

### **PAGE 2024 ANNUAL PROGRESS REPORT**

**PART I: Summary Report** 

**PART II: Comprehensive Summary of Regional and** 

**Global Work and Country Progress** 











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### NOTE FOR THE READER

This report summarizes the progress the PAGE programme made against its four outcomes in 2024 with reference to cumulative results since the initiation of the Partnership in 2013. It is presented in two parts.

### **Part I: Summary Report**

Section 1 provides an executive summary of the 2024 progress.

<u>Section 2</u> provides cumulative progress statements for each outcome together with an overview of the status of the indicators at the end of 2024. Details behind the aggregate reporting on the indicators are provided in the PAGE monitoring framework in a separate document.

<u>Section 3</u> summarizes contributions of the programme to different areas, including circular economy, green jobs and just transition, and sustainable finance, with reference to climate and biodiversity targets, gender and youth - based on 2024 examples.

Section 4 highlights challenges and lessons learned in 2024.

#### Part II: Comprehensive Summary of Regional and Global Work and Country Progress

<u>Sections 1 and 2</u> summarize 2024 progress in regional and global capacity development, South-South Collaboration, outreach and knowledge sharing activities.

<u>Section 3</u> provides a summary of 2024 progress in the 22 PAGE countries.

<u>Section 4</u> highlights examples of collaboration with other initiatives in 2024.

<u>Section 5</u> summarizes the activities of the PAGE Secretariat and governance bodies.

Section 6 outlines the main developments related to fund management.

The consolidated financial report and the certified financial reporting for the PAGE Multi-Partner Trust Fund (MPTF) are provided by the MPTF Office in a separate document.

The comprehensive monitoring framework with aggregate results and progress made in 2024 is provided in a separate document.

See also the 2024 online report for quick access to 2024 results of PAGE.

# PART I: SUMMARY REPORT

### **1.EXECUTIVE SUMMARY**

In 2024, PAGE launched a new chapter with the rollout of its updated strategy *From Recovery to Transformation: Greener, Circular and Job-Rich Economies by 2030,* signalling a renewed commitment by the Partnership to put its weight behind the global transition to inclusive, circular and green economies.

Recognizing that countries require bold shifts in the way economies are financed, resourced and structured, PAGE



set its overall goal at shifting finance and investments for a just, circular and green economic transformation that improves human well-being.

Amidst reduced global economic growth, escalating youth unemployment, widening inequalities, fragile fiscal positions, and the pervasive threats of climate change and nature loss, PAGE had defined its added value in supporting countries to:

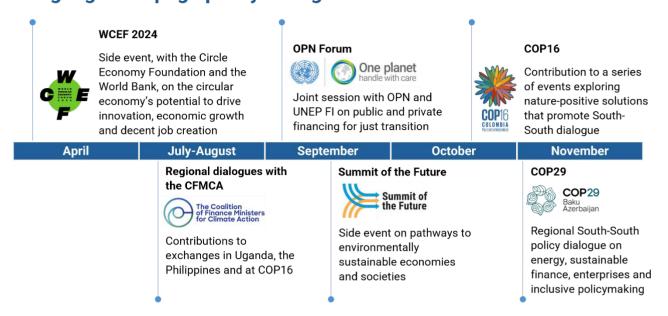


This strategic direction has been consistently implemented throughout 2024, evident in the partnership's strengthened global and regional portfolio as well as its country-level support. These efforts continuously prioritize circularity, green jobs and just transition, and sustainable finance as three essential and interconnected pillars of green transformation.

### Tailored support: from strategy to practice

PAGE actively extended its reach and deepened its impact by scaling its presence at international fora. Here, it effectively translated lessons from country work into actionable insights for global policy discussions, persistently working to position itself as a crucial voice for presenting concrete approaches and policy solutions, while also making vital connections between diverse themes.

### Highlights of page policy dialogues in 2024



Simultaneously, PAGE also created new opportunities for South-South exchange along with a shift to a new country delivery model with shorter-term, targeted interventions in response to strategic policy requests.

PAGE expanded its strategic alliances establishing a new partnership with the Coalition of Finance Ministers for Climate Action and strengthening existing collaboration with UN Development Cooperation Office (DCO), Green Economy Coalition, Green Growth Knowledge Partnership, and Biodiversity Finance Initiative.

At the country level, PAGE continued to provide integrated advisory assistance to countries that benefit from the multi-year support initiated in previous years with interesting milestones being reached with respect to national plans, strategies and policy reforms that guide and incentivize green transitions in India, Indonesia, Guatemala, Kazakhstan, Thailand, Morocco, Rwanda and Cambodia.

By the end of 2024, the majority of countries previously operating under the earlier delivery model had reached a stage where the Partnership phased out its direct support. The focus in these countries is now on fostering initiatives designed to sustain advancements toward an inclusive green economy.

In parallel, PAGE partners worked closely with select governments to identify strategic policy entry points for targeted support aligned with the updated PAGE Strategy.

### PAGE policy support under the updated strategy

### New engagements confirmed in 2024



In **Brazil**, PAGE has been supporting the Ministry of Finance since mid-2024 with a macroeconomic assessment of the impacts of the Ecological Transformation Plan.



In **Indonesia**, the Ministry of Planning seeks to further operationalize its Circular Economy Roadmap and Action Plan.



In **South Africa**, the Presidential Climate Commission plans to implement a just transition forum to accompany the country's phase out from coal.



In Kazakhstan, the Ministry of Ecology and National Resources aims to build a financial architecture for critical investments in the water sector.

#### **Driving green transformation: key progress areas**

With its new delivery model, structured around three core pillars, PAGE demonstrated the transformative power of circular economy principles, the opportunities to build job-rich economies, the way forward for sustainable finance and the underlying power of capacity development with results across countries and at regional and global levels.

Here, it is essential to mention that the launch of this new phase for PAGE - marked by a renewed joint commitment to keeping sustainability high on the global agenda - has been made possible by the substantive and financial contributions of its funding partners. In 2024, PAGE secured vital new pledges from SIDA and the Republic of Korea, building upon a significant contribution from the European Commission finalized in 2023. These partnerships are crucial as PAGE continues to work on inclusive green transformation.

### • Transition pathways to circular economies

PAGE continued to drive the shift towards more efficient resource use across sectors showing how circular economy principles can be a transformative force for sustainable economic growth, job creation and environmental resilience. Furthermore, blending policy reform, knowledge-sharing and capacity building, PAGE has consistently empowered governments, the private sector, and civil society to embrace circular economy strategies at the national and sub-national levels.

Capacity development initiatives like the PAGE Green Industry Summer School, held in Vienna in 2024, provided green industry practitioners with insights into practical aspects of circular economy policies. The curriculum was designed to highlight the importance of multi-stakeholder approaches that bring together policy, technology, and finance to facilitate a seamless shift towards a circular economy. The participants also used this opportunity to formulate regional strategies that could increase energy efficiency and improve access to urgently needed financing.

At the 8<sup>th</sup> World Circular Economy Forum (Brussels), PAGE launched its updated Strategy and successfully engaged partners on circular economy initiatives. PAGE also contributed to the discourse on circular economy's potential to foster innovation, economic growth and job creation through the *People Driving Change Today* session.

### At the country level

PAGE strengthened national and local initiatives to mainstream circular economy principles

Uruguay launched its first National Circular Economy Strategy with PAGE support, establishing an institutional framework and complementary initiatives to drive circular innovation and inclusive green growth. Indonesia launched a
National Circular
Economy Roadmap and
Action Plan. PAGE
advanced localized
circular economy
approaches through
education, industrial
assessments, and
initiatives to reduce food
waste.

The Industrial Union in Argentina delivered a sustainable production course and developed practical tools to help small and medium-sized enterprises adopt circular practices in key sectors with the support of PAGE.

#### • Shaping green transitions that are job-rich, just and fair

PAGE continued to promote and support green transitions that generate decent work and drive sustainable development. Through global dialogues, targeted country support, and evidence-based analysis, PAGE demonstrated how inclusive governance, robust evidence and strategic partnerships can accelerate just and sustainable economic transformations in different regional and country contexts.

At the Summit of the Future in New York, PAGE facilitated a dialogue on the importance of incentivizing circular business models and leveraging South-South and Triangular Cooperation for scaling just transitions by bringing together government officials, entrepreneurs, and civil society at the *Green and Circular - Can it be Fair?* side-event.

At UNFCCC COP29 in Azerbaijan, PAGE co-hosted a South-South Policy Dialogue with two themes: (1) employment implications and enterprise development opportunities for gender-responsive just transition; (2) NDCs as vehicle to advance just transition and sustainable financing for an inclusive green energy transition. A direct and beneficial outcome of the South-South policy dialogue was the establishment of a technical working group to deepen regional cooperation and prepare inputs for COP30.

PAGE endorsed the importance of social dialogue as a pillar of just transition and promoted the same in a dedicated webinar for national coordinators in which experts and national partners shared insights on integrating worker, employer, and civil society voices into policymaking and skills development strategies. PAGE was also instrumental in the release of the *Measuring and Modelling Circular Jobs* report, which calls for stronger data and definitions to better understand circular economy employment and its role in a just transition.

### At the country level

PAGE supported strategic assessments and capacity development in support of green jobs and just transitions

In **Ghana**, PAGE published a green jobs assessment showing strong employment and climate benefits from green policies.

In Barbados,
PAGE coorganized a
national
symposium
leading to the
announcement of
a renewable
energy skills
council.

In Guatemala,
PAGE supported
the first Green Jobs
and
Entrepreneurship
Fair as well as a
comprehensive
review of how
higher education
can advance the
green transition.

In Guyana, PAGE
helped with the
completion of a
green jobs
assessment and
initiated a reform of
its technical and
vocational
education and
training to promote
green skills in the
construction sector.

### • Financing green and just transitions

PAGE strengthened its focus on financing green and just transitions by fostering strategic partnerships with finance ministries and promoting policies and frameworks for sustainable finance across global, regional and national levels.

The new partnership with the Coalition of Finance Ministers for Climate Action (CFMCA) was an important strategic milestone for PAGE. This helped PAGE gain access to a wide network of ministries of finance, which were open to integrating climate and environmental goals into fiscal and economic planning and learning more about PAGE's tools such as the Sustainable Budgeting Approach. PAGE played an active role in shaping the agenda of Regional CFMCA meetings in Uganda and the Philippines to place the emphasis on the central role that finance ministries can play in green investment strategies and nature-based financing instruments, such as green bonds or biodiversity offsets.

At the Convention on Biological Diversity (CBD) COP16, PAGE supported CFMCA-led events to enable the convening of global financial and development leaders to discuss the mainstreaming of biodiversity into macroeconomic policy and the alignment of financial flows with the Global Biodiversity Framework to close the biodiversity finance gap. Other PAGE-supported dialogues at CBD COP16 highlighted country experiences on nature-positive finance enhancing South-South exchange. Thereby, PAGE's engagement was focused on providing conceptual leadership underpinned by country experiences.

At the regional level, PAGE co-organized a South-South workshop on green finance with BIOFIN in Central Asia. This brought together Kazakhstan, Mongolia, Kyrgyzstan and Uzbekistan and helped advance regional cooperation. Countries explored policies for financing circular economies, green taxonomies, and subsidy alignment with SDG priorities.

In collaboration with UN DCO, PAGE put forward a webinar engaging UN Resident Coordinator Office economists to deepen the understanding of just transition finance and strengthen the UN's country-level capacity to support inclusive green economies.

PAGE also explored public-private synergies in a session at the One Planet Network Forum in Brazil, advocating for blended finance mechanisms to scale investments in circular economies and sustainable production.

#### At the country level PAGE advanced national frameworks for sustainable finance In the **Kyrgyz** In India, an In Guatemala. In **Kazakhstan**, the Republic, the State assessment of PAGE developed a President signed a **Development Bank** rural development guide for municipal new Law on launched the Green schemes environmental Sustainable Public Financing identified how spending and a Procurement to Programme, roadmap for promote green principles marking a key step can enhance environmental sustainable goods in advancing the taxation to align and services. public investment **National Green** fiscal systems with in rural areas. Economy sustainability Development goals. Programme.

#### Shaping green economic policies

Beyond its focus areas, PAGE consistently provided strategic advice, guiding nations in shaping and advancing comprehensive green economic policies. This expertise translated into tangible results across diverse regions.

For instance, in Kazakhstan, PAGE provided support in refining the country's Green Economy Concept and launching its ambitious 2024-2030 Action Plan. This roadmap, aligned with the SDGs and Paris Agreement, sets Kazakhstan on a path to carbon neutrality by 2060 through concerted efforts in decarbonization, energy efficiency, and inclusive development.

In Thailand, PAGE supported the development of a national emission trading scheme through analysis and a policy framework, emphasizing carbon taxation, decarbonization strategies, and capacity building. Moving to Morocco, PAGE facilitated the integration of biodiversity considerations into the critical agriculture and mining sectors, ensuring alignment with the Kunming-Montreal Global Biodiversity Framework. This involved meticulous needs mapping, recommending best practices, and equipping government staff with essential training.

Meanwhile, in Uruguay, PAGE provided technical guidance resulting in the development of comprehensive marine biodiversity management guidelines, crucial for supporting sustainable offshore energy development, enhancing vital biodiversity data systems, and significantly reducing environmental impacts, particularly from seismic activities.

### 2024 in a Snapshot



### Prioritizing just transition and finance in global outreach and exchange

- Policy dialogues at Climate COP29, Biodiversity COP16, WCEF, OPN
   Forum, and Summit of the Future
- South-South Collaboration workshop among senior government experts from Kazakhstan, Mongolia, Kyrgyz Republic and Uzbekistan on green finance



### Leveraging the green transition through the UN system

Working with UN DCO on trainings and thematic dialogues



### Enhancing skills and institutional capacity for greener economies

12,800+ learners benefited from PAGE's learning portfolio



### New engagements with countries for strategic policy support

In Brazil, Indonesia, South Africa and Kazakhstan



### Transition ceremonies marking the phase out of PAGE

In Indonesia, Argentina and Kazakhstan



### 2 new national plans adopted

Updated green economy concept and action plan in Kazaskhtan National long-term development plan 2025-2045 in Indonesia

#### 7 new thematic and sectoral policies adopted

- In Uruguay, the National Circular Economy Strategy
- In Kazakhstan, the Law on Sustainable Public Procurement
- (PS)
- In India, the Eco-Mark Certification Rules
- In Indonesia, the National Circular Economy Roadmap and Action Plan, and the Regional Strategy and Action Plan on Food Loss and Waste for Bali Province
- In Kyrgyz Republic, the Green Finance Programme
- In Morocco, the Roadmap for the Moroccan Coalition for Sustainable Energy Access



### **Funding partners reconfirmed commitment**

- New pledges from SIDA and the Republic of Korea
- Substantive contribution from the European Commission signed in 2023



#### **Building partnerships to deliver transformative results**

- Strategic alliance with the CFMCA
- Strengthened partnerships at the global level with UN DCO, BIOFIN, UN CC:Learn, OPN, UNEP FI, GEC and GGKP and at the country level with GEF, GAIN, IKI and ILO programmes and projects

#### Enhancing skills and institutional capacity for greener economies

To enable individuals and institutions to lead green transitions, PAGE's capacity development involves a combined portfolio of nationally tailored training programmes focused on specific themes and global formats like the 2024 Green Industry Summer School or publicly accessible on-line training courses. On the UN CC:Learn platform, PAGE continuous to offers 7 open-access online courses in 10 languages on green finance, industry, trade and fiscal policy that have attracted more than 200,000 learners with over 56,800 certificates issued.

At the country level, Peru launched a new e-learning platform for green entrepreneurship on the Ministry of Environment's online learning platform 'Aprende' in support of the Roadmap for Green Growth. In Morocco, a systematic approach to green economy learning was provided through a Green Economy Learning Assessment, and the Mohammed VI Polytechnique University launched an elearning platform on decarbonation of agriculture. In Argentina, media professionals were enabled to cover the green transition through online training on strategies to promote sustainability in a changing media landscape, and how to craft new alliances between different organizations and formats to increase impact.

Through these varied global and national capacity development activities, a total of 75,700 people have been trained to date, including over 12,800 new learners in 2024, and a total of 39 recurring training courses are delivered through national staff colleges and similar institutions, equipping cohorts of government officials with essential skills.

### **Sustaining progress by leveraging PAGE's strengths**

PAGE's pivotal role in supporting national progress toward inclusive green economy goals green was celebrated in Indonesia, Argentina and Kazakhstan with transition ceremonies marking the phase out of PAGE.

### At the country level

PAGE transition ceremonies in Indonesia, Argentina and Kazakhstan



Argentina's transition workshop highlighted PAGE's contributions to the Argentina 2030 Productive Plan, green jobs programming, support to small and medium-sized enterprises, and the creation of systems to advance circular economy practices and labour formalization.



Kazakhstan's ceremony showcased PAGE's role in shaping national strategies on carbon neutrality, green economy and sustainable procurement, while supporting reforms through data-driven analysis on environmental and economic policy.



In Indonesia, a national dialogue recognized achievements in embedding circular economy and energy transition into national and provincial planning, supported by PAGE's technical inputs on sectoral reforms, green jobs, and low-carbon development.

#### The path forward

With its updated Strategy now fully operational, PAGE is approaching 2025 with a full agenda, reflecting its strong commitment to advancing global green economic transformation. The Partnership plans significant engagement at key international fora, including WCEF 2025, the 4<sup>th</sup> Finance for Development Conference, COP30, and the G20. Concurrently, PAGE is pioneering innovative formats for regional knowledge and experience sharing, such as the forthcoming Regional Academy for Africa and a new training series developed in collaboration with UN DCO. Furthermore, PAGE remains dedicated to producing influential global products, equipping partners with analytical tools and generating the foundational knowledge necessary for systemic green economic shifts, as summarized below.

### Analytical global work that started in 2024

### Global circular economy transition modelling and decision support tool (UNEP)

- Analytical tool to analyse circular economy pathways and policy options
- Support the application at the country level through an online visualisation platform

### Policy guidebook on decarbonizing highimpact sectors (UNIDO)

 Provides strategic guidelines for decarbonizing of key economic sectors through circularity, with a focus on highimpact sectors

### Report on jobs in the circular economy (ILO)

- Flagship report on modelled estimates of circular economy employment
- First phase delivered in 2024 through the report 'Measuring and modelling circular jobs'

### Documentation and dissemination of PAGE policy practices and lessons learned (UNDP)

- Captures PAGE's transformative SSTC experiences in green and circular economy policy advancement
- Equips countries with practical and replicable solutions and inspires learning

### Study on enabling macroeconomic and policy environment for a secondary materials market (UNIDO)

- Examines enabling policies and barriers for secondary materials markets
- Provides strategic recommendations on creating a supportive environment for low-carbon industrial development and resource efficiency

In an increasingly complex financial environment for green transitions, PAGE is well-placed to leverage its distinctive strengths in policy analysis, capacity development, and facilitating vital cross-sectoral dialogue. These capabilities are crucial for uncovering and implementing solutions that deliver tangible, sustainable results, reinforcing the urgency of global environmental action.





















### 2.PROGRESS MADE TOWARDS PAGE OUTCOMES

### **AMBITION, CONTEXT AND OBJECTIVES**

PAGE's ambition is to catalyse transformational change that enables countries to shift finance and investments for a just, circular and green economic transformation that improves human well-being. The entry points of the partnership are government-led national plans, policies and strategies as well as sectoral and thematic policy reforms that together create the enabling macroeconomic environment for working towards the global targets of the 2030 Agenda for Sustainable Development, Paris Climate Agreement and Kunming-Montreal Global Biodiversity Framework.

Leveraging the expertise and networks of UNEP, UNDP, ILO, UNIDO and UNITAR, PAGE offers an integrated package of activities that includes advisory support to select countries and an important portfolio at regional and global levels focused on filling knowledge gaps, capacity development, policy dialogues linked to international fora, and South-South exchange and cooperation.

Since 2024, following the update to the PAGE Strategy, PAGE put the emphasis on three essential and interconnected elements of a green economy transformation: green jobs and a just transition, foster circularity, and advance sustainable finance.

Through its country advisory support, PAGE has supported 21 countries and two states/provinces since 2023, including Argentina, Barbados, Brazil at national level and in Mato Grosso State, Burkina Faso, Cambodia, Ghana, Guatemala, Guyana, India, Indonesia, Jiangsu Province (China), Kyrgyz Republic, Kazakhstan, Mauritius, Mongolia, Peru, Rwanda, Senegal, South Africa, Uruguay, Morocco and Thailand. The countries have joined at different points in time over the past years and, at the end of 2024, 12 of them have already reached the moment when PAGE phases out its financial support, namely Mongolia, Ghana, Peru, Jiangsu Province (China), Burkina Faso, Mato Grosso State, Mauritius, Senegal, South Africa, Uruguay, Kyrgyz Republic and Argentina.

Under its updated strategy, PAGE started to reengage with select countries in the course of 2024 for an additional package of support to be delivered from 2025 (confirmed for Brazil, South Africa, Indonesia, and Kazakhstan).

2024 progress is reported against the overall programme logical framework of the PAGE Strategy 2021-2030 providing the underlying reference for the programme and the Multi-Partner Trust Fund with a focus on four outcome areas:

**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, have access and apply knowledge for advancing IGE.

### **CONTRIBUTION AT IMPACT LEVEL**

The Theory of Change and the logical framework of the updated PAGE Strategy 2021-2030, defines 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 several global reference frameworks to which PAGE outcomes can be aligned to indicate the wider impact of the programme. With its work, PAGE contributes to progress towards:

- Different Sustainable Development Goals (SDGs);
- Regional sustainable development priorities;
- Countries' National Determined Contributions (NDCs); and
- Targets of the Kunming-Montreal Biodiversity Framework.

As many different factors influence the overall impact, the references below are possible contributions of PAGE and 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). An overview of how the specific work in countries contributes to the different SDGs is included on the PAGE website.

PAGE is contributing to advancing **regional sustainable development priorities**. For example, in 2024, PAGE, together with the Biodiversity Finance Initiative, facilitated a government-to-government exchange in **Central Asia** to share knowledge and experience on green finance in support of just transition to sustainable development in a regional South-South Collaboration (SSC) workshop.

In the **Africa** and **Asia-Pacific** region, PAGE provided support to the regional meetings of the Coalition of Finance Ministers for Climate Action to strengthen the role of finance ministries in green transformation through the integration of climate and environmental priorities into fiscal and economic planning.

PAGE is supporting the advancement of **NDCs**, with related work noted in 14 countries (Mongolia, Peru, Senegal, Mauritius, Ghana, South Africa, Guyana, Kyrgyz Republic, Kazakhstan, Argentina, Indonesia, India, Guatemala and Thailand). For example, in 2024, in **Ghana**, PAGE conducted a green jobs modelling assessment that analyses the social and employment impacts of the country's climate and green policies captured in the NDCs. In **Mongolia**, a study on analysing options for energy subsidy reform contributes to the country's broader policy context by supporting implementation of its NDCs. In **Guatemala**, PAGE is supporting the development of a national policy on sustainable public procurement to align procurement practices with national environmental goals and the country's NDCs.

PAGE is contributing to the targets of the **Kunming-Montreal Global Biodiversity Framework**, with related work noted in 12 countries and one state (Mongolia, Peru, Burkina Faso, South Africa, Kyrgyz Republic, Mato Grosso State, Uruguay, Kazakhstan, Guatemala, Indonesia, India, Morocco and Thailand). For example, since 2024, in **Guatemala**, PAGE is supporting the development and implementation of a roadmap to advance environmental and biodiversity taxation. In **Morocco**, PAGE is working with the Biodiversity Committee of the Ministry of Energy Transition and Sustainable Development on biodiversity mainstreaming in the country's key sectors agriculture and mining.

### PROGRESS TOWARDS INTERMEDIATE OUTCOME

The intermediate outcome is defined 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.'

The purpose of the intermediate outcome is to convey the higher-level changes that result from collective progress across outcomes 1 to 4 throughout the country programmes and the global and regional work, such as the promotion of green industry and jobs, which may result from the accumulative progress under multiple outcome areas.

It also aims to capture how the different streams of work under each outcome area culminate to stimulate economy-wide change. The eight indicators under the intermediate outcome connect the programmatic work to higher-level impact. 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.

Most PAGE countries reframed national plans, sectoral and thematic policy and programmes along sustainability and climate action and strengthened enabling policy conditions, including finance across sectors to set the path towards inclusive green economy transition. PAGE has contributed to this, for example, through policy analyses provided to the governments of **Burkina Faso**, **Ghana**, **Indonesia**, **Kazakhstan**, **Kyrgyz Republic**, **Mauritius**, **Mongolia**, **Peru**, **Senegal** and **South Africa** that fed into the integration of inclusive green economy targets into national plans or the development and adoption of national green economy or green development policies, strategies and action plans.

#### Green public-private partnerships and sustainable business practices strengthened.

In most PAGE countries, initiatives that bring together public and private partners to achieve green economy objectives have been strengthened with the support of PAGE including the introduction of measures that support the adoption of sustainable production patterns. For example, in **Argentina**, PAGE supported the government to raise awareness and train small and medium-sized enterprises on sustainable practices, such as through the climate action agreement, a public-private platform for sustainable development. In **Peru**, PAGE partnered with the government and a local business development services provider to support eco- and bio-business start-ups to comply with the related national legislation for enterprises. In **South Africa**, PAGE supported government-led sustainable business promotion initiatives strengthening small and medium-sized enterprises contribution to an inclusive green economic transition. In **Mauritius**, PAGE supported the implementation of the *Small and Medium-Sized Enterprises 10-Year Master Plan*, a strategy to encourage enterprises to adopt sustainable production practices. PAGE provided recommendations to enterprises in **India**, **Argentina**, **Ghana**, **Uruguay** and **Indonesia** for design, production, process optimisation and business models to address challenges in transitioning to sustainable business practices.

### Green industry and green jobs promoted.

Almost all PAGE countries have either completed analysis, introduced strategies, policies and programmes, or implemented explicit measures and activities which promote green jobs and/or green industry with the support of PAGE. For example, in **Argentina**, the greening of industries was advanced through tailor-made training on sustainable production for SME. PAGE supported the development of the *National Circular Economy Strategy* in **Uruguay** and national circular economy road maps and action plans in **Argentina**, **Peru** and **Indonesia**. The partnership developed and applied green jobs assessment models in **Burkina Faso**, **Kyrgyz Republic**, **Mauritius**, **Ghana**, **Mongolia**, **Thailand** and **Guyana** and supported the development of green jobs promotion strategies in **Argentina**, **Ghana** and **Senegal**.

### Social conditions and social equities improved across societies.

In the context of PAGE, countries have in many cases increased the emphasis on the social conditions and social equities across their policy frameworks by addressing issues such as poverty, human rights and gender mainstreaming in their green economic transition. Several countries put an explicit focus on just transition in the policies and analytical products that PAGE supports, such as **Argentina**, **Ghana**, **Indonesia**, **Kyrgyz Republic**, **South Africa**, **Barbados**, **India**, **Guatemala**, **Morocco**, **Thailand**, **Guyana** and **Rwanda**. In addition, in **Mauritius**, PAGE supported the development of the *Marshall Plan Against Poverty* and the drafting of policy measures to prevent extreme poverty. In **South Africa**, the Presidential Climate Commission recently adopted a framework for just transition.

### Knowledge and learning for green economy enable institutions, policymakers, and individuals to take effective action on green economy.

Many PAGE countries have created and expanded knowledge and learning on green economy through capacity-building initiatives for a variety of stakeholders. PAGE has, for example, supported governments with the introduction of green economy in the curricula of schools, institutions and universities, the development and delivery of green economy courses for public officials, as well as courses targeted at the private sector, for instance, on regulatory challenges and opportunities for green transition. Training of public officials was conducted in **Argentina**, **Burkina Faso**, **Ghana**, **India**, **Kazakhstan**, **Mato Grosso State**, **Mauritius**, **Mongolia**, **Uruguay**, **Peru** and **Indonesia**. As a basis for capacity development initiatives, a large number of countries completed green economy learning needs assessments, namely **Argentina**, **Barbados**, **Burkina Faso**, **Ghana**, **India**, **Indonesia**, **Kazakhstan**, **Kyrgyz Republic**, **Mato Grosso State**, **Mauritius**, **Morocco**, **Senegal**, **South Africa**, **Thailand** and **Uruguay**.

### New South-South and Triangular and PAGE alumni country collaborations resulting from established or leveraged mechanisms.

PAGE countries have in many cases taken opportunities to exchange on green economy experiences and practices at sub-regional, regional or global level or found opportunities for peer-to-peer learning through dialogues between governments. For example, PAGE initiated a peer-learning partnership between **Mongolia** and **Kyrgyz Republic** leveraging Mongolia's experience in establishing a green credit fund. SSC was fully embedded into the concepts of PAGE's recent Global Green Economy Academies and Green Industry Summer Schools that provide platforms for policymakers, policy advisors and practitioners to share experiences and lessons in key policy areas of a green economic transformation.

In addition, in 2024, PAGE facilitated a government-to-government exchange on green finance in Central Asia in Kyrgyz Republic, in collaboration with the Biodiversity Finance Initiative. At the 29<sup>th</sup> UN Climate Change Conference (COP29) in Azerbaijan, PAGE put forward a cross-regional South-South policy dialogue on energy, sustainable finance, enterprises and inclusive policymaking. PAGE also contributed to a series of events exploring nature-positive solutions that promote South-South dialogue among delegates at the 16<sup>th</sup> meeting of the Conference of the Parties to the Convention on Biological Diversity (COP16) in Colombia.

### Partnerships and alliances strengthened with key institutions and actors that help establish platforms for expanding and financing the IGE transition.

In several cases, PAGE countries have established multistakeholder platforms on green economy as a vehicle to continue their path towards an inclusive green economic transition. For example, in **Senegal**, a national platform on green economy was established, issued by decree by the Ministry of Environment and Sustainable Development. The government of **Burkina Faso** organized a second edition of the National Green Economy Academy, using its own resources to advance green economy.

Joint delivery model of the five UN agencies strengthened, contributing to the UN System delivery.

PAGE has established and continuously strengthened the joint delivery model of the five participating agencies. The partnership has been recognised in UN System documents and processes for its focus on transformational change and a One UN interagency approach and delivery.

The joint delivery model was applied in the 22 partner countries as well as to numerous global and regional activities that were delivered under the partnership. Since the beginning of the UN reform process and the establishment of the UNRCOs, PAGE has built strong partnerships with UNRCOs in its partner countries which allowed it to embed its offer within the countries' broader reform agendas and strengthen the focus on green economy in UN joint support. Where openings were identified, PAGE was able to contribute to the Common Country Analysis as in the case of **Indonesia**, **Peru**, **Kazakhstan** and **Cambodia**. Beyond the country support, PAGE was also able to provide a platform for knowledge exchange providing thematic dialogues for UNRCOs or collaborating with UNRCOs and UNDCOs on targeted training sessions.

#### PROGRESS TOWARDS OUTCOMES 1-4

#### Shaping national policies

- ✓ 111 new or revised policies adopted formulating targets and pathways for a green economic transition:
  - 57 overarching national development plans and strategies
  - 54 thematic and sectoral policies, roadmaps and action plans
- ✓ Supported with:
  - **282 policy assessments and analytical studies** spanning a diverse range of themes
  - In collaboration with over 373 ministries and national institutions across sectors

#### **7** Filling knowledge gaps

- √ 75,700+ learners so far
- √ 7 open-access e-courses in 10 languages on green finance, green industry, fiscal policy, trade and sustainable finance
- √ 39 recurrent courses embedded in curricula of national training institutions
- √ 5 Global Green Economy Academies and 3 Green Industry Summer Schools providing deep-dive learning and knowledge exchange
- ✓ Trainings coordinated with UN Development Coordination and the network of UN Resident Coordinator Offices

### 2 Influencing global debate

**65 global and regional events** positioning inclusive green and circular economy transformation in global debates on climate action, biodiversity conservation, and the 2030 Sustainable Development

#### Developing capacity

- ✓ 25 analytical and modelling tools, manuals and guides for global references and application in countries
- ✓ Communication products sharing best practices for a transition to an inclusive green economy

### Outcome 1 - Countries have reinforced and integrated IGE goals and targets into SDG-aligned economic and development planning and financing

To achieve outcome 1, PAGE supports countries in the design and implementation of cross-sectoral policies and plan through IGE diagnostics, assessments, policy analysis and prioritization of IGE sectors in line with the 2030 Agenda, the Paris Climate Agreement and other international environmental and sustainable development frameworks. It also supports the mobilization and engagement of public, private and civil society stakeholders, the development of measurement frameworks, green budgeting processes and planning for the sustainability of results.

As of 2024, 15 countries and 2 states/provinces have adopted **cross-sectoral plans and strategies integrating IGE priorities** including Mongolia, Peru, Senegal, Ghana, Mauritius, Burkina Faso, Jiangsu Province, South Africa, Kyrgyz Republic, Mato Grosso State, Kazakhstan, Argentina, Barbados, Indonesia and Thailand. All of them have started to implement earlier adopted plans and strategies.

As countries develop national plans and strategies on recurrent basis or have different strategic components as part of an overarching policy framework, PAGE has supported governments in the development of different and subsequent cross-sectoral and national policy frameworks that advance an inclusive green economy. Since its beginning in 2013, PAGE provided inputs to a total of 57 national plans and strategies which now include IGE goals, including two additional ones that were adopted in 2024.

A highlight in 2024 was the adoption of Kazakhstan's updated *Green Economy Concept*. The revised document aligns national policies, regulations and commitments with SDG targets and indicators, as well as other international agreements, such as the Paris Climate Agreement. The concept reinforces the plans of the government, as reiterated by the national Green Economy Council, to achieve carbon neutrality by 2060.

