Just Transition and Green Jobs: Lessons, perspectives, and opportunities under PAGE

A mapping piece on PAGE-ILO’s support to advance a just transition

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Acknowledgement

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List of abbreviations

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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ALMPs</td>
<td>Active Labour Market Policies</td>
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<tr>
<td>BAPPENAS</td>
<td>Ministry of National Development Planning Indonesia</td>
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<td>BAU</td>
<td>Business-as-usual</td>
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<td>CA4J</td>
<td>Climate Actions for Jobs</td>
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<td>CDG</td>
<td>General Discussion Committee</td>
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<td>CNTAC</td>
<td>China National Textile and Apparel Council</td>
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<td>CODES</td>
<td>Coalition for Digital Environment Sustainability</td>
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<td></td>
<td>Department of Forestry, Fisheries and Environment</td>
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<td>DFFE</td>
<td>Development Working Group</td>
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<td>DWG</td>
<td>Decent Work in Garment Supply Chain in Asia</td>
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<td></td>
<td>Economic empowerment of women in green industry</td>
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<td>EEWiGi</td>
<td>European Commission</td>
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<td>EU</td>
<td>Green Jobs Assessment Institutions Network</td>
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<td>GAIN</td>
<td>Green Macroeconomic Transformation</td>
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<td>GET</td>
<td>Green Growth Knowledge Platform</td>
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<td>GHG</td>
<td>Greenhouse Gas</td>
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<td>GIZ</td>
<td>Gesellschaft für Internationale Zusammenarbeit</td>
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<td>GJAM</td>
<td>Green Jobs Assessment Model</td>
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<td>IGE</td>
<td>Inclusive Green Economy</td>
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<td>ILC</td>
<td>International Labour Conference</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>IO</td>
<td>Input-Output</td>
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<td>ITC</td>
<td>International Training Centre</td>
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<td>LCDI</td>
<td>Low Carbon Development Indonesia</td>
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<td>NDCs</td>
<td>Nationally Determined Contributions</td>
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<td>Acronym</td>
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<tr>
<td>NEDLAC</td>
<td>National Economic Development and Labour Council</td>
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<td>ONP</td>
<td>One Planet Network</td>
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<td>OSH</td>
<td>Occupational safety and health</td>
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<td>PPP</td>
<td>Public-Private Partnerships</td>
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<tr>
<td>RSK</td>
<td>Rabat-Salé-Kenitra</td>
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<tr>
<td>RSA</td>
<td>Rapid Situtional Analysis</td>
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<tr>
<td>SCP</td>
<td>Sustainable Consumption and Production</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>SEMs</td>
<td>Small &amp; Medium-sized Enterprises</td>
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<tr>
<td>Sida</td>
<td>Swedish International Development Cooperation Agency</td>
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<tr>
<td>SIYB</td>
<td>Start and Improve Your Business</td>
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<td>SSTC</td>
<td>South-South and Triangular Cooperation</td>
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<tr>
<td>TVET</td>
<td>Technical and Vocational Education and Training</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNEMG</td>
<td>United Nations Environment Management Group</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
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<tr>
<td>UNITAR</td>
<td>United Nations Institute for Training and Research</td>
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<td>UNRCO</td>
<td>United Nations Resident Coordination Office</td>
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1 Introduction

Current macroeconomic systems are eroding the ecological foundations of most of the countries, and rapidly changing climate with environmental degradation impacting negatively human health, well-being, and economic sectors. While natural resources account for a substantial amount of national GDP in many economies, environmental degradation and climate change is, above all, affecting local communities who depend on those resources and ecosystem services for income and livelihood. Ensuring that green economic transformations remain just and inclusive is crucial to mitigate risks and significant implications for most vulnerable group, regions, sectors and to make sure no one is left behind.

