



PAGE PARTNERSHIP FOR ACTION
ON GREEN ECONOMY



PAGE 2021 ANNUAL PROGRESS REPORT

PART I: Summary Report



TABLE OF CONTENTS – PART I

TABLE OF CONTENTS	1
NOTE FOR THE READER	3
1. EXECUTIVE SUMMARY	4
Progress in PAGE Countries	7
Capacity Development	21
Global Outreach and Knowledge Creation	22
2. CONTEXT, VISION AND OBJECTIVES OF PAGE	24
3. PROGRESS MADE TOWARDS PAGE OUTCOMES	26
3.1 Impact level Outcomes	26
3.2 Intermediate Outcomes	27
3.3 Outcome 1 - Countries have reinforced and integrated IGE goals and targets into SDG-aligned economic and development planning and financing	28
3.4 Outcome 2 - Countries are implementing evidence-based sectoral and thematic reforms in line with IGE priorities	33
3.5 Outcome 3 – Individuals and institutions representing different groups acquire capacities to advance IGE approaches at regional, national and sectoral levels	36
3.6 Outcome 4 - National and regional stakeholders access and apply knowledge for advancing IGE	41
4. CONTRIBUTION TO CLIMATE, BIODIVERSITY, GENDER AND CIRCULAR ECONOMY TARGETS	45
4.1 Contribution to climate action	45
4.2 Contribution to biodiversity	47
4.3 Promoting gender equality and women’s empowerment	48
4.4 Contribution to circular economy	49
5. CHALLENGES AND LESSONS LEARNED	50
LIST OF ABBREVIATIONS AND ACRONYMS	56

Part II - Comprehensive Summary of Country Progress and Global Work
(Separate Document)

Part III - Consolidated Financial Report (Separate Document)

Part IV - Monitoring Framework (Separate Document)

NOTE FOR THE READER

This report summarizes the progress made against the four PAGE outcomes since the beginning of the programme with an emphasis on the developments in 2021. It is presented in four parts:

PART I is a Summary Report including the following Sections:

- Section 1 provides an executive summary of the progress the PAGE programme has made in 2021.
- Section 2 outlines the context, vision and objectives of PAGE.
- Section 3 provides an aggregated progress statement for each of the outcomes together with an overview of the status of the indicators at the end of 2021. The details behind the aggregate reporting on the indicators are provided in the PAGE monitoring framework (in a separate document).
- Section 4 outlines PAGE's contribution to achieving the Sustainable Development Goals, Paris Agreement, biodiversity objectives, gender equality and circular economy, highlighting examples from 2021.
- Section 5 summarises challenges and lessons learned from the programme in 2021.

PART II presents the comprehensive reporting for the 20 partner countries and the work at the global level, including the following sections:

- Section 1 provides a summary of 2021 progress in the 20 PAGE Countries with links to additional information in the on-line annual report for 2021.
- Sections 2 to 3 summarise 2021 progress in global capacity development and knowledge sharing activities.
- Sections 4 to 6 provide an overview of the activities of the PAGE Secretariat and Governance bodies, Collaboration with other Initiatives and South-South Cooperation.
- Section 7 provides the main developments related to fund management.

PART III presents the consolidated financial report focused on the funding administered by the Multi-Partner Trust Fund Office under the PAGE Multi-Partner Trust Fund.

- Certified financial reporting is provided in addition to this report.

PART IV presents the comprehensive monitoring framework with aggregate results and progress made in 2021.

The detailed progress report is complemented by an online report: <https://2021.page-annual-report.org/>. Links to the on-line report are provided from the Executive Summary.

1. EXECUTIVE SUMMARY

In 2021, the Partnership for Action on Green Economy (PAGE) further expanded its reach, deepened its economic policy focus, and developed into a global platform and knowledge hub leveraging a wide network of actors in support of a green and inclusive green economy transformation.

Drawing on the specialized expertise of UNEP, ILO, UNDP, UNIDO and UNITAR, PAGE has promoted green economic transition, through interventions and activities in countries around the globe, bringing together inclusive green recovery, job creation, and sustainability agendas in a virtuous cycle reinforced by the principles of circular and low carbon economy, resource efficiency and sustainable finance.

The interplay between global action and engagement with multiple ministries and stakeholders at the national level enabled PAGE to inform the development, review and refinement of global sustainability agendas based on evidence from national transformation efforts and related challenges.

PAGE supports 20 governments and draws on a global network of countries across all regions representing varying levels of economic development, natural resource endowments and institutional capacities. An additional call for applications was launched in 2021, which generated a lot of interest: 23 countries inquired about the call, out of which 9 submitted full-fledged applications¹, bringing the total number of countries having expressed interest in PAGE up to 65. Following a criteria-based assessment process and in line with secured funding, two additional countries, Cambodia and Rwanda, were selected to join in 2022.

The engagement with a representative sample of large economies, transition economies, upper and lower middle-income countries, Least Developed Countries, Small Island Development States, and select provinces offers a wealth of experiences and lessons on how to initiate and sustain a just transition to a green and circular economy in different country contexts.²

Drawing on this first-hand knowledge, PAGE was able in 2021 to

- inform global debates and agenda setting through tailored events

¹ Cambodia, Ecuador, Moldova, Pakistan, Papua New Guinea, Rwanda, Saint Lucia, Ukraine and Uzbekistan

² Large economies (Argentina, India, Indonesia, South Africa), transition economies (Kazakhstan, Kyrgyz Republic, Mongolia), middle income countries (Ghana, Peru, Morocco, Thailand), Least Developed Countries (Burkina Faso, Guatemala, Senegal), Small Island Development States (Barbados, Guyana, Mauritius), Non-ODA countries (Barbados, Uruguay) and select provinces (Mato Grosso State in Brazil and Jiangsu Province in China)

- release analytical tools and best practice documents providing global reference to policy makers;
- connect countries in pairs and groups for peer-to-peer learning and knowledge sharing on national policies; and
- offer targeted learning programme that fill gaps in knowledge and skills.

While 2020 saw the onset of the COVID-19 pandemic and alignment of PAGE work with new realities, in 2021 PAGE shifted towards delivery of new green recovery activities and new priorities outlined in the PAGE Strategy 2021-2030, with a specific focus on strengthening relationships with the UNRCOs and deepening economic policy advice.

In the context of COVID-19, an increased focus on the triple planetary crises provided an opportunity for PAGE to further draw attention to the benefits and vehicles of a green economic transformation and strengthen related country-specific advice.

In line with this, PAGE initiated a 'Green Transformation Economic Advisory Mechanism' (Green TEAM) to provide deeper support and exchange on economic policy to partner countries – aiming to deliver transformative results for the whole economy and the economic recovery from the impacts of COVID-19. The mechanism brings together the UN's economists, from UN Resident Coordinator Offices (RCOs), PAGE agencies, UN Regional Economic Commissions, and the Office of the UN Chief Economist. Collaboration with the UN Resident Coordinators ensured that PAGE work was at the heart of the UN socioeconomic response to COVID-19 and aligned with priorities and complementary initiatives in the respective countries.

PAGE was again recognized in UN System documents and processes for its focus on transformational change and a 'One UN' interagency approach and delivery.

- The UN Department of Economic and Social Affairs' SDG Good Practices Initiative referred to PAGE as an inspiring example of SDG implementation.
- The UN University's Beyond Opportunism: The UN Development System's Response to the Triple Planetary Crisis publication recognized PAGE as a mechanism working "closely with RCs to make economic recovery planning a steppingstone for green and inclusive economic transformation to address the root causes of the Triple Planetary Crisis".

While rolling out new green recovery activities, PAGE was able to continue engagement and sustain green economy work in countries that had, or were about to, phase-out of the programme (this concerns Mongolia, Peru, Mauritius, Senegal, Burkina Faso, Ghana and South Africa). Out of the 20 PAGE countries, 15³ also commenced implementation of green

³ Mongolia, Senegal, Ghana, Burkina Faso, Mauritius, South Africa, Mato Grosso (Brazil), Uruguay, Kyrgyz Republic, Barbados, Kazakhstan, Indonesia, Argentina, Thailand, Morocco.

recovery activities, and an additional 2, Peru and Guatemala, submitted proposals for work to be initiated in 2022.

In line with the objectives laid out in the PAGE Strategy for 2021-2030, PAGE made further progress in the four areas defined as key outcomes of the programme, including policy support at cross-sectoral and sectoral level, capacity development and knowledge exchange. By the end of 2021, across the partnership, a total of 15 countries and two provinces had national development plans or cross-sectoral strategies that integrated inclusive green economy (IGE) objectives in place or in the final stages of development. 27 sectoral or thematic policies in line with IGE priorities are being implemented, have been adopted or are in the process of adoption with support from PAGE, and an additional 22 policies are under development. Through the additional economic recovery work, PAGE was able to contribute to various recovery roadmaps, as well as new or revised policies that take into consideration the impacts of COVID-19 and align recovery with green economy priorities.

PAGE further expanded its strategic partnerships with institutions that offer recurrent trainings to current and future policymakers. Since its initiation, PAGE has been instrumental in establishing 28 recurrent training programmes in nine countries, with more under development. The number of individuals having been trained across countries on subjects related to green economy is also quickly increasing, thanks to the systematic use of online training tools. Through the different capacity-building programmes and tailored trainings at the global and national levels, over 24,000 people (9,000 additional in 2021) have been trained to date. 256 national institutions had the opportunity to upgrade and strengthen their capacity to deliver IGE policy analysis, consultations and trainings.

PAGE serves as an important model for achieving Sustainable Development Goal 17 (partnerships for the goals), while contributing to country efforts to achieve SDGs 8 (decent work and economic growth), 12 (responsible consumption and production) and 13 (climate action). By aligning support with national IGE priorities, PAGE is also contributing in diverse partner countries to achieving SDG 1 (no poverty), 2 (zero hunger), 4 (quality education), 5 (gender equality), 7 (affordable and clean energy), 9 (industry, innovation and infrastructure), 10 (reduced inequalities), 11 (sustainable cities and communities) and 15 (life on land). In line with the above SDGs, PAGE continued to make significant contributions to climate, biodiversity, circular economy and gender outcomes.

An overview of how PAGE contributes to the different SDGs is available at <https://2021.page-annual-report.org/sustainable-development/>.

Since its inception in 2013, PAGE has raised USD 89 million to support governments around the globe to work across sectors seeking the integration of an inclusive green economy into policies and strategies that enable multiple global sustainability targets. USD 21 million additional fund were mobilized since 2020, including USD 7 million targeted towards green economy recovery following the COVID-19 pandemic.

PROGRESS IN PAGE COUNTRIES

PAGE further advanced and consolidated its results in line with its four key outcomes and the sustainability criteria for graduating countries while expanding efforts on green economic recovery. A summary of the main progress by country in 2021 is provided below.

Graduating countries

After Mongolia had already reached the end of its five-year support in 2018, PAGE re-established country work through the green recovery activities. At the same time, Mongolian partners supported the replication of their knowledge and experiences in other PAGE countries through peer learning activities and engaged with other initiatives to ensure sustainability of the green economy initiatives.

The targeted green recovery activities align with the objectives of the Action Plan of the Government of Mongolia for 2020-2024. In 2021, a 'Ger and Nature Scheme' was developed with the Ministry of Environment and Tourism and key stakeholders to promote community-based eco and cultural tourism centred around rural herding communities. As an additional path for green recovery also in line with the Action Plan, PAGE is supporting the UNRC Office on energy subsidy reform through a technical study on rationalization of energy tariffs.

Building on the work initiated by PAGE, partner initiatives continued activities in line with Mongolia's sustainability plan, strengthening policy reform processes and capacity development:

- UNDP worked with the Ministry of Finance to reform the budgetary process and integrate the SDGs into the budget cycle by conducting a fiscal analysis of budget programmes and exploring development of a financing mechanism to support the promotion of biodiversity and tourism by learning from international experiences.
- UNDP also conducted background analysis and developed a concept note to establish a private equity fund targeting fibre value chains to build climate-resilient livelihoods in the pasturelands of Mongolia and China.
- A course in Mongolian on Green Economy developed with PAGE support was included as an elective in two bachelor's degree programmes offered by the Mongolian University of Life Sciences.

While 2020 had marked the completion of PAGE's support to Peru, important outputs on green jobs and green economy modelling were achieved in 2021 and synergies strengthened with other relevant programmes in the country in line with its sustainability plan.

- In June, the Ministry of Labour and Promotion of Employment (MTPE) published the National Policy for Decent Jobs, which aims to generate decent and green

employment while contributing to the reduction of socio-environmental conflicts. Inclusion of 'Green Jobs' and 'Just transition' in the Policy were achieved thanks to the technical assistance provided by PAGE Peru and the ILO Green Jobs Programme.

- A "Conceptualization of Green Jobs in Peru" report conducted by PAGE supported the MTPE to define and measure green jobs and to conceptualize productive employment promotion as a way to advance inclusive green growth.
- To further institutionalize green business development, PAGE conducted workshops to train trainers, which in 2022 will replicate the 'My Green Business Training Programme', in coordination with the MTPE.
- Building on knowledge instilled by PAGE over the years, the National Center for Strategic Planning updated the T21 model initially developed in 2017. By increasing the scope to estimate trends and evaluate scenarios up to the year 2050, instead of 2035, the model became and even more important tool to support future strategic planning.

In addition, PAGE Peru, under the leadership of the Ministry of the Environment and the Ministry of Economy and Finance, developed a proposal for additional support for green economic recovery, outlining a partnership with the Regional Center for Entrepreneurship and Innovation of San Martin. Suggested worked aims to enhance the management skills of entrepreneurs in the region, with a focus on utilizing biodiversity to generate goods and services and interventions targeting both market demand and supply. After approval by PAGE, this new line of work will be initiated in 2022.

In **Senegal**, PAGE completed its five-year programme in 2019 but reengaged with the country in 2020 responding to a request by the Ministry of Environment and Sustainable Development (MEED) to support a green recovery from the COVID-19 with a focus on embedding green economy principles within its on-going national recovery efforts, expressed in a 'Priority Action Plan' under the Plan Senegal Emergent and its second phase 'Priority Action Programme' (PAP). In 2021, activities supporting a green recovery were initiated that built on and were complementary to earlier PAGE interventions, and additional outputs were achieved to ensure sustainability of PAGE achievements, as summarized below:

- Initiation of a study with the overall objective to develop a strategy for mobilizing the private sector around projects that leverage the inclusive green economy.
- Development of an operational directory on green jobs and occupations and 'Green Start and Improve Your Business training' sessions for women in different economic interest groups to enhance a green economic recovery.

- Studies on the feasibility of developing a cooperative of waste collectors supported by PAGE contributed to the establishment of the Mbeubeuss waste pickers' cooperative and implementation of the restructuring plan for the Mbeubeuss landfill.
- Building on its analytical work in the oil and gas sector, PAGE remained engaged in multi-stakeholder dialogue on oil revenue management, for which legislation is currently being finalized.

To consolidate and disseminate the achievements of Senegal towards a green economy, PAGE supported a [video impact story](#) shared via national media and social media.

Ghana has prepared for its phase out from PAGE since 2019, consolidating outputs and developing its sustainability plan. With the COVID-19 pandemic reaching the country in 2020, PAGE extended its engagement with the Ministry of Environment, Science, Technology and Innovation (MESTI) to support a green economic recovery in line with the Ghana United Nations Development System COVID-19 Common Country Analysis (CCA) and Socio-Economic Response and Recovery Plan (SERRP), and Ghana's Coronavirus Alleviation Programme (PAG).

Building on the foundation of earlier PAGE interventions, the objective of the additional support is to strengthen the enabling environment for greater public and private green finance, integrate green recovery policies into sub-national recovery plans and develop capacity for enterprises following sustainable production principles under the 1 District 1 Factory (1D1F) government policy. As a first activity in 2021, PAGE initiated a technical analysis to assess opportunities for leveraging green fiscal policy instruments to raise revenue for national COVID-19 recovery funds, which also take into consideration climate change, biodiversity loss and pollution concerns.

PAGE also leveraged work at the sectoral level through new partnerships through the following outputs:

- PAGE supported the organization of the Ghana Waste Fair alongside the Ghana National Plastic Action Partnership and the Waste Recovery Platform, bringing together more than 300 stakeholders to share and discuss innovative ideas to promote sustainable waste management in the country.
- The University of Ghana Business School added the green finance course developed by PAGE to its portfolio of short executive courses.
- PAGE supported the development of a funding proposal for creating green jobs through education and training, in line with the objectives of Ghana's plan for 'COVID-19 Alleviation and Revitalization of Enterprises Support'.

In Mauritius, PAGE started to phase out after five years of PAGE support from 2019, but at the same time, the COVID-19 crisis provided an opportunity for a renewed engagement with the Ministry of Finance and the Ministry of Agro-Industry and Food Security. Building on the foundation laid over the past years, PAGE started green recovery work in the area of sustainable food systems and the recovery of the tourism sector, which were highlighted as key government priorities in the 2020 and 2021 Budget Speeches.

In 2021, PAGE completed the following additional outputs in line with Mauritius's sustainability plan to ensure national ownership and continued focus on policy goals related to green finance, waste management and capacity development:

- a study on access to green finance by SMEs to strengthen implementation of the SME 10-Year Master Plan;
- the update of national green jobs model to examine the potential green jobs impact of the country's NDCs;
- the release of a guide for the issue of sustainable bonds in Mauritius by the Bank of Mauritius;
- an Industrial Waste Management Cost Structure Review to support implementation of the new national Solid Waste Management Strategy; and
- capacity-building workshops with the Civil Service College Mauritius to integrate green economy into national learning programmes and secondary school curricula.

Following the launch of the additional green recovery project in close collaboration with the UNRCO in June 2021,

- the Cabinet established a National Steering Committee to direct and supervise the related country work, while advancing national policies, strategies and programmes;
- PAGE supported the launch of the initiative Operation COSHARE in September 2021, to enhance the capacity of employees in the tourism sector through the promotion of health standards and cleaner productivity of SMEs; and
- PAGE commenced a study related to sustainable food systems to feed into the preparation of a new Strategic Plan (2021-2026) for the Food Crop, Livestock and Forestry Sectors, benefiting from the closely aligned National Food Dialogues organized by the UNRCO.

In Burkina Faso, PAGE completed its five-year period of support in 2019 and developed a sustainability plan to take the green economy agenda forward. At the same time, the government released its next national development plan for the period 2021-2025 (PNDES 2) (adopted on 30 July 2021), providing direction for the mainstreaming of IGE within sectoral strategies, building on the PAGE-supported 'National Strategy on the Green Economy' (SNEV). When Burkina Faso was hit by the COVID-19 pandemic in 2020, PAGE extended its support to the Ministry of the Environment, Green Economy and Climate

Change focusing on the countries green economic recovery of the tourism sector with the aim of mobilizing public and private funds and the development of incentives to support the greening of the tourism sector.

In 2021, a Technical Monitoring Committee under the leadership of Ministry of the Environment, Green Economy and Climate Change was set up to oversee the activities in the sector and ensure national ownership. The Committee oversaw preparatory work for activities to commence in 2022,

In line with sustainability plan, PAGE invested further in building capacity on green finance and budgeting, including

- A virtual workshop on the development of projects to attract climate funding and subsequent development of proposals for submission to the Green Climate Fund; and
- A comprehensive coaching for budget managers and monitoring and evaluation officers on the integration of inclusive green economy into sector budget programmes in six ministerial departments.

To promote and disseminate the achievements with IGE in Burkina Faso, a [15-minute documentary film](#) was released through national channels and social media with special reference to the contribution of PAGE.

South Africa reached the end of its initial five-year support in 2020, but PAGE remained actively engaged through the Department of Forestry, Fisheries and the Environment (DFFE) to provide additional green recovery support alongside the engagement with partners to ensure continuity of the green economy work in line with the sustainability plan.

As a key achievement, results from the modelling exercise on post-COVID-19 economic recovery options conducted with support from Cambridge Econometrics were shared with the government counterparts and stakeholders to inform long-term economic and policy planning.

This was connected to a workshop for the National Treasury on macroeconomic modelling to enable better assessment and planning for social and employment outcomes linked to economic recovery, climate and just transition policies.

Building on this analysis, PAGE offers technical assistance for greening South Africa's COVID-19 economic recovery package, focused on supporting opportunities in key sectors, capacity-building to promote green entrepreneurship, and engagement of stakeholders in the national economic recovery plan through dialogue and media outreach. In 2021, this included:

- providing technical support on the revisions of the Municipal Integrated Waste Management Planning Guidelines; and

- promoting green jobs through the “Green Jobs for a Better Future” dialogue series, Driving force for Change Youth Challenge and the Imvelisi African Enviropreneur programme.

In addition, PAGE completed an assessment of the barriers and enabling environment for the uptake of green technology.

PAGE communication tools, which includes a digital compendium of selected success stories and [video](#), were released to inform stakeholders about green economy progress in South Africa and PAGE’s contribution since inception.

The support to provincial government of Jiangsu Province in China was completed in 2020. Over the five-years of PAGE engagement with **Jiangsu Province**, the adjustment of low-carbon production in the province progressed steadily in line with the green economy trajectory PAGE that helped to shape through its activities focused on green industrial parks, the textile sector and measurement frameworks. By the end of 2020, the province's carbon dioxide emission intensity per unit of GDP decreased by 24.5% compared to 2015. In June 2021, the Department of Ecology and Environment of Jiangsu Province published its first annual work plan for Promoting Carbon Peaking and Carbon Neutrality.

Following the phase-out, PAGE remained connected with aligned initiatives, such as the ILO-SIDA Decent Work in Garment Supply Chains Asia project, to ensure continuity of priority workstreams and invested in further outreach and communication activities. Factsheets summarizing past reports were developed including a green economy progress index in Jiangsu and Fujian Province, green industry, and eco-industrial parks, among others to be disseminated at future national and international green-economy-related forums and conferences as soon as these activities are possible again.

Countries in full programme delivery

With 2021 originally planned as its last year of PAGE support, **Mato Grosso** completed a large number of important outputs with the State Secretariat of Planning and other State Secretariats to further the implementation of sectoral and thematic policies on farming, tourism and urban planning in line with the objectives of the overarching Provincial Strategy ‘Produce, Conserve and Include’. Support in the area of farming led by the State Secretariat of Family Farming was expanded through the additional green recovery activities that started in 2021, including a comprehensive analysis of the socioeconomic impacts of the COVID-19 pandemic on family farming.

Important achievements in 2021 include

- the finalization of the Sustainable Management Plan for land use and occupation of the historic centre of Cuiabá;

- development of standards for smart and sustainable construction and renovation of buildings at subnational level;
- the elaboration of the regulatory framework for sustainable public procurement, ecolabel policy and green seal legislation;
- the review of the forestry-based sector and value chains, to feed into the development of a forestry-based industrial strategy;
- an assessment on greening the livestock supply chain in Mato Grosso; and
- initial support for the development of an Observatory for information on green jobs.
- a training for companies on the implementation of sustainable tourism guidelines;

Acting on the recommendation of the green economy learning assessment to reflect IGE concepts in higher education curricula, PAGE formed a working group with four public universities in Mato Grosso which will develop an Action Plan in 2022.

PAGE support to the **Kyrgyz Republic** prioritized the integration of IGE goals and targets into the government's long-term National Development Strategy 2040 and the accompanying five-year development program - Unity, Trust and Creation, and translation into action through sectoral policy reforms. Following the Covid-19 pandemic, PAGE complemented this objective with the commencement of additional green recovery work focusing on strengthening the enabling environment for green finance and the sustainability and growth of Micro, Small and Medium Enterprises (MSMEs).

2021 began with the election of a new president, followed by a shift from a parliamentary to a presidential form and major restructuring of ministries and agencies, bringing with it some challenges and delays but also new avenues for promoting green economic recovery.

Under the leadership of the newly created Ministry of Economy and Commerce, PAGE supported the organization of a 'Green Expo 2021' exhibition on green technologies and solutions and a 'Green Economy Forum for Sustainable Business Development' in December 2021, to further promote green economy priorities in the country.

At the sectoral level, PAGE provided support towards

- the development of recommendations for the integration of green city principles into the spatial development strategy;
- a review and update of the Sustainable Finance Road Map;
- preparatory work for the creation of the Kyrgyz Green Finance Corporation;
- implementation of the waste chapter of the Green Economy Development Programme through workshops;
- review and analysis to inform reform of harmful agricultural subsidies; and

- creation of a prototype for the Green Jobs Assessment Model to inform the impact of green policies on the labour market.

In 2021, significant progress was made in building institutional and individual capacity, in addition to ongoing government training on green economy modelling:

- The Comprehensive Plan of Measures on Climate Change Education, developed with PAGE support, was officially launched in April 2021.
- Working with the 'Alliance of Universities for Green Economy and Sustainable Development', green economy learning was integrated into five separate university decrees, and two additional IGE learning courses were developed.

Following the COVID-19 pandemic, the new government in **Uruguay** that took office in 2020 actively promoted circular and green economy as a path for economic recovery. Against this background, PAGE commenced additional green recovery activities under the leadership of the Ministry of Industry, Mining and Energy from 2021 that focused on circular economy, the generation of green employment, and support to SMEs, particularly in the food sector, building on past work in these areas and occurring alongside with the already ongoing country programme.

At a cross-sectoral level, PAGE continued to advocate for the inclusion of the green economy as a dimension in national and subnational planning processes and commissioned a study proposing approaches for measuring green economy progress, including new efforts to measure green and blue employment. PAGE took over the coordination role of the Network of Directors of Environment and Development of Regional Governments from GIZ, which supports municipalities in the field of IGE by promoting and deepening learning and the search for joint solutions. In addition, new analysis was fed into the process for the design of policies and strategies for the sustainable coastal marine development of the country.

Important milestones were reached specifically related to circular economy, for which PAGE supported the roll-out of a comprehensive initiative with different outputs in 2021, including

- the design and official launch of the National Waste Management Plan;
- the design of a National Strategy for Circular Economy;
- the development of tools for monitoring and evaluating Uruguay's Circular Economy Action Plan;
- the organization of the third edition of the Uruguay Circular Award;
- preparatory efforts to set up a research and innovation fund for circular economy;
- the development of a certification scheme for entities that are free of single-use plastics; and
- a study to promote innovative activities for mitigation and adaptation to climate change in wood construction.

This thematic work was accompanied by a series of targeted national training workshops rolled out in different parts of the country, including

- a training for sub-national governments on promoting IGE at the local level,
- trainings focused on the inclusion of youth, rural women and people with disabilities in the creation of green and decent jobs; and
- a course on cleaner production for companies.

In **Argentina**, which joined PAGE in 2018, the Covid-19 pandemic aggravated an ongoing economic and political crisis resulting in high external debt, inflation and unemployment. In this context, the new government elevated green economy in its political agenda and advanced policies providing new growth opportunities through a sustainable approach. PAGE had already started to support the Ministries of Labor and Environment in these efforts with a focus on green jobs and just transition, green productive development and circular economy. Complementary to the ongoing work, PAGE commenced additional green recovery activities in 2021, linked to the work of the National Cabinet of Ministers on Climate Change and focused on strengthening the design and implementation of sectoral plans framed in the Nationally Determined Contributions, specifically for sectors that have high potential for greening employment and production.

Through the combined action in 2021, Argentina made further strides in fostering cross-sectoral strategies, concepts and methodologies with the following outputs:

- the finalization of a National Just Transition Strategy informed by three PAGE supported position papers from workers, employers and government;
- a concept document on just transition as a vehicle for the achievement of the 2030 Agenda;
- a methodology that allows the development of labor, emissions and productivity scenarios for the sectoral policies of the new NDC; and
- a diagnostic on country indicators for a green economy.

At the sectoral level, PAGE promoted the development of plans and roadmaps of green jobs and circular economy, and related indicators, with key achievements including the following:

- finalization of a Strategy and first Roadmap for a National Green Employment Promotion Plan;
- technical assistance for the development of a system of indicators for monitoring employment and training policies from the perspective of just transition and green employment;

- a fiscal impact and technical feasibility study as a starting point for the development of a National Plan for Circular Economy Promotion; and
- the reflection of several PAGE findings in the new National Green Productive Development Plan.

Additional works also commenced on exploring collective bargaining for a more sustainable production model and on updating the vocational training system in line with green labour market demands.

Supporting capacity building efforts in the country, PAGE conducted a review of the public sector's capacity needs for a transition to an IGE. PAGE also actively participated in the development and implementation of the newly co-designed Diploma on Green Jobs and Just Transition of the Institute of the World of Work at the National University UNTREF.

Halfway through its five-years of support, PAGE has deepened its support to Indonesia's Low Carbon Development Initiative (LCDI) and expanded its engagement with the Ministry of Planning - BAPPENAS - to also support the government's green recovery agenda with additional activities. Complementary to ongoing work, green recovery-related work started in 2021 with a focus on integrating circular economy into the food and beverage sub-sectors of the LCDI.

In 2021, PAGE informed Indonesia's Green Recovery Roadmap 2021-2024 through rapid assessments of the green stimulus package, which focused on the energy and waste sectors.

PAGE also contributed towards the roll-out of the LCDI at the sub-national level with a model and technical guideline adapted to the province of West Java. Providing a link to international dialogue, PAGE serves as an official knowledge partner for Indonesia's presidency in the upcoming G20 Summit in 2022.

At the sectoral level, PAGE initiated new analysis centred around circular economy, food loss, green jobs, and green financing, including:

- an assessment of sub-sectors in the food and beverages sector that can best contribute to green recovery and circular economy;
- a policy readiness assessment for the framework for green jobs and just transition in the energy sector;
- a policy scoping assessment and roundtable discussion on minimizing food loss and waste to inform provincial policies;
- a resource efficiency scoping for the fertilizer sector to identify opportunities for resource savings, emission reductions, and green jobs; and
- an assessment of the enabling environment and possible green financing mechanisms in West Java.

Using previously developed materials, PAGE worked with the University of Indonesia to launch a semester-long Inclusive Green Economy Modelling course for university students.

Kazakhstan joined PAGE in 2019 under the leadership of the Ministry of Ecology, Geology and Natural Resources (MEGNR) to support the implementation of its National Development Strategy and a related Green Economy Concept. Following the COVID-19 pandemic, PAGE initiated additional support focused on a green economy recovery.

Through both regular and green recovery support, PAGE was able to contribute to policy reform processes that drive a greener, more inclusive and sustainable economy and, more immediately, a green recovery, resulting into the following outputs:

- the development of the 'Doctrine on Carbon Neutrality until 2060', earlier framed as the Low Carbon Development Concept (LCDC), with inputs related to fiscal policy and waste management;
- the update of the Green Economy Concept to integrate new sustainable development objectives;
- the update of the 'Strategic Plan for Development of the Republic of Kazakhstan until 2025', which mandates the development of national projects in key sectors and thematic areas; and
- the development and approval of the 5-year cross sectoral 'National Project Green Kazakhstan' that encompasses PAGE workstreams on waste management and provides an entry point for enabling the country's green economic recovery.

In addition, PAGE contributed to different sectoral reform processes, including:

- the implementation of the new Environmental Code, through the development of legal guidelines for conducting strategic and environmental impact assessments;
- modelling and analysis on energy subsidies and fiscal incentives for low carbon development;
- an assessment of the economic impact of the carbon border adjustment mechanism;
- the initiation of a pilot project activity that directs emission payments to finance green SMEs; and
- an assessment of the status and legal frameworks of sustainable public procurement.

To build capacity in the field of green, circular economy and low-carbon development, a 'Building Back Better' training was held for 708 civil servants from Kazakhstan, Tajikistan, Uzbekistan and Kyrgyz Republic. This was informed by a draft Green Economy Learning Assessment developed in 2021.

In India, the endorsement of the forward going workplan by the National Steering Committee in November 2020 marked an important milestone for the roll out of a comprehensive PAGE programme in 2021. Working closely with the Ministry of Environment, Forest and Climate Change (MoEFCC) and other government partners, PAGE is contributing with its current workplan to the cross-sectoral priorities for sustainable development, resource efficiency and circular economy.

The 2020 green economy stocktaking report was complemented with additional analysis on shaping green economy with special focus on the manufacturing sectors, particularly textile and garments. The study identifies key drivers of growth with high impact that can be fed into the design of long-term sectoral roadmaps for inclusive green economic transformation.

In line with the objectives of resource efficiency and circular economy, specific sectoral outputs included the following:

- the launch of Green Room Air Conditioners on the Government e-Marketplace for promoting sustainable public procurement;
- analysis for the development of a strong ecolabelling framework; and
- the development of a methodology for sharing benefits and disbursing funds accrued through the access and benefits sharing mechanism.

PAGE also started to work at the subnational level in the states of Madhya Pradesh and Uttarakhand to conduct a green economy learning assessment and strengthen institutional capacities to mainstream IGE principles into state level economic planning

Countries in reorientation of programmes

From late 2020 and continuing throughout 2021, the PAGE programme in Guyana was put on a temporary pause. After taking office in August 2020, the new Government set priorities for the next five years in line with its Low Carbon Development Strategy (LCDS) – initially launched in 2013 and updated in 2021 – with an emphasis on COVID-19 response and recovery, job creation, renewable energy, climate mitigation and adaptation and SDGs. The originally planned PAGE activities are aligned with these new policy priorities, which are centred around low carbon development, the climate agenda and the SDGs.

At the request of the government, in 2021 the UNRC Office streamlined all UN agency work into a new cooperation framework - the Country Implementation Plan (CIP) - in light of the country's limited capacity. As a result, the PAGE Guyana work programme became more integrated into the UNCT's Social and Economic and Response Recovery Plan (SERRP), which falls under the 2022-2026 Multi-Country Sustainable Development Framework and Cooperation Agreement. The agreement, recently approved by the government, sets the stage for continuing PAGE activities in 2022.

Barbados joined PAGE with the objective to support the country in the delivery of its National Strategic Plan (2006-2025), one of the first national development plans to include an inclusive green economy as an explicit element. Following a series of delays as well as challenges associated with the COVID-19 pandemic, PAGE was able to re-engage with government counterparts under the leadership of the Ministry of Environment and National Beautification in line with new priorities and reconfirm the National Steering Committee in 2020. Following this, PAGE developed targeted activities focused on boosting the circular economy and promoting green consumption and production practices to support green economic recovery. Preparatory work was done for the development of a sectoral assessment of the Barbados environmental goods and services sector and a blue and green jobs assessment.

In addition, PAGE supported the XXII Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean in February 2021 that addressed the pressing environmental issues of the region, opportunities for green recovery, and urgent actions for nature in the next decade to achieve the SDGs.

In view of developing individual and institutional capacities in Barbados and other SIDS countries in the area of green and blue economy, PAGE and Cave Hill Campus of the University of West Indies signed an agreement in 2021 as a first step towards the delivery of the Programme for Green-Blue Economy Learning.

Countries in inception phase

Guatemala joined PAGE in 2018 with the prospect to reformulate economic policies around sustainability to support social inclusion, green jobs and green growth. After changes in the national government led to an extension of the inception phase, in September 2021 the PAGE programme was officially set up by the Ministry of Finance, followed by its registration by the Secretariat for Planning - SEGEPLAN.

With the early stages of the programme having been defined during the pandemic, COVID-19 recovery emerged as a key element of PAGE's work in Guatemala. Efforts in 2021 were focused on a green economy stocktaking exercise, considering the impacts of COVID-19, identifying priorities, and supporting the implementation of the Environmental Fiscal Strategy. As a result, PAGE released an Addendum Report to the analysis on the effects of COVID-19 on the green economy of Guatemala, coordinated by the UNRCO Economist, which entails a series of recommendations for strategic action to be considered in future work-planning. PAGE continued to support the implementation of the Environmental Fiscal Strategy, through the development of two guidelines for classification of environmental public expenditures and access to green and climate finance.

Guatemala's Economic Recovery Plan, focused on job creation and strategic investments, was launched at the end of 2020. In this context, the government is seeking additional green support by PAGE and developed a proposal to further the delivery of the Plan in conjunction

with existing policy frameworks such as the Strategy for Strengthening Value Chains, the Low Emissions Development Strategy, and the Environmental Fiscal Strategy. Additional green recovery support in Guatemala will start from 2022.

Since joining PAGE in 2019, Morocco has been rethinking its development approach. The 'New Development Model' - a set of guiding frameworks for economic, social and environmental growth - was reviewed in a national consultation process and presented in 2021. At the same time, after general elections in 2021, several ministries and agencies were reshaped to tackle new and emerging priorities, with a new Ministry for Energy Transition and Sustainable Development tasked with leading the development of green economy in Morocco and now acting as the focal Ministry for PAGE.

Against this background, PAGE was able to set up foundations for a five-year programme as well as the additional targeted support for green economic recovery, with activities set to roll-out starting in 2022.

- Discussion with key government ministries and stakeholders in the country have helped shape the plans for a comprehensive stocktaking study. The study will place specific focus on a post-COVID-19 recovery by assessing the ongoing recovery plans in Morocco, and specifically the industrial recovery programme which will include a chapter on greening the industrial sector.
- Preparatory work has started on a study on organic and agro-ecological value chains in the Rabat-Salé-Kenitra region in conjunction with the development of a green entrepreneurship training programme to ultimately boost green business development in the sector.
- A foundational training on IGE was designed for national partners and institutions involved in the programme, with a focus on effective green economy responses to COVID-19.

Thailand joined PAGE in 2019 under the leadership of the 'National Economic and Social Development Council (NESDC)' to support its green economic transition through the achievement of the targets set out in its 12th National Economic and Social Development Plan (NESDP, 2017-2021), which envisions prosperity, sustainability and happiness whilst simultaneously promoting SDG implementation together with NDC climate change commitments. Following delays due to elections and the global pandemic, inception activities commenced in early 2021, including the regular five-year programme as well as additional targeted support for green economic recovery.

PAGE supported a green economy stocktaking study that provided timely inputs on gaps and necessary drivers for the implementation of Thailand's existing green economy

principles to the 'National Economic and Social Development Council' – which is leading the process for developing the new NESDP for 2022-2026.

As part of its targeted green recovery work, PAGE is working with the 'National Institute of Development Administration' on the greening of Thailand's economic and social recovery projects which cover different sectors and are funded under the government's 400 billion Baht Rehabilitation Fund. In 2021, PAGE specifically supported the design of impact evaluations of the related government projects.

To further build green economy capacity in the country, PAGE started a learning needs assessment and supported the 'Policy Research Centre on Green Economy' at the Thammasat University to review relevant national policies and programmes as a basis to develop a training curriculum for relevant line ministries on a green and inclusive recovery.

CAPACITY DEVELOPMENT

In 2021, PAGE further refined an already comprehensive package of learning resources and used new formats for peer-to-peer learning alongside proven capacity development approaches at the global level. The link between country level outputs and global action, with accumulated learning from the national level feeding into green economy advocacy, outreach and knowledge exchange, has been a key feature throughout the year. Through self-paced courses, training-of-trainers, adjustments of university curricula, as well as tailored training for media representatives, policy-makers, local government officials, business and community leaders, PAGE further contributed to the critical mass of convinced and enabled actors needed for a green economic transformation.

The fourth edition of the PAGE Global Green Academy, held in May 2021, was another milestone event for PAGE. It was organized completely online with the participation of all 20 PAGE countries and a total of 120 participants from 29 countries to promote learning and exchange of experiences in effectively responding to COVID-19 crisis. As part of a peer-to-peer learning initiative, PAGE organized seven targeted exchanges throughout the year, including non-PAGE countries, on topics such as green finance, sustainable public procurement and digitalization. PAGE also supported capacity building in 2021 by releasing nine new episodes of the Green Renaissance podcast and contributing to the BMUV-funded flagship training on green recovery ([video summary](#)).

PAGE global e-learning products continued to be widely used, enabling an additional 7,155 users in 2021 to expand their knowledge in different subjects. PAGE currently hosts six self-paced e-learning courses, on green economy; sustainable finance; green fiscal policy; green economy and trade; green indicators for inclusive green economy; and green industrial policy. The global learning products benefited from the overhaul of the e-course on sustainable finance and the translation of the green industrial e-course into Spanish, French and Khmer (spoken in Cambodia). An impact evaluation found that following global training

activities, 93 per cent of respondents increased their capacity to identify and leverage opportunities for IGE promotion.

An additional 2,024 people were trained through nationally organized training workshops on a wide range of green economy-related topics, including green industry, green bonds, economic modelling, waste valorization, green entrepreneurship, mainstreaming SDGs and climate change, and green economy e-learning, among others.

GLOBAL OUTREACH AND KNOWLEDGE CREATION

Drawing on a wide network of partners, PAGE has again demonstrated its unique ability to inform and inspire actors across sectors through global and regional dialogues that elevate country experiences for knowledge exchange beyond its 20 partner countries. Inclusive and green economic recovery from COVID-19 played a central role when green economy champions from government, academia, the private sector and non-profit organizations came together in the following global events and high-level discussions:

- On 9 July 2021, the official High-Level Political Forum (HLPF) side event 'Green Recoveries for a Job-Rich Future' brought together leaders from the United Nations and national governments to discuss the realities of linking COVID-19 recovery with long-term sustainable development in the context of green job growth;
- The Green TEAM held two dialogues, on green recovery and sustainable finance, as part of its series 'One UN for Accelerating a Fair and Green Economic Transformation', creating a platform for economists from PAGE agencies and RCOs in PAGE countries to exchange ideas and share knowledge and best practices on accelerating fair and green economic transformations; and
- For the fourth straight year, PAGE partnered with the Latin America Green Awards (Premios Latinoamérica Verde or PLV) to promote local actions towards sustainable development in the region. In 2021, PAGE specifically supported three main components of the Awards, a Skills Strengthening Programme, Journalists Workshop and SDG PAGE Award.

PAGE partners further advanced the knowledge base on IGE with a focus on contributing to green economic recovery, building on existing initiatives, as well as launching new platforms and publications in 2021, including

- a compilation of case studies and best practices on Sustainable Infrastructure to complement and illustrate the principles contained in UNEP's International Good Practice Principles for Sustainable Infrastructure;
- collaboration with UNEP on the Global Recovery Observatory (GRO) - a live database of all COVID-19 related government spending in the 89 largest economies;
- final results from the specialized joint green recovery modelling project from PAGE and Cambridge Econometrics;

- support to three knowledge platforms (Green Policy, Green Industry and Green Finance), as well as the Green Forum and Green Learning Network, through collaboration with GGKP; and
- four Targeted Scenario Analysis (TSA) studies for Colombia (livestock), Ecuador (artesian and small-scale mining) and Peru (cacao and palm oil).

2. CONTEXT, VISION AND OBJECTIVES OF PAGE

PAGE aims to put sustainability at the heart of economic policymaking and practices to advance the 2030 Agenda for Sustainable Development, Paris Agreement on Climate Change, and biodiversity targets through inclusive green economy approaches and by bringing together the expertise of five specialized UN agencies (UNEP, ILO, UNDP, UNIDO and UNITAR). It supports nations and regions to achieve sustainable and green growth, create green jobs, address inequality and climate change, advance green industrial development, and improve skills, knowledge and institutional capacity. In 2021, PAGE provided support to 20 countries, out of which 15 also started to receive additional support for a green economy recovery.

Update of the PAGE logical framework

With the start of the new PAGE Strategy 2021-2030, PAGE agencies updated the programme's results framework, keeping the overall logic and structure of four outcomes with some revisions on the wording. At the output level, some changes were introduced, building on the lessons learned from programme delivery and monitoring and reporting in previous years.

The 2021 annual progress report reports against the revised overall programme logical framework that has become the underlying reference for the programme and the Multi-Partner Trust Fund since 2021. The accumulated results from the end of 2020 were transitioned to the new monitoring framework, and, where necessary, data has been disaggregated and new baselines established.

The updated monitoring framework provides the basis for reporting progress against the following outcomes in 2021:

Outcome 1: Countries have reinforced and integrated inclusive green economy (IGE) goals and targets into SDG-aligned economic and development planning and financing;

Outcome 2: Countries are implementing evidence-based sectoral and thematic reforms in line with national IGE priorities;

Outcome 3: Individuals and institutions representing public, private, social partners, civil society groups and stakeholders have acquired capacities needed to advance IGE approaches at the regional, national, and sectoral levels;

Outcome 4: National and regional stakeholders, including green economy champions, decision-makers, practitioners, and youth representatives, access and apply knowledge for advancing IGE.

Sustainability Criteria

As PAGE support for countries is time-bound, as countries approach the end of the five-year funding period, a set of sustainability criteria determine whether countries have achieved specific results, and what strategies should be put in place to support long-term success.

Criteria 1: The economic and national development policies have been reframed around IGE, SDGs and climate action priorities;

Criteria 2: A national coordination mechanism for IGE is established;

Criteria 3: Strategies, plans, policies for implementing IGE across sectors have been developed, including within civil society and the private sector, and capacities for policy analysis have been strengthened;

Criteria 4: Funding opportunities have been identified and embraced by national and international actors and in particular by international finance institutions and domestic financial markets;

Criteria 5: IGE elements are integrated into training programmes delivered by national institutions.

3. PROGRESS MADE TOWARDS PAGE OUTCOMES

In 2021, PAGE supported 18 countries and 2 provinces/states: Argentina, Barbados, Burkina Faso, Mato Grosso State (Brazil), Jiangsu Province (China), Ghana, Guatemala, Guyana, India, Indonesia, Kyrgyz Republic, Kazakhstan, Mauritius, Mongolia, Peru, Senegal, South Africa, Uruguay, Morocco and Thailand. Eight of them have completed their five-year period of PAGE support and have started the gradual phase-out, including Mongolia (since 2018), Ghana, Burkina Faso, Mauritius, Peru and Senegal (since 2019), and South Africa and Jiangsu Province, China (since 2020). Due to the new opportunities for support on green economic recovery that emerged in 2020, the phase-out has been less linear than originally planned. In 2021, PAGE continued to stay engaged in all graduating countries, except for Jiangsu Province, either offering additional targeted support for a green economic recovery in 2021 or supporting the development of related proposals.

3.1 IMPACT LEVEL OUTCOMES

Following the update of the Theory of Change and logical framework for the PAGE Strategy 2021-2030, PAGE agencies defined the impact of the programme as “

Countries transform their economies to eradicate poverty, increase jobs and social equity, strengthen livelihoods and environmental stewardship, and sustain investment and foster growth in line with the Sustainable Development Goals, the objectives of the Paris Agreement, Post-2020 Biodiversity Targets and other environmental conventions and sustainable development frameworks”.

In line with this impact description, PAGE identified a number of global reference frameworks to which PAGE outcomes can be aligned to indicate the wider impact of the programme, including.

- SDGs to which PAGE has contributed to advancing;
- Regional sustainable development priorities that PAGE has contributed to advancing;
- NDCs that PAGE has contributed to advancing, by country;
- Post-2020 Biodiversity Targets to which PAGE has contributed;
- COVID-19 green recovery targets and goals to which PAGE has contributed; and
- Other relevant environmental conventions and sustainable development frameworks.

As many different factors come to play at this level, the below only aims to reference possible contributions of PAGE and is not attempting to analyse direct attribution.

PAGE is aligned with the 2030 Agenda for Sustainable Development in many ways, especially with SDGs that relate to the economy, jobs, the environment and partnerships: PAGE supports governments to work across sectors and to seek the integration of policies and strategies that will enable them to achieve multiple sustainable development targets through an inclusive green economy approach. PAGE work currently supports the achievement of 13 SDGs (1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 15 and 17). A comprehensive overview of how the specific work in countries contributes to the different SDGs is included in the online version of the 2021 PAGE Annual Report: <https://2021.page-annual-report.org/sustainable-development/>.

PAGE is supporting the advancement of NDC's in 11 countries (Mongolia, Peru, Senegal, Mauritius, Ghana, South Africa, Kyrgyz, Kazakhstan, Argentina, Indonesia and Thailand). For example, in Argentina, through participation in the 'Green Jobs and Just Transition Board', PAGE was able to contribute to the writing of the new NDC submitted in December 2020. Contribution to the NDC processes in other countries in 2021 is further described under section 4.1.

PAGE is contributing to Post-2020 Biodiversity Targets in 10 countries (Mongolia, Peru, Burkina, Jiangsu Province, South Africa, Kyrgyz Republic, Mato Grosso, Uruguay, Kazakhstan and India). Contribution to the Biodiversity Targets in 2021 is further described under section 4.2.

PAGE is contributing to COVID-19 green recovery targets and goals in eight countries (Mongolia, Peru, Ghana, South Africa, Barbados, Kazakhstan, Argentina and Indonesia). For example, in Ghana, PAGE contributed to the National Socio-Economic Response and Recovery Plan (SERRP), developed following the impacts of COVID-19 in 2020.

Four countries are contributing towards other relevant environmental conventions and sustainable development frameworks (Mongolia, Barbados, Argentina and Indonesia).

3.2 INTERMEDIATE OUTCOMES

The intermediate outcome—referred to the 2020 Annual Progress Report as the overall outcome—was revised in the PAGE Strategy 2021-2030 as

"Countries reframe economic policy around sustainability and strengthen enabling policy conditions, incentives, partnerships, and business practices that catalyse greater public and private investment in resource-efficient technologies, economic activities, and infrastructure that benefit all of society including vulnerable and marginalized women, men, youth, and communities."

Indicators for the intermediate outcome were also updated to align with the revised outcome statement as well as to better capture the full breath of outcomes resulting from the work that PAGE delivers.

The purpose of the intermediate outcome is to convey the higher-level changes that result from collective progress across Outcomes 1-4 throughout the country programmes, such as the promotion of green industry and jobs, for example, which may result from the accumulative progress under multiple Outcome areas. This level also serves to support the development of narrative reporting through capturing the ways in which the different streams of work under each Outcome area culminate to stimulate economy-wide change.

There are the following 8 indicators under the Intermediate Outcome which connect the programmatic work to higher level impact. It should be noted, however, that indicators at this level represent a qualitative and observational assessment of the collective outcomes of PAGE, rather than measured attribution.

- Economic policy and programmes reframed along sustainability and climate action and enabling policy conditions, including finance, strengthened across sectors;
- Green Public-Private Partnerships (PPPs) and sustainable business practices strengthened
- Green industry and green jobs promoted;
- Social conditions and social equities improved across societies;
- Knowledge and learning for green economy enable institutions, policymakers, and individuals to take effective action on green economy;
- New South-South and Triangular and PAGE alumni country collaborations resulting from established or leveraged mechanisms;
- Partnerships and alliances strengthened with key institutions and actors that help establish platforms for expanding and financing the IGE transition; and
- Joint delivery model of the five UN agencies strengthened, contributing to the UN System delivery.

The monitoring of the intermediate outcomes requires countries to be in a more advanced state of programme delivery and are reported on in a narrative format, country by country, once they begin their phaseout year. The summaries for Mongolia, Peru, Senegal, Ghana, Mauritius, Burkina Faso, South Africa, and Jiangsu Province may be found [here](#).

3.3 OUTCOME 1 - COUNTRIES HAVE REINFORCED AND INTEGRATED IGE GOALS AND TARGETS INTO SDG-ALIGNED ECONOMIC AND DEVELOPMENT PLANNING AND FINANCING

To achieve the targets under Outcome 1, PAGE supports countries with IGE diagnostics, assessments, policy analysis, and prioritization of IGE sectors in line with the 2030 Agenda, the Paris Agreement and other international environmental and sustainable development

frameworks. It also supports the mobilization and engagement of public, private and civil society stakeholders.

As of 2021, 17 countries have adopted cross-sectoral plans and strategies integrating IGE priorities. Within these 17 countries, PAGE supported the development of 50 plans and strategies, out of which four were newly adopted in 2021, one in Indonesia and three in Kazakhstan.

Through rapid assessments of the energy and waste industries, PAGE informed **Indonesia's** Green Recovery Roadmap 2021-2024, developed by Bappenas, that elevates green economy to one of the major national structural transformation strategies for post-recovery.

In **Kazakhstan**,

- the revised 'Strategic Plan for Development of the Republic of Kazakhstan until 2025' was adopted by the country's President in March 2021, which includes a sub-chapter on green economy drafted by PAGE and elements proposed by PAGE in other chapters;
- the final National Project "Green Kazakhstan" was approved by Resolution of the Government on 12 October 2021, which covers air pollution, waste management, energy efficiency, biodiversity conservation, water management and rehabilitation of water bodies, and eco-education and improving eco-culture; and
- the 'Concept for the Transition of the Republic of Kazakhstan to a Green Economy (GEC)', available since 2013, was updated with PAGE support to provide a long-term pathway towards a green economy and carbon neutrality.

PAGE also supported the development of a draft Doctrine on Carbon Neutrality until 2060 of **Kazakhstan** that was presented by the country's President at a high-level event on 13 October 2021. Pending technical clarifications, the Doctrine is anticipated to be adopted in early 2022.

In 13 countries or provinces PAGE support continues to focus on the implementation of National Plans that already integrate IGE objectives (Mongolia, Peru, Senegal, Ghana, Mauritius, Burkina Faso, Jiangsu Province, South Africa, Kyrgyz Republic, Mato Grosso State, Kazakhstan, Barbados and Indonesia).

New developments in 2021 achieved with the support of PAGE include:

In **Mongolia** the Government is implementing its Action Plan for 2020-2024 (in line with Mongolia's long-term development policy "Vision 2050"), which considers "sustainable tourism based on nature, history and cultural heritage" as key to economic recovery.

In **Peru**, the Acuerdo Nacional (National Agreement), finalized in August 2021, acts at the highest policy level to enhance equality and overcome the adverse conditions resulting from the pandemic, with a focus on “sustainable economic growth with decent work”.

The **Kyrgyz Republic** made progress in institutionalizing the IGE model, which plays a key role in integrating green economy aspects into the state strategic planning and the governance system in the Kyrgyz Republic.

Mato Grosso continues the implementation of its ‘Produce, Conserve, Include (PCI) Strategy’ through the update of the ‘green seal’ legislation to make it more accessible to a larger number of family farmers.

Indonesia further rolled out the Low Carbon Development Initiative at the sub-national level with a model and technical guideline adapted to the province of West Java.

The development and implementation of national plans and cross-sectoral policies in South Africa, Kazakhstan, Argentina and Guatemala benefitted from the following nine PAGE supported cross-sectoral diagnostics and assessments, completed in 2021, and related cross-sectoral stakeholder consultations and dialogues.

- **South Africa:** Technical Report providing a COVID-19 Recovery Assessment;
- **Kazakhstan:** Study on Fiscal Incentives for Low-Carbon Development of the Republic of Kazakhstan; Second phase of Socio-Economic Impact Assessment (SEIA) of COVID-19; Fiscal Policy Analysis of Energy, Housing and Public Utilities (HPU) Sectors;
- **Argentina:** Inventory of policies related to the green economy; Green recovery - Progress in the circular economy towards a just transition; Study on the link between SDG and the just transition to a green economy; Indicators for the diagnosis of Argentina's progress in its transition towards a green economy; New panorama of the green economy in Argentina: inventory of policies and labour diagnosis; Position Paper: towards a Green Recovery and Just Transition in Argentina (Workers, Employers, Government); and
- **Guatemala:** Addendum to the Analysis of the effects of COVID-19 on the green economy.

Cross-sectoral stakeholder consultations and dialogues were held in 18 countries in 2021 (Mongolia, Peru, Senegal, Ghana, Mauritius, Burkina Faso, South Africa, Barbados, Kyrgyz Republic, Mato Grosso, Uruguay, Guyana, Kazakhstan, Argentina, Guatemala, India, Indonesia, Morocco and Thailand), including a range of public and private actors relevant for cross-sectoral policy reform.

15 National Steering Committees (NSC) in PAGE countries met on a regular basis throughout 2021 and engaged new government counterparts where necessary. 14 were already established NSCs, and a new one in Mauritius that the Cabinet officially agreed to

set up to direct and supervise PAGE country work related to the Green Recovery Programme, while advancing national policies, strategies and programmes. Preparatory work was also completed to support the establishment of an NSC for Thailand and Guatemala.

From 2021, indicators were also added to monitor progress related to green economy progress measurement frameworks and green financing mechanisms present in countries, as well as the development of sustainability strategies to ensure the continuation of green economy actions after the completion of the PAGE programme.

Four countries (Mongolia, Jiangsu Province, Argentina and South Africa) have so far established IGE measurement frameworks, and another five countries (Ghana, Burkina Faso, Kyrgyz Republic, Uruguay and Guyana) have plans to develop such measurement frameworks going forward. Mechanisms for green budgeting have been developed in seven countries (Mongolia, Peru, Mauritius, Burkina Faso, Mato Grosso, Argentina and Guatemala). New developments in 2021 include PAGE's collaboration with BIOFIN in Peru to support the mechanism for Public Works for Tax (WxT) deductions and the provision of support and tools to six sectoral ministries in Burkina Faso to integrate IGE into their sector budget programmes.

As of 2021, eight countries have developed a sustainability strategy (Mongolia, Peru, Senegal, Ghana, Mauritius, Burkina Faso, Jiangsu Province and South Africa).

A breakdown of key statistics against the updated PAGE Outcome 1 indicators is provided below:

Outcome 1 Indicators:

Outcome 1: Countries have reinforced and integrated inclusive green economy (IGE) goals and targets into SDG-aligned economic and development planning and financing

Indicator #1.1: Number of countries or provinces (at sub-national level) that i) started implementing or ii) have adopted national development plans or cross-sectoral strategies integrating IGE priorities

Status end of 2021: 15 countries and 2 states/provinces (in 2021, 11 countries and 2 states/provinces are implementing with PAGE support and 4 countries have adopted policies)

Indicator #1.2: Number of national development plans or cross-sectoral strategies integrating IGE priorities

Status end of 2021: 50 plans and strategies (4 additional in 2021)

Output 1.1: IGE diagnostics, assessments, and policy analysis undertaken

Indicator #1.1.1: Number of reports providing national IGE diagnostics, assessments and policy analysis conducted in consultation with national stakeholders that inform national planning processes

Status end of 2021: 47 reports completed; 2 with earlier agency support, 45 with PAGE support (out of which 11 additional in 2021)

Output 1.2: Public, private, and civil society stakeholders mobilized and engaged in cross-sectoral IGE prioritization

Indicator #1.2.1: Cross-sectoral national consultations and dialogues organized to mobilize stakeholders, share results of policy analysis and consult priorities

Status end of 2021: 18 countries holding cross-sectoral consultations

Indicator #1.2.2: Number of countries with national steering committees (NSC) overseeing IGE work meeting regularly

Status end of 2021: 15 countries (out of which 1 additional in 2021)

Output 1.3: Tools to measure progress and resources allocated to a more inclusive green economy

Indicator #1.3.1: Number of countries with IGE measurement framework established

Status end of 2021: 4 countries (0 additional in 2021)

Indicator #1.3.2: Number of countries with mechanism for green budgeting established

Status end of 2021: 7 countries (2 additional in 2021)

Output 1.4: Sustainability strategy for the phaseout of PAGE support developed in consultation with and endorsed by national partners

Indicator #1.4.1: Number of countries with sustainability strategies for the phaseout of PAGE support developed/updated and endorsed by national partners

Status end of 2021: 8 countries (0 additional in 2021)

3.4 OUTCOME 2 - COUNTRIES ARE IMPLEMENTING EVIDENCE-BASED SECTORAL AND THEMATIC REFORMS IN LINE WITH IGE PRIORITIES

To achieve the targets under Outcome 2, PAGE supports countries and provinces with sectoral and thematic diagnostics, assessments, and policy analysis, and with advisory support integrated into the design and advancement of sectoral and thematic policies, strategies and plans. Mobilization of partners to support IGE transformation is another key area of support including donors, international financial institutions, development banks, private banks and UN country teams.