In Indonesia, PAGE supported the development of the *National Action Plan 2025–2045*, which provides a strategic framework to transition Indonesia's economy from a linear to a circular model by 2045, aligning with national development goals under the *Vision Indonesia 2045* and the net zero emission target by 2060.

In addition, PAGE is in progress of supporting the Government of **Rwanda** with the consultation process for greening of the second *National Strategy for Transformation 2024-2029*, which was approved by the cabinet in 2024, with the aim to mainstream green growth across priority sectors and polices.

To inform national planning processes, PAGE is providing support to conduct national IGE diagnostics, assessments and policy analysis in consultation with national stakeholders. 64 reports have been completed with PAGE support, including five additional ones completed in 2024:

- In **Indonesia**, an analysis on economic transformation to inform the development of the country's *Vision 2045* and the recent update of the *Common Country Analysis*.
- In **Thailand**, i) a *Green and Inclusive Recovery Assessment* that provides policy recommendations for green and inclusive recovery and development, aligned with the *National Economic and Social Development Plan*, and ii) a report *Macroeconomic Planning for Green and Climate Policy Options* that analyzed the country's policy direction on green and climate initiatives, including carbon pricing, investments in the bio-circular-green economy and energy efficiency, and provides policy recommendations.
- In **Kyrgyz Republic**, a gender analysis of the previous *Green Economy Programme* to inform the new programme that is also being developed with PAGE support.
- In **Cambodia**, a policy brief on the priorities for inclusive green transformation, based on the results of a policy scoping study.

**Cross-sectoral stakeholder consultations and dialogues** have been held in all PAGE countries, bringing together public and private actors relevant for cross-sectoral policy reform. In 2024, consultations and dialogues were held in India, Mongolia, Guatemala, Argentina, Kyrgyz Republic, Indonesia, Kazakhstan and Thailand.

Since PAGE's initiation, **national steering committees** have been established in 20 PAGE countries, which held regular meetings to guide the respective country programmes and engaged relevant government counterparts and other stakeholders.

6 countries and 2 states/provinces (Mongolia, Jiangsu Province, Argentina, South Africa, Ghana, Mato Grosso State, Uruguay and Kazakhstan) have so far established **inclusive green economy measurement frameworks**.

**Mechanisms for green budgeting** have been developed in 6 countries and 1 state (Mongolia, Peru, Mauritius, Mato Grosso State, Guatemala, Uruguay and Argentina).

As of 2024, 10 countries and 2 provinces/states have developed a **sustainability strategy to ensure the continuation of green economy actions after the completion of the PAGE programme** (Mongolia, Peru, Senegal, Ghana, Mauritius, Burkina Faso, Jiangsu Province, South Africa, Argentina, and additionally Mato Grosso State, Kazakhstan and Indonesia in 2024).

A breakdown of key statistics against the PAGE outcome 1 indicators is provided below.

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

<u>Indicator #1.1:</u> 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 2024:** 15 countries and 2 states/provinces (in 2024, 13 countries and 2 states/provinces are implementing with PAGE support and 2 countries have adopted policies)

<u>Indicator #1.2:</u> Number of national development plans or cross-sectoral strategies integrating IGE priorities **Status end of 2024:** 57 plans and strategies (2 additional in 2024 – Kazakhstan and Indonesia)

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

<u>Indicator #1.1.1:</u> 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 2024:** 64 reports completed (5 additional in 2024)

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

<u>Indicator #1.2.1:</u> Cross-sectoral national consultations and dialogues organized to mobilise stakeholders, share results of policy analysis and consult priorities

Status end of 2024: 22 countries held cross-sectoral consultations as of 2024

<u>Indicator #1.2.2:</u> Number of countries with national steering mechanism overseeing IGE work meeting regularly

Status end of 2024: 20 countries (0 additional in 2024)

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

<u>Indicator #1.3.1:</u> Number of countries with IGE measurement framework established **Status end of 2024:** 6 countries and 2 states/provinces (0 additional countries in 2024)

<u>Indicator #1.3.2:</u> Number of countries with mechanism for green budgeting established **Status end of 2024:** 6 countries and 1 state (0 additional in 2024)

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

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

**Status end of 2024:** 10 countries and 2 provinces/states (3 additional in 2024 – Mato Grosso State, Kazakhstan and Indonesia)

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

To achieve 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 2024, a total of 54 thematic and sectoral policies, programmes and instruments supporting IGE priorities have been adopted in PAGE countries. Out of the 54 policies, 42 are now being implemented with PAGE support.

The total number of 55 includes seven additional thematic and sectoral policies that align with IGE objectives which were either adopted or for which implementation started in 2024.

The sectoral and thematic policies, strategies, programmes and plans either drew on results from diagnostics, assessments and policy analysis and/or were designed with PAGE advisory support.

The new policies and programmes are:

- In **Uruguay**, the *National Circular Economy Strategy* as a key element in the country's transition towards inclusive, green and circular economy.
- In **Kazakhstan**, the *Law on Sustainable Public Procurement* that establishes a fundamentally new system for sustainable public procurement.
- In **India**, the *Eco-Mark Certification Rules* that provide nation-wide labels for products which meet approved environmental criteria.
- In **Indonesia**, the *National Circular Economy Roadmap and Action Plan*, and the *Regional Strategy and Action Plan on Food Loss and Waste for Bali Province.*
- In **Kyrgyz Republic**, the *Green Finance Programme* that establishes a financial mechanism for green investments.
- In **Morocco**, the *Roadmap for the Moroccan Coalition for Sustainable Energy Access* to institutionalize and operationalize the coalition.

Beyond the thematic and sectoral policies stated above that are formally adopted and/or moved to the state of implementation, PAGE has been supporting the design and advancement of policies, plans and programme that are still under development.

As of 2024, PAGE has contributed in 76 cases to design state of policies, strategies, programmes and plans in consultation with national partners including the number of policies that were afterwards adopted and being implemented as noted above.

In 2024, PAGE provided inputs to 3 sectoral or thematic policies, plans and programmes that are still under development, including

- In **Kazakhstan** i) the revision of the *Water Code*, and ii) the development of the *Strategic Environmental Assessment for Semey City Masterplan* (both are in process of adoption).
- In **Guatemala** the action plan and update of the *National Cleaner Production Policy*

To advance sectoral and thematic reforms and the related planning processes, PAGE supported in 2024 in consultation with national stakeholders the development of 27 additional thematic policy documents including diagnostics, assessments, policy analysis, report chapters, guidelines, guides, and policy recommendations, as detailed below:

In **Peru** i) a feasibility study for the valorisation of organic and inorganic solid waste in the San Martin region; and ii) a mapping and analysis of the current state and progress of prioritized sectors for the transition towards green growth in the San Martin region.

In **Uruguay**, twenty-three standardized guidelines and protocols for managing marine biodiversity information in the context of offshore hydrocarbon activities in support of Uruguay's *National Environment Plan for Sustainable Development* and the *National Biodiversity Strategy*.

In **Ghana**, a green jobs assessment model to support the implementation of the *National Green Jobs Strategy*.

In **Kazakhstan** i) recommendations for environmental quality standards as a novel component of the revised *Environmental Code*, ii) a report on energy transition in monocities to support the *Roadmap 2030 and Just Transition Action Plan for Ekibastuz;* iii) the environmental chapter for the 2024 CCA for Kazakhstan; and iv) a markets readiness assessment on sustainable public procurement that provided the basis for the new law on sustainable public procurement.

In **Argentina** i) labour adaptation policy guidelines for the sustainable tourism sector; ii) labour adaptation policy guidelines for the sustainable construction sector; iii) a green jobs assessment for the green hydrogen sector; iv) a SAWT analysis for energy transition as part of the CCA; and v) a state of the art and opportunity assessment for green finance in Argentina.

In **Guatemala** i) a catalogue of environmental criteria for sustainable public procurement; ii) a guide for municipal environmental public spending, including a practical and a training guide; iii) and a roadmap to advance environmental taxation.

In **Indonesia** i) a consolidated policy paper and a policy brief on green and inclusive recovery through circular economy in the palm oil industry; ii) a resource efficient and cleaner production assessment for the fertilizer industry; iii) resource efficient and cleaner production assessment in the iron and steel sector; and iv) a report on innovative green financing for non-bank and bank financing schemes and business model development for solar PV rooftops at school buildings in West Java Province.

In **Thailand** i) a green recovery assessment of the government's rehabilitation fund; and ii) a report on macroeconomic planning for green and climate policy options to provide policy recommendations for the emission trading scheme framework; and iii) also to support the development of a policy framework for the *Emission Trading Scheme*, a carbon emission and decarbonization stocktaking survey.

And in **Morocco** i) a green economy learning assessment to provide a systematic approach to green economy learning; ii) a sectoral diagnostic and policy analysis on the improvement of inland waters and coastline governance for sustainable water resource management; and iii) a benchmarking study to support the institutionalization and operationalization of the Coalition for Sustainable Energy Access.

In its partner countries, PAGE serves as a vehicle for engagement of relevant partners beyond the five main agencies and partnerships are emerging that align the interests of different institutions with the broader objectives of PAGE.

2 additional financing sources were mobilised for IGE related work resulting now in a total of 66 financing sources in 16 countries and 2 states/provinces (Mongolia, Peru, Senegal, Mauritius, Burkina Faso, South Africa, Jiangsu Province, Kyrgyz Republic, Mato Grosso State, Uruguay, Kazakhstan, Argentina, India, Indonesia, Thailand, Ghana, Barbados and Morocco). In **India**, the UNEP Eco Advance Project will contribute to the development of the eco-mark criteria for the textile product category. In **Thailand**, the government's Land Development Office will provide funding for a bio-circular-green training programme in the agriculture sector. As of 2024, a total of 78 partners formally agreed to co-financing, complementary follow-up programming, pledges or public-private partnerships, including one additional in 2024.

A summary of how PAGE has cooperated with other initiatives in 2024 is provided in section five of this report.

A breakdown of key statistics against the PAGE outcome 2 indicators is provided below.

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

<u>Indicator #2.1:</u> 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 2024:** 54 policies (42 policies were being adopted and implemented with PAGE support, 12 policies were adopted), out of which 7 additional in 2024

Indicator #2.2: Number of countries that have mobilised financing for IGE

**Status end of 2024:** 16 countries and 2 provinces/states have mobilised financing for IGE (0 additional in 2024)

Indicator #2.3: Number of financing sources mobilised for IGE

**Status end of 2024**: 66 financing sources mobilised (2 additional in 2024) – new funding sources in Thailand and India

#### Output 2.1: Sectoral and thematic diagnostics, assessments and policy analysis undertaken

<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

Status end of 2024: 218 reports are available, out of which 27 additional in 2024

### Output 2.2: 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

<u>Indicator #2.2.1:</u> Number of sectoral or thematic policies, strategies, programmes and plans designed and advanced in consultation with national partners

Status end of 2024: 76 policies, strategies, programmes and plans designed in consultation (8 new in 2024)

### Output 2.3: IGE financing partners mobilised and engaged including UNCT, donors, IFIs, development banks and the private sector

<u>Indicator #2.3.1:</u> Number of partners formally agreeing to co-financing, complementary follow-up programming, pledges, PPPs, etc.

Status end of 2024: 78 partners, out of which 1 is additional in 2024

### Outcome 3 - Individuals and institutions representing different groups acquire capacities to advance IGE approaches at regional, national and sectoral levels

To achieve outcome 3, PAGE is supporting partner countries in development and delivery of nationally tailored training packages and programmes in priority areas with the overall objective of creating institutional and human capacity for designing and implementing IGE policies. In addition, global and regional training packages and events offer high-quality training, e-learning and other capacity-building products and services on IGE and contribute to building a global community of government officials and other stakeholders with the knowledge and skills to advance the transition to greener economies. The overall PAGE approach to providing technical assistance strengthens system-wide, institutional and individual capacities across all country-level activities, including those under outcome 1 and 2, and uses a participant survey to analyse the impact of its training activities.

In 2024, PAGE further strengthened individual and institutional capacities for IGE action at the national, regional and global level.

Across PAGE countries, a total of 165 institutions, ministries and departments were reported in 2024 as being able to deliver IGE analysis or trainings (9 additional in 2024).

373 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 (14 additional in 2024).

PAGE has continued to support targeted trainings at the national level and delivered tailor-made training jointly with national partners. As of 2024, PAGE had supported 165 training programmes that integrate IGE elements and are delivered by (sub)national institutions.

Six of these were additional in 2024, taking place in Peru, Guyana, Argentina, Morocco and India. 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.

A total of 17,534 individuals have completed sub(national) training programmes, out of which 101 learners were additional in 2024.

Strategic partnerships with institutions training current and future policymakers have been a key avenue for institutional and individual capacity-building over the past years. In addition to the one-off training programmes conducted, a total of 39 recurrent training programmes have been established so far and embedded in national institutions in 16 countries and 1 state (6 in Kyrgyz Republic, 5 in Uruguay, 4 each in Mongolia and South Africa, 3 each in Argentina and Mato Grosso State, 2 each in Peru, Senegal, Ghana, India and Mauritius, and 1 each in Burkina Faso, Indonesia, and Thailand).

As part of its global and regional capacity development, PAGE has since its inception helped 58,231 people to increase their knowledge and understanding of IGE topics, with 12,702 additional people in 2024. For 2024, this number includes trainees obtaining certificates from the seven self-paced elearning courses offered by PAGE on the UN CC:Learn platform.

To assess the impact of global and regional trainings, an impact survey was sent to learners in December 2024 who completed at least one PAGE e-learning course and/or attended UNIDO or ILO regional trainings between 2014 and 2024 (Summer School on Green Industry; Green Economy Academies). The survey received 821 responses.

The survey concludes that for the respondents:

- **84 per cent** have applied what they have learned.
- **89 per cent** have increased their capacity to identify and build on opportunities for the promotion of an inclusive green economy.
- 93 per cent have become more confident in advocating for an inclusive green economy after taking PAGE courses/trainings.
- **64 per cent** chose PAGE courses/trainings for professional reasons.
- 35 per cent have improved their job performance.
- **10 per cent** received a financial reward (wage rise, bonus, and other financial incentives provided by their employer).
- 13 per cent received a job promotion or new responsibility after participating in a PAGE training.

PAGE has since its beginning supported the development and delivery of a total of 24 global training programmes and specific training modules on IGE at global and national levels.

A breakdown of key statistics against PAGE outcome 3 indicators is provided below.

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

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

**Status end of 2024:** 84% of participants surveyed reported using knowledge and skills acquired through PAGE global training and capacity development activities

<u>Indicator #3.2:</u> 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 2024: 165 (sub)national institutions (9 additional in 2024)

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

Status end of 2024: 165 training programmes (7 additional in 2024)

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

<u>Indicator #3.1.1:</u> 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 2024: 373 national institutions/ministries/departments, out of which 14 were additional in 2024

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

<u>Indicator #3.2.1:</u> Number of people that have completed (sub)national level training programmes **Status end of 2024:** 17,534 people out of which 101 were additional in 2024

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

Status end of 2024: An average 88% of participants reported having increased their capacity

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

Status end of 2024: 39 IGE training programmes and specific training modules (0 additional in 2024)

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

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

**Status end of 2024:** 58,231 people of which 12,702 were additional in 2024. A total of 27,713 were from PAGE countries

<u>Indicator #3.3.2:</u> 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 2024: An average 81% of participants reported having increased their capacity

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

Status end of 2024: 26 training programmes and modules (0 additional in 2024)

### 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. 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 leverages South-South exchange and collaboration, and 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 also part of the activities under outcome 4.

Since 2013, PAGE has produced 26 IGE knowledge products, which are available to countries for use in national policymaking processes. Two were additional in 2024: a report *Measuring and Modelling Circular Jobs - A review of definitions, databases, methods and models for understanding employment in the circular economy* and a working paper on *The Green Economy Progress Measurement Framework (3<sup>rd</sup> edition).* 

By the end of 2024, a total of 113 stakeholders in 20 PAGE countries and 2 provinces/states 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.

In addition, 87 institutions and initiatives have been collaborating under the wider PAGE network, with 6 additional institutions that PAGE newly collaborated with at global level in 2024: the Coalition of Finance Ministers for Climate Action, the Circle Economy Foundation, the Issue-based Coalition on Environment and Climate Change, the FAIRR Initiative, the Solutions for Youth Employment Programme of the World Bank, and the Just Rural Transition Initiative.

Since 2013, PAGE has supported a total of 65 global and regional events in cooperation with a wide range of partners that contribute to South-South Exchange, peer-to-peer learning, sharing knowledge and scaling of good practices on green economy. 9 additional policy dialogues and South-South knowledge sharing events were held in 2024, including:

- A cross-regional South-South policy dialogue on energy, sustainable finance and enterprises for inclusive policy-making processes and enhancing NDC ambition at climate COP29;
- A government-to-government exchange workshop on advancing green finance in Central Asia;
- Contributions to the Asia and Africa regional meetings of the Coalition of Finance Ministers for Climate Change (CFMCA); and a side event at CBD COP16 led by CFMCA that focused on aligning financial flows with the Global Biodiversity Framework;
- A session on public and private financing for a just transition to sustainable consumption and production' at the One Planet Network Forum;

- A session on the circular economy's potential to drive innovation, economic growth and decent job creation at the 8<sup>th</sup> World Circular Economy Forum;
- A side event at the Summit of the Future 2024 on joining forces for a just transition to promote a green and circular future; and
- A series of events exploring nature-positive solutions at CBD COP16;

At the global level, PAGE has been working under the communication strategy updated on a yearly basis commits to continuous outreach on the topic of green economic transformation and PAGE results through events, website, monthly newsletter, online annual report, and targeted social media postings, among other activities.

At the national level, as of 2024, 8 countries and 1 state (Senegal, Burkina Faso, Uruguay, South Africa, Argentina, Mato Grosso State, Morocco, Indonesia and Guatemala) have developed a national level outreach and communication strategy or systematic plans to reach out to national stakeholders.

A total of 158 targeted national awareness-raising activities and tools across all PAGE countries have been delivered or used, 13 of which were additional in 2024. These include, for example, a video competition in Indonesia to enhance awareness and understanding of circular economy, a green jobs fair in Guatemala, and the *People at the Heart of PAGE* interview series with representatives from Mongolia, Burkina Faso and Kyrgyz Republic.

A breakdown of key statistics against PAGE outcome 4 indicators is provided below.

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

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

**Status end of 2024:** 113 stakeholders in all 22 PAGE countries were making use of PAGE knowledge products (4 additional in 2024)

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

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

Status end of 2024: 26 knowledge products, of which 2 were additional in 2024

<u>Indicator #4.1.2:</u> 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 2024:** 5 knowledge platforms (0 additional in 2024)

<u>Indicator #4.1.3:</u> Number of institutions, individuals, and initiatives collaborating under a wider PAGE network **Status end of 2024:** 87 institutions, individuals and initiatives (6 additional in 2024)

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

<u>Indicator #4.2.1:</u> 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 2024: 65 events (9 additional in 2024)

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

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

**Status end of 2024:** PAGE 2023 online annual report; update and improvement of the PAGE website content; social media campaigns; monitoring and evaluation of social media, website and newsletter performances through monthly reports; monthly newsletters; support to event planning at national and international levels

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

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

Status end of 2024: 9 national communication strategies or plans developed (0 additional in 2024)

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

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

Status end of 2024: 158 awareness-raising activities/tools developed (13 additional in 2024)

## 3. CONTRIBUTION TO BIODIVERSITY AND CLIMATE TARGETS THROUGH CIRCULAR ECONOMY, GREEN JOBS AND JUST TRANSITION, AND SUSTAINABLE FINANCE

PAGE is contributing to several interconnected thematic areas, driving transformative progress towards more sustainable and equitable economies.

Partner countries made progress in advancing circular economy principles, mobilizing sustainable finance, fostering green job creation, and promoting just transitions, the latter including a human rights-based approach and gender equality. The results achieved in these areas were in many cases closely linked to the countries' strategies and actions related to biodiversity conservation and climate action and the targets set under Nationally Determined Contributions (NDCs) or the Kunming Montreal Global Biodiversity Framework.

The table below provides examples from 2024 of how PAGE contributions and the results are interconnected across multiple thematic areas.







**Green Jobs and Just Transition** 

**Sustainable Finance** 

### Circular economy, green jobs and just transition, sustainable finance

### Uruguay releases National Circular Economy Strategy to enable policies for circular production and consumption and encourage circular initiatives and business models Generation of green jobs is a key element of the strategy

Includes green investment opportunities

### **Biodiversity and climate targets**

- Addresses biodiversity loss, through a focus on resource depletion, pollution and unsustainable consumption and production
   Contributes to reduction of emissions
- Contributes to reduction of emissions embedded in products and systems

### Indonesia releases National Circular Economy Roadmap and Action Plan with comprehensive policy directions and implementation mechanisms

Aims to stimulate innovation and green jobs Includes a set of regulatory, institutional and financial measures  Sets direction for decoupling of economic growth from environmental degradation

Resource Efficiency and Cleaner Production
Assessment for Indonesia's iron and steel
sector, identifying opportunities for resource
efficiency and waste reduction through cleaner
technologies and circular economy principles

- Informs reduction of the sector's environmental impact through lowering emissions and more sustainable use of natural resources
- Recommends air pollution control technologies and optimization of energy use in furnaces
- Indonesia releases Food Loss and Waste Regional Action Plan for the Island of Bali as part of waste-to-resource and circular economy initiatives
- Contributes to biodiversity conservation by improving the sustainability of the food system

### Circular economy, green jobs and just transition, sustainable finance

### Biodiversity and climate targets

Empowers women, youth, and small-scale farmers by improving skills, providing business support, and offering diverse economic opportunities across agricultural and food supply chains

- Contributes to reduce emissions and improve resource use efficiency across the food system

Green Jobs Assessment for Ghana to guide evidence-based implementation of the country's Green Jobs Strategy, including measures to reflect employment and just transition objectives in relevant national instruments  Analyses climate and other green policies and shows compatibility of economic growth, job creation and reduction of GHG emissions

Green Jobs Assessment for Guyana that analyses an alternative growth path for the country, including poverty reduction, social protection and just transition Provides a pathway for achieving the country's climate objectives

Greening technical and vocational education and training programmes in Guyana for capacity building and green jobs creation - Contributes to the country's Low Carbon Development Strategy 2030

### Green Jobs and Entrepreneurship Fair in Guatemala connecting job seekers and sustainable enterprises

Highlighting the role of youth in informing national priorities and emphasizing the need to strengthen their professional capacities

Aligns economic activity with environmental sustainability

Analysis of public finance and investments for green rural development in India to foster green economic growth that includes provision of alternative livelihood choices for women

- Contributes to achieving the country's NDCs

Guatemala releases a Classification Guide on Municipal Environmental Public Spending as a technical tool for analysing green investments

- Aligns public spending with the country's climate commitments

Roadmap for environmental and biodiversity taxation in Guatemala to align fiscal policy and economic growth with environmental sustainability

 Aligns with national regulations to support compliance with international climate commitments

Development of a national environmental fiscal strategy for Guatemala to implement the National Development Plan and the NDCs - Aligns with the country's climate commitments

The Kyrgyz Republic launched a Green Financing Programme to support the implementation of the country's National Green Economy Programme Key element for achieving the country's climate action targets

### Circular economy, green jobs and just transition, sustainable finance

#### Biodiversity and climate targets

Mongolia releases an analysis on energy subsidy reform to support renewable energy development in the country

 Supports implementation of the country's NDCs and feeds into key national strategies, including the State Policy on Energy

Climate budget tracking guidelines and training in Rwanda to support green and socially just investments

- Supports the implementation of the Climate and Nature Finance Strategy

Guatemala is developing a national policy on sustainable public procurement to algin procurement practices with national environmental goals and the country's NDCs  Aligns procurement practices with the country's NDCs

### Overall contribution to green economic policies and related thematic areas

Kazakhstan updated its Green Economy
Concept that reinforces the plans of the
government to achieve carbon neutrality by
2060 and aligns with the Paris Climate
Agreement

- The concept includes the target to increase the share of protected natural areas
- Key objectives of the concept include green financing to increase the share of green loans and green bonds

Thailand releases a report for macroeconomic planning for green and climate policy options for the emission trading scheme framework

- The report feeds into the draft Climate Change Act's consideration of carbon taxation

Development of a policy framework for the emission trading scheme for Thailand, including carbon and decarbonization stocktaking study

- Promotes development of energy efficiency and bio-circular-economy related programmes
- Promotes revenue distribution from carbon tax and investments in renewable energy

Analysis on effective integration of biodiversity into the priority sectors in Morocco: agriculture and mining

 Supports the country's commitment to the Kunming Montreal Global Biodiversity
 Framework

Uruguay releases guidelines and protocols for managing marine biodiversity information to manage biodiversity information for offshore hydrocarbon activities - Supports implementation of the National Biodiversity Plan















### 4. CHALLENGES AND LESSONS LEARNED

Today, the global landscape is defined by interconnected challenges: slow economic growth in developing and emerging economies, shifting international trade dynamics, fragile fiscal positions, and the undeniable urgency of climate and nature crises. Against this backdrop, PAGE has played a crucial role in assisting nations in navigating these complexities. PAGE's support focused on managing fiscal constraints through climate-positive actions, fostering green jobs and skills for an equitable transition, and championing circular approaches to drive sustainable growth and resource efficiency. These efforts directly aligned with the critical themes of finance, social justice, and circular models highlighted in international negotiations throughout the year.

Yet, operationalizing PAGE's updated Strategy across diverse country contexts presented its own set of challenges. Nevertheless, this year of focused and more tailored delivery resulted in a rich collection of important lessons, which will be instrumental in refining the Partnership's future engagement and operational approach.

### Making transformation tangible - from strategy to delivery

In the past, in many PAGE countries the demand was for developing comprehensive green economy strategies or climate-related development frameworks. However, now governments are wanting to focus on operationalising existing high-level policies, strategies or roadmaps through technical assistance for regulatory and finance frameworks, policy coherence, capacity development, and using PAGE's convening power to support multistakeholder consultations. Consequently, this increases the variety of outputs that PAGE is invited to support. These outputs are less focused on policy design stages, though they are fully in line with government demand.

Under the updated Strategy PAGE is moving from a comprehensive multi-year package of policy support to more tailored intervention, with reduced duration and funding. The identification of policy entry points in this process, required many rounds of discussions until the wide range of national partners that PAGE works with across countries could be brought on board.

In consultations with governments, PAGE agencies spent considerable time and effort to draw the line between 'steps of operationalization' that PAGE is well placed to support, and 'downstream activities' falling outside its mandate. In general, PAGE's new country delivery model is well adjusted to the call for 'moving from strategy to delivery' as it offers shorter-term, targeted, and high-leverage interventions in response to concrete policy requests that link to green jobs and just transition, green fiscal and financial reforms, and circularity.

### Managing political transitions and maintaining engagement

In 2024, political transitions in some of the partner countries resulted in a shift in the high-level national priorities. PAGE navigated these with agility.

Learning from previous experiences about the importance of anticipating political transitions, PAGE paid particular attention to the political landscape as part of the criteria applied in the decision-making process for selecting country requests in 2024. For each country putting forward a request, PAGE agencies engaged in substantive conversation with UNRCOs on the country context.

Here are some instances of how PAGE continued to engage with partner countries despite their changing political contexts:

- In Uruguay, which held elections in 2024, the selection decision was deferred; its progression depended on the newly elected government reconfirming its commitment.
- Following recent political changes in Argentina, there has been a shift in national policy priorities, with less emphasis currently placed on the green economic transition at the national level. As a result, PAGE experienced some challenges in maintaining its engagement in the country's high-level policy dialogues. However, a positive element to highlight here is that PAGE had anticipated changes with a proactive sustainability planning and expanded engagement with national partners outside the government and actors at sub-national level in Argentina's provinces an approach that may allow for sustaining some of the positive momentum created and results already achieved.
- Guyana is another country where PAGE was able to sustain results while a new government came to power. PAGE was able to provide targeted policy analysis and develop green skills in alignment with the Guyana's Low Carbon Development Strategy 2030, which remains a strategic priority for the current administration. PAGE engaged with not just the government, but also with higher education institutions and industry associations for these activities. This experience emphasized the importance of PAGE's flexible, adaptive approach and the need for ongoing stakeholder diversification to sustain green transitions beyond government cycles.

### Embracing circular economy for resource efficiency and job creation

The circular economy and promotion of measures to enhance circularity has again received a lot of attention, both at the global and national level. An interesting development is that increasingly circular economy is seen as a catalyst not only for environmental sustainability but also for job creation. There is wider recognition that circular economy initiatives can yield a win-win situation for both the environment and society, which can be realized by the right policy incentives and realigning finance to overcome the current gaps in adoption. This theme, while not entirely new, gained momentum this year through knowledge products and high-level global forums. For instance, *Circular Economy in the Food and Beverage Industry for a Green Recovery* (PAGE Indonesia, 2024) highlights significant potential of circularity practices for green job creation, particularly through the transformation of existing roles and new opportunities in post-consumption waste management and recycling.

Similarly, the *Measuring and Modelling Circular Jobs* report, developed by the Circular Jobs Initiative with PAGE support, calls for better data and evidence to understand how the circular economy can lead to a just and inclusive world of work, which concerns both, global progress and the challenges and opportunities in specific countries, sectors and policy domains. This message was also highlighted at the 2024 Summit of the Future side-event *Green and Circular - Can it be Fair? Joining Forces for a Just Transition*, co-organized by PAGE and a group of global green and circular economy initiatives.

Circular economy principles offer a blueprint for reducing waste and regenerating nature while creating new jobs, especially for women and marginalized groups.

### From narrative to practice - advancing just transition

In 2024, as several countries further advanced their thinking and approaches to a just transition, there are a few interesting insights. Just transition is now clearly expressed as a cross-cutting consideration in the green economic transition. After just transition was first captured conceptually, the focus shifted to mainstreaming just transition as an essential element in all key policy areas and related documents, with a clear call that green economy policies must incorporate social protection and skills development from the start, rather than treating them as afterthoughts.

For example, in the energy sector there has been a clear realization of the link between the energy transition and job losses and new job opportunities. This has led to an early call for 'just energy transition' that does not treat social protection and skill development as afterthoughts. However, the just transition concept is now being broadened to also recognize its relevance to transitions in agriculture, industry, or other areas.

Furthermore, just transition is increasingly being integrated with other critical themes. For example, discussions in 2024 frequently coupled just transition with circularity or sustainable finance. This emphasized that redirection of finance to green industries should also support re-skilling of workers as well as social protection programmes as essential components of the overall initiative. In addition to its recognition as a social imperative, a just transition is increasingly understood to be a crucial enabler of green transformation, as it fosters public support and workforce readiness for change.

An illustrative example is South Africa's new request to PAGE from the Presidential Climate Commission to advance the implementation of the *National Just Transition Framework* by facilitating inclusive dialogues in a coal-mining region. In Rwanda, PAGE is supporting the development of a *Just Transition Assessment Model* to contribute to the government's efforts towards an inclusive and green economy.

Green economy policies must incorporate social protection and skills development from the start, rather than treating them as afterthoughts.

### Financing transformation - redirecting public and private investment flows

Mobilizing the requisite public and private financing for green and inclusive economic transitions remains the most significant challenge. PAGE's updated Strategy explicitly highlights the need for a global shift in finance and investment toward just, green, and circular economies, with the understanding that transforming economies at scale requires massive efforts to redirect and realign capital flows.

While awareness of the importance of sustainable finance has expanded, the pace of change remains slow relative to the pressing demands. This is primarily due to persistent barriers such as high borrowing costs and perceived risks in green sectors. Moreover, countries are contending with tightening fiscal conditions and decreasing funds for international cooperation.

In this context, approaches that empower countries to optimize existing expenditures rather than increasing them, such as sustainable budgeting or green fiscal policies, have garnered considerable traction.

To effectively engage with key stakeholders, PAGE strategically partnered with finance-focused platforms, notably the Coalition of Finance Ministers for Climate Action (CFMCA). This collaboration enabled the identification of new avenues to influence economic decision-making and directly integrate green planning with actual budgetary and investment decisions. Through the strategic partnership with CFMCA, PAGE contributed to shaping the coalition's agenda by introducing tools, such as the *Sustainable Budgeting Approach*, sharing country-level experiences on green fiscal reforms, and supporting dialogue on realigning public finance with climate and nature goals.

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### Sub-national action as a lever for change

In several PAGE countries, the sub-national level emerged as an important entry point for driving green transformation, primarily due to significant decentralization of policy and budgetary authority. Consequently, PAGE has increasingly been called upon to support provincial and municipal governments in localizing national green economy priorities.

The approach proved particularly impactful in large or federal countries, for example in Argentina and Indonesia, where national policies often depend on state-level implementation and related capacity development. PAGE's convening power and technical neutrality helped to foster alignment between central and local authorities. These experiences illustrate that engaging sub-national actors can be an important enabler of local ownership and effective policy implementation, especially in countries with decentralized governance systems.

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### **Scaling South-South and Triangular Cooperation**

The year 2024 underscored the substantial value of South-South Collaboration (SSC) and knowledge exchange as catalysts for green economic transformation.

Developing countries often face similar challenges in balancing growth with sustainability and inclusivity. By sharing experiences, policies and tools among peers, countries can address obstacles and adopt best practices more quickly. SSC has long been promoted by PAGE. Yet, this year saw a renewed commitment to spread cross-country learning around PAGE priority themes circularity, sustainable finance and just transition.

For example, PAGE convened a regional collaboration workshop in Central Asia where senior government experts from Kazakhstan, Mongolia, Kyrgyzstan and Uzbekistan exchanged green finance strategies for greater country impact for a just and green transition.

PAGE also used global platforms like the COP summits, to amplify the voices of its partner countries, enabling ministers and technical experts from the Global South to share their perspectives and solutions on these thematic areas.