The general objective of this mapping piece is to provide an overview of the initiatives and progress made by the Partnership for Action on Green Economy (PAGE) in its 22 member countries with the support from the International Labour Organization (ILO) in achieving a just transition towards environmentally sustainable economies and societies for all. It focuses on emphasizing the urgent need to address the negative impacts of climate and environmental change on jobs and to promote inclusive and sustainable economic transformations at the national, regional and sectoral levels.

This mapping piece aims to capture key interventions, lessons learnt, different experiences, and insights undertaken by PAGE programme and the ILO to advance a just transition across various sectors and countries. It includes information on national frameworks with policy and sectoral interventions implemented in member countries, highlighting the transition towards green and sustainable economies while ensuring social equity and decent work opportunities. Moreover, this mapping piece aims to serve as a valuable resource with collected good practices and a way forward for policymakers, stakeholders, and researchers interested in
understanding the role of PAGE and the ILO in promoting a just transition and creating green job opportunities in their respective countries to achieve goals and objectives of the Paris Agreement and 2030 Agenda for Sustainable Development.

1.1 Climate and environmental change impacts on jobs

Environmental stewardship and employment effects go hand in hand, as 1.2 billion jobs (40% of the global workforce) depend on a stable, healthy environment and sustainable use of natural resources and ecosystem services. The world is already experiencing the drastically scaled-up impacts and consequences of the triple planetary crisis: climate change, biodiversity loss, and environmental pollution. The increased recurrence of unpredictable weather events such as floods, heat stress and more protracted droughts, continues to disrupt the working conditions for workers, livelihoods, communities, and enterprises. It is estimated that 2% of working hours, that is equivalent to 80 million full-time jobs – will be lost by 2030 due to heat stress.

On the other hand, if temperature increase remains below 2°C above pre-industrial levels as adopted in the Paris Agreement, the ILO analysed and estimated that 24 million new jobs will be created while 6 million will be lost, resulting in a net gain of 18 million new jobs by 2030. Furthermore, according to another ILO report this signifies that inaction is not an option for the world of work and that the cost of inaction will be many times greater than the price of investments needed now.

As countries transition away from fossil fuels, the labour market will face further disruptive implications and challenges in terms of job displacement and reallocation with massive need to reskill and upskill workers. A green macroeconomic transformation (GET) is complex and multidimensional. However, through early identification of investment and innovation opportunities, as well as of understanding potential risks and losses, and adopting a whole-of-society approach with inclusive and effective social dialogue among all impacted groups, large-scale changes in the labour market and wider economy can be anticipated, prepared for, and well managed.

1.2 The PAGE Agenda and Vision

The PAGE- is a joint initiative of five United Nations (UN) agencies – United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), International Labour Organization (ILO), United Nations Institute for Training and Research (UNITAR) and United Nations Industrial Development Organization (UNIDO), eight funding partners and 22 partner countries. Established in 2013, PAGE works to support nations and regions in achieving the UN Sustainable Development Goals (SDGs) and the targets of the Paris Agreement by reframing economic policies, sectoral reforms, and practices around sustainability.

With the combined expertise of the partner agencies, who work closely with national multi-stakeholders and UN Resident Coordination Offices (UNRCOs), PAGE has
become a prominent model of effective inter-agency cooperation. It delivers holistic country support that considers economic, social, and environmental dimensions of the green economic transformation.

Since 2013, PAGE has been promoting the « Inclusive Green Economy » (IGE) model – a concept developed by UNEP. This model recognises that there are many and diverse pathways to environmental sustainability and calls for nuanced and context-dependent policies on national circumstances, contexts, and level of development. As an alternative to today’s dominant economic model, which encourages wasteful consumption and production and poses widespread environmental and health risks, the IGE model aims to address ecological and resource scarcities, and results in social inequality within and between countries and regions. It promotes not only a low-carbon and resource-efficient economy but also one that is socially inclusive, just, and human-centred.

To support countries embarking on a green and inclusive trajectory, PAGE offers evidence-based economic and scientific advisory services to governments on policy development, technical assistance for policy implementation, and individual and institutional capacity-development services for creating an enabling policy environment that promotes green jobs growth today and in the future.