As of 2021, there were a total of 27 thematic and sectoral policies, programmes, and instruments supporting IGE priorities in PAGE countries. 19 policies have been adopted and 8 are being implemented with PAGE support. Five additional sectoral policies, which integrate IGE objectives, were adopted in PAGE countries in 2021.

The National Policy for Decent Jobs was published by the Ministry of Labour and Promotion of Employment in **Peru**. Mentions of 'Green jobs' and 'Just transition' in the policy were achieved thanks to the technical assistance provided by PAGE Peru and the Green Jobs Programme at the ILO.

The Comprehensive Plan for Measures on Climate Change Education, developed by UN:CC Learn and PAGE, was officially launched in the **Kyrgyz Republic**.

In **Uruguay**, the National Waste Management Plan, framed as part of the Integral Waste Management Law, was officially launched by the Ministry of Environment with PAGE support.

Guidelines for conducting strategic and environmental impact assessments (SEA/EIA) were finalized in **Kazakhstan** with support from PAGE, which serve as a secondary legal source. PAGE also organized a series of trainings and developed a roadmap to build capacity and facilitate uptake of the guidelines moving forward.

In **Mato Grosso's** capital city, the Management Plan for the Historic Centre of Cuiaba to preserve historic monuments and create jobs was finalized, for which PAGE provided support, including conducting a cultural heritage and urban analysis.

Three additional policies or policy instruments are in the process of adoption in three countries (increasing the total number of sectoral policies/instruments supported by PAGE to 27):

- the Petroleum Revenue Management Law in **Senegal**;

- an amendment to the Law on Public Procurement sent to Parliament for approval in the Kyrgyz Republic; and
- the State Tourism Policy and Strategic Plan for the Development of Renewable Energies in Mato Grosso.

PAGE further supported the implementation of sectoral and thematic policies adopted in previous years in seven countries, including

- the National Strategy for the Promotion of Green Jobs linked to the National Employment Policy in **Senegal**, through the organization of training sessions on Green Start and Improve Your Business (SIYB) tools including for women;
- the State Integrated System of Family Agriculture in **Mato Grosso** by working on the development of a Progress Measurement Framework to monitor and assess the development of establishments, families and individuals involved in the system;
- the National Circular Economy Action Plan in **Uruguay** through conducting an assessment of the progress made and developing policy recommendations to further promote the Plan;
- the Environmental Fiscal Strategy by the Ministry of Finance in **Guatemala** through the development of an Environmental public expenditure classification guideline for the municipal level and a guideline to access green and climate finance in collaboration with the Biodiversity Finance Initiative (BIOFIN).

Sectoral and thematic policy reform processes were informed by targeted consultations with a sectoral or thematic focus. In addition, 20 sector assessments and policy diagnostics were completed in 2021 in 11 countries, including:

- **Mongolia**: Concept of Ger and Nature scheme for nomadic tourism; Comprehensive study to develop a concept on G&N scheme for nomadic tourism; and Preliminary assessment of domestic and international market demand. These three studies inform the 'Ger and Nature Scheme' developed by PAGE with the Ministry of Environment and Tourism as a targeted green recovery activity.
- **Peru**: Conceptualization of Green Jobs in Peru, feeding into the development of the National Policy for Decent Jobs, published by the Ministry of Labour and Promotion of Employment (mentioned above).
- **Mauritius**: Green Recovery Options for the Tourism Sector Report in Mauritius;
- **South Africa**: Perspectives on a Green Technology Gap Analysis Report 2021 - Barrier Analysis and Enabling Environment for Climate Change Adaptation and Mitigation;
- **Kyrgyz Republic**: Marketing Research on the Spatial Strategy, Draft Concept for Green Cities, an analysis to promote the policy of using electric vehicles in the Kyrgyz Republic and Sustainable finance roadmap and training materials;
- **Kazakhstan**: Assessment of Status and Legal Frameworks of Sustainable Public Procurement, Roadmap for the Introduction and Development of Environmental

Impact Assessment and Transboundary Impact Assessment Mechanisms, Analysis of the experience of countries of the OECD and some other countries in applying EIA, Analysis of Infrastructure for transition to Environmental Standards, Narrative Report on Waste Sector Modelling (conducted for Waste Management Programme, and will now feed into the National Project), and Context analysis for the redirection of emission payments at the regional level in Kazakhstan;

- **Argentina:** Labor diagnosis of the just transition towards a green economy in Argentina, Final report on the Fiscal Impact of the execution of the National Circular Economy Plan and Roadmap, Study towards an Indicator System of Green Jobs;
- **Guatemala:** Environmental public expenditure classification guideline for the municipal level; and guideline to access green and climate finance, both facilitating implementation of the Environmental Fiscal Strategy.
- **Indonesia:** Rapid Assessment on the Green Stimulus Package for National Economic Recovery in the Energy Sector and Rapid Assessment on the Green Stimulus Package for National Economic Recovery in the Waste Sector, both informing Indonesia's Green Recovery Roadmap 2021-2024 (mentioned above); Enabling Environment Assessment on Green Finance in West Java Province; and Policy Reform to Reduce Food Loss and Waste and Support Low Carbon Development in West Java.

In all countries, PAGE serves as a vehicle for engagement of partners beyond the five main agencies and partnerships are emerging that align the interests of different institutions with the broader objectives of PAGE. In 2021, additional partnerships were mobilized in two countries, with arrangements for co-financing or follow-up support reached in a total of 52 cases. This includes mechanisms to ensure the continuation of results as part of sustainability planning in graduating countries. A full summary of cooperation with other initiatives is provided in Section five. Additionally, financing sources were mobilized for IGE from a total of 33 sources in thirteen countries.

A breakdown of key statistics against the updated PAGE Outcome 2 indicators is provided below:

Outcome 2 Indicators:

Outcome 2: Countries are implementing evidence-based sectoral and thematic reforms in line with national IGE priorities

Indicator #2.1: Number of thematic and sectoral policies, programmes, and instruments supporting IGE priorities that PAGE countries i) have adopted, or ii) are implementing

Status end of 2021: 27 policies (in 2021, 8 policies were being implemented with PAGE support, 19 policies were adopted)

<p><u>Indicator #2.2:</u> Number of countries that have mobilized financing for IGE</p> <p>Status end of 2021: 33 financing sources mobilized (1 new in 2021)</p>
<p><u>Output 2.1:</u> Sectoral and thematic diagnostics, assessments, and policy analysis undertaken</p> <p><u>Indicator #2.1.1:</u> Number of reports available providing sectoral or thematic IGE diagnostics, assessments, and policy analysis conducted in consultation with national stakeholders that inform sectoral or thematic planning processes</p> <p>Status end of 2021: 105 reports (4 with earlier support by UNEP GEI initiative/ILO and 99 with PAGE support), out of which 22 additional in 2021</p>
<p><u>Output 2.2:</u> Sectoral and/or thematic policies, strategies, programmes, and plans that draw on results from diagnostics, assessments, and policy analysis and/or are designed with advisory support</p> <p><u>Indicator #2.2.1:</u> Number of sectoral or thematic policies, strategies, programmes, and plans designed and advanced in consultation with national partners</p> <p>Status end of 2021: 47 policies, strategies, programmes and plans (10 new in 2021)</p>
<p><u>Output 2.3:</u> IGE financing partners mobilized and engaged including UNCT, donors, IFIs, development banks and private sector</p> <p><u>Indicator #2.3.1:</u> Number of partners formally agreeing to co-financing, complementary follow-up programming, pledges, PPPs, etc.</p> <p>Status end of 2021: 52 partners, out which 3 are additional in 2021</p>

3.5 OUTCOME 3 – INDIVIDUALS AND INSTITUTIONS REPRESENTING DIFFERENT GROUPS ACQUIRE CAPACITIES TO ADVANCE IGE APPROACHES AT REGIONAL, NATIONAL AND SECTORAL LEVELS

To achieve targets under Outcome 3, PAGE is supporting partner countries by designing and implementing nationally tailored training packages and programmes in specific priority areas with the overall objective of creating human capacity for designing and implementing IGE policies. Global and regional training packages and events are designed and delivered to individuals and institutions as part of capacity-building for a global audience with a focus

on PAGE partner countries. These high-quality training, e-learning and other capacity-building products and services on IGE contribute to a growing global community of government officials and other stakeholders with the knowledge and skills to advance the transition to greener economies. In addition, the overall PAGE approach to providing technical assistance strengthens system-wide, institutional and individual capacities across all country-level activities, including those under Outcomes 1 and 2. PAGE uses survey to analyse the impact of its training activities.

In 2021, PAGE further strengthened individual and institutional capacities for IGE action at the national, regional and global level.

Across PAGE countries, a total of 97 institutions, ministries and departments were reported as being able to deliver IGE analysis or trainings, 17 of which were additional in 2021. 256 institutions, ministries and departments are actively engaged in different areas of PAGE delivery at the national level and with the opportunity to continuously strengthen their capacity (35 additional in 2021).

In 2021, PAGE also continued targeted trainings at the national level and delivered tailor made training jointly with national partners. As of 2021, PAGE had supported 133 training programmes that integrate IGE elements and delivered by (sub)national institutions. 27 of these were additional in 2021, taking place in Mongolia, Peru, Senegal, Burkina Faso, South Africa, Kyrgyz Republic, Mato Grosso, Uruguay, Kazakhstan and Indonesia. The trainings cover a range of green economy topics in support of PAGE outcomes 1 and 2, including green economy modelling sustainable tourism, waste management, resource mobilization and green entrepreneurship.

By 2021, a total of 7,681 people had been trained through national training workshops (3,548 female, 4,133 male), out of which 1,995 were additional in 2021.

Across the PAGE countries, a total of 97 institutions, ministries and departments were reported as being able to deliver IGE analysis or trainings (25 additional in 2021). 256 institutions, ministries and departments were actively engaged in different areas of PAGE delivery at the national level and with the opportunity to continuously strengthen their capacity (35 additional in 2021).

Strategic partnerships with institutions training current and future policymakers have been a key avenue for institutional and individual capacity-building over the past years and in 2021. In addition to the one-off training programmes conducted, a total of 28 recurrent training programmes have been established so far and embedded in national institutions in twelve countries (5 in Mongolia, 4 in South Africa, 2 each in Peru, Mauritius, Ghana, Kyrgyz Republic and 1 each in Senegal, Burkina Faso, Uruguay, Argentina, India and Indonesia). Ten of these programmes were established in 2021:

- The Civil Service College **Mauritius** incorporated training on Green Economy Strategy Planning and Project Management into its curriculum;

- In the **Kyrgyz Republic**, the Alliance of Universities integrated green economy learning into five separate university decrees, and developed two additional IGE learning courses;
- In **Argentina**, a Postgraduate Diploma on Just Transition and Green Jobs was developed; and
- In the University of **Indonesia**, building on the course template developed by PAGE, an Inclusive Green Economy Modelling (IGEM) course was launched.

Additional training and university courses are under development in South Africa, Barbados, Mato Grosso State, Burkina Faso, Uruguay, Argentina and Mauritius.

In 2021, PAGE also continued targeted trainings at the national level, and delivered tailor made training jointly with national partners in Mongolia, Peru, Senegal, Burkina Faso, South Africa, Mato Grosso State, Kyrgyz Republic, Uruguay, Kazakhstan, Argentina and Indonesia. The trainings cover a range of green economy topics in support of PAGE outcomes 1 and 2, including green economy modelling, renewable energy, sustainable agriculture, green finance, resource mobilization and green entrepreneurship. By 2021, a total of 7,681 people had been trained through national training workshops (3,548 female, 4,133 male), out of which 1,995 were additional in 2021.

Since its inception, PAGE has supported a total of 16,552 people to increase their knowledge and understanding of IGE topics at the global level, with 7,146 additional people in 2021. For 2021, this number includes the participants of the PAGE Green Economy Academy, as well as trainees obtaining certificates from the now six self-paced e-learning courses offered by PAGE on the UN CC:Learn Platform.

To assess the impact of these trainings, an impact survey was developed and sent to over 4,700 learners in December 2021 that enrolled in at least one PAGE training at regional and global levels between 2014 and 2021. The survey was responded to by 316 participants. Key findings include:

- 87 per cent of respondents applied the knowledge and skills that they have acquired through PAGE trainings;
- 59 per cent of respondents used learning materials provided by PAGE trainings/courses to organize learning activities;
- 93 per cent of respondents increased their capacity to identify and leverage opportunities for the promotion of an inclusive, green economy;
- 94 per cent of respondents became more confident advocating for an inclusive green economy after taking a PAGE training or course;
- 89 per cent of respondents found PAGE trainings/courses useful;
- 48 per cent of respondents received a promotion or improved their job performance after taking a PAGE training/course.

In 2021, PAGE continued to offer 21 IGE training programmes and specific training modules to countries at global and national levels. The Introduction to Sustainable Finance Self-paced e-learning course was comprehensively updated with technical inputs by the United Nations Environment Programme Finance Initiative (UNEP FI) and the International Finance Corporation (IFC). The green industrial e-course, originally published in English, was translated and made available in three additional languages: Spanish, French and Khmer.

A breakdown of key statistics against PAGE Outcome 3 indicators is provided below:

Outcome 3 Indicators:

Outcome 3: Individuals and institutions representing public, private, social partners, civil society groups and stakeholders have acquired capacities needed to advance IGE approaches at the regional, national, and sectoral levels.

Indicator #3.1: Number and percentage of survey respondents who report using knowledge and skills acquired from PAGE training and capacity development activities.

Status end of 2021: 87% of participants surveyed reported using knowledge and skills acquired through PAGE global training and capacity development activities

Indicator #3.2: Number of (sub)national institutions which deliver IGE policy analysis, IGE training, develop IGE related policies and lead related policy processes and stakeholder consultations

Status end of 2021: 97 (sub)national institutions (17 additional in 2021)

Indicator #3.3: Number of training programmes for which IGE elements are integrated and delivered by (sub)national institutions

Status end of 2021: 133 training programmes (27 additional in 2021)

Output 3.1: Capacity development support delivered to (sub)national institutions

Indicator #3.1.1: Number of (sub)national institutions having strengthened their capacity to deliver IGE policy analysis or training or to lead policy and stakeholder consultation processes

Status end of 2021: 256 national institutions/ministries/departments, out of which 35 were additional in 2021

Output 3.2: (Sub)nationally tailored training programmes developed and delivered

Indicator #3.2.1: Number of people that have completed (sub)national level training programmes

Status end of 2021: 7,681 people (3,548 female, 4,133 male) out of which 1,995 were additional in 2021

Indicator #3.2.2: Percentage of participants who report having increased their capacity in IGE related issues through (sub)national trainings

Status end of 2021: An average 90.3% of participants reported having increased their capacity

Indicator #3.2.3: Number of IGE training programmes and specific training modules developed for recurrent use by (sub)national institutions

Status end of 2021: 28 IGE training programmes and specific training modules (10 were additional in 2021)

Output 3.3: Global and regional leadership and training programs and packages developed and delivered for individuals and institutions

Indicator #3.3.1: Number of people that have completed training on IGE in globally or regionally offered on-line training and on-campus training programmes (knowledge versus performance)

Status end of 2021: 16,552 people, of which 7,146 were additional in 2021. 2,813 people were from PAGE countries.

Indicator #3.3.2: Percentage of participants who report having increased their capacity in IGE related issues in global and regional training programmes (with a target of 80% on average)

Status end of 2021: An average 93% of participants report having increased their capacity

Indicator #3.3.3: Number of global IGE training programmes and specific training modules being offered to countries by PAGE (knowledge versus performance)

Status end of 2021: 21 training programmes (0 additional in 2021)

3.6 OUTCOME 4 - NATIONAL AND REGIONAL STAKEHOLDERS ACCESS AND APPLY KNOWLEDGE FOR ADVANCING IGE

Improving the access and application of knowledge for advancing IGE through partnership, organization of events, communication and outreach are the focus to achieve targets under Outcome 4. In 2021, PAGE expanded the scope of this outcome to focus also on national and regional stakeholders, enabling PAGE countries to also report on Outcome 4. PAGE is supporting countries to improve their IGE knowledge base by generating and sharing knowledge products such as manuals, reports, lessons learned and best practices with the aim to inform and support national policy analysis and formulation. For knowledge sharing, PAGE organizes high-level events, conferences, workshops involving current and future PAGE countries to build networks and global platforms to exchange experiences and information. IGE advocacy, outreach and communications efforts of PAGE are part of the activities under Outcome 4.

By the end of 2021, a total of 61 stakeholders in 14 PAGE countries were identified as having used the knowledge products for the design and implementation of IGE related policy priorities at the national and sectoral levels and related capacity-building activities.

Since 2013, PAGE has produced 19 IGE knowledge products, which are available to countries for use in national policymaking processes, including two released in 2021. New developments include the launch of the Integrated Approaches in Action: A Companion to the International Good Practice Principles for Sustainable Infrastructure developed by UNEP. Additionally, PAGE finalized its green economic recovery modelling with Cambridge Econometrics.

PAGE also supported in previous years the establishment of four knowledge platforms for the Green Growth Knowledge Partnership: the Green Learning Network, Green Industry Platform, Green Finance Platform and the Green Forum that continue to grow and establish themselves as leading sources of knowledge for supporting a green economy transition.

In addition, 75 institutions and initiatives are collaborating under the wider PAGE network, of which four are additional in 2021: UN ESCAP, Oxford University, Cambridge Econometrics and LinkedIn.

Since 2013, PAGE has held 66 IGE South-South and Triangular events, peer learning and dialogues in cooperation with other partners, that contribute to sharing knowledge and scaling of good practices on green economy.

Six additional global and regional sharing events were held in 2021. To raise visibility and contribute to the global discourse on IGE, SDGs and Climate Action in the context of COVID-19 and economic recovery, PAGE successfully organized a side-event at the High-Level Political Forum in July 2021, which served to discuss the realities of linking a COVID-19 recovery with long-term sustainable development in the context of green job growth. PAGE

also co-organized the Eighth Green Latin America Awards, contributing to knowledge generation and exchange in the Latin America and Caribbean Region. Additionally, exchanges were held between Mongolia and Kyrgyz Republic on green finance, Kazakhstan and Kyrgyz Republic on environmental education, Indonesia and Peru on the development of an IGE modelling course, and Senegal, Burkina Faso and Côte d'Ivoire on the development of a green jobs directory.

New indicators were added to account for communication related achievements, which is of increasing significance to the programme.

At the global level, PAGE has been working under the Communication Strategy developed in 2020 which encompasses the development and update of the website, the online annual report, monthly newsletter, outreach events and targeted social media postings, among other activities.

At the national level, as of 2021, four PAGE countries (Senegal, Burkina Faso, Uruguay and South Africa) have developed a national level outreach and communication strategy or plans to reach PAGE stakeholders.

To account for awareness-raising activities, which were previously counted primarily under output 1.2. (Public, private and civil society stakeholders mobilized and engaged in cross-sectoral IGE prioritization), an output was introduced to monitor targeted national awareness-raising activities and tools. There are currently 57 tools across 14 countries, 16 of which were additional in 2021. For 2021, these include the Kyrgyz Republic Green Expo 2021, the third Uruguay Circular Award and the South Africa Better Future Dialogue Series.

By the end of 2021, a total of 61 stakeholders in 14 PAGE countries were identified as having used the knowledge products for the design and implementation of IGE related policy priorities at the national and sectoral levels and related capacity-building activities.

A breakdown of key statistics against PAGE Outcome 4 indicators is provided below:

Outcome 4 Indicators:

Outcome 4: National and regional stakeholders, including green economy champions, decision-makers, practitioners, and youth representatives, access and apply knowledge for advancing IGE

Indicator #4: Number of times that PAGE knowledge products are used for the implementation of IGE priorities at national level

Status end of 2020: 61 stakeholders in 14 countries were making use of PAGE knowledge products

Output 4.1: IGE knowledge products and platforms generated/leveraged and shared

Indicator #4.1.1: Number of IGE knowledge products generated and made available on PAGE website for national level application

Status end of 2021: 19 knowledge products, of which 2 were additional in 2021

Indicator #4.1.2: Number of platforms established or leveraged to advance IGE knowledge-sharing and dialogue, including for and by youth and green economy champions

Status end of 2021: 4 knowledge platforms (0 new in 2021)

Indicator #4.1.3: Number of institutions, individuals, and initiatives collaborating under a wider PAGE network

Status end of 2021: 75 institutions, individuals, and initiatives (4 new in 2021)

Output 4.2: IGE South-South and Triangular events and dialogues organized to promote knowledge-sharing and debate on IGE

Indicator #4.2.1: Number of IGE South-South and Triangular events, peer learning and dialogues, including scaling of good practices, held in cooperation with other partners

Status end of 2021: 66 events (6 new in 2021)

Output 4.3: Global PAGE IGE advocacy, outreach, and communications strategy to reach PAGE stakeholders developed, put into practice, and reviewed/updated annually

Indicator #4.3.1: Communication strategy, plan, or tools—with defined audiences that include decision-makers, practitioners, and youth representatives—developed, implemented, and updated annually

Status end of 2021: PAGE Communication Strategy developed in 2020

Output 4.4: National outreach and communication strategies/plans to reach PAGE stakeholders developed/updated and put into practice

Indicator #4.4.1: Number of national communication strategies or plans with defined audiences developed and implemented

Status end of 2021: 4 national communication strategies or plans developed

Output 4.5: Targeted national awareness-raising activities implemented and/or tools developed

Indicator #4.5.1: Number of targeted national awareness-raising activities implemented and/or tools developed

Status end of 2021: 57 awareness-raising activities / tools developed

4. CONTRIBUTION TO CLIMATE, BIODIVERSITY, GENDER AND CIRCULAR ECONOMY TARGETS

4.1 CONTRIBUTION TO CLIMATE ACTION

Supporting countries' efforts to meet the goals of the Paris Agreement through their NDCs is a key priority which PAGE assists through various mechanisms, such as policy mainstreaming, modelling, climate finance and education. Examples from 2021 PAGE work are included below.

Mainstreaming climate change into policies and planning:

Following the announcement of the President in December 2020 that **Kazakhstan** will become carbon neutral by 2060, PAGE, with GIZ, contributed to the development of a draft Doctrine on Carbon Neutrality until 2060, based on modelling and analysis of different scenarios, to help enact this vision.

In **Mongolia**, PAGE is supporting a technical study by the Mongolian Energy Economics Institute that analyses how energy subsidies could be reformed through the rationalization of energy tariffs, including but not limited to reducing inefficient fossil fuel subsidies, and promotion of renewable energy development in Mongolia.

In **Indonesia**, PAGE is supporting the roll-out of the Low Carbon Development Initiative at the sub-national level, by adapting models and technical guidelines for use at the provincial level. Technical assistance and coaching were provided to the government of West Java province to develop the provincial low carbon development plan (RPRKD), using the model for exercising policy scenarios.

Integrating climate change into education:

In **Kyrgyz Republic**, PAGE supported the development of a Comprehensive Plan of Measures on Climate Change Education, which lays out key components of the country's climate change learning strategy and was officially launched in 2021. Additionally, a Kyrgyz youth dialogue was organized on 24 April 2021, bringing together more than 200 young people to provide a better understanding of climate change, insights into further study opportunities and ways to get involved in climate processes on national and global levels.

In **Mauritius**, the Mauritius Institute of Education (MIE) agreed to host a centralised online portal that will incorporate various e-learning modules and resources related to climate change and green economy for easy access to teachers.

Mobilizing climate finance:

PAGE supports different countries in the mobilization of finance for climate objectives. Throughout 2021, PAGE continued its support for the creation of a **Kyrgyz Republic Green Finance Corporation** to mobilize public and private funding for climate action and green recovery.

In **Burkina Faso**, trainings held for government officials and NGO staff on the development of bankable projects that could attract climate funding resulted in the development of two concept notes to be submitted to the Green Climate Fund.

In **Guatemala**, PAGE developed a guideline to access green and climate finance in collaboration with BIOFIN to support the Ministry of Finance in designing and implementing innovative financing solutions to mobilize resources for adapting and mitigating climate change

Supporting the development of NDCs:

In some countries, PAGE work links directly to the process for updating the Nationally Determined Contribution (NDC):

- In **Senegal**, a draft report on the rapid situational analysis of the COVID-19 impacts on the NDC process was developed, to be finalized in early 2022, which considers the current national and international macroeconomic situation and identifies the technical and social measures that could be integrated in the response to climate change.
- In **South Africa**, PAGE is supporting the South African Government in the NDC implementation and post-COP 26 national engagements to amplify youth voices in the Youth Barometer project. PAGE also actively participated in the NDC enhancement consultations held by the South African Department of Forestry, Fisheries and the Environment and Presidential Climate Commission in July 2021, in preparation for COP 26.
- In **Mauritius**, progress was made on updating the Green Jobs Assessment Model to incorporate the impacts on employment stemming from the country's NDC. The model allows for projections of green economy and climate policies on social, labour, economic and environmental outcomes.
- As the updated NDC for **Argentina** establishes sustainable employment and just transition as the central axis, the ILO together with PAGE developed a methodology to create labor, emissions and productivity scenarios for the sectoral policies of the NDCs.
- PAGE supported analysis of fiscal reform options in terms of their potential to raise and save public revenues, including how these revenues can be used to support

investments needed to deliver Kazakhstan's NDC. Additionally, to provide complementarity with the work on the UNDP-led Climate Promise project and leverage public budget for NDC implementation, key activities of NDC Roadmaps on adaptation and mitigation with high sustainable recovery potential have been incorporated into the 'National Project "Green Kazakhstan'.

- In **Thailand**, as part of the planned green recovery work, PAGE will support the alignment of Thailand's economic and social recovery projects from the government's 400 billion Baht Rehabilitation Fund with key SDGs, NDCs and other global sustainability frameworks.

4.2 CONTRIBUTION TO BIODIVERSITY

An inclusive green economy aims to respect planetary boundaries and restore the ecosystem services provided by the natural environment. In line with this, PAGE is engaged in various initiatives that focus on sustainable environmental management and halting the loss of biodiversity. Notable developments in 2021 include:

- In **Mongolia**, the G&N scheme, developed to support economic recovery, aims to increase knowledge of the local people on the value and benefits of biodiversity and to strengthen the interlinkages of biodiversity and human health through nomadic culture.
- In **Peru**, UNDP with additional PAGE funds and in collaboration with BIOFIN is supporting the mechanism for Public Works for Tax Deductions) to finance projects related to biodiversity and green economy and are currently accompanying the implementation of three pilot projects worth approximately USD 10 million.
- In **Guatemala**, PAGE worked with BIOFIN to develop an Environmental public expenditure classification guideline for the municipal level that helps local municipalities to improve transparency in the recording of public expenditure and classifying expenditure according to key areas such as environment, climate change and biodiversity.
- In **South Africa**, a Perspectives on a Green Technology Gap Analysis Report 2021 study was conducted to identify needs and costs required to create an enabling environment that would uptake existing and emerging green technologies in the water, energy and biodiversity sectors.
- In the **Kyrgyz Republic**, PAGE continued to provide support to BIOFIN in conducting analysis to reduce, replace or phase out harmful agricultural subsidies that threaten biodiversity and the welfare of farmers and disincentivize the adoption of green and organic practices.
- In **Kazakhstan**, the final 'National Project Green Kazakhstan', approved in 2021 with PAGE support, includes a focus on biodiversity and aims to "conserve biological diversity by increasing the number of rare and endangered species, as well as by

creating specially protected natural areas, increasing green spaces and instilling respect for nature and wildlife.”

- In **India**, PAGE is supporting BIOFIN in developing a methodology for sharing benefits and disbursing funds accrued through the access and benefits sharing mechanism of the National Biodiversity Authority and the State Biodiversity Boards, with revenues being used for conservation and development of sustainable livelihoods.
- In **Mato Grosso**, a review of the forest-based sector value chains was conducted in 2021, which aims to contribute to the development of Green Industrial Strategy for the forest-based sector with the overall objective of reducing deforestation and the related impacts such as biodiversity loss.
- Utilising the Targeted Scenario Analysis (TSA) methodology developed by UNDP, PAGE funded four studies in 2021 that compare the financial, economic, and environmental effects of current versus alternative sustainable practices in **Colombia**, **Ecuador** and **Peru**, and highlight the potential benefits for biodiversity.

4.3 PROMOTING GENDER EQUALITY AND WOMEN'S EMPOWERMENT

Greener economies hold the potential to reduce gender inequalities and increase women's economic participation. However, green policies should be designed to be fair, incorporating gender perspectives to address gender inequalities and identify opportunities to incentivize women's participation.

Processes to support the inclusion of gender targets in policy frameworks are already well developed and supported through other initiatives. Because of this, PAGE rather analyses and observes the situation and provides targeted support if there are perceived gaps and specific opportunities, as in cases from 2021 below.

- In **Kazakhstan**, PAGE supported development of the second phase of the Socio-Economic Impact Assessment (SEIA) of COVID-19 that includes a set of gender-sensitive policy recommendations for medium to long-term response and recovery measures related to employment, income, and economic activity (including green recovery) and social protection.
- In **Morocco**, PAGE is supporting a study on organic and agro-ecological value chains in the Rabat-Salé-Kenitra region with the aim to develop a green entrepreneurship training programme that promotes the inclusion of women in these sectors.
- In **Argentina**, PAGE commenced work to update the Vocational Training System to meet green economy labour market demands and ensure employment opportunities for women and young people in the tourism sector.

- In **Senegal**, three training sessions on Green Start and Improve Your Business (SIYB) tools were conducted to strengthen the technical operational and management capacities of 45 women in agricultural production, beekeeping and fishing.
- In **Uruguay**, PAGE supported capacity building in green jobs and decent work for rural woman working jointly with the Ministry of Labor to generate knowledge and skills and promote good practices for the transition to a green economy.
- The GGKP launched a new Gender Expert Group in November 2021 to catalyse collective action towards gender equality and women's empowerment in the transitions to green, low-emission economies.

4.4 CONTRIBUTION TO CIRCULAR ECONOMY

The timely adoption of sustainable consumption and production patterns is key to mitigate threats to human wellness, to economies and to the planet. Choosing more efficient production methods and use of natural resources can be one of the most effective ways to reduce our impact on the environment while simultaneously advancing human wellbeing.

PAGE has a track record of providing demand-driven policy and capacity-building support combining agendas for growth, jobs, sustainability and reduced inequalities. Using its toolkit and years of experience working towards green economic growth, PAGE has supported countries in achieving multiple targets of SDG 12 – Responsible Consumption and Production – and moving towards a circular economy. Key examples form 2021 include:

- In **South Africa**, PAGE is providing technical support to the Department of Forestry, Fisheries and the Environment on revising the Municipal Integrated Waste Management Planning Guidelines to ensure priorities including job creation, waste management and circular economy are incorporated.
- In **Uruguay**, PAGE is working with the the Ministry of Industry, Energy and Mining to design and validate the National Strategy for Circular Economy, which will be promoted as a step towards the institutionalisation of circular economy as a national policy. PAGE also assessed the progress made in the Uruguay's Circular Economy Action Plan and made policy recommendations to further promote Circular Economy.
- Also in **Uruguay**, PAGE supported the establishment and implementation of the Circular Economy Laboratory – an inter-institutional initiative which aims to promote the implementation of SDGs at the national level by enhancing the ability of businesses in Uruguay to contribute to the circular economy. Additionally, PAGE supported the third edition of the **Uruguay Circular Award 2021**, launched as part of the Uruguay Circular Program that seeks to promote the transition to a circular economy in the country.

- In **Argentina**, PAGE is contributing to development of a National Plan for the Promotion of Circular Economy. This was supported in 2021 by a technical feasibility study for the development of circular economy and fiscal impact study that would facilitate the formalization of the recycling industry and help to implement the Extended Producer Responsibility approach in the Argentinian market.
- In **Indonesia**, PAGE is supporting the government's goal of embedding the circular economy approach into its Low Carbon Development Initiative and next Medium-term Development Plan through promoting circular economy in the food and beverages sector. As an initial step in 2021, PAGE conducted a rapid assessment to identify sub-sectors that contribute most significantly to green recovery.
- In **Kazakhstan**, PAGE supported the Academy of Public Administration to implement a capacity building programme on sustainable recovery, focusing on opportunities for a green, low carbon and circular economy post-COVID-19. It brought together over 700 civil servants from ministries, regional departments and local authorities from Kazakhstan, Tajikistan, Uzbekistan and Kyrgyz Republic.
- In **India**, PAGE is supporting the government priority to develop the circular economy by building roadmaps to transform the manufacturing sector, with a focus on the textiles and garments sectors, developing a sustainable public procurement action plan and building an eco-labelling framework.

5. CHALLENGES AND LESSONS LEARNED

The COVID-19 pandemic and related socio-economic challenges and restrictions remained a major influence on PAGE countries and global action in 2021. New variants of the virus going around the globe in different waves led to renewed lock downs and COVID measures in PAGE countries and the UN Offices, further impeding face-to-face meetings and travel. Remote working and virtual formats became the standard for delivery and plans for a larger PAGE Ministerial Conference were again postponed.

How this situation will evolve in the future is difficult to predict, and flexibility in planning will still be needed. While impacts of the pandemic may fade, new disruptions of supply chains, inflation and food shortages following armed conflict in Europe may challenge again governments' long-term development plans and require additional short-term measures. A stable global economy with flourishing trade and linear growth trajectories is less likely to be the foundation for a green economic transformation in countries in the near future.

As new crises emerge, shifting priorities for funding are also starting to impact planning security for the PAGE Programme as a whole. The partnership is able to cover its commitments to partner countries through 2024 but has yet to be in a position to scale-up delivery as planned under the PAGE Strategy 2021-2030. Multi-year funding arrangements

and programming has been a factor of success contributing to better planning, staff management and effective delivery over the past years. Opposed to earlier long-term plans, PAGE partners will have to align with new priorities, look into shorter planning horizons and adjust the scope of delivery in line with secured funds.

In this situation, PAGE has explored new avenues for creating impact, e.g., through the Green Transformation Economic Advisory Mechanism (Green TEAM), closer collaboration with UN Resident Coordinators (UNRCs) and strengthened South-South Cooperation. PAGE began to live up to its potential as a knowledge hub that mobilizes expertise, elevates country experiences, connects governments and shares best practices to lead the way for integrated approaches to a green economic transformation.

Against this background, the following lessons and more specific challenges emerged in 2021.

PAGE's integrated model of delivery aligns well with the UN System Reform: Strong PAGE engagement with UNRCs and their Offices opened the door for discussions with the UN Development Cooperation Office (DCO) on PAGE's role in strengthening UN capacity to deliver on the triple planetary crises in all member states. Since 2021, PAGE agencies have explored the potential for a more structured cooperation between PAGE and UNRCs to maximise impacts under the overall objective of aligning economic planning with SDGs.

The Green Recovery work was originally leading the way for PAGE's engagement with the UNRC Offices and better integration of PAGE into UN Country Teams. This developed into substantive working relationships with the UNRC Offices in PAGE countries, led by the efforts of the Green TEAM to unite economic expertise for better delivery. While the current model of PAGE was created before the Reform of the UN Development System, PAGE delivery is well within the mandates and objectives of the UNRCOs. The following lessons from 2021 confirm this:

- The UNRCs and UNRCOs act as an important mechanism to open doors at the highest level of government, develop policies and communicate results. They can affirm country priorities, provide insights into economic decision-making and help manage political risks.
- In case of changes in national administration or diminishing political will, UNRCs can help build new momentum through forward leaning engagement.
- There are multiplier effects when PAGE becomes part of the UNCTs and provides examples of how to contribute to a green economic transition. UNRCs can ensure synergies with other initiatives and programmes and lead delivery as One UN.
- Embedding PAGE within the UNCT can also avoid an information gap when PAGE scales down its support after five years and ensure that results continue to be monitored.

At the same time, UNRCOs see PAGE's offer as highly relevant to accelerate action on green and inclusive economic transformation and note the following benefits:

- PAGE stocktaking studies identify policy entry points for the UN System to respond to countries' needs.
- The additional and direct support that PAGE is already providing through the Green TEAM is instrumental to position and strengthen UNRCOs.
- The knowledge products and tools that PAGE has produced can be leveraged further through wider dissemination to appropriate government counterparts and stakeholders.

Adjusting PAGE's entry points for policy advice for wider impact: The Green TEAM has been uniting economic policy expertise across the UN for deeper policy advice. The following lessons and opportunities for adjusting PAGE entry points and delivery models emerged from the substantive discussions organized by the Green TEAM with UNRC Office Economists in 2021:

- Establishing linkages to the highest priorities of a country such as OECD membership, EU market access, and G20 processes can help attract interest in green economic transformation from high-level authorities and decision-makers.
- Placing oversight of PAGE at the senior level in the UN country, e.g., Head of UN Country Offices can enhance impact and improve coherence in work planning and delivery.
- Building a stronger consensus among the partners in the UN and counterpart ministries, in the initial phases of work planning, which is sometimes time consuming, pays off in terms of long-term impacts.
- Continuous close engagement with all government ministries, beyond the lead ministry, focal points, and stakeholders, who have supported the country application to PAGE, is important in responding to emerging country needs and scaling up impacts to a wider policy canvas.

The following opportunities were highlighted for PAGE:

- Playing a stronger role in the development of carbon markets, carbon taxation, and sustainable agriculture and promoting SMEs in the green transition;
- Creating a rapid deployment team of economists to help PAGE to stay flexible and agile in its response to unexpected challenges or changes in government priorities;
- Strengthening joint work planning in connection with the countries' UN Sustainable Development Country frameworks (UNSDCFs);
- Increasing South-South Cooperation through deeper partnerships and systematic knowledge sharing, beyond webinars; and
- Stronger involvement of academic sectors and non-governmental actors.

Capitalizing on and communicating results achieved: With 20 partner countries across regions and that comprise different types of economies, PAGE has a wealth of experience and knowledge that it can capitalize on to scale impact. But it remains a challenge to capture the results related to a green economic transformation which appear complex, at times abstract, and not immediately obvious in terms of beneficiaries. It is less the technocratic approach that stands in the way of a clear narrative, but the sheer complexity of an economic transformation, which does not follow standard patterns but comes with a specific dynamic, pace and focus in each partner country.

There is room to scale-up sharing of good practices and experiences from PAGE and to engage with international fora more substantively and with advanced planning, going beyond the organization of side events. Effective communications and outreach efforts may be best targeted through country specific communication strategies developed in local languages that also include and target delegations of funding partners. Gender and Youth are two dimensions to be further strengthened across all outreach and engagement activities. In addition, PAGE graduating and alumni countries are the most effective ambassadors for green economic transformation and are proud to present the results achieved in their countries with PAGE support.

To allow for deeper insights into results, enhance strategic communication at country level, and engage with international fora, PAGE promoted the following steps and outputs in 2021:

- The organization of country spotlights to allow country partners to present their outcomes and own narrative on green economic transformation;
- The production of impact videos in graduating countries to summarize changes initiated with the support from PAGE;
- Outreach to EU Delegations and other in-country delegations of funding partners more systematically for briefings, specifically in view of EC's objectives to roll-out green and circular comprehensively through EU-programmes at country level;
- The inclusion of communication strategies and communication tools as explicit outputs in the revised country results framework; and
- Engagement with the Stockholm+50 Conference through substantive contribution to the leadership dialogues and planning of additional PAGE events.

Peer Learning as a cost-effective approach for scaling impact: Within a limited budget, peer learning among PAGE countries was scaled up in 2021 as a cost-effective approach for enabling countries to learn about best practices and new approaches. This offered an opportunity for new countries to benefit from experiences and lessons, and for graduating countries to stay engaged in PAGE. Examples from 2021 include:

- The fourth edition of the PAGE Academy on Green Economy, structured as a series of webinars showcasing how PAGE countries implement green economic policy, sectoral interventions and related lessons;
- The Peer-learning initiative, which connected countries in pairs or small groups on selected topics; and
- Thematically focused webinars that connected all PAGE country coordinators and agency focal points on a two-monthly basis (so called 'Family Gatherings').

Prolonged COVID-19 impacts and slow green recovery: Just as PAGE was building momentum in the beginning of 2020 for its expansion, the COVID-19 pandemic disrupted earlier planning and shifted the focus to the immediate health and socio-economic crises. What was first perceived as a short interruption followed by a recovery phase, became a two-year long phenomenon, with a less linear trajectory for recovery. Countries were again hit by new waves of variants in 2021, and delivery of green recovery work was difficult to implement as planned. Two additional countries submitted proposals for green recovery support only in 2021. With the additional green recovery offer and refocused activities, PAGE managed to adjust well and quickly to the new circumstances. At the operational level, the flexibility and adaptability of the PAGE approach proved to be of value. To grasp the results achieved under green economic recovery, however, is more challenging and still too early, as the health and socio-economic crises continued throughout 2021.

So far, in global terms, despite strong efforts by PAGE and other partners, the economic recovery does not appear to be remarkably green. Countries prioritize greening within certain aspects of the recovery, often focused in sectors strongly hit by the pandemic, while the overall economic trajectory of the country does not necessarily align with the objective of a green transition.

- To drive the recovery towards more system-wide impact, the following lessons can be drawn based on the short period in which experiences were gathered:
- Prioritizing support to economic sectors with the greatest overall impact on countries' green economic transformation may differ from the ones hit hardest by the pandemic;
- Focusing on the drivers of unsustainable consumption and production through strong public and market-based incentives can shift investment and finance flows into greener economic activities; and
- Approaching policy reforms related to green recovery with an emphasis on just transition helps to bring all stakeholders on board, including those that may experience difficulties if activities in sectors are changing.

Adaptation of PAGE Strategy in evolving global context: Since the release of the PAGE Strategy 2021-2030, the world has faced many new challenges requiring PAGE to continuously align its scope, approach and activities while staying loyal to its overall

objective and expected outcomes. The green economic transformation that PAGE promotes remains as relevant as before, with climate change still posing the most important overarching threat to people and planet. But green transformation has become a road with bumps and unexpected accelerators, less straight in direction.

Since PAGE amended its Strategy and approach to embrace the pandemic and economic recovery, new challenges and opportunities emerged. On a positive note, PAGE being recognized as a model for integrated delivery opens new opportunity windows within the Reform of the UN System, with discussion ongoing with the Development Cooperation Office (DCO). At the same time, Europe suffers from unexpected armed conflict and renewed impact on supply chains, energy security and prices, which is already spreading as the next socio-economic crisis around the world. It seems less likely that the world will find a stable path to sustainable growth in the near future, and PAGE will have to adopt, again and further amend its original strategy and plans in line with a continuously evolving global context.

Gap between interest and potential scope of delivery: PAGE's offer to support a green economic transformation and green recovery is in high demand. In its 2021 call for proposals, PAGE received 9 quality applications, with 14 additional countries inquiring about the call and a total of 65 countries that expressed interest in PAGE since its beginning. Two additional PAGE countries requested green recovery support in 2021, making it a total of 17 countries to which PAGE provides support on green economic recovery. Countries' ability to focus their requests and visualize PAGE support with their own country context has also improved remarkably, and PAGE's integrated model for delivery is highly appreciated and recognized.

However, the interest from countries at this point cannot be matched by funding commitments, as shifting priorities have made it more difficult to secure funding for PAGE's objectives. Different from earlier plans to take on board six new countries in the first two years of the new Strategy phase, PAGE is currently able to invite only two new countries to join in 2022, while declining seven that also presented quality applications. In line with available funds, PAGE did not increase the volume of global work, nor did it raise funding allocations for countries, and refrained from pursuing plans to scale up its reach and scope or to offer post-graduation support or a Green Economy Challenge Fund. Thanks to its modular approach, PAGE has been able to adjust and stay fully operational.

Over the past year, PAGE also developed a comprehensive resource mobilization strategy to address this situation, looking into different fundraising options, the compatibility with the PAGE governance structure and new potential funders. PAGE is not an obvious fit with funding instruments often structured thematically or regionally. At the same time, the closer integration of PAGE into the UN System delivery could come with new opportunities for mobilizing resources through new partners. In this situation, going forward, resource mobilization and the PAGE strategy, governance and model for delivery will need to be discussed in tandem to close the gap between country demand and available resources.

LIST OF ABBREVIATIONS AND ACRONYMS

ABS	Access and benefits sharing
AUCA	American University of Central Asia
AVZUR	University Alliance for Green Economy and Sustainable Development
BAPPENAS	Ministry of National Development Planning (Indonesia)
BAT	Best Available Techniques
B-C-G	Bio-Circular-Green Economy
BIOFIN	Biodiversity Finance Initiative
BMUV	German Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection
CCA	Common Country Analysis
CCICED	China Council for International Cooperation on Environment and Development
CE	Circular Economy
CEMPRE	Compromiso Empresarial Para el Recycling (Uruguay)
CIPPEC	Center for the Implementation of Public Policies for Equity and Growth
CRSAP	Climate Change Resilience Strategy and Action Plan (Guyana)
CSCM	Civil Service College Mauritius
DEFF	Department of Environment, Forestry and Fisheries (South Africa)
ECOWAS	Economic Community of West African States
EGS	Environmental Goods and Services
EGSS	Environmental Goods and Services Sectors
EMPAER	Mato Grosso Company of Research, Assistance and Rural Extension
ENA	Senegalese National School of Administration
EPA	Environmental Protection Agency (Ghana)
EPR	Extended Producer Responsibility
FAO	Food and Agricultural Organization
FLW	Food Loss and Waste
G20	Group of Twenty
GAIN	Green Jobs Assessment Institutions Network
GCF	Green Climate Fund
GDP	Gross domestic product
GEC	Green Economy Coalition
GEF	Global Environment Facility
GEP	Green Economy Progress
GES	Ghana Education Service
GET	Green Economy Transformation
GGGI	Global Green Growth Institute
GGKP	Green Growth Knowledge Partnership
GHG	Greenhouse Gases
GITA	Green Industry and Trade Assessment
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit

GJAM	Green Jobs Assessment Model
GLN	Green Learning Network
GNCPC	Ghana National Cleaner Production Center
GRO	Global Recovery Observatory
GSDS	Green State Development Strategy (Guyana)
GSS	Ghana Statistical Service
HLPF	High-Level Political Forum
HPU	Housing and Public Utilities
ICLEI	Local Governments for Sustainability
IFC	International Finance Corporation
IFL	Innovative Financing Lab
IGE	Inclusive green economy
IGEM	Integrated Green Economy Measurement
IIED	International Institute for Environment and Development
IMT	Institute of the World of Labour
ILO	International Labour Organization
IR	Indian Railways
ITC	International Training Center
IWA	Industrial Waste Assessment
LabEC	Circular Economy Laboratory (Uruguay)
LAC	Latin America and the Caribbean
LCDC	Low Carbon Development Concept (Kazakhstan)
LCDI	Low Carbon Development Initiative (Indonesia)
LCDS	Low Carbon Development Strategy (Guyana)
MCSAR	Ministry of Civil Service and Administrative Reform (Mauritius)
MCSFF	Mongolia-China Sustainable Fibers Fund
MEDD	Ministry of Environment and Sustainable Development (Senegal)
MEGNR	Ministry of Ecology, Geology and Natural Resources (Kazakhstan)
MENB	Minister of Environment and National Beautification (Barbados)
MESTI	Ministry of Environment, Science, Technology and Innovation (Ghana)
MET	Ministry of Environment and Tourism (Mongolia)
MGFC	Mongolian Green Finance Corporation
MIEM	Ministry of Industry, Energy and Mining (MIEM)
MMDA	Metropolitan, Municipal and District Assemblies (Ghana)
MoEFCC	Ministry of Environment, Forest and Climate Change (India)
MOF	Ministry of Finance (Mongolia)
MoU	Memorandum of Understanding
MPTF	Multi-Partner-Trust Fund
MSMEs	Micro, small and medium-sized enterprises
MSW	Solid municipal waste
NAIR	National Academy of Indian Railways
NCCP	National Climate Change Policy (Mato Grosso State)
NDC	Nationally Determined Contributions
NDPC	National Development Planning Commission (Ghana)

NESDC	National Economic and Social Development Council
NESDP	National Economic and Social Development Plan (Thailand)
NGO	Non-government Organization
NGDP	National Green Development Policy (Mongolia)
NITI	National Institution for Transforming India
NPCC	National Productivity and Competitiveness Council (Mauritius)
NSC	National Steering Committee
NSP	National Strategic Plan (Barbados)
NTFP	Non-Timber Forest Products
OECD	Organisation for Economic Cooperation and Development
OSCE	Organization for Security and Co-operation in Europe
PAG	Ghana's Coronavirus Alleviation Programme
PAGE	Partnership for Action on Green Economy
PAP	Priority Action Plan (Senegal)
PCI	Produce, Conserve and Include (Mato Grosso State)
PEA	Poverty Environment Action
PGEER	Public Green Economy Expenditure Review
PNDES	National Programme for Economic and Social Development (Burkina Faso)
PREN	Programme for the Relaunch of the National Economy (Senegal)
PRODUCE	Ministry of Production (Peru)
PSE	Plan Senegal Emergent
RPJMD	Regional Medium-term Development Plans (Indonesia)
RPJMN	National Medium-Term Development Plan (Indonesia)
RPRKD	Provincial Low Carbon Development Plans (Indonesia)
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
SAG	SWITCH Africa Green
SA-LEDS	South Africa Low Emission Development Strategy
SARUA	Southern African Regional University Association
SCIESU	State Committee for Industry, Energy and Subsoil Use (Kyrgyz Republic)
SCORE	Sustaining Competitive and Responsible Enterprise
SCP	Sustainable consumption and production
SCP-HAT	Sustainable consumption and production Hotspot Analysis Tool
SDG	Sustainable Development Goals
SDV	Sustainable Development Vision (Mongolia)
SEA	Strategic Environmental Assessment
SEBRAE-MT	Brazilian Support Service for Micro and Small Enterprises - Mato Grosso
SEEA	System of Economic and Environmental Accounts
SEIAF	State Government Integrated Farming System (Mato Grosso State)
SERRP	Socio-Economic Response and Recovery Plan (Ghana)
SIDA	Swedish International Development Cooperation Agency
SIDS	Small Island Development State
SIYB	Start and Improve your Business
SME	Small and Medium-sized Enterprises

SNDD	National Sustainable Development Plan (Morocco)
SNEV	Stratégie Nationale de l'Économie Verte (Burkina Faso)
SPP	Sustainable public procurement
SSTC	South-South and Triangular Cooperation
TDRI	Thailand Development Research Institute
TSA	Targeted Scenario Analysis
UGBS	University of Ghana Business School
UN CC: Learn	One-UN Climate Change Learning Partnership
UNDA	United Nations Development Account
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UFMT	Federal University of Mato Grosso
UNCT	United Nations Country Teams
UNRC	United Nations Resident Coordinator
UNRCO	United Nations Resident Coordinator Office
VNR	Voluntary National Review
WIEGO	Women in Informal Employment: Globalizing and Organizing
WRI	World Resources Institute
WTO	World Trade Organisation
WWF	Worldwide Fund for Wildlife
WxT	Work for Taxes
YREB	Yangtze River Economic Belt



PAGE PARTNERSHIP FOR ACTION
ON GREEN ECONOMY

PAGE would like to thank its funding partners:



Supported by:



Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

based on a decision of
the German Bundestag



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

un-page.org



PAGE PARTNERSHIP FOR ACTION
ON GREEN ECONOMY



PAGE 2021 ANNUAL PROGRESS REPORT

PART II: Comprehensive Summary of Country Progress and Global Work



TABLE OF CONTENTS

Table of Contents	0
1. Progress in PAGE Countries	3
1.1 Mongolia	3
Country context and PAGE portfolio	3
Progress in 2021	4
1.2 Peru	9
Country context and PAGE portfolio	9
Progress in 2021	10
1.3 Senegal	15
Country context and PAGE portfolio	15
Progress in 2021	16
1.4 Ghana	20
Country context and PAGE portfolio	20
Progress in 2021	22
1.5 Mauritius	24
Country context and PAGE portfolio	24
Progress in 2021	25
1.6 Burkina Faso	31
Country context and PAGE portfolio	31
Progress in 2021	33
1.7 South Africa	35
Country context and PAGE portfolio	35
Progress in 2021	37
1.8 Jiangsu Province, China	42
Country context and PAGE portfolio	42
Progress in 2021	44
1.9 Mato Grosso State, Brazil	45
Country context and PAGE portfolio	45
Progress in 2021	46
1.10 Kyrgyz Republic	53
Country context and PAGE portfolio	53
Progress in 2021	54
1.11 Uruguay	61
Country context and PAGE portfolio	61
Progress in 2021	62
1.12 Guyana	71
Country context and PAGE portfolio	71
Progress in 2021	72
1.13 Argentina	73
Country context and PAGE portfolio	73
Progress in 2021	74
1.14 Indonesia	83
Country context and PAGE portfolio	83

Progress in 2021	84
1.15 Kazakhstan	90
Country context and PAGE portfolio	90
Progress in 2021	92
1.16 Barbados	102
Country context and PAGE portfolio	102
Progress in 2021	104
1.17 Guatemala	105
Country context and PAGE portfolio	105
Progress in 2021	106
1.18 India	107
Country context and PAGE portfolio	107
Progress in 2021	109
1.9 Morocco	115
Country context and PAGE portfolio	115
Progress in 2021	117
20. Thailand	119
Country context and PAGE portfolio	119
Progress in 2021	120
2. Outcome 3 - Building Individual and Institutional Capacity at Global Level	124
2.1 Global Academy on the Green Economy	124
2.2 Green Renaissance Podcast	125
2.3 PAGE e-learning portfolio	125
2.4 Roll-Out and Translation of Inclusive green economy modelling course	127
2.5 Impact Evaluation of PAGE Capacity-building and Training	127
2.6 Building a Joint approach to learning evaluation	128
2.7 Contribution to a BMUV-funded flagship training on green recovery	129
3. Outcome 4 - Improving Access and Application of Knowledge for Advancing IGE	130
3.1 Addendum to PAGE Strategy 2021-2030	130
3.2 New Knowledge Products	130
Compilation of case studies and best practices on Sustainable Infrastructure	130
PAGE Inclusive Green Economy COVID-19 Recovery Modelling	130
Global Recovery Observatory	131
3.3 Knowledge Products Under Development	132
Study on impact of COVID-19 on Green Enterprises	132
3.4 Knowledge Platforms and Knowledge Networks	133
Green Industry Platform	133
Green Finance Platform	134
Green Forum	134
Green Economy Learning Network	135
3.5 Green Transformation Economic Advisory Mechanism	136
Uniting Economic Expertise for joint delivery	136
Targeted country-level support	136

3.6 Advocacy, Outreach and Communications	137
Production of Video Materials.....	138
Country Spotlights.....	138
2020 Online Annual Report.....	138
PAGE Website and Bulletin	138
Recognition in UN documents and processes.....	139
PAGE visibility through engagement in international and national events	139
3.7 Promoting Dialogue and Debate on IGE	140
Side-event at the High-Level Political Forum.....	140
Dialogue Series - One UN for Accelerating a Fair and Green Economic Transformation	141
3.8 PAGE UNDP-led Regional Knowledge Sharing in Latin America	142
Latin America Green Awards 2021 Edition.....	142
Targeted Scenario Analysis to Inform Greener and More Inclusive Investments	142
4. PAGE Secretariat and Governance Bodies	144
Implementing PAGE updated operational guidance	145
Communications.....	145
Green recovery and economic advisory mechanism.....	145
PAGE Evaluation	146
Resource Mobilization	146
5. Cooperation with Other Initiatives	147
5.1 In-Country Cooperation	147
5.2 Global Cooperation	150
6. South-South Collaboration	153
7. Financial Overview	156
Resource mobilisation	156
Fund management.....	156
Income and contributions	156
2021 allocations.....	157
Annex I	158
LIST OF ABBREVIATIONS AND ACRONYMS	163

1. PROGRESS IN PAGE COUNTRIES

PAGE has delivered inspiring results in line with its four key outcomes and its sustainability criteria for graduating countries. Below is a summary of the main progress by country and at the global level in 2021.

1.1 MONGOLIA

Country context and PAGE portfolio

Mongolia has made significant strides towards sustainable development. The country has established institutional mechanisms to oversee implementation of the SDGs, and the Vision 2050 provides a framework for the Government of Mongolia and its partners to implement strategic and inclusive programmes in a better integrated and coordinated way. However, structural weaknesses, including governance challenges, continue to be persistent and threaten progress towards the achievement of the SDGs. Despite efforts in maintaining macroeconomic stability after the economic difficulties in 2016-2017, Mongolia's economic growth has been volatile due to continued dependence on the mining sector, which is vulnerable to shocks, such as the decline of copper and coal prices and inconsistent demand from China. Unemployment remains high and quality of available jobs is low, leading many rural households to move to urban areas and many young and educated Mongolians to work abroad.

Climate change is one of the key factors that threatens sustainable development in Mongolia. The projected increase in the frequency and severity of climate related natural disasters, such as droughts, floods, windstorms and sand and dust storms is expected to have an adverse impact on agriculture and livestock, water and land resources, infrastructure development, human health, wellbeing and survival. While the Government announced new ambitious carbon emissions targets, the current fossil fuel subsidies continue to encourage overconsumption of coal, and investment in renewable energy and green development remains low. The COVID-19 pandemic worsened the underlying challenges of sustainable development in Mongolia, by pushing the government to prioritize financial resources for the immediate health and socio-economic response, which have significantly reduced a fiscal space for development investments. Yet, it has also created opportunities for economic diversification, digitalization, regional cooperation, and improving the emergency preparedness of education and health sectors.

PAGE's work in Mongolia commenced in 2013, supporting the development and implementation of the National Green Development Policy (NGDP), providing technical support, fostering political commitment, and modelling economic, social and environmental implications of NGDP targets. This set the tone for strong evidence-based policy analysis, resulting in reforms across a range of sectoral and thematic areas, including sustainable

public procurement, finance and trade, green economy learning, green jobs, green buildings, and industry and waste management.

Mongolia was the first country where PAGE started to phase out its support since 2018 accompanied by the development of a comprehensive sustainability plan. PAGE's support has culminated in several achievements including: integration of IGE goals and targets into national economic and development planning; sectoral and thematic reforms in green buildings and construction, green finance, waste management and sustainable procurement; and strengthened institutional capacity of government institutions, the media, universities, research institutes and businesses. In turn, this work has contributed to SDG 4 (Quality Education), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 13 (Climate Action), and 17 (Partnerships for the Goals).

Following graduation, Mongolia remains in the partnership as an alumni country, sharing knowledge to help replicate its achievements on a global scale.

To help the country recover greener and better from the COVID-19 crisis, PAGE is supporting the Government in implementing its Action Plan for 2020-2024, which considers "sustainable tourism based on nature, history and cultural heritage" as key to economic recovery. The tourism sector is the third largest contributor to the Mongolian economy and has been severely impacted by the pandemic. To promote a green recovery of the sector, PAGE is supporting the development of a "Ger and Nature" scheme with the Ministry of Environment and Tourism, contributing to economic diversification, improving rural livelihoods and reducing greenhouse gas emissions. Another important area for PAGE is to support on green recovery are the government's plans to reform energy subsidies, which will be critical to creating fiscal space, redirecting incentives and achieving Mongolia's ambitious climate targets.