The lesson is being reinforced that no country needs to reinvent the wheel - there is a wealth of knowledge within the Global South that can be harnessed through stronger networks and cooperation. South-South and Triangular Cooperation are powerful engines for scaling up success, and investing in these exchanges is a strategic way to accelerate inclusive green transformations globally.

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### **Deepening integration into the UN Development System:**

In 2024, PAGE continued to leverage the collective economic expertise of the UN Resident Coordinator network, working with the UN Development Coordination Office (DCO) on trainings and thematic dialogues focused on key areas of green economic transformation. The PAGE-DCO collaboration reinforced the value of structured peer exchange among RCO economists to foster mutual learning and position them as thought leaders in inclusive green economy planning.

For instance, the PAGE-DCO 2024 dialogue series *One UN for Accelerating a Fair and Green Economic Transformation*, provided RCO economists with a valuable platform to exchange knowledge and tools for advancing green economic transformation at the country level. The 5<sup>th</sup> and the 6<sup>th</sup> dialogue examined the role of the UN transitions approach in advancing a just green economy and mobilizing finance to support just transitions as well as the broader SDG agenda, respectively.

RCO economists from Guatemala, Indonesia, India and Mauritius lauded these dialogues, recognizing their high value in strengthening the UN's collective efforts to promote an inclusive green economy agenda.

### A new need to define direction in a continued complex global environment

Although PAGE commenced the full implementation its updated Strategy in 2024 with a horizon till 2030, emerging geopolitical developments and shifting government priorities among major contributors to UN programmes require a renewed effort to frame the UN's ambition, affirm its ongoing relevance, and underscore its prospective value, especially for integrated 'One UN' initiatives like PAGE.

In the past, PAGE has benefited from a relatively stable funding situation, allowing the programme to establish longer-term relationships with countries and funding partners, and to accompany green transition processes over the time needed to achieve results. However, in the current situation, where funds for international cooperation are decreasing, the inter-agency programme may have to revise its medium-term planning to fund volumes that are realistic, while remaining flexible within shorter-term planning horizons that are predictable. This will be in contrast to the actual demand from countries for support under the updated Strategy or the opportunities available for raising attention to green economy transitions at global and regional scale.

Navigating green economic transformation necessitates a delicate balance between strategic and adaptive flexibility, particularly amidst rapidly evolving global and country-level circumstances. PAGE's inherent agility, exemplified during the COVID-19 pandemic through its adaptive governance, extensive partner network, and flexible programming approaches, positions the Partnership favourably to realign its efforts in response to future changes.

# PART II: COMPREHENSIVE SUMMARY OF REGIONAL AND GLOBAL WORK AND COUNTRY PROGRESS

## 1. OUTCOME 3 – BUILDING INDIVIDUAL AND INSTITUTIONAL CAPACITY AT GLOBAL LEVEL

PAGE transforms economic thinking by equipping policymakers, practitioners, analysts, workers and employers with green transition knowledge, skills and best practices. Through its strategic blend of Global Academies, Green Industry Summer Schools, training programmes, and e-learning courses, PAGE has created a vibrant community of skilled practitioners who actively apply inclusive green and circular economy principles to reshape economic policies and practices globally.

### **Transforming Industries through Circular Economy - Summer School**

The PAGE Green Industry Summer School 2024 in July-August in Vienna, under UNIDO lead, provided green industry practitioners with insights into practical aspects of circular economy policies. The event highlighted the importance of multi-stakeholder approaches that bring together policy, technology and finance for a seamless shift towards a circular economy. It also emphasized multinational regional strategies among neighbouring countries to increase energy efficiency and improve access to urgently needed financing.

A diverse cohort of participants from over 30 countries representing government ministries, research and public policy institutes and the private sector, contributed their unique perspectives and hands-on policy experiences and benefitted from technical inputs provided by UNIDO, UNEP, ILO, UNDP and UNITAR, for example, on fostering just transition for micro and small enterprises in the circular economy and leveraging public finance for green industrial policies.

The Summer School also included an online self-paced course during May-June 2024, which equipped participants with a solid foundation covering key green industry concepts before the Vienna face-to-face segment. Participants learned about circular business models, circular design and sustainable supply chains. Furthermore, they explored innovation and technology driving industry 5.0 – an approach that aims beyond efficiency and productivity as the sole goals and reinforces the contribution of industry to society. Participants also gained practical knowledge in circular economy financing, green jobs and just transition principles as well as approaches to develop the capacity needed for a circular transition.

All participants joined an alumni online platform allowing them to continue the conversation and access insights and materials from the previous Summer Schools.

### 2024 Evaluation of PAGE Capacity Building and Training Results

In 2024, UNITAR once again conducted its impact survey to understand how learners have been applying the knowledge and skills acquired through PAGE capacity building and training. The survey included the participants of e-learning courses (who took at least one course) and participants who attended the 4<sup>th</sup> and 5<sup>th</sup> Global Academy on Green Economy and the 2<sup>nd</sup> and 3<sup>rd</sup> Summer School on Green Industry.

The survey highlighted positive impacts of PAGE global capacity building services, including enhanced knowledge and skills for

- preparing concept notes and proposals;
- designing and implementing green initiatives, such as sustainable procurement;
- incorporating environmental sustainability goals into project monitoring and evaluation;
- advocating for policy changes; and
- delivering lectures.

In some cases, respondents to the survey also referred to improved job performance.

Out of 821 responses, 89 per cent reported overall increased capacity and 93 per cent greater confidence in advocating for an inclusive green economy. 84 per cent have applied what they have learned, 35 per cent improved their job performance, and 13 per cent received a promotion or a new responsibility from their employer.

So far, a total of 75,765 learners have benefited from 26 training and learning packages offered by PAGE. This includes precisely 56,987 learners who completed courses from the PAGE e-learning portfolio, with an additional 12,651 learners joining in 2024. The portfolio encompasses 7 courses available in 10 languages, covering topics on green economy and trade, sustainable finance, green industrial policies, and green fiscal policies.

The open-access and self-paced courses, available on the UN CC:Learn platform, have attracted more than 1,000,000 users to date offering individuals from governmental institutions, academia and the private sector the opportunity to improve their knowledge through the courses listed below:

- Green industrial policy
- Green fiscal policy
- Green economy and trade
- Indicators for an inclusive green economy (introductory)
- Indicators for an inclusive green economy (advance)
- Introduction to sustainable finance
- Introduction to green economy

### **Learning Products under Development**

In 2024, PAGE, under UNITAR's lead, kick-started the development of new learning and training programmes, developing of outlines, establishing relevant partnerships, and working with other agencies on defining course content, including the following upcoming trainings:

The new PAGE e-course on Reshaping our Economies aims to show how changes in upstream policymaking (including trade, fiscal, industrial and employment policies) have the potential to shift the whole of the economy towards a green and inclusive transformation. Building on real world examples from PAGE's 22 partner countries, it will illustrate how in times of limited fiscal space and rising debt burdens, investments in sustainability can still go a long way in addressing pressing environmental challenges and climate change while tackling poverty and inequality. The course will be launched on the UN CC:Learn e-learning platform in the summer of 2025 in English, French and Spanish.

PAGE-DCO Training on Financing Just Transitions, developed in partnership with UN Development Coordination Office (DCO) and the SDG Investment Fair, the six-week online course will strengthen the capacity of countries to identify and scale finance for a just transition to greener economies, leveraging global PAGE tools and expertise. The training will take a deeper look at how governments can better track expenditures and systematically assess the economic, social and environmental consequences of fiscal decision making, as a basis for future allocations of funds. Following an announcement in a webinar with the UN Resident Coordinator Office (UNRCO) economists in 9 countries (Cambodia, Iran, Jordan, Kazakhstan, Kyrgyz Republic, Mongolia, Papua New Guinea, Serbia, Tunisia) submitted expression of interest and were selected for the March-April 2025 edition of the programme.

PAGE Executive Training Programme Future-Proofing our Economies, for which UNITAR and UNEP reached out to leading academic institutions (including University of Oxford, University of Cambridge, London School of Economics and Political Science, and Hertie School) to explore interest in codeveloping and delivering an executive programme *Future-Proofing our Economies*. The programme is geared towards senior staff from Ministries of Finance, Economy, Industry, Planning, Labour, and Environment in developed and developing countries, and aims to equip decision-makers with strategic foresight tools and economic modelling approaches to accelerate the transition towards green and job-rich economies. A pilot edition is planned for 30-40 participants in 2025.

### **Training Event under Development: Regional Academy for Africa**

In response to demand by partner countries for more regionally tailored learning and experiencesharing opportunities, PAGE will run a series of regional academies in collaboration with UN Regional Economic Commissions, regional development banks and other key partners.

In 2024, PAGE under ILO, UNIDO and UNITAR lead, started planning the first regional academy for the African region to be hosted by Morocco as a back-to-back event with the national Green Crossroads Conference in May 2025. The academy will bring together representatives from African PAGE countries as well as participants from other interested countries in the region. To define priorities, the design of the academy started with a learning needs assessment and a series of interviews with UNRCO economists and PAGE focal points, complemented by an online survey.

# 2. OUTCOME 4 – SOUTH-SOUTH COOPERATION, IMPROVING ACCESS AND APPLICATION OF KNOWLEDGE FOR ADVANCING IGE

Through global and regional events, PAGE has provided platforms for governments from PAGE countries and representatives from employers, workers, business and finance to exchange views, knowledge and experiences. PAGE leveraged South-South exchange and collaboration, and placed policy dialogues at international fora - Climate COP29, Biodiversity COP16, WCEF, One Planet Network Forum, and Summit of the Future to draw attention to the pivotal role of a just transition, sustainable finance and circularity in a green economic transformation. In addition, PAGE launched several important initiatives to fill knowledge gaps.

### A. Enhancing South-South Exchange and Collaboration

### Just Transition for All – South-South Policy Dialogue at COP29

From vision to practice for a just transition for all was the topic of a cross-regional South-South policy dialogue on energy, sustainable finance, enterprises and inclusive policymaking that PAGE and partners put forward at the 29<sup>th</sup> UN Climate Change Conference (COP29) in November 2024 in Azerbaijan. Nationally Determined Contributions (NDCs) were in the focus which – if designed well and integrating all perspectives – provide a framework for just transitions.

On the margins of the climate negotiations, the two-day event hosted in ILO's Just Transition Pavilion, provided a platform for a large variety of speakers – governments, employers, workers, businesses and UN agencies - to highlight initiatives on green jobs, sustainable business, and circular economy, explore equitable energy transition scenarios, and propose sustainable financing policies and models.

In the first dialogue participants explored transition scenarios with particular focus on employment implications and enterprise development opportunities for gender-responsive just transition in Central Asia and South Caucasus. The second dialogue analysed how NDCs could help advance just transition and sustainable financing in Asia-Pacific for an inclusive green energy transition.

The dialogues emphasized that NDCs require participation from ministries, social partners, and civil society while integrating climate action, biodiversity, economics, and just transition principles. Additionally, Just Energy Transition demands strategic mine closure planning, community engagement, and employment impact anticipation. These efforts are supported by diverse financing mechanisms involving multiple stakeholders to mobilize climate finance and develop comprehensive investment plans.

The event fostered mutual learning among representatives from Europe, Central Asia, Asia and the Pacific, the Arab States, and Latin America, with technical inputs from PAGE agencies, the United Nations Economic and Social Commission for Asia and the Pacific, the Association of Southeast Asian Nations, and the UN Issue-based Coalition on Environment and Climate Change in Europe and Central Asia. As an outcome, a technical working group including Azerbaijan and several Central Asian countries, was set up to enhance collaboration on NDCs, prepare position papers for COP30, and foster South-South Collaboration (SSC) with other countries and regions (e.g., Asia, Brazil, Europe).

### **Government-to-Government Exchange on Green Finance in Central Asia**

In September 2024, senior government experts from Kazakhstan, Mongolia, Kyrgyzstan and Uzbekistan came together in Issyk-Kul, Kyrgyz Republic, to share their knowledge and experience on green finance in a regional SSC workshop, facilitated by PAGE in collaboration with the Biodiversity Finance Initiative (BIOFIN). As a result, representatives identified actionable steps to advance green finance in line with national and global environmental commitments and outlined opportunities to enhance the collective impact of Central Asian countries for a just transition to sustainable development in the region. Sustainable finance practices discussed for governments to take forward include financing for circular economies, alignment of subsidies with national SDG priorities, green taxonomies as well as green and social standards, safeguards and disclosures.

### Regional dialogues with the Coalition of Finance Minister for Climate Action

Under UNEP's lead, PAGE entered into a strategic partnership with the Coalition of Finance Ministers for Climate Action (CFMCA) to strengthen the role of finance ministries in green transformation through the integration of climate and environmental priorities into fiscal and economic planning.

Throughout 2024, PAGE contributed to shaping the coalition's agenda and introduced green public policy tools, such as the Sustainable Budgeting Approach, while also bringing the PAGE countries Senegal and Mauritius into contact with coalition members. The coalition provides a unique platform for peer-to-peer exchanges among Ministries of Finance on innovative financing strategies and green fiscal and budgeting approaches tailored to each country's context.

At a regional CFMCA meeting in July 2024 in Uganda with 20 African Ministries of Finance, PAGE hosted a panel discussion on the pivotal role of Ministries of Finance in advancing green investment strategies for sustainable economic growth. The session highlighted how these ministries can align fiscal and economic policies with environmental goals. Representatives from Mauritius, Burkina Faso and Ethiopia shared how they address challenges related to governance, technical capacity, and interministerial coordination.

At a regional CFMCA meeting in August 2024 in the Philippines, PAGE offered two sessions on nature finance to Asia-Pacific Ministries of Finance and delegations from six PAGE countries - Kyrgyz Republic, Kazakhstan, Mongolia, Cambodia, Indonesia and Thailand - introducing green bonds, biodiversity offsets, and payments for ecosystem services as options to drive investments in nature-based solutions, emphasizing finance ministries' role in biodiversity conservation, ecosystem restoration, and achieving NDCs 2025 commitments.

At CBD COP16, PAGE supported the side events led by CFMCA focused on aligning financial flows with the Global Biodiversity Framework (GBF), closing the biodiversity finance gap, and mainstreaming biodiversity into macroeconomic policies. These high-level events featured opening remarks by UNEP's Executive Director and contributions from representatives of the World Bank, Storebrand Asset Management and the Finance for Biodiversity Foundation. Discussions brought together finance ministers, international development leaders, and CEOs to promote a collaborative approach to GBF implementation.

### Social Dialogue in Focus in Exchange among PAGE Actors

The pivotal role of social dialogue in a just transition towards a green economy was featured in a webinar for PAGE national coordinators in September 2024. ILO experts provided an employer, trade union, and policymaker perspectives on social dialogue, and the Green Economy Coalition broadened the scope with an emphasis on stakeholder and civil society engagement. Argentina's national coordinator shared the country's approach to integrate social dialogue into adjustment plans for jobrich, pandemic-recovering sectors such as tourism, construction, and the automotive industry that put an emphasis on skills adaptation and social protection.

### **PAGE Countries Showcase Adaptation Finance Models**

Delegates from several PAGE countries in the Asia-Pacific region, including the Kyrgyz Republic, Kazakhstan, Mongolia, Cambodia, Indonesia and Thailand, participated in a brainstorming session on adaptation financing hosted by UNEP, as part of the Asian regional meeting of the CFMCA, held in Manila, Philippines, in August 2024. The session focused on the importance of financial mechanisms like results-based budgeting to help countries achieve their climate adaptation goals. Participants exchanged ideas on how these tools could be implemented effectively to enhance resilience against climate impacts and shared insights and examples of how PAGE's initiatives are helping their nations transition toward low-carbon development pathways. These case studies highlighted the benefits of integrating sustainable finance into national strategies for achieving climate objectives.

### B. Promoting Dialogue and Debate on Inclusive Green Economy

### **People Driving Change Today Session at the World Circular Economy Forum**

The People driving change today session at the 8<sup>th</sup> World Circular Economy Forum in April 2024 in Brussels, explored the circular economy's potential to drive innovation, economic growth, and decent job creation. The event, organized by PAGE, the Circle Economy Foundation and the World Bank, gave a voice to institutions and countries promoting circular transitions, showing how the circular economy is taking root in various countries across regions. At WCEF 2024, PAGE also launched its updated Strategy, kicking off a new phase with action and funding partners, and joined the SWITCH to Green coordination meeting - a space to showcase and connect the comprehensive portfolio of EC funded circular economy initiatives promoting work in different sectors and regions.

### **Exploring Nature Positive Solutions at Biodiversity COP16**

At the CBD COP16 in October in Cali, Colombia, PAGE, through UNDP contributed to a series of events exploring nature-positive solutions that promote South-South dialogue among delegates, including representatives from governments, the private sector, local communities, environmental organisations and UN agencies. The events presented experiences of PAGE countries on topics such as green finance, natural capital valuation and accounting, public policies for circular economy and biodiversity, and emphasized ways to promote whole-of-society and whole-of-government approaches and SSC through initiatives such as PAGE.

### Green and Circular - Can it be Fair? - Side Event at Summit of the Future

Green and Circular - Can it be Fair? was the question put up for a side event held at the Summit of the Future in September 2024 in New York. PAGE brought together a group of circular economy and energy initiatives, representing entrepreneurs, civil society, and researchers, with government representatives from Finland, Brazil, Germany and Vietnam to find pathways to environmentally sustainable economies and societies with SDG dividends for all. The discussion included representatives from governments, institutions, academia, and the private sector. Speakers called for incentivizing investments into cleaner and circular business models and recognized the fundamental role of South-South and Triangular Cooperation to scale up and accelerate the just transition.

### Public and Private Finance for Just Transition – at One Planet Network Forum

Blend the gap-public and private financing for a just transition to sustainable consumption and production was the focus of a joint session of PAGE, One Planet Network (OPN) and UNEP's Finance Initiative at the OPN forum in September 2024 in Rio de Janeiro, coinciding with Brazil's presidency of the G20. Experts from policy and finance recognized the importance of public-private collaboration by aligning the actions of financial institutions, policymakers, and private investors and using public finance to incentivize private capital for driving investments in circular economy, green jobs, and sustainability.

### **Findings from Measuring Green Economy Progress**

A thematic webinar in May 2024 to present to economists from the PAGE network and key partners the findings from the third edition of the *Green Economy Progress Measurement Framework*. The related working paper highlights the trends in country progress towards an inclusive green economy prior to and after the COVID-19 pandemic, with persistent challenges in critical areas such as carbon emissions and material footprint. Given slow progress and setbacks in some areas, speakers emphasized the urgent need for substantial investments and underscored the importance of strategies that accelerate inclusive green economy transformation.

### C. Leveraging the Green Transition through the UN system

PAGE leveraged the collective economic expertise of the UN Resident Coordinator network, working with the UN Development Coordination Office (DCO) on trainings and thematic dialogues focused on key elements of green economic transformation.

### Financing Just Transitions - Thematic Dialogues with UNRCOs

In 2024, the PAGE-DCO Dialogue Series *One UN for accelerating a fair and green economic transformation* continued to leverage UN economic expertise in partnership with the UN DCO and UN Resident Coordination Offices (RCO) putting just transition and sustainable finance in the focus. On 2 July, the 5<sup>th</sup> dialogue tailored to UN RCO economists, examined the role of the UN transitions approach for advancing a just and equitable green economy, with inputs from ILO, UN Department of Economic and Social Affairs (DESA) and the Just Transition Finance Lab. Panellists emphasized the need for a systemic approach to addressing the interconnected challenges of poverty, inequality, and climate change, especially through integrated policy frameworks that encompass labour market strategies, social protection mechanisms, and workforce upskilling initiatives. Participants identified social dialogue as a crucial mechanism for breaking down institutional silos and fostering more cohesive policymaking, ultimately ensuring a just transition.

The 6<sup>th</sup> dialogue on 8 November invited UN RCO economists to explore the critical role of finance in support of just transitions and the broader SDG agenda, inviting contributions from UNDP, UNEP, ILO and UN DESA. Beyond emphasizing policy coherence and multi-stakeholder engagement, the discussion highlighted the need for integrating sustainability considerations into public finance management systems to track expenditure and allocate resources effectively to support long-term sustainable development. The dialogue underscored the importance of creating enabling environments for private investment through policies and financial instruments that reduce risk and encourage sustainable investments, such as just transition bonds and blended finance mechanisms.

The dialogues equip RCO economists with additional knowledge and tools to drive green economic transformation at the country level and foster exchange among countries and regions. Participating RCO economists from Argentina, Guatemala, Indonesia, India and Mauritius have recommended PAGE for these initiatives that strengthen the UN's collective action for advancing the inclusive green economy agenda.

### D. Knowledge Products under Development

### **Report on Jobs in the Circular Economy**

Building on the foundation of the *Jobs in the Circular Economy Initiative* — a joint programme launched in 2022 by the ILO in partnership with the World Bank Group and the Circle Economy Foundation - PAGE is supporting the development of the first global report on jobs in the circular economy. Led by ILO, this comprehensive report will present, based on a refined new model, global estimates of employment in a circular economy. The report also aims to provide partner countries with evidence-based policy solutions and sectoral reform strategies, with particular focus on key enablers such as finance and policies to advance a circular and just transition.

A first report on *Measuring and modelling circular jobs - A review of definitions, databases, methods and models for understanding employment in the circular economy*, was already published in October 2024 produced by the Circular Jobs Initiative with PAGE support.

The report emphasizes the importance of data in understanding people's contributions to a circular economy and its link to a just transition and the need for clear definitions and robust data collection to measure circular economy employment. It emphasizes that better data and evidence are needed to understand how the circular economy can contribute to a more just and inclusive world of work, which concerns both global progress towards this goal, and the challenges and opportunities posed in specific countries, sectors and policy domains.

This review lays the groundwork for a comprehensive report on jobs in a circular economy with the first authoritative global modelled estimates of employment in the circular economy expected in the second half of 2025, with plans for a launch at Climate COP30 in Brazil.

### Study on Enabling a Macroeconomic and Policy Environment for a Secondary Materials Market

PAGE, led by UNIDO, is working in collaboration with the Ellen MacArthur Foundation on a study on enabling a macroeconomic and policy environment for a secondary materials market.

With a focus on developing countries, the study will examine enabling policies and barriers for secondary materials markets and outline key policy drivers and economic incentives for resource-efficient industrial systems. The study aims to highlight mechanisms to stimulate demand for circular solutions, such as secondary materials markets and closed-loop production systems, while providing strategic recommendations on creating a supportive environment for low-carbon industrial development and resource efficiency, with the potential to inform the design and implementation of effective circular economy policies and regulatory frameworks.

Preliminary findings from this study will be presented in an Accelerator Session at the World Circular Economy Forum in Brazil in May 2025 and a final report is expected for a launch at the Climate COP30 in Brazil in the second half of 2025.

### **Global Circular Economy Transition Modelling and Decision Support Tool**

PAGE, led by UNEP, is currently developing a global circular economy transition modelling tool to provide policymakers with evidence-based analysis on the impacts and trade-offs of a global circular economy. This modelling analyses different global policy options for transitioning to a circular economy by assessing the global macroeconomic impacts on growth, employment, poverty, inequality, and sustainability targets. The modelling will be complemented by a decision support tool that provides easily accessible online visualization featuring circularity metrics, allowing policymakers to assess various transition scenarios that can inform a country's pathway and the related socio-economic, finance and fiscal measures that can unlock the productive and employment potential of the circular economy.

A draft version of the technical modelling report and accompanying visualization tool are expected to be completed by the end of 2025.

### Policy guidebook on Decarbonizing High-Impact Sectors

PAGE, led by UNIDO, is planning a comprehensive policy guidebook offering strategic guidelines and detailed implementation plans for decarbonizing critical industrial sectors, with particular emphasis on high-impact industries that have traditionally been difficult to abate.

### **South-South and Triangular Cooperation Practices and Lessons Learned**

PAGE, led by UNDP, is documenting transformative South-South and Triangular Cooperation (SSTC) experiences related to green and circular economy policy design and implementation. The report, expected by end of 2025, aims to summarize effective peer learning modalities across regions and to capture successful PAGE-facilitated results that involved the exchange between governments, for example, in the areas of green fiscal reforms and circular economy roadmaps.

By documenting these experiences, PAGE aims to enable the broader adoption of SSTC approaches that could equip countries with practical, replicable policy solutions, catalyse action and enhance regional and global alignment in green and circular economy implementation.

### E. Advocacy, Outreach and Communications

In 2024, PAGE rolled out a suite of complementary communications activities across multiple platforms to showcase experiences, results, and knowledge products to stakeholders worldwide and enhance the partnership's global visibility. With a new series featuring interviews with representatives of UN RCOs, PAGE leveraged insights in inclusive green economy transitions in PAGE countries and the collaboration with UN RCOs and UN Country Teams.

PAGE maintained continuous engagement through its monthly newsletter, promotion of outreach events, complemented by social media campaigns across all platforms and release of new video material.

### **Insights into Green Economic Transformation - Interview Series**

Throughout 2024, PAGE highlighted inclusive green transformations and insights from experts through interviews published on the PAGE website. The interviews emphasize PAGE's role in enhancing government capabilities, building institutional knowledge, and promoting green and circular economy strategies, including interviews with:

 UN experts from Thailand, India, Indonesia, Peru, Argentina, and Kazakhstan as part of the series *Keeping Up with the United Nations*, showcasing collaborations with UNRCOs and UN Country Teams. The interviews provided insights into each country's unique approach to green economy development with the aim to facilitate knowledge exchange across countries.



**Luz Fernández Garcia** Head of Office, UNRCO, Peru



Marat Shashkenov Economist, UNRCO Kazakhstan



**Gita Sabharwal**UN Resident Coordinator,
Indonesia



**Diandra Pratami** Economist, UNRCO Indonesia

### **Keeping up with the United Nations**



Manop Udomkerdmongkol Economist, UNRCO Thailand



**Fulvia Farinelli** Economist, UNRCO Argentina



**Shombi Sharp**UN Resident Coordinator,
India



Renaud Meyer Resident Representative, UNDP Thailand



Representatives from institutions in Burkina Faso, China, Kyrgyzstan and Mongolia as part of the series *People at the Heart of PAGE* launched in 2023. The 2024 interviews focussed on PAGE's impact on inclusive green transformation through cross-sector collaboration, international partnerships, and multistakeholder dialogues. Country-specific success stories emerged from these conversations, such as the Kyrgyz

Republic's *Green Economy Development Programme*, prioritizing sustainable finance for the private sector as a key driver of green initiatives, and Mongolia's successful integration of green economy principles into public policy, guided by PAGE-supported research.

- UNIDO experts in Thailand and Uruguay, highlighting PAGE's strategic approach to supporting green economy transitions through targeted interventions. In Thailand, PAGE is supporting the government in implementing a carbon emission trading scheme through the development of a policy framework. For Uruguay, PAGE catalysed the development of a National Circular Economy Strategy and helped position the country as a regional reference for circular economy efforts.
- A representative from the Industrial Union of Argentina (UIA) and an Argentinian entrepreneur on capacity building for Small and Medium-sized Enterprises (SMEs) on green industry practices. UIA's sustainability course has trained over 700 SMEs in 2024, helping entrepreneurs to integrate green practices into core operations, and to meet international environmental standards required for global trade participation while supporting their transition toward 2030 and 2050 emission reduction targets.
- Experts from ILO and Circle Economy Foundation highlighted how the new publication Measuring and Modelling Circular Jobs provides the first comprehensive methodology to measure employment in the circular economy, addressing a critical data gap and enabling governments to implement evidence-based policies that ensure the projected millions of new circular economy jobs are decent, inclusive and contribute to social justice.

### Video Materials Showing PAGE's Work and Results in 2024

In 2024, dissemination of video content helped to draw attention to country-specific initiatives and global events. PAGE released videos showcasing national transformation journeys, supported by PAGE for <u>Kyrqyz Republic</u>, <u>Indonesia</u>, and <u>Argentina</u>.

For <u>Morocco</u>, a new video highlights synergistic partnerships steering the transition towards a greener economy, and for <u>Thailand</u>, national partners released an awareness-building video that articulates green economy principles, including the Bio-Circular-Green (BCG) economic model, renewable energy expansion, and food loss reduction strategies.

For COP29, PAGE documented the voices that contributed to its cross-regional South-South policy dialogue <u>From vision to practice for a just transition for all</u> in a video, capturing the insights and collaborative approaches of a wide range of different viewpoints from representatives of governments, workers, employers, and international organisations.

### **2023 Online Annual Report**

The Online Annual Reports provide the most comprehensive communication tool on the Partnership's achievements and ongoing work. The 2023 version of the report was published online in March 2024 and was supported by a coordinated promotional campaign across social media platforms, including a <u>promotional video</u> highlighting key accomplishments.

### **PAGE Social Media and Bulletin**

PAGE released 12 editions of its monthly bulletin in 2024 to communicate recent achievements at the country and global level to partners, reaching approximately 2,600 subscribers by December 2024. In addition to its website, in 2024, PAGE had an online presence through Instagram, X (formerly twitter), Facebook, LinkedIn and YouTube, with a total of 16,440 followers, generating 187,000 impressions, and publishing 2,706 posts.

PAGE implemented a range of social media campaigns on the Partnership's value proposition and green economy concepts, including

- 5 key elements you didn't know about PAGE;
- 5 elements that make PAGE efficient;
- the comprehensive 5 W's on PAGE;
- 3 reasons why PAGE's work matters for greening economies; and
- 3 reasons why PAGE is a key player in greening economies.

PAGE also partnered with UN CC:Learn to launch a coordinated social media campaign promoting the e-learning courses across multiple platforms. The campaign featured promotional content of the courses, while a custom-designed Trello board served as a centralized digital hub-organizing all course materials, promotional assets, and access links in one user-friendly location, streamlining both promotion efforts and learner access.

### **Collecting Feedback from Countries**

Throughout 2024, PAGE actively monitored and collected feedback from country partners to gather evidence of its achievements and impact. Through surveys, interviews, and direct engagement, PAGE has documented substantial feedback from government officials, institutional partners, and stakeholders across the global network. The following testimonials offer first-hand evidence of how PAGE is creating meaningful impact and advancing inclusive green and circular economy transitions both within and beyond partner countries.



PAGE has supported South Africa in mainstreaming the Green Economy, particularly in measuring progress. Dialogue platforms about the circular economy have been key to our success.

### Mr. Kgauta Mokoena

Chief Director, Chemicals and Waste policy, Specialist Monitoring Services, Department of Forestry, Fisheries, and the Environment (DFFE), South Africa Cambodia aims to become a middle-income country by 2030 [...]. With this goal, we have launched a number of policies and strategies to not only improve our economic development but also to make sure the environment is well managed and inclusively engaged with our stakeholders there.

### Mr. Taing Meng Eang

Director of the Department of Green Economy at the Ministry of Environment in Cambodia





PAGE brings cutting edge expertise of the UN agencies together for a joined-up approach to accelerate the green transition. This allows us to offer integrated policy advice to the government and private sector [...]

Ms. Gita Sabharwal

United Nations Resident Coordinator in Indonesia

PAGE can assist the government in finding solutions to the financial bottlenecks that are slowing the pace of green transition initiatives, by deepening and territorializing its work on sustainable and green finance. [...]

### Ms. Fulvia Farinelli

Senior Economist, Development Coordination Officer, UNRCO in Argentina





Some important examples of PAGE's success [in India] include initiatives such as Sustainable Public Procurement, Ecolabelling, and strengthening institutional capacities for mainstreaming Inclusive Green Economy principles in urban policy making. [...]

### Mr. Shombi Sharp

United Nations Resident Coordinator in India

The summer school is comprehensively prepared and packaged with interactive activities, making the learning process more enjoyable. The diverse speakers provided a better understanding of the dynamics of the circular economy.

### Ms. Anggi Pertiwi Putri

Planner for Directorate of Environment, Ministry of National Development Planning of the Republic of Indonesia, BAPPENAS



### **3.PROGRESS IN COUNTRIES**

Countries where country programmes are in full implementation, including Brazil under the new PAGE delivery model.

### Cambodia

### **Country context and PAGE portfolio**

Over the past twenty years, Cambodia has experienced remarkable economic growth with an annual growth rate of 7 per cent. The country made significant progress and became a lower-middle-income country in 2015. In 2021, it fulfilled the necessary requirements to graduate from its status as a Least Developed Country (LDC) and is on track to graduate from this status by 2029.

Cambodia has been adopting green economy principles for many years, as demonstrated by the *National Strategic Plan on Green Growth 2013-20*30. The Royal Government of Cambodia has laid out the *Cambodia Vision 2050*, with the aim of achieving upper-middle income status by 2030 and high-income status by 2050, while addressing social inclusion and environmental sustainability. In 2021, the country submitted its *Long-term Strategy for Carbon Neutrality* to the United Nations Framework Convention on Climate Change, making it the second least developed country to do so and reaffirming its commitment to achieving a carbon neutral economy by 2050. To advance its aspirations further, Cambodia submitted an application to join PAGE in 2021 and was welcomed as a new partner country in 2022 under the leadership of the Department for Green Economy at the Ministry of Environment.

Against this backdrop, and guided by a policy scoping study, PAGE's activities are framed around two substantial workstreams:

- 1. The first workstream focuses on economic foresight and fiscal policy for achieving green and socially inclusive growth. The aim is to enable the government to optimize the utilization of existing resources within a limited fiscal space through sustainable budgeting, as well as attract new sources of finance. Additionally, the objective is to explore new sources of green and inclusive growth in alignment with the country's development priorities and in a context of increasing uncertainties.
- 2. The second workstream supports the promotion of circular economy and green jobs in the garments value chain in Cambodia. While many existing initiatives in the sector have focused on energy efficiency, PAGE's support focuses on circular and resource efficient practices, enhancing competitiveness, attracting green investments and improving market access. The ultimate goal is to promote an environmentally friendly and inclusive fashion industry, working closely with counterparts across government, business and trade associations as well as other development partners.