As of 2023 and a decade of action on green economy, PAGE has supported over 100 policies to curb these challenges in partnering countries (see Table 1).

Table 1: “By 2022 PAGE supported to foster over 100 policies in 22 partnering countries”

<table>
<thead>
<tr>
<th>Country</th>
<th>Key areas of Work</th>
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<tbody>
<tr>
<td>Argentina</td>
<td>• PAGE finalized a National Green Jobs Promotion Strategy and Roadmap(^7) with focus on greening the country’s active labour market policies &lt;br&gt;• National sustainable construction plan for a Just Transition(^8) (in development) &lt;br&gt;• PAGE supported Argentina’s Green Hydrogen National Strategy. &lt;br&gt;• PAGE in partnerships with various government ministries produced and presented a National Roadmap for a Green Employment Promotion Strategy. &lt;br&gt;• PAGE, in collaboration with the ILO and the Metropolitan University of Labour, supported the Ministry of Labor, Employment, and Social Security developing indicators for monitoring just transition and green employment policies. &lt;br&gt;• PAGE supported the development of inclusive green economy policies in the framework of the National Cabinet for Climate Change. &lt;br&gt;• PAGE provided support to the Ministry of Economy in developing a National Plan for Circular as part of the National Green Productive Development Programme.(^9)</td>
</tr>
<tr>
<td>Country</td>
<td>Key Activities</td>
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| Ghana     | - PAGE developed a financial instrument to support the country in sustainable finance development.  
- Coordinated Programme of Economic and Social Development Policies 2017-2024, including the Agenda for Jobs: Creating Prosperity and Equal Opportunity for All  
- ILO supported the process of development of National Green Jobs Strategy for 2021-2025 to feed into the National Employment and in supporting Green Enterprises for Decent Job Creations.  
- PAGE finalized a report on fiscal policies to support country in a post-COVID green economic recovery working with the Overseas Development Institute's research team.  
- PAGE supported the development of National Sustainability Plan. |
| Guatemala | - Development of green fiscal policies  
- PAGE supported in the implementation of Environmental Fiscal Strategy.  
- Development of ILO’s methodology on the Rapid Situational Analysis (RSA) with just transition characterising main entry points for the country both in policy and sectoral level.  
- Recognition of the green economy as a tool for sustainable development in Guatemala  
- Inclusion of the green economy in the General Policy of the Government |
| India     | - PAGE assisted in setting up the “Task Force on Environment Sustainability” to support green transition of Indian railways.  
- PAGE partnered with India’s Ministry of Rural Development to develop a timebound strategy and policy approach for integrating principles of environmental sustainability and inclusive green economy into local level development planning  
- PAGE conveyed a policy dialogue on “Unlocking inclusive & green manufacturing growth and diversification at the national level.” |
| Indonesia | - PAGE supported the Development Working Group (DWG) during Indonesia’s G20 presidency. It includes references to the green and blue economy.  
- Indonesia launched its Green Economy Index at The G20, facilitated by the National Development Planning Agency (Bappenas) as the focal agency for PAGE. The index utilizes PAGE’s Green Economy Progress Index methodology.  
- PAGE completed a Policy Scoping Assessment in West Java Province on Food Loss and Waste.  
- ILO supported the Green Jobs and Just Transition Policy Readiness Assessment in the Energy Sector  
- Report on “Low Carbon Development: A Paradigm Shift towards a Green Economy in Indonesia” launched with inputs provided by |