Progress in 2021

Supporting implementation of sectoral and thematic IGE policies (Outcome 2):

Informing energy subsidy reform

At the recommendation of the government, PAGE together with the UNRC Office is supporting energy subsidy reform in line with the Government's Action Plan for 2020-2024, which envisages, among others, a "gradual transfer of energy pricing and tariffs into a rational market system." As the country has a relatively high degree of subsidization, the removal of energy subsidies will be critical for achieving Mongolia's ambitious climate targets and its commitment to increase the share of renewable energy to 30 per cent by 2030. The current context with low oil prices and the need to rebuild fiscal positions with the COVID-19 crisis provides an opportunity to reform inefficient subsidies and free up public resources to instead provide much needed investment in areas, such as health, education

and social protection for vulnerable groups, while encouraging long-term investment for a low carbon economy.

PAGE is supporting a technical study by the Mongolian Energy Economics Institute that analyses how energy subsidies could be reformed through the rationalization of energy tariffs, including but not limited to reducing inefficient fossil fuel subsidies and promoting renewable energy development in Mongolia. The study, which is set to be finalized in 2022, draws on good practices from other countries in reforming energy pricing and tariffs.

In addition, PAGE, led by UNIDO, laid the groundwork in 2021 by conducting a background assessment and stakeholder consultations for a complementary study that explores opportunities for the agribusiness sector in Dundgovi province through expanding renewable energy deployment from solar and wind, creating green jobs, and reducing emissions. Located in the middle segment of the Gobi Desert, the Dundgovi province was chosen because of its potential for renewable energy and connectivity to the Asian Super Grid. The province's economy is highly dependent on agri-business; hence, the study will identify how the agri-business sector food (meat, dairy, vegetable) and non-food (wool, cashmere, leather) sub-sectors can benefit from renewable deployment. Bilateral consultations were conducted with the Ministry of Energy, Ministry of Environment and Tourism, Ministry of Food, Agriculture and Light Industry of Mongolia, National Center for Renewable Energy, and Mongolia Renewable Industry Association to collect inputs and define the scope of the study.

Promoting sustainable cultural and eco-tourism for a green recovery

In line with the Action Plan of the Government of Mongolia for 2020-2024, PAGE is working with the Ministry of Environment and Tourism (MET) and key stakeholders to promote community-based eco and cultural tourism in which rural herding communities, as custodians of nomadic lifestyle and culture, will be the main beneficiaries. With a 90 percent decline in tourism revenues in the past two years, reviving the tourism industry has become a central element of Mongolia's green recovery efforts focused on two pillars: Mongolia's pristine nature and nomadic culture or livelihood.

Building on an analysis of the social, economic and environmental impacts of nomadic tourism, a new concept of a 'Ger and Nature' (G&N) scheme was formulated whereby individual community groups will become hosts to cultural and adventure tourists. The scheme promotes connectivity using innovative technology, private sector collaboration and investment, standards, certification and quality assurance processes and targeted capacity building. The scheme aims to create green jobs and improve the quality of life at local level by offering additional income sources for herders. The scheme was presented, with support from PAGE, in October 2021 at Mongolia's International Travel Mart - an annual tourism event organized by the Mongolian Tourism Association to share knowledge and present tourism services to the wider public - held under the theme "Tourism for Inclusive Growth". In 2021, PAGE supported the development of different elements laid out in the 'Ger and Nature' scheme, described below:

Development of a strategy for the G&N scheme: PAGE and the MET developed a strategy for the G&N scheme in 2021, with collective ownership by key stakeholders, including the Tourism Development Center, the Center for Sustainable Tourism Development and the Provincial Department of Environment and Tourism. This was informed by various background analyses conducted by the Sustainable Tourism Development Center, as contracted by PAGE, focusing on i) the gaps within the existing community-based ecotourism framework; ii) the capacity and infrastructure needs for nomadic ecotourism development; iii) the gaps related to employment and decent jobs standards; and iv) customer preferences and requirements for eco and cultural tourism. The vision, objectives, themes, and activities presented in the G&N scheme provide the basis for a targeted activity plan for the provinces of Bayankhongor and Gobi-Altai. These provinces were selected as pilot sites as mining constitutes the major economic driver; however, both provinces have unique natural landscapes and expressed interests to become champions of the nomadic lifestyle in Mongolia. Implementation will be led by the provincial governments, with substantial input, support and ownership from a range of stakeholders, including the Ministry of Food, Agriculture and Light Industry Ministry of Culture, Mongolian Tourism Association, and private enterprises in the nomadic tourism sector.

Design of public-private sector collaboration platform: A public-private sector collaboration platform for nomadic culture-based ecotourism was designed by PAGE as a sharing economy platform model with the Local Tourism Coordinator (LTC), nomadic families and consumers. In the model, the private sector players are defined as international and domestic tour operators, regional operators, local suppliers, camps and herding communities, carriers, railways, and the financial sector. The Nomadic Herder's Tourism Council will operate as the coordinating body of the scheme, in the form of the National Council that was launched in the National Forum event in late November 2021.

Development of a roadmap: For implementing the scheme, a roadmap was developed based on the findings of initial assessments. This builds on the Strategy, which acts as a planning document for designing the scheme. To mobilize support for the roadmap and endorsement of the scheme by key stakeholders, the final validation workshop took place on 29 November 2021. In 2022, PAGE will support development of a strategy or plan for private sector engagement and investment.

Development of business criteria, standards and certification: Additionally, preparatory work has commenced for the development of domestic business criteria, service standards and a certification framework for community-based ecotourism, based on a review of international best practices.

Building institutional and individual capacity (Outcome 3):

Building capacity for sustainable cultural and eco-tourism promotion

To provide a basic understanding of the 'G&N' scheme for stakeholders, a pilot training was conducted online on 19 October 2021 with the participation of host families and herders from the two provinces (Bayankhongor and Gobi-Altai). The pilot was followed by a training on 29 November 2021, bringing together 52 participants from Bayankhongor, Gobi-Altai, and Arkhangai Provinces, including interested herders of the three provinces along with the local government officials and LTCs. A third training took place in Ulaanbaatar on 23 December 2021 with 61 participants, including tour operators, LTCs, government officials, academia, and civil society representatives. A training manual for the herders of the G&N scheme was prepared in Mongolian by PAGE. A training of trainers for certified auditors and inspectors is planned for mid-February 2022.

Peer Learning with the Kyrgyz Republic to Enhance Green Finance

In February 2021, the Kyrgyz Republic and Mongolia launched a virtual South-South exchange around green finance. The cooperation between the two PAGE partner countries leverages the Mongolian experience of establishing the Mongolian Green Finance Corporation (MGFC). The exchanges gathered key stakeholders from the Ministry of Economy and Finance, Union of Banks of the Kyrgyz Republic, as well as a representative of GGGI which played a key role in supporting Mongolia in setting up the MGFC. Following the discussions, GGGI agreed to support Kyrgyz Republic, building on Mongolia's experience, and hired a green investment officer based out of Ulaanbaatar to help with the work there. Mongolia's achievements in the realm of sustainable finance can offer a model for best practices in institutions such as the MGFC, which specializes in attracting green finance. With the Kyrgyz Republic at the starting point in promoting sustainable finance for its development agenda, the experience of Mongolia can offer significant support. Finance for sustainable development is included as a priority action of the Kyrgyz Republic's Green Economy Development Programme.

Integrating green economy into national university curricula

A course on "Green Economy" which was developed with support by PAGE has been included as an elective in two bachelor's degree programmes offered by the Mongolian University of Life Sciences (MULS): 1) "Agricultural cybernetics (majoring in Economics and Mathematical Modelling, and in Data Analysis)"; 2) "Marketing (majoring in Marketing, Marketing of Tourism, and E-Commerce and Marketing)". Both programmes were approved by the president of the University on 28 October 2021. The course is also offered as an elective under a new master's degree Programme on Environmental Economics at the University of Finance and Economics (UFE).

Measures to support sustainability of results in collaboration with other initiatives:

PAGE continues exploring synergies with complementary initiatives to sustain policy work and capacity development initiated during the core phase.

Reviewing Mongolia's Green Development Policy: Building on the work that PAGE supported, Mongolia was selected as a partner country in 2019 to apply the Green Economy

Policy Review methodology, developed by UNEP's Economic and Trade Policy Unit under the EU funded project "Inclusive Green Economy Policy Making for SDGs". Finalized in 2021, the [Green Economy Policy Review of Mongolia's National Green Development Policy](#) (NGDP) conducts a mid-term review of the NGDP, a national policy which was ratified in 2014 and will be implemented until 2030. The review showed that seven out of the ten indicators which could be measured reached more than 70 per cent of their 2020 target. Out of these, four even reached more than 9 per cent of their target for 2020, which can be considered "above average". It also found that the harmonization of the NGDP against the "Vision 2050" and the SDGs is relatively high. However, an amendment or a revision of the NGDP may be needed in order to make it even more consistent with the laws and national long-term policy documents that were introduced after its ratification. The report was prepared by the Economic Policy and Competitiveness and Research Center at the request of the MET and covers a review of the policy documents relevant for implementation of the NGDP, including laws, government resolutions, action plans, ministerial orders and other research and policy implementation plans and reports.

SDG-based environmental budgeting: In 2021, UNDP continued to support a pilot project at the Ministry of Environment and Tourism, designed to assist the Ministry of Finance to integrate the SDGs into the budgeting process. The initiative is designed to ensure that public expenditures are more directly aligned with priorities identified in the country's GE Action Plan and related environmental strategies. Within the reporting period, assessments on fiscal analysis and financing mechanism of Mongolia's environment and tourism sector were finalized.

Fiscal analysis: The purpose of this study is to analyze each budget programs based on the last 5 years fiscal statistics of Mongolia's environment and tourism sector, to determine expenditure trend, and to identify issues in the top-down and bottom-up budgeting process. By comparing budget components of revenue, recurrent expenditures, and public investments, it seeks to determine the expenditure trend, and developed proposals and recommendations to increase the efficiency of the budgeting at the state and local level. In addition to conducting a budget analysis of the MET portfolio, the study provides a statistical analysis of the revenue of natural resource use fees, the main source of environmental protection at the provincial level, and its spending. It also explores international good practices of SDG-budgeting and aims to identify the prerequisites for the transition to SDG-budgeting to integrate the long- and medium-term National Development policy objectives of Mongolia.

Financing mechanism: The purpose of this study is to explore international experience in implementing sustainable financing mechanisms to support biodiversity and tourism development, to identify the types of financing mechanisms exist in Mongolia and investigate the possible ways to improve funding for biodiversity conservation. To improve public funding, a major source for biodiversity conservation, it aims to develop a long-term and medium-term fiscal reform proposal for this sector based on the discussion among professional groups at Ministry of Environment and Tourism.

In addition, eight budget programmes of MET along with performance indicators for the 2022 fiscal year were developed using an SDG budgeting methodology. In total, 9 billion MNT (approximately 3.2 million USD) of resources were allocated for two budget programs, along with performance indicators for the 2021 and 2022 fiscal year and endorsed by authorized bodies.

Establishment of a Private Equity Fund: In collaboration with UNDP China, UNDP initiated the establishment and piloting of an Equity Fund that will focus on meeting the financing challenges in the agriculture and livestock value chains, covering both Mongolia and China. This work builds on the PAGE Sustainability Strategy and aligns with the national Green Growth Action Plan and the Sustainable Development Vision. An experienced international consultant was engaged to assist UNDP with a concept note that will help outline the feasibility of the Mongolia-China Sustainable Fibers Fund (MCSFF). In 2021, a specialist was engaged to design an investment vehicle that will cater to and support the financing needs of the companies engaged in the value chains and cashmere supporting infrastructure in Mongolia and China. The consultant completed a background analysis for the MCSFF Concept Paper, including a Risk Matrix Preparation and a Fiber Value Chain analysis in China and Mongolia. The fund manager for the Mongolia-China Sustainable Fibres Fund was selected, and the inception work for establishing the fund is due to start in early 2022.

Mongolia in the 2021 Online Annual Report

1.2 PERU

Country context and PAGE portfolio

Located on the west coast of South America with more than 50 per cent of its territory covered by forest, Peru has an abundance of natural resources that serve as the backbone of its economy. Decades of resource-driven growth have degraded the environment, resulting in water and air pollution, soil erosion and deforestation, affecting all segments of society, particularly the most vulnerable. In recent years, Peru has made significant efforts to not only offset the balance between economic growth and environmental preservation, but to turn its sustainability concerns into drivers of government policy and long-term prosperity. This is no more prevalent than in its Bicentennial Development Plan of 2011.

Against this backdrop, PAGE commenced work in Peru in 2014, with the aim of promoting efficient use of resources, environmental quality, and green jobs creation. PAGE has since supported the integration of green growth into national planning, assisted the implementation of green sectoral and thematic policies and built both individual and institutional capacity to support long-term change. As an important milestone, Peru approved a National Competitiveness and Productivity Policy, including a chapter on sustainability in 2018. In 2019, Peru's objective to achieve sustainable and inclusive green

growth was enshrined in the Vision of Peru to 2050 (which establishes the country's medium- to long-term vision for development), as one of its five axes. Other key achievements include sectoral and thematic reforms in green jobs, green industry, teleworking and urban transport; introduction of IGE courses into national curricula and strengthened capacity on forward looking policy analysis.

PAGE work in Peru has supported the achievement of the OECD Declaration on Green Growth and several SDGs, including SDGs 4 (Quality Education), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 10 (Reduced Inequalities), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 13 (Climate Action) and 17 (Partnership for the Goals).

In 2019, PAGE started a gradual phase out of its support from Peru, accompanied by the development of a sustainability plan and supported by the GIZ led Green Economy Transformation (GIZ-GET) project, to enhance national capacity and ownership and generate lasting results.

As the theme of green growth has become even more relevant in the context of the pandemic, the development of a proposal by the Ministry of the Environment and the Ministry of Economy and Finance for targeted green economic support to PAGE in December 2021 presents an opportunity to continue PAGE engagement in the country in 2022 with a set of targeted workstreams promoting inclusive green jobs and green entrepreneurship under the broader objective of green growth.

This green recovery work aligns with the Acuerdo Nacional ([National Agreement](#)), finalized in August 2021, which acts at the highest policy level in Peru to enhance equality and overcome the adverse conditions resulting from the pandemic, with a focus on “sustainable economic growth with decent work”. It also aligns with the strategic priorities of new UN Sustainable Development Cooperation Framework 2022 to 2026 for Peru which focus on management of the environment, climate change, and disaster risk, as well as competitiveness and productivity to improve access to means of sustainable lives.

Progress in 2021

Integrating green economy into sectoral policies and projects with a focus on green jobs (Outcome 2):

Developing monitoring and policy processes for green and decent jobs

The promotion of green jobs has been a core focus of PAGE Peru since joining the Partnership and was integrated into national and regional green growth strategies. The “[Conceptualization of Green Jobs in Peru](#)” report conducted by PAGE supports the Ministry of Labour and Promotion of Employment (MTPE) to define and measure green jobs and to use productive employment promotion to advance inclusive green growth. By providing a conceptual and operational definition of green jobs for the private sector in Peru, the report

shows specific ways to measure and evaluate progress towards creating green jobs - outlining sectors with the greatest potential to generate green jobs and how they can be best promoted.

The report is intended as an instrument to support the MTPE in the process of collecting information and operationalizing monitoring instruments related to green jobs in Peru, and as a guide to complement existing instruments for collecting information on green jobs. Additionally, by identifying sectors with the potential to generate green jobs, it gives the government a general vision that certain sectors do have the potential to be greened, and to conduct more in-depth studies on each sector in the future. The report was updated and presented on 18 May 2021 at an [event](#) attended by representatives of the Peruvian and Ecuadorian government, international organizations and civil society.

As a follow-up to this publication, in June, the MTPE published the [National Policy for Decent Jobs](#), which aims to generate decent and green employment while contributing to the reduction of socio-environmental conflicts, since these jobs limit greenhouse gas emissions, minimize pollution and contribute to climate change adaptation. Mentions of “Green jobs” and “Just transition” in the Policy were achieved thanks to the technical assistance provided by PAGE Peru and the Green Jobs Programme at the ILO.

Supporting sustainable finance and investment

UNDP with additional PAGE funds and in collaboration with BIOFIN is supporting the mechanism for Public Works for Tax (WxT) Deductions. The unique public investment mechanism was devised by the Peruvian Government in 2008 and allows private firms to “pay” a portion of their income taxes in advance in the form of public works—from public buildings to transport infrastructure and beyond. This mechanism, currently underused, holds a great potential for funding green infrastructure and projects related to biodiversity and ecosystem services with private sector funds.

To help realize this objective, PAGE through BIOFIN conducted an initial study, to prioritize the companies that would be interested in using the mechanism of investments through WxT to finance projects related to biodiversity and green economy. 23 companies were identified, out of which 50 per cent wish to use the mechanism to finance natural infrastructure for nearly USD 15 million.

Building on this, in 2021 PAGE continued to coordinate with specific (mainly extractive and tourism) companies interested in mobilizing resources through WxT. Efforts were also made to provide support to public and private entities for the implementation of MoUs, municipal agreements and inter-institutional agreements, as pre-operational actions to the mechanism of WxT.

PAGE through BIOFIN is also accompanying the implementation of three public investment pilot projects in biodiversity and natural infrastructure through WxT, for approximately USD

10 million: Huascarán National Park, Ecosystem recovery in Machu Picchu and Sustainable management of vicuñas in Colquemarca District.

Complementing these efforts, support is being provided to the Ministry of Environment in its communication strategy to promote public investment in natural infrastructure and ecosystem services through WxT with videos, podcasts and high impact presentations in training programs, public policy, advocacy and seminars. The project has been extended to continue until May 2022.

Targeted Scenario Analyses

Utilising UNDP Special Project funds, two Targeted Scenario Analyses (TSA) were completed in Peru. Both TSAs compared the financial, economic, and environmental effects of current practices in cocoa/palm oil production versus the adoption of alternative practices with different types of cocoa that can generate higher profitability while being more environmentally sustainable, over a 10-year timespan. The main premise for the definition of alternative practices is to satisfy the demand levels projected to 2030 by reducing the pressure on forest ecosystems.

The [cacao TSA](#) revealed that the Fine Aroma Cacao (CFA, for its acronym in Spanish) could generate greater profitability and at the same time be friendlier to ecosystems. Further, the study measures the effects of using technological management to increase productive yields on existing working land to avoid further expansion of the agricultural frontier.

The [palm oil TSA](#) identified an alternative scenario that could increase aggregate net monetary benefits by 9 per cent on average, with more significant benefits in the long term, while reducing pressure on areas of high conservation value by maximizing the yields per hectare. These benefits add to the socio-economic benefits generated by the positive environmental externalities of conversion derived from avoided deforestation, including capacity to capture carbon and conserve biodiversity.

Building institutional and individual capacity (Outcome 3)

Strengthening capacity for green business development

As part of its efforts to build capacity for green business development, in 2021 PAGE conducted two workshops to train trainers to deliver the “My Green Business Training Programme”, with a total of 44 trainers attending from Bolivia, Colombia, Ecuador and Peru. The course consists of two modules, supporting entrepreneurs to either develop a new green business or to green processes in already existing businesses. Following the initial workshops, newly certified trainers delivered a pilot course to a group of 27 senior entrepreneurs in the “Emprendedores de ORO” program in Lima and to another group of 39 university students at the Professional School of Animal Husbandry of the National University of San Antonio Abad de Cusco. The Ministry of Labour expressed interest to continue to roll out the course in programs they develop in border areas.

PAGE, in coordination with the MTPE is planning to replicate the course tentatively in 2022 in the Regions of Piura, and Arequipa, where PAGE provided technical assistance for the formulation of Regional Youth Employment Plans. The training would provide a first step to implement these plans, which did not receive designated resources from regional governments.

Facilitating knowledge-sharing on driving green business growth

As a close partner of the ITC-ILO, PAGE facilitated the attendance of key actors involved in PAGE Peru to the "Driving the Growth of Green Businesses" course for Latin America, coordinated by the ITC-ILO. Two courses were held in 2021 aimed at governments, employers and trade unions in the region. A total of 78 individuals participated in the course (3 from Peru), contributing to increased capacity and awareness of green business development.

Measures to support sustainability of results in collaboration with other initiatives:

PAGE continues exploring synergies with complementary initiatives to sustain policy work and capacity development initiated during the core phase.

Improving Modelling for Strategic Planning: The National Center for Strategic Planning (CEPLAN) has updated the input information and expanded the scope of the T21 model (renaming it [T21-CEPLAN](#): systematic model on future analysis on national and regional levels) to integrate more than 100 social, economic and environmental variables in 24 thematic modules. The updated model allows estimating trends and evaluating scenarios up to the year 2050 at the national level, making it a key tool to support strategic planning. The initial T21 Model was developed within the framework of PAGE and transferred to the Ministry of Production in 2017, before ultimately being transferred to CEPLAN.

Contributing to political dialogue on green job promotion: Throughout 2021, PAGE Peru continued to remain engaged at the core of political dialogue on the promotion of green and decent jobs, as highlighted in the engagements below:

- On 16 March, PAGE collaborated with GGGI to organize a green jobs dialogue between political parties on opportunities for green employment, conducted within the framework of the upcoming 2021 Peruvian elections. The "[Economic Reactivation: Dialogue between political parties on opportunities for green employment](#)," promoted the inclusion of green jobs in the National Work Plan of the presidential candidates. The promotion of green jobs has been a core goal of PAGE Peru since joining the Partnership in 2014 and advanced in 2021 with the adoption of the new National Policy for Decent Jobs;
- On 11 June, an "Entrepreneurship Week" was held within the framework of the Programme "Reto a la U" run by the ILO Colombia Office. Among various activities, a Diploma on Income Generation and Social Cohesion was held where the PAGE Lead

Agency Focal Point gave a [presentation on Green Entrepreneurship](#) based on the two training modules that were developed within the framework of PAGE. 150 young Colombians participated in this webinar, and the initiative was very well received; and

- On 19 August, the ILO participated in the Relaunch of the Committee on Sustainability and Climate Change: "Growth and Opportunities for Green Jobs" organized by the Swiss Chamber of Commerce in Peru. The ILO gave a presentation on "Building back better: a recovery with green jobs and just transition" and highlighted the ILO's green initiatives, specifically under the PAGE programme.

Development of green proposals: In 2021, two project outlines were developed by PAGE and submitted to the International Climate Initiative (IKI) to support Peruvian climate action and biodiversity. The first is a regional proposal, "Developing opportunities: climate compatible economic policy perspectives as a driver for more ambitious NDCs" involving Bolivia, Colombia and Ecuador. The project aims to contribute to the process of sustainable transformation at the economic, environmental and social level, strengthening the just and inclusive transition within the framework of the NDCs and the climate policies approved and updated by Andean countries. This will involve a transfer of methodologies and technical assistance between the implementing partners for the inclusion of greener practices, linking of financial mechanisms and the generation of green jobs in agricultural, waste and tourism sectors. The second proposal is specific to Peru and aims to strengthen biodiversity management by promoting the integrated implementation of the Rio Conventions through capacity building and knowledge sharing on nature-based solutions. This will improve socio-ecological resilience for indigenous peoples and local communities (IPLCs) living in and around Peru's biodiversity hotspots.

Assisting on green jobs and just transition: PAGE provided technical assistance to the Regional ILO Green Jobs Programme in the development of a short paper on Just Transition (JT) focusing on what it will mean for Peru, and what experiences there are in other countries regarding JT. This paper will serve as input for the processes of participation and socialization with other government ministries - including the Ministry of Production, Ministry of Agrarian Development and Irrigation, Ministry of Environment, Ministry of Labor and Employment Promotion, and Ministry of Transportation and Communications - as well as Subregional Governments and Municipalities, in relation to civil society, trade unions, private sector and academia, and the general public. This paper was also informed by the four reports developed by the ILO and PAGE in 2020 on the situation of agriculture, fishing (artisanal, industrial-landing sites), energy-stationary combustion and waste sectors in the context of JT. These papers were developed initially to support the 2020 NDC update and focus on possible impacts of JT on employment, social protection, training needs, social dialogue and participation in decision-making in every sector.

Promotion of labour integration of refugees and migrants: At the suggestion of PAGE, the 'Promotion of the Labor integration of refugees and migrants under decent work conditions in Ecuador and Peru' project, coordinated by the ILO, initiated a study on green jobs with a

focus on Venezuelan migrants and host communities in Ecuador and Peru. PAGE provided technical assistance throughout the development of the study that aims to identify the sectors and subsectors that offer greater opportunities for the creation of green jobs and green enterprises, within the framework of a just transition defined in the ILO guidelines under an approach of economic, social and environmental sustainability. The study focuses on five regions of Peru - Cusco, Lambayeque, La Libertad, Lima and Piura - and will be presented at the end of March 2022 to the five regional governments mentioned above, as well as to the employers and workers who actively participated in the development of the study and the ministries related to the identified economic sectors that have the potential to generate green jobs.

Peru in the 2021 Online Annual Report

1.3 SENEGAL

Country context and PAGE portfolio

In recent years, Senegal has established itself as one of West Africa's economic hubs and in the process, made significant strides towards improving the well-being of its population. Nevertheless, with approximately 50 per cent of its territory classified as semi-arid, the country is especially vulnerable to climate change, which is expected to intensify environmental threats such as desertification and water scarcity. As a large share of the population relies heavily on natural capital for their livelihood, committing to a green and inclusive economy is key to developmental success.

Recognizing the importance of sustainability, Senegal adopted the 'Plan Senegal Emergent' (PSE) in 2014, outlining a new development model designed to accelerate its progress towards emerging market status and facilitate its transition to a green economy in the mid to long-term. This was bolstered by the adoption of a National Strategy for Sustainable Development in 2015.

In this context, the Senegalese Ministry of Environment and Sustainable Development (MEDD) requested PAGE support in early 2014. PAGE intervention has focused on the operationalisation of the PSE and its five-year Priority Action Plan (PAP 2014-2018), specifically two pillars integral to green economy transition: 'Structural Transformation of the Economy and Growth' and 'Human Capital, Social Protection and Sustainable Development'. Since 2018, the reinforcement of IGE objectives in the elaboration of the PSE II and the second PAP to span 2019-2023 has become an area of attention for PAGE support.

Since 2019, PAGE began a gradual phase out of its support from Senegal, with a sustainability plan in development to further embed PAGE results and take the green economy agenda forward.

To date, PAGE work in Senegal has already culminated in several achievements, including the integration of Inclusive Green Economy (IGE) into national policies; sectoral and thematic reforms across green jobs, sustainable construction, waste management, green industry and sustainable use of revenues from oil and gas; the establishment of a national multi-stakeholder platform; and enhanced green entrepreneurship. As such, PAGE work has contributed to the achievement of several SDGs, including SDGs 4 (Quality Education), 5 (Gender Equality), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production) and 17 (Partnership for the Goals).

In order to cope with the health, but also social, economic and environmental impacts of COVID-19, in 2020 the State of Senegal embarked on a process of economic recovery with the development of a Programme for the Relaunch of the National Economy (PREN) and the adjustment of the *Programme d'action prioritaire* (PAP) of the (PSE) for 2019-2023, with redefined priorities to reflect the current context. This economic and social revival of the country should allow a change of paradigm and prove to be an opportunity for greening of the Senegalese economy with environmental considerations across all sectors of activity, as well as providing new entry points for PAGE. With socio-economic impacts of the pandemic persisting into 2021, the main development challenges remain to mitigate these impacts while promoting sustainable and inclusive growth.

Progress in 2021

Supporting further integration of green economy into policy actions (Outcome 1):

Analysing the impacts of COVID-19 to the NDC process

The draft report on the rapid situational analysis of COVID-19 impacts to NDCs process was submitted on 22 October 2021, with a final version to be completed in early 2022. The objective of the study is to analyze the impacts of COVID 19 in the implementation of the different measures contained in the NDC, taking into account the current national and international macroeconomic situation, and to identify the technical and social measures that could be integrated in the response to climate change. It also aims to identify measures and policies that could be considered from a labor market and employment perspective to mitigate potential negative impacts on employment in Senegal and maximize opportunities for decent job creation through climate action.

Elaboration of a strategic orientation policy document on green recovery (green recovery)

As part of its targeted support for green recovery, PAGE is conducting a study with the overall objective to develop a strategy for mobilizing the private sector around projects that leverage the inclusive green economy. A methodological guidance note that defines the

approach, including the tools, stakeholder consultations, timeline and main elements covered in the report was submitted in November 2021. The final report is expected in late February 2022 and will be followed by a validation workshop organized with the Economic, Social and Environmental Council (ESEC). Particularly, the study aims to:

- Identify the challenges and opportunities of the green economy for economic recovery, particularly in areas such as green bonds, sustainable public procurement, green taxation, green entrepreneurship, etc.
- Identify constraints to the development of the green economy, such as lack of qualified professionals, financing, technologies, etc.
- Identify existing public-private green financing mechanisms and types;
- Analyze the prospects for sustainable green job creation.
- Exchange with the private sector on existing opportunities and technology transfer mechanisms; and
- Provide the government with more information and recommendations to facilitate strategic decision-making on green recovery.

In line with this, technical guidance was provided to review the legal framework and identify the potential for developing Sustainable Public Procurement (SPP) in Senegal. In May 2021, PAGE delivered a report with proposed changes to the legal framework of public procurement to introduce the use of sustainable public purchasing with three dimensions: social, economic, and environmental. The Report assists the country in achieving strategic objective 2 of the Sector Policy Letter for the Environment and Sustainable Development (LPSEDD, 2016-2020) on the integration of the principles of sustainable development in public policies and the Plan Senegal Emergent (PSE). A high-level meeting on Senegal's green recovery plans on sustainable public procurement was held to further disseminate the findings of the review legal framework review to support the design of a Sustainable Public Procurement framework in the country.

Supporting implementation of sectoral and thematic IGE policies (Outcome 2):

Implementing a Cooperative Approach to Waste Management

Senegal suffers from problems linked to the poor management of solid waste, contributing to air and water pollution that particularly affects the poor urban population of Senegal's cities. Waste pickers are mainly low-income women and men who migrate from rural areas to collect, sort and sell waste from the streets or landfills, working in unprotected conditions with increased health risks. Providing a new setting with an associative or cooperative form could stabilize waste picker's income and improve social protection and market access as well as occupational health and safety.

To work towards this, on 19 March, the Ministry of Environment and Sustainable Development hosted a partially virtual and partially face-to-face workshop to validate a

[market survey in the waste sector](#) and [feasibility study of a cooperative of waste collectors](#) of the Mbeubeuss landfill, with the participation of 32 people. In collaboration with WIEGO (Women in Informal Employment: Globalizing and Organizing), both studies were finalized and published in September 2021.

The waste sector studies contributed to the implementation of the restructuring plan for the Mbeubeuss landfill under the Project for the Promotion of Integrated Management and Economics of Solid Waste in Senegal (PROMOGED), launched on 24 June 2021.

In addition, the ILO built on this work by supporting the [establishment of the Mbeubeus waste pickers' cooperative](#), within the framework of the project "Promotion of formal and innovative entrepreneurship in Senegal and The Gambia," funded by the Government of Italy. The constitutive General Assembly of the cooperative was held on 10 December.

Developing a Law on the Management of Revenues from Oil Exploitation

Throughout 2021, PAGE was engaged in multi-stakeholder dialogue on oil revenue management, for which legislation is currently being finalized. In the context of the discovery of oil and gas resources in Senegal, PAGE conducted a baseline assessment in 2018 on the use of revenues for sustainable development that recommended conducting broad consultations with national stakeholders to properly assess the costs and benefits of different options before moving forward. In line with these recommendations, in 2021 PAGE was engaged in multi-stakeholder dialogue regarding the law on the management of revenues from oil exploitation, which is currently being finalized. Two working sessions were held (February 18 and 26) with UNEP to discuss the implementation modalities of the multi-stakeholder workshop on the establishment of an Intergenerational Sovereign Wealth Fund where part of the revenues from oil and gas exploitation will be housed, as well as the popularization of the draft law.

Additionally, a multi-stakeholder technical meeting on policy options on managing oil and gas revenues for sustainable development was organized on 30 September to provide an opportunity to discuss the complex situation, and to bring together all stakeholders around this activity, including: the Ministry of Finance and Budget, the Ministry in charge of Oil and Energy, the Senegal Sovereign Wealth Fund (FONSIS), the Strategic Orientation Committee for Oil & Gas (COS PERTOGAZ), as well as the Ministry of Fisheries and all partners PAGE works with in strategic thinking. PAGE reiterated that Senegal's commitments made towards climate action and the social dimension of the ecological transition need to be taken into consideration when making decisions on managing revenues.

Development of an operational directory on green jobs and occupations

Building on the mapping of institutional learning needs and capacities related to inclusive green economy conducted in 2018, Senegal developed an operational directory of green jobs and occupations, with the support from PAGE (ILO and UNITAR). The directory aims to further enable the green economy transformation, supporting the creation of new green

jobs and the adaptation and transformation of existing jobs and identifying learning gaps. It will allow stakeholders in the labour market, such as employers, to more accurately measure and define the green skills they require, therefore helping guide the training sector in developing programmes to meet this demand. The development of the directory was also facilitated by a meeting organized on 8 June at which Côte d'Ivoire shared its own experience in developing a green jobs directory with Senegal and Burkina Faso.

The development of this operational directory was identified as a priority since 2015 when the national strategy for green jobs promotion recognized that the ecological transition in Senegal would require new jobs related to the use of new technologies, but also the adaptation and transformation of existing jobs. An initial operational directory of jobs and professions in Senegal was developed in 2003 and covered 22 occupational categories and job descriptions for 66 fields of activity. However, green skills were not considered at this time.

Building institutional and individual capacity (Outcome 3):

Green Start and Improve Your Business (SIYB) training sessions

Three training sessions on Green Start and Improve Your Business (SIYB) tools, as part of the activities of the green recovery program, were organized from 22 June to 3 July. The training sessions contributed to individual capacity development and green entrepreneurship development, strengthening the technical operational and management capacities of 45 women from three economic interest groups: agricultural producers in the classified forest of Mbaou, those of the beekeeping unit of Sokone and those of the fish farming unit of Tocc-Tocc.

Using the SIYB green modules and the ILO's participatory SIYB methodology, trainers helped entrepreneurs to understand the principles of business management, improve their business performance and consider the green dimension in business creation and management. The training aims to reinforce entrepreneurial capacities in line with PAGE's additional green recovery activities and the Ministry of Environment and Sustainable Development's policy to promote green jobs (Support Programme for the Creation of Green Jobs (PACEV)).

Promoting IGE communication

A communication plan was developed by PAGE under UNITAR lead with a focus on developing a strategy to popularize and disseminate the policy paper on green recovery being developed under the auspices of the ILO, among target groups and civil society. This will include the training of journalists on the green economy in February 2022 to be followed by the development of the content of the communication plan.

Also helping to disseminate the achievements of Senegal towards a green economy, PAGE has developed a [video impact story](#) that has been shared via national media and social media.

Participation in West Africa Hub to promote climate change and green economy learning

PAGE facilitated the participation of representatives from Senegal in South-South exchanges under the UN CC:Learn West Africa Hub. The Hub is led by the Agriculture, Hydrology and Meteorology (Agrhymet) Regional Centre, a specialized agency of the Permanent Inter-State Committee against Drought in the Sahel (CILSS) and a WMO Regional Climate Centre, serving 13 countries, namely Benin, Burkina Faso, Cape Verde, Chad, Ivory Coast, Gambia, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Togo. Several consultations between learning institutions in West Africa were organized to share experiences and explore possible opportunities in the areas of climate change and green economy.

As a follow-up to the experience-sharing sessions, in 2021, UNITAR delivered an online training of trainers to 17 professionals from five learning institutions in the region (Ecole Nationale d'Administration (ENA), Institut des Sciences de l'Environnement (ISE) of Senegal, Ecole Nationale des Eaux et Forêts (ENEF), Institut Universitaire de Formations Initiale et Continue (IUFIC) of Burkina Faso, and Agrhymet) on the development and delivery of e-learning courses. Participants were walked through the ins and outs of e-learning by an instructional design expert, giving them a broad overview of the steps and processes to develop effective online learning for adults. Each of the four sessions lasted 1.5 hours and allowed for interaction, with participants actively engaging in discussions among themselves and with tutors.

[Senegal in the 2021 Online Annual Report](#)

1.4 GHANA

Country context and PAGE portfolio

Ghana is a lower middle-income country and West Africa's second largest economy after Nigeria. Ghana is considered one of the fastest-growing economies in Africa, with real GDP growth of 6.5 per cent in 2019, driven by the mining and oil sectors. However, the COVID-19 pandemic resulted in a steep fall in economic growth, with contraction of the economy by 3.2 and 1 per cent in the second and third quarters of 2020 respectively, pushing the country into a recession for the first time in 38 years. The medium-term negative impact of the pandemic on growth will continue to be felt through low external demand, lower foreign direct investment, and tourism receipts. The World Bank projections indicate that the

economy may grow by an average of 2.2 per cent during 2021-2023, far lower than the average growth rate over the past two decades. According to the International Monetary Fund, Ghana's external and domestic financing conditions, though tightened considerably at the start of the pandemic, have improved since, and Ghana was able to issue USD 3 billion Eurobond in March 2021.

Ghana's policy environment for transitioning to a green and circular economy is anchored in many instruments including the 2013 National Climate Change Policy that envisaged a climate-compatible economy that achieves sustainable development through equitable low-carbon growth. The subsequent Ghana Shared Growth and Development Agenda II (2014-2017) and National Medium-Term Development Policy Framework (2018-2021) further refined Ghana's vision by providing an overarching policy framework for transformative change. Further, the UN Secretary General's appointment of Ghana's President as co-chair of the Group of 16 Eminent Advocates for the SDGs in 2016, demonstrated the country's strong political will to achieve sustainable development and green growth.

This policy framework provided the entry point for PAGE engagement since 2014. In line with the existing policies and Ghana's decentralized planning approach, PAGE focused on the planning and monitoring processes of Metropolitan, Municipal and District Assemblies. PAGE supported the further integration of IGE into sub-national planning processes, select sectoral and thematic policy reform processes and related capacity development across institutions and levels of government.

So far PAGE work has contributed to the following achievements: the mainstreaming of IGE into sub-national planning and reporting; inclusion of climate change education in basic schools across the country; initiation of thematic policy reforms across sustainable finance, green jobs and resource efficiency; as well as individual and institutional capacity-building. This in turn contributed to the achievement of SDGs 4 (Quality Education), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production), 13 (Climate Action) and 17 (Partnerships for the Goals).

PAGE began a gradual phase-out of its support in 2019 and completed the development of a sustainability plan to safeguard PAGE results and maintain the green economy agenda. In 2020, the urgent need to cope with the impacts of COVID-19, provided an avenue to remain further engaged with the country and facilitate a green recovery in line with government priorities focused on the promotion of green finance, green sub-national recovery plans and capacity development for green enterprises.

In line with these objectives, PAGE providing support to green recovery through analyzing and strengthening green financing opportunities, while supporting local governments, MSMEs and the informal sector in their recovery and response to COVID-19. The support will build on and drive complementarities with the substantial technical knowledge and

expertise developed with government partners and institutions to strengthen the recovery of the country from COVID-19. It will enable the leveraging of resources and expertise to further the One-UN and whole system approach and support to the government.

Progress in 2021

Supporting implementation of sectoral and thematic IGE policies (Outcome 2):

Green recovery through green finance, fiscal policies and business innovation

In 2020, when the country suffered the impact of COVID-19, PAGE started to support economic recovery with a focus on sustainability and green recovery, specifically contributing to the development of the Ghana United Nations Development System COVID-19 Common Country Analysis (CCA) and Socio-Economic Response and Recovery Plan (SERRP). In line with this plan and Ghana's Coronavirus Alleviation Programme (CAP), which is also referred to as Ghana CARES Programme, PAGE developed a proposal to support a green economic recovery. The proposal aims to revive GDP growth in line with SDGs, climate ambitions and government policies focused on poverty reduction and macroeconomic stability without placing any additional burden on public spending.

PAGE is supporting Ghana to strengthen the enabling environment to facilitate greater public and private green finance. PAGE activities will identify opportunities to support green fiscal policies and tax and regulatory regimes that promote employment and disincentivize polluting activities and will support new business opportunities emerging from the crisis. PAGE is also working to integrate green recovery policies into the sub-national recovery plans and facilitate capacity development for enterprises in resource efficiency and sustainable production principles under the 1 District 1 Factory (1D1F) government policy to build back better from COVID-19.

In 2021, PAGE led by UNEP initiated a workstream on green fiscal policy with the ODI (Overseas Development Institute) research team, with the purpose of conducting a technical analysis that will enable the Ghanaian government to assess opportunities to leverage green fiscal policy instruments to raise revenue to fund initiatives under the national COVID-19 recovery, while also making progress on climate change, biodiversity loss and pollution concerns. In addition, the analysis will support the Ghanaian government in identifying and calibrating public finance tools and policy levers that can enable and scale-up availability of high-quality green finance from the private sector and finance institutions. UNEP will provide overall technical oversight for the deliverables.

Ghana Waste Fair

Held from 21-23 July, the inaugural Ghana Waste Fair brought together more than 300 stakeholders to share and discuss innovative ideas to promote sustainable waste management in the country. Together with the Ghana National Plastic Action Partnership and the Waste Recovery Platform, PAGE supported a two-day event which hosted participants from the private sector, civil society, and government, including from the

Ministry of Environment, Science, Technology and Innovation (MESTI), and research and academic institutions. With over 50 exhibitors, topics of discussion included MSME financing and sustainable finance, policy design, and programmatic and technical solutions to waste management challenges in the country. The fair also hosted business clinics, with more than 100 MSMEs participating to foster capacity-building in areas such as performance indicators, market valuation and analysis, marketing and communication strategies, product design, business proposal development and funding support. As a result of the networking component of the fair through the exhibitions, at least two companies who took part in the exhibitions have reported new business agreements, resulting in several thousands of dollars in additional sales.

Integrating IGE into training delivered by national institutions (Outcome 3)

Project Proposal on Green Economy and Climate Change Education

PAGE, led by UNITAR, initiated and supported the development of a funding proposal on “Tackling climate change and creating green jobs through education and training” for submission to the German Climate Fund (IKI). The proposal was developed jointly by UNDP, UNITAR, ILO and UNESCO with inputs by the Ghanaian Environmental Protection Agency (EPA) and the Council for Technical and Vocational Education and Training (COTVET). The main objective of the proposed project is to increase the relevance of TVET and skills development to the needs of the labour market in Ghana. It aims to promote innovation and behavioural change in line with environmental responsibility and industrial development. Beneficiaries will gain employable skills that contribute to Ghana’s transition to a greener and sustainable economy and to Ghana’s COVID-19 Alleviation and Revitalization of Enterprises Support (CARES) Programme. The project was submitted to IKI in March 2021 by UNDP as lead implementing agency. No response has been received so far.

Training Programme on Green Finance and “Green Champions” Event

PAGE, led by UNITAR and UNEP, supported the University of Ghana Business School (UGBS) in developing a course on green finance targeting public officials and other stakeholders involved in financial, economic and sectoral policy design and implementation. After a successful pilot in December 2020, UGBS added the course to its portfolio of short executive courses. As of 2021, the course is run in two ways:

- **Scheduled programmes:** This entails running modules on Green Finance as a regular short course (up to 5 days). The course is advertised to the general public through electronic and print media and run twice per year. After each round of training, feedback from participants is used to improve upon the content and delivery of subsequent rounds of training.
- **In-house/customized programmes:** UGBS approaches specific organizations to encourage them to provide customized training to its staff on various aspects of Green

Finance. Based on discussions, the trainings are organized to meet the needs, available budget and delivery preferences of the client.

In 2021, UGBS also organized a “Green Finance Champions” Event on 6 July to recognize individuals who have made significant contributions to the development of green economy and finance in Ghana. Through the event, seven organizations and individuals were acknowledged and honoured for their work. The event was attended by a total of 73 participants.

Ghana in the 2021 Online Annual Report

1.5 MAURITIUS

Country context and PAGE portfolio

Mauritius has come a long way since its independence in 1968, transforming into a diversified upper middle-income economy, benefitting from dynamic industrial, financial and tourism sectors and high levels of human development. However, increased economic activity has adversely affected the environment, and the island’s vulnerability to climate change has made it essential for Mauritius to build a resource-efficient and resilient economy.

The overarching [Mauritius National Vision](#) (previously named Vision 2030) sets a clear path towards tackling environmental and social challenges, as well as achieving the country’s ambition of becoming a high-income, sustainable and inclusive economy.

Since 2014, PAGE has worked closely with the Mauritian government to achieve its vision, linked to the delivery of the Three-Year Strategic Plans. Key achievements include capacity development for the issuance of green bonds, guidance on social policies and the tracking public environment expenditures, the assessment of industrial waste and related industrial strategies, and advanced green economy learning. A significant contribution was towards the Marshall Plan Against Poverty, including the Marshall Plan Social Contract, which aids households at risk of extreme poverty.

More broadly, PAGE has supported achievement of the country’s Nationally Determined Contributions (NDCs) and several SDGs, including SDGs 1 (No Poverty), 4 (Quality Education), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production), 13 (Climate Action) and 17 (Partnerships for the Goals). Mauritius also directly recognised PAGE as contributing to their

achievements in the Voluntary National Review (VNR) of its SDGs presented at the High-Level Political Forum (HLPF) in July 2019.

PAGE began a gradual phase-out of its support in 2019, developing a sustainability plan to safeguard results and the future of green economy in Mauritius. In the following year, the COVID-19 pandemic brought unprecedented economic challenges and social disruptions to Mauritius. Due to the unpredictability following COVID-19, the Government has shifted from three-year plans to short-term one-year plans developed by the line ministries, which feed into the development of the budget allocations - making the annual Budget Speech an important indicator of current government priorities.

The Mauritius Budget Speech 2020-2021, given in June 2020, detailed the government's public investment priorities for stimulating economic recovery, including supporting tourism, manufacturing, investment in climate smart agriculture, renewable energy, circular economy and sustaining SMEs. The 2021-2022 Budget Speech reinforced these priorities by announcing funding for climate smart agriculture and recovery of the tourism industry.

In line with these government recovery priorities, PAGE responded quickly to this situation by finalizing a proposal focusing on informing policy development, strengthening the enabling environment and building national capacity for promoting sustainable agri-food systems, with linkages to the tourism sector. The targeted green recovery work was launched in 2021 building on the results of PAGE's four-year presence in Mauritius.

Progress in 2021

Ongoing strategic support for policymaking (Outcome 1)

Ensuring sustainability of results

An inter-ministerial consultation to review progress of the PAGE Mauritius Sustainability Plan took place on 16-17 August 2021. The Ministry of Finance, as the PAGE focal point, expressed appreciation for PAGE, whose presence could be felt even after the completion of the regular programme on several fronts: a guide for the issuance of sustainable bonds, tools for tracking public environmental expenditure, increased SME competitiveness, SCORE training that continues to be conducted in 2021, and IGE learning and capacity development that has been institutionalized in the Civil Service College Mauritius (CSCM) and enabled the training of over 400 civil servants. Going forward, the Ministry will review the progress of the sustainability plan and actions with relevant ministries on a regular basis, while seeking new funding opportunities and initiatives to sustain and scale up the impacts of green economic policymaking on the ground.

Establishment of a National Steering Committee

Following the launch of the green recovery work in Mauritius, the Cabinet agreed to establish a National Steering Committee (NSC) for PAGE Mauritius to direct and supervise the green recovery work under the PAGE country programme, as a tool to meet the

objectives of PAGE Mauritius while advancing national policies, strategies and programmes. The NSC enabled UN agencies to connect with other NGOs (such as FORENA - an NGO in Mauritius working on sustainable food practices, Regenerative Mauritius, Foodwise), private and public organizations (Association of Urban Authorities, Association of District Councils, Regional Assembly of Rodrigues and others), helping to get necessary actors' buy-in and advice on engaging with urban stakeholders for planned activities on promoting sustainable urban food systems under PAGE's green recovery work. The establishment of a National Steering Committee to oversee the PAGE Green Recovery Fund Programme in Mauritius was recognized in an official Cabinet Decision.

Supporting implementation of sectoral and thematic IGE policies (Outcome 2)

Creating an enabling environment for Sustainable Food Systems (green recovery)

In close collaboration with the government of Mauritius and the UNRCO, PAGE officially launched a green recovery project in Mauritius with a [ceremony](#) held on 17 June gathering over 130 participants. The Ministry of Agro-Industry and Food Security acts as the lead ministry for green recovery activities, which will be implemented through the Food and Agriculture Research and Extension Institute (FAREI). The project will support macroeconomic modelling to help predict the creation of green jobs in the agro-food sectors and assess the impacts of economic recovery on the sectors. It will also create a diagnostic and rapid assessment toolkit to increase public and private funding for nature-based solutions and smart agriculture that will support sustainable food systems. The project will then support urban food system plans to increase circularity and will build the capacity of private firms in the hospitality and food sectors on new food safety management protocols.

A first study, on "Creating an enabling environment and incentives to boost sustainable agro-processing industry including high growth potential SMEs in Mauritius" was launched with FAREI in June 2021, with the aim to provide technical support on the formulation, implementation, and coordination of financial, regulatory, and environmental policy to boost the sustainable agro-processing industry.

In line with the PAGE green recovery activities, the UNRCO organized National Food Dialogues in July and August 2021 to consolidate and map the agriculture sector and food systems, the role of key stakeholders in Mauritius, and the challenges faced in the sector. Knowledge exchange sessions were also organized by the UNRCO in November and December 2021 between regional countries about food systems initiatives and projects. The exchanges shared insights on the policy and governance mechanisms related to urban food and agriculture practices in Mauritius and highlighted the strong interest and support expressed from Ministry and NGO partners.

Initially, the PAGE-UNEP green recovery activities aimed to inform the development of a national Farm to Fork (F2F) Strategy, a concept mentioned in the National Budget to pursue a transition towards sustainable food systems in Mauritius. In recent discussions with the

Ministry of Agro-Industry and the Food and Agricultural Research and Extension Institute (FAREI), PAGE was informed that the government lacks capacity to develop a full-fledged F2F strategy. Instead, the government will focus on preparing a new Strategic Plan (2021-2026) for the Food Crop, Livestock and Forestry Sectors.

To ensure the relevance of PAGE work, PAGE is in close discussion with the leading ministries and institutions as well as UNRCO to explore possible policy entry points. In this respect, several bilateral meetings were held with local stakeholders, including the Ministry of Agro-Industry and Food Security, FAREI, Ministry of Local Authorities, Association of District Councils, Association of Urban Authorities, the Rodrigues Regional Assembly, and civil society (NGOs). These discussions led to an updated policy context for the PAGE-UNEP green recovery activities, where it will now support an urban food systems transformation by enhancing circularity in urban food systems. An evidence-based policy brief will be developed with an overview of urban food systems challenges and policy and governance frameworks for sustainable urban food systems and urban agriculture.

Green Jobs Modelling to support green recovery efforts in selected sectors (green recovery)

Researchers from the University of Mauritius (UoM), in collaboration with PAGE (ILO), conducted green jobs modelling to quantify the social, employment, environmental and economic impacts of different recovery options for Mauritius, with a focus on policy options for maximizing employment impacts in sustainable agriculture, textile and renewables for a rapid and greener recovery. In a draft policy brief, the key findings and policy recommendations derived from the green jobs modelling analysis were provided to the government for consideration and were discussed at the PAGE NSC in November 2021. The ILO and the UoM research team plan to organize a consultation and workshop to disseminate key findings and provide capacity building with relevant line ministries in 2022. The findings of the modelling provided key results that expanded the understanding of green jobs in Mauritius and will feed into the development of the Skills for Green Jobs Study and Roadmap.

Promoting access to Green Finance for SMEs in Mauritius

The report titled [Greening the SMEs: Improving SME access to green finance in Mauritius](#) was finalised, following close consultation with and review by relevant line ministries in Mauritius. This includes the Ministry of Industrial Development, SMEs and Cooperatives; the Ministry of Finance, Economic Planning and Development; SME Mauritius; and the private sector, which all contributed immensely to the report by providing access to resources and information through their networks. The study assesses the level of integration of environmental sustainability in the financing of SMEs in Mauritius, and examines the current state of green finance frameworks, practices and structures relevant to the financial sector and the potential to scale up green financing for the SME sector in Mauritius. It has three key messages:

- Innovative SME green financing schemes from commercial lenders will be necessary to complement public funds to provide sufficient financial support for SME adoption of green practices;

- SMEs face knowledge, financial, policy and size barriers inhibiting them from accessing green finance; and,
- Following increasing unemployment and income losses precipitated by the COVID-19 pandemic, support measures are needed to protect small-scale enterprises and prevent them from reverting to negative coping strategies, thereby undoing the progress made so far towards greener and more inclusive development.

The report will further facilitate the Government of Mauritius to implement its 10-year Master Plan for the SME sector, which makes recommendations to reshape the entrepreneur landscape and sets targets for SMEs by 2026. UNEP is in discussion with the government and UNRCO to organize a virtual dissemination workshop to share the report findings with interested stakeholders from the public and private sector, including the Bankers Association, SME Mauritius and Business Mauritius.

Facilitating Industrial Waste Management

In 2021, PAGE, led by UNIDO, conducted a study providing an "Industrial Waste Management - Cost Structure Review" (IWMC-SR) as a follow up to the recommendations of the PAGE-supported Industrial Waste Assessment report carried out in 2017. The study analyses the cost structure and policy gaps in the industrial waste management sector in Mauritius, with the primary goal of promoting symbiosis and sound solid waste management in industries. This is done with the objectives to build a Circular Economy and enhance the competitiveness of enterprises.

The IWMC-SR also builds on the results of the PAGE supported Industrial Waste Assessment (IWA) completed in 2016, which provided recommendations that were considered for the new National Solid Waste Management Strategy.

A total of 30 firms from selected industrial sectors (textile, chemicals, food, printing and construction materials) participated in the study. For the first time in Mauritius, the results provide a clear and unique description of the structure of the costs for industrial waste management, for both the private and public sectors. A virtual validation meeting was held on 6 December 2021, organized by UNIDO under PAGE and chaired by the Ministry of Industrial Development, to disseminate the findings and receive feedback from the national Project Steering Committee (PSC), co-chaired by the Ministry of Industrial Development, SMEs & Cooperatives (Mol) and Business Mauritius. The final draft will be published in the second quarter of 2022.

Promoting green recovery of the coastal tourism sector

Responding to the impacts of COVID-19, PAGE Mauritius seeks to identify options to promote private sector support for a green recovery in the tourism sector. A study was conducted, led by UNDP, on the private sector contribution towards a green recovery in the sector. The findings of the study will be integrated into a larger proposal led by UNDP to the Green Climate Fund (GCF) on adaptation to climate change in the coastal zone of the Republic of Mauritius, particularly as it relates to the views of the private sector.

Development of green bonds

Following the training workshops supported by PAGE on Green Bonds in 2018, continuous progress has been made by institutions in Mauritius to further analyze related enabling conditions. In June 2021, the Bank of Mauritius (BOM) opened a Climate Change Center and released a [Guide for the issue of sustainable bonds in Mauritius](#).

This Guide was designed to accompany and encourage issuers, investors and intermediaries to establish a domestic sustainable bonds market. It provides an overview of the requirements and process for the issuance of Sustainable Bonds and the listing of these bonds on the Stock Exchange of Mauritius. The Guide was drafted by a technical committee comprising of the Bank of Mauritius (Central Bank), Stock Exchange Mauritius, the Ministry of Financial Services and Good Governance, the United Nations Development Programme (UNDP), the Financial Services Commission (FSC) and the Standard Chartered Bank (Mauritius) Limited.

PAGE was invited to provide comments and contribute to the development of the national guidelines for the issuance of green and sustainable bonds, at the request of the UNRC Office. The review provided insights on the benefits and features of green, blue and social bonds, including the issue of debt sustainability, alternative debt instruments within the context of the wider spectrum of sustainable/green/blue financing instruments, the assessment of 'green' and 'blue' impacts, as well as second-party verification.

Building national capacity for inclusive green economy (Outcome 3):

Supporting the Tourism Sector for a Safe and Green Recovery

As part of targeted Green Recovery activities, PAGE supported the launch of [Operation COSHARE](#) (COVID-19 Occupational Health and Safety and Resource Efficiency), jointly organized by the Ministry of Tourism, the National Productivity and Competitiveness Council and the Tourism Authority. In its efforts to address the challenges brought on by the pandemic within the local tourism industry, Operation COSHARE was designed to enhance the capacity of employees in the sector through the promotion of health standards, protocols on efficiency optimization, cleaner productivity and competitiveness of SMEs, and promote Mauritius as a safe destination for travellers – overall helping the industry recover from the economic impacts of the pandemic. The launch event on 2 September 2021 was published in local newspapers and aired on national television.

Operation COSHARE builds on ILO's Sustaining Competitive and Responsible Enterprises (SCORE) programme and the support it provided to the National Productivity and Competitiveness Council (NPCC), with funding from PAGE, by rolling out COVID-19 recovery training to participating enterprises. Previous SCORE trainings in Mauritius focused on optimizing the efficiency, cleaner production and competitiveness of SMEs through improved workplace cooperation. In its first phase, 25 trainers were trained and delivered

occupational safety and health training to over 1,100 beneficiaries via online and in-person trainings. A Trainer's Guide on "Resource Efficiency and Cleaner Production for Productivity Gains - a training programme for the Tourism and Hospitality Industry in Mauritius" was developed with ILO support under COSHARE programme.

As of January 2022, 1,022 of the 1,458 improvement commitment projects that followed the training in Phase 1 were completed. A total of 47 enterprises, including food processors, hotels and restaurants, showed interest in participating in Phase 2 on Resource Efficiency, and 27 were selected after screening and scoping. As of March 2022, identification and implementation of improvement projects, site visits and implementation, and monitoring of results in energy and water usage, carbon and water footprints, and food waste reduction were being implemented.

Integrating IGE elements into national institutions

Following the "Green Economy Learning Assessment: Mauritius, Competencies to Enable a Green Transition" conducted in 2019, PAGE continued to support national partners and key stakeholders to i) advance the integration of green economy into national training curriculums available to civil servants and ii) to promote IGE and climate change learning in schools, as described below. Highlighting the achievements of the GELA, the Civil Service College Mauritius (CSCM) was approached by the World Bank in 2021 to participate in a webinar to share the experience of the Green Economy Learning Assessment project in Mauritius and its success in assessing learning needs and training public officials on green economy topics.

Training of civil servants: With the support of PAGE through UNITAR, trainers of the Civil Service College Mauritius (CSCM) - a key national institution in the training of public officers - successfully underwent a Training of Trainers (ToT) programme in February 2020. Following the ToT, between July 2020 and 30 November 2021, 461 middle-level civil servants (42 per cent female) were trained in two courses offered by CSCM in which green economy considerations were integrated. The two courses focus on Project Management in the Public Sector and Strategic Planning. The civil servants trained are well placed in the hierarchy of the government, encompassing Assistant and Deputy Public Secretaries, Directors, Line Managers and Head of Sections/Departments from a range of Ministries (e.g., Finance, Environment) to influence policy decisions with green economy considerations.

Integrating green economy into the CSCM e-learning platform: The CSCM upgraded its e-learning system platform [iTrain](#) with technical assistance from PAGE and integrated three PAGE e-learning courses including (i) Indicators for an Inclusive Green Economy: Introductory Course, (ii) Indicators for an Inclusive Green Economy: Advanced Course, and (iii) Introduction to Green Economy. More courses are to be added in the future, including the Green Economy and Trade, Green Fiscal Reform, Sustainable Finance, as well as Sustainable Diet and Sustainable Consumption and Production in Africa. The new online platform went live in January 2022 and will be accompanied by a wider awareness raising campaign to entice public officers, students and the general public to enrol in these courses.