PAGE's technical assistance work is underpinned by an institutional approach to capacity development, supporting the training arm of the Ministry of Economy and Finance in introducing green and inclusive approaches into their regular training programme.

PAGE's work in Cambodia aims to contribute towards the achievement of several SDGs, including SDG 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Sustainable Consumption and Production) and 17 (Partnerships for the Goals).

In 2023, the new government under the leadership of the Prime Minister introduced the *Pentagonal Strategy-Phase I*. The strategy is designed to guide the country towards its goal of becoming an upper-middle-income country by 2030 and a high-income country by 2050. Emphasizing economic growth, job creation, equity, efficiency, and sustainability, the strategy will coordinate the efforts of all stakeholders to continue building on the existing foundation of peace and past achievements.

In 2024, the *National Strategic Development Plan 2024-2028*, which aims to effectively implement the *Pentagonal Strategy Phase 1*, was still under development. The government is also developing a new *Cambodia Climate Change Strategic Plan for 2024-2033*, aiming to achieve carbon neutrality by 2050 and climate resilience through inclusive and sustainable development. The final document of the third version of the country's Nationally Determined Contributions, which seeks to enhance the ambition for GHG emission reductions while being more inclusive and actionable, is anticipated to be submitted to the UNFCCC in July 2025.

A major milestone that will have effects across Cambodia's economy, in particular with regards to export-oriented sectors, is the graduation from LDC status anticipated for 2029. The government is preparing a smooth transition strategy, as well as the new *Trade Policy Framework 2030*. PAGE is contributing to these through analytical work on environmental trade standards and their implications for Cambodia in the context of LDC graduation.

### **Progress in 2024**

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

### Follow-up on the Policy Scoping Study

Based on a policy scoping study conducted by the Cambodia Development Resource Institute (CDRI), PAGE published a policy brief in 2024, highlighting five priorities for an inclusive and green economic transformation in Cambodia:

- unlocking private and public finance to accelerate the transition;
- providing stronger evidence on the trade-offs between different growth pathways;
- integrating circular economy principles in Cambodia's manufacturing sector;
- prioritizing skills development to seize the job potential of a green and circular economy; and
- leaving no one behind in a green economic transformation.

The results of the study were endorsed by the PAGE National Steering Committee and have informed PAGE's priority workstreams going forward. The findings were disseminated through various channels, including CDRI's website and newsletter, as well as panel discussions at the Cambodia Climate Change Summit in October 2024 in Sihanoukville, and at the Cambodia Women Entrepreneurs Day in November 2024 in Phnom Penh.

### **PAGE National Steering Committee**

Following the elections in 2023 and the settling-in of the administration, the Minister of Environment established the PAGE National Steering Committee (NSC) in June 2024. The NSC is chaired by the Ministry of Environment, with the Ministry of Economy and Finance and UNITAR as vice-chairs. The first NSC meeting brought together senior representatives from the Ministries of Environment; Economy and Finance; Mines and Energy; Industry, Science, Technology and Innovation; Labour and Vocational Training; and Tourism, as well as the Council for the Development of Cambodia, alongside UN partner agencies and a representative of the EU delegation in Cambodia as observers. The Steering Committee endorsed the five priorities set forth in the PAGE green economy brief and approved the PAGE project document, results framework and work plan for 2024-2025.

### **Sustainable Budgeting Approach**

Through the Coalition of Finance Ministers of Climate Action (CFMCA), Cambodia had expressed interest in piloting the Sustainable Budgeting Approach (SBA). The SBA is a decision-support tool, codesigned by UNEP and the University of Oxford to help policymakers identify and resource strategic policy opportunities that promote national economic development while addressing critical environmental and social objectives. It uses a taxonomy-based methodology, which categorizes fiscal policies based on their economic, environmental, and social impacts, to achieve objectives defined in line with government priorities.

In November 2024, UNEP held an online briefing for the Ministry of Economy and Finance (Public Financial Management - PFM - Reform Secretariat) on the tool, which will be followed by an in-person workshop in 2025, bringing together several Ministries as well as key development partners. The SBA aims to align directly with Cambodia's national priorities and ongoing PFM reform efforts by facilitating a more nuanced understanding of the fiscal implications of policy decisions.

### **Engagement with the UN Resident Coordinator Office and Country Team**

In 2024, PAGE continued working in close collaboration with the UN Resident Coordinator Office (RCO) on issues relating to a green economic transformation. The PAGE national coordinator has been hosted at the RCO, as well as partner agency offices (UNDP and UNIDO) to strengthen synergies with other UN initiatives in the country. PAGE also contributed to the UN Country Team (UNCT) Results Group on Economic Transformation, a draft UNCT policy brief on LDC graduation, the interagency team for Gender Equality and Women's Empowerment as well as the Common Country Analysis (CCA). Under the guidance of the RCO economist, Cambodia successfully submitted an expression of interest to participate in the global PAGE-DCO training on *Financing Just Transitions* which is being rolled out in 2025.

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

### **Roadmap on Green Trade**

PAGE (UNDP) is supporting the government, particularly the Ministry of Commerce, in developing a roadmap to guide Cambodia's readiness to comply with green trade standards. The objective is to promote green growth while addressing sustainability requirements of Cambodia's key export markets and strengthen the country's trade competitiveness in the context of LDC graduation. Following the 2024 UNDP study on *Cambodia's Graduation from LDC Status: Preparedness and Potential Economic and Social Impacts*, PAGE is supporting a more in-depth analysis of green trade standards and rules of origin and their implications for the country. The assessment is being prepared by UNDP in close collaboration with UNIDO on sustainable investment and responsible business and UNEP's green trade team. A consultation workshop and bilateral consultations on the roadmap development were conducted with relevant stakeholders in December 2024. The roadmap is expected to be finalized in mid-2025.

### Building institutional and individual capacity (Outcome 3):

### Partnership with the Economics and Finance Institute

A Letter of Agreement was signed between UNITAR and the Economics and Finance Institute (EFI), the training arm of the Ministry of Economy and Finance, for a series of learning events on green and inclusive public financial management (PFM) to be held in 2025. The ultimate objective of this initiative is to integrate green and inclusive economy approaches into levels 4 and 5 (senior management) of the mandatory PFM certificate programme. Given the reach of the mandatory programme for all civil servants working on PFM at sub national and level levels, the partnership with EFI will be an opportunity to provide learning at scale.

### Improving Access and Application of Knowledge for Advancing IGE (Outcome 4):

### **Cambodia at COP29 Just Transition Forum**

PAGE facilitated the participation of the Director of the Department of Green Economy, Ministry of Environment, in the PAGE Just Transition Forum at COP29 in Baku, in November 2024. Cambodia's presentation focused on the country's climate and carbon neutrality plans for sustainable energy transition with insights into Cambodia's climate commitments as outlined in its NDCs and the *Long-Term Strategy for Carbon Neutrality by 2050*.

### India

### **Country context and PAGE portfolio**

With one-sixth of the world population, India is the second most populous country in the world, but with less than three per cent of global land surface area is likely to face significant resource constraints in the near future. India's gross domestic product and per capita income have been increasing for many decades. At the same time, the gap between expected consumption and potential 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 taken proactive steps towards inclusive, green economic growth across different sectors of the economy. The government made concerted efforts to support the achievement of the Sustainable Development Goals (SDGs) and its Nationally Determined Contributions 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.

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 the National Institution for Transforming India, MoEFCC and the Ministries of Textiles and Finance. PAGE in India specifically aims to develop replicable models and enhance cooperation on initiatives between national and subnational levels with a focus on 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 Indian Railways.

Since the initiation of PAGE, several new policy developments have confirmed the country's focus on economic growth that is low carbon, resilient, inclusive, just, green and sustainable.

- The government formed committees in 11 areas in 2021 that recommended action plans on circular economy, including end-of-life products, recyclable materials, and others. The government also drafted various policies in alignment with the principles of circular economy, such as the *Steel Scrap Recycling Policy*, the *National Automobile Scrappage Policy*, and the *Sustainable Bharat Mission for Textiles*, which aims to enhance resource use efficiency and circularity in the textiles sector.
- The Prime Minister made India's global mission LiFE (Lifestyles for Environment) the central theme of India's G20 presidency in 2023, leading to sustainable and responsible consumption and production, along with the provision of finance and technology, being recognized as critical enablers for achieving the international climate goals.

- The Environment and Climate Sustainability Working Group of the presidency adopted the Chennai High Level Principles for a Sustainable and Resilient Blue/Ocean-based Economy, to be implemented voluntarily by the G20 members, based on national circumstances and priorities. Also, under India's G20 presidency, the industry-led Resource Efficiency and Circular Economy Industry Coalition was launched to promote resource efficiency and circular economy, and elevated the focus on green jobs and skills by launching the Skill Council for Green Jobs aligned to the National Skill Development Mission to enable skills and entrepreneurship for green businesses.
- The government has implemented four major rural development schemes over the past year with the objective to reduce poverty, generate employment, and develop rural infrastructure:
  - Mahatma Gandhi National Rural Employment Guarantee (MGNREGA) that provides guaranteed employment to rural households;
  - o Pradhan Mantri Awaas Yojana Gramin (PMAY-G), which provides affordable rural housing;
  - National Rural Livelihood Mission (NRLM) that promotes self-employment and microenterprise development; and
  - o Pradhan Mantri Gram Sadak Yojana (PMGSY), which provides rural infrastructure.

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 2024**

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

### **Promoting Sustainable Consumption and Production Through Ecolabeling**

In 2024, the Government of India announced the *Eco-Mark Certification Rules* with the objective to revamp the regulatory framework for eco-labelling in the country to encourage demand as well as production of environment-friendly products, leading to the promotion of green industries.

PAGE (UNEP) supported this landmark achievement with its conceptual and analytical work on ecocertification provided to the Ministry of Environment, Forest and Climate Change (MoEFCC). Since October 2024, the new *Eco-Mark Certification Rules* that align with India's *Lifestyle for Environment Mission*, replace the eco-mark scheme of 1991 and provide labels for products that meet approved environmental criteria - ranging from cosmetics, detergents, oil, coffee and tea to textiles and electronical goods. PAGE's analyses over the last two years helped to establish a clear and improved framework for product certification, increasing market transparency and consumer trust. Building on this, PAGE continues to assist the MoEFCC in developing operational guidelines for the scheme, addressing critical components such as designating verifiers, conducting market surveillance, and verifying the authenticity of eco-mark-awarded products.

### **Financing Green Rural Development**

To enhance public finance and investments for green rural development, an in-depth analysis of four selected rural development schemes – MGNREGA, PMAY-G, NRLM and PMGSY - was undertaken by PAGE in collaboration with the Ministry of Rural Development (MoRD). Building on a preliminary desk review in the previous year, PAGE developed a comprehensive questionnaire in 2024 to seek inputs on green rural development in India regarding new initiatives, opportunities, challenges and best practices. The questionnaire was circulated to 29 stakeholders including national NGOs, UN agencies and individual experts, and 20 responses were received. Subsequently, the schemes' potential contribution to green economic growth was assessed, as well as future opportunities, challenges and policy interventions needed to mainstream principles of inclusive green economic growth in planning and financing for rural development. Following the analysis, a paper is being prepared to provide recommendations to policy makers to foster investments under the schemes towards green and inclusive economic growth in rural areas. The objective is that the implementation of the recommended actions will lead to enhanced public finance and investments for green rural development, especially regarding green jobs and sustainable rural infrastructure.

### **Guidance for Promotion of Green Jobs**

PAGE (ILO) developed the document *Green Jobs Guidance Note: Definitions, Measurement Methodologies and Strategies for Green Jobs Promotion* for the Ministry of Labour and Employment to support the work of the Skills Council for Green Jobs. The guidance note is structured into five main sections: introduction to green jobs; definitions of green jobs; country-specific definitions; selected approaches to measuring green jobs; and a compilation of selected best practices promoting green jobs and a just transition. The note aims to strengthen the understanding of green jobs concepts and practices in India, and to promote green jobs that help ensure that economic activities are environmentally friendly and provide decent work for all. The note was finalized in October 2024 and is planned to be published in early 2025. As a next step, PAGE will conduct an analysis to define green jobs within the textile sector in India and identify a set of job roles that will support the sector's green transition.

### Building institutional and individual capacity (Outcome 3):

### **Capacity Building to Integrate IGE Principles in Urban Planning**

PAGE (UNITAR and UNDP) partnered with the National Institute of Urban Affairs (NIUA) to carry out a comprehensive revision and update of a set of training materials on sustainable urban planning targeted at municipal officials in the states of Madhya Pradesh and Uttarakhand. The revisions included inputs received from government stakeholders, as well as the PAGE National Steering Committee in April 2024. A training of trainers using the updated and revised training curriculum, comprising of 9 modules, was conducted by NIUA and UNDP at the Dr. R. S. Tolia Uttarakhand Academy of Administration in December 2024 for a group of 24 trainers from Madhya Pradesh and Uttarakhand. In addition, PAGE (UNITAR) is working closely with NIUA to adapt the revised training curriculum into a self-paced, freely accessible interactive online course that will be hosted on the National Urban Learning Platform. The self-paced online course is expected to be launched in mid-2025.

### 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 reducing inequality and poverty has been limited. The country's national income depends on the agricultural sector, the export of a few commodities and remittances from Guatemalans overseas. It is also highly 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 environmental challenges come with socioeconomic consequences.

Against this background, the Government of Guatemala launched its *Low-Emission Development Strategy (LEDS)* as its strategy for climate change mitigation. In addition, the government took steps over recent years to promote the greening of its economy, and the Ministry of Public Finance developed an *Environmental Fiscal Strategy* that envisages a set of fiscal instruments to improve pricing of environmentally harmful economic activities, as well as adjustments to public procurement to reach national climate change and sustainability objectives.

Guatemala joined PAGE in 2018 under the lead of the Ministry of Public Finance and endorsed by the Ministry of Economy and Ministry of Environment and Natural Resources, requesting support to reframe economic policies around sustainability, with a focus on tax reform, a just transition and green jobs. Following the initial launch, the PAGE programme was delayed by several incidents and adjusted and refocused in accordance with the new developments.

After the outbreak of the COVID-19 pandemic, Guatemala launched an *Economic Recovery Plan* at the end of 2020, which focused on job creation and strategic investments. PAGE, in collaboration with relevant ministries, developed activities to strengthen a green recovery within existing policy frameworks, such as the *Strategy for Strengthening Value Chains*, the *Low Emissions Development Strategy* and the *Environmental Fiscal Strategy*.

In 2022, the overall productivity was affected by tropical storms that had led to the destruction of important public infrastructure and the government ratified a state of public calamity. Within this framework, the National Congress approved an amendment to the national budget to provide an emergency fund to mitigate damages caused by natural disasters.

Economic challenges aggravated when the impact of the conflict in Ukraine elevated inflation and costs of living, raising again the attention to the need of having an effective tax system and a just transition process. After general elections in August 2023, a new government took office and kept general interest in the overall green economy agenda and the implementation of the *Environmental Fiscal Strategy* while also emphasizing selected value chains, such as cocoa and ecotourism, for the collaboration with PAGE and other development partners supporting the country.

In light of all these developments, and also taking into account the results of an initial national green economy stocktaking study, the PAGE support to Guatemala prioritizes activities which support the implementation of four key national policies: the *Low Emissions Development Strategy*, the *Environmental Fiscal Strategy*, the *Nationally Determined Contributions*, and the *National Climate Change Plan*.

Relevant to these policies, PAGE contributes technical assistance and capacity building in the areas of green fiscal policy, sustainable public procurement, sustainable waste management, cleaner production, circularity, and sustainable value chains. These strategic areas were reaffirmed through consultations with the newly appointed authorities and technical focal points of the government in 2024. This is in line with the new *General Policy Plan 2024-2028*, which explicitly mentions advancing the green economy as a framework to bolster environmental protection in a socially inclusive and economically viable way.

PAGE is also discussing with the government needs and opportunities to implement the Sustainable Budgeting Approach as a tool for adopting data-driven fiscal strategies that enhance economic resilience while safeguarding environmental integrity.

PAGE's 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 2024**

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

### Second National Forum on Inclusive Green Economy and First Green Jobs Fair

Guatemala's second High-Level National Forum on Inclusive Green Economy was organized by the Ministries of Public Finance, Economy, and Environment and Natural Resources, as well as the Guatemalan Cleaner Production Centre in collaboration with PAGE on 7-8 May 2024 in Guatemala City. The event provided a platform for a country-wide dialogue on emerging policy priorities of the green transition. Participants from the government, the private sector, academia and civil society actively engaged in a conversation on a national green finance taxonomy to steer investments towards sustainable initiatives as well as the potential or circularity for improving competitiveness of Guatemala's economy. Approximately 90 participants attended the forum, representing public and private sectors, civil society, academia and the local UN system.

Back-to-back with the forum, Guatemala's first Green Jobs and Entrepreneurship Fair was held on 8 May, organized by the Ministry of Labour and PAGE (ILO), connecting job seekers with sustainable enterprises by providing a platform for face-to-face exchanges around the themes of green skills development, just transition and environmental sustainability. An interactive dialogue with youth representatives highlighted the role of youth in informing national priorities and the need to strengthen their professional competencies for the green transition.

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

### Inputs to the Update on the National Cleaner Production Policy and its Action Plan

To support the update of the *National Cleaner Production Policy* and the development of its Action Plan, PAGE (UNIDO) continued to develop a study in 2024 in collaboration with the Ministries of Public Finance, Environment and Natural Resources, and Economy. The study analyses the best available techniques of sustainable production and specific models of economic recovery and circularity, while taking into account the country's commitments under the Paris Climate Agreement and other relevant international environmental agreements. An analysis of the current legislation has been prepared to identify gaps in Guatemala's regulatory framework related to energy and waste management. On this basis, the study provides policy recommendations to promote the most suitable circular economy approaches in line with existing national policies, such as the *Environment and Resources Policy*, and the *Environmental Management Framework Policy*. The final report is anticipated in mid-2025.

### **Greening the National Public Procurement System**

PAGE provides technical assistance to the Ministry of Environment and Natural Resources to inform the development of a national policy on sustainable public procurement that aligns procurement practices with national environmental goals and the country's Nationally Determined Contributions. More specifically, in 2024, PAGE (UNEP) supported the integration of sustainability considerations into the country's public procurement system, following the finalization of a comprehensive document outlining the methodology and outcomes of the process undertaken to prioritize products and services. Sustainability criteria were developed for three priority product categories - cleaning products, cleaning services and furniture - accompanied by technical specifications and recommendations for a phased integration of those into procurement procedures. Key findings and recommendations were validated with relevant stakeholders and will inform next steps in the development of a national SPP policy framework. The initiative contributed to better institutional understanding of sustainable procurement practices and leaves the Ministry with a structured methodology for introducing sustainable public procurement that can be scaled to additional product categories.

### **Guide for Municipal Environmental Public Spending**

A guide for the classification of municipal environmental public spending was developed by PAGE (UNDP) for the Ministry of Public Finance in collaboration with the Ministry of Environment and Natural Resources and the President's Secretariat of Planning and Programming. The guide, which is accompanied by practical and training manuals, serves as a technical tool for municipalities to analyse investments in environmental protection. It provides recommendations and practical examples on how to classify and plan environmental public spending effectively, including regulatory and reference frameworks, to enhance and redirect municipal investment in biodiversity management using a results-based budgeting approach. In 2025, the guidelines will be used to train the country's 340 municipalities and equip decision-makers with the necessary information to formulate policies that promote the sustainable management of natural resources and foster the country's sustainable development.

### **Roadmap to Advance Environmental Taxation**

A roadmap to advance environmental taxation was developed by PAGE in collaboration with the Ministry of Public Finance, offering a strategic framework and recommendations to align fiscal policy and economic growth with environmental sustainability. The roadmap includes systematization of policy instruments, an analysis of legislative and environmental commitments, steps to advance environmental taxation, as well as integration of environmental guidelines into fiscal policy.

### Strengthening Higher Education Institutions to Promote a Green Economic Transition

The readiness of Guatemala's Higher Education Institutions (HEIs) to prepare future professionals for leading the transition toward an inclusive green economy was assessed in a report developed by PAGE (UNITAR) for the Ministry of Public Finance and in collaboration with Ministries of Education, Economy, and Environment and Natural Resources. The report, finalized in April 2024, recommends incorporating inclusive green economy more coherently in higher education and professional training. It emphasizes the development of transformative, technical, managerial and participatory competencies, while recognizing already ongoing efforts of HEIs to integrate sustainability into their curricula. The draft results and recommendations of the analysis were discussed and validated during an online workshop on 11 April 2024 with participation of the Ministries of Public Finance, Economy, and Environment and Natural Resources, as well as national universities. As a follow-up to the report, an academic-grade interdisciplinary seminar on inclusive green economy is being developed for university students.

### Morocco

### **Country context and PAGE portfolio**

Located in North-western Africa, Morocco is a lower to middle income country according to the World Bank, 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 highly variable rainfall and recurrent droughts with severe environmental, social and economic consequences. Being also exposed to fluctuation in commodity prices, the country has been challenged by rising energy and food prices, depletion of natural resources, high youth unemployment, growing social inequality, and slowing gross domestic product growth.

Against this background, Morocco recognized the importance of reframing economic policies around sustainable development. Morocco's commitment to an inclusive green economy transition was first articulated in its 2017 *National Strategy for Sustainable Development (NSSD)*, which aimed to reconcile economic growth, social inclusion, and environmental protection by 2030. This commitment was already put to action by the Moroccan government prior to PAGE through several green economy initiatives related renewable energy, energy efficiency, water and waste management, sustainable agriculture and aquaculture, and forestry. The commitment was reaffirmed and deepened in the revised NSSD completed in 2023 with the support of PAGE. The updated strategy aligns with Morocco's new development model and the 2030 Agenda and places a strong emphasis on six key areas of transformation: water security, sustainable territories, a low-carbon economy, sustainable urban development, circular economy, and social inclusion. Each transformation area is broken down into strategic objectives, measurable indicators, and concrete targets. The revised strategy also prioritizes strengthened climate governance, resilience to climate risks, and the mobilization of human, technological, and financial capacities.

Morocco joined PAGE in 2020 under the lead of the Ministry of Energy Transition and Sustainable Development tasked with leading the development of a green economy in Morocco. Commencing its support at a time marked by the impacts of the COVID-19 pandemic, PAGE aligned with related policy developments emphasizing green recovery of key industries. The Moroccan Economic Watch Committee of Morocco had formulated recovery strategies with greening potential, such as the *Industrial Recovery Plan 2021-2023*, with a pillar positioning 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 complemented the *Industrial Acceleration Plan 2021-2025* that includes a green economy dimension. At the same time, the country put forward a new development model - a set of guiding frameworks for economic, social and environmental growth - involving a national consultation process between in 2019 and 2021.

Based on an initial policy scoping study, the PAGE programme set its priorities to include:

- the promotion of national multistakeholder dialogues and coordination mechanisms combined with effective communication;
- promoting green economic and fiscal instruments for supporting a green economic transformation and the sustainable use of ecosystems and natural resources;

- addressing decarbonization, competitiveness and skills needs for a green transformation in key industrial sectors;
- analysis of sustainable value chains;
- institutionalizing South-South Collaboration on access to sustainable energy; and
- targeted capacity building and sustainable management of water resources.

While global and regional uncertainties continue to challenge the national economy in 2024, PAGE's work remained closely aligned with Morocco's green strategies and long-term policy frameworks, including the *National Strategy for Sustainable Development Strategy 2017-2030*, the *New Development Model 2021-2035*, the *Generation Green 2020-2030*, the *National Biodiversity Strategy and Action Plan* that is currently being revised, the *Industrial Acceleration Plan 2021-2025*, the *Morocco Mines Plan 2021-2030*, and the *National Water Plan 2020-2050*.

PAGE in Morocco aims to support SDG 2 (Zero Hunger), 4 (Quality Education), 6 (Clean Water and Sanitation), 7 (Affordable and Clean Energy), 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), 15 (Life on Land), 16 (Peace, Justice and Strong Institutions), and 17 (Partnerships for the Goals).

### **Progress in 2024**

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

### Roadmap for the Moroccan Coalition for Sustainable Energy Access

In collaboration with the Moroccan Agency for Sustainable Energy, PAGE (UNDP) completed a roadmap for the institutionalization and operationalization of the Coalition for Sustainable Energy Access in June 2024 based on stakeholder consultations and a benchmarking study. The roadmap outlines the Coalition's statutes, its governance mechanism called the Transition Committee and Secretariat, and the initial steps that the coalition will take to put the roadmap into action. The initiative supports the sharing of know-how, expertise and best practices and aims to strengthen South-South cooperation to help Morocco find ways to increase access to sustainable energy.

### **Sectoral Diagnostic and Policy Analysis on Water Management**

In collaboration with the Ministry of Industry and Commerce, the Ministry of Equipment, Transport, Logistics and Water, and the Moroccan Coalition for Water, a non-profit organization supported by the General Confederation of Moroccan Enterprises, PAGE (UNIDO) finalized a sectoral diagnostic and policy analysis on the improvement of inland waters and coastline governance for sustainable water resource management and the realization of water saving from industrial, touristic and domestic use. The report *Water governance in Morocco: for a coherent approach to inland and coastal water management* provides an institutional overview of the governance mechanisms for water in Morocco and includes a comparative benchmarking with Tunisia, France and Senegal. The Moroccan Coalition for Water presented the analysis at the 2024 World Water Forum in Bali, Indonesia.

The study addresses the country's acute water crisis exacerbated by climate change, population growth and sectoral pressures, particularly in agriculture, which consumes eighty per cent of water resources. It points out the existing fragmented legislation, and the disconnection between inland and coastal water management that hinders sustainable resource use. By advocating for integrated governance, green economic transitions, and participatory approaches, the study aims to support legal reforms, such as harmonizing water and coastal laws. The analysis supports the government's effort to advance large-scale infrastructure projects, such as dams, desalination plants and irrigation networks, and to revitalize coordination bodies, such as the Higher Council for Water and Climate. These efforts aim to enhance water security, promote circular economy practices, and align policies with global climate and sustainability goals, embedding resilience and inclusivity into overall Morocco's development framework.

### **Systematic Analysis to Green Economy Learning**

To support a more systematic approach to green economy learning in Morocco, PAGE (UNITAR) conducted a *Green Economy Learning Assessment (GELA)*, focusing on the needs and priorities of professionals involved in policy development, implementation, monitoring and evaluation, including government officials and representatives of business associations, academia and civil society. During a webinar in May 2024, PAGE presented the outcomes and deliberated on the primary recommendations derived from the GELA.

The assessment pinpoints both sector-specific and overarching educational requirements essential for fostering a green and inclusive economy. It emphasizes that in addition to technical skills, key capacity gaps relate to management and participatory skills which are key to advance green economic policies. The assessment also scrutinizes the training capabilities within critical skill areas across more than fifty national training institutions. Co-hosted by the Ministry of Energy Transition and Sustainable Development (MTEDD), the webinar brought together key stakeholders and representatives of the PAGE Morocco Steering Committee. Following the webinar, the GELA has been finalized and disseminated for uptake by national partners, including a national Circular Economy Conference organized by MTEDD in December 2024. The results will also inform the development of partnerships between UNITAR and selected national training institutions in 2025, including the Higher Institute of Information and Communication and the National School of Public Administration.

### **Mainstreaming of Biodiversity into Priority Sectors**

In collaboration with the Ministry of Economy and Commerce, PAGE (UNIDO and UNEP) completed a study to support the effective integration of biodiversity into Morocco's priority sectors agriculture and mining, aligned with the Kunming Montreal Global Biodiversity Framework. The report includes a detailed mapping of the needs and challenges of the two sectors, an analysis of global biodiversity best practices, and recommendations on biodiversity mainstreaming in Morocco. To ensure optimal biodiversity integration to foster the green transition, monitoring mechanisms to maintain biodiversity best practices were included. In addition, training modules on the integration and implementation of biodiversity best practices were developed by PAGE to enable government officials to effectively integrate the recommendations in the two sectors. A final presentation was made on 25 September 2024 to the Biodiversity Committee of the Ministry of Energy Transition and Sustainable Development to highlight the key findings of the study and discuss the training modules designed for continued capacity building of key ministry personnel. The study was completed in October 2024.

The study informs the governance frameworks of Morocco's key ministerial and inter-ministerial bodies responsible for biodiversity management, including the Ministry of Energy Transition and Sustainable Development and relevant cross-sectoral coordination platforms. Specifically, the study provides evidence-based recommendations and sector-specific guidance that will support the integration of biodiversity considerations into national and sectoral policies, regulatory mechanisms, and implementation processes. This contribution is directly aligned with Morocco's revision and adoption of its new *National Biodiversity Strategy and Action Plan*, scheduled to be developed and finalized between 2025-2026, in accordance with the requirements of the Kunming-Montreal Global Biodiversity Framework.

### Building institutional and individual capacity (Outcome 3):

### E-Learning Platform on Decarbonization of Agriculture in Morocco

Morocco's Mohammed VI Polytechnique University launched an e-learning platform, focused on the decarbonization of agriculture that offers online courses, podcasts and webinars to deepen the understanding of decarbonization and carbon sequestration. The platform provides public access to knowledge on sustainable agriculture and enhances agro-professionals' expertise in decarbonization techniques and implementing climate-smart practices. This initiative is closely aligned with national government strategies, particularly the objectives of the Ministry of Agriculture, Marine Fisheries, Rural Development, Water and Forests. The Ministry has set ambitious targets, such as converting one million hectares to conservation agriculture by 2030 as part of Morocco's broader agricultural strategy. The platform also supports the country's commitments under its Nationally Determined Contributions to reduce greenhouse gas emissions from the agriculture sector and contributes to the Low Greenhouse Gas Emission Development Strategy 2050, which aims to decarbonize key sectors and foster sustainable economic growth.

The platform was developed by a partnership that included PAGE, the AgriTech Center of Excellence at Mohammed VI Polytechnique University and the ILO ProAgro project, which aims to foster decent work, create sustainable jobs, and enhance skills in Morocco's agro-industrial sector, supporting both national and international climate and employment goals. PAGE (ILO) provided technical assistance, capacity building and resource mobilization.

### Rwanda

### **Country context and PAGE portfolio**

Rwanda's economy highly depends on the health of its natural resources and ecosystems. As indicated in the *National Strategy for Transformation (2017-2024)*, 70 per cent of the total labour force is employed in the agricultural sector, the third highest contributor to Rwanda's gross domestic product. For this reason, the government decided to invest in the efficient use of natural resources, to guide its economic growth and development, including efforts to combat climate change. As outlined in its national *Vision 2050 'The Rwanda we want'*, the country aims to become an upper middle-income country by 2035 and a low carbon and high-income country by 2050.

In 2011, Rwanda adopted the *National Green Growth and Climate Resilience Strategy (GGCRS)*, which was revised and updated in 2023. The GGCRS, and Rwanda's Nationally Determined Contributions (NDCs) under the Paris Climate Agreement identified key sectors for driving green growth and helping Rwanda meet its climate change commitments. These sectors include agriculture and land use, industry, energy, human settlements, and transport.

Against this background, Rwanda joined PAGE in 2022 under the lead of the Ministry of Finance and Economic Policy. PAGE's inception included a comprehensive green economy policy stocktaking study and additional consultations with government focal points.

In parallel to PAGE inception, there were a few additional policy developments:

- An update of *National Strategy for Transformation for 2024-2029 (NST-2)*, which confirms agriculture and land use, industry, energy, human settlements, and transport as priority sectors and puts emphasis on SME participation in the manufacturing sector to generate economic growth, and decent and productive jobs.
- A series of investment plans, developed by the Rwanda Green Fund, an affiliated agency of the Ministry of Environment, to support resource mobilization for sustainable land management, climate resilient agriculture, and green cities; and
- A *Climate and Nature Finance Strategy* adopted by the cabinet in October 2024 to bridge the financing gap of USD 6.2 billion by 2030 for climate and nature investments.

Based on the results of the stocking and in line with new policy developments, the PAGE programme has defined its priorities in support of key overarching national policies and for the provision of additional thematic support for Rwanda's green economic transition. The national policies to be supported are the implementation of the NST-2, and the implementation and revision of the country's NDCs. Thematic support will be provided in the areas of climate finance and investments in nature-based solutions, circular economy and resource efficiency, and green jobs and just transition.

PAGE's work in Rwanda aims to contribute towards the achievement of several SDGs, including SDG 8 (Decent Work and Economic Growth), SDG 13 (Climate Action), SDG 15 (Life on Land) and SDG 17 (Partnerships for the Goals).

#### **Progress in 2024**

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

### **Greening of the National Strategy for Transformation**

Rwanda's progress towards an inclusive green economy was analyzed in a green economy policy stocktaking, pointing out areas that could benefit from PAGE support over the next five years. Building on the stocktaking study developed in 2023, PAGE (UNDP) is supporting the greening of the 2<sup>nd</sup> National Strategy for Transformation (NST-2), which was approved by the cabinet in August 2024, with the aim to mainstream green growth across priority sectors and polices. As a first step, a technical team established under the Ministry of Finance and Economic Planning, including representatives from the Ministry of Environment, the Environment Management Authority and the National Green Fund, developed a paper providing guidance to the ministry on tools and methodologies for integrating green economy, environment and climate change components into the delivery of the NST-2. The support provided by PAGE includes the revision of other medium-term strategies until 2029, namely the sector strategic plans and district development plans.