<table>
<thead>
<tr>
<th>Country</th>
<th>PAGE Actions</th>
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</table>
| Kazakhstan              | • PAGE, together with the Economic Research Institute, finalised a Carbon Neutrality Strategy until 2060.  
                          | • PAGE provided technical support during the revision process of Kazakhstan's environmental regulations. The new Environmental Code is called the “EcoCode”.  
                          | • PAGE contributed to the development of a policy vision for the waste sector  
                          | • PAGE played a significant role in the adoption of the updated ‘Strategic Plan for Development of the Republic of Kazakhstan until 2025’ in March 2021. |
| Kyrgyz Republic         | • PAGE worked with the Ministry of Economy and Commerce to develop a National Industrial Resource Efficiency Policy to promote climate-friendly industrial development. |
| Mauritius               | • PAGE has directly supported the drafting of the Marshall Plan against Poverty and Exclusion, addressing social inclusion as a vital part of an inclusive green economy.  
                          | • PAGE produced a study on the access to, and use of, green finance by SMEs (small and medium-sized enterprises) in Mauritius |
| Mongolia                | • PAGE developed Green Development Policy and Implementation Plan The policy focuses on transitioning to a green economy through sectors such as renewable energy, sustainable transport, and sustainable mining practices. |
| Peru                    | • PAGE supported the National Competitiveness and Productivity Policy specific milestones on environmental sustainability; sectoral and thematic reforms related to green jobs and green industry  
                          | • PAGE developed recommendations for a National Green Industrial Policy  
| Senegal                 | • National Green Jobs Strategy, part of National Employment Policy (2015-2016)  
                          | • PAGE, in partnership with the Economic, Social, and Environmental Council, developed a strategic document with identified sectors impacted by climate change measures, analyses COVID-19's effects, and proposes policies to mitigate employment impacts and promote green job creation in line with NDC targets.  
                          | • PAGE played a pivotal role in the drafting of Senegal's National Action Plan for Sustainable Public Procurement.  
                          | • PAGE supported the Ministry of Industrial Development and Small and Medium Industries via ‘Economic empowerment of women in green industry’ (EEWiGI) project to integrate environmental and |
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<table>
<thead>
<tr>
<th>Country</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Senegal</td>
<td>Gender dimensions into Senegal’s Industrialization Policy and Strategy 2021-2035</td>
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<tr>
<td>South Africa</td>
<td>PAGE undertook the Green Economy Industry and Trade Analysis(^{23})</td>
</tr>
<tr>
<td>Uruguay</td>
<td>PAGE supported the Ministry of Industry, Energy and Mining in designing and validating the National Strategy for Circular Economy(^{24})</td>
</tr>
<tr>
<td></td>
<td>PAGE supported the Ministry of Labour for the integration of the environmental and just transition perspective in various policies it develops and by strengthening the capacities of its work teams.</td>
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<tr>
<td></td>
<td>PAGE supported new National Waste Management Plan(^{25})</td>
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Source: Please see more information on other policy work in PAGE partnering countries available at https://www.un-page.org/2022-annual-report/policies-supported/