Integrating green economy into school curriculum: Following a series of consultative meetings in Mauritius and Rodrigues that brought together policymakers, educators and NGOs, stakeholders unanimously agreed that green economy learning should be integrated formally into the school curriculum at the primary and secondary levels. The review of school curricula takes place every four to five years and the Mauritius Institute of Education (MIE) is committed to integrating green economy in the next round of review.

Raising awareness of green economy among teachers: To raise awareness among educators on green economy learning, CSCM organized two workshops for schoolteachers in Mauritius and Rodrigues in 2020 to promote the use of available tools and techniques to integrate Green Economy in the classroom. As a result, the “Green Rodrigues Awareness for Children Network (GRACN)” was created by the participants to sustain the initiative of green economy learning. The GRACN will be comprised of two primary teachers, two secondary teachers and three NGOs and devise a timetable for the academic year in scheduling climate change and environment-related events to avoid overlap. As another result of the workshop, a national essay competition for primary and secondary school children on Climate Change and Green Economy was launched by CSCM in 2021, with a total of 591 submissions received. The first edition of the national essay competition helped increase awareness among the teachers and parents on the challenges of climate change and green economy. The CSCM will support the continuation of the essay competition in the coming two years with the hopes that a ministry or organization will then lead the initiative.

Developing online green economy learning resources for teachers: The Mauritius Institute of Education (MIE) agreed to host a centralised online portal that incorporates various e-learning modules and resources related to climate change and green economy for easy access to teachers. This MIE-hosted database will be updated regularly and is promoted through websites of other partners including the Ministry of Education, Ministry of Environment, the CSCM and NGOs. On top of these courses, schoolteachers in Rodrigues and Mauritius were made aware of relevant courses on the UNCC: Learn platform.

Mauritius in the 2021 Online Annual Report

1.6 BURKINA FASO

Country context and PAGE portfolio

Burkina Faso has one of the lowest carbon emissions and ecological footprints in Sub-Saharan Africa, with GDP growth continuing to rise. However, it faces persistent challenges in the form of limited natural resources, high poverty levels and heavy reliance on

agriculture. In the face of these challenges, the Government has taken forward several national initiatives that highlight the country's commitment to sustainable development. It was one of the first countries in the world to adopt a National Adaptation Plan, with combatting climate change positioned as a high-ranking goal for the country. In recent years, recurrent terrorist attacks, particularly in the Northern and Eastern parts of the country, have added an additional challenge and hampered government development efforts.

In 2014, PAGE was requested to support the development of a National Green Economy Strategy (*Stratégie Nationale de l'Economie Verte* - SNEV) to serve as the backbone of the country's transition to a green economy, as well as contribute to the National Plan for Economic and Social Development (PNDES 2016-2020). Several macroeconomic and sectoral assessments were conducted to inform this Strategy, including the Green Economy Assessment that identified priority sectors for green investment. Steps to introduce reforms and build capacity have since been taken by different ministries in several thematic and sectoral areas, including sustainable agriculture, sustainable trade, green industry and green taxation.

Following the start of the gradual phase out of PAGE in Burkina Faso in 2019, the country's next national development plan for the period 2021-2025 (PNDES 2) was adopted by the Government on 30 July 2021, providing a new entry point to better mainstream IGE within sectoral strategies, building on the SNEV.

Key achievements of PAGE work between 2014 and 2020 include the adoption of the SNEV in July 2019, completion of activities in line with its objectives and the development of a specific support project for its implementation; contributions to sectoral and thematic reforms in the areas of sustainable trade, green industry, and sustainable agriculture; and capacity development on sustainable agriculture and green entrepreneurship. Further, the country created a model for joint delivery of complementary UN initiatives, bringing together PAGE, the Poverty-Environment Action (PEA), and SWITCH Africa Green into one coherent programme aimed at greening the economy.

Through this work PAGE has contributed towards the achievement of several SDGs, including SDGs 2 (Zero Hunger), 4 (Quality Education), 5 (Gender Equality), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production), 13 (Climate Action), 15 (Life on Land) and 17 (Partnerships for the Goals).

When Burkina Faso was hit by the COVID-19 pandemic, PAGE continued its support beyond 2020 to support the recovery of the tourism sector. This included conducting studies and modelling activities that to help mobilize funds and develop incentives for the adoption of green practices within the industry. In 2021, the Technical Monitoring Committee under the leadership of the Ministry of the Environment, Green Economy and Climate Change was set up to oversee the activities in the sector to ensure national ownership and continuation beyond the PAGE programme.

Progress in 2021

Shaping sectoral and thematic policy reform for green recovery (Outcome 2):

Facilitating a green recovery of the Tourism Sector (green recovery)

With an additional contribution for 2021-2022, PAGE is supporting the country's green economic recovery of the tourism sector through a post-COVID-19 Green Recovery Workplan for the Tourism Sector. PAGE will contribute to studies and modelling activities that provide the basis for strengthening the mobilization of public and private funds and the development of incentives to support the greening of the tourism sector.

While the Workplan will be officially launched in 2022, its implementation started on 22 June 2021 with the creation of a Technical Monitoring Committee to oversee this work. The Committee was created by the Ministry of the Environment, Green Economy and Climate Change (MEEVCC), leading the PAGE work, and is placed under the supervision of the Secretary General of MEEVCC. It is composed of 12 key players in the tourism, economy and finance and environment sectors, with representatives from the National Office of Protected Areas, General Directorate of Economy and Planning, General Directorate of Taxes, National Observatory of Tourism and employers' organizations of tourism and the hotel industry, alongside the PAGE National Coordinator and Focal Point. The Committee enshrines the full ownership of the project by national stakeholders and will facilitate studies, reports and project implementation.

The Committee oversaw preparatory work for the following activities to commence in 2022:

- Assessment and implementation of the most relevant policies and incentive and fiscal measures to support the recovery of businesses in the tourism sector;
- A study on resource efficiency and waste management guidelines for businesses in Burkina Faso;
- A monitoring, control and evaluation system, including a steering committee, for measuring the progress and impacts of activities implemented for greening the tourism sector; and
- A communication plan for disseminating the results of the various assessments undertaken and the updated National Strategy of Sustainable Tourism.

Separate to this activity but also related to green recovery support efforts, PAGE was engaged in a study carried out by an economic advisor hired by the NDC Partnership to support the Ministry of Economy and Finance in developing a Post COVID-19 Green Recovery Action Plan. The PAGE Project Coordinator attended the validation workshop of the study and contributed several recommendations to improve the integration of climate action in the Plan.

Improving evidence-based analysis to guide reforms to the artisanal mining sector

A report to guide reforms to align the gold mining sector with sustainable and inclusive development efforts in Burkina Faso was completed in 2020. The report analyses the challenges of the artisanal gold mining sector and its coexistence with sustainable agriculture. In 2021, the report was edited and stylized in preparation of wider dissemination.

Enhancing capacity and awareness to support green growth (Outcome 3)

Building national capacity for resource mobilization

The Government of Burkina Faso officially adopted the government's support project for the implementation of the National Green Economy Strategy in late 2020, which was developed with support of PAGE. This paves the way for further resource mobilisation beyond PAGE. In line with this goal, PAGE supported two virtual workshops in December 2020 and 11-13 January 2021 for 12 participants to train government officials from various ministries in Burkina Faso, as well as NGO staff, in the development of bankable projects, which could attract climate funding.

Government officials were introduced to financial resource mobilisation tools and identified projects according to donors in the context of green economy. As a result of the training, two concept notes were developed to be submitted to the Green Climate Fund. The notes were discussed during a workshop in June 2021 organized by the General Directorate of Green Economy and Climate Change and will be finalized with further support from donors and agencies.

Coaching to support integration of IGE into planning frameworks

In 2021, PAGE organized a comprehensive coaching for budget program managers and monitoring and evaluation officers on the integration of inclusive green economy into sector budget programmes of six ministerial departments. The training covered the following modules: introduction to the concept of Inclusive Green Economy, including the National Strategy on the Green Economy; issues and challenges of the green economy in Burkina Faso; and approaches and tools for the integration of IGE in national and sectoral planning.

Taking place from 7 October to 12 November 2021, the six coaching sessions each lasted 2 days. 90 individuals benefited from the training from six different ministerial departments, including MEEVCC; the Ministry of Economy, Finance and Development; the Ministry of Agriculture and Hydro-Agricultural Developments; the Ministry of Youth and Employment; the Ministry of Animal and Fisheries Resources; and the Ministry of Arts, Culture and Tourism. By engaging participants from multiple national Ministries, PAGE enabled the government to mainstream IGE objectives throughout different sectors and to align policymaking with sustainable development across the government.

Promoting Climate Change learning in the region

Throughout the month of February 2021, the Government of Benin and UNITAR jointly organized the first “West African Campaign on Learning about Climate Change”. The campaign consisted of television and radio debates, followed by a series of contests broadcast on the radio in which eight winners were selected to benefit from a two-week introductory training on climate change delivered by the Regional Agriculture, Hydrology and Meteorology Research Centre. As the Coordinator of the Regional Hub on Learning about Climate Change, Burkina Faso’s PAGE Project Coordinator played a significant role in the campaign.

Facilitating Regional Exchanges on Green Economy and Climate Change

UNITAR facilitated a collaboration between PAGE and the West African Regional Learning Platform on Climate Change, a programme initiated by UN CC:Learn in partnership with the Agrhyet Regional Centre. The platform facilitates experience sharing, training and dialogue between countries and institutions in the region on learning about inclusive green economy and climate change. Activities include webinars, expert debates, trainings, and the development of learning materials adapted to the context of the region, helping to strengthen synergies and collaboration. Through this platform, Burkina Faso has shared experiences on IGE policy development and capacity building with other countries and institutions in the region, including a virtual meeting on 8 June 2021 with Côte d'Ivoire and Senegal to exchange experiences on the development of a directory of green jobs to more accurately measure the demand for green skills.

Promoting IGE and PAGE work

A [15-minute documentary film](#) was developed on IGE in Burkina Faso with special reference to PAGE contributions and achievements. The Minister of Environment is featured in the film along with the Director General of Green Economy and Climate Change, the UNITAR Programme Coordinator, the Project Coordinator for PAGE and other National stakeholders.

[Burkina Faso in the 2021 Online Annual Report](#)

1.7 SOUTH AFRICA

Country context and PAGE portfolio

South Africa has become one of the largest economies in Africa, benefiting from high levels of industrialisation and abundant natural resources, including large mineral deposits. The country has also made considerable strides towards improving the well-being of its citizens, significantly lowering poverty rates, and increasing access to public services. Whilst the

economy is still expanding, economic growth has slowed down in recent years, with many social and environmental challenges persisting. South Africa still grapples with inequality, poverty, and unemployment; and industrialisation coupled with increasing exploitation of natural resources has resulted in a heavy ecological footprint.

Recognizing the potential of green economy strategies, the South African government embarked on a development path linking economic prosperity to environmental sustainability and social equity. Released in 2010, South Africa's New Growth Path identified the green economy as a national priority, with the subsequent Green Economy Accord of 2011 - a result of social dialogue between government, business, civil society and labour. Through the South African National Development Plan 2030, a long-term strategy adopted in 2012, the government significantly strengthened its ability to manage environmental costs and respond to the increasingly severe impacts of climate change. The Medium-Term Strategic Framework (2014-2019) provided an action plan for realizing the country's national development vision.

Interesting recent developments include a carbon tax of USD 8.34 per ton of carbon dioxide equivalent signed into law (effective from 1 June 2019 to December 2022), as well as the development of a Low Emission Development Strategy (SA-LEDS) by the Department of Forestry, Fisheries and the Environment (DFFE). Given the comprehensive green economy policy framework already in place when South Africa joined the partnership in 2015, PAGE work has been structured around improving policy coordination, deepening collaboration between different stakeholders and supporting policy implementation. PAGE has also helped to identify sectors and industrial segments with potential for IGE transformation and strengthened capabilities through green economy learning and training.

PAGE support was further aligned with priority areas identified in the Medium-Term Strategic Framework that refers to the following areas focused on: (i) planning, piloting and investing in the creation of a framework for implementing the transition to an environmentally sustainable and low-carbon economy; and (ii) harnessing research and information management capacity to identify, develop and maintain datasets to generate policy-relevant statistics, indicators and indices.

Since 2015, PAGE work has resulted in several achievements, including a green economy progress measurement framework, the creation of social dialogue on Just Transition, and contributions towards policy reforms related to green industry, trade, water management and renewable energy. PAGE activities also enabled South Africa to assume a leadership position as a green economy champion, as demonstrated by hosting the Third PAGE Ministerial Conference in Cape Town in January 2019.

In turn, PAGE has contributed to the achievement of SDG 8 (Decent Work and Economic Growth) and cut across several other SDGs, including SDGs 4 (Quality Education), 9 (Industry, Innovation and Infrastructure), 10 (Reduced Inequalities), 12 (Responsible

Consumption and Production), 15 (Life on Land) and 17 (Partnership for the Goals), as well as South Africa's NDCs.

The COVID-19 pandemic and the ensuing economic lock-down has led to important economic crises and a significant number of people losing their jobs, bringing the expanded unemployment rate to 42 per cent in 2020. In response to this, the Government of South Africa put in place economic relief schemes to mitigate the socio-economic impact, with the contributions of the corporate and private sector. These programmes put specific emphasis on SMEs and supporting young, green entrepreneurs. In line with this, PAGE engaged in a rapid modelling exercise to assess the impact of South Africa's relief package on inclusive green economy, amongst other initiatives to promote green and decent employment.

Progress in 2021

Supporting Green economy policies and measuring progress towards a green transition (Outcome 1):

Analysing technology gaps for a green economy

The 'Perspectives on a Green Technology Gap Analysis Report 2021: Barrier Analysis and Enabling Environment for Climate Change Adaptation and Mitigation', developed by PAGE, was validated by national partners on 23 November 2022. The study identifies needs and costs to create an enabling environment required for the uptake of existing and emerging green technologies in the water, energy, and biodiversity sectors to inform the Technology Needs Assessment (TNA) process currently underway in South Africa.

Identifying and prioritising climate technology needs and enabling technology uptake are key steps for effective action on climate change. As signatories to the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement, countries are encouraged to develop their Technology Needs Assessments (TNAs) to support this process. One of the gaps of South Africa's 2007 TNA report, which was largely attributed to the limited guidelines available at the time for its compilation, was the limited inclusion of an analysis of the enabling environment.

The study consisted of three main steps: 1) an analysis of identified barriers across sectors in South Africa's first TNA; 2) metric development to measure potential outcomes based on a multi-criteria approach; and 3) an enabling environment case study of six prioritised technologies (two per sector) in water, energy and biodiversity. As a result, an analysis framework, as well as a set of recommendations for each targeted sector, were developed and will guide the update of the TNA and the development of a Technology Action Plan.

Supporting the development of Municipal Integrated Waste Management Planning

PAGE is providing technical support to the DFFE on the revisions of the Municipal Integrated Waste Management Planning Guidelines (MIWMP) and the existing model waste by-laws. Supporting municipal waste management can help the country attain COVID-19 economic

recovery objectives set forth in the national Economic Reconstruction and Recovery Plan (ERRP). Among the ERRP's priorities are the creation of jobs and the improvement of livelihoods, waste management, circular economy, and the integration of waste pickers, which feature in the ERRP's implementation plan. The DFFE was tasked to lead in achieving objectives in this area.

PAGE will be working with the Council for Scientific and Industrial Research (CSIR) as the implementing partner for this work and will work closely with the DFFE Waste Branch to update the relevant content and guidelines in the DFFE's [Integrated Waste Management Plan portal \(IWMP\)](#) and the [South African Waste Information Center](#). This update will incorporate the revisions of the MIWMP into the municipal planning process of 5-year integrated waste management plans. The CSIR will also provide a training on the revised MIWMP and model waste by-laws through a virtual capacity building workshop to the municipal waste management officers.

Green Jobs for a better future dialogue series

South Africa's vision for a low-carbon, resource-efficient and pro-employment future was laid out in the National Development Plan 2030. The country's Economic Reconstruction and Recovery Plan to overcome the socio-economic impacts of the COVID-19 crisis also acknowledges the benefits of an inclusive green transition. The virtual dialogue series "Green jobs for a better future" was designed to explore avenues for creating employment opportunities, particularly for young people, through green jobs as an important element of a just transition and a green recovery from the COVID-19 pandemic.

The dialogue consisted of a series of five webinars from mid-April to mid-June 2021, where different stakeholders shared their views on enabling policies, job opportunities in specific sectors, and prevalent skills gaps and discussed with participants implementable actions to support young people in their aspirations to work in the green economy.

The overall objective of the dialogue series was to examine, through a series of interactive online interventions, the different dimensions of a green recovery and job creation for young people in South Africa to 1) Discuss and share the latest national, provincial and local knowledge about green jobs, green jobs actors and the enabling policy environment in South Africa, with specific focus on youth unemployment and in the context of a 'just transition' and a post-COVID-19 recovery; 2) Understand the scope of existing and proposed green job opportunities for young people and discuss with decision-makers, practitioners, SMEs and young people how to promote the uptake of green jobs in selected economic sectors.

Youth Barometer on Just Transition

As the general awareness of the climate crisis has grown, the just transition has also become specifically tied to climate action, and particularly energy, which is manifested as a key issue in UNFCCC negotiations and in the NDC enhancement process of the Paris Agreement. All of this comes at a time when the global climate movement is gaining momentum, also seen in South Africa through several NGOs and youth organizations. The youth constituency is by

far the most significant group associated with unemployment and unemployability in South Africa.

The Youth Barometer survey was developed by UNDP with technical guidance and input from partners like the DFFE, the Presidential Climate Commission (PCC), UNICEF and youth representatives. The survey was rolled out between November 2021 and January 2022, with the aim to reach a sample size of 10,000 respondents from around the country. To disseminate results from the Youth Barometer and formulate collective youth recommendations on NDC implementation, just transition and green economy aspects, the Youth Barometer project will culminate in a national online dialogue and a social media communications campaign.

PAGE and Cambridge Econometrics Findings from Modelling in South Africa

In late 2020, South Africa participated in a [modelling exercise on post-COVID-19 economic recovery options](#) organized by PAGE and [Cambridge Econometrics \(CE\)](#). The research analyzed spending plans and multisectoral impacts in detail, with results shared during a stakeholder workshop on 22 January. The analysis offers an additional scenario with a 'green push' for the government's consideration, through measures such as increased investment in renewables and decommissioning coal power plants. Among the [key findings](#), research has shown that green policies can promote economic growth, job creation and environmental sustainability.

The modelling results were featured in a webinar "[Linking Economic Recovery and Stronger Climate Action in South Africa](#)" hosted by the World Resources Institute (WRI) on 24 May 2021 to highlight climate action in South Africa, particularly focused on bolstering economic recovery and achieving a just transition towards net-zero emissions. The modelling was also presented at meetings of the Presidential Coordinating Commission on Climate Change (P4C) in June and July. The Commission was established in February 2021 to finalise the just transition framework for South Africa in line with the 2050 vision and requested additional modelling technical assistance as well as approaches around designing a social compact model for a just transition.

Contributing to national policy processes and UN frameworks

Throughout 2021, the PAGE South Africa Project Coordinator participated in the UN Sustainable Development Cooperation Framework (UNSDCF) technical committee that works with national partners to deliver as one in three select district municipalities. The partnership between the UN and national, provincial and local government partners was launched in April 2021.

Additionally, the PAGE South Africa Project Coordinator actively participated in the NDC enhancement consultations held by the DFFE and the P4C in July, as well as in the Energy Transition Council meetings convened by government of UK through the UK high commission in South Africa in preparation for COP 26.

Perspectives to advance IGE in South Africa

With close ties to the PAGE South Africa programme, the document "[Perspectives on Advancing an Inclusive and Sustainable Green Economy in South Africa](#)" was finalized in 2021 as a Green Economy Advisory Group (GEAG) project, in partnership with the DFFE; the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) of the Federal Republic of Germany; GIZ and UNEP. The publication was a response to the third PAGE Ministerial Conference that took place in January 2019 in South Africa, drawing on the four thematic concept notes produced for the Conference.

Shaping sectoral and thematic policy reforms (Outcome 2)

Building a biomaterials sector

On 2 February 2021, PAGE hosted a validation workshop on the Biomaterial Market Demand Study conducted in 2020. The event aimed to present and discuss recent work on stimulating demand for bioplastics in South Africa, which offers a potential decarbonization option for the petrochemicals value chain. The study contributes to reimagining the plastics sector in South Africa as it identifies the existing and potential markets and associated marketing strategies, which are critical in driving biomaterials' growth in South Africa and contributes to the Plastic Master Plan currently under development by the Department of Trade, Industry and Competition. An interview was also conducted with PAGE focal points from UNIDO and the DEF discussing PAGE's recent work on the Biomaterials Market Demand Strategy in an [interview with Business Day TV](#).

Driving force for Change Youth Challenge

PAGE and the DFFE hosted the [2021 Driving Force for Change II Youth Challenge](#), which awards and provides support for young entrepreneurs and green innovators to further develop early-stage entrepreneurship skills and competencies, aiming to promote green economy development and create decent jobs for youth. The first edition was created last year to address youth unemployment through green entrepreneurship promotion, and, following its success, the 2021 edition was launched on 9 August. SMEs across all economic sectors with business plans driven by environmentally sound and socially inclusive intentions were invited to participate, with 811 applications received and evaluated. A total of 16 winners were selected as demonstrating the best business models in green manufacturing, innovative agriculture, circular economy and eco-tourism, as well as the best female and most innovative business entrepreneurs. An Awards Ceremony will be officiated by the Minister of the DFFE in early 2022 to recognize the winners. Support during the first half of 2022 will include access to sector-specific technical assistance, tailor-made business development services and business management training to help them further develop business acumen skills sets and competencies.

Imvelisi African Enviropreneur programme

The PAGE-supported Imvelisi African Enviropreneur programme was launched on 1 October 2021, with 15 October 2021 as the closing date for submitting applications. The

programme received a total of 51 applications and selected 26 candidates to participate in the programme.

The Imvelisi Enviropreneurs Programme Bootcamp is an in-depth business model and business idea development training, coaching and mentoring programme. It was facilitated through a virtual entrepreneurship management system called Entrepreneurerdy. Imvelisi Enviropreneurs Programme Bootcamp was considered as one training-cum-coaching package. It was designed around the Business Model Canvas, an entrepreneurial tool for describing, analysing, and designing business models and driven by one-on-one coaching in the business model generation and business development–promoting immediate workplace transference. Aspiring entrepreneurs and innovators acquired knowledge and tools for addressing start-up challenges. Virtual training sessions were conducted through the Entrepreneurerdy platform (entrepreneurship management system). The Imvelisi Graduation and Awards Ceremony was held on 3 December 2021 when three winners were selected. The winning business ideas focused on the development of a charcoal alternative made from 100 per cent organic waste, greywater recycling to address water conservation, and production of Biodiesel to create new and renewable products from waste and residues.

Building institutional and individual capacity (Outcome 3)

Quality management of continuing education courses offered by universities

Since 2019, UNITAR has been working with the Southern African Regional University Association (SARUA) on a project that aims to support the establishment of a system for effective quality management for and formal recognition of university-offered continuing education courses. In 2021, the updated guidelines for continuing education provided by universities were presented to regulators in South Africa, including the Council for Higher Education (CHE) and the Department of Higher Education and Training (DHET). Institutional partners were supportive of the guidelines; however, no formal recognition was achieved in 2021. In 2022, SARUA will explore opportunities to align the guidelines with the work of the technical committee on accreditation under the Southern African Development Community (SADC).

During 2021, the guidelines and the quality assurance mechanism were presented to accreditation officers from 13 South African universities at two events on 23 and 24 February. Following the events, an online community of practice was established on the SARUA website so that universities could exchange and collaborate. Also in 2021, the development of a quality assurance system mechanism (technology-based prototype system) for quality review and assurance was completed and pilot-tested by the University of Western Cape. The University is now planning a full implementation of the amended Guidelines across its portfolio of continuous education courses.

While the project is now complete, efforts by SARUA will continue to outreach to and raise awareness for other universities, as well as regulators in South Africa and the Southern African Development Community (SADC).

Building capacity to delivery an inclusive green economy COVID-19 recovery plan

On 23-26 November 2021, Cambridge Econometrics in collaboration with the University of Pretoria and its Africa Training Hub of the [Green Jobs Assessment Institutions Network \(GAIN\)](#) built the capacity of the National Treasury and other national partners to assess and better plan for social and employment outcomes of alternative development choices linked to economic recovery, climate and just transition policies. The training targeted policy makers in the Government of South Africa as well as social partners, with a total of 30 attendees participating in the training. This helps the Government to use the model as a tool for future policy planning and evidence-based advice in the field of economic development, employment, green economy and climate change.

Raising awareness of green economy and the PAGE programme

PAGE communication tools, which include a digital compendium of selected PAGE success stories and a [PAGE video](#), were designed and developed to inform stakeholders about PAGE work in South Africa since inception. Also contributing to raising awareness and engaging in green economy dialogue, the PAGE South Africa National Coordinator participated as a panellist in the [SEED Symposium hosted by Indalo Inclusive on 23 - 25 March](#), which focused on just transition and green recovery, and was invited by UNFCCC Regional Collaboration Centre in Kampala to participate as a panellist in a Webinar: Youth engagement in the UNFCCC process and more ambitious climate action.

[South Africa in the 2021 Online Annual Report](#)

1.8 JIANGSU PROVINCE

Country context and PAGE portfolio

As the second largest economy in the world, China has positioned itself as a forerunner of sustainable development, guided by the national development vision known as 'Ecological Civilisation'. In 2015, the Chinese Government expressed an interest to join PAGE, starting at the provincial level in Jiangsu - the second richest province in the country. Located on the eastern coast of China, Jiangsu province is home to around 80 million people. Characterized by a dense network of rivers, lakes and waterways, it has a strong resource base but is faced by several challenges, including high population density, environmental degradation, and a reliance on heavy industry.

Jiangsu has demonstrated a strong commitment to green economy in recent years by fostering green and high-tech industries, shifting towards energy saving and resource efficient production and consumption models, redefining the eco-redlines of conservation zones, and enhancing the policy monitoring, coordination and evaluation of green development progress. The 13th Five-Year Development Plan (2016-2020) of Jiangsu, formally established these as priority areas.

As one of China's major industrial powerhouses, Jiangsu was the first province to release a provincial plan on Ecological Civilisation Construction (2013-2022), highlighting the mid- and long-term development goals for Jiangsu. This plan foresees the greening of industrial parks as a means for achieving clean and circular production, setting the target for all provincial-level industrial parks to meet the national Eco-Park standard by 2022. In addition, policy guidelines on Strengthening the Green Industrial Development along the Yangtze River Economic Belt (YREB) were issued by five ministries, which focused on accelerating green industrial transformation in heavy industry sectors.

Against this background, Jiangsu Province joined PAGE in 2015 with the objective to i) leverage new opportunities and overcome existing challenges in Jiangsu, ii) identify and share success stories at the provincial and sub-provincial levels, in an effort to inspire other provinces and countries to embrace green economy; iii) identify and analyse major barriers to an inclusive green economy transition; and iv) advance green industrial transitions and policy coordination in Jiangsu's industrial parks. PAGE has since supported the province with capacity development, macro-level green economy policy monitoring, and targeted sectoral policy advice on green industrial development, green jobs and green trade centred around the concept of green industrial parks. In doing so, it has contributed to several SDGs, including SDG 4 (Quality Education), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Sustainable Consumption and Production), 13 (Climate Action) and 17 (Partnerships for Goals).

With Jiangsu Province approaching graduation from the partnership in 2020, a national sustainability plan is under development to sustain results in the future. PAGE findings were also submitted to inform the development of the '14th Five-Year Development Plan (2021-2025)' at the national level through the China Council for International Cooperation on Environment and Development (CCICED).

In 2020, China was the first country affected by the COVID-19 crisis, followed by economic recovery measures launched in the first half of 2020. Jiangsu Province has continued to pursue the green economy agenda in light of COVID-19 and associated impacts. In March 2020, the provincial government issued the 'Opinions on Promoting Green Development'. This official guidance document covers 33 aspects of green development, including green industrial parks, circularity, resource efficiency, green trade, green value chains, green textiles, renewable energy, low-carbon economy and international cooperation. This was combined with increased domestic green investment, with USD 4.3 billion provided for

major projects especially in sustainable infrastructure within the province with a focus on environmental protection, and the National Green Development Fund unveiled on 15 July 2020, featuring USD 12.7 billion in its first phase.

Progress in 2021

Jiangsu's progress towards an inclusive green economy transition

Following Jiangsu Province's graduation from the PAGE programme, during the past years the adjustment of low-carbon production in the province has progressed steadily, partly in line with the green economy trajectory PAGE helped to shape. By the end of 2020, the province's carbon dioxide emission intensity per unit of GDP and energy consumption per unit of GDP decreased by 24.5% and 18.2% respectively compared to 2015. In addition, more than 50% of enterprises have set up departments dedicated to environmental management. In line with the national "dual carbon strategy" to peak CO₂ emissions by 2030 and achieve carbon neutrality by 2060, in June 2021 the Department of Ecology and Environment of Jiangsu Province published the Department of Ecology and Environment's Work Plan for Promoting Carbon Peaking and Carbon Neutrality. As the first annual work plan on peak carbon and carbon neutrality for provincial ecological and environmental systems in China, the Plan entails 22 tasks, adhering to local conditions, focusing on priorities, and strengthening the interface between short-term actions and long-term programmes.

Supporting sustainable garment supply chains

As one of the biggest emitting sectors in China and one of the most important livelihood industries (in particular for women), the textile and garment industry is actively working to improve environmental and social sustainability. The China National Textile and Apparel Council (CNTAC) is working with local industrial clusters to establish demonstration and exhibition fairs and conduct industrial research with information disclosure on sustainable development governance of local governments. Building on the past collaboration, PAGE, led by the ILO, is working with CNTAC to organize a promotional event and capacity building workshop in Humen Township of Dongguan City, which is situated in a region that is home to one of the leading textile industrial clusters in the country.

Postponed to 2022 due to travel restrictions brought on by the pandemic, the event will raise awareness of textile enterprises and local government on Green Jobs, Just Transition and a responsible green transformation of the industry. Relevant content from the Just Transition Toolkit developed for the textile and garment sector by ILO under the ILO-SIDA Decent Work in Garment Supply Chains Asia project will be introduced and adapted to the country context for promotional and training purposes. The signing of a Memorandum of Cooperation between the ILO (CO Beijing) and CNTAC (Office of Social Responsibility) on the joint organization of the event and possible future collaboration areas lays a solid foundation for a more systematic and in-depth collaboration on promoting Green Jobs and Just Transition in China, and in other countries in Asia where Chinese textile enterprises are engaged.

Packaging knowledge for further outreach

As part of PAGE China's outreach and communication efforts, UNEP supported the development of six factsheets summarizing past reports including the green economy progress index in Jiangsu and Fujian Province, green industry, and eco-industrial parks, among others. These factsheets are planned to be disseminated at future national and international green-economy-related forums and conferences for further publicity.

Jiangsu Province in the 2021 Online Annual Report

1.9 MATO GROSSO STATE, BRAZIL

Country context and PAGE portfolio

In recent years, the Brazilian State of Mato Grosso has benefitted economically from the growth of its large agricultural sector. It is now working towards increasing the added value of agriculture commodities through processing and addressing the environmental and social challenges associated with this growth.

Recognizing the importance of achieving inclusive sustainable growth, Mato Grosso opted to tackle these challenges by promoting new economic activities and technologies to rehabilitate its natural resource base. In 2015, the State of Mato Grosso launched the Strategy - Produce, Conserve and Include (PCI) - with the objective to increase production, encourage added value through the processing of agriculture commodities, achieve international standard labels, conserve natural resources and promote the inclusion of families in rural settlements and traditional and vulnerable communities. This approach requires decarbonizing the economy and increasing energy efficiency, planning capacities and skilled labour. This strategy falls in line with the objectives of PAGE and benefits from various national level planning instruments advancing sustainable development across Brazil, including the Action Plan for the Prevention and Control of Deforestation in the Amazon, the National Climate Change Policy (NCCP), and the Low Carbon Agriculture Plan - a sectoral plan of the NCCP.

Against this backdrop, Mato Grosso joined PAGE in 2016, with a priority to support the development of a green economy with emphasis on the generation of green employment opportunities and poverty eradication, both linked to the economic transformation pursued by the State of Mato Grosso. Thematic and sectoral reforms were pursued in a variety of

priority areas, including agriculture, agro-industry, tourism, renewable energy, land regularisation and green jobs.

These activities contribute to the achievement of SDGs 2 (Zero Hunger), 4 (Quality Education), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production) and 17 (Partnership for the Goals).

In light of the COVID-19 crisis, the government of Mato Grosso placed green recovery at the core of the economic recovery plan and recognized the importance of investing in programmes that bring significant environmental, social and economic benefits to the population. The green recovery policy promoted by the government of Mato Grosso focuses on strengthening family agriculture, which accounts for 51 per cent of the workforce in Mato Grosso, implemented through the State Plan for Family Agriculture in partnership with the Secretariat of Economic Development and Environment.

Since 2021, PAGE has aided the reformulation of the Strategic Plan for Family Agriculture, reinforcing its earlier work in the sector and strengthening state governance as well as environmental and social commitments by building a culture of integrity. Areas of interest with respect to a green and inclusive recovery are the development of the agro-industry value chain, the logistical and commercial market integration of family agriculture products, better technical assistance and stronger governance.

Progress in 2021

Integrating green economy at the cross-sectoral level (Outcome 1):

Supporting the 2030 Agenda through a bottom-up approach

PAGE is working with the State Secretariat of Planning to develop a legal instrument to guide the planning and implementation of sustainable policies that accelerate local development in line with the SDGs. The instrument aims to prepare local actors from state and municipal governments, organized civil society and companies to take “bottom-up” actions which support the achievement of the 2030 Agenda goals.

As a first step, PAGE conducted an initial report in 2021 to assess the Multi-annual Plan of the State and 10 selected municipalities and how much it aligns with the SDGs. The Multi-annual Plan is a normative instrument that administrative bodies use for planning goals and priorities through programs and actions for the period of four years. As a next step, PAGE will conduct workshops in each of the 10 municipalities on the integration of SDGs into planning processes.

Together with this activity, PAGE is conducting an online training course for public officials and civil society about the SDGs. This is a collaboration between UNDP and the Government school, the official body for training public officials.

Supporting implementation of sectoral and thematic IGE policies (Outcome 2):

Sustainable Management Plan for Cuiabá's Historic City Centre

In Mato Grosso's capital city, the Federal University of Mato Grosso, together with the Academy of Architecture and Urbanism, finalized the Sustainable Management Plan for land use and occupation of the historic centre of Cuiabá in October 2021. Having a deep historical and cultural significance for the State of Mato Grosso and Brazil overall, the historic centre plays a key role for the tourism sector and economy. The Plan provides an instrument for the Secretariat of Culture of Cuiabá to conserve and safeguard the centre and raise awareness on sustainability, natural resources, cultural heritage preservation, and local economic development, offering a roadmap to Mato Grosso for sustainable decision-making in its capital.

The preparation of the Plan was supported by PAGE and involved both prospective and strategic planning, including the review of existing local programmes, policies and initiatives, and was further supported by a cultural heritage and urban analysis completed by PAGE in 2019. The subsequent proposals for the 'Land Use and Urban Mobility Plan' promoted urban quality of the historic centre of Cuiabá.

In relation to prospective and strategic planning, the historic centre was evaluated for its economic, environmental, social, spatial and technological characteristics, proposing solutions for unused space.

Regarding governance and partnerships, the work makes recommendations for the legal framework within the region, including properties with land irregularities. Proposals and solutions were presented for environmental sanitation (drainage, microclimate, landscape), public water supply, urban cleaning and solid waste management, electricity distribution network, archaeology, public safety, microclimate, historical/cultural/tourist aspects, and urban landscape, as well as the social inclusion of people with disabilities.

The Plan also identifies issues for municipal legislation, both urban and fiscal, as well as the instruments of the city's statute that can be used in the promotion of the historic centre, which includes a focus on clean energy, the use of rainwater, and the creation of green jobs. Finally, the work provides recommendations for the integration of the 'Management Plan' into the 'Law of the Master Plan of the Municipality of Cuiabá', as a strategic guideline for the historic centre, and to use the management instrument to raise funds for the implementation of sustainable projects for the area.

Development of Guidelines for Sustainable Construction

PAGE supported the State Secretariat of Cities in the development of standards for smart and sustainable construction and renovation of buildings at the subnational level that were

finalized in March 2021. In 2020, PAGE prepared a progress report containing survey results and an analysis of state, national and international experiences on green buildings—focusing on guidelines, parameters, and rules for implementation, as well as barriers and challenges for implementing the green building guidelines – and suggested actions to address them. Building on this work, PAGE is currently developing a course on the Guidelines for Sustainable Construction to train public officials who are part of the State Secretariat of Cities, to further disseminate and build capacity on the guidelines.

The course aims to promote smart buildings and sustainable renovation of public buildings, which reduce the use of energy, water, and resources. It also aims to promote the strategy for the Mato Grosso government to provide subsidies for the development of norms that establish criteria for sustainable constructions.

With increased interest in sustainability in buildings around the world, Mato Grosso is presenting itself as a leader, gathering the interest of all sectors connected to civil construction. Given the high rate of employment in the construction sector, investments in sustainable buildings come with ecological as well as social and economic benefits.

Industrial Policy Strategy for the Forestry-based Industry

PAGE is supporting the update of the State Industrial Policy to include elements that enable green industrial development in Mato Grosso. The update will focus on the forestry-based industry, with the aim to develop an industrial strategy. The updated State Industrial Policy will help to preserve The Amazon forests as well as promote synergies with different actors in public and private sectors, including companies, associations, communities, workers, trade and services.

A first report, 'Review of forest-based sector and value chains in Mato Grosso' related to the Industrial policy strategy was delivered in April 2021, containing a review of the relevant value chains—including firewood, sawn wood, charcoal, cellulose and paper—and a policy assessment of the forest-based industry, outlining legal requirements, existing instruments, stakeholders, challenges and opportunities. It identifies innovative technologies and assesses the potential for adding value in the forest-based sector, based on models related to the green economy in the State of Mato Grosso. This was followed by workshops with the private sector and the Federation of Industries to discuss policies and priorities for the forest-based segment.

Building on this, PAGE will conduct two further evidence-based studies to evaluate the value of adding potential in the forest-based industry with a focus on green economy models and assessing the potential environmental impact and benefits. This will establish the costs and benefits of new industrial standards, as well as define priorities and development strategies, to encourage innovation and business sustainability.

Supporting Implementation of the Sustainable Tourism Guidelines

Building on online training workshops for 45 companies that took place in December 2020, in April 2021 PAGE held four online workshops, one for each tourism pole in the State, for the public sector on the Sustainable Tourism Guidelines that PAGE helped develop in 2019. The online workshops for the sustainable tourism gathered 65 people all over the state and contributed to the institutional capacity development of the State secretariats and municipalities. In addition, the support to the selected companies further develops the individual capacity of business owners while helping to disseminate the guidelines and raise awareness of best practices in the tourism sector.

In 2021, eleven companies were selected and received training and specialized support through the 'Brazilian Support Service for Micro and Small Enterprises Mato Grosso (SEBRAE -MT)' on how to implement the guidelines in their businesses. The methodology for standardizing and certifying sustainable tourism was tested, and the results and testimonials from partners and clients engaged in the project were communicated widely in a video to promote a broader implementation of reforms in Mato Grosso's tourism sector.

In 2019, PAGE contributed a study on sustainable tourism to the elaboration of the guidelines, which are implemented by the Secretariat of Tourism across their activities.

Elaborating the Regulatory Framework for Sustainable Public Procurement

While public procurement practices in Mato Grosso have advanced considerably in transparency, the current model for bidding does not include a reference to sustainability, but it recently became a government priority to embed sustainability throughout government procurement. PAGE, through UNEP, is supporting the Mato Grosso State Secretariat of Planning to adopt sustainable public procurement practices for which two key products were delivered in 2021. The first is a document containing IGE-focused criteria for purchasing materials, products and services. The second is a draft of a Sustainable Public Procurement Policy for Mato Grosso, including the central themes and sustainability criteria of the Sustainable Development agenda. This draft policy was developed following a mapping exercise of existing normative instruments and the purchasing potential of Mato Grosso. Dissemination of the draft policy among government managers was supported through a webinar held on 19 November and brought together 26 participants. The aim of the webinar was to raise awareness and mobilize stakeholders on sustainable public procurement.

Additionally in line with this activity, PAGE is also supporting the development of a new Ecolabel policy that incentivizes private enterprises to adopt sustainable public procurement and improved sustainability practices. A new document was produced proposing Ecolabel requirements and criteria for organizations and small producers. This is supported by a roadmap for implementing the new Ecolabel Document. It is expected that this will drive demand towards 'green' producers and promote a transition towards a green economy.

The activity will review current legislation and aim to make it more accessible to family farmers, small landowners, and indigenous and traditional communities, promoting the improvement of the environmental quality of products and processes. The Green Seal is the

mechanism by which the sustainable procurement program will encourage the market to promote the environmental agenda by mobilizing market forces for the awareness of consumers and producers, encouraging producers to adopt sustainable environmental practices

Greening the supply chain of livestock farming products

With the objective to green the livestock supply chain, PAGE is working with local institutions to conduct assessments and deliver policy recommendations that feed into the State Policy Guidelines implemented by the Mato Grosso Meat Institute. In 2021, PAGE collaborated with EXAGRO - a local consultancy company - to analyse and identify the available production systems and technologies for livestock production in three geographical regions of Mato Grosso. The analysis will provide recommendations for the recovery and reforestation of degraded land. The government counterpart, the Mato Grosso Meat Institute, supported this analysis by carrying out a survey of producers in the state on sustainable livestock production, along with other assessments of the current situation in the livestock industry. Recommendations from the analysis findings will be incorporated into guidance documents and disseminated through training.

Building an Observatory for Information on Green Jobs

PAGE is supporting the development of an Observatory for information on Green Jobs within the framework of the provincial strategy 'Produce, Conserve and Include (PCI)'. The Observatory will serve as an important monitoring tool, make data available on qualified labour, enable analysis of the local economy, and develop economic policies that consider social and environmental aspects. Building upon previous studies and tools developed by PAGE in Mato Grosso on green jobs in 2019 and 2020, the Observatory will assess opportunities for generating employment and income in specific economic sectors.

In 2021, PAGE conducted an assessment of how PAGE and the PCI contribute to green jobs in Mato Grosso, as well as a viability study for the Observatory. PAGE, led by UNIDO, elaborated the terms of reference and started a bidding process to receive proposals for the activity. The Observatory will be developed by the Federation of Industries in Mato Grosso.

Promoting decent and green jobs for a resilient and inclusive recovery

In June 2021, PAGE, led by the ILO and with support from the ILO country office in Brasilia, developed a briefing note "Recommendations for decent and green jobs to promote a green, resilient and inclusive recovery in the Mato Gross State" in the context of the COVID-19 pandemic for use in development planning and sector planning at national, regional, and local levels. The note was shared at a five-day online workshop organized in October and November 2021, under the leadership of the International Advisory Board of the government of the State of Mato Grosso for capacity building and social dialogue on green recovery in the context of COVID-19, bringing together experts from universities and other civil society institutions, in addition to state government agencies. Following the workshop, a proposal was developed for the State Secretariat of Planning for a Plan for local

governance structure for a green and inclusive recovery, containing a list of priorities for the short-, medium- and long-term.

In 2022, PAGE will develop a publication on green jobs and just transition to strengthen the capacity and understanding of ILO constituents and PAGE partners on the definition and methodologies for the assessment of decent work and green jobs, to promote a socially just transition to a green and inclusive economy.

Promoting family farming

Continuing in its work to support family agriculture in Mato Grosso, PAGE is developing a Progress Measurement Framework for the 'State Policy on Sustainable Rural Development of Family Farming'. The Framework uses multidimensional indicators to monitor and assess the development of municipalities, establishments, families, and individuals within the scope of the State Government Integrated Family Farming System (SEIAF). An updated version of the Framework was developed and divided into macro projects, helping to structure resource needs. It follows the lines of action proposed in the Strategic Plan for Family Agriculture.

The Framework aims to expand the sustainable production of family farming; add value and market production; and promote technical assistance, rural extension, and environmental and land regularization, to reach the 81,635 farming families existing in Mato Grosso. These actions aim to promote the socioeconomic development of the area, generate employment and income, improve the quality of life, and reduce rural poverty, which affects around 25 per cent of this population.

Analysing the Socioeconomic Impacts of COVID-19 in family farming

In 2021, PAGE commenced targeted green recovery support in Mato Grosso with a focus on supporting the family farming sector - building on the efforts of PAGE over the past four years. The Secretariat of Family Farming in Mato Grosso, through PAGE, is carrying out unprecedented work to analyze the socioeconomic impacts of the COVID-19 pandemic on family farming, which is responsible for the majority of food production in the state.

A study is being conducted on how the pandemic is affecting production dynamics, market access, access to essential services and income of small farmers. The study aims to provide recommendations on how initiatives of the state government and civil society could minimize the negative post-pandemic impacts through "green" macroeconomic policies and incentives.

The study also seeks to show how public and private resources could be directed towards strategic investments in family farming that recognize and value natural resources while reducing systemic risks and mitigating future outbreaks of zoonotic diseases. The investment pipeline has a horizon up to 2030, which addresses the investment needs for different public sectors targeted by the State Plan for Family Farming (PEAF MT). The investments proposed

in the pipeline were organized to finance the implementation of the five action lines forecasted in the PEAFF MT:

1. Sustainable production, added value and commercialization;
2. Regularization and improvement of environmental and land management;
3. Technical Assistance and Research;
4. Governance and social control and
5. PEAFF MT Management.

Building institutional and individual capacity (Outcome 3):

Integrating IGE elements into Higher Education Curricula

A key finding of the 2020 Green Economy Learning Assessment (GELA) was that an overwhelming majority of institutions have a strong interest in incorporating IGE concepts and considerations into their existing offer. However, at the same time, these institutions lack the resources and experience to turn that ambition into practice.

Acting on the recommendation of the GELA to reflect IGE concepts in higher education curricula, led by UNITAR, PAGE formed a working group with four public universities in MT (Federal University of MT - UFMT, University of MT - UNEMAT, Federal Institute of MT - IFMT and Federal University of Rondonópolis - UFR) with the goal to devise an Action Plan to guide the implementation of that recommendation. The Action Plan outlines the governance, responsibilities, timeline, tentative learning objectives and methodological parameters of a so-called Extension Course (similar to a Summer School), a communication plan and a sustainability strategy post-PAGE. The working group completed the Action Plan and obtained unanimous validation for it by the Steering Committee in November. The development of the Extension Course is expected to be finalized in the first quarter of 2022 after which the four universities plan to offer the course in April 2022, targeting students from various disciplines, such as economics, business administration, sociology, political science, engineering and others more.

In addition, PAGE plans to build on this collaboration with universities to develop a green economy training program targeting two main groups: i) policy makers working on the State's recovery plan, enabling them to improve relevant policy frameworks in the sector and ensure that green economy principles are reflected in emerging policies and strategies; and ii) affected small farmers, businesses and vulnerable groups, helping them to rebuild economic opportunities in a sustainable way.

1.10 KYRGYZ REPUBLIC

Country context and PAGE portfolio

The Kyrgyz Republic is a landlocked country in Central Asia, with a rich natural heritage. A large mountainous region, its economy is mainly driven by agriculture (accounting for 40 per cent of employment), extractive industries, hydropower energy, service and construction sectors. It has a medium human development status, shrinking unemployment rates to 8 per cent in recent years. However, for an economy heavily reliant on agriculture and natural resources, land degradation and desertification pose serious threats to the economy, its people and the environment.

The Government of the Kyrgyz Republic is committed to advancing inclusive sustainable growth, as set out in its long-term [National Development Strategy 2040](#), that recognizes the importance of integrated policies balancing social, economic and environmental dimensions of development. To realize this Strategy, the government has prepared an accompanying five-year development programme – Unity, Trust and Creation. Spanning the period 2018-2022, it provides a medium-term framework for all national, sub-national and sectoral strategies, including those related to the environment and climate change. To complement the Strategy, the Government developed a Green Economy Programme 2019-2023 with a special focus on green energy, agriculture, industry, low carbon economy and environment, friendly transport, sustainable tourism, waste management and natural ecosystems sectors.

It is within this broader national context that PAGE, together with other bilateral and multilateral partners, including GIZ, the EU, BIOFIN, and the OECD, are collaborating to support the transition to IGE in the Kyrgyz Republic. Since 2016, PAGE has prioritized support to advance the integration of IGE goals and targets into the government's national planning processes. PAGE is also facilitating evidence-based sectoral reforms in green industry, sustainable agriculture and jobs and strengthening institutional capacities around IGE diagnostics, coordination, finance and public procurement.

This work supports progress towards achieving SDGs 2 (Sustainable Agriculture) 4 (Quality Education), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 13 (Climate Action) and 17 (Partnerships for the Goals), as well as implementation of the Paris Agreement, which the country ratified in November 2019.

In 2020, the COVID-19 pandemic and a political crisis significantly affected the economy of the Kyrgyz Republic, prompting PAGE to develop a proposal to create an enabling environment policy for enhancing the sustainability and growth of Micro, Small and Medium Enterprises (MSMEs) as a key avenue for a green recovery. 2021 began with the election of

a new president, followed by a shift from a parliamentary to a presidential form of government and a major restructuring of ministries and agencies, creating challenges as well as new avenues for green economy efforts to continue moving forward.

Progress in 2021

Integration of IGE into national plans and policies (Outcome 1):

Green Economy Forum and Green Expo 2021

On 10 December 2021, the Ministry of Economy and Commerce hosted a “Green Expo 2021” exhibition of green technologies and solutions and a “Green Economy Forum: From Challenges to Opportunities for Sustainable Business Development.” The two events were held within the framework of the Green Economy Days and provided a platform for private sector, government officials and international organizations to discuss how to turn challenges into opportunities for sustainable business growth. Participants learned about what ‘green’ technologies and solutions are now being supplied to the Kyrgyz market, as well as the opportunities offered by the state and development programs for consulting and financial support for green business projects. The events were organized with the assistance of PAGE, the JIA business Association and the Association for the Development of the Agro-Industrial Complex.

38 companies and organizations from private and financial sectors demonstrated their services and products at the Green Expo. As an outcome document, a Forum Resolution was adopted, highlighting the need for strengthening the information campaign on the principles of green economy, attracting new and green technologies, revisiting the existing norms and regulations in the construction sector and developing fiscal incentives for green projects. The Green Economy Forum is held annually, currently in its sixth year, and has become a platform to consolidate the efforts of government, entrepreneurs, international and local development programmes, and business associations on Green Economy.

Institutionalizing an Inclusive Green Economy Model for Kyrgyz Republic

In 2021, PAGE, together with GIZ, continued to support the institutionalization of IGE modelling by providing technical support and developing further modelling capacity in government. This work aims to facilitate additional application of the model and build capacity for the translation of model results into policy recommendations. An official technical group on the model of green economy was established and approved by order of the Ministry of Economy and Commerce of the Kyrgyz Republic, as of September 9, 2021. The technical group consists of 30 (15 women) representatives of departments and educational institutions, including members of the [Alliance of Universities for Green Economy and Sustainable Development \(AVZUR\)](#). To date, 22 half-day trainings out of a planned 25 have been held for the technical group. The working group is playing a key role in promoting and institutionalizing green economy modelling into state strategic planning and integrating green economy aspects into the governance system in the Kyrgyz Republic, through strong inter-agency cooperation.

Shaping sectoral and thematic policy reforms jointly with other initiatives (Outcome 2):

Building green cities

PAGE provided expert support in strengthening the policy work on SDG 11 to make cities inclusive, resilient, safe and sustainable, in close partnership with the Ministry of Economy. The specific results are multi-fold; recommendations were developed to integrate green city principles in the city districts' construction and to introduce the spatial development strategy of the Kyrgyz Republic as a common system of territorial-spatial development. Additional achievements include the introduction of courses on green cities in target universities and the development of a proposal concept on green cities.

PAGE also supported the Forum of Cities, organized by the Ministry of Economy and National Institute of Strategic Studies and Public Foundation 'Urbanistika' on February 25, 2021, to promote environmentally sustainable urban development through planning, regulating, organizing and governing the territorial and spatial development of cities and human settlements. Key themes focused on climate-resilient cities, digitalization, transport, air pollution, green zones in cities, environment and living conditions. 55 participants (25 offline, 45 per cent women) represented nine city mayors' offices, architecture and construction faculties of universities, civil society organizations, the State Design Institute of Architecture and Urban Planning and experts in urbanization.

Sustainable finance road map

The Sustainable Finance Road Map (SFRM) was drafted with the technical support of PAGE, led by UNDP, in close partnership with the Ministry of Economy and the Union of Banks of the Kyrgyz Republic (UOB). The SFRM is the product of a partnership between the Government (as represented by the Ministry of Economy and the National Bank of the Kyrgyz Republic) and the financial sector (led by the Kyrgyz Union of Banks). The Road Map is an existing document that is updated to reflect the current situation and reviews the current state of sustainable finance in Kyrgyzstan, providing an overview of existing practices, policies and regulations, investment opportunities, incentive mechanisms and challenges to mainstreaming sustainable finance and the growth of a sustainable financial system. The SFRM also defines the Action Plan for the development of a sustainable financial system in Kyrgyzstan, and tangible steps forward in its attainment of a low-carbon, resource-efficient, sustainable economy.

The Sustainable Banking and Finance Network (SBFN), of which UOB is a member since 2018, provided their inputs to the draft SFRM. The SFRM will be updated to consider insurance sector aspects and then adopted by the working group, established by the Order of the National Bank of the Kyrgyz Republic. Additionally, training on SFRM is planned for the representatives of financial institutions and members of the working group under the Ministry of Economy on taking the SFRM action plan into practice.

Supporting the creation of the Kyrgyz Green Finance Corporation

Throughout 2021, PAGE continued its support for the creation of a Green Finance Corporation to mobilize public and private funding for green recovery. A working group was created, including staff of the Ministry of Economy, the Union of Banks of the Kyrgyz Republic, independent experts, and representatives of PAGE and GGGI, with bi-weekly consultations.

As an initial activity for developing the corporation, legal review for the Kyrgyz Republic National Financing Vehicle (NFV) was finalized, led by the GGGI, and a draft report has been put together. NFVs are defined broadly as funds that are public or public-private entities and are set up within or, in some cases, outside government, and can help overcome the known disadvantages of climate finance by creating stronger alignment with national priorities, reduced barriers to access, availability for rapid deployment and expanded capital base for scale-up. The legal review made a thorough analysis of the regulatory framework of the Kyrgyz Republic in the field of Green Economy and investment in the commercial and corporate sector to identify the most appropriate legal and business model for incorporating the NFV. This resulted in recommendations on the specific legal form for NFV that satisfies and balances the interests of all stakeholders with the purpose to finance green projects in the country and thereby develop Kyrgyz green economy.

An action plan for the next steps and the distribution of responsibilities was developed and legal framework analysis on the creation of a Green Finance Corporation is underway. Additionally, the Ministry of Economy received the terms for approval, which outlined three different lines of action: 1) Development of a business plan for the creation of Green Finance Corporation; 2) Market research; and 3) Development of a country application to join the Green Climate Fund.

In this context, in February 2021 Mongolia and the Kyrgyz Republic launched a virtual South-South exchange on sustainable finance. Mongolia had already achieved noteworthy results, particularly in establishing institutional arrangements for attracting and administering green finance, and shared its experience in establishing the Mongolian Green Finance Corporation (MGFC) and attracting green finance to the country. These achievements offered institutional best practices that the Kyrgyz Republic can use to promote sustainable finance under its own development agenda, specifically the creation of the Kyrgyz Republic Green Finance Corporation. Together with the Ministry of Economy of the Kyrgyz Republic, a concept of a study tour to Mongolia was developed, planned for early 2022 after the parliamentary elections in the Kyrgyz Republic.

Developing sustainable waste management mechanisms

Since 2020, PAGE, led by UNEP, has been supporting the implementation of selected recommendations of the waste chapter of the Green Economy Development Programme, adopted in November 2019. The issue of solid waste management is of high priority in Bishkek, the capital city, as the population increases and sustainable solutions beyond landfills are being sought.

In September 2021, PAGE, through UNEP, supported the organization of a workshop for the implementation of new mechanisms for waste management, which were developed between January and June 2021. The thematic workshop delivered two key products to inform the waste management reform to include green economy priorities. Firstly, it delivered an amendment proposing reforms to regulations on the recycling of goods after the loss of their consumer properties. Secondly, the workshop delivered a list of goods that require extended responsibility from producers over waste. The event was attended by 21 representatives (10 female and 11 male) from governmental bodies (State Inspectorate for Environmental and Technical Safety and State Committee on Ecology and Climate) and NGOs of Kyrgyzstan, Ecopartnership, NGOs from Belarus, as well as international organizations.

PAGE also continued to strengthen the capacity and raising awareness among different target groups about the effectiveness of economic mechanisms in the field of waste management and the use of recycled materials, under UNDP lead. The last of the four winning local organizations of the eco-competition on solid waste management held in 2020 implemented their activities in 2021 with PAGE funding. The organization, EcoVolunteer, implemented its activities, including two study tours with the participation of 44 people ensuring wide coverage in media.

Reforming fiscal policy for sustainable agriculture

PAGE continued the collaboration with UNDP Biodiversity Finance Initiative (BIOFIN) to carry out the study of fiscal policy reforms for sustainable agriculture, in partnership with the Ministry of Finance and Ministry of Agriculture, Water Resources and Regional Development. PAGE provided financial support for the implementation of the policy recommendation "Reform harmful agricultural subsidies to remove barriers to green/organic agriculture". The following reports were prepared as a part of this recommendation:

1. Best Practices in reforming the use of environmentally harmful subsidies and lessons learned in agriculture;
2. Review of the national and international context for regional and international commitments to agricultural subsidy reform, and the current subsidy policy in the agricultural sector of the Kyrgyz Republic; and
3. Political and economic analysis of the subsidy on the import of mineral fertilizers and crop protection chemicals in the form of VAT exception and the consequences of this reform (currently in final stage).

The study results will support the ongoing global effort to make an inventory of harmful subsidies and develop reform plans. PAGE-BIOFIN plans to start a peer learning webinar to initiate stakeholder consultations on the findings and recommendations of the study.

The project is expected to end in May 2022. Key milestones and expected results in the coming months include the finalisation and validation of the reform options and proposed action plan related to the VAT exemption for agriculture chemicals by the new Government.

Building on analysis by BIOFIN, a sectoral assessment of impacts, trade-offs and benefits of specific subsidies and taxes in different sectors (i.e., economic, social, health, environment) and its effects on other policy objectives, such as climate change, was initiated by PAGE, led by UNEP. The assessment aims to also provide potential reform options including the scale and potential use of subsidies revenues.