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

#### **Green Jobs Assessment Model**

To support the Government of Rwanda in its efforts towards an inclusive and green economy and just transition for all, the Ministry of Environment and PAGE (ILO) initiated the development of a *Green Jobs Assessment Model (GJAM)* in July 2024 for evidence-based policy formulation and decent job creation in Rwanda, which will be conducted by the Rwanda National Institute of Statistics. In addition, the University of Rwanda has been identified as the national research institution to support the development of a *Just Transition Assessment Model* to complement the GJAM as a key component towards a climate neutral economy that ensures fairness and equity for all stakeholders.

### Building institutional and individual capacity (Outcome 3):

## **Capacity Building on Climate Budget Tracking**

To support the implementation of the *Climate and Nature Finance Strategy*, PAGE (UNDP) supported the design of the *Climate Budget Tracking Guidelines* that allow government officials to track all climate related expenditures. Subsequently, the training on application of the guidelines of staff of the Ministry of Finance and Economic Planning (MINECOFIN), as well as staff in the Ministry of Environment was conducted. In total, 40 staff members were trained. PAGE also provided support to MINECOFIN to develop an *Environmental*, *Social and Governance Framework* to mobilize resources for green and socially just investments that ensure sustainable development. This led the ministry to mobilize 200 million Euros from the African Development Bank.

#### **Integrating Inclusive Green Economy into Higher Education**

In 2024, PAGE (UNITAR) consulted with the Higher Education Commission of Rwanda to define needs and activities aimed at increasing the provision of inclusive green economy (IGE) learning by Rwandan higher education institutions in line with national IGE priorities. This will include the development of a *Green Economy Learning Assessment*, aimed at identifying the learning needs and gaps in higher education learning vis-à-vis key priorities set by the government in two to three key sectors; revision of guidelines and criteria for accreditation of tertiary level education programmes; international experience sharing and benchmarking on IGE; and awareness raising and youth engagement. The activities will take place in the period 2025-2026.

## **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 patterns from the industrial sector – which accounts for almost 40 per cent of the country's gross domestic product – are a cause behind many of these environmental issues.

Against this background, Thailand has embraced green economy principles under its 'Sufficiency Economy Philosophy,' which incorporates a green growth development model. This model is deeply 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. In addition, the government put forward the Bio-Circular-Green Economy Business Model to promote sustainable growth that is environmentally friendly and socially inclusive.

The 12<sup>th</sup> *National Economic and Social Development Plan (NESDP) 2017-2021* provided the initial entry point for PAGE when Thailand joined the partnership in 2020. But then PAGE started its support during a moment when the COVID-19 pandemic and related recovery was the main concern, leading to an initial focus on helping the government to green its 400-Billion-Baht Economic and Social Rehabilitation Fund using insights from the most affected sectors of the economy.

Following this engagement, PAGE was officially launched in 2022, hosted by the Office of the National Economic and Social Development Council (NESDC). This coincided with the development of Thailand's 13<sup>th</sup> *National Economic and Social Development Plan for 2022-2026* that benefited from the results of a PAGE supported green economy stocktaking study that explored gaps and drivers for implementing Thailand's existing green economy principles.

Building on the green economy stocktaking study and consultations with the government, PAGE targets five areas contributing to an inclusive green economy: 1) reduction of carbon emissions and pollution; 2) promotion of energy and resource efficiency; 3) biodiversity and ecosystem conservation; 4) decent job creation; and 5) a just transition creating prosperity for all. The central element of PAGE work is an integrated approach to support the creation of a carbon emissions trading scheme. PAGE also provides capacity building for implementing the national Bio-Circular-Green Economy Model in the agriculture sector, technical assistance in waste management, and awareness raising on just transition issues.

PAGE in Thailand plans to contribute to SDGs 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production) and 13 (Climate Action).

The new cabinet formed after parliamentary elections in 2023 has since confirmed its commitment to green growth, bio-based economy, natural resources preservation, energy efficiency, clean and renewable energy usage, and carbon emission reduction, including the application of carbon pricing instruments, backed by new policy developments in 2024:

- A new National Power Development Plan (PDP) 2024-2037 guiding transition to cleaner energy sources and power supply management with the aim to increase the share of renewable energy to over 50 per cent by 2037 and foreseeing investments in solar, wind, biomass, biogas and other renewable sources. The PDP is part of a broader national energy strategy that includes the Alternative Energy Development Plan, the Energy Efficiency Plan, the Oil Plan and the Gas Plan, including the goal to reduce reliance on fossil fuels and the share of coal to 7 per cent by 2037.
- The Climate Change Act is in the legislative process. The act foresees a comprehensive legal framework for reducing greenhouse gas emissions, promoting sustainable development and enhancing climate resilience with national emission reduction targets, reference to a carbon pricing mechanism, and a national climate fund for mitigation and adaptation projects.

## **Progress in 2024**

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

#### Policy Recommendations for Green and Inclusive Recovery and Development

In collaboration with the National Economic and Social Development Council, PAGE (UNIDO) published the *Green and Inclusive Recovery Assessment* in September 2024 that evaluates the government's projects supported by the 400 billion Thai Baht Economic and Social Rehabilitation Fund established for recovery from the COVID-19 pandemic. The assessment provides policy recommendations for green and inclusive recovery and development, such as the implementation of the SDGs, the Nationally Determined Contributions, the *Bio-Circular-Green Economic Policy*, as well as the recovery and development policies of Thailand aligned with the *National Economic and Social Development Plan*. Recommended measures include improvement of the government's project cycle process, assessment of policy impacts, establishment of sustainable financing mechanisms, and partnership building for transformative change.

Based on case studies included in the assessment, PAGE, in collaboration with Thammasat University, developed training modules for online and in-person training for policy makers, civil servants and young academic professionals to share the lessons and best practices resulting from the assessment. The modules provide insights into i) how to integrate green and inclusive development objectives in project design and implementation; ii) how to measure economic, social, and environmental outcomes with green indicators and the related methods and tools to assess policy impacts; and iii) the principles and practice of sustainable finance. The training will take place in 2025, both through an online self-paced module and in-person training sessions.

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

#### **Development of a Carbon Emission Trading Scheme**

PAGE supported the development of a carbon emission trading scheme in 2024 through four activities. These activities were developed in collaboration with a variety of government partners, such as the Office of the Prime Minister's National Economic and Social Development Council (NESDC), the Subcommittee on Carbon Emission Management Mechanism, the Department of Climate Change and Environment, the Department of Alternative Energy Development and Efficiency, the Department of Primary Industries and Mines, and the Thailand Greenhouse Gas Management Organisation.

- PAGE (UNIDO) is working with the Joint Graduate School of Energy and Environment of King Mongkut's University of Technology Thonburi to develop a policy framework for an *Emission Trading Scheme (ETS)* and a roadmap for implementation of the ETS. The objective is to outline what is required to implement an ETS, including legislation, institution, technology, capacity, finance and communication. In 2024, the focus was on conducting a carbon emission and decarbonization stocktaking survey targeting policy makers and companies from government prioritized sectors, such as electricity generation, petroleum refinery, pulp and paper, cement, iron and steel, food and beverage, plastic, and textile. This was followed by a consultation workshop organized by PAGE and hosted by the NSEDC on 1 November 2024 with representatives from government, industrial sector, financial institutions, academia, media and non-governmental organizations to complete the picture of the GHG emission profile focusing on carbon dioxide to inform the carbon capture and trading system, and to enhance the understanding of the ETS policy framework development.
- PAGE (UNIDO and UNDP) provided policy recommendations for the planned ETS policy framework and its implementation roadmap through a report *Macroeconomic Planning for Green and Climate Policy Options in Thailand*. The recommendations focus on measures that can accelerate the implementation of decarbonization strategies, investments in renewable energy, development energy efficiency and bio-circular-green economy related programmes, and also propose revenue redistribution from carbon tax and trade to address climate justice. The results and recommendations of the study also feed into the draft Climate Change Act's consideration of carbon taxation.
- PAGE (UNITAR), together with the Climate Action Academy (CAA) of the Thailand Greenhouse Gas Organization, initiated a learning needs assessment to inform the development of the ETS curriculum for policy makers and institutes who will implement the scheme, as well as for industries who will have to comply with the carbon reduction plan, and the trade platform that will support carbon allowance trade exchange. The Policy Research Centre on Green Economy of Thammasat University will be leading the assessment and curriculum preparation of a foundational self-paced e-course to be hosted on CAA's online platform and a series of advanced technical trainings or workshops focused on the needs identified in the learning needs assessment to be carried out. The activity aims to support the capacity of the CAA and potential national training centres and academia to conduct trainings in support of the ETS implementation.

PAGE (UNDP) developed a draft report in 2024 that provides a qualitative analysis of the carbon market in Thailand and the potential socio-economic impacts on different sectors of both the ETS and a carbon tax to inform the best possible design of the ETS framework. The findings draw attention to the importance of robust monitoring, reporting and verification methodologies; government and stakeholder's control and compliance capabilities; and comprehensive outreach and public participation. The report was shared at the first national ETS stakeholders' consultation workshop on 1 November 2024.

#### **Financing Mechanism for Waste Management**

In consultation with the Subcommittee on Development of Financing Mechanism for Sustainable Waste Management under the PAGE National Steering Committee and the Department of Local Administration of the Ministry of Interior, PAGE (UNEP and UNIDO) is conducting a study under the Bio-Circular-Green Economic Model to profile municipal waste using digital technology and to identify financing mechanisms that support sustainable waste management as part of the country's transition to a circular and green economy. The study will include consultations, planned for 2025, at both the national level and at the subnational level in the Rayong municipality, which will serve as a case study. The development of a mobile application with a digital knowledge programme aims not only to enhance the municipality's capacity for managing waste cycles efficiently, but also to promote behavioural change on waste circularity.

## Brazil

#### **Country context and PAGE portfolio**

Brazil, the largest country in South America has a diverse economy and an important agricultural and mining sector as well as an export-oriented industrial base. The country has ample growth opportunities as the world shifts to low-carbon economies, given that it already runs to a large extent on clean energy and has abundant natural resources. However, Brazil also faces environmental challenges, including biodiversity loss and deforestation, which threaten both livelihoods and economic stability. Addressing the environmental challenges in Brazil requires a balanced approach that promotes economic growth while ensuring ecological sustainability.

PAGE's engagement in Brazil began in 2016 at the sub-national level in the State of Mato Grosso where PAGE supported the implementation of the State's *Produce, Conserve, Include (PCI) Strategy* by building institutional capacity and piloting green economy initiatives in several sectors including tourism, energy, and agriculture. Through targeted support, PAGE helped the state design replicable models for sustainable development, including participatory planning tools, low-carbon value chains, and a green job strategy. The state's initiatives gained traction - reflected in stable deforestation rates alongside agricultural growth and improved intersectoral coordination.

In 2023, the Brazilian Federal Government announced its *Ecological Transformation Plan (ETP)* to integrate environmental priorities into national economic planning. In this context, the government requested PAGE to provide targeted support in line with the PAGE updated Strategy and country support model for the delivery of the ETP at the national level. Since mid-2024, PAGE has been working with the Ministry of Finance, specifically the Secretary of Sustainable Economic Development, to provide analytical and technical inputs for the ETP. The initiative aims to ensure that the implementation of the ETP's six pillars - sustainable finance, technological densification, bioeconomy and agri-food systems, energy transition, circular economy, and green infrastructure and adaptation - are aligned with the country's long-term economic, social and environmental development goals.

PAGE's work in Brazil aims to contribute towards the achievement of several SDGs, including SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (responsible Consumption and Production), SDG 13 (Climate Action), SDG 15 (Life on Land) and SDG 17 (Partnerships for the Goals).

### **Progress in 2024**

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

### Implementing the Ecological Transformation Plan

PAGE provides support for the delivery of the Ecological Transformation Plan (ETP) of the Brazilian Federal Government working with the Ministry of Finance. Providing analytical and technical expertise, PAGE helps the government to assess the ETP's contribution to achieving national sustainability goals and international commitments, particularly in relation to job creation, GDP growth, poverty alleviation, and climate resilience.

To do this, PAGE launched, together with the Ministry of Finance and the Federal University of Rio de Janeiro, a comprehensive macroeconomic modelling exercise that analysis the potential economic, environmental and social impacts of the ETP from 2020 to 2050, using a dynamic input-output framework. The analysis covers key sectors of the Brazilian economy, including agriculture, energy, and transport, and spans across the plan's six thematic axes: bioeconomy and agri-food systems, technological densification, green infrastructure and adaptation, energy transition, circular economy, and sustainable finance. The final results will be presented at a dedicated seminar in 2025, offering a platform for high-level discussions on the next steps related to the plans' implementation.

In addition, an expansion of the initial PAGE sectoral and impact analysis modelling is planned to assess the economic, social and environmental impacts of changes in the agriculture, energy and transport sectors; refine some of the model's underlying assumptions; update estimates and sources on inequality and emissions; and integrate data for circular economy analysis. PAGE will also further strengthen the Ministry of Finance's modelling capacity by developing a customized macroeconomic modelling tool, which integrates climate and environmental dimensions and ETP policies into the ministry's official economic projections; quantifies the social, environmental and employment impacts of ETP and NDC's policies; and assesses the socio-economic and environmental impacts of a circular economy. PAGE will complement this model development and customization by strengthening the capacity of government modelers through training to implement PAGE's Integrated Green Economy Modelling methodology.

Furthermore, during Brazil's G20 presidency in 2024, PAGE (UNEP) supported the G20 Environmental and Climate Sustainability Working Group. PAGE, along with a technical team within the organization, helped revise the G20 paper titled *Advancing a Global Agenda Towards an Inclusive Circular Economy*. The report fed into the global discussion held at G20 on the transition to circular economies. The PAGE (UNEP) technical representative contributed expertise to the review process, ensuring the paper addressed both, Brazil's priorities and broader international views on sustainable economic transition.

Countries where PAGE still implemented programmed activities under a country workplan up to the end of 2024 - the final year of implementation.

## **Argentina**

#### **Country context and PAGE portfolio**

Argentina is the third largest economy in Latin America and an upper-middle-income country with a well-diversified economy. The specific dynamics of the Argentinian economy over the last decade, with altering periods of accelerated growth and recession, exchange rate fluctuations and high inflation have led to the deterioration of productive factors and decrease of investments in technological change and productivity. During this period, Argentina showed strong commitment to sustainability in the context of international processes and expressed interest to pursue economic, social and environmental objectives in an integrated manner.

Argentina joined PAGE in 2018, with the government recognizing the potential for inclusive green economy to provide a means for achieving the 2030 Agenda for Sustainable Development. At the time, PAGE support was tailored to help Argentina advance an inclusive green economy 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 and sustainable financial instruments.

In 2020, Argentina's economic situation was further challenged by the impacts of the COVID-19 pandemic coinciding with a complete government reshuffle. When the government set out plans for the country's economic recovery, PAGE provided additional support to link recovery to the SDGs and climate change targets with the aim of providing new growth opportunities through a sustainable approach. Despite the crisis, the government maintained its commitment to a green economy agenda and began developing industrial, labour, financial, and communication policy instruments, successfully bringing these issues to the forefront of the national and federal agenda.

Aligning strategies across all levels of government and with key societal actors, PAGE support in Argentina contributed to a range of results linked to national policies promoting green jobs, and sectoral strategies for industrial and workforce transformation with emphasis on just transition, sustainable energy transition, skills development, and financial tools. Key achievement include:

- The adoption of the *Argentina 2030 Productive Plan*, in conjunction with labour adaptation plans in key sectors: construction, tourism and automobiles.
- To deliver on the above plan, the creation of a Sustainable Industrial Development Platform to support SMEs advance sustainable industrial development, along with an information system for circular economy under the National Registry on Waste-Streams for Recycling-Market-Actors.

- The nation-wide roll out of the National Green Jobs Programme, supported by a green jobs indicator system and a new award system for innovative solutions for labour formalisation and just transition.
- An employment impact analysis of green hydrogen investments, which informed Argentina's National Hydrogen Strategy and helped align it with labour market and workforce transition goals.

PAGE's work supported 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).

The phasing out of PAGE support in 2024 coincided with the period when the new government took office after the presidential elections in 2023 and rolled out its new strategy, including fundamental shift in its economic policies and a critical position towards the Agenda 2030 for Sustainable Development and the green economic transition. PAGE has already been in the process of developing a sustainability strategy to sustain the achievements thus far in the country's green economic transition when it had to adjust to the change in direction led by the highest level of government.

To structure its phase out in this new political context, PAGE benefitted from its wide institutional reach and multi-stakeholder approach that anchored green transition with different social partners, as well as at the sub-national level.

PAGE's sustainability strategy has been maintained in its general outline, focusing on key national priorities, such as green jobs and just transition, renewable energy transition, circular economy and sustainable industrial development and green business, and green finance. The strategy emphasizes building institutional and territorial capacities, fostering multi-stakeholder participation through social dialogue, and enabling future continuity through instruments for financing, knowledge exchange, and federal-level implementation of green economy policies.

#### **Progress in 2024**

In its last year, as PAGE phased out its support and put in place its sustainability strategy in a new political context, national partners completed the below activities of the green recovery programme.

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

### **Celebrating 5 Years of Partnership with PAGE**

Hosted by the UN Resident Coordinator, PAGE celebrated five years of partnership during a workshop in November 2024 in Buenos Aires. The event brought together representatives from UN agencies, multilateral development banks, bilateral cooperation agencies, the private sector, and civil society organizations. Participants reflected on the results achieved and explored opportunities for future strategic collaboration to deepen Argentina's transition to an inclusive green economy.

During the event, participants highlighted PAGE's multi-agency approach, which enabled the successful design and implementation of national and sectoral policies promoting green jobs, industrial and labour transformation, skills development, and innovative financial instruments. The initiative was recognized for its strong institutional integration, policy impact, and ability to align efforts across government levels and stakeholders.

Looking ahead, beyond PAGE, participants reflected how the green economic transition could be sustained by aligning with emerging national priorities, including energy transition, bioeconomy, industrial digitalization, and regional integration processes such as Argentina's pathway toward OECD membership. Participants emphasized the importance of strengthening sub-national implementation and the development of financial instruments adapted to provincial and private sector investment. As opportunities for future work, participants identified circular economy, resource and energy efficiency, quality and environmental, social and governance standards for value chains, critical minerals, and inclusive labour market policies that advance skills for the green transition (particularly among youth, women, and migrants), and the need to integrate sustainability into infrastructure, logistics, and digital innovation strategies.

At the end of the event, participants committed to building on PAGE's foundations by strengthening collaboration across the UN system, development banks, provinces, municipalities, and the private sector to maintain momentum for inclusive green economy agenda in Argentina.

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

#### **Development of Financial Instruments**

PAGE (UNDP) finalized a report *Sustainable Finance in Argentina: Development of Financial Instruments for Takeoff* that analyses the current state of sustainable finance in Argentina, identifying key challenges and opportunities. It provides recommendations on institutional frameworks and financing mechanisms to support the development of sustainable financial instruments. In addition, in collaboration with Techo-Argentina, a sustainable finance manual was developed that establishes definitions and standardized classification criteria to ensure consistency in the application and interpretation of sustainable finance concepts.

#### Building institutional and individual capacity (Outcome 3):

#### **Private Sector Capacity Development on Sustainable Production Argentina**

Argentinian companies interested to increase their competitiveness along the value chain had the opportunity to participate in an online course on sustainable production offered by the Industrial Union of Argentina (UIA) in collaboration with PAGE as part of the RUTA x Verde training programme between April and June 2024. The course incorporated the content of sustainability manuals and guidelines for small and medium sized companies (SMEs) in the food and textile sectors, completed with PAGE support in early 2024, and provided practical guidance to facilitate standards on compliance reporting. To increase the application of circular approaches, UIA and PAGE are also preparing a management manual of circular economy practices for SMEs to green industrial production processes.

#### **Enabling Media Professionals to Cover the Green Transition**

Between July and August 2024, in collaboration with the Argentinian Network of Municipalities to fight Climate Change, PAGE (UNITAR) delivered an online training to build capacities linked to covering and communicating sustainability related topics in different media formats. The training is designed for media professionals in print, TV and radio, such as editors, journalists and managers, as well as less conventional practitioners like influencers and online content creators.

The training aims to strengthen the media sector as enabler for the green transition and behavioural change by building an informed citizenry and constructive, fact-based public debates. This is important in a time when narratives related to green transition and the Agenda 2030 are questioned from high-profile public and private actors. The participants of the pilot edition learned about editorial strategies to promote sustainability in a changing media landscape, and how to build new alliances between different organizations and formats to increase impact. The methodology included weekly webinars with presentations and Q&As by national experts, and final homework to reflect on the learnings.

#### **Promoting Sustainable Production Practices and Sustainability Reporting in Argentina**

To foster long-term environmental and economic benefits for the private sector while promoting more sustainable business practices nationwide, 500 representatives from SMEs were trained and equipped with practical tools to adopt sustainable production practices, comply with environmental regulations, and enhance their competitiveness. The initiative also guided SMEs in preparing sustainability reports, including defining the scope, identifying the target audience, prioritizing productive sectors, as well as developing evaluation methodologies covering requirements, documentation and indicators. The training was conducted by PAGE (UNEP) together with the Ministry of Environment and the Ministry of Labour.

#### Supporting Alignment of environmental policies with OECD standards

Given Argentina's federal system, environmental laws vary across jurisdictions but have some level of harmonization through Minimum Standards Laws (established by the 1994 Constitutional Reform). These laws aim to unify environmental regulations at the national level, but, so far, their implementation has been inconsistent across provinces.

To address these discrepancies, the Undersecretariat of Environment requested technical assistance from PAGE (UNDP) to help align Argentina's environmental policies with OECD standards with a focus on identifying regulatory gaps, supporting policy development, ensuring compliance and local enforcement capacities.

PAGE provided support for three thematic pillars:

- Waste and Chemical Management waste policies, hazardous substances, extended producer responsibility, worker safety, and noise reduction.
- Climate Change & Public Participation public access to environmental information, energy transition, biofuels, carbon markets, and mining regulations.
- Natural Resource Protection & Environmental Impact water and air quality, land use planning, protected areas, fire management, and environmental impact assessments.

### 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 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 launched the *Low Carbon Development Initiative (LCDI)* to incorporate greenhouse gas emission reduction targets into policy planning, along with other interventions for preserving and restoring natural resources, and this context requested PAGE support.

After inception in 2018, PAGE supported the further planning and implementation of the LCDI with a focus on energy, waste management, circular economy and green industry sectors, including food and beverages and iron and steel, in line with the national priority programme outlined in the former *National Medium-Term Development Plan (RPJMN) 2020-2024*. The support focused at both the national and sub-national level, included assessment work and contribution to LCDI modelling and database updates. The institutional strengthening of the LCDI Secretariat serves as the ministry's think-tank and coordinating mechanism to integrate inclusive green economy in the development planning process.

Since PAGE initial phase, there were several significant developments in Indonesia's policy framework which provide additional the policy entry points for PAGE's recent support:

- From 2020, to recover from the impacts of the COVID-19, the government put stronger focus on circular economy, and PAGE started to support the development of a *Circular Economy Roadmap and Action Plan* as part of its support for a green economy recovery.
- The Ministry of National Development Planning launched in 2022 its economic transformation agenda with six grand strategies including green economy, low carbon and circular economy, blue economy and energy transition accompanied by a *Green Economy Index* to measure the country's progress in green economic transition.
- The green economy pillar of the economic transformation agenda focuses on i) accelerating new and renewable energy; ii) development of smart grid and energy storage systems; iii) implementation of circular economy; iv) strengthening fiscal and non-fiscal incentive and disincentive system for advancing green products; v) development of green financing and implementation of carbon pricing; and vi) implementation of green economy principles in all sectors.

The Ministry of National Development Planning emphasized green economy for the development of its *National Medium-Term Development Plan 2025-2029*, as well as the national long-term development plan 2025-2045, for achieving Indonesia *Vision 2045* and net zero emissions by 2060. Green economy and circular economy were integrated into the draft of the *National Long-Term Development Plan (RPJPN 2025-2045)* which sets Indonesia's ambition to transform from a middle-income towards a high-income economy through stable economic growth accompanied by inclusivity and sustainability. The RPJPN 2025-2045 will serve as the national guidance towards Indonesia Emas (Golden Indonesia) until 2045 and will be translated into the national medium-term development plan every five years.

PAGE's work in 2024 reinforces these national policy developments through technical support to build stronger institutions and policy coherence and strategic sectoral analysis, including its recent assessments related to electric vehicles.

In Indonesia, PAGE contributes to 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).

#### **Progress in 2024**

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

#### Celebrating achievements from 7 Years of Partnership with PAGE

Led by the Ministry of National Development Planning (BAPPENAS), national partners celebrated the achievements of PAGE Indonesia in a national dialogue in December 2024 in Jakarta, under the theme Accelerating Green Economic Transformation. The dialogue sought to align key stakeholders across various sectors to expedite green initiatives, including energy transition policies and fiscal innovations for sustainable development. The Deputy Minister of National Planning, Febrian Alphyanto Ruddyard, and the Chair of the PAGE Management Board Steven Stone, were among the keynote speakers. This event also initiated a new collaboration between the Government of Indonesia and PAGE to support the implementation of Indonesia's *Circular Economy Roadmap and Action Plan*. The dialogue was attended by over 300 participants in person, and over fifty participants online.

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

#### **Launch of the National Circular Economy Roadmap and Action Plan**

The Ministry of National Development Planning launched a *Circular Economy Roadmap and Action Plan* at the national Green Economy Expo in Jakarta in July 2024.

This policy document provides a strategic framework to transition Indonesia's economy from a linear to a circular model by 2045, aligning with national development goals under Indonesia's *Vision 2045* and the net zero emission target by 2060. PAGE's technical contributions, including evidence-based analysis, stakeholder consultation support and alignment with global best practices, have helped inform the design of the roadmap and ensure its coherence with the broader *Low Carbon Development Initiative* and the upcoming RPJPN 2025–2045.

The launch of the roadmap also complements the introduction of the *Green Economy Index* and represents a critical policy instrument to operationalize the green economy pillar under the national economic transformation agenda.

Technically grounded in the "9R" principle - Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose and Recycle - the roadmap outlines comprehensive policy directions and implementation mechanisms to reduce resource dependency and environmental impacts while stimulating innovation and green jobs. It focuses on five priority sectors with high economic and environmental significance: food and beverage, textiles, construction, plastics, and electronics. These sectors were selected based on their material intensity, economic contribution, and potential for circular innovation. The roadmap and action plan includes a set of regulatory, institutional, and financial measures, along with monitoring and evaluation indicators that are designed to drive systemic change and support the decoupling of economic growth from environmental degradation.

### Assessment of Circular Approaches for Indonesia's Iron and Steel Industry

Opportunities to enhance resource efficiency and reduce waste in Indonesia's iron and steel sector through cleaner technologies and circular economy principles were identified by the *Resource Efficiency and Cleaner Production Assessment* conducted by PAGE (UNIDO) to respond to a request from the Ministry of National Development Planning.

The assessment included case studies of two selected companies and found that the application of resource efficiency techniques in the iron and steel industry can improve competitiveness, reduce the sector's environmental footprint, and help the government meet climate targets. To realize these benefits, the assessment recommended the implementation of air pollution control technologies, optimization of energy use in furnaces, and enhancement of water treatment processes.

#### Actions to Mitigate Food Loss and Waste in Indonesia's Provinces

Indonesia developed a *Food Loss and Waste Regional Action Plan* for the Island of Bali that suggests establishing a regulatory framework for food loss and waste (FLW) reduction, through measures such as food labelling, including targets, timelines, involvement of key stakeholders and awareness raising activities.

The action plan aligns the reduction of FLW with broader sustainability initiatives focused on wasteto-resource and circular economy under the leadership of the Ministry of National Development Planning that PAGE supports.

At the same time, in the Province of West Java, the 'Ngupahan' app was launched, which provides a tool for households and local communities to reduce food waste. PAGE (UNDP) developed the mobile application in close collaboration with the Regional Food Agency and the Environment and Forestry Agency. The app features an education corner, a food sharing platform, a compost bank, and a direct sales market. These features enable users to educate themselves about food waste, share surplus food, manage waste profitably, and buy or sell food at consumer-friendly prices.

An introduction event took place on 30 July 2024 in Gunung Putri Village and was attended by over 30 local stakeholders, including community members and local authorities. The initiative addresses the immediate food waste challenges in West Java and presents a model for sustainable food management practices that could be replicated in other provinces.

#### **Assessing Electric Vehicle's Impact on the Economy and Environment**

PAGE is supporting the Ministry of National Development Planning (BAPPENAS) to assess the impact of electric vehicles (EV) on the overall green economy progress in Indonesia which is tracked by *Indonesia's Green Economy Index*. With this work, PAGE aligns with the priority areas of Indonesia's economic transformation agenda.

A consolidated policy paper was finalized in October 2024, titled *Assessing the Impact and Opportunities of Electric Vehicles in Advancing Indonesia's Green Economy Index.* It synthesizes key findings and policy recommendations from three studies conducted by PAGE in 2024, detailed below. The paper provides a strategic reference to guide policymaking on sustainable mobility, ensuring that EV development contributes to both Indonesia's *National Medium-Term Development Plan 2025–2029* and the *National Long-Term Development Plan 2025-2045*.

- 1. The study *Impact of Electric Vehicle Adoption and Development on Indonesia's Green Economy Progress* was developed by PAGE (UNEP) in collaboration with CORE Indonesia (an independent economic research institute). The study assessed the impacts of both EV adoption (use in transportation) and EV industry development (such as manufacturing and infrastructure) on various green economy indicators under three scenarios to understand how different levels of EV adoption and industrial development would influence Indonesia's *Green Economy Index (GEI)* and broader socio-economic and environmental outcomes. The scenarios were:
  - Business-As-Usual (BAU): continuation of current trends with limited policy changes and slow adoption of EVs.
  - Moderate Transition Scenario: moderate policy support and incentives lead to a midlevel adoption of EVs and growth in domestic production capacities.
  - Accelerated EV Development Scenario: strong policy push, infrastructure development, and industry investment lead to high levels of EV adoption and significant growth in local EV and battery industries.

The assessment found that the Accelerated EV Development Scenario demonstrated the highest improvement in the GEI, indicating that a comprehensive approach to both EV adoption and industry development can strongly advance the country's green economic transformation. Economically, the scenario contributes to GDP expansion and job creation, particularly in the manufacturing, energy, and services sectors. From an environmental perspective, increased EV adoption leads to notable reductions in greenhouse gas emissions, especially when paired with a cleaner national energy mix. The study also highlighted the importance of securing critical raw materials and improving energy infrastructure to meet the rising electricity demand. Overall, the findings underscore the need for a comprehensive policy package, including fiscal incentives, investment in green infrastructure, workforce development, and sustainability standards, to maximize the benefits of EV development while ensuring economic inclusivity and environmental integrity.

2. PAGE (UNIDO), in collaboration with Life Cycle Indonesia (an environmental consulting company, specialized in life cycle assessment and strategies) BAPPENAS, Ministry of Energy and Mineral Resources (Directorate of Electricity) and CORE Indonesia, conducted the study Impact Assessment of Electric Vehicle Adoption in the Industry: Exploring Technological

Advancements, Research Needs, and Policy Recommendations for Advancing the Electric Vehicle Value Chain. The assessment provides a comprehensive analysis of the impact of EV adoption on Indonesia's industrial sectors, covering the manufacturing supply chain, labour and social impacts, environmental life cycle assessment, technological advancements, and circular economy opportunities for end-of-life battery management. It also identifies critical research, and development needs and includes policy recommendations for scaling up the EV industry in line with Indonesia's low-carbon transition objectives. This study specifically supports BAPPENAS' efforts in integrating sustainable mobility and green industrial transformation into the country's Green Economy Framework and complements related studies conducted by PAGE. The findings will be used to inform national strategies on green economy, EV policy and investment planning, particularly in line with the RPJPN 2025-2045.

3. PAGE (ILO), in collaboration with BAPPENAS (Directorate of Environmental Affairs and the Low Carbon Development Initiative), conducted the Assessment on Jobs and Skill Needs in the Electric Vehicle Value Chain. The assessment provides insights into the employment implications of Indonesia's emerging electric vehicle industry, and detailed analysis of current and future human resource requirements, presenting practical recommendations for addressing qualification needs. The key findings highlight that the transition to electric vehicles will generate new employment opportunities with relatively limited disruption to the existing automotive sector, due to the gradual adoption of EV technology. The assessment also emphasizes the need for targeted skilling and reskilling programmes to support workers in adapting to changes within the value chain. Additionally, the study offers practical recommendations for policymakers to address current and future human resource requirements, ensuring alignment with Indonesia's low-carbon development goals. These findings serve as important guidance for stakeholders engaged in shaping policies related to industry, workforce development, and education.

Building institutional and individual capacity (Outcome 3):

## **Training on Environmental Planning and Development**

Building on the results of the *Green Economy Learning Assessment (GELA)*, PAGE (UNITAR) developed a syllabus, reference module and training materials for the two-week training programme Environmental Planning and Development, which will be run by the Centre for Planner Coaching, Education and Training of the Ministry of National Development Planning (BAPPENAS). On 13-14 June 2024, PAGE conducted a two-day focus group discussion to review the content and delivery method and ensure the alignment of the training package with the government's *Low Carbon Development Initiative (LDCI)*. 32 experts and stakeholder representatives attended the discussion, including representatives from BAPPENAS, and the LCDI Secretariat, as well as academia and UN agencies. Based on the recommendations from the focus group discussion, the learning materials and training curriculum have been updated to include the indicators of the *National Long-Term Development Plan 2025-2045* and add themes relating to circular economy and biodiversity. Prior to launching these materials, the reference module and training curriculum developed based on the GELA will be tested, which will involve stakeholders from selected provinces.