1.3 Key principles and concepts of a just transition and green jobs

Central to PAGE’s work for accelerating an inclusive green economy is policy development for enabling green jobs creation and a just transition for all. But what are green jobs, and what does a just transition entail?

What are Green Jobs?

Box 1: Definition of Green Jobs developed through intergovernmental processes and international organizations

Green jobs are decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency. Green Jobs Help:

a) Improve energy and raw materials efficiency
b) Limit greenhouse gas emissions
c) Minimize waste and pollution
d) Protect and restore ecosystems
e) Support adaptation to the effects of climate change.


« Decent jobs » are jobs that pay a fair income, guarantees employment security, safe and non-discriminatory working conditions, includes social protection for workers and their families, and backs freedom of affiliation\(^{26,26}\). Decent jobs are a co-benefit of a green and just transition due to the fact that such jobs entail practices such as cleaner production and consumption and energy efficiency that improve
occupational safety and health (OSH) in the workplace. Green and decent jobs are key building blocks of a just transition towards environmentally sustainable economies and societies for all.

What does a Just Transition entail?

The ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all27 (adopted in 2015) outlines nine key policy areas and institutional arrangements for a just transition on which are:

(a) macroeconomic and growth policies;
(b) industrial and sectoral policies;
(c) enterprise policies;
(d) skills development;
(e) occupational safety and health;
(f) social protection;
(g) active labour market policies;
(h) rights; and
(i) social dialogue and tripartism

The newly adopted Resolution and Conclusion on Just Transition28, during the 111th Session of the International Labour Conference (ILC) conducted in June 2023, defines a «just transition» as the promotion of green economy in a way that is fair and inclusive as possible to everyone concerned – workers, enterprises and communities (see boxes 2 and 3). This entails creating decent work opportunities and leaving no one behind for a social justice and human-centered sustainable development.

Box 2: Key concept, definition and guiding principles for a just transition for all

...Just transition involves maximising the social and economic opportunities of climate and environmental action, including an enabling environment for sustainable enterprises, while minimising and carefully managing challenges. It should be based on effective social dialogue, respect for fundamental principles and rights at work, and be in accordance with international labour standards. Stakeholder engagement is also important.

A just transition is central to delivering sustainable development in its economic, social, and environmental dimensions and to addressing the linkages between them. It is instrumental in taking ambitious action on environmental and climate change and pursuing the realization of the goals and commitments of the Paris Agreement and, as appropriate, other international environmental agreements relevant to a just transition.

Source: Guiding principles for a just transition for all, adopted Resolution of the 111th Session of the ILC, June 2023

The following box provides a comprehensive overview of the imperatives of a just transition as an outcome of the General Discussion Committee on a Just Transition (CDG) discussed and adopted at the ILC 2023
Box 3: Imperatives of a Just Transition

- Just transition is crucial for achieving social justice, decent work, poverty eradication, and addressing environmental and climate change.
- Just transition is necessary for reaping benefits from addressing the environmental crisis. It requires planning and coordination to address employment losses, decent work deficits, inequality, and educational misalignments.
- Inclusive just transition entails a strong gender dimension to address many of the environmental challenges and leverage the potential opportunities.
- Strong social commitment and consensus is fundamental. Social dialogue must be integral to policymaking and implementation. Engagement and consultations should take place with all relevant stakeholders.
- The promotion of sustainable public, private and social enterprises by fostering an enabling environment, such as through supportive policies, incentives, and clear regulatory frameworks is key for a just transition. Such policies and incentives should be coupled with the promotion of effective social dialogue, advancement of decent work and the promotion of environmentally sustainable business models.
- Gender equality, social inclusion and equity should be promoted, paying particular attention to indigenous and tribal peoples and groups in vulnerable situations.
- Ensuring a just transition is important for all countries at all levels of development, and for all economic sectors, the formal as well as the informal economy, and should be in line with national development priorities.
- The International Labour Conference endorses the ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all (2015) which provides the central reference for policymaking and a basis for action. Their implementation should be accelerated and scaled up through a reinvigorated framework for action consisting of four interrelated and mutually supportive elements namely: (i) promoting inclusive, sustainable and job-rich economies; (ii) advancing social justice; (iii) managing the process of just transition; and (iv) financing a just transition.

Source: Extracted from Resolution and Conclusions on a Just Transition, International Labour Conference 111th Session, June 2023

1.4 Anchoring a Just Transition in PAGE’s country support and engagement

PAGE supports governments to progress and achieve positive outcomes in line with their nationally determined contributions (NDCs) on green economic transformation. Thanks to the endorsement of the ILO’s Decent Work Agenda and the Guidelines for a just transition towards environmentally sustainable economies and societies for all, considerations of a just transition are increasingly being included in NDCs on green transitions. However, the integration of economic, social, and employment consideration in climate and environmental policies is uneven, often excluding employers’ and workers’ organisations from the formulation and implementation of NDCs. Green jobs and just transition are relatively new concepts in many policy
areas, requiring activities to build awareness, a strong social consensus, and development of the capacity so that the necessary policies can be fully developed.

Although the need for ensuring a just transition applies to all countries seeking to green their economies, there is no “one-size-fits-all” approach. The positive and negative social and employment outcomes of a green economic transformation will vary depending on economic sectors, geographical locations, and national circumstances thereby impacting countries, regions, enterprises, workers, and communities differently.