Developing sustainable industrial policy

In the Kyrgyz Republic, PAGE is working with the Ministry of Energy and Industry to develop a National Industrial Resource Efficiency Policy to promote climate-friendly Industrial development. The activity was kicked off in August 2021 with meetings with the Ministry of Industry. In December 2021, a stakeholder consultation meeting was organized with representatives from the Ministry of Economy, the Ministry of Industry, representatives from cement and metal industries, and other stakeholders to populate the policy development work, collect input and disseminate survey questionnaires to stakeholders. As a follow-up, a team of international and national experts visited five industrial plants to conduct an in-depth assessment of the status of industries toward resource efficiency and cleaner production practices and opportunities for resource savings. A national industrial resource efficiency policy will be developed for government consideration based on the collected data and analysis.

Integrating jobs in the economic and environmental analysis for policy making

In 2021, PAGE, led by the ILO, continued to support the development of a prototype for the Green Jobs Assessment Model (GJAM) for the Kyrgyz Republic to analyse the impact of green policies on the labour market and household income distribution. A key component of this was the extensive technical assistance to the NSC in producing a national account matrix (NAM), which will be expanded with labour force and household budget data to provide a complete picture of the economy, the income distribution and job structure. A full social accounting matrix (SAM) was completed, which is the basis for an extensive database for the Green Jobs Assessment Model (GJAM). The ILO and the NSC also made progress in the design of a household survey that will measure green sector activities in the informal sector, providing information on SMEs, environmental activities of households and green jobs.

Building institutional and individual capacity (Outcome 3):

AVZUR University courses on Inclusive Green Economy

In 2021, PAGE continued collaboration with the American University of Central Asia (AUCA) under the framework of the [Alliance of Universities for Green Economy and Sustainable Development \(AVZUR\)](#). AVZUR counts 13 of the country's leading universities as members. In 2021, AVZUR member universities selected five topics through a collaborative process in order to develop new academic courses related to Green Economy. Each course was

developed by a different AVZUR member; however, the courses are now co-owned by the Alliance and accessible to all members via the dedicated learning portal: <http://e-learn.avzur.kg/>. In addition to the five new courses, the PAGE academic course on IGE modelling was tailored to the national context.

All academic courses are gradually being integrated into the curriculum of the universities that supported their development in the academic year 2021-2022, mostly as electives at master's level. Depending on the popularity of the courses with students, more universities will consider including them in their academic programmes. The list of courses and institutions supporting the development is included below:

- [Economics of climate change in Central Asia](#) (OSCE Academy in Bishkek)
- [Green and sustainable finance](#) (International Alatau University (IAAU))
- [Agriculture and green growth](#) (Kyrgyz National Agrarian University (KNAU))
- [Green economy and international trade](#) (American University of Central Asia (AUCA))
- [Introduction to green economy](#) (Kyrgyz Economic University (KEU))
- [Green Economy Modelling](#) (Kyrgyz Russian Slavic University (KRSU))

Implementation of Youth Engagement Competition Winning Projects

Within the framework of cooperation with AVZUR, seven winning projects of the #generation GREENEGY competition, held at the end of 2020, were implemented in 2021 with funding support from PAGE. The competition aimed to raise awareness and promote green economy among young people, as well as the general public, in the Kyrgyz Republic. All projects were created and implemented by teams of students or school children. The [winning projects](#) range from the creation of a database of bio-farmers in the Kyrgyz Republic, through upcycling of clothes, and a device that generates electricity while biking.

Launch of Comprehensive Plan of Measures on Climate Change Education

On 23 April, the Kyrgyz Republic held a high-level event to officially launch [Comprehensive Plan of Measures on Climate Change Education](#), which lays out key components of the country's climate change learning strategy. A major milestone for the country, the Plan was presented to a range of stakeholders from government (including Ministry of Education and Science, Ministry of Economy and Finance, State Agency on Environment Protection and Forestry), academia (including Kyrgyz National University, Kyrgyz National Agrarian University, American University in Central Asia, Agency for Primary Vocational Education, Kyrgyz Academy of Education), the private sector, civil society, and international organizations. The Plan is structured around three priority areas for integrating climate change education and lays out short-, mid-, and long-term measures under each of those priority areas:

1. Capacity building for decision-makers from different sectors, as well as at the local level
2. Integration of climate aspects at all levels of formal and non-formal education
3. Public access to information and enhanced awareness and the involvement of youth and the general public.

Several learning actions stemming from the Plan were supported directly under the UN CC:Learn project, including: 1) Training program on climate change for civil servants, implemented in partnership with the Academy of Public Administration under the President (APAP) of the Kyrgyz Republic; 2) Integration of climate change aspects into standards and teaching materials at the secondary level of education, led by the Kyrgyz Academy of Education, 3) Development of an [online knowledge platform](#) for provision of public information, and 4) Youth Climate Dialogue, organized on 24 August 2021.

The official adoption of the Plan had been planned for August 2021 but was postponed due to political changes. The development of the Plan was implemented in the framework of the one UN Climate Change Learning Partnership (UN CC:Learn), with support from PAGE. A [short video](#) was also developed presenting the comprehensive plan of measures, as well as implemented learning actions.

Peer Learning on education reform between Kyrgyz Republic and Kazakhstan

Considering the similarity between the education systems and work carried out by PAGE in Kazakhstan and the Kyrgyz Republic in the areas of environmental education and public awareness, an online session was organized in April 2021 to exchange experiences and best practices. From the Kyrgyz side, the session was attended by officials from the Climate Finance Centre, as well as by national consultants involved in the development of the 'Comprehensive Plan of Measured Climate Change Learning'. From the Kazak side, peers included officials from Ministry of Ecology and Ministry of Education. The peer exchange took place at a critical moment during the development of the National Project "Green Kazakhstan" (supported by PAGE), which includes a section on eco-education. The Kyrgyz example and experience helped shape Kazakhstan's policy in this field.

Youth Climate Dialogue in Bishkek

A [Kyrgyz youth dialogue](#) was organized on 24 April 2021, bringing together more than 200 (100 offline and 100 online) young people representing various academic institutions and organizations. The interactive program improved participants' understanding of climate change from a youth perspective and provided insights into further study opportunities and ways to get involved in climate processes on national and global level. Several online communities were set up by youth as a follow up (such as an Instagram account "jashtarklimat3un" (youth4climate) and a WhatsApp group), where youth exchange useful information (from science articles to applied projects). Additional youth dialogues have since been organized on regional level in the country, with plans to continue their regular organization.

The event took place in the framework of the UN CC:Learn project on Climate Change Learning, implemented with support from PAGE. Students involved with AVZUR participated in the event. The dialogues demonstrated the vibrant ecological culture among youth in the country, which can be relied upon to sustain PAGE results and achievement going forward.

Training on environmental accounting and labour statistics

PAGE, led by the ILO, provided technical assistance to the National Statistical Committee (NSC) to improve the national statistical system by expanding their capacity to design and carry out surveys and further develop and integrate economic and environmental statistics, including on green and non-green activities and green jobs in the informal economy. This was achieved through working sessions of the NSC and an international expert on the System of Economic and Environmental Accounts (SEEA), an international expert on National Accounts (SNA) and the ILO.

Kyrgyz Republic in the 2021 Online Annual Report

1.11 URUGUAY

Country context and PAGE portfolio

Uruguay ranks high in the Latin American region in terms of human development, and opportunity and national progress is supported by institutional stability and inclusive social policies. In recent years, the government has integrated sustainable, inclusive and green development into its core pillars of economic development, setting ambitious goals for equality, the environment and a diversified economy. At the same time, its open economy remains vulnerable to oscillations in the global market. Exports still rely on primary sectors such as agriculture and livestock that are intense in the use of natural resources.

To address these issues, the government is committed to sustainability and green economy in pursuit of higher income and better wealth distribution, job creation, poverty reduction, equality and shaping the environment into one of its core pillars of economic development. Uruguay completed several national planning processes to set out its ambition and strengthen its overall policy frameworks.

Since joining in 2017, under the leadership of the Ministry of Industry, Mining and Energy, PAGE informed and promoted sustainable national planning processes and built related capacities. PAGE initially focused on strengthening the capacity of policymakers to assess the impact of environmental policies using macroeconomic models, enhancing public-private collaboration, and broader engagement and awareness-raising on IGE.

More recently, Uruguay has embraced the concept of circular economy, given its potential to generate new businesses and jobs in an environmentally conscious manner. This has provided an important entry point for PAGE on a sectoral and thematic level. PAGE helped mainstream circular economy into the overarching programme Transforma Uruguay (also

known as the National System of Productive Transformation and Competitiveness), created in 2016 to promote the productive transformation of the country's economy and increase its competitiveness. To operationalize this programme, a National Circular Economy Action Plan was published in September 2019.

Under this overall framework, PAGE is providing technical assistance (including the greening of micro, small, and medium-sized enterprises (MSMEs), waste and by-product valorisation, and green production methods in specific industries), and sectoral and thematic analysis in several areas (including land use tensions in residential metropolitan areas with industrial activities).

In 2020 a new government took office, introducing a number of institutional and political changes in Uruguay. A Ministry of Environment was created, and new authorities designated. With the COVID-19 pandemic also starting in 2020, the new government has been actively promoting circular and green economy as a pathway for economic recovery. Against the background, Uruguay was selected to receive additional PAGE support from 2021 focused on circular economy, the generation of green employment, and support to SMEs particularly in the food sector. The government sees these areas as potential drivers for reviving Uruguay's economy, from the perspective of both long-term planning and short and medium-term sectoral policy interventions. Under this new setting, Uruguay made considerable progress in the development of a law on integrated waste management, with PAGE supporting the design of the national waste management plan, led by the Ministry of Environment.

PAGE activities in Uruguay are contributing towards the achievement of SDGs 8 (Decent Work and Economic Growth), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 13 (Climate Action) and 17 (Partnerships for the Goals), as well as Uruguay's Nationally Determined Contributions (NDCs) to the Paris Agreement.

PAGE was selected as an example of action on SDG 17 as part of Uruguay's Voluntary National Review (VNR) presented at the High-Level Political Forum (HLPF) in July 2019.

Progress in 2021

Incorporating environmental dimensions into national development strategies (Outcome 1):

Proposing a set of indicators for measuring progress towards a Green Economy

Since 2017, under the leadership of the Office of Planning and Budget, PAGE has advocated for the inclusion of the green economy as a dimension in national and subnational planning processes. In 2021, PAGE commissioned a study proposing approaches for measuring green economy progress, both at the national and subnational levels. The methodology puts forward a set of dimensions and indicator categories that, taking into account international guidance, could be used as a basis for the development of green economy

related indicators. These indicators aim to contribute to a deeper understanding of the environmental situation at the sub-national level, and to an understanding of the processes and practices that favour growth and its impact on the environment. The data can highlight current and potential problems in the environmental status of the provinces (called territories) providing input to the monitoring of SDGs, both for policy makers and for society as a whole. The indicators will be disseminated through the 'Territorial Data Observatory' within the Office of Planning (which publishes subnational data) and the 2022 Budget. The Data Observatory has public access and is used by researchers, public servants, policy makers, local governments.

Integrating sustainable development into marine spatial planning

PAGE is helping to promote Marine Spatial Planning, specifically the development of public policies in productive sectors and services that help safeguard and sustainably use the natural marine-coastal capital of the country. The Uruguayan Oceanography Commission (CUO), chaired by the Ministries of Education and Culture, with the support of PAGE, through the Office of Planning and Budget (OPP) and the Ministry of Industry, Energy and Mining (MIEM), aims to develop a roadmap for short, medium and long-term actions for the development of Uruguay's marine area, aligned with the SDGs and Intergovernmental Oceanographic Commission (IOC) guidelines.

To fulfil this objective, a consultant hired by PAGE conducted a series of interviews and surveys with actors from key institutions in the sector, such as academia, business and government, alongside an analysis on topics related to marine sciences and a review of related scientific literature from the last ten years. The analysis and the result of the related interviews with stakeholders will be an input into the marine spatial planning process in Uruguay, with the ultimate aim to develop policies and strategies for the sustainable coastal marine development of the country, relevant for the CUO as well as the Executive Branch agencies.

Coordinating the network of subnational governments in inclusive, green economy

The Network of Directors of Environment and Development of Regional Governments (RED) is a collaboration among peers for the implementation of departmental policies with implications for subnational governments. The platform promotes the generation of synergies, sharing information on best practices and building collaborative alliances that support the individual actions of each departmental government.

In early 2021, PAGE Uruguay took over the coordination role for the Network from the UNEP-GIZ [Green Economy Transformation \(GET\)](#) project in Uruguay, which was completed. Since 2015, the Network has been supporting municipalities in the field of green and inclusive economy by promoting and deepening learning and searching for joint solutions, with the objective to include the green economy in the planning processes of subnational governments. The work aims to enhance both planning and capacity building. Through the network of local governments, it was possible to reach the provinces.

Activities that are being implemented include training for teams of municipalities in inclusive green economy, support for the design of projects and initiatives, as well as promotion of meetings and spaces for dialogue on related topics. 9 training workshops were already completed in 2021, reaching 115 participants (86 female/29 male) and will be replicated in 2022. The German-Uruguayan chamber of commerce (AHK) will be co-implementing these activities with PAGE Uruguay, through the support from Ministry of Environment of Germany.

A first meeting where the AHK introduced their objectives and scope was held in November 2021, with 5 additional workshops planned in 2022.

Circular Economy Laboratory (LabEC)

PAGE supported the establishment and implementation of the Circular Economy Laboratory (LabEC) - an inter-institutional initiative which aims to promote the implementation of SDGs at the national level by enhancing the ability of businesses in Uruguay to contribute to the circular economy.

The LabEC was launched on 24 February 2021. Besides PAGE Uruguay, it involves MIEM, UNDP, the Chamber of Industries of Uruguay (CIU), the Technological Laboratory of Uruguay (LATU), the Technological Center of Plastics (CTplas) and ImpulsaLab. Implementation of the LabEC was supported by 'SDG Accelerator' Methodology created by UNDP and adapted to the Uruguayan context to accelerate the processes of generating and realizing new business ideas to achieve the SDGs.

The accelerator proposes a methodology that combines applied training with support for business projects. It incorporates a comprehensive vision of sustainable development and leverages the potential of the circular economy as a tool for development. Specifically, it promotes virtual training and face-to-face technical assistance.

The LabEC targets formally established businesses with an interest or a previous history of having implemented action within the framework of circular economy. It comprises a process of ideation and development of a roadmap to overcome problems at the company level, as well as the identification of opportunities that have commercial potential.

During the first phase of the LabEC, three free and open online training workshops were carried out on 10, 17 and 24 March 2021. 50 participants (30 female/20 male) attended the workshops, which first introduced general circular economy concepts and then focused in on more advanced topics, such as stakeholder mapping for circular processes, life cycle analysis and eco-design. From May, this was followed by technical support for selected companies. At the completion of the LabEC, participants from companies had identified problems, selected ideas, identified opportunities, elaborated of circular economy projects, designed a plan and started to implement their projects.

During 2022 a new edition of the LabEC will be implemented focusing on the food sector as part of PAGE activities on green economy recovery. The activities will be divided into two

modules: applied training and development of initiatives for participating micro, small and medium-sized enterprises to green their processes and management.

Strengthening efforts towards a circular economy (Outcome 2):

Supporting the implementation of the National Strategy for Circular Economy

PAGE is working with the the MIEM to design and validate the National Strategy for Circular Economy, which will be promoted as a step towards the institutionalisation of circular economy as a national policy. The strategy promotes a new economic development model that includes the continuous valorization of resources; the closing of material, water and energy cycles; the creation of new business models; the promotion of industrial symbiosis; and the consolidation of sustainable cities, to optimize efficiency in the production and consumption of materials and reduce the water and carbon footprint.

Based on the priorities and goals specified by the MIEM, the Strategy will emphasize certain areas to be agreed upon and articulated with the different Ministries involved, including the Ministry of the Environment; the Ministry of Livestock, Agriculture and Fisheries; the Ministry of Tourism, among others. These areas include industrial materials and products; container and packaging materials; optimization and use of biomass; water cycles; sources and use of energy; and management of materials in urban centers, among others. For each area, the strategy will specify short and long-term goals, call upon actors to innovate and transition their traditional models into circular ones, and propose promotion mechanisms to be developed as enablers of the circular economy. Inter-institutional agreements on the strategy were made throughout 2021, with the strategy process launched in December 2021 and the design expected in 2022.

Monitoring and evaluation of Uruguay's Circular Economy Action Plan

An assessment of the progress made in the Uruguay's Circular Economy Action Plan (PAEC) was conducted, and policy recommendations were made to further promote circular economy. The first progress report was submitted in April 2021 with preliminary evaluation and monitoring of PAEC. In the second half of the year, after stakeholders' review and validation, the final and revised evaluation and monitoring report of PAEC was completed, which included the conclusions obtained throughout 16 semi-structured interviews with Uruguayan technicians and experts in circular economy (CE). Special focus was given to Uruguay's potential for transition to a circular economy and the contribution of the PAEC to this process.

Uruguay Circular Economy Award 2021

In 2021, PAGE supported the third edition of the Uruguay Circular, with Award recipients announced in a ceremony held on 27 October. The initiative is a collaboration between PAGE Uruguay; the Ministry of Industry, Energy and Mining (MIEM); the National Development Agency (ANDE) and the UNDO. The Award aims to recognise companies, entrepreneurs, cooperatives, communities, educational institutions and other organizations

that implemented actions promoting the country's transformation towards a circular economy and helped to make this work known at an international level.

Winners were recognised in six different categories (large companies, MSMEs, entrepreneurs, cooperatives and other associations, communities, and educational institutions) as contributing to the country's transition to a circular economy through various initiatives – for example, by creating new products from recycled concrete, developing clean waste management plans for companies and institutions, and reducing pollution produced during leather finishing processes. The awards event was attended by the Vice-President of the Republic, the Undersecretary of MIEM, the President of ANDE, and the Representative of UNIDO for Uruguay, Argentina, Chile and Paraguay.

The Award was launched as part of the 2021 edition of the Uruguay Circular Program that seeks to promote the transition to a circular economy in the country. The initiative is organized by PAGE, MIEM, ANDE, the Ministry of Environment and UNIDO, with the support of the Swiss Embassy in Uruguay, UNDP, the GEF (Global Environment Facility) and the GCF (Green Climate Fund). The 2021 Program also included, for a second year, the Circular Opportunities Program, of which PAGE Uruguay is a partner, in conjunction with the National Development Agency. It provides support to entrepreneurs for circular economy projects and initiatives, with PAGE Uruguay providing technical expertise for the follow-up and evaluation of proposals.

Innovation and Research Fund for the Circular Economy

The National Agency for Research and Innovation (ANII), BID Lab and PAGE, together with the MIEM and UNIDO, are jointly setting up and managing a 'Research and Innovation Fund for the Circular Economy'. The objective is to foster research and innovation capacities, focusing on the implementation of the principles of the circular economy, thus enabling the economic reactivation and resilience of enterprises. PAGE helped the National Agency to develop the idea and will be guiding the selection of the projects as well as monitoring the process.

A call for proposals to access funds was launched in November 2021 and will be closing in February 2022. The projects seeking funds must be framed within one of the following themes: a) Development of innovations that enable greater circularity in production processes and/or business models in all production sectors and b) Support for the development of innovative solutions to strengthen resilience in the food value chain, with the aim of improving the efficiency of processes and reducing the environmental impact. Private sector organizations and companies of all sizes, based in the country, may be beneficiaries of this fund. The enterprises include cooperatives producing goods and services whose output is destined for the market. Support consists of grants to the project budget to deliver planned activities and milestones.

Promoting greening of micro, small and medium-enterprises (Outcome 2)

Cleaner production course

PAGE Uruguay, together with the MIEM, the Ministry of Labor and Social Security (MTSS) and the ILO, implemented a training course for companies and for facilitators, developed by the Cleaner Production Center (CPmL) of the University of Montevideo (UM) from June to September 2021. A total of 28 participants benefitted from the course (20 female/8 male).

The Course on Cleaner Production for Companies is self-managed, with a theoretical-practical approach at no cost. It seeks to train people to identify improvements to their business models and potential cost savings and to implement efficient solutions, which translate into a triple impact economic, environmental and social gain.

In addition, a course on Cleaner Production for Facilitators was held during the first semester of 2021, also with a theoretical and practical approach. It equipped technical experts to assist micro and small companies in the implementation of cleaner production practices. It is aimed at UTU graduates and teachers linked to careers such as Chemical Technician, Mechanical Technologist and Environmental Control, or related subjects.

Sustainable Entrepreneurship for Youth

As part of the Sustainable Entrepreneurship Training programme developed with PAGE, GIZ, the Ministry of Labor and the youth foundation DESEM (an NGO empowering youth and sustainable innovation), 17 youth-led projects were selected and implemented with funding support throughout 2021, as part of an effort to empower and create tangible green employment opportunities for young people.

This is a continuation of the three training workshops held in October 2020, focusing on sustainable management, natural resource optimization and climate change positive practices for 60 young participants between 18 and 29 years old. The courses ended with a project design and a pitch session resulting in the selection of the 17 projects, which include actions related to sustainable tourism, community organic gardens and circular economy. Among the winners were two young entrepreneurs that were supported to bring their idea to fruition and create Tienda Verde - a virtual store of natural, ecological and vegan products - in response to the lack of options where they live for more responsible and conscious consumption.

Measuring green and blue jobs

During 2021, PAGE, together with the Ministry of Labor, worked on the measurement of green and blue employment in Uruguay. The process started with the identification of a set of indicators, based on international methodologies. To validate the selected indicators, three workshops were held with ministries, international organizations and the national statistics institute. The workshops helped to verify and confirm the selection of indicators and add additional ones not included in the initial selection. In 2022, the set of indicators will be included in public access the Ministry of Labour's publicly accessible statistics data viewer .

Training for rural women to promote green and decent work

During 2021, PAGE supported capacity building in green jobs and decent work for rural women, jointly with the Ministry of Labor. The objective was to generate knowledge and skills and promote good practices for the transition to a green economy. 50 women from 13 different regions participated in on-line training held in October. The training helped to build skills to identify and promote good practices in productive enterprises, to design, together with rural women's organizations, the issuance of seed capital for the implementation of green projects, and to identify synergies between green enterprises by fostering articulation, associativity and networking among women.

Inventory of social and productive initiatives of classifiers

PAGE and the Ministry of Labor are working together to create an inventory of waste sorters. The creation of the inventory was foreseen in the Integrated Waste Management Law approved in 2019 in Uruguay. PAGE is supporting the creation of the inventory as well as its dissemination on the Ministry's web pages. The ultimate goal is to have an updated inventory of social and productive initiatives that work in waste sorting in Uruguay. The inventory construction process began in October 2021, with work to continue during the first half of 2022.

Capacity building in Hydroponia

As part of its green recovery support, PAGE is implementing an activity to promote the creation of green jobs and social inclusion of people with disabilities in the food sector. This is done through training in hydroponic production, including aspects of infrastructure, production and marketing, the promotion of new opportunities and ways to address challenges, as well as strategies for its roll-out in the country. For six weeks during August and September 2021, training of trainers for disability centres took place every Thursday at the Faculty of Agricultural Sciences of the Universidad de la Empresa (UDE). A total of 26 people received training (13 female/13 male).

Following on from this, in the first half of 2022, greenhouses will be built in the disability centers for hydroponic production, and necessary materials for their maintenance will be provided. In addition, for eight weeks agronomist engineers from UDE (Business University) will monitor the operation of the greenhouses. At the same time, networks of public and private organizations will be created to support these pilots.

Implementing Green and Inclusive Production and Services (Outcome 2):

Supporting the regulation of the Integrated Waste Management Law

Throughout 2021, PAGE Uruguay supported the design of the National Waste Management Plan, framed as part of the Integral Waste Management Law. The Plan was officially launched to the general public on 7 October. A series of participatory technical workshops "Towards a Uruguay + Circular" conducted by PAGE in conjunction with the Ministry Environment in

early 2021 with municipalities, professionals, civil society organizations, associations and business chambers helped shape the Plan.

The approach to waste management, presented in the plan, is comprehensive and incorporates environmental, economic and social aspects, with a ten-year scope. The fundamental goals are the protection of the environment and the promotion of a sustainable development model, through the prevention and reduction of the negative impacts of waste generation, and better management at all stages of waste management.

It is the first time that Uruguay will have a national plan with these characteristics, with a commitment to separate collection, correct classification, and increase recycling and recovery. The plan contemplates various strategies differentiated according to the types of waste (household, industrial, hospital, technological, among others) and enshrines the concept of extended producer responsibility (the one that generates, produces or imports the waste is responsible for developing the return channels). The plan also includes a process for raising public awareness, working with young people in schools and high schools, carrying out dissemination campaigns, among other elements.

Single-Use Plastics Free Certification

PAGE Uruguay, with UNDP and the Ministry of Environment, is developing a proposal for a certification scheme and a seal of entities "free of single-use plastic". The scheme aims to identify systematic standards for the development of certification schemes and select the one that best fits the objectives and context. In addition, it aims to identify relevant stakeholders in the sector for the development of technical standards and a certification scheme; gather background information on similar schemes and standards at the international and local level; develop preliminary drafts of the certification criteria; advise the Ministry of Environment and the Technical Committee and act as the technical secretariat of said committee; design agreements between parties to ensure proper implementation of the certification; design and develop training for auditors, among others.

During 2021, the draft certificate for single-use plastics was developed and agreed upon inter-institutionally. In November 2021, a workshop was held with several institutions to discuss and validate the proposal and agree on next steps. During 2022, an inter-institutional committee will be formed, and courses and training will be offered to auditors on the certification scheme, coming from the Ministry of Environment.

Promoting innovation for mitigation and adaptation to climate change

PAGE is supporting the promotion of innovative activities for mitigation and adaptation to climate change in wood construction. During 2021, PAGE supported a study to analyze the impacts of wood construction, specifically the use of domestic reforestation timber in housing construction, on climate change. The study was initiated with the Ministry of Environment and the Ministry of Housing and will serve as an input to the National (Wood) Plan "habitat madera" that will be promoted by the national government in 2022.

Building capacity for an inclusive, green economy (Outcome 3):

At the beginning of 2020, PAGE, working with the Ministry of Industry, finalized its Plan for Capacity Building and Training on Inclusive Green Economy, which emphasizes action to: "Promote green entrepreneurship through the creation of a platform to support inclusive green entrepreneurship". The Plan formulates five recommendations to strengthen participation, management and strategic skills at differing levels in society, including non-governmental organizations, SMEs, and public officials in national and sub-national functions. An interinstitutional group was formed to support the implementation of the Plan from 2021 onwards, which includes representatives of various government ministries and technicians from the University of Montevideo.

Capacity building of social organizations in relation to green economy

During 2021, under UNITAR leadership, PAGE and the Small Grants Program (Programa de Pequeñas Donaciones - PPD) joined forces to build capacities of civil society organizations. The Small Grants Programme is an initiative supported by UNDP in collaboration with the Ministry of Environment and the Ministry of Tourism that is oriented to reinforce the non-governmental institutions working in sustainable development in Uruguay. PPD has over 15 years of experience in empowering mostly community-owned organizations and cooperatives to formulate and run sustainability-centered projects. In this framework, PAGE provided support for the development of three training methodologies aimed at tackling capacity needs in ecotourism, agroecology and more general training for trainers.

Building IGE capacity at the local level

During the months of September and October 2021, the course "Promoting Inclusive Green Economy at the local level" was implemented for technical teams of subnational governments. The course consisted of a series of virtual meetings and three face-to-face sessions covering sustainable finance, sustainable public procurement, mobility, circular economy and green economy. The teams from the municipalities were supported through technical assistance in the elaboration of inclusive green economy initiatives.

This training was aimed at subnational government teams linked to the tourism sector, environmental management and the development of all 19 municipalities of the country. The course began in a virtual format in September and subsequently included a series of face-to-face meetings in three departments: Paysandú (6 and 7 October), Durazno (28 and 29 October), and Lavalleja (4 and 5 November).

The course addressed conceptual aspects of the green and inclusive economy with concrete examples at the subnational level on the challenges for environmental management, tools for the formulation of project profiles and opportunities for the incorporation of technologies for greening and improvement of subnational services. On each occasion, authorities were present to open the meeting and highlighted the importance of promoting these actions. Among them were the Undersecretary of the MIEM, the United Nations

Resident Coordinator in Uruguay, the UNIDO representative for the Southern Cone, the General Coordinator of the Decentralisation and Institutional Strengthening Programme of the Office of Planning and Budget (OPP), the Executive Director of the Uruguayan Agency for International Cooperation (AUCI), and the President of ANDE, as well as the mayors of each department.

Uruguay in the 2021 Online Annual Report

1.12 GUYANA

Country context and PAGE portfolio

Guyana is an upper to middle income country in South America endowed with natural resources, fertile agricultural land and extensive forests that cover around 87 per cent of the country. Agriculture and mining are key economic sectors, accounting for 21 and 20 per cent of GDP respectively. With its abundance of rivers, the country is susceptible to climate change effects, particularly floods and droughts, and its resource-based economy remains highly exposed to fluctuations in global commodity prices. Petroleum was discovered off the coast in vast quantities along the continental shelf in 2015, and oil exports began in 2020. This offers the potential for rapid industrial development and increased revenues but comes with environmental, governance and economic risks.

Against this background, Governments of Guyana have, over the years, recognized the importance of taking measures to combat environmental degradation, preserve forest cover and support sustainable development, by committing to low impact, climate resilient development.

The PAGE partnership with Guyana began in 2017, linked to the development and implementation of its Green State Development Strategy (GSDS): Vision 2040_(2019). The Strategy was intended to be the country's long-term economic and socio-cultural national development vision and was aligned to the SDGs and Guyana's Nationally Determined Contributions (NDC). The Strategy was developed from previous national policies, including the Low Carbon Development Strategy (2013), the Climate Resilience Strategy and Action Plan 2015 (CRSAP), the Renewable Energy Transition Plan, the Climate Change Resilience Strategy and Adaptation Plan, the National Biodiversity Strategy and Action Plan, and the National Adaptation Strategy for the Agricultural Sector (2009-2018). Most of these prior strategies were not fully implemented but were found to still be relevant to Guyana's economic development.

PAGE support provided for policy development, including through the Guyana Green Economy Modelling Study, and to building stakeholder and institutional capacities contributed towards the achievement of SDGs 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 13 (Climate Action) and 17 (Partnerships for the Goals), as well as Guyana's NDC, especially as it relates to developing the country's renewable energy potential.

In 2020, the PAGE programme experienced delays arising from the highly contested general elections in March and the COVID-19 pandemic. After taking office on 2 August 2020, the new Government set priorities for the next five years in line with its Low Carbon Development Strategy (LCDS) - initially launched in 2013 and updated in 2021 - with an emphasis on COVID-19 response and recovery, job creation, renewable energy, climate mitigation and adaptation and SDGs. Planned PAGE activities are still aligned with these new policy priorities, centred around low carbon development, the climate agenda and the SDGs. At the request of the Government, the UN Resident Coordinator's Office has been streamlining all UN agency work into a new cooperation framework for better efficiency - the Country Implementation Plan (CIP) - in light of the country's limited capacity.

The PAGE Guyana work programme has also become more integrated with the support provided by the UN Country Team (UNCT) on the response to and recovery of the COVID-19 pandemic. PAGE supported the UNCT's Finance and Economic Recovery Working Group and the work of the Guyana National Emergency Operations Centre (NEOC) in the early stages of the pandemic. The PAGE Guyana work programme now forms part of 'Pillar 4: Macroeconomic Response and Multilateral Collaboration' of the UNCT's Social and Economic Response Recovery Plan (SERRP). Additional future entry points for PAGE support on green economic recovery are provided by the new administration's 2020/2021 national budget 'Agenda 2020: our plan for prosperity'.

Planned PAGE activities are still aligned with these new policy priorities, with some delays over the past year after the new government initiated an internal review process. Since then, the PAGE programme has been integrated into the UNCT CIP falling under the 2022-2026 Multi-Country Sustainable Development Framework and Cooperation Agreement. The agreement, recently approved by the government, sets the frame for the continuity of PAGE activities in 2022.

Progress in 2021

Workshop on environmental goods and services

In partnership with Statistic Canada, PAGE via the ILO, organized a virtual workshop on 3 June 2021, at which the Bureau of Statistics (BoS) in Guyana was provided with practical tools and training for developing the environmental goods and services sector component of the system of environmental accounts. ILO and Statistics Canada also further advanced the preparations for the compilation of the benchmark supply and use table (SUT) that will be the main component of the green jobs assessment model in 2022.

Guyana in the 2021 Online Annual Report

1.13 ARGENTINA

Country context and PAGE portfolio

As the third largest economy in Latin America and an upper to middle income country with a well-diversified economy, Argentina recently experienced a slowdown in economic progress with low to negative growth in GDP and a rise in unemployment. The specific dynamics of the Argentinian economy over the last decade, with altering periods of accelerated growth and recession, as well as exchange rate crises, have resulted in sudden changes in regulatory frameworks, the deterioration of productive factors and significantly impacted investments in technological change and productivity.

Against this background, the country recognizes that economic reforms need to be pursued to facilitate growth, stimulate employment and promote sustainability, with important structural challenges to overcome on the road to IGE.

Argentina has already demonstrated a strong commitment to sustainability in the context of international processes and has expressed a clear interest in pursuing economic, social and environmental objectives in an integrated manner. During its Presidency of the Group of Twenty (G20) in 2018, Argentina selected 'Building Consensus for Fair and Sustainable Development' as the theme of the G20 Leaders' Summit, highlighting its commitment to promoting green economy as part of the global sustainability agenda. It has taken forward a series of important commitments in environmental and socioeconomic matters, assuming Voluntary Commitments on emission reductions according to the Paris Agreement and promoting an agenda within the framework of its G20 Presidency focused on the 'Future of Work', a 'Sustainable Future of Food' and the 'Infrastructure for Development'. Congress also recently approved the Minimum Standard Law on Climate Change, setting standards for climate protection in policy strategies for different sectors and a law to prohibit the use of microplastic in cosmetic and housekeeping products.

Argentina joined PAGE in 2018, with the government recognizing the potential for IGE to provide a means for achieving the 2030 Agenda for Sustainable Development. With PAGE support, Argentina aims to advance IGE transition with a focus on governance; technical analysis to inform policymaking; vocational training to support labour market transition; and sustainable productive development and finance for technological innovation, including fiscal incentives, sustainable public procurement schemes and sustainable financial

instruments. Emerging areas that would most benefit from PAGE contribution include the facilitation of cross-sectoral dialogue and targeted support to waste management and green industry.

In 2019, PAGE commenced the inception phase to identify priority workstreams with an initial workshop and stocktaking exercise, including the identification of complementary initiatives. Although progress was made in 2019, PAGE work was impacted by a severe financial and economic crisis in 2019 and government changes and broader political instability in the region. In 2020, a new United Nations Sustainable Development Cooperation Framework was established with the new government, providing an opportunity to elevate IGE priorities and to further enhance the foundation for PAGE.

PAGE work is likely to support SDGs 4 (Quality Education), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production), 13 (Take urgent action to combat climate change and its impacts), and 17 (Partnerships for the Goals).

In 2020, PAGE Argentina faced challenges in its inception year with a complete Government reshuffle following general elections in December 2019 and the COVID-19 crisis further exacerbating the economic crisis. As the country set out plans for economic recovery, PAGE offered additional support to the National Cabinet of Ministers on Climate Change, which linked recovery to SDGs and Climate Change targets through a range of different sector-based activities, including emission reduction scenarios, industrial reconversion and technological innovation, green employment and just transition measures, as well as fiscal strategies, green financing and capacity-building.

Deep economic and political crisis from the already complicated situation of external debt, high inflation and unemployment were further deepened by the impacts of the pandemic in 2021. However, the new Government elevated green economy in its agenda and has advanced many policies in the areas of green jobs, energy transition and social economy with the aim of providing new growth opportunities through a sustainable approach in line with the objectives and efforts of PAGE Argentina.

Progress in 2021

Integrating IGE into national plans and policies (Outcome 1)

Towards a National Just Transition Strategy

Argentina continues to make strides in fostering a just transition towards a green economy. In early 2021, three position papers for setting-up a national tripartite dialogue on strategies for a just transition - for Employers, Workers, and Government - were developed through assessment, more than 75 interviews and three participative workshops. The workshops took place with the three key stakeholder groups on 30 March, and 6 and 29 April to bring

together the key issues of green recovery and Just Transition from a range of perspectives across unions, employers and government representatives.

In addition to the typical tripartite structure and focal points from the Ministries of Environment, Production and Labour, PAGE engaged a broader scope of institutions into the Just Transition Process, including representatives from the Ministry of Economy, of Ministry of Social Development, Ministry of Tourism, Ministry of Transport and various State Secretaries.

In 2021, PAGE provided inputs for the political agenda on just transition at parliamentary discussions and academic events and supported the development and implementation of the new [postgraduate diploma on Green Jobs and Just Transition](#), helping to further increase capacity and awareness of these principles (more details under outcome 3).

The results of the Dialogue will aim to inform a tripartite process to develop a National Just Transition Strategy under a working group within the National Climate Change Cabinet. Preparations are also underway to hire an expert to support a regular political dialogue from 2022, with a focus on outreach on IGE at the provincial level.

Green Jobs and a just transition are key objectives in Argentina, building on PAGE work from 2020, including the [Labour Diagnostic of the Just Transition to a Green Economy](#) report (composed of five interrelated studies that provided inputs for different elements of the country's IGE transition), a PAGE-developed analysis on the [Linkages between the 2030 Agenda and Just Transition for Green Recovery](#) and the High-Level Dialogue held in December 2020 among representatives from government ministries, labour and trades unions, and international organizations.

Strengthening the Agenda of just transition through political dialogue

PAGE Argentina, represented by the Project Coordinator and other focal points, participated in a broad series of events and provided inputs for the political agenda on Just Transition throughout 2021, engaging dialogue at the parliamentary, local government and academic level, including the following:

- In May, the PAGE Project Coordinator prepared a special segment for the ITC-ILO Course on "Green Jobs for Sustainable Development: Concepts and practices";
- On 26 May, the PAGE Project Coordinator presented a Seminar with the Ministry of Environment and Sustainable Development (MAyDS), specifically the Secretary of State of Environmental Policy and the representative of the UNIGLOBAL/Universidad Tres de Febrero Institute for the World of Labour, on "Biodiversity and Labour" to about 100 participants;
- On 2 July, the PAGE Project Coordinator gave a presentation in the webinar "[Green employment: contribution to the design of fair and sustainable labour policies in Argentina](#)" held by the Center for Metropolitan studies. The discussion was triggered by

a document on Green Employment that promotes a more sustainable and fair recovery for the world of work in our cities through public policies;

- On 14 July, a special Webinar on "[Green Jobs, Perspectives and Challenges](#)" was held at the Metropolitan Foundation and the Center for Metropolitan Studies of the Metropolitan University of Labour. The Project Coordinator and UNDP representative of PAGE were invited as keynote speakers among parliamentarians and townhall members of the City of Buenos Aires;
- On 26 July, the Project Coordinator presented the new PAGE Green Employment Indicators at a Workshop of the MAyDS;
- On 4 August, the PAGE Argentina Focal Point from the Ministry of Production, National Director for Productive Development of the Nation, held a [meeting](#) at the National Chamber of the Chemical and Petrochemical Industry - an association of 150 enterprises - presenting PAGE results, specifically on the advancement of the National Plan for the promotion of the Circular Economy; and
- On 21 October, the PAGE Project Coordinator and the Senior Development Coordination Officer at the UN Resident Coordinator Office presented a course on the "[Argentine situation and post-pandemic international context](#)" at the Austral University as part of the Green Jobs programme.

Defining Just Transition as a vehicle for the achievement of the 2030 Agenda

A concept document on [Just Transition as vehicle for the achievement of the 2030 Agenda in Argentina](#), prepared by UNDP under leadership of a recognized senior economist in Argentina, provides a theoretical in-depth analysis for policy-making. The objective of this document is to provide a conceptual framework of the link between the Sustainable Development Goals and the just Transition towards a green economy from the perspective of environmental economics. In turn, it seeks to conclude with policy recommendations so that the transition that will take place after the COVID-19 pandemic can be fair and sustainable.

Developing Green Performance Indicators to inform policymaking

Building on work from 2020, in November 2021, PAGE, led by UNEP, finalized the '[Diagnostic on Country Indicators for a Green Economy](#)' to provide a decision-making tool for policymakers. The focus of this diagnostic, completed in partnership with the Center for the Implementation of Public Policies for Equity and Growth (CIPPEC) and the Ministry of Environment and Sustainable Development (MAyDS), is to develop and prioritize environmental performance indicators and streamline them into a single report that provides a technical basis for informed decision-making on IGE. The indicators will be used for an environmental information system hosted in the National Environmental Information Centre (CIAM), once approved by the Ministries of Labour, Environment and Production. A list of indicators was analyzed and selected to monitor green employment, with a particular focus on four strategic sectors of the national economy prioritized by the MAyDS: Agriculture, Construction, Energy and Waste Management. As a result, the first chapter of

this document presents a conceptual framework on inclusive green economy and green employment, and suggests an initial list of indicators that are now being used by the ILO in order to support the Ministry of Labour in the setup of a monitoring instrument for its Active Labour Market Policies. This work, undertaken with the Center for Metropolitan Studies, is expected to be finalized in early March 2022 and will help the Ministry of Labour to monitor its progress on Green Jobs promotion.

Integrating labour impacts into climate policies (green recovery)

Argentina has been provided with a powerful new instrument to strengthen its decision-making capacities with respect to international commitments on the reduction of emissions. As the updated NDC, presented by Argentina in 2020, establishes sustainable employment and just transition as the central axis, the ILO together with PAGE has developed, in the frame of supporting activities for the Climate Action for Jobs Initiative, a methodology based on social accounting (SAM) that allows the development of labor, emissions and productivity scenarios for the sectoral policies of the NDCs. This was completed through comprehensive work led by the International Institute of Political Economy of the University of Buenos Aires (UBA), the National Scientific and Technical Research Council (CONICET) and the Ministry of Labour, Employment and Social Security (MTEySS).

With this, the country can better determine what qualitative and quantitative labor impacts its climate policies will have and determine the most dynamic sectors for a sustainable recovery of employment in the country. This will help to define scenarios to push green recovery in priority sectors - such as metal, electronics, tourism and automotive - but most importantly, support the National Cabinet of Ministers on Climate Change to draw broader informed policies for accomplishing the NDCs through transformations in the transport and energy sectors, among others.

To consolidate this advance, PAGE formed an inter-institutional team to apply this methodology through a five-week course in November 2021 for key officials from partner ministries, regulatory entities, autonomous statistical entities, the Central Bank and National Stock Exchange Commission, as well as staff from the Secretariat for Strategic Affairs of the Presidency, the Ministry of Economy and the Statistical Division of the Ministry of Production, among others. The training is expected to improve decision-making regarding emissions and jobs, taking into account the country's opportunities for a post-pandemic green recovery.

Promotion of Green Employment and Green Skills (Outcome 2):

Developing a National Green Employment Promotion Plan

In September 2021, PAGE finalized a Strategy and agreed on a first Roadmap for a National Green Employment Promotion Plan that provides concrete actions for greening the active labour market policies of the country. PAGE started to support the development of the Strategy in November 2020 under ILO leadership with the MTEySS and the Interdisciplinary

Institute for Economic Policy of the University of Buenos Aires. The Strategy was developed in a participative manner with the engagement of the three main Ministries and was used to validate a common Roadmap in specific multi-institutional workshops.

Supporting development of the Strategy and Roadmap, PAGE helped build new institutional capacities to guarantee informed and tripartite decision-making on the issues of Just Transition. A five-week course was held in June to July 2021 for the MTEySS on Just Transition and Green Employment received intensive participation and certification of all areas of the Ministry, including those less involved but essential when developing comprehensive policies, such as Social Security and Labor.

The Roadmap was validated by a wide range of institutional stakeholders and is currently being discussed at a high internal political level. It was also presented by the National Focal Point of the MTEySS at the international online Conference: "Climate Change and the Social Question in a Post-Pandemic World: Views from Latin America" organized by the Kingston University. It is expected that the Roadmap will be jointly signed in 2022, following elections in December 2021, after which promotion of the roadmap will start on the provincial level.

Monitoring Green Employment Promotion

PAGE, through the ILO and the Center for Metropolitan Studies of the Metropolitan University of Labour, is providing technical assistance to the MTEySS to develop a system of indicators for monitoring employment and professional training policies from the perspective of just transition and green employment.

This will strengthen the information and monitoring system of employment policies, enabling the sound measurement of progress on green employment. As stated in the study carried out under PAGE for the development of the 'National Strategy for Green Employment Promotion in Argentina', one of the technical recommendations is to develop the capacity of the MTEySS and its substantive areas to enable the monitoring and evaluation and thus the continuous improvement of its Active Labour Market Policies (ALMP).

Developing these capacities will allow the MTEySS to advance in the implementation of its missions and functions, such as "to elaborate policies for the promotion of green employment as an instrument for the preservation and restoration of the environment, the transformation of economies and labor markets and the generation of decent employment opportunities based on sustainability".

Promoting collective bargaining for a more sustainable production model

Collective bargaining stands out as an instrument for adapting the world of work to new challenges, including the transition to a more sustainable production model (Just Transition), for its immediate response capacity (compared to the modifications of laws and regulations), its proximity to sectoral realities and, therefore, its potential to offer problem-focused solutions, including protection of workers, their adaptation to productive changes, and their participation in benefits.

During the pandemic, support to productive sectors was prioritized through wage subsidies and through underpinning their access to financing. In the medium to long term, the deployment of industrial policies and technologies that improve productivity while considering the environment, could be strengthened through the collective bargaining process. Yet, this aspect of green economy and green jobs promotion has been very poorly explored in the framework of PAGE on the global and national scale, as the focus is normally put on the ALMPs as instruments for employment more so than on aspects of International Labour Standards (ILS).

Therefore, PAGE, together with the MTEySS and implemented through the International Research Centre for Labour and Development of the National University of San Martín, initiated a study on the contributions of collective bargaining to the incorporation of new environmental production practices, the transformation of key sectors into a green perspective and the reconversion and protection of Workers, within the framework of the ILO Just Transition Guidelines. The results of this study will serve as input for the recommendation of lines of action that contribute to the design and implementation of public policies that support the just transition in Argentina.

Vocational Training System updated in line with green labour market demands (green recovery)

PAGE, led by the ILO, commenced work to update the Vocational Training System to meet green economy labour market demands. Based on the priorities of partner Ministries, this focuses on key sectors that align with the green recovery work, including construction, metal and electronics industries, the tourism and automotive industries, as well as segments of the informal and social economy. This will be complemented by another PAGE activity led by UNIDO (mentioned below) on promoting sustainable development of productive sectors.

Two assessments have started to analyse gaps and opportunities of the existing vocational training system on the sectoral level. The first, launched in November 2021, aims to strengthen the capacities of the MTEySS with a view to developing and implementing a work adaptation plan for the tourism sector. This plan will indicate the training needs to strengthen sustainability and formalize the workforce, with employment opportunities for women and young people in the tourism sector. These objectives align with the Federal Strategic Plan for Sustainable Tourism (PFETS) that foresees actions to achieve greater development of the Argentine tourism system through the implementation of Good Environmental Practices as a means of a post-pandemic recovery.

The second assessment will involve a diagnosis of the cooperative sector and the independent employment sector in terms of its environmental, economic, and social sustainability, and the development of practical recommendations to improve the application of current MTEySS programs by strengthening formalization and the creation of decent employment in green sectors. These segments of the social economy are deemed to be a new labour market sector which is highly responsible for circular economy streams

in Argentina and LAC overall, but currently remains broadly informal and has not yet been sufficiently included in IGE strategies.

Additionally, in the construction sector, PAGE is providing technical assistance to the MTEySS for the design of a labour adaptation plan for the Construction (Housing) sector. The plan considers actions in the short-term, associated with the impact of the pandemic and recovery measures, and in the medium- and long-term in connection with the transition to a green economy. It will help to implement a) programs to improve employability and promote and sustain green employment in the sector; b) a mapping of new job competencies and required professional roles; and c) professional training that incorporates the necessary competences for new green occupations.

Promotion of Circular Economy (Outcome 2):

Developing a National Plan for the Promotion of Circular Economy

Previous PAGE work - the Roadmap for setting up a National Plan for the promotion of Green Jobs and the Green Economy Stocktaking Study - provide the basis for the development of a fiscal feasibility study, a digital register for the recycling industry, and a related Fiscal Impact Study for developing a National Plan for the Promotion of the Circular Economy. The development of the three documents was launched by PAGE in 2020 and taken forward jointly by UNIDO and the Ministry of Productive Development.

Technical Feasibility Study: In 2021, under UNIDO leadership, the technical feasibility study was finalized for the development of the circular economy in Argentina, which includes a technological proposal for the implementation of a digital National Circular Economy Registry. This would facilitate formalization of the recycling industry and help to implement the Extended Producer Responsibility approach, as it would involve the quantification and quality assessment of materials in the Argentinian market for specific material and waste streams.

The main conclusions of this study were that the functional implementation of the Circular Economy System is considered feasible for a first stage in which the national exchange of the analyzed flows will be promoted. The architecture of the Registry was developed; however, it requires approval from Congress and regulatory underpinning to enshrine the Registry into law and implement it in practice. An expansive development of a Circular Economy System that includes special tools, such as the Registry, will require regulatory adjustments, many of which have already been implemented in comparative law, to facilitate exchanges in the face of current legal restrictions.

Fiscal Impact Study: The [Fiscal Impact Study for the Promotion of the Circular Economy](#) was finalized and presented at the inter-ministerial level to the relevant stakeholders at an event on 4 November 2021. The main objective of the Study was to provide technical assistance to the Ministry of Productive Development for the analysis of the potential fiscal impact of

different sectoral policy measures oriented towards the circular economy. In addition to the fiscal analysis, environmental and social dimensions were also analysed under a socially inclusive recycling framework, as well as the possible positive multiplier effects on the generation of new value chains and employment at the economic level. Three streams were selected to study in-depth, based on specific interests of the MAyDS: end of life tires, spent lead-acid batteries (non-ferrous scrap) and polyethylene terephthalate (PET plastics).

During the meeting, the consulting team of the UNSAM School of Government Policy shared the results of the analysis, demonstrating the impact that the implementation of different sector policy measures oriented towards the circular economy would have and discussed the challenges and opportunities in developing strategies that can support circularity in the economy and the recovery of residual flows. Based on the results of the study, PAGE will develop a policy framework on circular economy. This will build on the efforts to create incentives for sustainable production with focus on circular economy, with a strong link to the work on the National Green Jobs Strategy.

Launch of the National Green Productive Development Plan

Several PAGE Argentina findings have been reflected in the [National Green Productive Development Plan](#), announced by Argentina's Ministry of Production in July 2021, to align the country's production with the global climate agenda. PAGE-led initiatives, such as National Dialogues held in 2019 and 2020, various assessments and the creation of the "Just Transition Board" within the National Cabinet of Ministers Against Climate Change, have all contributed to its development and placement on the political agenda.

PAGE is supporting several instruments that will help the Government in implementing the Plan, such as Green Jobs Indicators for active labour market policies, green standards for finance, and the recently completed study on the fiscal impact and strategy for circular economy (mentioned above).

Overall, the Green Productive Development Plan aligns with Argentina's commitment to combat climate change and includes a set of initiatives to implement that commitment in production systems with a sustainable, inclusive and environmentally responsible paradigm across government, private sector and civil society. The development and validation of a policy framework for the promotion of the circular economy, mentioned above, will be pushed forward in this framework.

Promoting sustainable development of productive sectors

Led by UNIDO, PAGE aims to develop strategies for the promotion of sustainable development in productive sectors, focusing on how green recovery can be boosted by promoting circular economy in key areas. Initial work commenced in the sugar cane industry - selected due to its high labour and productive impact - to be followed in other sectors. As part of the Green Recovery activities, it was agreed to develop a roadmap for the generation of power from the sugarcane industry in the North-West region of Argentina. This aims to define the critical aspects for development of the sugar and energy chain under the

principles of the circular economy, the role of bioethanol in the decarbonization process of Argentina's energy matrix and the economic benefits of the greening of the sector and reuse of waste throughout the supply chain.

A study will also be conducted by PAGE in early 2022 that will contribute to identifying cases when circular economy models or pilots linked to the concepts of industrial symbiosis can be promoted to help increase industrial development in the context of green recovery. It will also support the collection of the data and technical information necessary for the Digital National Circular Economy Registry by classifying in which instances waste is considered a product, by-product or co-product.

Contributing to capacity-building for green economy (Outcome 3)

Assessing national capacity for IGE transition

In 2021, led by UNITAR, PAGE conducted a review of the public sector's capacity needs during the transition to an IGE. The focus of the study was on various needs as identified by the collaborating ministries, PAGE agencies as well as technical staff at the National Public Administration Institute (INAP), the country's most important civil service training entity, offering learning and career development to public officials of various ranks and sectors at the national and sub-national level.

The exercise resulted in a roadmap document 82 containing a series of practical suggestions and learning formats to update INAP's Virtual Campus and align it with the new landscape of skills and knowledge requirements to achieve the country's sustainability commitments. The roadmap is expected to be implemented throughout 2022.

Diploma on Green Jobs and Just Transition

PAGE actively participated in the development and implementation of the newly co-designed [Diploma on Green Jobs and Just Transition](#) of the Institute of the World of Work at the National University UNTREF. The Diploma includes modules on Sustainable Development, Ecological Transition and Green Recovery, and Skills and Competencies for Just Transition and Green Employment, among others.

The first cohort of 32 students from Chambers, Trade Unions, the UN System and Government were delivered masterclasses from senior economists, public actors and representatives from Unions and Industrial sectors as well as PAGE focal points and partners. On 28 July, the PAGE Project Coordinator, together with the Chief of Cabinet of the Secretary of State for Employment, provided a course on Green Jobs Policy and Just Transition, and on 4 August, the Chief Economist of the UNRCO in her role as member of the PAGE National Steering Committee for Argentina, provided a masterclass on Green Economy. The Diploma helped to build the capacity for Green Jobs and Just Transition of those involved in the governance of Argentina, helping to bring these ideas and principles into practice at the national level.

Developing a green economy communication and awareness-raising strategy

A plan for a communication strategy was drafted under UNDP leadership. It aims to design, plan, validate and implement a comprehensive communication and dissemination strategy based on content production and management to position the project nationally and internationally, taking into account its main partners, beneficiaries and donors. It will increase the visibility of the initiative in Argentina, through content production, development of multimedia products for web and social networks and specific press efforts in coordination with campaigns on social networks.

Argentina in the 2021 Online Annual Report

1.14 INDONESIA

Country context and PAGE portfolio

Indonesia has experienced stable economic growth over the past decade, transforming the country into one of the largest economies in Asia. At the same time, the government recognizes that further action is needed to address poverty, inequality, unemployment, and environmental degradation. Accordingly, the Indonesian Government is working to incorporate sustainability policies and emission reduction activities into its national plans and targets.

In 2017, the Government under the leadership of the Ministry of National Development Planning (Bappenas) launched the Low Carbon Development Initiative (LCDI). The LCDI offers a non-siloed approach to achieve low-carbon development, sustainable natural resource management and poverty alleviation while maintaining economic growth. It aims to incorporate greenhouse gas (GHG) emission reduction targets into the policy planning exercise, along with other interventions for preserving and restoring natural resources.

In alignment with the LCDI, Indonesia joined PAGE in 2018 to transform its economy into a driver of sustainability and social inclusion and to address development and environmental challenges at the national and sub-national level through multi-stakeholder action. PAGE was launched in October 2018 to support further planning and implementation of LCDI with a focus on the energy, waste management and circular economy, and green industry sectors, in line with the national priority programme outlined in the RPJMN 2020-2024.

Various policy scenarios assessed through the LCDI were mainstreamed in the latest National Medium-Term Development Plan 2020-2024 (RPJMN - from its Indonesian title),

launched as the first 'green' RPJMN in the beginning of 2020 with clear targets, locations, and priority sectors. The Medium-term Development Plan provides a reference for sector ministries, government bodies and other stakeholders for their policymaking and programmatic planning over the next five years and supports the implementation of the National Long-term Development Plan (RPJPN) 2005-2025, which seeks to establish a country that is developed and self-reliant, just and democratic, and peaceful and united.

With green economy gaining momentum in Indonesia, low carbon development and circular economy, together with blue economy and energy transition have been promoted by the Indonesian Government as priority programmes to accelerate a green economy transition. In this context, apart from assisting the implementation of LCDI at both the national and sub-national level, moving forward, PAGE will provide support to the Indonesian Government to further integrate inclusive green economy into the next RPJMN 2025-2029 as well as the national long-term development plan (RPJPN) 2025-2045, for achieving Indonesia Vision 2045 as well as Net Zero Emission 2060 (or sooner).

PAGE work in Indonesia is currently aligned with the following SDGs: SDG 7 (Affordable & Clean Energy); SDG 8 (Decent Work and Economic Growth); SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible Consumption and Production); SDG 13 (Climate Action) and SDG 17 (Partnership for the Goals).

In 2020, when Indonesia started to address the impacts of the COVID-19 pandemic, Bappenas promoted a green recovery through its 'Build Back Better with Low Carbon Development (B3-Low Carbon)' approach. This provided a new entry point for PAGE to support circular economy in Indonesia, aligned with ongoing support in the context of LCDI, focused on energy and resource efficiency, energy transition, green industry, better waste management, green jobs and just transition. In addition, through its rapid sectoral assessment of green stimulus packages in the energy sector, which promotes the instalment of solar PV rooftops, PAGE was able to contribute to Indonesia's Green Recovery Roadmap 2021-2024, which elevates green economy to one of the major national structural transformation strategies for post-recovery.

As Indonesia holds the presidency for the upcoming G20 Summit in 2022, PAGE serves as its official knowledge partner and will help facilitate consultation processes to bring a green, blue, and low carbon economy - which has been gaining popularity in the country - into the Summit agenda.

Progress in 2021

Integrating IGE into national plans and policies (Outcome 1):

Rapid Assessments to inform Green Stimulus

In early 2021, PAGE supported the government with two Rapid Assessments on the Green Stimulus Package for National Economic Recovery, for the energy and waste sectors. The

assessments outlined various green stimuli that will encourage the use of renewable energy, increase energy efficiency and promote refuse-derived fuel from municipal solid waste to build momentum on green recovery and low carbon development in Indonesia.

The development of both assessments involved engagement with relevant ministries and stakeholders. Several implementable policy scenarios for green recovery resulted from the energy sector assessment, and one scenario featuring the instalment of solar PV rooftops gained significant interest and was integrated into the [Indonesia Green Recovery Roadmap \(2021-2024\)](#), launched in October 2021 by Bappenas, with reference to PAGE's contribution. The waste sector assessment resulted in policy recommendations focused on promoting refuse-derived fuel (RDF) technology for municipal solid waste, for which implementation scenarios were discussed with Bappenas, key line ministries, the private sector, universities, and other relevant stakeholders.

Additionally, PAGE supported a number of green recovery policy dialogues, some of them through public discussions, offering both online and offline webinars co-organized by national civil society organizations (e.g., the *Masyarakat Energi Terbarukan Indonesia* (METI - Indonesian Renewable Energy Society). The webinars engaged speakers from various backgrounds, including high level government officials, parliament members, business associations, and civil society organizations. Specific topics also varied, from a green recovery to support energy transition in Indonesia to the importance of fiscal stimulus in the renewable energy development.

Roll-out of the LCDI at the sub-national level

In 2020, PAGE supported Bappenas in the development of the generic version of the provincial LCDI macro system dynamics model and technical guideline. The model and the technical guideline were used as a reference to translate the LCDI framework from the national to sub-national level, and to mainstream low carbon development into regional medium-term development plans (RPJMD).