Improving Access and Application of Knowledge for Advancing IGE (Outcome 4):

## **Circular Economy Education for Youth to Empower the Next Generation**

Circular concepts need to find their way into educational initiatives and grassroots actions, so the message of the national workshop *Mainstreaming Circular Economy for Transformative and Sustainable Ch*ange in May 2024, facilitated by PAGE and the Gadjah Mada University in Yogyakarta. The workshop highlighted the urgency to prepare future generations for the transition towards a circular economy. Representatives from the government, academia and the private sector emphasized the need to collaborate to effectively integrate circular economy concepts into educational systems and related policies.

### A New Phase – Targeted Support under PAGE updated Strategy

#### 2025-2026

PAGE has supported the development of Indonesia's *National Circular Economy Roadmap and Action Plan* launched in 2024. This national strategy is linked to other national policies and objectives, such as the *National Medium-Term Development Plan 2025-2029*, the national legal framework for the *National Long-Term Development Plan*, and targets for greenhouse gas emission reductions set forth in the country's Nationally Determined Contributions (NDCs). Within this policy context, BAPPENAS requested targeted support under PAGE's updated Strategy for operationalizing the roadmap and action plan with alignment to the NDCs by strengthening circular economy policy and implementation mechanisms, and by establishing a financing and investment strategy. The proposal was accepted by PAGE with policy support to start in 2025.

### 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 its independence, making it one of the biggest emitters of CO2 in the world per capita. Over 40 per cent of the population resides in rural areas, and the country is an important supplier of grains and oilseeds, with 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. Because there is no integrated waste management system, 86 per cent of solid municipal waste ends 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 conditions creates social tensions that threaten progress towards a fairer, greener and more prosperous economy.

The government has taken progressive steps to promote sustainable development with ambitious targets set out in the *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. Kazakhstan seeks to foster economic diversification and inclusive growth through green economy promotion.

Against this backdrop, Kazakhstan joined PAGE in 2018 with the objective to support the implementation of its *National Development Strategy Kazakhstan 2050*. A strategic planning reform initiated in the beginning of 2021 under the supervision of the new *State Agency for Planning and Reform*, provided additional opportunities for PAGE to raise the green economy ambition of the country.

PAGE work has been built around the following entry points and avenues for progress: the *Concept for the Transition of the Republic of Kazakhstan to a Green Economy*, the revised *Environmental Code*, the updated *Strategic Plan for Development of the Republic of Kazakhstan until 2025*, and the 5-year cross-sectoral national project *Zhasyl Kazakhstan (Green Kazakhstan)*.

Across these different overarching polices 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, the use of strategic environmental assessments, the promotion of green businesses and energy efficiency in regions, as well as institutional capacity-building.

A new milestone in the country's green transition was reached with the adoption of the *Strategy on Achieving Carbon Neutrality by 2060* in 2023, which outlines a comprehensive plan to reduce carbon emissions, promote low-carbon development, and encourage the adoption of renewable energy sources. Achieving carbon neutrality will require a deep transformation of the energy system currently largely depending on coal.

In 2024, there were a few important new developments that are immediately relevant to PAGE support:

- The President issued a decree updating the *Concept for the Transition of the Republic of Kazakhstan to a Green Economy;*
- The President signed a new *Law on Sustainable Public Procurement* to promote sustainable goods and services;
- The government started enforcing a revised Water Code; and
- The government approved the National Infrastructure Plan until 2029, prioritizing energy, transport, water supply and digitalization and including environmental responsibility among project selection criteria.

PAGE work in Kazakhstan has contributed to the following SDGs: SDG 3 (Good Health and Well-Being), SDG 13 (Climate Action), SDG 7 (Affordable and Clean Energy), 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).

#### **Progress in 2024**

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

### **Celebrating 5 Years of Partnership with PAGE**

The Government of Kazakhstan celebrated its achievements under PAGE with a transition ceremony involving representatives of key ministries, state bodies, international organizations and business on the occasion of the 4<sup>th</sup> International Congress organized by the Kazakh Association of Regional Environmental Initiatives in October 2024 in Astana. The event underscored how integrated efforts by development and national partners to promote inclusive green economy in Kazakhstan have taken deep roots in the country and have laid the foundation for a sustainable, low-carbon and inclusive green economic future. PAGE has played a pivotal role in the update of the country's guiding *Concept for the Transition to a Green Economy*, the development the *Carbon Neutrality Strategy and Action Plan*, the revision of the *Environmental Code* and *the Water Code*, as well as a new *Law on Sustainable Public Procurement*. Furthermore, PAGE supported national partners with analytical work focusing on carbon tariffs, fiscal reform, industrial decarbonization, environmental quality, and the socioeconomic implications of coal phase-out.

The PAGE sustainability strategy and action plan, developed in 2024, summarizes achievements, remaining challenges and ways forward for ensuring the implementation of green economy policies in Kazakhstan beyond PAGE support. This was presented at the transition event. To complement the sustainability strategy, briefing papers highlighting progress and remaining challenges, such as the need for enhanced policy coherence, stronger institutional capacities and greater public awareness, were developed.

#### **Adoption of the Updated Green Economy Concept and Action Plan**

PAGE (UNDP) supported the Government of Kazakhstan to update the national *Green Economy Concept*, which was adopted in June 2024. The revised document aligns national policies, regulations and commitments with SDGs targets and indicators, as well as other international agreements, such as the Paris Climate Agreement.

The concept reinforces the plans of the government, as reiterated by the national Green Economy Council, to achieve carbon neutrality by 2060. In November, the government approved the *Action Plan for the Implementation of the Concept of Transition to a Green Economy for 2024–2030.* The plan, also supported by PAGE, outlines the strategic roadmap for advancing Kazakhstan's transition to a green economy, aligning with the country's commitments to sustainable development and global climate goals. It establishes a framework for 15 key objectives such as decarbonization, increased energy efficiency, and sustainable resource management, while ensuring economic resilience and social inclusivity.

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

#### **Adoption of the Law on Sustainable Public Procurement**

In July 2024, the President of Kazakhstan signed a new *Law on Sustainable Public Procurement*, which came into effect on 1 January 2025. In collaboration with the Kazakhstan Association of Regional Environmental Initiatives, PAGE completed a market's readiness assessment for sustainable public procurement (SPP), which provided the basis for the new law. It establishes a fundamentally new system for SPP, designed to not only improve the quality of products procured, but also to support the growth of the market for sustainable goods and services, and to bring the country's SPP policy in line with international standards.

#### **Revision of the Water Code**

Kazakhstan's *Water Code* focuses primarily on the economic use of water resources, with limited emphasis on conservation, sustainability or ecosystem preservation. In response to these shortcomings, the newly established Ministry of Water Resources and Irrigation sought PAGE's expertise to support amendments to the legislation. PAGE participated in parliamentary working group meetings, advocating for key updates to address flood protection, watershed management, public participation in water governance, conservation, climate adaptation, and enforcement of related legislation. PAGE presented these suggestions to representatives from all relevant line ministries (Ministries of National Economy, Finance, Ecology and Natural Resources, Agriculture, Water Resources, Energy, and others), NGOs and other stakeholders, emphasizing the importance of strengthening oversight and the role of sustainable water resource management frameworks. The revised *Water Code* is expected to be adopted in early 2025.

#### **Strategic Environmental Assessment for Semey City Masterplan**

Since the latest amendments to the *Environmental Code*, strategic environmental assessments (SEA) have become obligatory from 2024 in Kazakhstan for application at the drafting stage of national and local strategic documents. PAGE (UNDP) supported the development of the SEA for the Astana City Masterplan, which was approved by the Ministry of Ecology and Natural Resources in 2023, marking a significant step forward in implementing SEA methodologies in urban planning. Building on this, PAGE provided support to the ministry for the SEA of the Semey City Masterplan in 2024 to test the methodology, checklist, and instructions.

During this process, discrepancies were identified between the *Environmental Code* and existing SEA instructions, prompting necessary corrections to ensure methodological coherence and legislative alignment.

On 29 August 2024, a virtual presentation and training session on the *Methodology for Conducting Strategic Environmental Assessments* was held for representatives from government agencies and experts. The session introduced SEA fundamentals, highlighted legislative requirements, and shared practical recommendations from the draft methodology. Participants gained insights into organizing SEA procedures, including cost estimation, stakeholder engagement, and procedural timelines.

#### **Advancing Environmental Quality Standards**

Kazakhstan is advancing its environmental regulatory framework with the development of recommendations for environmental quality standards (EQS), which define permissible levels of anthropogenic impact on the environment. The recommendations, developed by PAGE (UNDP), identify critical substances, physical factors and biological indicators requiring regulatory oversight, thereby enhancing the country's capacity to protect natural resources and reduce negative impacts of economic activity on the environment and human health. The EQS are a novel component of the revised *Environmental Code*, supported by PAGE earlier, and reflect Kazakhstan's commitment to sustainable development and environmental protection. By setting clear and enforceable standards, the EQS contributes to the country's broader goals outlined in the *Green Economy Concept* and the *Strategy on Achieving Carbon Neutrality by 2060*.

#### **Support for Kazakhstan's Common Country Analysis**

In close collaboration with the UN Resident Coordination Office, PAGE (UNITAR) supported the development of the environmental chapter for the 2024 Common Country Analysis (CCA) for Kazakhstan, which will serve as a foundation for the development of the new UN Sustainable Development Cooperation Framework in the country. The CCA provides a comprehensive analysis of the country's development landscape, identifying key challenges, opportunities, and strategic priorities. By contributing to this process, PAGE ensures that green economy principles and low-carbon development strategies are integral to the framework that will guide the UN's engagement over the coming years.

#### Building institutional and individual capacity (Outcome 3):

#### Training Programme for Civil Servants on Green Economy

Building on the *Building Back Better* training that was conducted in previous years and the *Green Economy Learning Needs Assessment* from 2022, PAGE (UNIDO and UNITAR) expanded its collaboration with the Academy of Public Administration (APA) by designing a training programme on inclusive green economy for civil servants. Between July and October 2024, PAGE and APA conducted six two-day training sessions in the city of Pavlodar, equipping 206 civil servants from local administrations with knowledge and practical tools to plan and implement green and circular economic solutions in their respective sectors. The initiative develops capacities of local administrations (called 'akhimats') to integrate national, strategic policies and targets into regional and local frameworks and actions for enabling green economic transformation. The aim is to bridge the gap between strategic planning and local implementation, which has been a persistent challenge in Kazakhstan, due to the large territory of the country, regional differences, and relative independence of regional administrations. The training will remain to be offered by APA and can be delivered upon demand to local and regional departments.

## Improving Access and Application of Knowledge for Advancing IGE (Outcome 4):

#### **Green Economy Series on National Television**

A television series to promote inclusive green economy principles, developed by PAGE (UNDP) in collaboration with Atameken Business Channel, was aired between October and December 2024. It showcased expert discussions on green industrial development, green finance, strategies and challenges in achieving the country's 2060 carbon neutrality goal, analysis of economic and regional impacts of climate change and adaptation strategies, as well as the role of education and media in fostering environmental awareness. The television series enhanced public understanding and engagement with sustainable development practices, which is crucial for the successful implementation of green economy policies, such as the country's *Green Economy Concept* and the *Strategy on Achieving Carbon Neutrality by 2060*.

## A New Phase – Targeted Support under PAGE updated Strategy

2025-2026

The government of Kazakhstan, through the Ministry of Ecology and Natural Resources and the Ministry of Water Resources and Irrigation, requested PAGE's support for the development of the financial architecture for blue finance for critical investments in the water sector, including the issuance of blue bonds. Components of PAGE's support will include the establishment of a blue finance taxonomy which references just transition principles and building the capacity of government and finance professionals for developing and implementing the blue finance architecture.

## **Barbados**

#### **History and Achievements**

2016-2024

PAGE supported Barbados in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2016 and 2024.

Barbados ranks among the highest in the Caribbean Small Island Developing States (SIDS) region according to the 2023-2024 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, and social and economic policies for the betterment of its citizens. However, the negative effects of global financial and economic crises, in addition to 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 SIDS, 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*, and the *National Strategic Plan (NSP) 2006-2025*. 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 to strengthen the physical infrastructure and preserving the environment'.

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, but the commencement of a comprehensive PAGE programme was delayed by several factors beyond the control of the partnership. The endorsement for PAGE to start its programme was provided in 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 inclusive green economy at the tertiary levels.

In 2020, impacts from the COVID-19 pandemic on the tourism sector in Barbados let to a sharp increase in unemployment rates. Against this background, the government announced a relief programme and stimulus package, focusing on key areas, such as tourism, agriculture, infrastructure, manufacturing, and support to micro, small and medium-sized enterprises.

In line with this, PAGE provided targeted green recovery support from 2021 focused on waste management, resource efficiency, circular economy and sustainable consumption and production practices in support of a green economic recovery. From 2022, under a new government, PAGE reemphasized support to the country's blue-green economy through partnerships with national institutions, regional knowledge transfer and capacity building activities.

Since 2023, PAGE's work has been aligned to the 2023 amendment to the *Physical Development Plan*, which emphasizes sustainable and resilient growth by addressing land use, climate change adaptation, and the transition to a green economy. PAGE portfolio including work on green and blue jobs, sustainable consumption and production, and environmental resilience, was seen as a practical mechanism to implement the plan's vision.

PAGE's key achievements in Barbados include building the country's capacities for trade in environmental goods and services and designing programmes to support the labour force in transitioning to green jobs. PAGE has partnered with the University of the West Indies (UWI) Cave Hill Campus and the Government of Barbados to implement the *Green-Blue Economy Learning Programme*, aimed at strengthening individual and institutional capacities in Barbados and other SIDS countries. A feasibility study was conducted for the establishment of a SIDS-SIDS Green Economy Knowledge Hub, followed by a *Green and Blue Learning Needs Assessment* and the development of a business plan to mobilize funding for the Hub's implementation. Additionally, PAGE contributed to the development of the Joint Programme proposal *Harnessing Blue Economy Finance for SIDS Recovery and Sustainable Development*, designed to unlock financing for sustainable blue economy initiatives. PAGE's work has also influenced government policy statements reaffirming Barbados' commitment to a green economy and provided training for government officials on green jobs and business growth, enhancing national capacity for green economic transition.

PAGE activities in Barbados have contributed 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).

While PAGE is completing its activities, in 2024, Barbados has made significant strides in advancing its green economy, closely linked to the foundational work of PAGE. Key developments include the announcement of a Renewable Energy Skills Council, which is set to drive the implementation of recommendations for a just transition in the renewable energy sector, addressing technical and institutional capacity gaps, promoting decent work, and fostering social justice. Another positive development is the Bridgetown Initiative, reinforcing the country's leadership in climate finance. The Bridgetown Initiative, spearheaded by the Prime Minister, has become a catalyst for reforming the international financial architecture to better serve climate-vulnerable countries. In 2024, the Initiative entered its third phase, "Bridgetown 3.0," which focuses on unlocking more finance for adaptation, introducing debt pause clauses for countries hit by natural disasters, and pushing for fairer, more inclusive global financial systems. These developments underscore Barbados' role in driving forward innovative solutions for climate adaptation and green economy, both nationally and internationally and have reinforced Barbados' position as a regional leader in green economic transformation.

#### **Progress in 2024**

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

### **Analysing Environmental Goods and Services**

In collaboration with the Ministry of Environment and National Beautification, Green and Blue Economy of Barbados and the University of the West Indies, PAGE (UNEP) conducted a comprehensive trade and policy assessment of the Environmental Goods and Services (EGS) sector in Barbados. The assessment analysed the import and export dynamics of EGS in Barbados, identifying opportunities to drive sustainable growth, reduce environmental impacts, and contribute to the country's green and blue economy goals. Informed by both national and international trade patterns, the assessment pinpoints key sectors for development and provides actionable recommendations through policy briefs and detailed reports. Recommendations include introducing incentives for local EGS production, expanding trade partnerships to improve market access, and reducing tariff and non-tariff barriers for environmental goods. Specific proposals focused on improving waste management infrastructure, enhancing renewable energy capacity, and encouraging the adoption of eco-friendly technologies through targeted fiscal incentives. In parallel, PAGE facilitated a strategic framework to guide policy and investment decisions. This framework outlines steps to integrate EGS into national development plans, increase public and private sector collaboration, and improve the competitiveness of Barbados' EGS exports. The project's findings were presented to local partners and the cabinet in June 2024, ensuring that the recommendations are aligned with Barbados' sustainability priorities and trade objectives.

## Building institutional and individual capacity (Outcome 3):

#### **Training Course on Waste Safety and Management**

In collaboration with the Ministry of Environment and National Beautification, Blue and Green Economy of Barbados, PAGE (UNIDO) developed a training course on waste management for environmental technicians working in the municipal waste sector that could also cater to those in the private sector. The Barbados Community College, a tertiary level teaching institution, has been designated to deliver the training. The Sanitation Service Authority is the leading state entity responsible for solid waste management in the country and is the target audience. The Environmental Technicians' Certificate Course for Waste Safety and Management has the following objectives and learning outcomes: i) discuss the scope of waste management policies, legislation and regulations; ii) incorporate the principles of waste safety and sustainability into effective waste management practices; iii) understand the interdisciplinary and multidisciplinary nature of environmental challenges related to their job roles; iv) explain the concept of the waste hierarchy, emphasizing methods to avoid, reduce, reuse and/or recycle waste; v) identify various solutions for managing waste, including strategies for reducing domestic waste through awareness campaigns; and vi) carry out practical waste management activities according to specified situations and timelines. The draft course (syllabus) and learning materials were shared with experts and relevant agencies in environmental science and waste management for feedback and additional input for completion of the syllabus. The training will take place in 2025.

#### **Bridging the Skills Gap in Barbados Green Energy Transition**

Barbados' Ministry of Labour, Social Security and Third Sector announced a plan to establish a renewable energy skills council to bridge the skills gap in the green energy transition and foster collaboration across sectors. This was the result of a national symposium *Just Transition and Job Creation in the Blue and Green Economy* in Bridgetown from 10-12 April 2024, organized by PAGE in collaboration with the Ministry of Labour and the Ministry of Environment, National Beautification, Green and Blue Economy. Participants, representing the government, private sector, labour organisations, academia and NGOs, among others, recommended to pursue innovative strategies and policies that promote decent work, social justice and job creation in the blue and green economy, while addressing gaps in technical and institutional capacity in the renewable energy sector.

## Guyana

#### **History and Achievements**

2017-2024

PAGE supported Guyana in its green economic transformation between 2017 and 2024.

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. Notably, Guyana's oil and gas resources are rated among the highest in the world. Guyana had the highest real gross domestic product growth (GDP) rate in the world, recording an average of 47 per cent from 2022 to 2024, with a projected increase by about 10 per cent in 2025 according to the International Monetary Fund.

This offers the potential for rapid industrial development and increased state revenues but comes with environmental, governance, and economic risks. The country is prone to climate change effects, particularly floods and droughts, and its resource-based economy, with agriculture and mining as key economic sectors, remains highly exposed to fluctuations in global commodity prices.

Against this background, the Government of Guyana has 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: Vision 2040*. The strategy was intended to be the country's long-term economic and socio-cultural national development vision and aligned to the Sustainable Development Goals (SDGs) and the country's Nationally Determined Contributions. One of PAGE contributions in this period was a *Guyana Green Economy Modelling Study*, alongside targeted capacity development for select stakeholder and institutions.

From 2020, the PAGE programme experienced delays after a new government took office, and the COVID-19 pandemic further slowed down government activities. The new government confirmed its priorities until 2025 in line with the country's *Low Carbon Development Strategy* but abandoned plans for a *Green State Development Strategy*.

In this situation, PAGE reoriented its support to respond to new priorities and focused efforts on the integration of its programming into the support provided by the UN Country Team through the UN Country Implementation Plan 2022-2024. The implementation plan was approved by the government in 2022, but did not lead to a renewed commitment to the PAGE programme. In this situation, PAGE partners decided to focus on completing ongoing activities that were yielding results in the area of green jobs and green skills while already starting the gradual phase out.

In this last phase, PAGE was able to develop the Guyanese macroeconomic model, based on the Cambrige Econometric's FRAMES model, to assess the economic and employment implications of different policy scenarios and provided a summary of the results of the policy simulations, covering topics such as green industries, green jobs and just transition.

In 2024, this was complemented by a green jobs assessment, also prepared in collaboration with Cambridge Econometrics and the initiation of technical training activities. PAGE also provided support to the UN Resident Coordination Office by conducting a structural transformation analysis, evaluating the effects of this transformation on Guyana's economy, society and environment.

In Guyana, PAGE has 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).

### **Progress in 2024**

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

#### **Green Jobs Assessment**

A green jobs assessment was finalized in 2024 by PAGE (ILO) in collaboration with the GAIN Network (specifically Cambridge Econometrics), using economic modelling. The assessment aligns with Guyana's *Low Carbon Development Strategy 2030*, which aims to decouple economic growth from fossil fuel dependence while expanding renewable energy capacity and green job creation, as evidenced by recent investments in solar, hydro and wind projects under its energy supply matrix.

Three scenarios were examined: household subsidies for poverty reduction; a sustainable growth scenario incorporating eco-tourism and energy transformation; and a divestment scenario exploring the shift from oil and gas to green hydrogen. The findings suggest that domestic demand and the onshoring of energy supply chains have important macroeconomic impacts.

The green jobs assessment provides an analysis of an alternative growth path for Guyana that foresees reinvesting revenues from oil and gas into renewable energy technology, green hydrogen, skills training and social protection. According to the report, this approach would result in higher employment and GDP growth, as compared to continuing with business as usual, while also supporting export diversification, reducing the reducing poverty and the reliance on expensive imports. The assessment is an important reference for the government for evidence-based policymaking, providing a pathway that can facilitate a just transition of Guyana's labour market while also achieving the country's climate and development objectives.

### Building institutional and individual capacity (Outcome 3):

#### **Advancing Green Skills in the Construction Sector of Guyana**

Guyana's Ministries of Education and Labour launched an initiative for greening technical and vocational education and training (TVET), which aims to advance institutional capacity for greening the construction sector. Representatives from the Council for Technical and Vocational Education and Training, the Government Technical Institute, the University of Guyana and industry associations were trained in designing competency standards for green jobs and developing and implementing new curricula that enhance sustainable practices in the sector. The training was conducted between February and March 2024 by PAGE in collaboration with the government's Board of Industrial Training. The initiative contributes to the priority of green jobs creation included in Guyana's *Low Carbon Development Strategy 2030*.

Countries where PAGE started its phase out already before 2024 but for some final activities are still completed and results achieved. In addition, PAGE started to monitor follow-up on PAGE results through government initiatives or other development partners and programmes.

## **Uruguay**

## **History and Achievements**

2017 - 2023

PAGE supported Uruguay in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2017 and 2023.

Uruguay stands out in the Latin American region for its high level of human development and the opportunities it offers. The nation's progress is underpinned by institutional stability and inclusive social policies. In recent years, the government has made concerted efforts to integrate sustainable, inclusive and green development into its fundamental economic strategies, with ambitious objectives set for achieving equality, environmental conservation and economic diversification. However, despite these strides, Uruguay's open economy remains susceptible to fluctuations in the global market. The country's exports are still heavily reliant on primary sectors such as agriculture and livestock, which are resource intensive.

To address these issues, the Government of Uruguay has been committed to sustainability and green economy, aiming for increased income, improved wealth distribution, job creation, poverty alleviation, equality, and environmental preservation. This commitment has led to the integration of environmental considerations into the core pillars of economic development as a result of various national planning initiatives to delineate aspirations and bolster overarching policy frameworks.

Since joining the partnership in 2017, under the leadership of the Ministry of Industry, Mining and Energy, PAGE has played an important role in informing and promoting these national planning processes and developing related capacities. The work initially focused on strengthening the capacity of policymakers to assess the impact of environmental policies using macroeconomic models, fostering public-private collaboration, and increasing participation and raising awareness on inclusive green economy principles.

Uruguay has embraced the concept of circular economy, recognizing its potential to generate new businesses and jobs while prioritizing environmental sustainability. This shift has created an opportunity for PAGE to engage both, at sectoral and thematic levels. PAGE helped mainstream circular economy into the overarching programme 'Transforma Uruguay' (also known as the National System of Productive Transformation and Competitiveness), established in 2016 to foster the country's economic transformation and enhance its competitiveness. To operationalize this programme, Uruguay published a *National Circular Economy Action Plan* in September 2019.

Under this overall framework, PAGE provided technical assistance for the greening of micro, small and medium-sized enterprises, waste and by-product valorisation, and the implementation of green production methods in industries. Additionally, PAGE conducted sectoral and thematic analysis, such as addressing land use tensions in residential metropolitan areas where industrial activities are ongoing.

In 2020, Uruguay underwent significant institutional and political reforms including the establishment of a Ministry of Environment that indicates a shift towards prioritizing environmental protection and sustainable resource management. The creation of the ministry aligned with the government's emphasis on circular and green economy as key strategies which provided a new entry point for PAGE to support strategies for post-COVID-19 economic recovery. It underscored the recognition of environmental sustainability as a key component of long-term planning and policy interventions. Furthermore, the establishment offered opportunities for targeted initiatives, such as green and blue employment, supporting small and medium-sized enterprises in the food sector, and the implementation of a national waste management plan following the development of a law on integrated waste management.

Through 2023, PAGE continued to support national efforts to further advance sustainability initiatives with the aim to enhance resource efficiency, reduce waste generation and promote sustainable production and consumption practices across various sectors of the economy. Furthermore, the government intensified collaborations with sub-national governments, fostering partnerships to advance the circular economy agenda at the territorial level. These collaborations seek to empower local communities, promote innovative solutions, and create synergies between different levels of governance to achieve sustainable development goals effectively.

During the period 2017-2023, green growth initiatives evolved from seed funding into robust government-led and funded projects. The institutionalization of the Circular Uruguay Award is one example. Launched in 2019 under PAGE Uruguay, this award is now in its fifth edition, fully funded and organized by the Government of Uruguay. PAGE also contributed to national plans for employment and waste management. In addition, PAGE helped improve national and sub-national inclusive green economy metrics and statistics in the country. Notable achievements during this period include:

- Launch of the National Waste Management Plan.
- Establishment of the Circular Opportunities Sectoral Fund under the *Uruguay Circular Programme*.
- Establishment of the Circular Uruguay Award and hosting the first Circular Economy Award for Latin America and the Caribbean.
- Formal adoption of the *National Development Strategy Uruguay 2050*, including PAGE-supported environmental components.
- Approval of the National Environmental Plan for Sustainable Development.

PAGE activities in Uruguay have contributed 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.

#### **Progress in 2024**

Uruguay consolidated key milestones in 2024 in its green economic transition by advancing national strategies, including by launching the *National Circular Economy Strategy*, deepening institutional capacity with the development of 23 marine biodiversity data protocols, and expanding subnational level engagement by conducting municipal dialogues on inclusive green economy. Building on earlier foundations, 2024 marked a year of implementation and policy alignment, reflecting Uruguay's commitment to embedding green and circular economy principles into national and sectoral planning - and ensuring continuity beyond PAGE.

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

### **National Circular Economy Strategy**

Uruguay's new *National Circular Economy Strategy*, launched by the Ministry of Industry, Energy and Mining in April 2024, is a key element in the country's transition towards inclusive, green and circular economy. The strategy sets the path for an improved institutional landscape to enable policies for circular production and consumption and encourage circular initiatives and business models. With the strategy, circular economy is embedded within the country's sustainable development framework, complemented by the *National Circular Economy Action Plan*, the *National Integrated Waste Management Plan*, as well as vehicles to incentivize circular economy in industry and research such as the Annual Circular Economy Awards, a Circular Economy Laboratory and Circular Economy Innovation and Research Fund. PAGE supported the Ministry of Industry, Energy and Mining to develop the strategy in collaboration with the Ministries of Economy and Finance, Environment, Livestock, Agriculture and Fisheries, and the UN Economic Commission for Latin America and the Caribbean.

#### **Managing Marine Biodiversity Information**

As Uruguay develops its offshore energy sector, the government has recognized the importance of protecting marine ecosystems. National planning efforts, such as the *National Environment Plan for Sustainable Development* and the *National Biodiversity Strategy*, highlight the need to improve how marine areas are monitored and managed. These priorities include better tools to assess environmental impacts and ensure that marine resources are used sustainably.

In alignment with these priorities, in collaboration with the Ministry of Industry, Energy and Mining, PAGE (UNEP) finalized in 2024 the development of 23 standardized guidelines and protocols for managing marine biodiversity information related to offshore hydrocarbon activities. The guidelines provide a structured framework for collecting, delivering, and systematizing marine biodiversity data. The study focused on creating tools for biodiversity data collection and management, drawing from national, regional, and international practices. It included the design of a marine biodiversity information repository with protocols for regular updates, ensuring that data remains current and accessible.

The report includes opportunities for collection of biodiversity data aboard exploration and production vessels and proposes methods for integrating the data into environmental assessments. Additionally, the report addresses the evaluation of seismic activities' impacts on fisheries and outlines strategies for minimizing such risks.

The guidelines strengthen Uruguay's capacity to integrate marine biodiversity considerations into environmental assessments, laying the groundwork for a Global Environment Facility-funded project and enhancing the country's sustainable management of its marine territory. The research results will guide practitioners, regulators and industry operators in applying robust, science-based biodiversity practices in offshore operations, ensuring transparent data flow, and supporting evidence-based environmental assessments.

#### Building institutional and individual capacity (Outcome 3):

#### Municipal Dialogues on Inclusive Green Economy and Circular Economy

In line with Uruguay's national push to integrate circular economy principles across all levels of government, PAGE (UNIDO) in collaboration with the Network of Divisions and Departments for Development, Land Use Planning and Environment of Subnational Governments and the Ministry of Industry, Energy and Mining of Uruguay, facilitated a series of dialogues with local authorities in October 2024. These efforts reflect the country's broader efforts to localize green economy implementation and empower municipalities to co-lead the transition. Two in-person workshops and two virtual workshops were conducted to update departmental representatives on key strategies and promote dialogue on inclusive green economy and circular economy. It included participation from representatives of thirteen municipalities.

The workshops shared updates on the implementation of the *National Circular Economy Strategy*, introduced the *National Bioeconomy Strategy*, discussed alternatives for organic waste management; reviewed ongoing projects of the Technologic University of Uruguay and the Office of Planning and Budget; and strengthened communication through the exchange of knowledge on ongoing and completed green economy projects. Following the workshops, tailored technical assistance on the definition, development and consolidation of local projects was provided to participating municipalities to support the implementation of green economy initiatives related to waste management, nature tourism and climate change, among others.

## **Promoting Circular Economy**

As part of Uruguay's implementation of its *National Circular Economy Strategy* and the *National Waste Management Plan 2023-2033*, PAGE (UNEP), in collaboration with Alcoholes del Uruguay (ALUR) and the National Institute of Viticulture (NAVI), supported targeted initiatives in 2024 to promote circular practices in the food and beverage sectors – two priority areas identified by the Strategy. The collaboration resulted in the establishment of a national system for collecting used household cooking oil through the project 'La Energía Se Transforma: Recicla tu Aceite'. A framework for collection points in cities with more than 5.000 inhabitants was developed, including the recommendation to use reusable containers. The collected oil is now integrated into the International Sustainability and Carbon Certification System, ensuring traceability and supporting biodiesel production, which helps reduce greenhouse gas emissions and dependency on fossil fuels. Additionally, a sustainability guide for wineries was developed and validated by NAVI. The guide, finalized in 2024, promotes resource efficiency and circular production processes, driving the wine industry towards more sustainabile practices. The collaboration between PAGE, ALUR and NAVI aligns with Uruguay's broader sustainability goals and its national policies mentioned above.

# **Kyrgyz Republic**

#### **History and Achievements**

2016-2023

PAGE supported the Kyrgyz Republic in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2016 and 2023.

The Kyrgyz Republic is a landlocked country in Central Asia with a rich natural heritage. The country has a large mountainous region, and 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, reducing 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 has been 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 had released an accompanying five-year national development programme 2018-2022 to provide a medium-term framework for all national, sub-national and sectoral strategies, including those related to the environment and climate change. In a second step, 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. The subsequent *National Development Programme until 2026* is currently serving as a mid-term development horizon and includes an inclusive green economy as one of the country's priorities.

Within this national context, PAGE provided policy support for an inclusive green economy to the Government of Kyrgyz Republic between 2016 and 2023 alongside other bilateral and multilateral partners, including the German Corporation for International Cooperation, the European Union, the Biodiversity Finance Initiative and the Organization for Economic Cooperation and Development. PAGE contributed to the integration of inclusive green economy goals and targets into the government's national planning processes, supporting both, the development of the first *Green Economy Programme 2019-2023* and the *Green Economy Development Programme until 2028*, which is currently being developed. In addition, PAGE facilitated evidence-based sectoral reforms related to green industry, sustainable agriculture, green jobs, sustainable finance and public procurement and strengthened institutional capacities for inclusive green economy diagnostics and coordination. The establishment of the Coordination Council by the Cabinet of Ministers in 2023 has improved the coordination of green economy initiatives in the country. The platform brings together government, private sector, and development partners, ensuring alignment across key actors and sectors for effective policy implementation.

The time when the COVID-19 pandemic hit the economy of the Kyrgyz Republic coincided with significant a political transition, marked by a shift from a parliamentary to a presidential form of government and a major restructuring of ministries and agencies, while SDGs and green economy remained a priority in the development policy of the new leadership. In this period, PAGE started to support the government to develop a new *Green Economy Development Programme*, which aims to translate strategic documents into practical mechanisms and instruments for the promotion of an inclusive green economy, by spelling out implementation means, including finance, capacity building and coordination of the cross-cutting inclusive green economy policy framework. The programme will serve as a blueprint for achieving green economic goals and aligns with the *National Development Strategy 2040* and SDG priorities. It focuses on key sectors such as green energy, energy efficiency, low-emission transport, sustainable tourism, waste management, fiscal policy and sustainable finance, and sustainable procurement.