Fossil fuel-dependent nations and regions will experience job losses when governments decide to move away from coal, gas, and oil. Similarly, resource-intensive sectors such as manufacturing and construction, or hard-to-abate industries such as steel, cement, and petrochemicals will face expensive restructuring costs when switching to greener production models. Meanwhile, countries, industries, and people stand to gain from job creation in alternative and more sustainable employment growth that is more resilient to climate change and environmental degradation.

In collaboration with the ILO and other partner agencies, PAGE pilots several scoping studies and green jobs assessments that lay the foundation for developing policies, interventions and programmes aimed at promoting the creation of green jobs and sustainable enterprises. These initiatives are tailored to the local context and the specific country needs.

**Box 4: PAGE’s policy work on green jobs and just transition policy readiness assessment in the energy sector in Indonesia**

PAGE and ILO have made significant contributions in Indonesia by focusing on translating the Low-Carbon Development (LCD) Initiative into specific sectoral policies, with a particular emphasis on the energy sector.

PAGE and ILO have been instrumental in developing and implementing a supportive policy ecosystem in Indonesia. They have worked on policy coordination across sectors and levels of government, integrating ecological, social, and economic concerns. They have also aimed to reform institutional settings to better support activities related to greening and just transition.

Energy transition will, however, create significant employment changes in the energy and electricity sectors. In the face of such changes, developing a supportive policy ecosystem to enable future green jobs growth and to ensure a just transition is critical.

In 2022, the ILO conducted a green jobs policy readiness assessment to understand the existing green jobs and just transition policy frameworks in Indonesia. This assessment provided insights into the policy landscape, identified areas for improvement, and highlighted opportunities for supporting green jobs and just transition. This green jobs policy readiness assessment aims to develop a baseline perspective of current green jobs and Just Transition policy frameworks in Indonesia, with a focus on the energy sector. It has also explored recommendations for measures to support the labour market, from both the supply and demand sides, as well as for overarching measures that will promote the enabling environment needed to ensure a just transition process.
1.5 The need for a just, green, and human-centred recovery from Covid-19

The Covid-19 pandemic created widespread shocks to labour markets globally as modes of production and consumption were almost instantly disrupted, unleashing a domino effect of multiple crises and putting green economic transformation progress on hold. According to ILO figures\textsuperscript{31}, the pandemic led to an unprecedented loss of 255 million full-time equivalent jobs. As unemployment and inflation rates skyrocketed, a debt crisis followed, and for the first time in two decades, the number of people living in poverty increased. These crises disproportionately impacted regions (the Americas experiencing the highest employment losses and Europe the lowest), sectors (with employment losses in low-skilled industries and job growth in high-skilled sectors), and workers (with women and youths seeing the sharpest drop in disposable income compared to men and elderly workers). The global crises unleashed by the pandemic serve as another reminder of the fragile, unsustainable economic and social system we live in today, heightening the call for governments to strengthen their resilience and safeguard jobs and incomes for people, livelihoods, and societies.\textsuperscript{32}

Building back better and greener

Despite the disruption of inclusive green economy progress in various countries due to the pandemic, the Covid-19 recovery presented an opportunity to reimagine economic systems, fundamentally rethink our relationship with the natural environment, and create better job markets. Under the PAGE global modelling work, the ILO, UNEP and research partners have presented initial findings showcasing green recovery scenarios with investments in green energy and transport would create 20.5 million new jobs by 2030, significantly more than from a similarly sized stimulus based on cutting value-added taxes, which would add only 3 million new jobs.\textsuperscript{33}

To ensure a just and human-centred recovery, principles of « social justice » need to be at the core of public policy, where all women and men receive the same quality of work, skills, opportunity, treatment, and social protection as they transition to the new world of work. Meaningful, effective, and inclusive social dialogue between governments and representative organizations of workers and employers will be essential to build a strong consensus with the involvement of significant players representing broader stakeholder engagement and offering a platform for the groups that traditionally have not been invited to shape decisions that have an impact on them.