In 2021, the generic model was adapted for West Java province, taking into account provincial characteristics, priorities and data. PAGE also provided technical assistance to the West Java government for developing the provincial low carbon development plan (RPRKD), using the model for exercising policy scenarios. This document will become a reference for the Development Planning Agency (Bappeda) of West Java and other relevant bureaus for implementing low carbon development programmes in the province. During the process, the Government of West Java benefited from the on-the-job training for model development, data consolidation, as well as policy simulation using the model, through coaching clinics provided by PAGE.

Supporting the development of a National Action Plan on SDG 13

PAGE supported Bappenas in the development of a National Action Plan (NAP) for SDG 13 - Climate Action, with the aim of bringing green economy and low carbon development aspects into the existing NAP for SDG 13. The Action Plan was subsequently integrated into

the updated 2020-2024 National Action Plan for all SDGs through the National SDGs Secretariat. This process was conducted in parallel with the preparation of the Voluntary National Review (VNR).

Putting Green Economy on the G20 Development Working Group Agenda

As Indonesia is preparing to host the G20 summit in 2022 in Bali, the Government started the consultation process with various stakeholders in 2021. Bappenas is leading the consultation process for the Development Working Group (DWG) and is now advocating for green economy and low carbon development to be on the agenda at the 2022 summit.

In this context, on 4 May 2021, the Head of PAGE Secretariat contributed to a national consultation meeting, delivering a presentation on green economy, green recovery, and experiences of green economy implementation in developing countries. The webinar was hosted by the Deputy Minister of Development Funding in Bappenas and the Director of Multilateral Funding Cooperation and included the Director of Environmental Affairs Bappenas, the Director of Climate Change Mitigation at the Ministry of Environment and Forestry, and the Director of Development, Economic, and Environmental Affairs at the Ministry of Foreign Affairs as speakers. The webinar was attended by more than 100 participants from various ministries and universities or academic communities.

To support Indonesia's G20 presidency, especially in the area of green economy, PAGE helped to hire a senior national consultant on green economy and low carbon development. The consultant will work closely with PAGE and Bappenas to produce background and position papers on green economy in the context of developing countries as reference for the DWG's discussions at the G20 meetings in 2022.

Shaping sectoral and thematic studies and policy reforms (Outcome 2):

Promoting circular economy in the food and beverages sector (green recovery)

As part of its green recovery strategy, the government is planning to embed the circular economy approach into its LCDI and the next Medium-term Development Plan (RPJMN) 2025-2029. As the circular economy aims to generate economic growth by maintaining the value of products, materials, and resources in the economy, it is seen as one of the instruments that can support the achievement of SDGs and low carbon development policies. In line with this priority, PAGE has focused its green recovery support on the food and beverages sector as one of five high potential sectors for the circular economy in Indonesia.

Throughout 2021, PAGE supported a series of consultation meetings with key stakeholders, including relevant Directorates of the Ministry of Industry. PAGE, led by UNDP, is conducting a rapid assessment to identify sub-sectors that contribute most significantly to green recovery, for example, by increasing GDP, creating green jobs, and reducing GHG emissions and waste. This will be followed by additional in-depth assessments in the selected sub-sectors, looking especially at the potential for greater resource efficiency, waste and CO2

reduction, green jobs creation and skills development, as well as the fiscal and non-fiscal stimulus options for encouraging private investment in the circular economy. From 2022, this work will be complemented by policy advocacy, awareness raising, and capacity building activities.

Laying the groundwork for Green Jobs and a Just Transition in the Energy Sector

PAGE is supporting the Government of Indonesia through Bappenas to lay the groundwork for green jobs and Just Transition promotion in the energy sector, namely by conducting a “Policy Readiness Assessment on Green Jobs and Just Transition in the Energy Sector in Indonesia”. The assessment aims to map current macro-level policies and programmes and reviewing the existing capacity of associated institutions (Governments, other constituents, and stakeholders) to undertake greening and Just Transitions planning, with an in-depth exploration on the energy sector. The assessment also considers the findings from the ILO and ASEAN joint [Regional Study on Green Jobs Policy Readiness in ASEAN](#), as well as the Rapid Assessment on Green Stimulus in the energy sector. To date, PAGE has developed a background paper based on the desk review on the current and previous studies and activities and submitted it to Bappenas in late October 2021, to be followed by stakeholder interviews and consultation processes, which aim to validate the initial findings and identify how to address the policy gaps. The study is expected to be finalized in the first quarter of 2022 and will be followed by capacity building on green jobs and Just Transition at the national and sub-national levels.

Policy Scoping and Roundtable Discussion on FLW in West Java Province

In 2021, PAGE supported the Government of West Java to conduct an assessment of existing policies related to the management of food loss and waste for the province. Working closely with the Development Planning Agency (Bappeda) and relevant bureaus of the provincial government, PAGE completed a [Policy Scoping Assessment](#) and roundtable discussion on minimizing food loss and waste (FLW) to inform provincial policies that contribute directly or indirectly to FLW across the food supply chain.

The West Java Province was identified as a priority area for FLW reduction, as it is committed to becoming a “green province” by 2025, through efforts to invest in a green economy and reduce greenhouse gas emissions. Reducing FLW is critical, as it contributes 7.3% of GHG annually in Indonesia, exacerbating climate change, water scarcity, biodiversity loss, economic losses, food insecurity, and natural resource exploitation.

The roundtable discussion was organized on 1 July 2021 under the leadership of Bappenas and Bappeda West Java, with support from PAGE, to inform government stakeholders of the assessment’s findings and contribute to the formulation of a strong FLW strategy and subsequent programmes to build a more resilient, sustainable and healthy food system. The roundtable engaged diverse stakeholders across the food system to gather perspectives on how the government can support policy and fiscal reforms to reduce FLW.

PAGE's FLW policy assessment in West Java provides a set of policy recommendations and a strategy that could be used as a reference for the Government of West Java in formulating their own version of policy for better FLW management. The assessment also acts as a reference to include FLW as an indicator in the next regional development planning document (RPJMD) of West Java Province 2025-2029. Further, representatives from Bappeda also presented the West Java FLW strategy, informed by PAGE's policy assessment and recommendations, to other Indonesian sub-national governments during Indonesian Sub-National Food Systems Dialogues (part of the UN Food Systems Summit) in August 2021.

Additionally, PAGE is conducting FLW baseline assessments in three provinces (West Java, Central Java, and Bali), to be finalized and presented to the government in 2022. These assessments will provide new data on household food loss and waste. This data will support national reporting for SDG 12.3 as well as the development of a strategy to address household FLW nationally and in those three provinces. The robust and timely FLW data will allow Indonesia to understand the scale of the problem, inform policy interventions and enable the tracking of progress on FLW reduction to 2030. The findings will also be used as a reference to further strengthen the FLW strategy in West Java and to develop an action plan for better FLW management in all three provinces.

Resource Efficiency Scoping Assessment in the Fertilizer Sector

In collaboration with Bappenas, UNIDO under PAGE is conducting a resource efficiency scoping assessment of the fertilizer sector to identify opportunities for resource savings, emission reductions, and creation of green jobs to foster the implementation of the government's LCDI. Building on the findings of the Green Industry and Trade Assessment (GITA), the fertilizer assessment was launched in June 2021, followed by formal consultations and focus group discussions to disseminate information regarding resource efficient and cleaner production (RECP) approaches and planned studies in the fertilizer industry and to identify industries that will participate in the assessment. This involved the participation of relevant stakeholders such as the Directorate of the Energy Conservation of the Ministry of Energy and Mineral Resources, the Ministry of Industry, state-owned fertilizer enterprises and the private sector.

A questionnaire survey was conducted with five fertilizer plants, and an in-depth study was conducted on three plants to identify potential areas to improve resource efficiency and production practices. A draft report on the fertilizer plant resource consumption profile, assessment findings, and recommended measures for implementation was prepared by the Indonesia Cleaner Production Centre and shared with relevant ministries for feedback.

The fertilizer assessment is set to finish in early 2022 and will be followed by a resource efficiency scoping assessment on the cement sector. Based on the analysis of both assessments, policy recommendations will be developed for large industrial plants that could stimulate and reward sustainable resource efficiency improvements in line with the LCDI.

Supporting Green Finance in West Java Province

To support the development of green finance in the West Java Province, PAGE, led by UNEP, completed an assessment of the enabling environment, with a focus on the banking sector, that maps project pipelines in the renewable energy and waste sectors and possible financing mechanisms in West Java. With Bappenas' input from the consultation meeting in July 2021, the near-final report was subsequently enhanced to include alternative financing options beyond banking with focus on the energy sector. The result of this first phase has informed the second phase, i.e., the development of a business case for a pilot-ready project.

Led by UNDP, PAGE started the second phase by developing business cases for piloting a project on the instalment of solar PV rooftop on school buildings in the West Java province. The study will identify both policy and operational challenges, as well as potential options to speed up the solar PV instalment in the province and provide inputs to the provincial government to implement the recommended scenarios with private sector involvement. Further, as an additional benefit, the study will identify potential fiscal and non-fiscal policy reform scenarios to enable and speed up mitigation actions in the energy sector as part of the government's decision to accelerate the energy transition. The successful result of this phase could be a model for replication/scaling up in other provinces.

Building national capacity for inclusive green economy (Outcome 3):

Skills Development for Greening the Recovery

On 23 June 2021, PAGE organized a webinar on "Learning and Skills Development for Green Recovery: Building Back Better with Low Carbon Development in Indonesia" that focused on the role of learning and skills development in enabling Indonesia to "Build Back Better" through LCDI. The event served to launch the [Green Economy Learning Assessment \(GELA\)](#) that was conducted in 2020 and was framed around the report's main findings, including gaps and entry points for scaling up green economy learning in the country.

The webinar was organized in partnership with Bappenas and featured speakers from various government ministries including the Institute of State Administration of the Republic of Indonesia (LAN), the Ministry of Energy and Mineral Resources (MEMR), and the Ministry of Industry (Mol), as well as from the Global Green Growth Institute (GGGI), the Indonesia workers association (represented by KSBSI), civil society groups, the academic community, and the private sector. Among the presentations, the ILO presented a policy framework for green jobs and a just transition and outlined some of the key findings from its recent decent jobs and just transition policy readiness assessments from the ASEAN region, including an ongoing study from Indonesia.

Aligned with Indonesia's LCDI implementation framework, the GELA incorporates the ongoing COVID-19 situation by integrating national sectoral and sub-national government

learning needs for a green recovery - focusing on the policymakers and government officials who will design green economy programmes. Building directly upon the results of the GELA, PAGE plans to develop a National Strategy for Green and Low Carbon Economy Learning in partnership with Bappenas, LAN, and GGGI. This will involve development of green and low carbon economy learning reference modules for existing government training platforms, as well as pilot training in selected ministries and provinces.

Launch of Inclusive Green Economy Modelling Course for University Students

PAGE also worked with the University of Indonesia (UI, through its School of Environmental Sciences), the Indonesia Expert Network on Climate Change and Forestry (APIK Indonesia Network) and Environment Institute Indonesia to launch a semester-long Inclusive Green Economy Modelling (IGEM) course for university students in Indonesia.

The existing PAGE IGE Modelling course had been presented to the UI earlier in the year. A virtual exchange was then organized with the Universidad del Pacifico, who shared their experience in adapting and implementing the IGE Modelling course in Peru. Drawing on these experiences, the UI adapted the training material to the Indonesian context, with a preparatory module developed to level-up students' knowledge and understanding. The complete course was launched as part of one of the UI's own graduate programmes in September 2021, targeting master and doctoral students.

The UI also collaborated with Sriwijaya University and the President University to deliver the course to post-graduate students at all three universities during the fall semester. In total, the course was delivered to 44 students across the three universities, with those that completed the course expressing high satisfaction rates (over 85% of students stating that the objectives of the training were clearly met and that the topics covered were relevant to their studies). Opportunities to scale the delivery of the course will be explored in 2022.

Indonesia in the 2021 Online Annual Report

1.15 KAZAKHSTAN

Country context and PAGE portfolio

Kazakhstan is an upper to middle income country whose economic growth has largely depended on the exploitation of fossil fuels since independence, making it one of the biggest emitters of CO₂ in the world per capita. With 42.1 per cent of the population residing in rural areas, the country is an important supplier of grains and oilseeds and has an ambitious livestock development programme. However, climate change, environmental

degradation and waste pollution present significant threats to the country. Kazakhstan is also flood-prone, exposed to extreme temperatures and impacted by glacier melting and droughts. No integrated waste management system exists, with 86 per cent of solid municipal waste ending up in uncontrolled landfills and waste disposal sites, most of which do not meet sanitary requirements. The resource-rich nation is one of the wealthiest in Central Asia; however, the slow pace of improvements in living condition creates social tensions that threaten progress towards a fairer, greener, and more prosperous economy.

The Republic of Kazakhstan has taken progressive steps to promote sustainable development with ambitious targets set out in its National Development Strategy Kazakhstan 2050 and its Green Economy Concept that have served as the strategic vision of the country on inclusive sustainable development since 2013. These targets include sourcing as much as 30 per cent of energy from renewables by 2030, increasing to 50 per cent by 2050. More generally, Kazakhstan seeks to promote economic diversification and inclusive growth through green economy promotion. The strategy for decarbonisation was reconfirmed by the President's announcement in December 2020 to reach carbon neutrality by 2060.

Against this backdrop, Kazakhstan joined PAGE in 2018 with the objective to support the implementation of its National Development Strategy Kazakhstan 2050. In 2019, a scoping mission, led by the Ministry of Ecology, Geology and Natural Resources (MEGNR, previously the Ministry of Energy), a green economy stocktaking and the inauguration of a national steering committee - comprising representatives of the government and private sector - provided the foundation for support aligned with country priorities.

A strategic planning reform initiated in the beginning of 2021 under the supervision of the new State Agency for Planning and Reform, provides new opportunities for PAGE to raise the green economy ambition of the country. In this process, some policy documents that PAGE supported in 2019 and 2020 were replaced by new policy initiatives in 2021. PAGE work has been built around the following entry points and avenues for progress:

- 1) The 'Concept for the Transition of the Republic of Kazakhstan to a Green Economy (GEC)', implemented since 2013 and updated in 2021, provides a long-term pathway towards a green economy and carbon neutrality;
- 2) The country's low carbon development was presented as a 'Doctrine on Carbon Neutrality until 2060', expected to be adopted in early 2022 (earlier framed as the Low Carbon Development Concept (LCDC));
- 3) The development and implementation of the revised Environmental Code, (signed into law on 2 January 2021) and the related introduction of approximately 150 normative legal acts, provided the basis for meeting international obligations, the sustainable use of natural resources as well as climate mitigation and adaptation measures;
- 4) The updated 'Strategic Plan for Development of the Republic of Kazakhstan until 2025', mandates the development of 5-year National Projects in key sectors and thematic areas;

- 5) The 5-year cross-sectoral National Project "Zhasyl Kazakhstan" (Green Kazakhstan) was approved by the government in October 2021. In line with the strategic planning reform, it replaces the earlier programmatic and sector-focused planning approach (including the formerly developed Waste Management Programme) and provides an entry point for enabling the country's green economic recovery.

Across these different overarching policies and concepts, PAGE's sectoral and thematic support focuses on waste management, green fiscal policy, sustainable public procurement, the introduction of environmental norms, standards, and permissions (including Best Available Techniques (BAT)), the use of strategic environmental assessments, the promotion of green businesses and energy efficiency in regions, as well as institutional capacity-building.

PAGE work in Kazakhstan aims to contribute to the following SDGs: SDG 3 (Good Health and Well-Being), SDG 13 (Climate Action) and SDG 7 (Affordable and Clean Energy) - through a focus on strategic low carbon and green economy policy development and implementation, waste management and fiscal reform; SDG 9 (Industry, Innovation and Infrastructure), SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Production and Consumption), and SDG 15 (Life on Land) - through improvements in eco-regulation and waste management and redirection of emission payments to support green SMEs.

Progress in 2021

Integrating IGE into national plans and policies (Outcome 1):

Updating the Concept for the Transition to a Green Economy

Since 2013, the Government has been implementing the 'Concept for the Transition of the Republic of Kazakhstan to a Green Economy (GEC)', which outlines the goals, objectives and general approaches to achieving sustainable development in the country. After the adoption of the Concept, Kazakhstan made international commitments under the Paris Agreement and the 2030 Agenda for Sustainable Development. On the national level (with support from PAGE), a new Environmental Code was adopted, and a Carbon Neutrality Doctrine was announced.

In line with these new developments, PAGE advised that the GEC be updated to integrate the sustainable development goals, targets, and indicators, as well as to align the GEC with new strategic documents, regulations, and commitments at the national and international levels. PAGE prepared documents to discuss the update at the highest government level within the meetings of the Green Economy Council, which meets twice a year under the auspices of the Prime Minister with high level participation from the Ministries of Economy, Ecology, Industry, and Energy; the Prime Minister's office as well as international partners such as UNDP and UNEP. As the result, the Prime Minister within the Council meeting on 24 June 2021 instructed the Ministry of Ecology, Geology and Natural Resources (MEGNR) to start the revision in partnership with the relevant state bodies. PAGE received a formal

request by MEGNR to support the update of this strategic document, which started with the development of a detailed implementation.

Work will be guided by MEGNR with the support of national stakeholders represented in the eight working groups under the Green Economy Council (GEC). The working groups bring together relevant public sector, private sector, civil society, and academic representatives, in line with the priorities of the GEC. The representatives from all line ministries, private and civil society sectors will provide necessary statistical data, share relevant information, provide comments and recommendations on content, and facilitate consultations with stakeholders to discuss draft documents. The GEC supported a modelling exercise with scenarios development that is planned to be completed by July 2022.

Integrating green economy into strategic development planning

In March 2021, the updated 'Strategic Plan for Development of the Republic of Kazakhstan until 2025' was adopted by the country's President, which includes a sub-chapter on green economy drafted by PAGE, as well as other PAGE recommendations in other chapters. The Strategic Plan is a key document that provides guidance for the country and a pathway for achieving the vision encoded in the National Development Strategy Kazakhstan 2050. The initial draft did not contain a reference to green economy, prompting PAGE to initiate discussions with the Ministry of National Economy and to draft a chapter on green economy. The need to update the Strategic Plan 2025 arose from the double challenge of COVID-19 and the low international price of oil (in the first half of 2020), which called for an adjustment of national economic projections due to the dependence of Kazakhstan's economy on oil.

The Strategic Plan is at the core of the strategic planning reform initiated in the beginning of 2021 under the supervision of the State Agency for Planning and Reform. As instructed by the President, line ministries were mandated to develop 5-year National Projects, equipped with indicators and budgets, detailing actions in all sectors and thematic areas featured in the Strategic Plan. Since the Strategic Plan featured a sub-chapter on green economy, in March 2021, the MEGNR was charged to develop a "National Project Zhasyl Kazakhstan" (Green Kazakhstan) with a 5-year horizon.

Supporting the 5-year National Green Kazakhstan Project (green recovery)

After the initial dip of global oil prices early in the pandemic, the price of oil recovered its position by the end of 2020 and maintained high levels throughout 2021, allowing Kazakhstan's economy to bounce back quickly from the impact of the COVID-19 pandemic. Therefore, the government did not develop specific green recovery policy instruments, but rather integrated green recovery principles into the strategic reform process. In accordance with the assignment of the President of the Republic of Kazakhstan, the MEGNR started the development of the 5-year National Project "Zhasyl Kazakhstan" (Green Kazakhstan) covering different thematic areas. On 18 February 2021, PAGE received a formal request from MEGNR to provide urgent technical support for the development of the project. The short-term, actionable nature of this project provided an opportunity to align short-term

planning with long-term green economy planning, climate goals, and the SDG commitments of the country.

In the period of March to October 2021, PAGE, as part of its green recovery support, helped coordinate the development of the project and provided technical support in the areas of waste management, energy efficiency and eco-education. Activities were implemented with support of national experts, in collaboration with the Economic Research Institute under the Ministry of National Economy, and in consultation with relevant stakeholders from the Ministries of Economy, Finance, Energy, and Industry and the Agency for Strategic Planning and Reform and others. The [analysis](#) that PAGE conducted in 2020 of the waste sector, which intended to inform the Waste Management Programme of the MEGNR (now discontinued), served as a foundation for the development of waste management sub-section of the project, including indicators, activities and public budgets allocations.

The final [National Project "Green Kazakhstan"](#) was approved by Resolution of the Government of the RK № 731 dated October 12, 2021. The Project covers air pollution, waste management, energy efficiency, biodiversity conservation, water management and rehabilitation of water bodies, and eco-education and improving eco-culture, and sets out activities (at national and regional level), targets, indicators and budgets in each of those domains. It includes measures on energy efficiency, retrofitting buildings, sustainable transport and natural capital investments, with the intention to rapidly create employment opportunities that deliver a high economic multiplier while reducing emissions. It also includes measures to build environmentally sound waste management, covering municipal solid, industrial, healthcare, agricultural and historical waste based on the Concept of waste management of the Republic of Kazakhstan.

To provide complementarity with the UNDP-led [Climate Promise](#) project and leverage public budgets for NDC implementation, key activities of NDC Roadmaps on adaptation and mitigation with high sustainable recovery potential were incorporated into the Project.

Supporting the new Carbon Neutrality Doctrine (previously the Low Carbon Development Concept)

Following the announcement of the President in December 2020 that Kazakhstan will become carbon neutral by 2060, the former 'Low Carbon Development Concept 2050' (LCDC) was transformed into the 'Doctrine on Carbon Neutrality until 2060' in September 2021. In line with this, the focus of PAGE work was aligned in 2021 to focus on the development of the Doctrine but with the same thematic inputs as the LCDC, namely fiscal policy and waste management, which are embedded within a larger support programme led by GIZ (Project "Support of Green Economy in Kazakhstan and Central Asia for a low-carbon economic development").

MENRG received instructions to adjust its work to the new timeframe and work towards 2060 instead of 2050. The extended timeline and explicit target of 'carbon neutrality' required an adjustment of all three models (TIMES, CGE, SD) used for predictions in Kazakhstan's

relevant sectors. A new round of workshops with stakeholders (from government, civil society, and private sector) was organized by GIZ with support from country experts engaged through PAGE to discuss scenarios and assumptions of modelling and receive feedback and suggestions from government agencies.

This work received significant high-level political attention in 2021, including a series of high-level meetings:

- A working meeting under the chairmanship of the Minister of MENRG with the participation of vice ministers of sectoral state bodies (10 March);
- Several working meetings between the Vice-ministers of Energy and National Economy on macroeconomics, investments and economic development of different sectors under a decarbonization scenario; and
- Three meetings (20 April, 6 May, 8 July) of the working group under chairmanship of the Vice Prime Minister.

The [draft report](#) by DIW-Econ (the implementing partner of GIZ) - which became the basis for the Carbon Neutrality Doctrine - was delivered to the Government in July 2021 and final feedback addressed by September 2021. The [draft Doctrine on Carbon Neutrality until 2060 of Kazakhstan](#) was presented by the country's President at a high-level event on 13 October 2021. The Ministry of National Economy was tasked with the development of the draft Doctrine (focal point ministry had previously been MENRG). Pending technical clarifications, the Doctrine should be adopted in early 2022.

Fiscal policy analysis of energy, housing and public utilities (HPU) sectors

In early 2021, under the leadership of UNEP, PAGE completed a draft technical study "[Fiscal Incentives for Low-Carbon Development of the Republic of Kazakhstan](#)" that analyses fiscal policy related to energy, housing and public utilities (HPU). A workshop was organized on 29 March 2021, with representatives of the Ministries of Energy, Finance, and Ecology, the Agency for Strategic Planning and Reforms and other interested stakeholders to discuss findings of the report. Following the stakeholder consultations, the analysis was revised to reflect the feedback received and was submitted to GIZ to contribute to the Green Finance and Investments part of the Carbon Neutrality Doctrine. Key findings of the report include that fossil fuels subsidies in Kazakhstan more than doubled in the period 2016 - 2019, and during this period about 536 billion tenge was allocated to support the production and consumption of fossil fuels.

The findings of the report were presented at a side event "Renewable Energy Sources and Energy Saving: contribution to Carbon Neutrality" organized by MEGNR, which took place on 4 November at the Central Asia Pavilion at the COP 26 in Glasgow. Building on the report, PAGE will support additional analysis to model the socio-economic and environmental impact resulting from an alternative use of the identified fiscal space, and preparatory work began in 2021 (further described below).

Modelling and analysis of energy subsidies

Following-up on the [“Fiscal Incentives for Low-Carbon Development of the Republic of Kazakhstan”](#) PAGE - led by UNEP, with financial and technical support provided by UNDP - coordinated and developed modelling and analysis on the impacts of reforming energy subsidies on the economy, environment and society. In close consultations with national stakeholders, including the Ministry of Finance, Ministry of Energy, Ministry of National Economy, and Ministry of Industry and Infrastructural Development, this analysis incorporates estimates for new subsidies and potential tax revenue and economic and environmental impact modelling of the fossil-fuel subsidies reform under three key scenarios. The study also provides evidence for how fiscal policy reforms can create much needed fiscal space and help reallocate scarce public resources towards green recovery, while encouraging long-term investment for a low carbon economy. The International Institute for Sustainable Development (IISD) will conduct the analysis, to be completed in June 2022. The findings will be used to inform the Green Economy Concept update.

Implementing the new Environmental Code

The new Environmental Code, which entered into force on 1 July 2021, envisages a rapid reform of the main environmental regulatory framework that can open broad opportunities for green growth in the country. PAGE provided technical support during the revision process and deliberation of the Code by the Parliament and now assists with the implementation of its new elements according to best international practices and the development of relevant secondary legislation.

Strategic Environmental Assessment (SEA): The new Code contains requirements for undertaking SEA for policy documents targeting different sectors including agriculture, forestry, fisheries, energy, and industry (including the exploration and production of minerals), transport, waste management, telecommunications, tourism, urban and rural development planning, and land use and protection. SEA will become mandatory for all policy documents from 2023 onwards.

In 2021, following a second round of comments from NGOs and state institutions that were addressed by PAGE, [Guidelines for conducting strategic and environmental impact assessments \(SEA/EIA\)](#) were finalized. The Guidelines are a secondary legal act developed in 2020 with support from PAGE. Based on the analysis of the Institutional Framework for SEA/EIA implementation and the Guidelines, a series of capacity building events took place (on 30-31 March, 2 April, 28-29 April, 19-20 May, 26-27 May, and 9-10 June) for regulators from national and regional authorities, the business community, and NGOs, to raise awareness of and provide practical guidance on conducting SEA and EIA. The trainings were organized in partnership with the Ministry of Ecology, UNECE and the Office for Security and Co-operation in Europe (OSCE). Approximately 50 participants attended each event, with around 300 participants trained in total.

To aid the implementation of SEA/EIA, a [Roadmap for the introduction and development of EIA and transboundary impact assessment mechanisms](#) was developed by PAGE experts, in

consultation with the UNECE and OSCE expert team. The Roadmap was presented at a Roundtable on the EIA, which took place on 21 June. The Chair of the Committee on environmental regulation at MENRG, opened the discussion with representatives from the private sector and civil society. To demonstrate how the SEA should be conducted, PAGE will support the implementation of a pilot SEA in 2022 focused on the development of the master plan for the city of Nur-Sultan. One of the key challenges facing the rapid development of Nur-Sultan City is the growing number of vehicles, which leads to poor air quality.

Environmental standards: The secondary legislation on the environmental standards (norms) has gone through two rounds of consideration by state bodies and interested stakeholders, with PAGE addressing the comments and conducting an awareness raising event on 14 May. A draft Roadmap on Development of Environmental Quality Standards was presented to MENRG in September 2021. The Draft Roadmap focuses on the introduction of a system of environmental quality standards for environmental components (atmospheric air, surface water, soil), taking into account internationally recognized approaches and standards; advanced monitoring system for atmospheric air, water resources, and soil; a planning system to achieve standards; and a system for monitoring and evaluation. Implementation of the Roadmap will contribute to improving the quality of the environment, as well as improving the health of the population of the Republic of Kazakhstan.

Environmental permissions: Building on the analysis of legal and institutional gaps and needs for the system for environmental permits in Kazakhstan, in 2021 PAGE finalised a set of draft regulations including the following: i) Rules for issuing environmental permits, ii) Rules for Development of Environmental Efficiency Improvement Program, and iii) Rules for Development of Environmental Action Plan. A stakeholder consultation was organized on 22 February 2021 with participation of more than 90 representatives of state institutions, industry, and NGOs.

Assessing the Economic Impact of the Carbon Border Adjustment Mechanism

In July 2021, the MENRG formally requested PAGE to support a study on the impact of the European Carbon Border Adjustment Mechanism (CBAM) on Kazakhstan's economy. The European Green Deal (announced in December 2019) aims to achieve climate neutrality by 2050 and proposed a CBAM for selected sectors to reduce the risk of carbon leakage. With an almost 40% share in its total external trade, the EU is Kazakhstan's biggest trade partner, and it can be expected that the CBAM will have a significant effect on the economy of Kazakhstan, especially considering that industries involved are resource and energy intensive. As the CBAM is one of the main elements of EU's green recovery policy, this work can support the Kazakh economy to adapt to the challenges and realities in a post-pandemic world and will be conducted as part of the PAGE green recovery support.

At the Green Economy Council Meeting in June 2021, the Prime-Minister called for an intergovernmental working group to assess the impact of the CBAM on Kazakhstan's economy, formally requesting PAGE to support such a study. This study will require close

coordination by the Ministry of National Economy, which regulates economic development and strategic planning, as well as the MENGR, which is involved in the formulation and implementation of the state policy of environmental protection and control and supervision of the national Emission Trading Scheme (ETS). The inter-ministerial collaboration that will ensue around this work is an important step towards strengthening national organs charged with monitoring progress towards green economy, such as the High-level Green Economy Council.

A team of international experts was engaged to conduct the study (the same team will also lead on the GEC update), with support from a national expert provided through collaboration with Economic Research Institute, with work having started in November 2021. Given the export commodity dependence of the economy, the study will include an in-depth analysis and estimation of possible benefits and potential costs associated with CBAM using macroeconomic computable general equilibrium modelling (CGE) to trace the effects on GDP and government revenues. The modelling exercise will take place in early 2022, followed by an impact assessment and the provision of policy recommendations.

Supporting Socio Economic Impact Assessment for COVID-19 recovery

Within the work on the COVID-19 response, PAGE helped develop the [second phase of the Socio-Economic Impact Assessment \(SEIA\) of COVID-19 in Kazakhstan](#), initiated by UN agencies in the country under the leadership of the UN Resident Coordinator. The final Assessment Report was finalized in June 2021. The second phase provides a more in-depth impact study of the COVID-19 outbreak on different groups of the population who are most susceptible to the socio-economic shocks associated with the COVID-19 crisis. The assessment developed a set of gender-sensitive policy recommendations for the Government, the UN System and development partners to further support the Government with medium to long-term responses and recovery measures. These measures relate to employment, income, reduced economic activity (including green recovery) and social protection, including social assistance and social benefits.

Supporting policy change across a wide range of sectors and thematic areas (Outcome 2):

Redirecting emission payments to promote green SMEs

MEGNR and PAGE, led by UNIDO together with an earlier UNDP project (on energy efficiency in buildings), initiated a pilot project activity that directs emission payments to finance green SMEs with high potential to reduce emissions. This project's main objective is to promote green business and create green employment by increasing the efficiency of emissions payments in reducing negative environmental impacts, creating favorable conditions for the implementation of "green" projects by SMEs, and providing financial assistance incentives. The Akimat of Pavlodar oblast - a region that generates a quarter of all of Kazakhstan's emissions, mainly from industrial facilities - agreed to pilot the initiative in the region.

In 2021, national experts were engaged to conduct an [initial emission payments context analysis](#), that reviewed environmental payments regulation, analysed financial flows within the local budget of the Pavlodar region, examined existing financial arrangements within the local/regional budgets, and set out the general priorities of the Pavlodar region. Analysis showed that the volume of emission payments to regional budgets had been increasing in recent years; however, during the period under review, less than 50 per cent of the payments were used to solve environmental problems.

As preparatory work, the PAGE expert team held a series of consultations with various government departments, including those of Entrepreneurship, Environment, Budget Planning, Finance, Housing and Utilities, and Energy, as well as the social-enterprise corporation Pavlodar (SEC Pavlodar) and the Damu (Entrepreneurship Development) Fund to design the piloting scheme. Following consultation, the Damu Fund announced its interest in participating in the project as a co-investor, and an implementation plan and pilot project scheme were developed and formally approved by the Deputy Mayor of Pavlodar region on 3 July 2021. The scheme will now be put into practice to demonstrate how emission payments can be redirected to provide financial support for green businesses.

Assessing the Feasibility of Sustainable Public Procurement

Following an introductory online workshop on Sustainable Public Procurement (SPP) in December 2020, an [“Assessment of Status and Legal Frameworks of Sustainable Public Procurement in the Republic of Kazakhstan”](#) was conducted by PAGE in 2021. Informed by questionnaires and interviews from the Ministries of Ecology and Finance, public procurement departments of Akimats, the National Chamber of Entrepreneurs, and state companies, the assessment encompasses the international obligations, legislation and agreements as well as national statistical documents, goals and plans of Kazakhstan in the field of sustainable development and public procurement procedures. It aims to support the introduction of economic, environmental and social aspects into the draft Law on Public Procurement, currently under consideration by the Parliament, that aims to increase the efficiency of state budget expenditures and strengthen support for local suppliers.

In Kazakhstan, in addition to public procurement, through which the needs of state bodies are served, there are also purchases of the quasi-public sector, i.e., procurement of companies with state participation, bringing the volume of public procurement to 43% of government expenditures and above the OECD average. The current legislative framework on public procurement in Kazakhstan meets the general principles of international laws and best practices; however, it does not apply the principles of sustainable public procurement. The assessment revealed that public procurement is essential in the system of public services and can create incentives for business transformation. It also found that some state companies are open to integrating sustainability principles in their operations and management. Building on these efforts, the development of sustainable procurement criteria for a set of priority products which will support the recovery efforts will take place in 2022.

Building institutional and individual capacity for green economy (Outcome 3)

Assessing Green Economy Learning

A draft Green Economy Learning Assessment (GELA) was conducted by PAGE, in coordination with the Academy of Public Administration (APA) and with methodological support from UNITAR, to be finalized in early 2022. The GELA aims to identify needs, priorities and possible starting points for integrating green economy principles into various education and training activities, mainly in the training system of civil servants. The assessment is a first step towards the development of a comprehensive government strategy for training civil servants on the green economy. Specific objectives of the learning assessment include identifying training priorities to promote the concept of a green economy; reviewing existing institutional capacities for the provision of relevant educational and training initiatives; and identifying opportunities to strengthen and expand training on the green economy for civil servants.

The initial findings of the GELA were used to inform the civil servants capacity building programme "Sustainable Recovery: Opportunities for a Green, Low Carbon and Circular Economy in Post-COVID-19" (mentioned below).

'Building Back Better' Regional training

The Academy of Public Administration (APA), jointly with UNITAR (in the framework of PAGE), UNDP (with support provided by GIZ) and MENRG, implemented the civil servant's capacity building programme "Sustainable Recovery: Opportunities for a Green, Low Carbon and Circular Economy in Post-COVID-19" (also referred to as Build Back Better or "BBB" training). The training took place between May and August 2021 and brought together civil servants from ministries, regional departments and local authorities from Kazakhstan, Tajikistan, Uzbekistan and Kyrgyz Republic.

The programme helped build the capacity of civil servants in Kazakhstan and neighbouring countries in the field of a green, circular economy and low-carbon development, taking into account the lessons learned from the COVID-19 and oil crises to develop a more sustainable economy in the future. As a result, Kazakhstan and neighbouring countries of Central Asia will be able to more effectively develop and implement green development programmes and policies and contribute to achieving national commitments under the Paris Agreement and the SDGs.

As part of the preparation for the training program, APA conducted an online survey to assess the needs of the target group related to learning about the green economy and low-carbon development. For four weeks, 261 people took part in the survey with respondents representing various government agencies. The assessment revealed a significant gap in understanding the concepts and approaches to the development and implementation of local development plans and programmes that meet the strategic goals of the country in

transitioning to low-carbon development and building a green economy. Following the survey, the training program consisted of the following four stages:

- 1) An **introductory course on low carbon development and a green economy** aimed to familiarize civil servants with the basic concepts and approaches related to green economy and low carbon development approaches. The course had four lecture-style online modules developed by APA, with support from UNITAR.
- 2) An **advanced course** designed as a live virtual training over a period of 3 half-days. In 14 groups of around 50 participants, 708 civil servants were trained between June and August 2021. Participants were provided with theoretical and practical knowledge on the topic of an inclusive green economy and the prospects for low-carbon development in Kazakhstan and the Central Asian region. The training was led by experienced trainers from APA, with guest speakers from international development agencies and partner organizations (such as UNEP, GIZ, OSCE) delivering insights on specific issues.
- 3) A **practical module** took place back-to-back with the advanced course over two half-days. During the practical module, participants were able to apply new learning to solving the challenges countries encounter when making a "green" economic transformation. Participants had to choose one of six proposed focus areas for group work and develop their own draft Roadmaps for the Development of My City / Village / Region until 2050 according to the templates developed by the trainers.
- 4) A **peer-learning session** is planned in 2022 as a continuation of the training to reunite training participants, including heads of departments, vice-ministers, and representatives of Kyrgyzstan, Uzbekistan, Turkmenistan, and Tajikistan at the senior level in a session to exchange experiences on the development and adoption of measures for sustainable economic recovery. Currently, suitable experts from Germany and European Commission are being identified to take part.

708 participants were awarded certificates on successful completion of the training programme. While participants commented that an offline training format would be preferable, as many officials faced difficulties with bad connections and competing work schedules, more than 90% of the participants indicated that they found the training useful and would participate in similar trainings in the future.

Based on the GELA findings and the experience with the BBB training, the APA is interested in developing a regular low-carbon development training program, to be included in the official training calendar of civil servants in a blended format of e-learning courses and online and offline training. Such work would be in line with the mandate and objectives of PAGE and would provide sustainability to capacity development efforts on green, low-carbon development in Kazakhstan.

Additionally, in the framework of the BBB training, a final 2-hour online conference is planned to bring together all training participants, as well as high-level representatives from APA and MENRG. The best projects developed during the training will be presented, alongside short presentations of activities delivered by PAGE. A green economy event had

been planned in Kazakhstan since the inception of the programme in 2018 but had to be put on hold and rethought with the outbreak of the pandemic. Although this format does not replace the original idea of the high-level event, it nonetheless allows PAGE to present its work to a wider audience within the country.

Peer learning with Kyrgyz Republic on environmental education and public awareness

A peer-learning session was organized on 30 April, where representatives of government ministries, including the Ministry of Education and Science and MEGNR, and national consultants from Kazakhstan and Kyrgyz Republic, shared experiences on working on the environmental education and public awareness. At the time of the exchange, Kazakhstan was in a process of developing a policy framework for eco-education and public awareness on ecological issues under as part of the Green Kazakhstan National Project, which PAGE is supporting, and the Kyrgyz Republic had recently completed a draft Climate Change Learning Strategy, with support from UN CC:Learn. The experience-sharing event reviewed policy developments in both countries and discussed challenges and opportunities of introducing environmental aspects into the education system. This included the questions about how to finance the development of eco-oriented education and improve the ecological culture of the population as well as the distribution of roles for the development and implementation of activities.

Building public awareness and support for inclusive green recovery

With the aim of raising public awareness and support for green recovery, PAGE, led by UNDP, initiated a TV project in the format of a talk show, with participation of a presenter and 2-5 speakers. Planned running time is 25 minutes to be broadcasted in evening prime time 21:00 (with reruns throughout the week). The initiative is to be duplicated on business information channels, with textual support in the format of news articles.

[Kazakhstan in the 2021 Online Annual Report](#)

1.16 BARBADOS

Country context and PAGE portfolio

Barbados ranks among the highest in the Caribbean Small Island Developing States (SIDS) region according to the 2019 Human Development Index. With a diversified, serviced-based economy buttressed by the tourism and international business sectors, Barbados has successfully employed a blend of good governance, social and economic policies for the betterment of its citizens. However, the negative effects of recent global financial and economic crises, its dependency on imported fossil fuels, and constant changes in

international development and financial policies, have placed pressure on the country's economy, society and environment. Limited access to natural resources, coupled with its vulnerability to climate change as a small island developing state, underlines the importance of building a resilient economy and achieving an integrated ecological, economic and social wellbeing.

Recognizing these challenges, the Government of Barbados has continued to make strong policies and commitments to sustainable development through social compacts with the private sector and trade unions, and strategic frameworks, such as the National Sustainable Development Policy, the National Strategic Plan (2006-2025) (NSP) and the 2007 Green Economy policy framework. The NSP provides a framework for Barbados to become a fully developed society that is prosperous, socially just and globally competitive. With six strategic goals, the Plan speaks specifically of 'Building a Green Economy: Strengthening the Physical Infrastructure and Preserving the Environment' (under the Strategic Plan's Goal 4).

Barbados joined PAGE in 2016 with a focus on the implementation of the NSP and other green economy objectives that build on previous work conducted by UNEP in 2010-2012. After an inception mission in 2017, the commencement of a comprehensive PAGE programme was delayed by several factors beyond the control of the partnership. General elections held in 2018 led to a change in administration and the need to reconfirm national priorities. PAGE's relevance to national objectives was reconfirmed with the request to incorporate blue economy principles. PAGE officially re-engaged with the government in November 2018 in a joint mission holding high-level consultations. The final mission report and revised PAGE workplan were thereafter presented to the government in January 2019 for official cabinet endorsement, a step required by national processes for the country programme to commence. This fell into a time when Barbados was undergoing an austerity programme with all public policies and programmes again being reconsidered. The endorsement for PAGE to start its programme was provided in September 2019, confirming key thematic areas such as green and blue jobs assessment, youth engagement, environmental goods and services, greening/resource efficiency in industry, and individual and institutional capacity building for IGE at the tertiary levels.

PAGE activities in Barbados are expected to contribute to the achievement of SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), SDG 14 (Life Below Water), and SDG 17 (Partnerships).

In 2020, with the COVID-19 pandemic and related impacts on travel and supply chains, the tourism sector in Barbados was devastated, resulting in high unemployment rates. Against this background, in September 2020, the government announced a one-year USD 40 million COVID-19 relief programme and a USD 300 million stimulus package. Key areas of focus include tourism, agriculture, infrastructure, manufacturing, support to micro, small and medium sized-enterprises and home ownership. In line with this, PAGE developed targeted

activities focused on boosting the circular economy and promoting green consumption and production practices to support green economic recovery.

Progress in 2021

Meeting of the Forum of Ministers of Environment of LAC

PAGE Barbados supported the XXII Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean in February 2021 that addressed the pressing environmental issues of the region, opportunities for green recovery, and urgent actions for nature in the next decade to achieve the SDGs. The Meeting represented 26 months of work and culminated in eight decisions and a political declaration, including a Statement on COVID-19 Sustainable Recovery. The Forum presented political support for the environmental dimensions of sustainable recovery from the COVID-19 pandemic. The Government of Barbados recognized PAGE for its support to the Meeting, specifically in reference to its efforts on the Green Economy Knowledge Hub, sustainable consumption and production and circular economy.

Quantifying Green and Blue Jobs

Under PAGE, the ILO drafted TORs for research on the current situation of Green and Blue Jobs in Barbados, both in qualitative and quantitative terms, under the module of the Labour Force Survey (LFS). This consultancy will be conducted with the view to prepare and inform the green jobs survey, which will be completed once the restrictions under the COVID-19 pandemic soften. The TORs were shared with representatives of the Ministry of Labour and other relevant institutions, such as the UWI. The LFS is currently on hold as the National 2020 Consensus is underway. The Barbados Statistical Service expressed a strong commitment to incorporating the Green and Blue Jobs Module into the LFS, once the survey recommences.

Sectoral assessment on Barbados Environment Goods and Services Sector

TORs for a study on Trade Assessment of the Barbados Environment Goods and Services Sector were drafted in cooperation with the University of West Indies. The goal of the study is to contribute to improving the understanding of the nexus between the pursuit of a liberalized international trade regime and the development of a "green" economy in a small, open economy". The analysis resides within the wider policy prescriptive context of international trade and development with a special focus on the sub-set of Environmental Goods and Services (EGS).

Establishing a Programme for Green-Blue Economy Learning

PAGE is supporting the Cave Hill Campus of the University of West Indies (UWI Cave Hill) and the Government of Barbados to implement a Programme for Green-Blue Economy Learning (G-BEL). In March 2021, PAGE and UWI Cave Hill signed an agreement as a first step towards the delivery of the G-BEL, with the ultimate goal of developing individual and institutional capacities in Barbados and other SIDS countries in the area of green and blue economy and sustainable development. A feasibility study was conducted for the establishment of a SIDS-SIDS Green Economy Knowledge Hub, to be followed by a Green

and Blue Learning Needs Assessment. In addition, a business plan was developed and funding resources for the implementation of the Hub are being explored.

Barbados in the 2021 Online Annual Report

1.17 GUATEMALA

Country context and PAGE portfolio

Guatemala is the largest economy in Central America. Despite relatively high economic growth during the last decade, progress in inequality or poverty reduction has been limited. The country's national income depends largely on the agricultural sector, the export of a few commodities and remittances from Guatemalans overseas. It is also vulnerable to climate change and extreme weather conditions and faces persistent challenges around the loss of natural resources, deforestation, increased soil and water pollution, and growing waste levels. These natural environmental challenges also carry significant socio-economic consequences, compounding vulnerability and exclusion.

In recent years, Guatemala took steps to promote the greening of its economy through the deployment of its Environmental Fiscal Strategy. The policy envisages a set of fiscal instruments to improve pricing of environmentally harmful economic activities, thus supporting national climate change and sustainability objectives.

Led by the Ministry of Public Finance and endorsed by other ministries and national stakeholders, Guatemala joined PAGE in 2018 with the objective of reformulating economic policies around sustainability to support social inclusion, green jobs and green growth. PAGE met with national counterparts in September 2018 to discuss objectives and parameters for work in the country. Towards the end of 2018, the Ministry of Public Finance was restructured. This was followed by general elections in 2019, with a new President assuming office in January 2020. While changes in the national government led to an extension of the inception phase for PAGE, efforts in 2021 were focused on completing a national green economy stocktaking study, identifying priorities, and supporting the implementation of the Environmental Fiscal Strategy.

In 2020, the outbreak of the COVID-19 pandemic further delayed the initiation of the PAGE programme in Guatemala which went into a six-month long lockdown. Within this context, Guatemala's Economic Recovery Plan, focused on job creation and strategic investments, was launched at the end of 2020. To promote a green recovery, PAGE developed a proposal to strengthen sustainability objectives within existing policy frameworks such as the Strategy

for Strengthening Value Chains, the Low Emissions Development Strategy, the Environmental Fiscal Strategy and the above-mentioned recovery plan.

PAGE work in Guatemala aims to contribute towards the achievement of several SDGs, including SDGs 12 (Responsible Consumption and Production), 13 (Climate Action), 15 (Life on Land) and 17 (Partnerships for the Goals).

Progress in 2021

Establishing the basis for green economy transformation

In September 2021, the PAGE program was officially formalized in Guatemala by the Ministry of Finance, followed by registration of the PAGE programme by SEGEPLAN. A PAGE Governance Roundtable with several government institutions including the Ministry of Finance, the Ministry of Economy, the Ministry of Environment and Natural Resources, the UN Resident Coordinator (UNRC) and PAGE agencies is expected to formally assume the role of the PAGE National Steering Committee in early 2022. This steering mechanism will assume technical and political coordination among government counterparts, agencies and UNRC.

PAGE, led by UNITAR, coordinated several meetings in preparation of a [high-level virtual event](#) following the successful formalization of the PAGE project in 2021. The launch event was held on 19 January 2022 with the Vice Minister of Finance, in the presence of the UNRC and high-level representatives from the Ministry of Environment and Natural Resources and the Ministry of Economy. During this event, the Interim Minister of Industry, Energy and Mining from Uruguay, shared his country's experience of achieving results with PAGE.

Joint analysis with UNRCO on COVID-19-related Impacts on a Green Economy

In March 2021, an Analysis was published on the [effects of COVID-19 on the green economy of Guatemala](#), coordinated by the UNRCO Economist. Building on this, PAGE released an [Addendum Report](#) to this Analysis in September 2021. The report analysed the impacts of COVID-19 on key areas relevant to PAGE's work in the country, such as manufacturing and construction. It also explores entry points related to digital economy and public financial management. The core results entail a series of recommendations for strategic action to be considered in future work-planning. In addition, the study provides information on existing sustainability initiatives and institutional points of contact to initiate and deepen the national dialogue related to recovering better from the COVID-19 pandemic.

The manufacturing and construction sectors are key for green economy strategies due to the large impact these activities have on the environment and the opportunities to converge towards more sustainable and equitable practices. Both sectors experienced significant impacts from the pandemic, and consequently their reactivation has been very relevant in the period of economic recovery, due to their contribution towards employment and GDP. As such, PAGE will implement related activities, including organizing a stakeholder discussion on circular economy and green industry.

Supporting implementation of the Environmental Fiscal Strategy

Throughout 2021, PAGE continued to support implementation of the Environmental Fiscal Strategy.

Quality of public spending on the environment: In 2021 an [Environmental public expenditure classification guideline for the municipal level](#) was developed by PAGE in collaboration with the Biodiversity Finance Initiative (BIOFIN), helping to support the implementation of the Environmental Fiscal Strategy, specifically its strategic pillar 2 (Municipal financial assistance). In Guatemala, municipalities are responsible for the local management of their territory, including its natural resources. However, according to the Ministry of Public Finance, the concrete results of the municipal public funding on environmental protection are unknown, which raises the question of transparency and quality of spending in these areas. The classification guideline helps local municipalities to improve transparency in the recording of public expenditure and classifying expenditure according to key areas such as environment, climate change and biodiversity. This guide was developed in a participatory manner with the support of local municipal authorities and the Ministry of Finance. As a result, five municipalities increased transparency in the recording of public expenditure and promoted a more effective use of environmental funds by adopting this classification guideline.

Access to green and climate finance: In 2021, PAGE developed a [guideline to access green and climate finance](#) in collaboration with the Biodiversity Finance Initiative (BIOFIN), which supports the Ministry of Finance in designing and implementing innovative financing solutions to mobilize resources for greening the economy as well as for adapting and mitigating climate change, in line with strategic pillar 5 (Access to green and climate finance) of the Environmental Fiscal Strategy. The guideline provides options to secure match-funding as required by international green and climate financing. It also offers some insights into strengthening green fiscal policy by reforming tax legislation, creating new taxes and environmental charges.

Guatemala in the 2021 Online Annual Report

1.18 INDIA

Country context and PAGE portfolio

With one-sixth of the world population, India is the second most populous country in the world but has less than three per cent of global land surface area and is likely to face

significant resource constraints in the near future. India's Gross Domestic Product (GDP) and per capita income have been increasing for many decades. At the same time, the gap between consumption and supply of resources is also steadily increasing along with exacerbation of environmental challenges such as climate variability, poor air quality, over-exploitation of groundwater, water scarcity, increasing inland and coast salinity, and degradation of land.

Against this background, India has recognized the need to develop transformative, integrated, and all-inclusive roadmaps that embed the principles of inclusive, green economic growth in planning, programming and decision-making, across different sectors of the economy. The Government of India has already made concerted efforts to support the achievement of the SDGs and its Nationally Determined Contribution (NDC) and has shifted from focusing on select initiatives to embracing large-scale, integrated economy-wide approaches, including resource efficiency, circular economy and sustainable consumption and production. In line with this ambition, India has developed several policies, programmes and action plans, including, among others, a National Resource Efficiency Policy (NREP), sectoral action plans on circular economy, a National Policy on Biofuels, Vehicle Scrapping Policy, national and subnational plans for climate change, and a Smart Cities Mission. At the subnational level, various states are moving towards a low carbon climate resilient pathway.

When India joined PAGE in 2018 under the leadership of the Ministry of Environment, Forest and Climate Change (MoEFCC), a national green economy stocktaking, and prioritization exercise helped to define resource efficiency as the main entry point for PAGE support. At the sectoral and thematic level, the focus was set on circular economy, eco-labelling, green manufacturing and sustainable public procurement, working with NITI Aayog (National Institution for Transforming India), MoEFCC, the Ministries of Textiles and Finance respectively. PAGE in India specifically aims to develop replicable models and enhance cooperation on initiatives between national and subnational levels, with special attention given to the States of Madhya Pradesh and Uttarakhand. This is complemented by a comprehensive capacity building effort on green economy, targeting officials of Indian Civil Services and other specialized services, such as the Indian Railways.

In 2020, the COVID-19 pandemic caused GDP to fall by 7.9 per cent, hitting the informal sector particularly hard and leading to a severe socio-economic and health crisis. However, a variety of measures implemented since 2020 to support recovery from COVID-19 under the so called 'Atmanirbhar Mission' for a self-reliant India, amounting to investments of 15 per cent of India's GDP, helped to set back the national economy on a growth trajectory with prospects of double-digit GDP growth rates in the coming years, according to the International Monetary Fund. In line with the earlier policy approach, the country aims to ensure that this economic growth is low carbon, resilient, inclusive, just, green, and sustainable.

The National Resource Efficiency Policy, developed in 2019 and put out for wide consultation is likely to be adopted soon. It is expected to guide India's States in the development of their own resource efficiency strategies. To expedite the transition to a circular economy, the government formed 11 committees that will recommend action points on circular economy in different areas.

India's upcoming presidency of G20 in 2023 provides another opportunity to push the circular and green economy. For the first time, the G20 has identified sustainable and responsible consumption and production, along with the provision of finance and technology, as critical enablers for achieving the climate goals.

PAGE activities in India are contributing towards the achievement of SDGs 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 13 (Climate Action) and 17 (Partnerships for the Goals).

Progress in 2021

Developing a strong national foundation for PAGE support (Outcome 1)

During the inception phase, through stakeholder consultations and a green economy national stocktaking study, PAGE supported the identification of priority activities relating to policymaking and capacity development on Inclusive Green Economy (IGE). Initially the start of a more comprehensive programme in 2020 was delayed, as PAGE was waiting to receive an endorsement from the newly formed National Steering Committee (NSC). The COVID-19 pandemic and associated lockdown provided an additional challenge, with India being hard hit and experiencing a significant economic crisis.

The endorsement of the forward-looking workplan by the National Steering Committee in November 2020 marked an important milestone for the start of a full PAGE programme. The NSC brings together key government institutions such as the MoEFCC, the Ministries of Micro, Small and Medium Enterprises (MSMEs), of Labour and Employment, of Finance and of Skill Development and Entrepreneurship, as well as NITI Aayog as the government's national public policy institute. Additional national stakeholders representing civil society are also represented, and public policy institutions or national implementing partners can be invited to participate, based on demand.

Working closely with these partners, PAGE is contributing with its current workplan to the cross-sectoral priorities for sustainable development, resource efficiency and circular economy, with MoEFCC leading the development and adoption of the National Resource Efficiency Policy, and NITI Aayog leading the development of circular economy plans in 11 different areas, as well as monitoring SDG implementation at the national level, encompassing several areas that PAGE supports (further details under outcome 2 below).

In 2021, PAGE agencies started to explore new area for cross-sectoral support focused on larger sectors and stakeholders which would create a large-scale impact on future economic growth. In this context, mainstreaming principles of sustainability and inclusive green economy across programmes for rural development was identified as one of the important intervention areas. In India, almost 70 per cent of the population is classified as rural, meaning efforts to integrate sustainability into rural development programmes can have far-reaching and transformative impacts. In June 2021, a meeting was held between UNEP and the Ministry of Rural Development in which the Ministry invited PAGE support in the development of a related policy paper.

Shaping sectoral and thematic policy reforms (Outcome 2)

Developing roadmaps to transform the manufacturing sector

The traditional drivers for economic growth and job creation, such as manufacturing and international trade, are rapidly changing, including through globalization of value chains and reform towards circular and low carbon economy. These transformative changes offer opportunities to create decent employment and entrepreneurship in line with national priorities. A broad-based reflection and dialogue on India's drivers for economic growth and job creation commenced, considering these global realities and national challenges, to identify and inform future policies and strategies and build both momentum and capacity for low carbon socio-economic and employment growth.

With an objective to enhance India's manufacturing capabilities and exports, the government introduced the Production-Linked Incentive Scheme in 10 key sectors (including textiles) to make Indian manufacturers globally competitive, attract investment and ensure efficiencies. Besides agriculture, the textile sector in India is the largest employment generator in the country, and the upcoming National Textile Policy will, inter alia, help enhance export performance and create better employment opportunities.

In line with this objective, the green economy stocktaking study analysed trends, initiatives, and challenges in key economic and environmental sectors, including manufacturing, agriculture, mining, cities, water and energy. The study identified key themes for PAGE support, including the contribution of manufacturing to a just transition to low carbon, resource efficient and circular economy, particularly in Small and Medium Enterprises (SMEs).

This served as the background for a study conducted in 2021, led by UNIDO and the ILO, with the title: *'Shaping India's Inclusive and Green Economy: Mobilizing Green Transformation in Select MSME Manufacturing Sectors'*. Following consultations with stakeholders (including representatives from industry associations, think tanks, research organizations, civil society, PAGE agencies and government partners), the textile and garment sectors were identified for further analysis. The study includes an appraisal of key macro drivers for economic growth and employment creation and maps high impact

opportunities to initiate the transition towards inclusive green growth and operationalize inclusive green economy transformative roadmaps in the manufacturing sector, with special focus on energy, textiles and garments sectors. The sectoral roadmaps outline a longer term (e.g., 10 year) vision, practical measures to reach this vision and necessary changes with respect to government policy, industry action, organization of markets and value chains, skills, and technology and innovation. The main findings of the study were summarized in a brief document 'Highlights of Green Jobs and Just Transition directions in India manufacturing sector' to facilitate dissemination to stakeholders in the sector.

Implementing Sustainable Public Procurement

In India, the total volume of public procurement is estimated to constitute about 20-25 per cent of the nation's GDP; therefore Sustainable Public Procurement (SPP) can play a large role in driving resource efficiency and shifting markets in the direction of a green economy. A comprehensive and well-designed national level SPP policy was identified as a key instrument to promote resource efficiency in the draft National Resource Efficiency Policy and the 2017 Resource Efficiency Strategy Paper from NITI Aayog (the government's national public policy institute). In 2018 the government set up a Task Force on Sustainable Procurement, comprising of representatives of UNEP, the MoEFCC, Ministry of Railways, Bureau of Indian Standards, Bureau of Energy Efficiency and Government e-Marketplace (GeM), Confederation of Indian Industry (CII), and the Procurement Policy Division (PPD) and Department of Expenditure (DoE) of the Ministry of Finance (MoF).

In 2020, UNEP, outside of PAGE as part of its SPP programme, prepared a report on SPP in India in consultation with the MoF. Based on the report, a preliminary market assessment was done and SPP criteria developed for two select priority products - Writing and Printing Paper, and Room Air Conditioners (RACs). The report was delivered to the national Task Force on SPP, and, following stakeholder consultations, Green RACs (wherein buyers will be given an option to select sustainable RACs, over conventional RACs) were launched on the Government e-Marketplace as the first of this kind of initiative on 5 June 2021, on World Environment Day. So far nearly 18,000 Green RACs, worth USD 10 Million, have been purchased through GeM.