In the Kyrgyz Republic, PAGE supported efforts towards achieving 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), 13 (Climate Action) and 17 (Partnerships for the Goals).

#### **Progress in 2024**

While PAGE is completing its activities, support was provided in 2024 to integrate green economy into policy actions through the *Green Economy Development Programme*, and to thematic inclusive green economy policies through the *Green Financing Programme*.

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

#### **Development of the Green Economy Development Programme until 2028**

PAGE (UNDP) supported the Ministry of Economy and Commerce in developing key sections of the new *Green Economy Development Programme*. This involved reviewing the relevant sections of the previous programme, analyzing the current situation, and defining tasks, activities, and expected results to align with the country's sustainable development priorities. PAGE's support focused on sustainable finance, waste management, public procurement, energy efficiency, and green energy. To ensure inclusivity, PAGE conducted a gender analysis of the *Green Economy Development Programme 2019-2023*, identifying gaps and opportunities to mainstream gender considerations. Based on this analysis, specific recommendations were developed for the new programme, including concrete measures for selected sectors. Each section of the draft programme now integrates gender-specific actions to promote equitable outcomes and greater participation of women. The *Green Economy Development Programme* is currently undergoing final consultations prior to being adopted, ensuring alignment with national priorities and stakeholder inputs for effective implementation.

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

#### **Launch of the Green Financing Programme**

With the launch of the *Green Financing Programme* with an initial capital of over USD 8 million, the Kyrgyz State Development Bank marked an important milestone for the country's *Green Economy Development Programme* by establishing a financial mechanism for green investments. This milestone builds on the groundwork laid by PAGE (UNDP) by conducting a feasibility study for a green finance facility, and a green finance market assessment in 2023 in collaboration with the Ministry of Economy and Commerce and the Union of Banks. The two studies identified key sectors such as energy, transport and processing for green finance uptake, and proposed strategic reforms including the introduction of a green taxonomy, phasing out harmful subsidies, and strengthening inter-agency coordination.

The *Green Financing Programme* provides access to funding for green projects and public-private collaboration, making it a key element for achieving the country's climate action targets and green economy objectives. PAGE supported the development and launch of the programme and will continue, through UNDP, to work closely with the State Development Bank to monitor implementation progress, assess impacts, and ensure effective scaling of green finance mechanisms.

## Senegal

#### **History and Achievements**

2014-2022

PAGE supported Senegal in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2014 and 2022.

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 requested PAGE support in early 2014. PAGE intervention focused on the operationalization of the PSE and its *Priority Action Plan (PAP) 2014-2018*, specifically on two pillars integral to green economy transition: structural transformation of the economy and growth, and human capital, social protection and sustainable development. From 2018, the reinforcement of inclusive green economy objectives in the elaboration of the PSE II (2019-2023) had become an area of attention for PAGE support.

PAGE's work in Senegal has culminated in several achievements, including the integration of inclusive green economy 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.

In 2019, PAGE began a gradual phase-out of its support to Senegal with a sustainability plan to take the green economy agenda forward but then considered Senegal for additional assistance when the COVID-19 pandemic affected the country's economy.

Under the renewed support provided from 2021 for a green economy recovery, the adjustment of the PAP of the PSE for 2019-2023 provided new entry points for PAGE with a focus on mitigating the main socio-economic challenges of the pandemic, while promoting sustainable and inclusive growth through the support in green recovery policymaking and the integration of gender dimensions into national plans. In addition, PAGE supported the integration of sustainable practices in public procurement processes as well as plastic recycling.

Senegal celebrated 8 years of partnership in 2022 with a commitment to capitalize on PAGE achievements. The multi-stakeholder National Platform on the Green Economy took over to consolidate the country's achievements on green economy and to continue the work undertaken by PAGE.

In Senegal, 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 2024, Senegal, through the Ministry of Environment and Ecological Transformation, expressed interest for a continuation of support under PAGE updated Strategy.

In recent years, Senegal has developed new strategies and engaged in strategic partnerships to strengthen its green economic transition. Notable among these are the articulation of *Senegal 2050 Vision*: a national agenda for transformation which, among other things, aims to position Senegal as a leader in renewable energy in West Africa and to develop a diversified and resilient economy. The *Master Plan and Five-Year Development Strategy* includes a pillar on sustainable development and national planning. In 2023, Senegal became a pathfinder country in the *Global Accelerator on Jobs and Social Protection for Just Transitions* in 2023 and also joined the Just Energy Transition Partnership. The Ministry of Environment, Sustainable Development and Ecological Transition released its *Policy Letter for the Environment - Sustainable Development and Ecological Transition Sector 2022-2026* under which the country is pursuing an ecological transition which includes the development of a *National Ecological Transformation Plan* and updating its Nationally Determined Contributions.

#### **Continued Green Economy Transition by Sustaining PAGE Results**

2023-2024

After its phase out, PAGE continues to follow the policy developments in Senegal as part of its overall monitoring of results. This section provides examples of how the results of PAGE have been sustained by the government or how elements of PAGE work have been continued or expanded by other development or UN initiatives. While there is a link to PAGE there is no claim of direct attribution.

The government established by decree, the National Green Economy Platform to sustain PAGE achievements in Senegal and to continue the country's progress towards a green transition. An initial action plan was drafted in 2023 that includes a roadmap for 2023-2026 with the following key priorities: i) improving the framework for green economy statistics development; stakeholders' capacity development and support; ii) communication advocacy and green economy promotion; and iii) cooperation and partnership to mobilize the resources needed to implement activities.

The platform provides a forum for dialogue among stakeholders of the green economy sector, supports research related to green economy, aims to support green initiatives, information sharing, awareness-raising, capacity development, partnerships and networking. Members of the platform are

currently engaged in evaluating and updating the *National Green Jobs Strategy*, supported by an ILO project on the social dimension of the ecological transition.

The platform is also preparing a series of conferences on the role of the private sector in an ecological transition and inclusive green economy, as well as a quarterly e-bulletin on green economy news, information and resources.

The ILO launched the new *Women Work Greener and Better - Green Jobs for Women and Youth in the Saloum Delta Initiative* in 2023 that was designed within the framework of the *Global Accelerator on Jobs and Social Protection for Just Transitions* and the *Climate Action for Jobs Initiative*. Senegal also became a pathfinder country of the global accelerator, with reference to the successful work implemented under PAGE. The high-level engagement of the government was confirmed through a letter from the Ministry of Economy to the UN Resident Coordinator to continue the policy work on just transition under the global accelerator.

### **Mauritius**

#### **History and Achievements**

2014-2022

PAGE supported Mauritius in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2014 and 2022.

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 *National Vision 2030*, developed in 2015, has set 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 related 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 made towards the *Marshall Plan Against Poverty*, including the *Marshall Plan Social Contract*, which aids households at the risk of extreme poverty.

In 2019, PAGE started to phase-out its support and develop a sustainability plan to sustain results and green economy action, when a year later the COVID-19 pandemic brought new economic challenges and social disruptions to Mauritius. At the time, the government announced plans and budget allocations to stimulate a green economic recovery, including supporting tourism, manufacturing, investment in climate smart agriculture, renewable energy, circular economy and sustaining small and medium-sized enterprises.

In line with these government priorities, PAGE provided additional support between 2020 and 2022 that resulted in a technical study that analysed the challenges and opportunities for financing nature-based solutions and climate-smart agriculture in Mauritius, with a related toolkit on scaling up sustainable finance. Based on the results, a policy brief on financing nature-based solutions and climate-smart agriculture was developed. PAGE also contributed to waste management reform by reviewing the cost structure of industrial waste management.

In 2022, Mauritius celebrated 8 years of engagement with PAGE in a high-level transition ceremony in which the government set the path for sustaining the achievements towards an inclusive green economy.

In Mauritius, PAGE contributed to the development of the country's Nationally Determined Contributions (NDCs) and the achievement of several Sustainable Development Goals (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).

#### **Continued Green Economy Transition by Sustaining PAGE Results**

#### 2023-2024

After its phase out, PAGE continues to follow the policy developments in Mauritius as part of its overall monitoring of results. This section provides examples of how the results of PAGE have been sustained by the government or how elements of PAGE work have been continued or expanded by other development or UN initiatives. While there is a link to PAGE, there is no claim of direct attribution.

In 2023 and 2024, a few new developments show the country's continued commitment to advancing PAGE's vision of inclusive and green economic transformation based on the principle of integrating environmental sustainability with economic and social development.

The *Circular Economy Roadmap*, adopted by the government cabinet in 2023, is a comprehensive strategic plan to guide the country towards sustainable and environmentally friendly practices and sets the stage for comprehensive policy changes and initiatives, including the creation of green jobs. To support the development, a *Skills Roadmap for a Green Economy in Mauritius* was developed in 2023 with PAGE support, as well as a modelling exercise on green jobs and employment impacts of a green and low carbon strategy in Mauritius.

The parliament also passed a *Waste Management Bill* in 2023 that introduced new regulation for waste management practices to facilitate circularity with the aim to reduce the environmental footprint, mitigate pollution, and protect natural resources. PAGE had contributed to the legislation by developing an analytical framework on industrial waste management.

In 2024, new government initiatives on renewable energy, enhancing the blue economy, and embedding sustainability into economic policy frameworks, build on the groundwork and capacity laid by PAGE, such as such as the support to the development of the Nationally Determined Contributions and strengthening an enabling environment for sustainable agri-food systems, including green jobs and green finance.

The Mauritius' national budget 2024-2025 outlined a USD 6.6 billion plan for climate adaptation and mitigation, including the promotion of renewable energy and investment in the blue economy. These efforts include coral farming, amending sand extraction laws, and improved environmental monitoring, aiming for a 20 per cent contribution of the blue economy to the gross domestic product.

The recently signed United Nations Sustainable Development Cooperation Framework 2024-2028 complements these actions, focusing on resilience, sustainability, and innovation for green, blue and digital economies. Related priorities are climate change adaptation, improving food, water, and energy systems, and promoting inclusion and gender equality.

The *Net Zero Nature Positive Accelerator Integrated Programme*, funded by the Global Environment Facility and led by UNEP started in Mauritius in 2023. The programme stays in line with the emphasis on green economic transition that PAGE promoted in Mauritius by driving decarbonization in key sectors, particularly manufacturing. It supports, for example, the adoption of cleaner technologies and processes in industries such as beverage production, aligning with PAGE's earlier work to integrate sustainability into industrial practices.

It aligns closely with national strategies, such as the *Renewable Energy Roadmap 2030* and the *Circular Economy Action Plan 2023-2033*, both of which reflect PAGE's principles of systemic transformation and sustainable economic planning. By focusing on decarbonizing heavy industries and integrating renewable energy solutions, the net zero programme ensures that the progress initiated by PAGE is scaled up in alignment with global climate goals.

In addition, the programme directly benefits from the networks built by PAGE and the collaboration across government, private sector, and international stakeholders. The programme complements capacity building measures to enhance technical expertise and workforce readiness, to further ensure sustainability of Mauritius green economic transition.

#### **South Africa**

#### **History and Achievements**

2015-2022

PAGE supported South Africa in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2015 and 2022.

South Africa is one of the largest economies in Africa, with a high level of industrialisation and abundant natural resources, including large mineral deposits. Over a long period, the country also made considerable strides towards improving the well-being of its citizens, reducing poverty rates, and increasing access to public services. In recent years, while the economy is still expanding, economic growth has slowed down and South Africa grapples with inequality, poverty, and unemployment. In addition, industrialisation coupled with the increasing exploitation of natural resources has resulted in a heavy ecological footprint.

Recognizing the potential of green economy strategies, South Africa was a pioneer to embark 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, complemented by 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* adopted in 2012 the government strengthened its ability to manage environmental costs and respond to the increasing impacts of climate change.

Given that the comprehensive green economy policy framework was already in place when South Africa joined the partnership in 2015, PAGE work was 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 inclusive green economy transformation, including circularity and to strengthen capabilities through green economy learning and capacity development.

In 2019, South Africa assumed a leadership position as a green economy champion when hosting – as the first PAGE country - the Third PAGE Ministerial Conference in Cape Town, which culminated in the Cape Town Action Pathways Towards 2030.

During the COVID-19 pandemic, when gross domestic product declined and youth unemployment was rising to record highs, PAGE provided targeted support with a focus on incorporating green economy dimensions in recovery efforts and addressing unemployment challenges and the needs of young people.

In 2022, PAGE marked its 7 years of successful collaboration and partnership with the Government of South Africa and other partners in an event that showcased the achievements made towards inclusive green economy and a green recovery and looked into the future to ensure sustained positive impact.

The PAGE South Africa sustainability report finalised in 2023 summarized the results of the collaboration with PAGE, achieved by an array of institutions and actors actively supporting South Africa's transition to an inclusive low-carbon economy from different angles and at different levels.

Since 2015, PAGE work has resulted in several achievements including the establishment of a green economy progress measurement framework, the facilitation of social dialogue on just transition, and contributions towards policy reforms related to green industry, trade, water management, waste management and economic modelling to transition to a low carbon, climate resilient and inclusive economy. The report also highlights that PAGE contributed to better policy coordination and collaboration among key actors on green economy policy, planning and implementation processes and led to new government initiatives.

As part of the green recovery work, PAGE conducted a global modelling assessment on recovery scenarios, and this activity included a chapter on South Africa, in which South Africa's *Economic and Recovery Reconstruction Plan* was modeled. This work was conducted with Cambridge Econometrics' E3ME (Energy-Environment-Economy Modeling). Based on the reception of this chapter by the South African government, PAGE went on to train modelers from South Africa's National Treasury on the model, building capacity for the Treasury to conduct future modelling independently. PAGE also provided capacity building support to small and medium-sized enterprises through the green recovery funds. Post completion of the PAGE programme, DFFE developed green business guidelines for small and medium-sized enterprises, start-ups and entrepreneurs in partnership with the German Corporation for International Cooperation.

In South Africa, 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.

#### **Continued Green Economy Transition by Sustaining PAGE Results**

#### From 2024

After its phase out, PAGE continues to follow the policy developments in South Africa as part of its overall monitoring of results. This section provides examples of how the results of PAGE have been sustained by the government or how elements of PAGE work have been continued or expanded by other development or UN initiatives. While there is a link to PAGE there is no claim of direct attribution.

# Implementation of the Extended Producer Responsibility Scheme to increase circularity and just transition

PAGE provided support in 2023 for the revision of the *Municipal Integrated Waste Management Planning Guidelines* to ensure that job creation, waste management and circular economy are incorporated. The guidelines have been adopted with the result that from now on all municipalities in South Africa must integrate circular economy dimensions into their planning and management of waste.

In 2024, the Department of Forestry, Fisheries and the Environment embarked on widespread roadshows to enhance awareness at municipal level on the role of the Producer Responsibility Organizations (PROs), which spread across provinces in the country, focussing on waste management. The establishment of PROs in advancing the work of the *Extended Producer Responsibility Scheme* addresses both inclusivity, for example of waste pickers, and circularity within the value chain.

#### **Capacity Building to Promote Green Industrial Development**

The Department of Forestry, Fisheries and the Environment undertook training on green industry development which targeted tenants of industrial development zones, youth and women. Further, it delivered training on circular economy, targeting private and public sector. A total of four outreach sessions were also undertaken in partnership with the Green Youth Network and the National Cleaner Production Centre to share knowledge on green industry development. The *Green Business Guideline for Small and Medium-sized Enterprises (SMEs), Start-ups and Entrepreneurs* formed the basis of the sessions. Awareness was also raised on the Green Growth Knowledge Partnership I-GO Assistant, which targets SMEs on transitioning business operations to be 'green'. There is a clear need for these trainings, which are in high demand, and the government is looking for way to make them recurrent and sustainable, rather than ad-hoc.

#### **Advancing Knowledge on Circular Economy**

Between September and November 2024, the Department of Forestry, Fisheries and the Environment in partnership with the German Corporation for International Cooperation, hosted a series of four virtual webinar sessions on circular economy in agriculture, industry and manufacturing, mining and energy, which was followed by one in-person session. The events that targeted research institutions, private sector, civil society groups and the public sector enhanced the understanding of challenges and opportunities in advancing sustainable development imperatives through the uptake of a circular economy.

#### **Advancing a Just Energy Transition**

The pursuit of a just transition is a top priority for the Government of South Africa and an ongoing effort. Building on the *Just Transition Framework*, which was supported by ILO South Africa, South Africa joined the Just Energy Transition Partnership and developed a *Just Energy Transition Implementation Plan (JET-IP)*, which was endorsed by the cabinet in 2023 and launched at COP28. The JET-IP is a roadmap to ensure that the energy transition from heavy reliance on coal to sustainable and renewable energy sources is a just one.

In 2024, the Department of Forestry, Fisheries and the Environment and ILO, together with the International Training Centre of the ILO, started to develop a series of virtual thematic policy dialogues on just energy transition, that will take place in 2025 during South Africa's G20 presidency with other green economy champions in the Global South to enhance South-South Collaboration and peer-to-peer for greater impact.

#### A New Phase - Targeted Support under PAGE Updated Strategy

2024-2026

In 2024, PAGE confirmed a new phase of targeted support to South Africa under its updated Strategy and new country delivery model.

#### Operationalizing South Africa's Just Transition Forum in the coal sector

Building on the strong foundation of robust commitment to green economy and just transition, South Africa is implementing a range of policy measures to decarbonise its economy and ensure a just transition away from coal. These measures are laid out in the *Just Energy Transition Implementation Plan*, the *Climate Change Act*, and the *Framework for a Just Transition in South Africa*. At the same time, South Africa will hold the Presidency of the G20.

Within this context, the Presidential Climate Commission (PCC) requested PAGE's support for the establishment and operationalisation of a multistakeholder Just Coal Transition Forum under the auspices of the National Economic Development and Labour Council. Through the forum, the government, organised business and organised labour can engage in social dialogue to reach an agreement on the appropriate manner of handling negotiations for a just transition at sectoral level. This inclusive approach aims to contribute to mitigating job losses and social inequality as South Africa transitions to a low-carbon economy.

Starting from 2025, PAGE will support this process with a focus on informing policy discussions by assessing the current policy, economic and social landscape of the coal sector; analysing the impact of coal phase-down on the energy sector and the coal sector value chain; developing responsive sectoral or thematic policies; convening multistakeholder consultation processes and developing draft policies, collective agreements and programmes for workers and enterprises; and supporting the PCC in mobilising finance for implementing sectoral or thematic policies. PAGE endeavours to develop and implement a tailored training programme for enterprises and workers on policy topics relevant to the just energy transition and phaseout (e.g., resource efficiency and economic diversification). South Africa's experience with coal phaseout will also form the basis of a training programme on managing the transition from coal to renewable energy, which will be accessible to stakeholders in other countries facing coal phaseout. Knowledge sharing will be further enhanced by PAGE through the promotion of South-South and Triangular Cooperation, in the form of knowledge dialogues and the creation of knowledge products, on coal phaseout for a transition to an inclusive green economy.

In addition to supporting the PCC, PAGE will provide technical support to the Department of Energy and Electricity and the South African National Energy Development Institute in contributing and advancing the work of the G20 Energy Transitions Working Group.

## **Jiangsu Province (China)**

#### **History and Achievements**

2015-2022

PAGE supported Jiangsu Province in its green economic transformation between 2015 and 2022.

As the second largest economy in the world, China has positioned itself as a forerunner of sustainable development, guided by the national development *Vision Ecological Civilisation*. In 2015, the Chinese government expressed an interest to join PAGE, starting at the provincial level in Jiangsu. Located on the eastern coast of China, Jiangsu province is home to around 85 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 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 policy monitoring, coordination and evaluation of green development progress. As one of China's major industrial powerhouses, Jiangsu was the first province to release *a Provincial Plan on Ecological Civilisation Construction*, highlighting the mid- and long-term development goals for Jiangsu. This plan foresaw 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 were issued by five ministries, which focused on accelerating green industrial transformation in heavy industry sectors.

Since 2015, the key achievements of PAGE work include 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. More specifically, PAGE developed a report on green economy measurement progress; a comprehensive indicator framework focused on the industrial sector; a green industrial park assessment study and related policy guidelines; and a baseline assessment of sustainable textile trade and value chains. Support was also provided to a provincial green economy academy, workshops on industrial parks management, and social dialogues on green jobs for quality green industrial development.

When Jiangsu Province graduated from the partnership in 2020, PAGE findings were 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. Jiangsu Province has continued to pursue the green economy agenda admit the COVID-19 pandemic. In March 2020, the provincial government issued the *Opinions on Promoting Green Development*.

This official guidance document covers 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. Since the Chinese President announced China's 2060 Carbon Neutrality Target, Jiangsu Province has been mainstreaming and integrating climate targets in its provincial planning.

PAGE work in Jiangsu 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).

#### **Continued Green Economy Transition by Sustaining PAGE Results**

2023-2024

After its phase out, PAGE continues to follow the policy developments in Jiangsu Province as part of its overall monitoring of results. This section provides examples of how the results of PAGE have been sustained by the government or how elements of PAGE work have been continued or expanded by other development or UN initiatives. While there is a link to PAGE there is no claim of direct attribution.

The provincial government issued the *Implementation Opinions on Accelerating the Establishment and Improvement of a Green, Low-Carbon and Circular Development Economic System* in 2021 – a systematic planning document on sustainable consumption and production, value-chain, infrastructure, energy transition, innovation and enabling environment. The province also published the 14th *Five-Year Development Plan (2021-2025)* and *Vision 2035 of Jiangsu Province*. Priority areas include promoting circular and green economy, developing sustainable infrastructure, accelerating digitalization and living in harmony with nature.

Jiangsu Province also continued to abate environmental pollution, decrease energy consumption intensity, reduce excess capacity of high emitting industry, and grow green business. More specifically, Jiangsu piloted various green financial instruments, such as green bonds, green loans and green guarantees to mobilize finance for investing in environmental infrastructure.

## **Mato Grosso (Brazil)**

#### **History and Achievements**

2016 - 2023

PAGE supported Mato Grosso in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2016 and 2023.

In recent years, the Brazilian State of Mato Grosso has experienced economic growth fuelled by its expansive agricultural sector. However, this growth also brought significant environmental and social challenges. Recognizing the importance of achieving inclusive sustainable growth, Mato Grosso has chosen to confront these challenges by fostering new economic activities and deploying advanced technologies to restore its natural base while also enhancing the value of agricultural commodities through processing.

In line with these objectives, the State of Mato Grosso introduced the *Produce, Conserve and Include (PCI) Strategy* in 2015 that aims at boosting production, promoting value addition through the processing of agricultural commodities, obtaining internationally recognized certifications, conserving natural resources and integrating families in rural settlements as well as traditional and vulnerable communities. This approach requires the decarbonization of the economy, enhancing energy efficiency, strengthening capacities and cultivating a skilled workforce. The strategy has leveraged various national-level planning instruments to foster sustainable development efforts 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 key sectoral plan of the NCCP.

Against this backdrop, Mato Grosso joined PAGE in 2016, with a focus on promoting the development of an inclusive green economy. The partnership placed particular emphasis on green jobs and addressing poverty, aligned with the state's broader agenda for economic transformation. Substantial efforts were directed towards implementing thematic and sectoral reforms across various areas, including agriculture, agro-industry, tourism, renewable energy, land regularisation and the promotion of green jobs.

In response to the challenges posed the Covid-19 pandemic, the Government of Mato Grosso prioritized green recovery as a central component of its economic recovery plan. This led to the adoption of a green recovery policy in 2021, with a specific emphasis on enhancing family agriculture accounting for 51 per cent of the workforce in Mato Grosso. The implementation of the initiative was carried out through the *State Plan for Family Agriculture*, in partnership with the Secretariat of Family Farming. These new developments opened a new entry point for PAGE to support the revision of the plan and strengthen elements such as state governance and environmental and social commitments. The revision aimed to foster a robust agro-industry value chain, improve logistical and commercial market integration for local agriculture products, offer enhanced technical assistance, and strengthen governance structures for a green and inclusive recovery.

Another significant development emerged in 2022 with the state's ambition to reduce greenhouse gas emissions by up to 80 per cent by 2030 and reach carbon neutrality by 2050. The government expanded the dialogue on public policies aimed at preserving the environment with the 141 municipalities of the state and explored collaboration with new partner institutions to prevent illegal deforestation. PAGE supported an evaluation of sustainable systems in the livestock sector, offering recommendations for rehabilitating degraded and deforested land. The assessment emphasized social responsibility and explored market opportunities for producers involved in, or interested in adopting, sustainable production practices. PAGE also supported the continued implementation of the PCI strategy, contributing to its goals, particularly in sustainable agriculture practices, capacity building and knowledge dissemination. In collaboration with various stakeholders, PAGE contributed to the establishment of mechanisms for reducing deforestation, restoring native vegetation and improving agricultural practices. Additionally, PAGE's focus on inclusive participation and building partnerships helped strengthen the governance framework of the PCI strategy, promoting greater accountability and maximizing its positive impact in support of Mato Grosso's sustainable green transition

Throughout its engagement, PAGE has provided integrated support to help Mato Grosso operationalize its green economy vision by linking strategic planning with sectoral innovation, institutional capacity building, and inclusive local implementation. This approach enabled the state to make tangible progress toward its sustainability and development goals across key areas of governance, agriculture, tourism and green recovery. Major achievements of PAGE's support include:

- Development of a state strategy and monitoring framework for the 2030 Agenda, in partnership with the Secretariat of Planning.
- Strengthening of the *State Integrated Family Farming System*, including digital tools and fiscal mechanisms for local implementation.
- Design and implementation of a green recovery training programme for public and private actors.
- Promotion of sustainable tourism and construction standards through training and technical guidance.
- Strategic studies to support micro and small producers in adopting cleaner technologies and improving productivity.
- Development and adoption of participatory municipal development plans, promoting inclusive territorial planning.

In Mato Grosso, PAGE has contributed 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).

#### **Continued Green Economy Transition by Sustaining PAGE Results**

#### From 2024

After its phase out, PAGE continues to follow the policy developments in Mato Grosso as part of its overall monitoring of results. This section provides examples of how the results of PAGE have been sustained by the government or how elements of PAGE work have been continued or expanded by other development or UN initiatives. While there is a link to PAGE there is no claim of direct attribution.

#### **State Integrated Family Farming System**

The strengthening of family farming was a core activity of PAGE in Mato Grosso. The *State Integrated Family Farming System*, for which PAGE provided support in the form of training workshops that focused on a smart tool for data collection for the system (e-SEIAF), continues to develop and advance. By the end of 2023, all 141 municipalities of Mato Grosso were able to finalize the process of enrolling in the system. To encourage participation, the government offered two per cent of taxes collected by the State of Mato Grosso to be applied to the municipalities for family farming. In 2024, the procedures, parameters, criteria and weights to be considered in the calculation of the *Municipal Family Farming Index* were established by the Secretariat of Family Farming and are ready to be applied. The new index represents a significant step towards the organization and strengthening of family farming in the state, establishing clear and measurable criteria for the distribution of financial resources and providing technical support.

## Mongolia

#### **History and Achievements**

2013-2023

PAGE supported Mongolia in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2013 and 2023.

Mongolia has been on stable trajectory in its economic development but remains vulnerable to economic shock and climate threats. Mongolia's economic growth remains depended on the mining sector and vulnerable to price fluctuations, e.g., for copper and coal. Unemployment remains high and the quality of jobs low, leading to migration to urban areas as well as other countries. 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 come with expected adverse impact on agriculture and livestock, water and land resources, infrastructure development, human health, and wellbeing. The government has ambitious carbon emissions reduction targets, but fossil fuel subsidies continue to encourage the overconsumption of coal and investment in renewable energy remains low.

Against this background, Mongolia started in 2013 to develop a *National Green Development Policy (NGDP)*, which provided the initial entry point for PAGE. PAGE supported the development and implementation of the NGDP by providing technical support, fostering political commitment, and modelling economic, social and environmental implications of NGDP targets. This was completed by evidence-based policy analysis related to priority areas and targets of the NGDP, 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.

When PAGE was at the point to phase out at the end of 2019, with a comprehensive sustainability plan in place, it considered additional support in the period of the COVID-19 pandemic to help Mongolia in its green economic recovery. PAGE supported the government to implement its *Action Plan for 2020-2024*, which included sustainable tourism based on nature, history and cultural heritage as key to economic recovery.

Key achievements of PAGE in Mongolia include integration of inclusive green economy 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. During the green recovery phase, PAGE completed the development of a *Ger and Nature Scheme* - a concept for nomadic tourism - with the Ministry of Environment and Tourism, contributing to economic diversification, improving rural livelihoods and reducing greenhouse gas emissions. To support a green transition in the energy sector, PAGE has also supported the government's plans to reform energy subsidies towards the promotion of renewable energy, which will be critical to creating fiscal space, redirecting incentives and achieving Mongolia's ambitious climate targets.

In Mongolia, PAGE 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 the phase out, Mongolia remained in the partnership as an alumni country, sharing knowledge to help replicate its achievements on a global scale.

#### **Progress in 2024**

While PAGE is completing its activities, support was provided in 2024 for the implementation of sectoral and thematic inclusive green economy policies through a study on energy subsidy reform and renewable energy development.

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

#### **Analysis on Energy Subsidy Reform and Renewable Energy Development**

With support from PAGE (UNEP), the Mongolian Energy Economics Institute (MEEI) conducted an indepth study on energy subsidy reform and its implications for renewable energy development in Mongolia. The study, originally completed in 2023 and revised in 2024, was carried out through a combination of empirical data collection, literature review, and extensive stakeholder consultations. Its primary aim was to assess the economic, social and environmental impacts of Mongolia's current fossil fuel subsidy regime, and to provide evidence-based recommendations for aligning energy sector policies with national sustainability and climate objectives.

The analysis finds that Mongolia's energy sector, which accounts for approximately two-thirds of national greenhouse gas emissions, remains dominated by coal-fired power, supplying around eighty per cent of the country's electricity. In contrast, renewable energy sources - mainly hydropower - contribute only 3 per cent, despite Mongolia's substantial solar and wind energy potential. Current energy subsidies have created significant market distortions, with electricity sold to consumers at prices up to 75 per cent below the actual cost of generation, transmission, and distribution, and thermal energy priced up to 3.4 times lower than real cost. These subsidies, which peaked at USD 228 million in 2021 during the COVID-19 pandemic, are primarily used to cover operating costs rather than infrastructure investment or transition to clean energy.

The study highlights the importance of reforming the existing energy subsidy system to promote the financial sustainability of the energy sector and unlock the potential of renewable energy. The findings support a gradual phase-out of coal-related subsidies, with a redirection of fiscal savings toward investment in renewable infrastructure, such as wind farms and solar photovoltaic systems. The analysis also emphasizes the need for a socially just transition, including targeted support to protect vulnerable households and complementary measures such as energy efficiency improvements, smart grid investments, and public awareness campaigns.

The study directly supported the work of the Ministry of Energy, providing a foundation for ongoing energy sector reform and informing national policy discussions. Notably, the study contributed to the design and implementation of Mongolia's new energy tariff system, which came into effect on 15 November 2024.

This reform introduced a tiered pricing structure that reflects the actual cost of energy and promotes efficient consumption. In parallel, the study aligns with broader regulatory and policy developments in Mongolia, including the 2019 amendment to the *Law on Renewable Energy*, the *Law on Air Pollution Fees*, and Mongolia's updated NDCs.

The findings were presented to the Development Partners Group on 17 December 2024, offering a platform for policy dialogue and enhancing donor coordination around Mongolia's sustainable development priorities. The final report is scheduled for publication in 2025 under the UN Resident Coordinator's Office and will serve as a key reference for future energy planning, investment prioritization, and green economy policymaking in Mongolia.

#### **Continued Green Economy Transition by Sustaining PAGE Results**

2023-2024

After its phase out, PAGE continues to follow the policy developments in Mongolia as part of its overall monitoring of results. This section provides examples of how the results of PAGE have been sustained by the government or how elements of PAGE work have been continued or expanded by other development or UN initiatives. While there is a link to PAGE there is no claim of direct attribution.

In 2024, the new coalition government has set among its policy priorities, the improvement of Mongolia's human development indicators and the promotion of inclusive and green growth. The 2024-2028 Action Programme aims to shift the economy from the dominance of extractive industries to a green and inclusive pathway that attains targets for poverty reduction, human development, and raises per capita income. The government is planning the upcoming five-year development guideline (2026-2030) - the national medium-term development strategy, with an emphasis on strategizing the transition towards a green economic transition, energy independence, and social inclusion. These initiatives are expected to align with Mongolia's long-term strategy Vision 2050, which focuses on reducing coal dependence and expanding the renewable energy sector.

Mongolia has set ambitious renewable energy targets, targeting the expansion of renewable sources from 3.4 per cent in 2018 to 30 per cent by 2030. Mongolia is currently updating its NDCs and developing a *Long-Term Low Emissions Development Strategy for 2050 (LT-LEDS)*. In parallel, the government is drafting a climate change law to create a legal and regulatory framework for low-carbon, and for carbon pricing. Mongolia will also host the United Nations Convention to Combat Desertification's 17th Conference of Parties in 2026.

In 2024, Mongolia discussed re-engagement with PAGE in 2025. In this regard, the government requires technical assistance for advancing an inclusive green economic transition strategy that aligns with Mongolia's existing policy frameworks, especially the forthcoming five-year development guideline. Anticipated support from PAGE will integrate inclusive green economy and just transition principles into the development guideline and in alignment with LT-LEDS, the NDCs revisions, the *National Biodiversity Action Plan 2015-2025 (NBSAP)*; and developing a green economy transition financing framework addressing priority sectors such as mining and agriculture.

#### **History and Achievements**

2014 - 2024

PAGE supported Peru in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2014 and 2024.

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. However, 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, the county 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.