Building on this, PAGE submitted a draft SPP Action Plan to the Ministry of Finance for review, providing a way forward for integrating sustainability into the public procurement process more broadly. In parallel, other services, including waste management as a service and cooling services, were identified for the development of SPP criteria and integration into the public procurement platforms.

Additionally, the government, represented by the MoF, became a member of the Asia Pacific Green Public Procurement Network, jointly organized by UNEP and the Korean Environmental Industry and Technology Institute (KEITI). The purpose of the network is to enable exchange of knowledge between the Asia Pacific regions in the field of SPP implementation.

Further, a course on SPP was developed by UNEP and the International Training Centre (ITC) of the ILO at global level. This self-paced online course explores the key concepts of sustainable procurement and how reach sustainable development objectives. PAGE will support outreach to key stakeholders at the national level, such as the MoF, to promote the training programme for strengthening national knowledge and national initiatives on SPP in India.

Building a strong ecolabelling framework

PAGE aims to strengthen the existing ecolabel programme in India, developing ecolabels for selected consumer products and supporting the development of an overall framework for a more comprehensive ecolabeling programme in India. Ecolabelling can effectively identify and establish markets for green and resource efficient products, encouraging a move towards eco-friendly consumption patterns and providing incentives to governments, manufacturing entities, and consumer organizations to adopt sustainable best practices.

The existing ecolabel programme - the 'Ecomark' scheme - was initiated by the Ministry of Environment and Forests and Climate Change (MoEFCC) in 1991, but received very limited uptake. Since then, ecolabelling has gained greater significance, because of the impetus on sustainability in various policies and programmes. The 2006 National Environment Policy of India recognises the role of ecolabels in promoting environmental conservation, and the draft National Resource Efficiency Policy recognises the need for a robust awareness generation campaign and marketing strategy to disseminate knowledge of the environmental impacts of products.

Against this background, PAGE is supporting the MoEFCC to analyse past and current national and global level interventions in ecolabelling and provide the basis for the development of an overarching framework for ecolabeling in India, including key features, an institutional structure for programme development and implementation to ensure benefits for consumers, producers, and the society at large. In 2021, the MoEFCC, the lead ministry for PAGE in India, created an advisory committee on ecolabelling that will guide in strengthening the existing eco-mark scheme and in the development of an overall framework for an ecolabeling programme in India. In 2022, PAGE will develop an ecolabel for 1-2 select product categories and generate awareness for strengthening and effective implementation of the ecolabelling programme through communications and capacity building activities.

Promoting Biodiversity financing through Access and Benefit Sharing (ABS)

Building on the work launched in 2019, UNDP, with additional PAGE funds and in collaboration with BIOFIN, is supporting India in the development of a methodology for sharing benefits and disbursing funds accrued through the access and benefits sharing (ABS) mechanism provided by the National Biodiversity Authority and State Biodiversity Boards. The estimated revenues available for sharing are in the range of USD 200 million, providing a significant pool of funds potentially available for conservation and the development of sustainable livelihoods.

In October 2021, the National Biodiversity Authority (NBA) of India constituted a working group to develop a robust implementation framework to increase financial flows from ABS in the country as well as develop methodologies for a potential ABS assessment in India and elsewhere. The working group deliberated and prepared draft guidelines for identifying interventions for the use of ABS funds by the National Biodiversity Authority, State Biodiversity Boards and the Local-level Biodiversity Management Committees. A draft guidance document was prepared to establish a Local Biodiversity Fund (LBF), which will invest ABS funds in ecosystem restoration projects.

In order to effectively address questions related to implementation, a [NBA-UNDP webinar series](#) with 10 sessions on the Biodiversity and Biological Diversity Act 2002 was organized from 22 May 2020 to 24 February 2021, during which leading experts and practitioners shared their professional expertise. Stakeholder consultations were also held to explore the role of technologies such as the blockchain to improve the ABS compliance and to ensure financial flows. Some of the innovations attempted under this finance solution include the development of a voluntary certification scheme through the Quality Council of India (QCI) to incentivize ABS compliance both legally and financially. Follow-up activities to register the logo are currently underway.

Building individual and institutional capacities (Outcome 3)

Assessing Green Economy Learning at the State level

State governments in India are the key drivers for achievement of the SDGs at the national level, through SDG localisation at the subnational level. NITI Aayog undertakes periodic reviews of the States' performances against SDG indicators and ranks them based on progress made from previous years. In this context, there is a need to assess and strengthen the capacities of states and the leading departments for this work, enabling them to better include SDG principles in their respective programmes and activities, and to monitor and report against them.

Against this background, PAGE started to work at the subnational level in the States of Madhya Pradesh and Uttarakhand with the aim to strengthen institutional capacities to mainstream IGE principles into state level economic planning, with a specific focus on SDG 11 - Sustainable Cities and Communities and SDG 13 - Climate Action. This involves the assessment of capacity gaps and training needs of nodal institutions and other stakeholders, identification of entry points for inclusion of IGE principles, piloting capacity building approaches, and developing inter-state and inter-sectoral learning platforms for replication amongst departments and states. The two states representing two different geographies (Hilly- Uttarakhand and Arid Plains- Madhya Pradesh) were chosen as they both already feature a local UNDP presence, and UNIDO and UN Habitat are also working in these two states in similar thematic areas, providing favourable conditions for PAGE engagement.

In Madhya Pradesh, the Environmental Planning and Coordination Office (EPCO) under the Department of Environment, and in Uttarakhand, the Directorate of Environment, have been identified as the nodal departments for this initiative. In 2021, PAGE held discussions with these departments to present the Green Economy Learning Assessment (GELA) methodology and develop a plan for the assessment of capacity gaps and training needs. Based on the assessments, targeted training modules in e-learning formats will be developed for key stakeholders in the two states, so that each state can meet its specific needs.

The relevant government representatives also received further insights into the use of the GELA methodology through an exchange with PAGE Indonesia, organized as part of the global series of peer learning webinars in August and November 2021. This allowed for a discussion of the main steps in the process and the findings of the GELA conducted in Indonesia, as well as provided a better understanding of the main gaps and entry points for scaling green economy learning in India.

Laying the groundwork for capacity building in 2022

In 2021, several discussions were held with key experts on the need and feasibility of establishing and institutionalising a Centre of Excellence on Circularity. The Centre would provide knowledge and expertise on circularity and support across sectors in an integrated way, which is currently not available in India in this format. In this regard, meetings were held with various experts and agencies, including among others, representatives from government departments, technical institutions and representatives of the Chatham House. All the experts and agencies consulted so far have supported the idea of establishing a Centre of Excellence on Circularity.

PAGE, led by UNEP, also initiated discussions with key agencies and experts to map opportunities for the development and institutionalisation of training and capacity building programme for officials of civil services and other specialised services, like the Indian Railways. PAGE aims to develop and rollout courses to strengthen the training capacity of the National Civil Service Training Institutions with mandates to train officials in areas pertaining to IGE and resource efficiency.

Raising awareness and promoting green economy in India

Throughout 2021, PAGE India, represented by the Project Coordinator and other PAGE agency focal points, continued to be actively involved in several outreach activities (within and outside PAGE), together with other development partners with the aim to further outreach, raise awareness and promote an inclusive green economy.

- On 24 and 25 June, and 1 July, UNEP organized a stakeholder consultation on resource efficiency and circular economy at the district level, in partnership with Angul District Administration, Government of Odisha. This initiative brought the discussion on circular economy and resource efficiency to the implementation level and has the potential of becoming a model for other districts. The consultation brought together various stakeholders from public line departments, private sector, CSOs, research institutions,

academia, and others. The Team Leader & Coordinator, European Union - Resource Efficiency Initiative (EU-REI), and GIZ India also shared the EU-REI state level experiences on resource efficiency and circular economy;

- PAGE colleagues from the ILO contributed to the Asia Pacific Climate Week (APCW) 2021 virtual thematic sessions and high-level side events (6-13 July), including on just energy transition, finance for just transition, SDG integration into business operations and supply chains in Asia, by sharing examples of work and studies conducted by PAGE in India. These events contributed significantly to the exchanges and cooperation among the participating countries (including PAGE and non-PAGE countries) in Asia-Pacific on promoting green jobs and a just transition toward a greener economy;
- An overview of PAGE in India was presented in a UN Country Teams meeting on 24 September. The meeting was chaired by the United Nations Resident Coordinator (UNRC), and the UNRC Office offered to support with communication and outreach of PAGE activities in India;
- On 29 September, the PAGE India Project Coordinator delivered the keynote address in the thematic session on blue and green economy, as a part of the UNICEF's South Asia Experts' Summit: Dialogues on the Post-COVID-19 World of Work. The summit aimed to generate key insights into the impact of COVID 19 and suggested responses providing strategic policy recommendations for a future where all adolescents and youth have equitable access to employable skills and decent work in the future; and
- On 29 October, the UNEP PAGE agency focal point participated as a panelist in a technical session on Circular Economy, Resource Efficiency and Cleaner Production for Climate Mitigation, also sharing PAGE's experiences and expertise in the area. The session was part of the Uttar Pradesh Conclave on Climate Change, 2021, which was jointly organized by the Department of Forest, Environment and Climate Change of the Uttar Pradesh Government, in collaboration with GIZ. The session aimed to build an understanding of what is being done and required actions to make circular economy, resource efficiency and cleaner production mechanisms a reality in Uttar Pradesh.

India in the 2021 Online Annual Report

1.9 MOROCCO

Country context and PAGE portfolio

Located in North-western Africa, Morocco is a lower to middle income country with an important service and manufacturing sector and a high share of the population engaged in

agricultural activities. Situated in one of the most arid areas of the world, the country is vulnerable to climate change and recent weather patterns, with highly variable rainfall and recurrent droughts, producing severe environmental, social and economic consequences. Faced with several challenges, including increases in energy and food prices, depletion of natural resources, high youth unemployment, growing social inequality, and slowing GDP growth, Morocco recognized the importance of reframing economic policies around sustainable development.

Morocco's overall commitment to inclusive green economy transition is outlined in its 2017 National Strategy for Sustainable Development (SNDD) that aims to reconcile economic growth and promote social inclusion, protection and enhancement of the environment by 2030, as well as the New Development Model in 2021, that puts social equity and sustainability at the heart of all future government policies. Prior to PAGE, the Moroccan government had already started to roll out several green economy activities that achieved significant results in the areas of renewable energy, energy efficiency, water and waste management, sustainable agriculture and aquaculture, and eco-tourism.

With Morocco officially joining PAGE in 2020 - initially with the Ministry of Industry, Trade and Green and Digital Economy, but then with the newly formed Ministry of Energy Transition and Sustainable Development as the government focal point - the launch of the programme coincided with the outbreak of the COVID-19 pandemic.

Morocco reacted quickly to the crisis, securing USD 12 billion for recovery to boost the economy with a focus on building national industry. In this context, the Economic Watch Committee (CVE) of Morocco formulated a number of recovery strategies with significant green potential. These include i) the industrial recovery plan 2021-2023, whose third pillar in particular aims to position Morocco as a low-carbon and circular industrial base, ii) the Pact for Economic Recovery and Employment, and iii) a set of sectoral recovery plans. These recovery plans complement other sectoral approaches with strong green economy dimensions, for example, the Industrial Acceleration Plan 2021-2025 (*Plan d'Accélération Industrielle 2021-2025*). PAGE's targeted green recovery efforts are in line with these policy documents and emphasize green recovery of key industries.

At the same time, the country has been undergoing a deep rethinking in its development approach. The New Development Model - a set of guiding frameworks for economic, social and environmental growth - was reviewed in a national consultation process in 2019 and reemerged in 2021. Additionally, after general elections in 2021, several ministries and agencies were reshaped to tackle new and emerging priorities, with a new Ministry for Energy Transition and Sustainable Development tasked with leading the development of green economy in Morocco and acting as the focal Ministry for PAGE. PAGE was therefore launched at an opportune time in Morocco, with green economy among the highest priorities. As such, PAGE is benefitting from an administrative "clean slate" that will encourage further cooperation, synergies and partnerships among PAGE partners and multiple national and international stakeholders.

Progress in 2021

Shaping green economy policies and green economy recovery (Outcome 1):

Establishing the foundation for PAGE support

A first Inception Meeting was held virtually on 29 July, bringing together key ministries and national agencies, PAGE agencies and key stakeholders to officially begin strategic planning in the country. This was the first of several virtual inception activities between PAGE agencies, representatives of government and key stakeholders to identify needs and demands, discuss the scope of the inception phase, initiate dialogue with a long-term perspective, and secure national engagement and ownership for the PAGE partnership. PAGE Morocco was initially launched with the Ministry of Commerce and Industry as the government focal point, however, following the 2021 general elections, the newly formed Ministry of Energy Transition and Sustainable Development became the new PAGE government focal point. The Head of Division of Partnerships at the Ministry of Energy Transition and Sustainable Development was officially appointed as the government focal point in January 2022.

The findings from the stocktaking study - to be completed in 2022 - will inform the identification of PAGE Morocco milestones and deliverables, the formulation of the annual work plans, and the results framework.

PAGE Morocco is also playing an active role in the establishment of the new United Nations Sustainable Development Cooperation Framework (UNSDCF), with focus on its first axis: an inclusive economic transformation and sustainability. PAGE was directly and actively involved in developing the first intended Result included in the United Nations Sustainable Development Framework (UNSDCF) for Morocco which states the following: *“Morocco’s economy is competitive, inclusive, and creates decent jobs, especially for women and youth, through a structural transformation based on sustainable development and resilience, including climate resilience.”* PAGE was also a key contributor during its development process, namely hosting a writing workshop for that specific Result in cooperation with the UN Resident Coordinator’s Office in January 2022.

Building knowledge to inform green economy transformation

PAGE Morocco set out - as one of its inception activities - to undertake a comprehensive stocktaking policy analysis of green economy initiatives in the country. The Stocktaking study will be developed under the guidance of the PAGE national steering committee, led by the Ministry of Energy Transition and Sustainable Development (PAGE government focal point), which is comprised of the Ministry for Economic Inclusion, Small Business, Employment and Skills, the Ministry of Economy and Finance (MEF), the Ministry of Agriculture, Maritime Fishing, Rural Development and Water and Forests (MAPDREF), Ministry of Equipment and Water, the General Confederation of Moroccan Enterprises (Green Economy Commission), the Coalition for sustainable waste management and valorization (COVAD) the Moroccan

coalition for water (COALMA), the Confederation of Democratic Workers (CDT - syndicate) and the Mohammed 6 Foundation for the Environment (FM6e).

The objective of the study is to map and capture information that can be used to track progress in Morocco's transition towards a green economy to identify main policy entry points to anchor PAGE support within existing plans, processes, and actors. The analysis will place specific focus on post-COVID-19 recovery by assessing the ongoing recovery plans in Morocco, including the industrial recovery programme post-COVID-19, and will include a chapter on greening the industrial sector. The study will also review policies, institutions and initiatives to identify opportunities to mobilize public and private financing for the green economy transition. It is expected that the study will be completed by mid-2022.

Strengthening green fiscal policy

PAGE agencies and the Ministry of Economy and Finance (MoEF) started to collaborate on the development of a green fiscal policy and will initiate a national assessment involving key finance actors in Morocco (regulatory bodies, professional associations, institutions from the banking sector and relevant finance departments of key ministries) in early 2022 to identify the highest impact areas and priority sectors for pilot activities.

Shaping sectoral and thematic studies and policy reforms (Outcome 2):

Supporting green entrepreneurship in the agro-ecological sector

In July 2021, PAGE, in collaboration with the Ministries of Agriculture and Employment and other stakeholders, started a study on organic and agro-ecological value chains in the Rabat-Salé-Kenitra region with the aim to develop a green entrepreneurship training programme and ultimately boost green business development in the sector. Under PAGE, experts are analysing the potential for economic growth, job creation and the involvement of young people and the inclusion of women in the two sectors. The research, to be finalized in early 2022, will define current gaps and future skills requirements and provide practical recommendations for supporting the technical and vocational education and training system to improve their service offer.

Building institutional and individual capacity (Outcome 3):

Foundational training on IGE and a green recovery

In 2021, UNITAR, in collaboration with UNIDO, designed a foundational training on IGE, with a focus on effective green economy responses to COVID-19. The objective of the training is to reach a common understanding of the fundamental principles of IGE among key stakeholders, discuss opportunities and challenges for a green economic recovery in Morocco, and share experiences with other PAGE partner countries. The training will also be an opportunity for national partners and institutions to become familiar with the objectives, scope and operational modalities of the PAGE project in Morocco. Thematic deep dive sessions will be led by the five PAGE agencies, including on fiscal reform (UNEP),

industrial policy (UNIDO), entrepreneurship and jobs (ILO), regional development and urban governance (UNDP), as well as education and training (UNITAR). The training was delivered in January with the participation of over 45 institutions.

Raising awareness and building knowledge of IGE

As part of a direct request from the government, through the national steering committee, PAGE is developing a communication strategy and plan for PAGE in Morocco. As a collaboration between UNDP and UNIDO, a communications expert will be hired to provide continuous support to all communication activities and actions that meet the specific needs and objectives of the project. The expert will make PAGE's activities and impact visible in Morocco, share good practices and improve the level of information and awareness among key actors on the importance of the transition to a green and inclusive economy to foster large-scale green economic recovery from COVID-19. The overall aim of the communication strategy is to ensure that PAGE Morocco meets and maintains an important audience at the national level while supporting efforts to familiarize all stakeholders as well as the general public on IGE concepts.

Morocco in the 2021 Online Annual Report

20. THAILAND

Country context and PAGE portfolio

As a dynamic and emerging market economy, Thailand has recorded strong growth in recent decades, but this has come at a high environmental cost. The country's natural resources and environmental quality are deteriorating, including the depletion of forests, reduction of soil fertility, and loss of biodiversity. High plastic and air pollution, inadequate treatment of hazardous and non-hazardous waste, and water pollution are also affecting the quality of life and resulting in economic costs. Unsustainable production and consumption patterns from the industrial sector – which accounts for almost 40 per cent of the country's GDP – is a key source of many of these environmental issues.

Simultaneously, the implementation of the Sustainable Development Goals is a priority focus of Thailand. The country has embraced green economy principles under its 'Sufficiency Economy Philosophy,' which incorporates a green growth development model. This model is deep-rooted in the [National Strategy \(2018-2037\)](#), which acts as an overarching guide for national development and a framework for international cooperation. Green economy and green growth lie at the cornerstone of the strategy to reach high-income status within 20 years, while keeping environmental considerations at the forefront. The [12th National](#)

[Economic and Social Development Plan \(NESDP\) 2017-2021](#) envisions prosperity, sustainability, and happiness while simultaneously promoting the SDGs' implementation and climate change commitments under the NDC. This provided the initial entry point for PAGE when Thailand joined PAGE in 2020. In addition, the Government put forward the Bio-Circular-Green Economy (B-C-G model) business model to promote sustainable growth that is environmentally friendly and socially inclusive.

Thailand plans to contribute towards the Bio-Circular-Green economic model, green jobs, capacity for green economy, energy transition, digitalization and financing the green economy transition, with a focus on SDGs 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production) and 13 (Climate Action).

Following the outbreak of COVID-19, the Government acted swiftly to contain the virus and rescue the economy with three sizable fiscal stimulus packages worth USD 76.2 billion or 15 per cent of GDP, with a strong commitment to 'build back better'. In support of this commitment, PAGE is evaluating key projects of the Government's 400-Billion-Baht Economic and Social Rehabilitation Fund for developing a policy strategy to guide their greening, using insights from the most affected sectors of the economy.

Additionally, with the current NESDP coming to an end in 2021, the National Economic and Social Development Council (NESDC) is developing the 13th NESDP to be implemented in 2022-2026. PAGE's work on conducting a green economy stocktaking study supported the NESDC - as a focal point of PAGE programme in Thailand - in this process by exploring the gaps and necessary drivers to expedite the implementation of Thailand's existing green economy principles.

Progress in 2021

Building the foundation for PAGE work (Outcome 1)

PAGE organized a working group meeting in February 2021, led by the National Economic and Social Development Council (NESDC) and attended by key agencies from the Ministry of Energy, Ministry of Natural Resources and Environment, Ministry of Agriculture and Cooperatives, Ministry of Digital Economy and Society, Ministry of Transport, Ministry of Industry, Ministry of Labour and Thailand Development Research Institute. To build the foundation for the implementation of the PAGE programme in the country, the working group agreed on setting up a National Steering Committee at the department level and the initiation of a green economy stocktaking exercise. Next steps of the inception phase in early 2022 include National Steering Committee Meetings to review progress and adopt the 2022 country work plan and a public event to launch PAGE Thailand Implementation Phase.

Analysis to inform a green economy transition (green economy stocktaking)

Supported by PAGE, the Thailand Development Research Institute (TDRI) as the key national partner is conducting a Green Economy Stocktaking Study to identify major gaps for a green economic transformation and entry points and recommendations for the PAGE programme Thailand. The study explores different thematic areas including green jobs, the Bio-Circular-Green economic model (BCG model), energy, finance, digitalization, and capacity development for green economy, putting the focus on SDGs 8, 9, 12 and 13. A draft report was completed in December 2021, with the consultation among key government organizations and PAGE partners and a final report expected in the first quarter of 2022. The outputs from the stocktaking highlighted the priority areas for policy restructuring in relation to decarbonisation, BCG technology and innovation, and waste management, and the enabling role of sustainable finance, capacity building, and amended regulation. These will be the basis to develop PAGE supported implementation plan in 2022 onwards.

Since the period of the current 12th National Economic and Social Development Plan (NESDP) is ending in 2021, the NESDC is in the process of developing the 13th NESDP as the national framework policy to be implemented in 2022-2026. With the green economy stocktaking study, PAGE is able to provide timely support to the new NESDP, by exploring the gaps and necessary drivers for expediting the implementation of Thailand's green economy principles, as described in Thailand's "Sufficiency Economy Philosophy". The Sufficiency Economy Philosophy is an innovative approach to development designed for practical application over a wide range of problems and situations, based on moderation, prudence, and social immunity, and uses knowledge and virtue as life guidelines.

With the support of the PAGE Green Transformation Economic Advisory Mechanism (Green TEAM), a chapter on sustainable finance was added to the green economy stocktaking to inform and guide PAGE interventions in this area. This analysis benefited from the Global Recovery Observatory and related policy brief on Thailand (mentioned below), as well as a Paper on Sustainable Finance developed by the UNRCO Economist of Thailand.

Evaluating the impact of national recovery projects (green recovery)

As part of its targeted green recovery work, PAGE is working with the National Institute of Development Administration (NIDA) on the greening of Thailand's economic and social recovery projects which cover all relevant sectors and are funded under the government's 400 billion Baht Rehabilitation Fund. This includes facilitating their alignment with key SDGs, NDCs, and other global sustainability frameworks.

In 2021, PAGE initiated the impact evaluation of the government's economic and social recovery projects through developing evaluation criteria for six selected government's projects (Development of innovative agricultural products per township; Development of pilot areas for improving quality of life based on new theory applied to 'Kok Nong Na model'; Development of pilot areas for travel safety zone; Upgrading the economy in the Central-Western Economic Corridor using BCG model; and Processing of marine food and agricultural products). The criteria involve economic, social and environmental dimensions and links to SDG and NDC targets.

PAGE, through UNIDO and UNDP, developed the green recovery evaluation study design, including the research methodology and models to draw better insight, and identified six projects to be evaluated. In 2022, the National Institute of Development Administration (NIDA) will undertake the evaluations which will provide valuable insights to the government for the development of SDG-aligned social and economic recovery policies and/or packages and related implementation strategies.

Complementing the NIDA socioeconomic analysis, PAGE, led by UNEP, is evaluating relevant sectors covered under the six projects using the SCP-HAT (Sustainable Consumption and Production Hotspot Analysis Tool). SCP-HAT serves to identify footprints and unsustainable “hotspots” from supply chain-wide consumption and production activities and analyse the environmental impacts of the sectors. Based on the findings, NIDA plans to develop a consolidated evaluation report with the input of PAGE agencies expected by end of 2022.

In addition, PAGE used data from the Green Recovery Observatory to project the likely impacts on Thailand’s environment and socio-economy, including on employment. A policy brief based on this above assessment was developed to inform the consolidated policy strategy that NIDA will develop once the project evaluations is completed. The brief summarizes the national recovery packages and their alignment with national strategies and provides comparisons and recommendations.

Building on this work, NIDA, in collaboration with PAGE partners and NESDC, will organize a consultation workshop in 2022 to share evaluation results and implications for public, private and civil society stakeholders. An international workshop will also be organized to share Thailand’s best practices and lessons learned on green economic recovery.

Building capacity to support a green recovery (Outcome 3)

The Policy Research Centre on Green Economy (PRO-Green Centre), under the Faculty of Economics at the Thammasat University and supported by PAGE through UNITAR, reviewed relevant national policies and programmes to support the development of a training curriculum for relevant line ministries on a green and inclusive recovery. The curriculum will focus on three thematic areas: green industrialization, circular economy, and green jobs and just transition.

The curriculum will be informed by a prior learning needs assessment that is being conducted with target beneficiaries and other key stakeholders. The final learning needs analysis will be circulated to PAGE partners and NESDC for review in the first part of 2022. The results of this analysis, and subsequent development of the training curriculum, will inform the design of capacity building activities and media events on a green and inclusive economic recovery that PAGE will organize in 2022. Specific capacity-building efforts will target key government officials to harness knowledge for developing policy frameworks that

support a green economic recovery, including through fostering green industrialization, applying a circular economy approach, and promoting green jobs and a just transition.

Thailand in the 2021 Online Annual Report

2. OUTCOME 3 – BUILDING INDIVIDUAL AND INSTITUTIONAL CAPACITY AT GLOBAL LEVEL

By providing global and regional training and learning programmes, PAGE strengthens the capacity of individuals, government and institutions – developing expertise and enabling them to put inclusive green economy principles into practice.

2.1 GLOBAL ACADEMY ON THE GREEN ECONOMY

Returning with a packed agenda, the [2021 PAGE Global Green Academy](#) was held from 10-21 May under the overall theme of "Driving towards greener, fair and sustainable recovery: Learning from PAGE countries in effectively responding to COVID-19 crisis". Engaging 78 speakers across 11 plenary sessions and 8 technical sessions, the Academy was presented in three languages for 120 participants from 29 countries. The fourth edition of the Academy covered various areas related to green and sustainable recovery – aiming to enhance real-time and real-world experience and knowledge sharing for policymakers and key stakeholders from PAGE partner countries to gain essential insight and support in their respective recovery agendas.

Focusing on best practices, tools and solutions, the Academy opened with a plenary session on "Recovery from the COVID-19 crisis: Understanding stimulus packages, countercyclical measures, how they come about and how they are funded" and was followed by technical sessions covering topics such as transformative changes in key sectors (renewable energy, agriculture, fishing and circular economy), the future of green construction, linking green recovery with climate objectives, and fostering a just transition. The final plenary session – "Working together on a green recovery: International partnerships, coalitions, networks and collaboration" – engaged speakers from the ILO, UNITAR, Green Growth Knowledge Partnership (GGKP), and the PAGE Secretariat.

The interactive Academy serves as an intensive capacity building tool for policy-decision makers, experts and leaders to deep dive into key topics on IGE. The Academy was capped by a Knowledge Fair, where PAGE countries were able to share experiences and best practices in virtual booths, offering an opportunity for peer learning and exchange. To extend the impact of the Academy's shared exchange, a follow-up survey was conducted, and results made available to support future exchanges. The survey found that 83% of respondents were satisfied with the quality of the academy, 81% will apply what they learned and 89% of institutions/employers represented by participants will benefit from their participation in the academy.

2.2 GREEN RENAISSANCE PODCAST

Throughout 2021, PAGE released episodes of the [Green Renaissance: How to Rebuild the Global Economy](#) podcast series on green recovery, featuring voices from government, business, civil society, youth groups and UN agencies. The podcast unpacks the complex policy questions that will determine the fate of our economies, our societies, and our planet for decades to come and presents these in a clear and accessible way. The podcast was launched as part of the “Learning for a Green Recovery Initiative” in December 2020.

Over the year, UNITAR published nine more episodes, covering a range of green economy-related topics - including green jobs, sustainable finance, circular economy, social equity, and sustainable agriculture - featuring 35 guests from around the world. Other PAGE agencies also provided support for the development of the podcast: for example, the ILO was involved in developing episode seven, which focused on green jobs in Peru. Highlight episodes included a round-table discussion with UNEP, UNECA, the University of Oxford and IMF in June on the state of play for the green recovery so far, as well as the launch of UNDP, UNEP and FAO’s report on “A Multi-Billion Dollar Opportunity: Repurposing Agricultural Support to Transform Food Systems.”

The series is being widely distributed across all major platforms and has now passed 5,000 total listens across more than 80 different countries. The series’ final episode “Pacts, Protests and the Legacy of COP26” - featuring inputs from UNITAR, a development economist and representatives of the Youth Climate Movement - was released in February 2022.

2.3 PAGE E-LEARNING PORTFOLIO

PAGE’s e-learning portfolio has grown significantly in terms of scope and reach. Today, learners can educate themselves for free and get certified in seven peer-reviewed e-courses in up to nine languages. Over the past three years, PAGE e-courses have reached 74,000 people from all over the world (approximately half from PAGE partner countries) and awarded more than 15,000 certificates of completion (see infographic below). PAGE courses are hosted on the UN CC:e-Learn platform, the single largest learning platform dedicated to green economy and climate change with more than half a million learners.

In 2021, PAGE secured the following updates and additional translations:

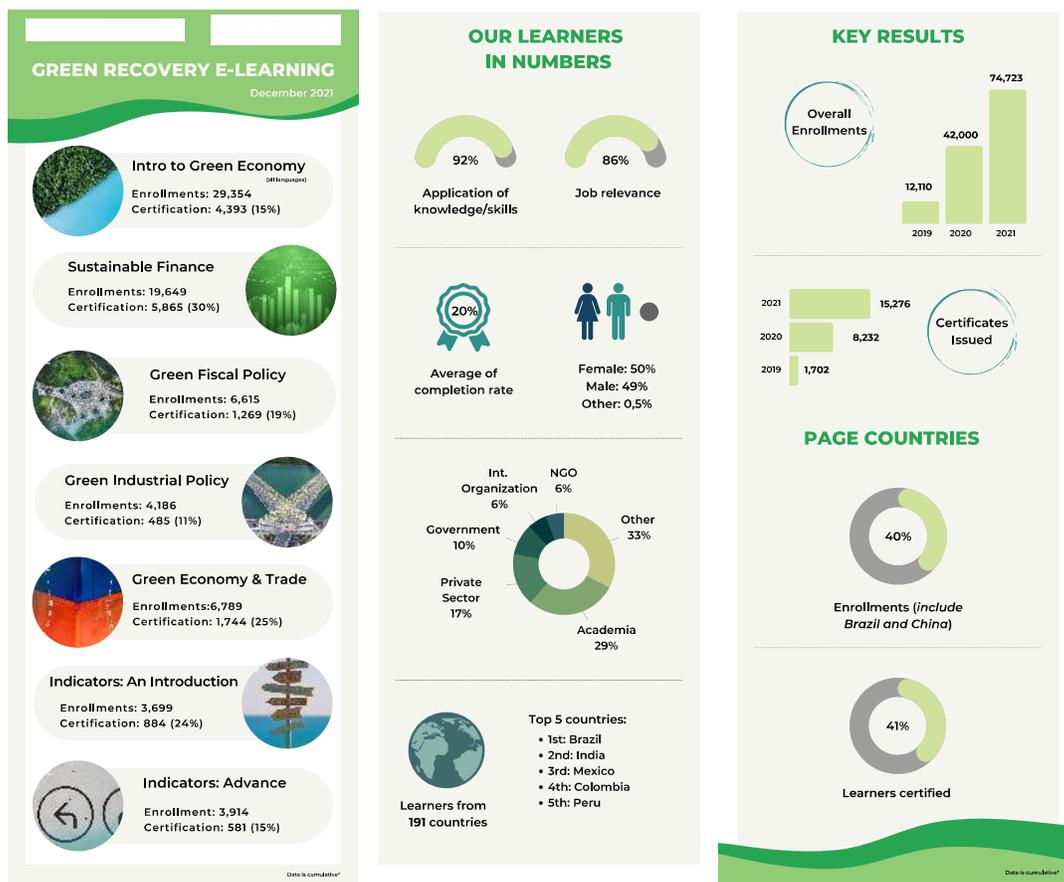
Translation of green industrial e-course: The green industrial e-course, originally published in English, was translated and made available in three additional languages: Spanish, French and Khmer.

Overhaul of e-course on sustainable finance: The [introductory e-course on sustainable finance](#) has been one of the most popular ones among the PAGE courses available on the UN CC:e-Learn platform, with 19,649 enrollments between its launch in March 2019 and December 2021 and an outstanding certification rate of 30 per cent (total of 5,865

certificates issued). The course was originally developed in 2018 by PAGE together with the Skandinaviska Enskilda Banken (SEB) and GIZ. In 2021, the course was comprehensively updated with technical inputs by the United Nations Environment Programme Finance Initiative (UNEP FI) and the International Finance Corporation (IFC).

The self-paced interactive and practical course provides learners with the basic knowledge to understand sustainable finance - its scope, its contribution to supporting action on climate change and sustainable development, the main actors and how financial institutions make decisions on sustainability-related issues. The course also allows learners to dig deeper into topics such as sustainable finance instruments, methodologies and frameworks for integrating sustainability into financial decisions and interventions, key global initiatives and sustainable finance regulations. These topics are supplemented by examples and case studies from around the world.

The target audience includes governments, academia, the financial sector, businesses, and civil society. It is also being offered to UN Country Teams in the framework of the UNDP-UNEP led SDG Task Team on sustainable finance.



2.4 ROLL-OUT AND TRANSLATION OF INCLUSIVE GREEN ECONOMY MODELLING COURSE

In 2020, UNITAR, in collaboration with UNEP, launched a package of teaching materials for a semester-long course on “Inclusive Green Economy Modelling”, which is freely available to higher education institutions around the world. The goal was to support interested universities in establishing recurrent courses on modelling. In 2021, the materials were translated into French by UNEP (in addition to the existing set of materials in English and Spanish). UNITAR and UNEP organized a webinar on 1 June 2021 to introduce the course to interested stakeholders in Francophone partner countries (Senegal and Burkina Faso) to promote its uptake and inclusion in training curricula by universities.

In 2021, UNITAR also led several bilateral discussions with interested education institutions to further explore opportunities for adopting the course. The course materials were taken up by the University of Indonesia and two other national institutions, as well as the Kyrgyz Russian Slavic University. In total, five national universities have established modelling courses based on the package provided by PAGE (three in Indonesia, one in Peru and one in the Kyrgyz Republic). In addition, three universities in Latin America confirmed interest in taking up the course: Universidad de Buenos Aires, University of Guyana and the Universidade Federal de Mato Grosso. UNITAR will continue following-up on these opportunities in 2022.

2.5 IMPACT EVALUATION OF PAGE CAPACITY-BUILDING AND TRAINING

UNITAR conducted an impact survey to understand how PAGE trainings are contributing to achieving sustainable and green growth worldwide. Participants from 10 regional and global trainings delivered by PAGE agencies, as well as learners that have taken PAGE e-courses since 2014, were invited to take part in this survey. The survey was made available in four languages during the month of December 2021, and a total of 316 responses were received. The survey covered participants from 88 countries, with 48 per cent coming from PAGE countries.

Overall, 88 per cent of respondents said that they have applied the knowledge and skills acquired through PAGE trainings. 48 per cent of respondents received a promotion or improved their job performance and 8 per cent of respondents received a financial reward after completing a PAGE training, either through a wage raise, bonus, or other financial incentive provided by the employer. Moreover, 50 per cent of respondents agreed that their well-being or mental health improved during the COVID-19 crises after taking a PAGE training or course.

94 per cent of respondents have become more confident advocating for an inclusive green economy after taking a PAGE training course. Furthermore, 93 per cent of respondents have

increased their capacity to identify and leverage opportunities for the promotion of an inclusive green economy.



of respondents say the training was useful



of respondents say the training increased their capacity to identify and leverage opportunities for the promotion of IGE



of respondents have applied the knowledge or skills provided by the training



of respondents have become more confident in advocating for an IGE after taking a training

In addition, PAGE welcomes the use of its learning materials by other education and training programmes to raise awareness and develop human capacity at the national level. According to the results of the annual survey, 59 per cent of respondents reported that they used PAGE learning materials to organize their own trainings and activities.

2.6 BUILDING A JOINT APPROACH TO LEARNING EVALUATION

PAGE has continued to deliver a range of face-to-face trainings, e-learning, and other tailored capacity-building products and services on IGE at the national, regional, and global levels. In order to allow for systematic evaluation of learning across agencies and partner countries, UNITAR developed an Evaluation Toolkit. The Toolkit includes the following materials:

1. Guidance Note
2. Survey form for local and national learning events
3. Survey form for regional and global learning events
4. Self-assessment form
5. Impact survey template
6. List of participants template
7. Step-by-step guide

In 2021, the materials were made available to PAGE countries and introduced to national coordinators and focal points during a workshop session. In addition, UNITAR also developed a database where the results of post-training surveys, as well as the results of impact surveys, can be consolidated in a common space. The database will help keep track of the results to report on PAGE's new logical framework. Currently, Uruguay, Kazakhstan, and Burkina Faso have made use of this tool which is expected to be extended to other PAGE countries.

2.7 CONTRIBUTION TO A BMUV-FUNDED FLAGSHIP TRAINING ON GREEN RECOVERY

The German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) invited PAGE to contribute to the UNEP/UNESCO/BMUV "Short-Course on Ecosystem Restoration towards Green Recovery", which was organized online by the Technical University (TU) Dresden from 1 November to 10 December 2021. PAGE with UNITAR as the coordinating agency ran two 90 minutes live sessions (on 29 and 30 November) during part three of the course, which dealt with "aligning stimulus or other economic packages to avoid post COVID-19 lock-in effects in non-sustainable structures". 21 experts from 16 countries who prepare and implement political decisions and practical measures in ministries, authorities, local government and non-governmental institutions attended the training.

The PAGE sessions featured a mix of plenary discussions, expert presentations, interactive exercises, as well as polls and video elements. Some of the key issues discussed included the application of IGE instruments in the context of nature conservation, opportunities and challenges for a green recovery going forward, as well as a case study on economic recovery and biodiversity: the example of South Africa's Economic Reconstruction and Recovery Plan. In the course evaluation, the sessions led by PAGE received one of the highest scores. Participants rated the content as "absolutely essential" and the teaching style as "excellent". Going forward, UNITAR and TU Dresden will continue sharing information about up-coming learning opportunities and disseminate it among relevant stakeholders and partners.

3. OUTCOME 4 – IMPROVING ACCESS AND APPLICATION OF KNOWLEDGE FOR ADVANCING IGE

3.1 ADDENDUM TO PAGE STRATEGY 2021-2030

Due to the events of 2020, when the COVID-19 pandemic changed the course of the global economy, PAGE partners developed an Addendum to the PAGE Strategy 2021-2030 to consider the evolving global context and reflect PAGE's role in working towards a green economic recovery.

The addendum outlines the PAGE response to the economic crisis resulting from COVID-19 and the green recovery country and global support package. It also refers to new PAGE efforts to leverage UN reforms and economic expertise to support and orient national development planning to be more consistent with future demands.

Since the completion of the Amendment, new opportunities and challenges have emerged, which will require further amendments to the Strategy that will be discussed among all partners in 2022, such as i) new opportunities resulting from closer collaboration with the UN Development Cooperation Office, and ii) new challenges to the global economy resulting from armed conflicts in Europe (driving inflation as well as renewed disruption of supply chains and energy flows), with impacts on PAGE partner countries and availability of funding for international programmes.

3.2 NEW KNOWLEDGE PRODUCTS

Compilation of case studies and best practices on Sustainable Infrastructure

To complement and illustrate the principles contained in UNEP's *International Good Practice Principles for Sustainable Infrastructure*, UNEP and UNDP, via PAGE, collaborated to produce a report of 10 case studies - *Integrated Approaches in Action* - on Sustainable Infrastructure. Each case study illustrates one of 10 best practice principles – for example, Principle #3: Comprehensive Lifecycle Assessment of Sustainability and Principle #9: Transparent, Inclusive, and Participatory Decision-Making documenting integrated, systems-level approaches to sustainable infrastructure. UNDP contributed specifically to the case study on Zimbabwe. The case studies were released in February 2021 to coincide with UNEA-5, aiming to inspire policymakers for the impending wave of infrastructure spending. The case studies were disseminated through a monthly webinar series on "[Sustainable Infrastructure: Putting Principle into Practice](#)," each focused on one of the ten principles.

PAGE Inclusive Green Economy COVID-19 Recovery Modelling

In early 2021, PAGE and Cambridge Econometrics released the [final results](#) from the specialized joint modelling project underway since late 2020. The modelling took a global

outlook for economic recovery options as well as a tailored approach specific to the South African context, which analysed spending plans and multisectoral impacts.

Overall, the findings found that a 'non-green' recovery focused solely on GDP and jobs will result in greater environmental degradation, while alternatively, green recovery policies can be, at minimum, as effective at boosting GDP and jobs. Importantly however, green recovery options will involve economic reconstruction, and so Just Transition policies will need to be included with them for true success.

Globally, the modelling shows that a green recovery will perform stronger in terms of GDP and jobs and will remain more persistent after these policies are phased out. The size of the green recovery response, however, needs to be larger to return GDP back to its pre-pandemic path. Beyond this, 'non-green' scenarios will see a rebound in emissions while green recovery scenarios achieve substantial cuts in CO2 emissions.

Building on the [previously presented findings](#) from South Africa, specifically looking at the South African Economic Recovery and Reconstruction Plan (ERRP), the analysis was extended to apply the World Conservation Monitoring Centre's tool [ENCORE](#) (Exploring Natural Capital Opportunities, Risks and Exposure). This proprietary tool enables users to visualize how the economy depends on nature and the economic risks occurring from environmental changes.

In this extended analysis – which includes looking at the decommissioning of coal mines as part of a 'green push scenario' – the results show that while GHG emissions would be reduced, there would still be ecosystems impacts expected from other sectors, such as expected increases in construction and infrastructure processes. Thus, the recommendations for the National ERRP are to include plans to mitigate the impacts of sectoral growth on natural capital assets, and particularly place attention on the agriculture sector.

Global Recovery Observatory

To further support public discourse and stimulate greater global efforts on green recovery through targeted analysis, UNEP collaborated with the University of Oxford and supported the development of the [Global Recovery Observatory](#) (GRO) - a live database of all COVID-19 related government spending in the 89 largest economies, with over 7,000 policies and with recorded spending announcements exceeding USD 16 trillion. The Observatory tracks and assesses the potential impacts of COVID-19 spending policies on the environment (climate, nature, and pollution) and selected social and economic indicators and showed that less than 20 per cent of total recovery spending was green.

The GRO brings much needed transparency and accountability to the choices being made by policymakers around the world when given a historic choice between preserving the status quo which created and perpetuates the triple planetary crises, or investing in a greener, more inclusive and more sustainably prosperous future. The GRO seeks to also

address any lack of knowledge on policy options for greening recoveries by providing access to information and examples of policy choices aligned with the Build Back Better principles made by other countries, which could serve as a template for domestic national reforms.

By linking the Observatory, developed by the Oxford University Economic Recovery Project (OUERP) and support from UNEP, with the expertise and capacities of PAGE, it has become possible to connect the data to actionable policy support to not just hold a mirror to decisions already made, but crucially provide a framing lens for influencing future policy design with the objective of raising ambition towards Agenda 2030 and Paris Agreement objectives. There is ongoing work with PAGE partners to further improve the value-added of the Observatory, notably by adding a jobs impact assessment (with ILO) and refining the precision and coverage of natural capital impacts to give more visibility and information to key stakeholders about how COVID-19 spending can impact the ecosystems which contribute more than 50 per cent of global GDP.

3.3 KNOWLEDGE PRODUCTS UNDER DEVELOPMENT

Study on impact of COVID-19 on Green Enterprises

PAGE, led by UNIDO in cooperation with ILO, launched a global study in September 2021 on the 'Impact of COVID-19 on green enterprises: Policy guidance towards inclusive, resilient, and sustainable recovery', focusing on India, Ghana, and Uruguay. The study, conducted by the Indian think tank [Environmental Management Centre](#) (EMC) investigates the impact of COVID-19 on green SMEs, the extent to which it hinders SMEs from implementing SDGs, and potential sustainable mechanisms for SMEs to recover and transform. The study also identifies the new business opportunities and jobs that stem from the pandemic. The findings of the analysis will craft recommended policy guidance for enterprises, financial institutions, international organizations, and national government.

This is the first part of a two-phase global study on the development of guidelines for SMEs and policy suggestions for the governments in PAGE countries, to be followed by a virtual workshop to promote dissemination. Phase II will add three more countries and expand the scope to include informal SMEs (eight out of ten enterprises are informal, constituting over 50 per cent of the world's employment) and gender dimensions and will include a digital recovery toolkit built on the results from phase I and phase II. It will add targeted research focusing on three geographically and economically diverse PAGE countries: India (Asia), Ghana (Africa), and Uruguay (Americas), to extract findings that could be useful to other PAGE countries to replicate or adapt. UNIDO-sponsored impact assessments of COVID-19 on manufacturing firms globally will provide some background analytical data for the study to build on.

3.4 KNOWLEDGE PLATFORMS AND KNOWLEDGE NETWORKS

Over the year 2021, PAGE and GGKP further strengthened collaboration across the three main platforms (Green Policy, Green Industry and Green Finance) and the Green Forum, with GGKP putting emphasis on expanding user groups, functionalities and the depth of knowledge provided. GGKP has become the main vehicle for PAGE on platform-based knowledge sharing and web-based outreach (e.g., for webinars on new knowledge products).

Towards the end of 2021, the [Green Policy Platform](#) featured more than 6,300 green growth knowledge products, across 37 sector and thematic pages, and increased its users by more than 40 per cent, out of which 29 per cent were first-time visitors. The Green Policy Platform expanded its audience to project-based and partnership-based users through its Initiatives feature (also called “+Platforms”) that gives online presence to projects and partnerships that work on country, regional or international projects. Additionally, a new [Gender Expert Group](#) was launched in November 2021 to catalyse collective action towards gender equality and women’s empowerment in the transitions to green, low-emission economies.

Green Industry Platform

The Green Industry Platform launched a comprehensive pilot project for the I-GO initiative in September 2021 in the three regions: [Africa](#), [Latin America and the Caribbean](#), and [Eastern Europe, Caucasus and Central Asia](#).

I-GO is a global initiative that aims to upscale resource efficiency efforts of small and medium-sized enterprises (SMEs) by simplifying their access to tailored support services most relevant to their specific activity, location, and business needs through a locally adaptable support structure. This I-GO support structure is based on the I-GO tools, the [SME Support Centre](#) and [I-GO Assistant](#), an SME resource efficiency self-assessment and navigation tool. The I-GO Network then brings together key local SME supporting organizations in a coordinated approach to promote the tools amongst their SME networks and also gain access to expert training and support.

The I-GO pilot, continuing into 2022, has the aim to collect relevant SME resource efficiency information and support services available to target countries within each region, develop national I-GO Networks of SME supporting organizations to enable coordinated access to local SMEs, translate the I-GO Assistant into required languages and then test the overall I-GO support structure approach with targeted SMEs. The I-GO Assistant as a core output of the pilot phase is being [launched in March 2022](#).

In 2022, the Green Industry Platform aims to develop two further tools to support the I-GO initiative, an Implementation Manager tool to accompany an SME through the process of implementing and reporting on resource efficiency measures and a global initiative mapping and analysis tool that will provide an interactive online approach to searching for and comparing the scope of initiatives focused on SME resource efficiency.

Green Finance Platform

At COP25, the GGKP's Green Finance Platform, together with the UNEP Inquiry into the Design of a Sustainable Financial System, launched the [Green Finance Measures Database \(GFMD\)](#) - the global compendium of green finance measures across developed and developing countries to advance green finance. As of December 2021, the database comprised 680+ policy and regulatory measures across 100 developed and developing countries. The GFMD serves as a tool for monitoring national green finance efforts while also allowing policymakers to benchmark their green finance regulatory landscape against their peers.

In May 2021, the Green Finance Platform, the International Network for Sustainable Financial Policy Insights, Research, and Exchange (INSPIRE) and the Grantham Research Institute on Climate Change and the Environment launched the [Sustainable Finance Policy Effectiveness Working Group \(SFEG\)](#), comprised of experts from academia, financial think tanks and international organizations. The SFEG mission is to support financial policymakers in the design of finance measures that will align the financial system with sustainable development and create positive impact in the real economy. The Green Finance Platform is currently working with the 2 Degrees Investing Initiative on the development of a Green Finance Effectiveness Framework to assess the environmental impact of green finance measures.

The platform also recently assumed executing responsibility for a [GEF Aligning Finance Policies project](#). The project focuses on the development of national Sustainable Finance Roadmaps in six countries - China, India, Kazakhstan, Mexico, Mongolia and Nigeria - and building of international consensus on best practices, from policies and regulations to standards and norms, to green the financial system. As part of this effort, the Nigeria Green Banking Tagging Review was successfully launched in mid-February.

Green Forum

Following a beta launch in late 2020, the [Green Forum](#) was officially launched to the public in February 2021 at the Fifth Session of the UN Environment Assembly. The Green Forum is an online interactive community space for professionals managed by the GGKP to share and discuss insights into the pursuit of a sustainable economic transition. Several features and functionalities were developed over the course of the year, providing members the opportunity to create and manage their own public or private groups to support collaboration and promote inclusive green economy policies, practices and actions at the local, national, regional and global levels.

Along with design and user experience enhancements, the forum improvements included a UI redesigned community discussion and group pages, integrated community widgets across all GGKP's platforms for cross-promotion and linkages, enhanced group functionality, such as search and submit blogs capabilities for review by GGKP, as well as improved group management. In addition, an improved direct messaging function, including the

visualisation for group managers sending messages to their group or community members was completed.

The Green Forum membership has reached over 1,500 since its launch consisting of various stakeholders from policymakers, academics, and finance actors to the private sector. Approximately 3,500 posts have been published, ranging from opinions, events, opportunities, knowledge-sharing pieces, and blogs. There are currently 38 [groups](#) that include such topics as trade, water security, green growth, and sustainable finance policy, and 16 [Community Discussions](#), ranging from climate change and agriculture to the circular economy and blue economy. While Discussions allow users to join freely, the groups offer a unique space for certain clusters to collaborate on specific challenges or projects while maintaining a degree of confidentiality.

- In October 2021, the [Stockholm+50 group](#) was launched to serve as an official space/open forum to share experiences and initiatives in the lead up to the Stockholm+50 meeting, commemorating the 50 years since the 1972 United Nations Conference on the Human Environment. This meeting aims to act as a springboard to accelerate the implementation of the [UN Decade of Action](#) to deliver the Sustainable Development Goals.

To ensure ongoing improvements and to stimulate innovation, the forum added administration and backend functionality to obtain data on the activity and user engagement across the site that will provide insight into the relevance of the community discussions and groups.

Green Economy Learning Network

The [Green Learning Network](#) (GLN) also hosted by GGKP is designed as a community of practice for learning professionals and students to exchange green learning resources, share experiences, and collaborate. The GLN was officially launched in November of 2020. Developments in 2021 can be reflected along the Network's three interconnected elements:

1. [A library of resources](#) hosted on the GGKP website. Since its inception, over 250 new resources have been added to the Learning Hub.
2. [A growing community](#): the GLN newsletter was sent out every two months and the base of subscribers has grown to over 400. The GLN LinkedIn community counts over 270 users from over 55 countries.
3. [Webinars and peer-learning events](#): The first webinar discussion "*Changing Curricula to Educate for Sustainable Development*", hosted in partnership with UNEP's Youth + Education Alliance and the International Renewable Energy Agency, took place on 11 February 2021 and elicited nearly 300 registrants. The second webinar "*Education for the Energy Transition*" (30 June 2021) resulted in over 650 registrations.

To ensure the sustainability of the Network beyond PAGE support, UNITAR is seeking collaboration with the green economy youth groups under the [Higher Education](#)

[Sustainability Initiative \(HESI\)](#), an open partnership between several UN entities and the higher education community.

3.5 GREEN TRANSFORMATION ECONOMIC ADVISORY MECHANISM

Uniting Economic Expertise for joint delivery

PAGE, in close coordination with the [UN Economist Network](#) and its Chief Economist, established the [Green Transformation Economic Advisory Mechanism \(Green TEAM\)](#) in 2021 to provide deeper support on economics to partner countries. This is done in view of PAGE's main objective to deliver transformative results for the whole economy and the economic recovery from impacts of COVID-19, while keeping an eye on fairness and social justice.

This mechanism brings together the UN's internal economic experts – economists from UN Resident Coordinator Offices (RCOs), PAGE agencies, UN Regional Economic Commissions, and the Office of the UN Chief Economist – to advise and inform PAGE work for creating transformative impacts on national economies. With this mechanism, PAGE is creating a template for joint planning and delivery by both country resident and non-resident UN agencies – an important element of the UN Reforms. It also aims to contribute to “greening” the UN System's approach to socio-economic development.

The reformed UN System that now includes an economist in each UNRC Office, a UN Chief Economist in Headquarters, and increased capacity of UN agencies on macroeconomics offers a unique opportunity to bring together the specialized expertise on economic policy and provide a coherent package of support to PAGE partner countries.

The first meeting held in June 2021, brought together a team of economists from select countries (Argentina, Indonesia, Kazakhstan, Morocco and Thailand) to discuss three themes: economic policies for i) greening public spending and fiscal space; ii) addressing poverty gaps and inequalities; and iii) supporting a just transition. The discussion also highlighted available tools and initiatives (such as the [Global Recovery Observatory](#), the [SDG Push Initiative](#), and the [Climate Action for Jobs Initiative](#)), opportunities, challenges, and potential entry points for future PAGE support to countries in these areas. The meeting paved the way for a series of discussions held later in 2021 (described further in Section 3.6) and strengthened collaboration and coordination among the PAGE teams and UN RCO economists.

Targeted country-level support

In close coordination with the economists from UN RCOs and PAGE agencies, the Green TEAM began offering additional but globally coordinated country-level support in 2021 to mainstream sustainability considerations to UN and national strategic plans, such as Common Country Analyses (CCAs) and Cooperation Frameworks. Four PAGE countries –

Argentina, Indonesia, Morocco and Thailand – were selected as pilot countries, with the thematic area of support adjusted to the demand of each country and complementary to the on-going PAGE country programme. Activities in the four pilot countries, currently in different stages of implementation, are described below:

- **Argentina:** The Green TEAM will support the development of provincial blueprints that will act as a replicable design to promote a more sustainable and inclusive model of production focused on issues such as sustainable value chains, circular economy, green finance and sustainable and resilient cities. This will be informed by inputs and policy recommendations stemming from five regional dialogues planned by UNDP for the first half of 2022. The Green TEAM will also contribute to a study on the labour impact of green hydrogen development, which will feed into the update of the Common Country Analysis (CCA) in 2022.
- **Indonesia:** The Green TEAM supports the development of an Economic Transformation Analysis as part of the 2022 update to the Common Country Analysis (CCA) for the next United Nations Sustainable Development Cooperation Framework (UNSDCF) for Indonesia. The analysis will take stock of policy areas that can drive fundamental changes in the economy to raise the overall productivity level while ensuring adequate quantity and quality of employment, equitable distribution of income and wealth, access to quality public services and protection of the environment.
- **Morocco:** The Green TEAM played an active role in the establishment of the new United Nations Sustainable Development Cooperation Framework (UNSDCF) with Morocco and its first axis on 'Inclusive Economic Transformation and Sustainability'. This strategic axis outlines the need to combine the imperatives of environmental sustainability, economic growth, and social inclusiveness. Priority areas include improving business competitiveness, supporting entrepreneurship and the ecological transition through green and circular economy, and investing in the development of scientific, technical, and professional skills.
- **Thailand:** The Green TEAM provided overall guidance and peer-review to the Green Economy Policy Stocktaking Study, which will act as a foundation for the PAGE programme in Thailand through the identification of entry points for green economic transformation. As a main recommendation, a chapter on sustainable finance was added to the study, identified as a key area by the UN Resident Coordinator's Office in Thailand. The Green TEAM is currently mobilizing the different actors working on sustainable finance in Thailand to coordinate efforts including the UNEP Finance Initiative (UNEP FI), the Global Recovery Observatory, UNDP Finance Sector Hub and UN ESCAP.

In 2022, the mechanism is planned to gradually expand to five additional PAGE countries based on lessons learned.

3.6 ADVOCACY, OUTREACH AND COMMUNICATIONS

Throughout 2020, many communications products were produced and released by PAGE in the context of the COVID-19 pandemic and related green recovery efforts. In 2021, PAGE

placed the focus on strengthening its economic advice, capitalizing on results, conducting thematically focused outreach and connecting different communities from country and global levels. While continuing communication through its established channels, outreach and visibility focused on better communicating the results of the programme through online events, deep-dive webinars and video production. Given the restrictions on travel that persisted throughout the year, face to face meetings and outreach were not possible, and plans to hold a Ministerial Conference were further postponed.

Production of Video Materials

Throughout 2021, PAGE communications emphasised the production of video material, helping to raise the visibility of PAGE and disseminate achievements to a wider audience. A new video about green recovery work, "[Green Recovery: the path to inclusive economic transformation](#)", was developed in coordination with IKI (International Climate Initiative) and published on the IKI webpage. The PAGE Secretariat produced a "[PAGE Highlights Video 2021](#)" that summarizes the achievements of the year. Additionally, detailed documentary-style videos were published for three graduating countries - [South Africa](#), [Senegal](#) and [Burkina Faso](#) - describing the policy impact and achievements of the PAGE programme since inception and include various interviews by national partners involved.

Country Spotlights

A new communication tool of country spotlights enabled a deep dive into the happenings of each country and PAGE's contribution to the green economy transition. Country Spotlights are focused deep dives that present the green economy transformation in one PAGE partner country, in an open discussion delivered by the PAGE country team and government focal points. Two spotlights were conducted in late 2021, on 24 November and 15 December, on [South Africa](#) and [Uruguay](#) respectively. The discussions focused on sharing progress, priorities for the country's green economy transition, specific challenges and the ways in which the PAGE engagement supports long-term sustainable development in the country. The spotlights not only acted as a communication tool for current funding partners to learn in further detail how the PAGE programme operates in these countries, but also provided a platform to engage potential new donors that are interested in the programme.

2020 Online Annual Report

The Online Annual Reports provide the most comprehensive communication tool on the partnership's achievements and on-going work. For the launch of the 2021 version, on 18 February the PAGE Secretariat organized a virtual launch event to bring all members of the PAGE community together - agencies, management board, funding partners, project coordinators, country teams, as well as national implementing partners and government focal points - to celebrate the achievements of the programme over the past challenging year.

PAGE Website and Bulletin

In 2021, PAGE communicated recent achievements at the country and global level to key partners through its monthly [PAGE Bulletin](#), with a subscription of 2,688 subscribers. The [PAGE website](#) had 92,362 users visiting in 2021, reflecting a 50 per cent increase. The [PAGE Twitter account](#) (@PAGEExchange) grew to 2,800 followers, and the [PAGE YouTube channel](#), launched in 2017 for videos on PAGE work and IGE, amassed 19,625 views. In 2021, PAGE increased its outreach on [Instagram](#) and [LinkedIn](#) with 1,751 and 2,737 followers respectively. Furthermore, PAGE has a [Flicker](#) account where it collects and shares pictures from PAGE global and national events.

Recognition in UN documents and processes

In 2021, PAGE was recognized in several key UN System documents and processes for its focus on transformational change and a 'One UN' interagency approach. For its country work on green recovery in line with economic transformation, the UN Department of Economic and Social Affairs' SDG Good Practices Initiative referred to PAGE as an inspiring example of SDG implementation. The UN University's [Beyond Opportunism: The UN Development System's Response to the Triple Planetary Crisis](#) publication recognized PAGE as a mechanism that works "closely with RCs to make economic recovery planning a stepping stone for green and inclusive economic transformation to address the root causes of the Triple Planetary Crisis"

PAGE visibility through engagement in international and national events

Throughout 2021, PAGE colleagues were engaged in a wide range of technical and policy-oriented meetings, which allowed PAGE agencies and the PAGE Secretariat to share information on the partnership, its tools, services and achievements. The Head of the PAGE Secretariat contributed to the following events:

- The Elevate Global Webinar "A Green Recovery in Asia: Opportunities for Concerted Action" on 20 January. The webinar brought together experts and decision-makers to discuss priorities for a post COVID-19 green recovery in Asia, highlighting opportunities for concerted efforts involving governments, the business sector and civil society to rebuild and transform economies and to confront the climate crisis;
- The launch of the Chemicals and Waste Youth Platform at the [Youth Environment Assembly](#) on 18 February, via a video contribution, reflecting on the major challenges and opportunities in moving towards sustainable development;
- The premier event, "Defining Green Recovery", of the UN Environment Management Group's (EMG) three-part dialogue series on "Addressing COVID-19 for the Environment" on 27 April;
- The Bappenas Virtual Dialogue on Green Economy on 4 May, for the Preparation of the G20 Summit 2022, providing global insights on IGE, its indicators, as well as the experience of other emerging economies in implementing IGE into their national development processes;
- Alongside the Partners for Inclusive Green Economy, in a session on green recovery as part of a [Nature for Life](#) on 6 October 2021 focused on transforming public sector

finance. The three-day programme aimed to support transforming our relationship with nature – for the SDGs, the Paris Agreement and a nature-positive future, for people and the planet; and

- The Eleventh Clinic of the Economic Transformation for UN Economists and RCOs, which focused on green economic transformation.

Additionally,

- PAGE prepared the opening session “A Green Recovery from COVID-19”, at the ILO Green Week on Economic Recovery on 19 April. Latest findings from the PAGE green economic modelling project with Cambridge Econometrics and the Global Recovery Observatory were shared, indicating that a 'non-green' recovery focused solely on GDP and jobs, will result in greater environmental degradation, while alternatively, green recovery policies can be, at a minimum, as effective at boosting GDP and jobs;
- PAGE was featured in the presentation by the Government of Indonesia in the official COP26 side-event hosted by the ILO, United Nations University, INRA (the French National Institute for Agricultural Research) and the UN Economic Commission for Africa (ECA) on 11 November. The event “Achieving a Just Transition towards Net Zero: Challenges and opportunities with a focus on Africa” focused on the Just Transition framework, countries’ experiences and business insights from across the world with a particular focus on the priorities of African countries; and
- PAGE contributed to the UNEP/UNESCO/BMUV Short-Course on Ecosystem Restoration towards Green Recovery, run online by the Technical University (TU) Dresden - a flagship programme by the German Government - from 1 November to 10 December 2021 (more details available in Section 2.7).

3.7 PROMOTING DIALOGUE AND DEBATE ON IGE

Side-event at the High-Level Political Forum

Held on 9 July 2021, “[Green Recoveries for a Job-Rich Future](#)” brought together leaders from the United Nations and national governments to discuss the realities of linking COVID-19 recovery with long-term sustainable development in the context of green job growth.

The conversation between the panellists (Director-General of the ILO, Executive Director of UNEP, Ambassador of Barbados, Head of Fiscal Policy Agency of the Ministry of Finance of Indonesia, and German Parliamentary State Secretary, BMUV) touched on sectoral potential, green finance and the importance of ensuring a just transition.

The discussion focused on grasping the opportunity to turn economic recovery into economic transformation – building resilient economies that account for planet and people. Speakers highlighted the importance of global partnerships and brought practical challenges from their own national experiences, which included preparing micro-businesses for a circular economy transition in the Caribbean, engaging industry in the conversation on

energy transition in Indonesia and the importance of ensuring social balance in line with ambitious plans for carbon neutrality in Germany.

Each speaker noted the crucial need to make this green economy transformation just and for the whole of society, noting the need to understand the connections of current global crises.

Dialogue Series - One UN for Accelerating a Fair and Green Economic Transformation

In 2021, the Green TEAM held two dialogues as part of its series “One UN for Accelerating a Fair and Green Economic Transformation”, creating a platform for economists from PAGE agencies and RCOs in PAGE countries to exchange ideas and share knowledge and best practices on accelerating fair and green economic transformations.

The dialogue series provides an open space to identify opportunities and challenges as well as potential methods for moving action on inclusive and sustainable recovery options. It aims to inform how PAGE can better support its partner countries in their respective green economy transitions beyond the COVID-19 crisis as well as further inspire a green transition globally. Dialogues are planned to occur quarterly, acting as a vehicle to deepen the engagement between PAGE and UN Economists.

Dialogue to Advance Green Recovery: [The first dialogue](#) in March 2021 drew attendance from UN economists across 18 countries with the UN Chief Economist as the keynote speaker. The open discussion highlighted green investments as a priority not only for recovery from the pandemic but also to ensure the future well-being of the planet and people, making a strong economic case for investing in the SDGs. Participants identified priority thematic areas to further inform and influence economic recovery decisions, which included sustainable finance, digitization and just transition. The dialogue also emphasized the analytical tools and services that PAGE agencies offer, such as the [Global Recovery Observatory](#) and macroeconomic [modelling](#), which can be used to make a persuasive case and build a powerful narrative to encourage policymakers to take the trajectory towards sustainable pathways. A [full report of the dialogue](#) was made available after the event.

Dialogue on Sustainable Finance: [The second dialogue](#) was held in November 2021, with more than 70 colleagues from across the UN system – including UN RCs, representatives of regional commissions and the Development Coordination Office (DCO), economists from UN RCOs and from PAGE agencies, the Heads of UNDP Finance Sector Hub and UNEP Finance Initiative, the Director of UNEP’s Economy Division, and members of the PAGE Management Board. The objective of the dialogue was to strengthen ties and collaboration between PAGE partner countries and UN RCO Economists on sustainable finance. It shed light on the challenges of scaling up sustainable finance and identified potential areas of work on public and private finance in PAGE partner countries. The dialogue included keynote presentations from the UNEP Finance Initiative and UNDP SDG Finance Sector Hub

and a country example showcasing joint delivery of UN initiatives to promote sustainable finance in Thailand, captured in a [full report of the dialogue](#).

3.8 PAGE UNDP-led Regional Knowledge Sharing in Latin America

Latin America Green Awards 2021 Edition

The [Latin America Green Awards](#) (*Premios Latinoamérica Verdes - PLV*) is an annual event organized by Fundación Latinoamérica Verde to award the best socio-environmental projects in Latin America. Among the foundation's objectives are to promote research in Latin America, gather together the best socio-environmental projects in Latin America on an annual basis, organize Latin America Green Awards event to award the best socio-environmental projects in Latin America, encourage the banking industry to adopt sustainability criteria, to promote 2030 SDG awareness, liaise support for environmental cooperation programs and conduct training programs on environmental issues for all audiences. PLV partnered with PAGE through a Skills Strengthening Program for the fourth consecutive year and a Journalist's Workshop for the second year and awarded the SDG PAGE Award for the first time in 2021.

The **Skills Strengthening Programme** is an educational platform designed specifically to support participants to develop and secure funding for their green projects in Latin America and the Caribbean. In 2021, it was completed by approximately 862 people from 19 countries, helping them to improve and fund their projects.

The 2021 **journalists' workshop** "Environmental Journalism and SDGs: What to report when resources run out?", emphasized that media and communication professionals are essential channels and allies to inform, sensitize and raise awareness among citizens. Four experts shared and explained their journalism and communication solutions and experiences with 57 attendees.

PAGE decided to recognize the project with the most SDGs aligned with their initiative to strengthen partnerships and the projects' growth possibilities with the **SDG PAGE Award**. The eligibility criteria considered five fundamental dimensions: people, planet, prosperity, peace and partnerships. The deliberation session, held via Zoom on July 9, 2021, was led by each of the category's International Jury presidents. Greener was unanimously chosen as the winner of the SDG PAGE Award, which aligned with 12 of the 17 SDGs and received a 90 per cent score. Compra Local was chosen as second place, which aligned with 11 SDGs, and Semaforos Solares que Salvan Vidas took third place, aligned with 6 SDGs.

Targeted Scenario Analysis to Inform Greener and More Inclusive Investments

Utilising the Targeted Scenario Analysis (TSA) methodology developed by UNDP, in 2021, PAGE funded the development of four studies in Colombia (livestock), Ecuador (artisanal

and small-scale mining) and Peru (cacao and palm oil – described in further detail in the Peru country section).

In Colombia, deforestation in the Amazon region presents great challenges, threatening loss of forest resources, landscape connectivity, water quality, biodiversity, soil fertility, GHG sequestration, among many other ecosystem services that characterize the region. Taking into account the regulatory and land use planning frameworks that are being developed for Colombian livestock and the goals and commitments proposed by the government to reduce its greenhouse gas emissions and conserve protected areas, the [TSA study in Colombia](#) conducted an economic analysis to recommend concrete actions towards more sustainable livestock production in the region and help reduce deforestation in these valuable ecosystems. The TSA shows that the Sustainable Ecosystem Management (SEM) scenario can decrease deforestation – avoiding 35,000 hectares of deforestation in the analysed period. Further, SEM can add more than 1,000 jobs annually, increase fiscal income by 109 million pesos per year on average during the 15 years of study, and increase ecosystem services.

In Ecuador, the [TSA study on the artisanal and small-scale gold mining sector](#) assesses the impact of two management scenarios within the sector, which 100,000 people depend on. Engaging with stakeholders from the private and public sector, the study aims to help decision-makers design and implement sustainable policies that incorporate the value of ecosystem services. The TSA estimates the social and economic gains or losses resulting from continuing current practices (i.e., the business-as-usual scenario-BAU), which cause a high environmental impact, compared to a more sustainable path that promotes socially and environmentally responsible practices. The results show the possibility for significant gains for artisanal miners, processing plants, laboratories and the state if miners sell their ore to small-scale mining plants that are supported and strengthened with appropriate, mercury-free processes.

PAGE's support to these studies was critical to the development of an additional four TSAs and catalyzed the mainstreaming of TSA in the GEF portfolio. PAGE support also helped to scale the use of TSA, with the Green Commodities Programme receiving requests for ten new TSA for 2022 in eight countries.

4. PAGE SECRETARIAT AND GOVERNANCE BODIES

The PAGE Secretariat has continuously provided its services to the Partnership for Action on Green Economy, including key functions such as programme planning, coordination and monitoring, communication, and outreach, fundraising and donor relations, and organizing governance meetings.

The PAGE Secretariat, serving as the central point of liaison between the PAGE partners, provided services to the Technical Team, the Management Board and the Steering Committee. Under the direction of the Technical Team, the Secretariat ensured smooth inter-agency cooperation in planning and implementing PAGE activities.

The Secretariat assisted PAGE partners in organizing the following governance meetings:

- 1 PAGE Technical Team meeting with partial Management Board participation, held in 3 online sessions on 16, 18 and 23 March 2021 (focused on implementing the PAGE Strategy for 2021-2030);
- 1 Virtual Steering Committee meeting on 15 and 16 June 2021 (related to PAGE's response to COVID-19, budget framework and delivery of work programme, guidance for PAGE support on green economy recovery, and implementation of the PAGE Strategy for 2021-2030);
- 7 Management Board calls held on 23 March, 3 April, 16 June, 6 July, 28 July, 25 September, and 8 October (related to PAGE's response to COVID-19, budget framework and delivery of work programme, guidance for PAGE support on green economy recovery, and review and approval of green recovery proposals);
- Monthly Technical Team Meeting calls, held on 14 January, 18 February, 31 March, 28 April, 26 May, 18 June, 14 July, 18 August, 15 September, 19 October, 9 November and 7 December;
- A series of 8 PAGE gatherings held on 13 January, 17 February, 24 March, 28 April, 30 June, 1 September, 20 October, 15 December on various themes, including a targeted session on scaling up national communication;
- 2 country spotlights on 24 November and 15 December, focusing on South Africa and Uruguay respectively; and
- 2 orientation sessions (each held twice) on 30 September and 7, 12 and 14 October, on work planning, monitoring and reporting.

In close cooperation with the Technical Team, the Secretariat developed concepts, agendas and background materials and coordinated logistical arrangements, minutes and meeting summaries, and follow-up activities.

The PAGE Secretariat also facilitated

- discussions among agencies on developing a global workplan that was innovative and reflective of the new green economy context; and

- coordinated the finalization and release of the 2020 PAGE Annual Report, both in online and in written format.

Implementing PAGE updated operational guidance

In 2021, the PAGE Secretariat facilitated the implementation of the 2021-2030 [PAGE Strategy](#) and its Amendment on related Green Economic Recovery. Following the update of the PAGE programme logframe and PAGE Operational Manual, the PAGE Secretariat updated relevant documents and procedures, including those related to work planning, monitoring and reporting, and automated and digitalized processes where possible. Detailed guidance notes were developed to inform agency colleagues and project coordinators of updated procedures and launch the next multi-year work planning process for 2021-2023. Teams channels were created for each PAGE country as a platform to share and collaborate on documents.

Further, the PAGE Secretariat organized a series of orientation sessions, through on-line webinars, focusing on different areas such as work planning, monitoring and reporting and development of sustainability strategies for countries approaching graduation. The PAGE Secretariat also updated the Terms of Reference of the PAGE Multi-Partner Trust Fund in line with the new Strategy and worked with agencies to extend the Memorandum of Understanding among agencies for the Trust Fund till 2030.

Communications

In communications, the PAGE Secretariat supported the development of a video produced and financed by the International Climate Initiative (IKI) on PAGE's action on [green recovery](#). In addition, a [PAGE 2021 Highlights Video](#) was developed by the PAGE Secretariat focused on achievements of PAGE in 2021. The PAGE Secretariat also commenced the process for redesigning and restructuring the PAGE website, to be finalized in 2022.

As an important outreach event, in July 2021, an official high-level side-event (virtual format) was held at the High-Level Political Forum, coordinated by the Secretariat, which brought together leaders from the United Nations and national governments to discuss the realities of linking COVID-19 recovery with long-term sustainable development in the context of green job growth.

Green recovery and economic advisory mechanism

In 2021, the PAGE Secretariat continued to coordinate additional support to countries for a green economic recovery, which complements the regular PAGE support. Countries received additional support on selected areas which link post COVID-19 economic recovery with SDGs and NDCs. In 2021, the Secretariat coordinated the review and assessment of three additional proposals (from Morocco, Guatemala and Peru), the associated approval process by the Technical Team and Management Board, and the development of specific workplans.

Another priority in 2021 was the strengthening of the economic aspects of the programme, in which the PAGE Secretariat coordinated the formation of the Green Transformation Economic Advisory Mechanism (Green TEAM) and related meetings. Through the Green TEAM, the PAGE Secretariat facilitated targeted support for Morocco, Thailand, Argentina and Indonesia. Additionally, two dialogues were organized, on advancing green recovery and sustainable finance. Those were part of the dialogue series on “Accelerating a Fair and Green Economic Transformation” that created a platform for economists from PAGE agencies and UN Resident Coordinator Offices in PAGE countries to exchange ideas, knowledge, and best practices.

PAGE Evaluation

The PAGE Secretariat initiated preparations for the next evaluation of the PAGE programme, together with UNEP’s Evaluation Office, including collating relevant background documents and developing ToRs for the evaluators. The evaluation started in March 2022.

Resource Mobilization

To achieve the ambitions of the PAGE 2030 Strategy and Delivery Plan 2021- 2025, there is a need to extend the funding partner group and strengthen efforts in mobilizing resources, allowing PAGE to deepen support to current partner countries and expand engagement with up to 10 new countries by 2030. In line with this, with support from BMUV and the GIZ-GET project, the PAGE Secretariat coordinated the hiring of a consultant to develop a PAGE Resource Mobilization Strategy including consultations with the PAGE Management Board and PAGE funding partners. Building on this, the PAGE Secretariat developed a Resource Management Action Plan exploring the scaling up and expansion of funding sources for the PAGE programme. Relevant communications material, including a presentation, was developed by the PAGE Secretariat to support the resource mobilization process.

5. COOPERATION WITH OTHER INITIATIVES

5.1 IN-COUNTRY COOPERATION

At the country level, PAGE deepened existing cooperation and expanded collaboration with several organizations and initiatives. These collaborations are country-driven, dependent on the opportunities offered by the local context and needs. In that sense, PAGE offers a flexible mechanism for engaging with many global, regional and local organizations and initiatives.

Collaboration is done through organizing joint events, implementing joint activities, and strengthening common platforms for a coordinated country delivery. The following section presents a brief description of the most relevant examples from 2021. An overview of cooperative efforts at country level, including for previous years, can be found in Annex I.

Cooperation with GIZ: The project 'Green Economy Transformation in cooperation with the Partnership for Action on Green Economy (PAGE) - Synergies between low-emission paths and the SDGs (GIZ-GET project)', jointly implemented by GIZ, UNEP and the German Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) enhances PAGE in-country work and complements the partnership and its impacts through flexible, innovative, action-oriented and locally-rooted cooperation measures. This project has been active in five PAGE countries: **Indonesia, Peru, South Africa, Uruguay and Argentina**. Beyond this specific project, PAGE and GIZ also collaborated in the Kyrgyz Republic and Kazakhstan:

- **Peru:** The GIZ-GET project helped consolidate achievements and supported the elaboration of the country's Sustainability Strategy for PAGE, taking a lead role in assisting Peru in the process of transitioning to a greener economy and enhancing its sustainability.
- **South Africa:** The project complemented PAGE work by implementing several activities in South Africa, including building capacity on green bonds, supporting a high-level national dialogue on green jobs, initiating an informal Green Economy Advisory Group and conducting a training course on circular economy. With close ties to the PAGE programme, the document "Perspectives on Advancing an Inclusive and Sustainable Green Economy in South Africa" was finalized in 2021. The publication stems from a Green Economy Advisory Group (GEAG) project, pursued in partnership by the Department of Forestry, Fisheries and the Environment (DFFE), BMUV, GIZ and UNEP. The publication arises as an action after the third PAGE Ministerial Conference that took place in January 2019 in South Africa, drawing on the four thematic concept notes produced for the Conference.
- **Uruguay:** PAGE built on previous work by the project, notably the green economy assessment and well established inter-institutional coordination. Following on from the Sustainable Entrepreneurship Training Programme for youth that PAGE and GIZ collaborated on in 2020, 17 youth-led projects, selected from the programme, were

implemented throughout 2021 with funding support, as part of an effort to empower and create tangible green employment opportunities for young people. Additionally, in early 2021, PAGE Uruguay took over the coordination role for the Network of Directors of Environment and Development of Regional Governments (RED) from the UNEP-GIZ-GET project which was completed. Activities that are being implemented include training teams of municipalities in inclusive green economy, supporting the design of projects and initiatives, as well as promoting meetings and spaces for dialogue on related topics.

- **Argentina:** The project supported the PAGE inception phase through assistance for strategic planning and technical support for stakeholder engagement, including participation in the inception mission in May 2019. PAGE worked closely with GIZ on national outreach on green economy and South-South exchange, including the Global Exchange Forum on Inclusive Green Economy, the second national Resource Efficiency Panel of the German-Argentinean Chamber of Commerce, and a webinar on Just Transition with South Africa in November 2020.
- **Indonesia:** GIZ project activities in support of PAGE include the organization of the PAGE inception workshop, as well as the development of a 'Study on Carbon Taxes as Fiscal Incentives to Reduce GHG Emissions and Develop a Carbon Market in Indonesia' and a jointly conducted introductory training on System Dynamics Modelling targeted at regional governments. PAGE's work on green recovery in Indonesia will further complement the work of GIZ and other development partners.
- **Kyrgyz Republic:** Building on efforts that commenced in 2018, PAGE, together with GIZ continued to support the institutionalization of IGE modelling by providing technical support and developing further modelling capacity in government. This work aims to facilitate additional application of the model and build capacity for the translation of model results into policy recommendations.
- **Kazakhstan:** Since 2019, PAGE coordinated with the GIZ project 'Low Carbon Development Strategy for Kazakhstan', by initially supporting the development of the waste section of the Low Carbon Development Concept (LCDC) and a technical study on fiscal policies. Since September, PAGE aligned its work with the development of the 'Doctrine on Carbon Neutrality until 2060' and the larger support programme led by GIZ (Project "Support of Green Economy in Kazakhstan and Central Asia for a low-carbon economic development") to develop inputs related to fiscal policy and waste management. PAGE and GIZ have also collaborated in the development of a legal framework for environmental permissions through reinforcing Best Available Techniques, and the implementation of a 'Build back better training' for civil servants.

Cooperation with the Global Green Growth Institute: PAGE and GGGI have continued collaborative efforts in 2021 to support common partner countries in their transition to an IGE, including Peru, Kyrgyz Republic and Indonesia.

- **Peru:** PAGE collaborated with GGGI to organize a green jobs dialogue “[Economic Reactivation: Dialogue between political parties on opportunities for green employment](#)” between political parties on opportunities for green employment, conducted within the framework of the upcoming 2021 Peruvian elections.
- **Kyrgyz Republic:** GGGI was included in the working group to support the creation of a Green Finance Corporation alongside PAGE, staff of the Ministry of Economy, the Union of Banks of the Kyrgyz Republic and independent experts. GGGI also conducted a legal review for the Kyrgyz Republic National Financing Vehicle, as an initial activity for developing the Corporation.
- **Indonesia:** GGGI featured as a speaker in the PAGE-organized webinar on “Learning and Skills Development for Green Recovery” that launched the Green Economy Learning Assessment (GELA) and focused on the role of learning and skills development in enabling Indonesia to “Build Back Better” through the LCDI. Building directly upon the results of the GELA, PAGE plans to develop a National Strategy for Green and Low Carbon Economy Learning in partnership with Bappenas and GGGI.

Cooperation with UNDP-Biodiversity Financing Initiative (BIOFIN): BIOFIN and PAGE collaborated in 2021 on sustainable finance solutions including issues of fiscal reform for sustainable agriculture and biodiversity in Kyrgyz Republic, Peru, India and Guatemala.

- **Kyrgyz Republic:** PAGE and BIOFIN teams delivered technical support on the reform of environmentally harmful agriculture subsidies. In 2021, BIOFIN carried out studies on fiscal policy reforms for sustainable agriculture. In 2022, PAGE-BIOFIN plan to hold peer learning webinars to initiate stakeholder consultations on the study findings and recommendations.
- **Peru:** UNDP is using PAGE funds in collaboration with BIOFIN to support sustainable finance and investment through the mechanism for Public Works for Tax Deductions.
- **India:** Building on the work launched in 2019, BIOFIN and PAGE, via UNDP, are supporting India in the development of a methodology for sharing benefits and disbursing funds accrued through the access and benefits sharing (ABS) mechanism provided by the National Biodiversity Authority and State Biodiversity Boards.
- **Guatemala:** PAGE developed a [guideline to access green and climate finance](#) in collaboration with BIOFIN in 2021, which supported the Ministry of Finance in establishing and implementing mechanisms and procedures in line with the Environmental Fiscal Strategy.

PAGE countries are also collaborating with various other initiatives working on green economy and related areas. Select examples from 2021 are included below:

- **UNEP with funding from the European Union:** In the framework of the project Inclusive Green Economy Policy Making for SDGs, in 2021 UNEP released the [Green Economy Policy Review of Mongolia’s National Green Development Policy](#) (NGDP), conducting a

mid-term review of the NGDP – a national policy which was ratified in 2014 and will be implemented until 2030.

- **UNICEF:** The PAGE India Project Coordinator delivered the keynote address in the thematic session on blue and green economy on 29 September 2021, as a part of UNICEF's "South Asia Experts' Summit: Dialogues on the Post-COVID-19 World of Work".
- **The Climate Promise:** PAGE incorporated key activities of NDC Roadmaps on adaptation and mitigation with high sustainable recovery potential into the national Project in Kazakhstan, to complement the work on UNDP-led Climate Promise project and leverage public budget for NDC implementation.
- **International Institute for Sustainable Development (IISD):** To support the energy subsidy reform in Kazakhstan, PAGE and IISD completed a draft technical study "[Fiscal Incentives for Low-Carbon Development of the Republic of Kazakhstan](#)" that analyses fiscal policy in the energy, housing and public utilities (HPU) sectors.
- **UN Economic Commission for Europe (UNECE) and the Office for Security and Co-operation in Europe (OSCE):** To advance the systematic application of Strategic Environmental Assessment and Environmental Impact Assessment (EIA) in Kazakhstan, a [Roadmap for the introduction and development of EIA and transboundary impact assessment mechanisms](#) was developed by PAGE experts, in consultation with the UNECE and OSCE expert team.
- **UNDP outside PAGE:** In Mongolia, PAGE is working with key UNDP initiatives outside of the PAGE programme to increase the scope and sustainability of results. UNDP initiated the piloting of an Equity Fund targeting the agriculture and livestock value chains, covering Mongolia and China. Additionally, UNDP continued to support a pilot project that assists the Ministry of Finance to integrate the SDGs into the budgeting processes.
- **ILO Regional Projects and Programmes:** PAGE Peru provided technical assistance to the Regional ILO Green Jobs Programme in the development of a short paper on Just Transition, including experiences from other countries. In Senegal, the ILO built on feasibility studies conducted by PAGE by supporting the establishment of the Mbeubeuss waste pickers' cooperative within the framework of the project "Promotion of formal and innovative entrepreneurship in Senegal and The Gambia", funded by the Government of Italy. PAGE Argentina and South Africa contributed to national events and close collaboration with UNRCOs.

5.2 GLOBAL COOPERATION

Throughout 2021, PAGE continued to strengthen global partnerships in line with the momentum on green economic recovery. The strategic partnerships help to inform economic thinking, strengthen collaboration for capacity building, and disseminate IGE knowledge and ideas.

Green Economy Coalition and the Partners for Inclusive Green Economy: PAGE participated in regular meetings of the global inter-institutional group 'Partners for Inclusive Green Economy' to exchange ideas with its members, including GEC, GGKP, UNEP-UNDP PEA, the OECD, GGGI, the International Institute for Environment and Development (IIED) and GIZ. The partners developed a joint paper on 'Setting a structural agenda for a green economic recovery from COVID 19' and presented a first outline at the [OECD Forum on Green Growth](#) in November. PAGE also contributed to a [session on green recovery and public sector finance](#) co-organized by the GEC as part of the OECD-UNEP Nature for Life hub in October 2021 and the [GEC Global Meeting in December 2021](#) 'Code Red for Nature and People', which served as a collaborative space for diverse global networks to share solutions and drive action on green recovery, inclusion and nature.

Strengthening collaboration with UN ESCAP: PAGE established a new partnership with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) on macroeconomic policy and sustainable finance targeting PAGE countries in the Asia region. This collaboration aims to coordinate efforts on national development, economic and planning policies and catalysing finance for the IGE transition. Building on a comprehensive mapping of activities on macroeconomic policy and sustainable finance from participating initiatives, opportunities for collaboration to leverage synergies across multiple processes have been identified for implementation in 2022 in Indonesia, Kazakhstan, Thailand and at the regional level. In this context, PAGE is also identifying opportunities for joint delivery with the UNEP Finance Initiative (FI), the UNDP Sustainable Finance Hub (SFH), the Global Recovery Observatory (GRO) as well as economists from the UN Resident Coordinator's Offices.

Collaboration with global research institutes: With an increased focus on providing economic expertise, PAGE engaged with two leading research institutes in 2021 to assess green economic recovery. In early 2021, PAGE and Cambridge Econometrics released the [final results](#) from a specialized joint modelling project underway since late 2020. PAGE will continue to work with Cambridge Econometrics to expand this modelling in 2022. PAGE also worked with the University of Oxford to initiate and support the development of the [Global Recovery Observatory \(GRO\)](#) - a live database of all COVID-19 related government spending in the 89 largest economies. The GRO tracks and assesses the potential impacts of COVID-19 spending policies on the environment and selected social and economic indicators - showing that less than 20 per cent of total recovery spending was green.

Development Coordination Office (DCO) Collaboration: To make the UN Reforms work for fast, fair and green transformation, PAGE has enhanced cooperation with the DCO and its outreach to Economists in over 150 UN Country Offices under the workstream [Uniting UN's Economic Expertise](#), and the Dialogue Series "[One UN for Accelerating a Fair and Green Economic Transformation](#)". This collaboration with DCO contributes directly to the UNSDG Core Group workstream on strengthening capacities of Resident Coordinator Offices and UN Country Teams to respond more effectively to the Triple Planetary Crisis.

Supporting GGKP: PAGE has continued to support the Green Growth Knowledge Partnership (GGKP) in its work as a global community of organizations and experts committed to collaboratively generating, managing and sharing green growth knowledge. In 2021, this included the official public launch of the [Green Forum](#), an online interactive community space for professionals to share and discuss insights on a sustainable economic transition, at the Fifth Session of the UN Environment Assembly. With a user-centric approach, the forum provides members with a space to create and manage their own public or private groups to support collaboration and promote inclusive green economy policies, practices and actions at the local, national, regional and global levels.

LinkedIn data insights partnership: The ILO, PAGE and LinkedIn launched a two-year data insights partnership that aims to improve government decision-making, promote green jobs and build the capacities of governments to identify and provide training opportunities. Through the Memorandum of Understanding signed between the ILO and LinkedIn on 15 January 2021, the partners hope to support the development of deep, cross-sector partnerships that benefit governments, the private sector, employers' and workers' organizations and civil society organizations. This partnership also supports the achievement of the SDGs and meeting the unique challenges posed by the COVID-19 pandemic. The partnership also welcomes the strategic collaboration of UNEP and UNITAR, whose complementary mandates and expertise will help translate rich labour-related data insights into informed policies and practical capacity-building activities.

UNEP Finance Initiative (FI): UNEP FI was closely involved and delivered a keynote presentation at the dialogue on sustainable finance, organized by PAGE as part of the Green TEAM dialogue series. The objective of the dialogue was to strengthen ties and collaboration between PAGE partner countries and UN RCO's Economists on sustainable finance.

Cooperation with SEED: PAGE and SEED (a global partnership for sustainable development enterprise support) have worked together to amplify the impact of green enterprises – particularly for a green and inclusive economic recovery from COVID-19 and a greener economy beyond the crisis. In 2021, PAGE contributed to SEED's regional Policy and Finance Practitioners Labs, with PAGE Thailand participating in the 2021 Hack for Climate Finance in Bangkok. PAGE was also consulted in the development of the SEED Green Recovery Snapshot report *Eco-Inclusive Enterprises Driving Green Recovery Pathways*, which draws attention to the potential triple returns of prioritizing green and social enterprises in the short- and long term.

6. SOUTH-SOUTH COLLABORATION

South-South and Triangular Cooperation (SSTC) allows countries to exchange knowledge, to learn from each other and utilize in the local context evidence-based solutions from one country to another. The common frameworks, provided by the 2030 Agenda for Sustainable Development and Paris Climate Agreement, offer excellent opportunities to establish good practices, identify factors for success and share those with countries that are also in search of pathways to a resource-efficient, low-carbon and socially inclusive economy.

SSTC empowers countries to design tailored responses to development challenges, considering evidence-based solutions from their peer countries. With 20 partner countries and eight funding partners engaged at different stages of a green economy transformation, including policy development at the national and sectoral levels, capacity-building and awareness-raising, PAGE provides an ideal platform for SSTC.

In 2021, PAGE initiated a series of peer learning exchanges to help support and leverage knowledge and experience-sharing between policy-makers and other stakeholders from PAGE partner countries on green recovery practices. The exchanges provide participants the opportunity to engage in informal learning, share best practices and build relationships in a small group setting. The peer learning events are demand-driven, focusing on specific thematic areas of interest to participating parties, and were informed by a joint survey run by ILO-ITC and UNITAR, with the purpose of collecting ideas on peer-learning and building an alumni network for PAGE countries. Sharing first-hand experiences between countries helps to inform and contribute to real-life policy processes and facilitate the replication of green recovery policies and projects, scaling collaboration and innovation.

The peer learning initiative was launched in January 2021 with a presentation to PAGE national coordinators, funding partners, and agencies during one of the monthly PAGE Family Gathering calls. In February, a survey was carried out to identify thematic interests and define country pairings. The subsequent peer learning events addressed real-life policy issues and challenges in PAGE countries and supported ongoing policy reforms. The following peer learning exchanges took place over 2021:

- **Sustainable finance (Mongolia, Kyrgyz Republic – two exchanges):** In February 2021, an ongoing virtual South-South exchange was launched between the two countries. Mongolia had already achieved noteworthy results in sustainable finance and shared its experience in establishing the Mongolian Green Finance Corporation and attracting green finance to the country. These achievements offered a model for institutional best practices that the Kyrgyz Republic has used to promote sustainable finance in its own development agenda, ultimately supporting in coordinating the creation of the Kyrgyz Green Finance Corporation.
- **Sustainable education (Kazakhstan, Kyrgyz Republic):** To stimulate sustainable economic recovery and development, PAGE is supporting the National Project “Green Kazakhstan”, which aims to develop eco-oriented education. In the same vein, PAGE

supported the development of a Comprehensive Plan of Measures for Education on Climate Change in the Kyrgyz Republic. Considering the similarity of the education systems and the related work carried out by PAGE in the two countries, an online session was organized in April 2021 to exchange experience and best practices with the participation of government counterparts and international and national consultants.

- **Inclusive digital green economy (global, PAGE constituents):** Following interest from PAGE Project Coordinators and Agencies, UNEP and UNITAR organized a workshop on Inclusive Green Digital Economy on 30 June 2021, targeting all PAGE countries before organizing additional learning. Attendees were provided with background information and current examples of the various roles digital economy has in green recovery - such as the Korean New Deal, the electric car industry, and the European Green Deal - to help them explain the topic and better understand how it relates to their country and agency work.
- **Sustainable public procurement (Ghana and Senegal):** On 30 July, a peer learning exchange was organized to share information on Ghana's experiences implementing Sustainable Public Procurement policies. During the call, participants from Ghana shared approaches and success stories from implementing energy efficiency standards and provided Senegalese participants an opportunity to ask questions and better understand the challenges and opportunities they might anticipate in implementing similar policies. The event was organized as a pre-cursor to more formal exchanges between government officials, i.e., as the first in a series of peer exchanges between the two countries.
- **Green economy learning assessments (India, Indonesia - two exchanges):** Peer learning was organized to discuss the findings of the Green Economy Learning Assessment (GELA), conducted in Indonesia last year - which identified gaps and entry points for scaling green economy learning - to guide the development of the current GELA in India. The exchanges in August and November 2021 brought together PAGE counterparts in both countries to learn more about entry points for scaling green economy learning in India and the challenges and opportunities that may be encountered in the process, as well as to identify opportunities for continuing engagement.

Additionally, the following exchanges were organized outside the peer learning initiative:

Indonesia-Peru learning exchange on IGE modelling course: In early 2021, PAGE Indonesia engaged the University of Indonesia to promote the existing PAGE IGE Modelling course materials for university students. A virtual exchange was organized with the Universidad del Pacifico to share their experience in adapting and implementing the IGE course in Peru, as supported by PAGE. Learning from these experiences, the course adapted the existing IGE modelling training material to the Indonesian context and was launched for one of the University of Indonesia's master's programme in September 2021.

West Africa exchange on developing a green jobs directory: In June 2021, Côte d'Ivoire shared its experience in developing a green jobs directory with Senegal and Burkina Faso. The directory aims to further enable the green economy transformation by supporting the

creation of new green jobs, the adaptation and transformation of existing jobs and identifying learning gaps to more accurately measure and define green skill requirements. Learning from Côte d'Ivoire, Senegal developed its own operational directory of green jobs and occupations in 2021 that builds on the mapping of institutional learning needs and capacities related to inclusive green economy, conducted in previous years.

PAGE Family Gatherings: Throughout 2021, the PAGE Secretariat continued to organize a series of informal monthly virtual meetings between the PAGE Project Coordinators, partner agencies and Secretariat to share best practices, discuss challenges and promote peer-to-peer learning, removing geographical barriers and strengthening ties. The gatherings in 2021 were organized under different thematic areas, including on green recovery proposals and achievements, communication and outreach, connecting with funding partner delegations in PAGE partner countries and digital transformation and the green economy.

2021 PAGE Global Green Academy: Held under the theme "Driving towards greener, fair and sustainable recovery: Learning from PAGE countries in effectively responding to COVID-19 crisis", the 2021 Academy was presented in three languages for 120 participants from 29 countries. The Academy covered various areas related to green recovery – aiming to enhance real-time and real-world experience and knowledge sharing for policymakers to gain essential insight and support in their respective recovery agendas. The Academy was capped by a Knowledge Fair, where PAGE countries were able to share experiences and best practices in virtual booths, offering an opportunity for peer learning and exchange ([video summary](#)).

7. FINANCIAL OVERVIEW

Resource mobilisation

2021 marked the starting point of the new PAGE Strategy 2021-2030 with an ambitious resource mobilization target and plans to expand the partnership by 10 new countries (to a total of 30 countries) complemented by a larger portfolio of global work. The multi-year commitments from funding partners up to 2020 were sufficient to transition smoothly into the new Strategy phase and deliver a scope of work comparable to previous years plus the additional support for green economic recovery.

PAGE was able to secure new funds in 2021 for the implementation of the Strategy, by signing an amendment with the Republic of Korea for a contribution of USD 776,767. Together with the contributions received by 2020, this allows PAGE to take on board two new countries from 2022. Plans to further deepen the work in the 20 existing countries, to offer post-graduation support or scale up global work are currently on hold subject to receiving further pledges by funding partners.

To achieve the ambitious target of the Strategy 2021-2030, there is agreement among PAGE agencies on the need to strengthen resource mobilisation efforts, to align better with requirements of existing funding partners and to secure interest from new potential funders. For this purpose, the PAGE agencies, guided by an external expert, developed a Resource Mobilization Strategy and Action Plan in 2021.

Fund management

PAGE has still been using two mechanisms for fund management. The PAGE Multi-Partner Trust Fund remained the primary avenue for funding, and the UNDP Multi-Partner Trust Fund Office (MPTF Office) provides the fund management services as Administrative Agent.

In parallel, UNEP continued the fund management related to the UNEP Trust Fund holding the earlier contribution of the EU. Given the lower level of delivery and postponement of activities due the COVID-19 pandemic, the UNEP-EU contract was extended at no cost until the end of 2022, now covering the period 2017-2022.

Income and contributions

With the new agreement signed in 2021, the total amount of PAGE funds received since 2013 is USD 89 million. Since the establishment of the PAGE MPTF in 2017 it is USD 55.4 million and an additional USD 7.05 million for green recovery support.¹

The commitments and the contributions received in the PAGE MPTF in 2021 are summarized in Table 2 of the Consolidated Annual Financial Report of the Administrative Agent (Part III of the report) for the PAGE Fund. The overview is limited to the commitments

¹ Includes the amount held by UNEP outside the MPTF.

to the PAGE MPTF and does not include the 2017-2022 contribution from the EU or contributions received before 2017 in the UNEP Trust Fund.

2021 allocations

Throughout 2021, the disbursement of funds to agencies was facilitated by the PAGE MPTF, based on the overall annual work plan and the country work plans for the 20 PAGE countries. Funds were released after the Management Board approved the requests for fund transfers. Fund transfers were processed by the MPTF Office for the remaining parts of the 2020-2021 work plan and the green recovery support (four transfers made to agencies in 2021). The allocations under the 2021-2022 work plan and remaining funds for green recovery support will be released in the first half of 2022.

Table 4, Table 5.1 and Table 5.2 in the Consolidated Annual Financial Report summarize the allocations per agencies from the PAGE MPTF and related project accounts and expenditures.

One aspect to note on the disbursements and associated expenditures is that the overview includes work plans with different timelines. Work plans for UNEP-GGKP and the UNDP Special Project cover multi-year programmes, while the rest of the PAGE work is delivered under recurrent one-year workplans.

Since 2021, UNEP also started receiving allocations from the PAGE MPTF for delivery of country and global work. Two new project accounts (ODA and Non-ODA) were set up for this purpose by the MPTF Office, in addition to the already existing ones for UNEP-GGKP and the PAGE Secretariat hosted in UNEP. Given UNEP only started using the new accounts from 2021, expenditures rates are still lower than for the other project accounts.

In a transition period covering 2021 and 2022, UNEP's delivery, including the provision of Secretariat services, is partly funded by the EU contribution held in the UNEP Trust Fund and partly funded from the PAGE MPTF. The part funded through the UNEP Trust Fund is not included in the Consolidated Annual Financial Report of the Administrative Agent.

ANNEX I

List of examples: PAGE in-country cooperation with other initiatives

COUNTRY	ORGANIZATIONS & INITIATIVES	DESCRIPTION
ARGENTINA	Centre for Sustainability University of Buenos Aires (UNESCO-IIEP)	Development of the PAGE stocktaking study
	ILO Project OFFSIDE	Organization of a webinar on green economy and the Just Transition
	ILO Safeyouth@work initiative	Co-organized a Youth Hackathon with the National Institute for Youth, on Green Jobs
	GIZ-GET project	Supported inception phase through assistance for strategic planning, outreach and technical support for stakeholder engagement, including participation in the inception mission
		Organized webinar on Just Transition with South Africa
BARBADOS	GEF Small Grants Programme of UNDP	Organization of the Inaugural Small Island Future Fest - exposition on Green and Blue Economy in SIDS
	Food and Agricultural Organization (FAO)	Contributed to the successful development of Joint Programme proposal entitled: Harnessing Blue Economy Finance for SIDS Recovery and Sustainable Development.
BURKINA FASO	UNDP-UNEP Poverty-Environment Action (PEA)	Joint programming and delivery
	Global Green Growth Institute (GGGI)	Complementarity of work is ensured through regular coordination meetings with both organization's government agency focal points
	UNEP Environment and Trade Hub	Collaboration on the Action Plan for Sustainable Management and Export of Non-Timber Forestry Products
	SWITCH Africa Green	Cooperated on National Green Economy Strategy, green entrepreneurship training, and now development of PAGE sustainability plan
GHANA	REDD+	Development of an investment plan for the implementation of Ghana's REDD+ strategy and targets in line with the country's NDCs
	UNEP Finance Initiative (UNEP FI)	A joint scoping study was completed to identify green finance interventions, investment opportunities and barriers and support domestic resource mobilization
	UNEP Environment and Trade Hub	Jointly produced the Green Industry and Trade Assessment
	ILO-SIDA Partnership	Jointly supported the Ministry of Employment and Labour Relations on a National Strategy for Green Jobs
GUYANA	Statistic Canada	Providing capacity-building on building the Green Jobs Assessment Model (GJAM) of Guyana
	Conservation International	Green Conversations public event on "International Best Practices in Inclusive Green Economy Transition"

	(Guyana) and WWF Guianas	
	UNEP Environment and Trade Hub	Contributed to the Green Industry and Trade Assessment, and supported the University of Guyana and UNEP to deliver a green trade and industry training
	International Institute for Environment and Development (IIED)	Supporting analysis on fiscal policies aimed at transitioning agriculture to more sustainable operations
GUATEMALA	Swedish Embassy and the Instituto Centroamericano de Estudios Fiscales	Conversations for joint delivery and complementarity of work programmes
	BIOFIN	Collaborated on a guideline to access green and climate finance
	GIZ	Coordination with a GIZ local initiative on Green Public Procurement, which is complementary to PAGE
KAZAKHSTAN	UNDA Regional project on SPP in EECCA Region	Ongoing discussions on future collaboration on SPP
	GIZ project on development of a low carbon economy in Kazakhstan and Central Asia	Supporting development of a Low Carbon Development Strategy (LCDS) (now Doctrine on Carbon Neutrality until 2060), which PAGE complemented with study on fiscal policies related to NDC and waste sector
	GIZ-GET project	Green economy modelling with a focus on identifying sectors for IGE intervention
	UNEP Finance Initiative (UNEP FI)	Provided substantive inputs to the chapter 'Financial Green Economy Transition' of the green economy stocktaking
	International Institute for Sustainable Development (IISD)	Collaborated on a report on to inform energy subsidy reform
	UNECE and OSCE	Supporting work on Strategic Environmental Assessment and Environmental Impact Assessment
KYRGYZ REPUBLIC	UNDP-UNEP Poverty-Environment Action (PEA)	Organized PAGE inception mission
	UNDA Regional project on SPP in EECCA Region	On-going implementation of the project on SPP in close cooperation with the Ministry of Finance
	OECD, OSCE and GIZ	Organizing Green Economy Forums, development of a Sustainable Finance Roadmap, building institutional capacity for IGE modelling
	BIOFIN	Reforming environmentally harmful agricultural subsidies
	UN CC: Learn programme	Capacity-building on IGE
	International Finance Corporation (IFC)	Collaborating to develop recommendations for the implementation of sustainable finance

	UNEP FI	Organized an introductory training workshop on Environmental and Social Risk Analysis
	GGGI	Supporting the creation of a Green Finance Corporation alongside PAGE
JIANGSU PROVINCE (CHINA)	SIDA	Work on industrial parks specializing on the sustainability of garment industry value-chains, and co-hosted an online event on Just Textile and Garment Sector in China
	BIOFIN	Promoting biodiversity conservation outcomes using finance and economics
	UNEP Environment and Trade Hub	Conducted a study on south-south trade in environmental goods and services (EGS) and collaborated on a baseline assessment of sustainable textile trade and value chains in Jiangsu, along with targeted training for textile producers and retailers.
INDIA	ILO 2018-2022 Decent Work Programme	Development of employment transformative roadmaps for high impact industrial sectors (e.g., textiles and garments)
	BIOFIN	Development of a methodology for a fund mechanism on Biodiversity
	Green Economy Coalition	PAGE India invited to lead a session in the Green Economy Coalition's annual global meeting in India
	SWITCH Asia	Supporting the Ministry of Finance to introduce SPP at national and state levels
	BIOFIN	Developing a methodology for sharing benefits and disbursing funds accrued through the access and benefits sharing (ABS) mechanism
	GGGI	Mission started discussions with GGGI on synergies and complementarity
INDONESIA	World Bank, WRI Indonesia and GIZ	PAGE inception mission
	UNDP's Innovative Financing Lab (IFL)	Assistance to develop a framework for blue financial instrument. Establishment of a Green "Sukuk" Bond
	GIZ-GET project	Collaboration on inception workshop, development of a 'Study on Carbon Taxes as Fiscal Incentives to Reduce GHG Emissions and Develop a Carbon Market in Indonesia' and a jointly conducted introductory training on System Dynamics Modelling targeted at regional governments
	GGGI	Supporting development of a National Strategy for Green and Low Carbon Economy Learning with Bappenas
	International Institute for Environment and Development (IIED), Waste and Resources Action Programme (WRAP), UNDP-UNEP	Collaborating on a work stream on Food Loss and Waste
	Poverty-Environment Action (PEA)	Capacity-building on monitoring and reporting for Green "Sukuk" Bonds
	UNEP FI	Supporting PAGE work on green and innovative financing for the LCDI

MATO GROSSO (BRAZIL)	REDD+ programme	Support implementation of the State Government Integrated Family Farming System
MAURITIUS	UNEP FI	Collaboration on informing the future development of a green bonds programme and on conducting a study on access to green finance
	UNEP's Responsible Industry Group, One Planet Network's Sustainable Tourism Programme	Building capacities regarding sustainable value chains in the tourism sector; developing an Action Plan for Low Carbon and Resource Efficient Accommodation
	ILO's SCORE project	Pilot training aimed at optimising the efficiency, productivity, cleaner production and competitiveness of SMEs
	One Planet Network (OPN), the Lifecycle Initiative	SCP-HAT tool used to assess national budget and environmental footprints of key sectors
	Switch Africa Green	Complementary work on green industry, and will support sustainable development objectives following phase out
MOROCCO	GGGI	Supported the application of Morocco to PAGE through a letter of support
MONGOLIA	UNEP Inquiry	Developed a roadmap for sustainable finance to better align Mongolia's financial system with the Sustainable Development Vision
	EU funded project on Green Economy Policy Review	Conducted a Green Economy Policy Review of Mongolia's National Green Development Policy (NGDP)
	SWITCH Asia	Close cooperation enabled the adoption of an amendment to the Law on Procurement of Goods, Works and Services with State and Local Funds
	UNEP Environment and Trade Hub	Collaboration has included a study and technical note on trade and green economy that was broadly discussed with stakeholders and policymakers
	UNEP FI	Engagement has focused on developing the Mongolian Green Credit Fund (now Mongolian Green Finance Corporation - MGFC)
	GGGI	Collaboration has focused on different workstreams, yielding concrete results including i) measuring green economy progress; ii) financing green growth; and iii) supporting green buildings
PERU	GIZ-GET project	Collaboration on promoting sustainable finance, supporting preparation for the launch of the National Circular Economy Platform and PAGE sustainability strategy
	GGGI	Supported the Ministry of Finance to green economic policies and conducted a green jobs dialogue
	UNEP Environment and Trade Hub	Developed green trade policy proposals for biotrade and the sustainable management of water resources
	BIOFIN	Supporting sustainable finance and investment through the mechanism for Public Works for Tax Deductions
SENEGAL	Charitable foundation WIEGO	Working on waste management with the association of informal waste collectors
	ENDA Energy	Setting up a national multi-stakeholder platform on the Green Economy

	ENABEL - the Belgium Technical Cooperation GEF-funded project on Energy Efficiency and Use of Local Material for Sustainable Construction	Support to a Public-Private Partnership for the establishment of an incubator for the green economy and green jobs Training and support to the development of technical norms and standards on sustainable construction materials and energy efficiency
	One Planet Network (OPN)	A group of OPN partners was set up to support SPP, which PAGE supported via an e-learning course, webinar and training workshop
	GGGI	Combined resources and technical support on the employment impacts of green economy policies
SOUTH AFRICA	Green Jobs Assessments Institutions Network (GAIN)	Organization of a sub-regional training on green jobs modelling University of Pretoria established as a regional training hub for Africa on Green Jobs Assessments
	EU funded project on Green Economy Policy Review	Assessing the greening of the South African Industrial Policy Action Plan
	SWITCH Africa	PAGE in South Africa is designed to reinforce and complement other support programmes on the green economy, such as SWITCH Africa Green Focus on identifying trade opportunities from the perspective of green industrial development (i.e., Green Economy Industry and Trade Analysis), and on scaling trade in organic and biodiversity-based agriculture
	UNEP Environment and Trade Hub	" Perspectives on Advancing an Inclusive and Sustainable Green Economy in South Africa " published from Green Economy Advisory Group (GEAG) project, pursued in partnership by the DFFE
	BMUV, GIZ, UNEP	The project has been complementing PAGE on building capacity on green bonds, supporting a high-level national dialogue on green jobs, initiating an informal Green Economy Advisory Group and conducting a training course on circular economy
URUGUAY	Climate and Clean Air Coalition (CCAC), GIZ and the Environment Corporation of Bogotá, Colombia (CAEM)	Organization of the first international event on Cleaner Production and Formalisation of Brick Production Activities of Uruguay
	Finnish Innovation Fund	Supporting the development of a circular economy as key component of a green economy transition in Uruguay
	GIZ-GET project	PAGE builds on previous work, e.g., green economy assessment, enabling collaboration on various workstreams, e.g., youth entrepreneurship. In 2021, PAGE took over the coordination role for the Network from the UNEP-GIZ-GET

LIST OF ABBREVIATIONS AND ACRONYMS

ABS	Access and benefits sharing
AUCA	American University of Central Asia
AVZUR	University Alliance for Green Economy and Sustainable Development
BAPPENAS	Ministry of National Development Planning (Indonesia)
BAT	Best Available Techniques
B-C-G	Bio-Circular-Green Economy
BIOFIN	Biodiversity Finance Initiative
BMUV	German Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection
CCA	Common Country Analysis
CCICED	China Council for International Cooperation on Environment and Development
CE	Circular Economy
CEMPRE	Compromiso Empresarial Para el Recycling (Uruguay)
CIPPEC	Center for the Implementation of Public Policies for Equity and Growth
CRSAP	Climate Change Resilience Strategy and Action Plan (Guyana)
CSCM	Civil Service College Mauritius
DEFF	Department of Environment, Forestry and Fisheries (South Africa)
ECOWAS	Economic Community of West African States
EGS	Environmental Goods and Services
EGSS	Environmental Goods and Services Sectors
EMPAER	Mato Grosso Company of Research, Assistance and Rural Extension
ENA	Senegalese National School of Administration
EPA	Environmental Protection Agency (Ghana)
EPR	Extended Producer Responsibility
FAO	Food and Agricultural Organization
FLW	Food Loss and Waste
G20	Group of Twenty
GAIN	Green Jobs Assessment Institutions Network
GCF	Green Climate Fund
GDP	Gross domestic product
GEC	Green Economy Coalition
GEF	Global Environment Facility
GEP	Green Economy Progress
GES	Ghana Education Service
GET	Green Economy Transformation
GGGI	Global Green Growth Institute
GGKP	Green Growth Knowledge Partnership
GHG	Greenhouse Gases
GITA	Green Industry and Trade Assessment
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GJAM	Green Jobs Assessment Model
GLN	Green Learning Network

GNCPC	Ghana National Cleaner Production Center
GRO	Global Recovery Observatory
GSDS	Green State Development Strategy (Guyana)
GSS	Ghana Statistical Service
HLPF	High-Level Political Forum
HPU	Housing and Public Utilities
ICLEI	Local Governments for Sustainability
IFC	International Finance Corporation
IFL	Innovative Financing Lab
IGE	Inclusive green economy
IGEM	Integrated Green Economy Measurement
IIED	International Institute for Environment and Development
IMT	Institute of the World of Labour
ILO	International Labour Organization
IR	Indian Railways
ITC	International Training Center
IWA	Industrial Waste Assessment
LabEC	Circular Economy Laboratory (Uruguay)
LAC	Latin America and the Caribbean
LCDC	Low Carbon Development Concept (Kazakhstan)
LCDI	Low Carbon Development Initiative (Indonesia)
LCDS	Low Carbon Development Strategy (Guyana)
MCSAR	Ministry of Civil Service and Administrative Reform (Mauritius)
MCSFF	Mongolia-China Sustainable Fibers Fund
MEDD	Ministry of Environment and Sustainable Development (Senegal)
MEGNR	Ministry of Ecology, Geology and Natural Resources (Kazakhstan)
MENB	Minister of Environment and National Beautification (Barbados)
MESTI	Ministry of Environment, Science, Technology and Innovation (Ghana)
MET	Ministry of Environment and Tourism (Mongolia)
MGFC	Mongolian Green Finance Corporation
MIEM	Ministry of Industry, Energy and Mining (MIEM)
MMDA	Metropolitan, Municipal and District Assemblies (Ghana)
MoEFCC	Ministry of Environment, Forest and Climate Change (India)
MOF	Ministry of Finance (Mongolia)
MoU	Memorandum of Understanding
MPTF	Multi-Partner-Trust Fund
MSMEs	Micro, small and medium-sized enterprises
MSW	Solid municipal waste
NAIR	National Academy of Indian Railways
NCCP	National Climate Change Policy (Mato Grosso State)
NDC	Nationally Determined Contributions
NDPC	National Development Planning Commission (Ghana)
NESDC	National Economic and Social Development Council
NESDP	National Economic and Social Development Plan (Thailand)

NGO	Non-government Organization
NGDP	National Green Development Policy (Mongolia)
NITI	National Institution for Transforming India
NPCC	National Productivity and Competitiveness Council (Mauritius)
NSC	National Steering Committee
NSP	National Strategic Plan (Barbados)
NTFP	Non-Timber Forest Products
OECD	Organisation for Economic Cooperation and Development
OSCE	Organization for Security and Co-operation in Europe
PAG	Ghana's Coronavirus Alleviation Programme
PAGE	Partnership for Action on Green Economy
PAP	Priority Action Plan (Senegal)
PCI	Produce, Conserve and Include (Mato Grosso State)
PEA	Poverty Environment Action
PGEER	Public Green Economy Expenditure Review
PNDES	National Programme for Economic and Social Development (Burkina Faso)
PREN	Programme for the Relaunch of the National Economy (Senegal)
PRODUCE	Ministry of Production (Peru)
PSE	Plan Senegal Emergent
RPJMD	Regional Medium-term Development Plans (Indonesia)
RPJMN	National Medium-Term Development Plan (Indonesia)
RPRKD	Provincial Low Carbon Development Plans (Indonesia)
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
SAG	SWITCH Africa Green
SA-LEDS	South Africa Low Emission Development Strategy
SARUA	Southern African Regional University Association
SCIESU	State Committee for Industry, Energy and Subsoil Use (Kyrgyz Republic)
SCORE	Sustaining Competitive and Responsible Enterprise
SCP	Sustainable consumption and production
SCP-HAT	Sustainable consumption and production Hotspot Analysis Tool
SDG	Sustainable Development Goals
SDV	Sustainable Development Vision (Mongolia)
SEA	Strategic Environmental Assessment
SEBRAE-MT	Brazilian Support Service for Micro and Small Enterprises - Mato Grosso
SEEA	System of Economic and Environmental Accounts
SEIAF	State Government Integrated Farming System (Mato Grosso State)
SERRP	Socio-Economic Response and Recovery Plan (Ghana)
SIDA	Swedish International Development Cooperation Agency
SIDS	Small Island Development State
SIYB	Start and Improve your Business
SME	Small and Medium-sized Enterprises
SNDD	National Sustainable Development Plan (Morocco)
SNEV	Stratégie National de l'Économie Verte (Burkina Faso)

SPP	Sustainable public procurement
SSTC	South-South and Triangular Cooperation
TDRI	Thailand Development Research Institute
TSA	Targeted Scenario Analysis
UGBS	University of Ghana Business School
UN CC: Learn	One-UN Climate Change Learning Partnership
UNDA	United Nations Development Account
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UFMT	Federal University of Mato Grosso
UNCT	United Nations Country Teams
UNRC	United Nations Resident Coordinator
UNRCO	United Nations Resident Coordinator Office
VNR	Voluntary National Review
WIEGO	Women in Informal Employment: Globalizing and Organizing
WRI	World Resources Institute
WTO	World Trade Organisation
WWF	Worldwide Fund for Wildlife
WxT	Work for Taxes
YREB	Yangtze River Economic Belt



PAGE PARTNERSHIP FOR ACTION
ON GREEN ECONOMY

PAGE would like to thank its funding partners:



Supported by:



Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

based on a decision of
the German Bundestag



Ministry for Foreign
Affairs of Finland



**NORWEGIAN MINISTRY OF
CLIMATE AND ENVIRONMENT**



Ministry of Environment
Republic of Korea



SWEDISH INTERNATIONAL
DEVELOPMENT COOPERATION AGENCY



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

un-page.org