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 in the implementation of green sectoral and thematic policies, and built both individual and institutional capacity to support long-term change. Key milestones include Peru's approval of the *National Competitiveness and Productivity Policy* in 2018, featuring a dedicated chapter on sustainability, and the inclusion of green growth in Peru's *Vision 2050*, to which PAGE contributed. Throughout its engagement, PAGE supported reforms across multiple sectors, including green jobs, urban transport, and teleworking, while also building national capacity for forward-looking policy analysis. It introduced inclusive green economy concepts into academic curricula and promoted sustainability as a core component of economic development.

PAGE started a gradual phase out of its support in 2019, accompanied by the development of a sustainability plan and supported by the German Corporation for International Cooperation-led green economy transformation project, to enhance national capacity and ownership and generate lasting results. PAGE, however, continued its engagement with Peru in 2021, as the topic of green growth got renewed attention during the COVID-19 pandemic with a new request for targeted support on green economic recovery coming from the Ministry of Environment and the Ministry of Economy and Finance.

Since 2023, there have been several developments confirming the country's commitment to a green economic transformation. The *Strategic Plan for the National Development of Peru up to 2050 (PEDN)* was approved in 2023, including the objective to increase the competitiveness and productivity of the economy to generate well-being for the people by focusing on sustainable and green economic growth with decent employment. At the same time, the General Directorate of Policies and Regulatory Analysis of the Ministry of Production is advancing on a *National Industrial Development Policy* with the strategic objective to move towards a green and circular economy, to raise the competitiveness and productivity of the economy, and to ensure that it generates well-being for people, based on sustainable economic growth with decent employment.

In addition, the Ministry of Environment developed the *National Environmental Policy 2030*, which is framed by the *Green Growth Guidelines* that were established by ministerial resolution to identify and promote eco- and bio-businesses, providing the basis for actions, strategies and plans that promote such businesses.

Despite continued political instability in Peru with a high turnover rate of ministers and low expectations for economic growth, several initiatives were advanced since, such as the revision of the national climate change strategy to integrate green economy and eco-business concepts. PAGE focused on a set of targeted activities to promote inclusive green jobs, eco-businesses, green industry, green finance and capacity building for public servants, under the broader objective of green growth.

Over nearly a decade of engagement, PAGE has supported Peru's efforts to align economic growth with environmental sustainability and social inclusion. By combining strategic policy support, analytical tools, capacity development and multi-stakeholder dialogue, PAGE contributed to the integration of green economy principles into national and sectoral planning, while fostering innovation, green employment, and institutional coordination to advance the country's long-term development vision. Major achievements of PAGE's support include:

- Strengthening of the BIOINNOVA San Martín Centre to deliver green entrepreneurship training at the regional level.
- Development of a national study with the Ministry of Production to promote sustainable and diversified industrial products.
- Support for the *National Policy for Decent Jobs*, which includes a focus on green jobs and just transition.
- Integration of environmental sustainability into the *National Competitiveness and Productivity Policy*.
- Adoption of the Circular Economy Roadmap for Industry.
- Introduction of the inclusive green economy modelling course at Universidad del Pacífico.
- Technical support for the Green Industry Policy and application of the IGEM modelling framework.
- Endorsement of *Green Growth Guidelines*, laying the foundation for long-term sustainability planning.

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).

#### **Progress in 2024**

While PAGE is completing its activities, support was provided in 2024 for the implementation of sectoral and thematic inclusive green economy policies through a study on solid waste management and a roadmap on green growth in the San Martin region, as well as to capacity building for ecobusinesses.

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

#### Feasibility Study for the Valorization of Organic and Inorganic Solid Waste

The Ministry of Environment, the Ministry of Economy and Finance and the National Council for Competitiveness and Formalization with the technical assistance of PAGE (UNEP) finalized a study that focused on identifying opportunities and challenges in the development of strategic waste valorization corridors, engaging 36 districts across the region. The study *Assessment of the Feasibility of Implementing Waste Valorization Corridors for Recyclable Inorganic Solid Waste in the San Martín Region* suggests measures for solid waste managers to promote and formalize the value chain of usable solid waste, engaging municipal governments and stakeholders. The report emphasizes the need to increase the national solid waste valorization rate through the formalization of waste pickers, the development of waste conditioning areas, and investment in infrastructure for organic waste recovery. It identified persistent gaps, including low rates of approved segregation programmes, informal operations of waste facilities, and limited functionality of existing infrastructure. The study also underscores the importance of integrating actors across the value chain and unlocking investment initiatives to enhance equipment and infrastructure, forming a foundation for informed policy action and investment planning by national and subnational authorities.

#### Roadmap for Green Growth for the San Martin Region

A draft of the *Roadmap for Green Growth* for San Martin region has been elaborated by PAGE (UNDP) in 2024 in collaboration with the Ministry of Environment and the Ministry of Economy and Finance. The roadmap is aligned with national and regional policies and priorities, including the *National Environmental Policy 2030*, the *National Competitiveness and Productivity Policy*, the *Green Growth Guidelines*, the *Green Finance Roadmap*, the *San Martín Concerted Regional Development Plan 2030*, and the *San Martín Regional Competitiveness and Productivity Plan 2030*. The roadmap includes an inventory of good practices in the San Martín region that contribute to green growth, which can be replicated in other territories of Peru.

To support the development of the roadmap, a mapping and analysis of the current state and progress of prioritized sectors for the transition towards green growth in the San Martín region was carried out, including the mapping of economic, social and environmental indicators of green growth. These indicators have been included in the draft of the roadmap, which will be validated in a participatory workshop in 2025 with local and national stakeholders such as the regional government of San Martin, the Ministry of the Environment, the Ministry of Economy and Finance, as well as civil society, indigenous communities, and the private sector.

In addition, a diverse and resilient portfolio of public and private financing sources at international, national and local level has been developed by PAGE (UNDP) in collaboration with the to promote ecobusinesses and bio-businesses in the San Martín region, as well as various channels to facilitate access to these financing sources. The study collected secondary and primary information through interviews with key stakeholders from local financial institutions, government programmes and cooperation projects, among others. The identified funding sources were incorporated into the roadmap.

Furthermore, a green growth training programme has been developed by PAGE (UNDP) in collaboration with the Ministry of Environment and the Ministry of Economy and Finance. It will target the government officials from regional governments, local governments and other public sector institutions. The training is expected to take place in 2025. Subsequently, a self-paced course will be made available for free public access on the Ministry of Environment online learning platform 'Aprende'.

#### Building institutional and individual capacity (Outcome 3):

#### **Training to Promote Eco-Businesses**

Following the rollout of the pilot edition of the moderated online course on eco-businesses geared towards local officials in San Martín at the end of 2023, PAGE (UNITAR), the Ministry of Economy and Finance and Ministry of Environment (MINAM) launched the course's self-paced version in May 2024. The self-paced course has been made available to the public for free on MINAM's online learning platform 'Aprende'. Going forward, national partners will administrate the course and related certifications autonomously. Moreover, based on the pilot edition's positive feedback from participants and continued demand, UNITAR and MINAM agreed to run a second edition between October and November 2024 - this time with a national reach. The course featured the same target audience and format with weekly sessions and complementary readings; materials have been updated and adjusted to the new geographic scope. Demand for this topic and type of training remains strong; the course was oversubscribed ten times. To some degree, the demand can be absorbed by the self-paced version. Notwithstanding, further demand exists in the country for highly tailored and interactive formats that enable experience-sharing among professional peers around this issue.

#### Ghana

#### **History and Achievements**

2014-2024

PAGE supported Ghana in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2014 and 2024.

Ghana is a lower middle-income country and West Africa's second largest economy after Nigeria. After almost three decades of sustained economic growth, it experienced economic slowdown since 2020, when GDP growth went down to 0.4 per cent, and further economic turmoil in 2022. To achieve macroeconomic stability and debt sustainability, the government implemented the International Monetary Fund-supported economic programme, which aims to reinstate macroeconomic stability, ensure sustainable debt levels, and establish the foundation for increased and more equitable growth.

Despite these challenges, the government remains committed to fostering awareness and backing the execution of activities pertaining to climate change and the green economy.

Ghana's policy environment for transitioning to a green and circular economy has been anchored in several instruments. These include the 2013 *National Climate Change Policy*, which envisaged a climate-compatible economy that achieves sustainable development through equitable low-carbon growth. Other policies supporting the country's transition to a green economy include:

- National Energy Policy (2009), National Energy Strategy (2010), and Strategic National Energy Plan
- National Employment Policy (2012)
- Renewable Energy Act (2013)
- National Climate Change Master Plan (2015)
- Energy Sector Recovery Programme (2019)
- 2021 updated Nationally Determined Contribution
- Energy Transition Framework
- National Climate Change Adaptation Strategy
- Forest Plantation Development Strategy (2016–2040)
- *REDD+ Strategy* (2016–2035)

Against the background of a well-developed policy framework, PAGE started supporting Ghana in 2014. Recognizing the country's decentralized planning approach, PAGE focused on the planning and monitoring processes of metropolitan, municipal and district assemblies. PAGE further supported sectoral and thematic policy reform processes and related capacity development across institutions and levels of government.

When PAGE began a gradual phase out of its support in 2019, the COVID-19 pandemic hit Ghana's economy in 2020, and the partnership continued to assist Ghana for a green economic recovery.

The additional support on green economic recovery opened a new opportunity for PAGE to support Ghana in the implementation of its *National Green Jobs Strategy* for the period 2021-2025 to ensure a just and socially inclusive transition to a greener economy. The strategy emphasizes the strengthening institutional capacities, development of green skills and occupations, promotion of green enterprises, and fund mobilization to bolster economic activities within green sectors and create jobs. Also in this period, Ghana developed a *Circular Economy Roadmap and Action Plan* with policy recommendations that guide for Ghana's just transition to a circular economy.

PAGE's work in Ghana has contributed the mainstreaming of an inclusive green economy into subnational planning and reporting and facilitated the incorporation of green policies into the recovery plans of metropolitan, municipal and district assemblies, aligning with the medium-term development plans. In addition, PAGE contributed to individual and institutional capacity building, e.g., the inclusion of climate change education in basic schools across the country and a training of trainers programme for regional economic planning officers and statisticians. PAGE also helped initiate thematic policy reforms in the areas of sustainable finance, green jobs and resource efficiency.

In Ghana, PAGE 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).

#### **Progress in 2024**

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

#### **Green Jobs Assessment**

In 2024, as one of the last activities before its phase out, PAGE completed a *Green Jobs Assessment* in collaboration with the Ministry of Employment and Labour Relations. This assessment was supported by economic modelling and linked to the *National Green Jobs Strategy (2021-2025)*, which is currently under implementation. The modelling was conducted in collaboration with the Institute of Statistical, Social and Economic Research, the University of Ghana and SINTEF (a Norwegian research institution), and the results were released in March 2024. With the aim to assess employment impacts, the model compared a business-as-usual growth scenario with an alternative development path in which Ghana's climate and green policies, included in the updated Nationally Determined Contributions and the *National Energy Transition Framework*, are implemented. As compared to business-as-usual, the scenario including climate and other green policies shows positive development impacts in terms of economic growth and employment creation while reducing GHG emissions. The assessment provides a baseline for green jobs and green enterprises in the country, as well as the green jobs potential in various sectors, and recommends measures to reflect employment and just transition objectives in relevant national instruments, including the *National Medium-Term Development Framework*.

#### **Sustaining the Green Jobs Model**

The *Green Jobs Assessment Model* that PAGE helped to build in Ghana will remain available for future green jobs assessments and related policy analysis. An immediate new application is planned in the context of another joint ILO and European Union project focused on the green jobs potential in selected sectors across the country. Between 2024 and 2027, the ILO-EU *Integrated Action on Green Jobs and Skills Project* promotes a coordinated approach towards green and digital skills development in Ghana, which is also linked the implementation of the *National Green Jobs Strategy*.

#### **Burkina Faso**

#### **History and Achievements**

2014-2022

PAGE supported Burkina Faso in its green economic transformation and green economic recovery from the impacts of the COVID-19 pandemic between 2014 and 2022.

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

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)*. 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, sustainable tourism, green industry and green taxation.

At the point when PAGE started to phase out its support to in Burkina Faso in 2019, the country's next national development plan for the period 2021-2025 (PNDES 2) was adopted by the government in 2021, providing a new entry point to better mainstream inclusive green economy within sectoral strategies, building on the SNEV.

With additional resources made available to promote a green recovery from the impacts of the COVID-19 pandemic from 2020, PAGE was able to engage in the economic recovery of the tourism sector to support the implementation of the *National Strategy for the Promotion of Sustainable Tourism*. The partnership promoted sustainability of the tourism sector through exploring opportunities for mobilizing finance and encouraging the integration of employment and just transition policies in the national policymaking process.

In 2022, Burkina Faso celebrated eight years of achievements under PAGE and the start of a new chapter for the country to make the economy low carbon, job rich and socially inclusive.

Since 2014, the key achievements of PAGE work 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, tourism, and sustainable agriculture; and capacity development on sustainable agriculture and green entrepreneurship. Further, the partnership created a model for joint delivery of complementary UN initiatives, bringing together PAGE, the Poverty-Environment Action, 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).

#### **Continued Green Economy Transition by Sustaining PAGE Results**

2023-2024

After its phase out, PAGE continues to follow the policy developments in Burkina Faso as part of its overall monitoring of results. This section provides examples of how the results of PAGE have been sustained by the government or how elements of PAGE work have been continued or expanded by other development or UN initiatives. While there is a link to PAGE there is no claim of direct attribution.

#### **National Strategy for the Promotion of Sustainable Tourism**

In 2024, the Ministry of Tourism engaged with the Ministry of Finance to request that a greater share of the tourism development tax is allocated back to the tourism sector. This was part of the recommendations included in the study *Financing of Sustainable Tourism in Burkina Faso* conducted by PAGE, which presented a series of proposals for developing a comprehensive national tourism financing framework to address financing gaps and support the growth of a sustainable and inclusive tourism sector.

Moreover, the ministry plans other actions on financing options for sustainable tourism. Stakeholders from the tourism sector have highlighted the need for a comprehensive national framework to address climate financing requirements in the industry. This framework should bridge legal and institutional gaps and ensure the availability of financial instruments tailored to Burkina Faso's context, considering the specific needs of different sectors.

# 4.BUILDING PARTNERSHIPS TO DELIVER TRANSFORMATIVE RESULTS

In 2024, PAGE expanded its strategic alliances at country and global levels, strengthening existing partnerships and establishing new collaboration with a diverse range of institutions. PAGE builds strategic global partnerships to reach key actors driving a green transformation and strives on the growing momentum around sustainable finance, circular economy, and just transition. The partnerships help PAGE to strengthen outreach, widen global platforms, reach new stakeholders, and pool knowledge and resources for effective delivery of the partnership's objectives. At country level, partnerships are responsive to local contexts, and the specific goals of each country's programme with a focus on facilitating knowledge sharing, capacity building, and economic thinking.

The following section highlights examples of important partnerships and related achievements from 2024.

Partner Organisation	Strategic Relevance	Achievement from collaboration in 2024			
Global level					
The Coalition of Finance Ministers for Climate Action (CFMCA)	- Brings together 97 Finance Ministers to commit to climate action.	<ul> <li>Technical input on nature finance and green fiscal reforms to the coalition's broad network of finance ministries.</li> </ul>			
	<ul> <li>Allows PAGE to shape the coalitions' agenda and embed sustainable finance within conversations on fiscal policy.</li> <li>Creates opportunities for Finance Ministries of PAGE countries to connect with the Coalition.</li> </ul>	<ul> <li>Contributions to the coalitions' regional meetings in Africa and Asia-Pacific and high-level events at the Biodiversity COP16.</li> </ul>			
The Biodiversity Finance Initiative (BIOFIN)	<ul> <li>Enables partner countries to integrate biodiversity finance into macroeconomic planning and policymaking, creating more resilient development models.</li> </ul>	<ul> <li>Bundling of complementary expertise in a regional South-South Collaboration Workshop bringing together senior government experts from Central Asia to share their knowledge and experience on green finance.</li> </ul>			
UN Development Cooperation Office	<ul> <li>Contributes to more integrated policy approaches as envisioned in the UN Reform and provides access and guidance to UN RCOs.</li> <li>Provides a vehicle to embed green economy principles in core coordination mechanisms of the UN at country level – with institutional capacity that extends beyond PAGE.</li> </ul>	- Bringing together UN RCO economists and green economy experts in two online policy dialogues on the role of the UN transitions approach for advancing a just green economy and the ways to align and mobilize financial flows to support just transitions and advance the SDG agenda.			

#### The One UN As public learning platform In 2024, PAGE expanded its digital Learning allows to reach broad audiences learning impact for its portfolio of e-Partnership (UN with specialised content on green learning courses as the platform reached a milestone of over 1,000,000 CC:Learn) economy amplifying PAGE's educational impact. The One Planet Is a global platform with a large Joint PAGE session at the OPN Forum **Network (OPN)** and diverse membership in Rio de Janeiro on Blend the gap committed to enhancing public and private financing for a just sustainable production and transition to sustainable consumption consumption allows to reach new and production. stakeholder groups. **UNEP Finance** Is an initiative primarily targeting Joint PAGE session at the OPN Forum **Initiative (UNEP FI)** private actors in the financial in Rio de Janeiro on Blend the gap market and provides a public and private financing for a just complementary implementation transition to sustainable consumption pathway to promoting and production. sustainable finance connecting public and private funding sources. The Green Is a network of civil society GEC contributed its expertise to a **Economy Coalition** webinar for PAGE national coordinators organisations, business and (GEC) researchers that unify messaging on the role of social dialogue in a just on inclusive green economy and transition and moderated PAGE's side provide an important link to event at the Summit of the Future in diverse stakeholder communities. New York titled green and circular—can The Green Growth Is a global network of experts and PAGE and GGKP maintained their Knowledge organisations committed to strategic partnership through regular **Partnership** working towards a sustainable coordination exchange to explore (GGKP) future through the generation, knowledge-sharing and digital management and sharing of transformation solutions reach circular knowledge and provides, economy practitioners. enhancing the outreach of PAGE through the various platforms. **Country level** Global - Is a mechanism that allows for In Mauritius, the Net Zero Nature **Environmental** the implementation of large-scale Positive Accelerator Programme, led by Facility (GEF) programmes which can build on UNEP, builds on PAGE's work, scaling **Funded Initiatives** the PAGE foundational policy industrial decarbonization efforts while work in countries and follow leveraging the multi-stakeholder through with the delivery of networks established. It focuses on specific measures in select decarbonizing heavy industries and sectors. integrating renewable energy solutions. The Green Jobs Provides a network of institutions In Ghana, a Green Jobs Assessment Assessment with specialised modelling with modelling was conducted in

capabilities that are

complementary to PAGE - to

strengthen assessment findings

that are provided to governments for policy design and delivery.

Institutions Network (GAIN) collaboration with SINTEF (a Norwegian

research institution and member to the

In Guyana, a Green Jobs Assessment was finalized in 2024 by PAGE in collaboration with the GAIN Network,

using economic modelling.

ILO-GAIN).

# **ILO Programmes** and Projects

- Have implementation capabilities to follow through on approaches and measures that create decent work opportunities and to ensure continuity and sustained application of analytical findings on green jobs that result from PAGE's work.
- In Morocco, an e-learning platform was launched to enhance skills in Morocco's agro-industrial sector, developed in a partnership that included PAGE, the ILO ProAgro project and the Mohammed VI Polytechnique University.
- In Ghana, alongside the work that PAGE supported on building and applying a Green Jobs Assessment Model, the ILO-EU Integrated Action on Green Jobs and Skills Project has promoted digital skills development, focusing on the green jobs potential in selected sectors included in the model.

#### Projects and Programmes Funded by the International Climate Initiative (IKI)

- Enables the implementation of projects that accelerate the climate and nature actions and allows to follow through on and complement PAGE's work.
- In India, the IKI-funded EcoAdvance project will co-finance the development of comprehensive Eco-mark criteria for the textile sector. PAGE supported the release of India's new Eco-mark Scheme in 2024.
- In 2024, PAGE continued its strategic collaboration with the Green Economy Transformation (GET) project ensuring complementarity of work and approaches in countries of common interest such as Argentina, including GIZ-GET participation in Argentina's PAGE transition ceremony.

# **5.PAGE SECRETARIAT AND GOVERNANCE BODIES**

The PAGE Secretariat has continuously provided its services to the partnership, including programme planning, coordination and monitoring, communication and outreach, fundraising and donor relations, and organizing governance meetings. Serving as the central liaison point between PAGE partners, the Secretariat facilitated governance meetings including a Steering Committee meeting in Brussels, nine Technical Team calls, three Management Board meetings, and multiple bilateral meetings with funding partners throughout 2024. Under the Technical Team's direction, the Secretariat ensured smooth inter-agency cooperation, with key achievements in 2024 including the roll-out of the new global and regional workplan for 2024-2025 and the selection of four countries to engage with PAGE under the updated Strategy 2021-2030.

For country engagement, the Secretariat coordinated efforts to select Brazil, Kazakhstan, Indonesia, and South Africa as first countries under the new delivery model, while monitoring activities in countries receiving multi-year support under the previous delivery model (Kazakhstan, India, Indonesia, Thailand, Cambodia and Rwanda) and advising on sustainability plans for countries completing their multi-year support programme (Argentina, Mato Grosso State, Uruguay, Kazakhstan, Kyrgyz Republic, Indonesia and Thailand). Furthermore, the Secretariat developed and implemented a traffic light system to regularly monitor the progress of country, global and regional work activities, and facilitated the finalisation of the updated Strategy, its translation into French and Spanish, and its launch at the World Circular Economy Forum 2024.

The Secretariat coordinated the finalisation and release of the 2023 PAGE Annual Progress Report and the third edition of the *Green Economy Progress Measurement Framework*, while contributing to partner meetings such as the Green Growth Knowledge Partnership (GGKP) Steering Group Meeting, or the UN Environment Management Group retreat. Additionally, the Secretariat coordinated with other initiatives supporting green economy transformation, including meetings with the Partners for Inclusive Green Economy (PIGE) and maintained quarterly calls with the Green Economy Coalition (GEC) and the GGKP. On the financial management side, the Secretariat coordinated the development of UN agency workplans for the 22<sup>nd</sup> and 23<sup>rd</sup> requests for fund transfer from the PAGE Multi-Partner Trust Fund (MPTF) and facilitated new contribution agreements for the MPTF from the Republic of Korea and Sweden for 2025.

For outreach events described in the section of this report 'Promoting dialogue and debate on inclusive green economy', the Secretariat actively participated in several events including the coordination meeting with the EU's SWITCH to Green Facility at WCEF 2024, focusing on EU-funded global and regional sustainability programmes, as well as the 3<sup>rd</sup> PAGE Industry Summer School described under Outcome 3, delivering the opening presentation and hosting an information booth. For country level events, the PAGE Secretariat provided opening remarks at Argentina's PAGE transition ceremony in November, supported Indonesia's national dialogue in December with a recorded address from the Management Board Chair, and coordinated expert participation at the October Asia regional workshop on SDG12 co-organized by the One Planet Network, the Asian Institute of Technology and the Joint Graduate School of Energy and Environment at King Mongkut's University of Technology Thonburi.

The Secretariat organized webinars in the key thematic areas of PAGE bringing together different audiences, such as the *Social Dialogue in Focus* for exchange among PAGE actors, *Financing Just Transitions*, a thematic dialogue for UNRCOs, and *Findings from Measuring Green Economy Progress*, with more details provided in the following sections of this report: 'Enhancing South-South exchange and collaboration'; 'Leveraging the green transition through the UN system'; and 'Promoting dialogue and debate on inclusive green economy'.

To amplify PAGE's visibility and impact, the Secretariat led outreach and communications activities as described in Section Advocacy, outreach and communications. The Secretariat managed the PAGE website, monthly newsletters, social media and published a series of interviews with partners and experts. Additionally, the Secretariat ensured coverage of global events including: i) *Exploring nature positive solutions* at Biodiversity COP16; ii) Regional dialogues with the Coalition of Finance Ministers for Climate Action; iii) PAGE policy dialogues on just transition at COP29; iv) Side event at the Summit of the Future: *Green and circular – can it be fair?*, v) *Public and private finance for just transition* - at the One Planet Network Forum; and vi) *Transforming industries through circular economy* - Summer School.

# **6.FINANCIAL OVERVIEW**

#### **Resource mobilisation and allocations**

In 2024, all PAGE delivery was secured through funds pooled in the PAGE Multi-Partner Trust Fund (MPTF), which has become the only avenue for funding to PAGE. The UNDP-based Multi-Partner Trust Fund Office (MPTF Office) provided the fund management services as Administrative Agent.

PAGE started the year under a new four-year Budget and Delivery Framework for 2024-2027 that allocated already secured funds of USD 25 million, resulting into USD 23 million available for programming (without 1per cent Trust Fund Fee and 7 per cent Programme Support Cost).

This amount included remaining funds available in the PAGE Multi-Partner Trust Fund and pledges under the signed agreements received in 2023 from the European Commission, Republic of Korea and SIDA.

The budget framework aligns with the updated PAGE Strategy 2021-2030 and delivery framework as agreed with PAGE Management Board and Steering Committee. The funds have been allocated in line with priorities of the updated Strategy, including a larger regional and global portfolio, anticipated support to 8 countries under a new delivery model, and ongoing commitments with countries agreed prior to 2024, as well as ensuring PAGE's governance structure.

#### **Budget and delivery framework 2024-2027 (thousand USD)**

	2024	2025	2026	2027	Total USD
PAGE global and regional work		1,197	1,153	1,153	4.70m
Knowledge creation and sharing   Global and Regional events   UN Reform Support   Capacity building   SSC facilitation					
Country Support – New Delivery Model		1,381	1,381	1,381	5.52m
8 countries over 4 years - 244k/country/year Activities in a country for up to 2 years	976	976	976	976	3.90m
Country coordination for 8 countries working over a 2-year period; USD 60k/country/year		240	240	240	960k
Centrally managed retainer of international experts	165	165	165	165	660k
Finalize multi-year support in 8 PAGE countries	1,594	1,595	1,100	460	4.75m
Kazakhstan, India, Guatemala, Indonesia, Morocco, Thailand, Rwanda and Cambodia					
Coordination and governance		2,104	2,104	2,104	7.51m
Technical assistance by the five agencies (200k/agency)		1,000	1,000	1,000	3.63m
PAGE Secretariat		1,064	1,064	1,064	3.72m
Management Board, Technical Team and Steering Committee meetings	40	40	40	40	160k
Contingency funds		110	110	110	440k
Total	5480	6387	5848	5208	22.92m

<sup>\*</sup>Figure adjusted for the portion of funds that agencies and Secretariat have already received in advance in 2023

In addition to the already programmed funds, PAGE signed two contribution agreements with new pledges for 2025:

- New contribution from the Republic of Korea of estimated USD 631,330; and
- New contribution from SIDA of estimated USD 963,762.

#### Income and contributions

With the new agreements signed in 2024 and in-kind contributions from agencies, the total cumulative amount of PAGE funds since 2013 reached USD 111.6 million.

Since the establishment of the PAGE MPTF in 2017 PAGE received pledges of USD 65.13 million (including USD 7.05 million for green recovery support) and deposits of USD 63.88 million.

USD 1,611,332 additional income reached the PAGE MPTF in 2024 (Table 1 in Consolidated Annual Financial Report of the Administrative Agent).

The commitments and the contributions received in the PAGE MPTF in 2024 are summarized in Table 2 of the Consolidated Annual Financial Report of the Administrative Agent. The overview is limited to the commitments to the PAGE MPTF and does not include the 2017-2022 contribution from the EU or other contributions received before 2017 in the UNEP Trust Fund.

#### **Fund transfers to agencies**

Throughout 2024, the disbursement of funds to agencies was facilitated by the PAGE Secretariat and the MPTF Office based on the agreed bi-annual work plan 2024-2025 with allocations for global and regional work and for select workplans with partner countries after Management Board approval of fund transfers.

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 expenditures.

<u>Closure of projects under PAGE MPTF:</u> The multi-year project supporting the Green Growth Knowledge Platform (GGKP) for USD 2,192,430 came to an end in December 2022 with final expenditures of USD 2,141,098 and a balance of USD 51,332 returned to the trust fund in 2024. The UNDP Special Project, also of multi-year duration, came to an end in June 2023 and was operationally closed. Final expenditures will be reported in 2025.

#### LIST OF ABBREVIATIONS AND ACRONYMS

APA Academy of Public Administration
ASEAN Association of Southeast Asian Nations
BAPPENAS Ministry of National Development Planning

BCG Bio-Circular-Green

BIOFIN Biodiversity Finance Initiative CAA Climate Action Academy

CBD Convention on Biological Diversity

CCA Common Country Analysis

CDRI Cambodia Development Resource Institute

CE Cambridge Econometrics
CEO Chief Executive Officer

CFMCA Coalition of Finance Ministers for Climate Action

CIP Country Implementation Plan

COP Conference of Parties

DESA Department of Economic and Social Affairs (UN)

DFFE Department of Forestry, Fisheries, and the Environment (South Africa)

EGS Environmental Good and Services
EQS Environmental Quality Standards
ESG Environmental. Social and Governance

ETP Ecological Transformation Plan

ETS Emission Trading Scheme

EU European Union EV Electric Vehicle

FLW Food Loss and Waste

GACERE Global Alliance on Circular Economy and Resource Efficiency

GAIN Green Jobs Assessment Institutions Network

GBF Global Biodiversity Framework

GDP Gross Domestic Product
GEC Green Economy Coalition
GEF Global Environmental Facility

GELA Green Economy Learning Assessment

GEPMF Green Economy Progress Measurement Framework

GET Green Economy Transformation
GFPN Green Fiscal Policy Network

GGCRS Green Growth and Climate Resilience Strategy

GGKP Green Growth Knowledge Partnership

GJAM Green Jobs Assessment Model
HEIS Higher Education Institutions
IGE Inclusive Green Economy

ILO International Labour Organization IRP International Resource Panel IKI International Climate Initiative IUA Industrial Union of Argentina

LCDI Low Carbon Development Initiative

LDC **Least Developed Country** 

**LEDS Low-Emission Development Strategy** 

LiFF Lifestyles for Environment

Long-Term Low Emissions Development Strategy LT-LEDS

**MGNREGA** Mahatma Gandhi National Rural Employment Guarantee

**MINAM** Ministry of Environment

**MINECOFIN** Ministry of Finance and Economic Planning

**MoEFCC** Ministry of Environment, Forest and Climate Change

MoRD Ministry of Rural Development **MPTF** 

Multi-Partner Trust Fund

**MSMEs** Micro, Small and Medium-Sized Enterprises

**NAVI** National Institute of Viticulture **NBSAP** National Biodiversity Action Plan **NCCP National Climate Change Policy NDCs Nationally Determined Contributions** 

**NESDC** National Economic and Social Development Council **NESDP** National Economic and Social Development Plan

NGO Non-Governmental Organization NLRM National Rural Livelihood Mission

**NSP** National Strategic Plan

**NSSD** National Strategy for Sustainable Development

**NST** National Strategy for Transformation

**OECD** Organization for Economic Cooperation and Development

OPN One Planet Network

**PAGE** Partnership for Action on Green Economy

PAP **Priority Action Plan** 

Presidential Climate Commission PCC PCI Produce. Conserve and Include

PIGE Partners for Inclusive Green Economy

PEDN Strategic Plan for the National Development

**PFM Public Financial Management** 

PMAY-G Pradhan Mantri Awaas Yojana - Gramin **PMGSY** Pradhan Mantri Gram Sadak Yojana

**PNDES** Ministry of Production

**PROs Producer Responsibility Organizations** 

**PSE** Plan Senegal Emergent

**RECP** Resource Efficiency and Cleaner Production

**RPJMN** Medium-term Development Plan SBA Sustainable Budgeting Approach

SCP Sustainable Consumption and Production

**SDGs** Sustainable Development Goals

SEA Strategic Environmental Assessment

**SIDS** Small Island Developing States SINTEF A Norwegian research organization **SMEs** Small and Medium-sized Enterprises **SNEV** National Green Economy Strategy

SPP Sustainable Public Procurement

SSC South-South Collaboration

SSTC South-South and Triangular Cooperation

TVET Technical and Vocational Education and Training

UIA Industrial Union of Argentina

UN United Nations

UN CC:Learn The One UN Climate Change Learning Partnership

UNCT United Nations Country Team

UN DCO United Nations Development Coordination Office

UNDESA United Nations Department of Economic and Social Affairs

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNEP FI United Nations Environment Programme Finance Initiative

UNESCAP United Nations Economic and Social Commission for Asia and the Pacific

UNFCCC United Nations Framework Convention on Climate Change

UNIDO United Nations Industrial Development Organization
UNITAR United Nations Institute for Training and Research

UNRC United Nations Resident Coordinator

UNRCO United Nations Resident Coordinator Office

WCEF World Circular Economy Forum



PAGE was launched in 2013 as a response to the call at Rio+20 to support countries addressing one of the greatest challenges of our time: building economies that improve human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.

The Partnership brings together the expertise, convening power and networks of five United Nations agencies – United Nations Environment Programme, International Labour Organization, United Nations Development Programme, United Nations Industrial Development Organization, and United Nations Institute for Training and Research – to support countries in addressing one of the most pressing challenges of the 21st century: transforming their economies into drivers of sustainability.

PAGE supports nations and regions in reframing economic policies and practices around sustainability to foster economic growth, create income and jobs, reduce poverty and inequality, strengthen ecological foundations of their economies, and achieve the Sustainable Development Goals.

#### FOR FURTHER INFORMATION:

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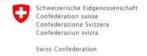












Federal Department of Economic Affairs FDEA State Secretariat for Economic Affairs SECO