Global and Regional Services Package
By supporting policymakers and practitioners, PAGE actively fosters dialogue and collaborations on a global scale to accelerate and expand green economic transformation. These efforts contribute to informed decision-making and cultivate stronger political commitment to economic transformation that aligns with climate objectives.

As a global platform and knowledge hub, PAGE plays a pivotal role in informing global debates and shaping the agenda. It develops analytical tools and produces documents that outline best practices, while also facilitating peer-to-peer learning and fostering South-South Triangular Cooperation among countries (See section 3).

2 What does the ILO offer in PAGE partnering countries?

The ILO estimates that green macroeconomic transformations will be the most extensive shift in labour markets in history – greater than that of digitalisation and technology. The impacts on employment can be considered from four perspectives: (i) new jobs will be created; (ii) some jobs might be substituted by others; (iii) certain jobs will be lost or eliminated without being substituted; and (iv) most jobs will be transformed.

The ILO supports PAGE countries through holistic and different policy-oriented interventions and activities in promoting green jobs opportunities and addressing the social dimensions of the greening of economies to achieve a just transition for all. As a unique tripartite UN agency, the ILO works together with representatives of governments, workers, and employers’ organisations to understand the nature and scale of changes that could happen in labour markets as countries adopt environmental, climate and sustainability policies to adapt to or mitigate climate change impacts. The ILO’s activities within PAGE can be unpacked into two main pathways:

➔ Supporting development and implementation of policies to promote green jobs

➔ Facilitating social dialogue as key enabler in a just transition
Through its unique tripartite mandate and structure, specialised technical expertise and range of programmes and tools, the ILO brings to PAGE the expertise and leadership needed to understand the intricacies and dynamics of large-scale socio-economic transformations and to manage them well and inclusively within the realm of work.\textsuperscript{35}

2.1 ILO’s support to promote green jobs development

PAGE collaborates with the ILO\textsuperscript{37}, supporting partner countries with technical, tailored, and advisory support on the creation of green jobs and advancing a just transition. The ILO provides support in several areas, primarily on climate change and decent work, green and sustainable enterprise development, green works, and skills development.

The ILO’s offer and services include:

- **Knowledge creation** on the linkages between labour and environmental issues.
- **Advocacy** by building partnerships, such as with the Partnership for Action on Green Economy and the Green Jobs Assessment Institutions Network (GAIN)\textsuperscript{1} – a global community of institutions, researchers and experts that analyses social and employment outcomes of green policies to help guide future policy making. Also the green jobs modelling and assessments are framed within the just transition, that allow countries to foresee the opportunities and risks to reshape their economic and labour policies and investment decisions to maximize employment gains.

\textsuperscript{1} https://www.ilo.org/global/topics/green-jobs/areas-of-work/gain/lang--en/index.htm
Capacity development and training through a range of online and face-to-face courses, both tailored to partner countries and inter-regional courses at their international training centre (ITC) in Turin to increase the understanding of main just transition areas and provide practical support for implementation at country, local, and sectoral levels.

Diagnostics and prioritization to help policymakers make informed and research-based decisions.

Pilot projects and interventions in partner countries in Africa, Asia, Europe and Latin America. In Senegal, project activities under the framework of PAGE contributed to the implementation of a national programme on green jobs. In South Africa, the Free State SME Development Initiative seeks to create decent job opportunities through small and medium sized enterprise (SME) development. In Uruguay, pilot experiences have been developed to mainstream the environmental and green job perspective into vocational training and support for greening enterprises.

Policy advice to develop and implement effective national or sectoral policies that create green jobs, foster social inclusion, and improve sustainability.

Knowledge sharing through global and South-South exchange forums, allowing countries to exchange knowledge and learn from one another.

In addition, the « Climate Action for Jobs » (CA4J) encompasses enabling climate action through the promotion of decent jobs and social justice, providing support to countries in achieving a just transition, and facilitating an inclusive recovery from the COVID-19 pandemic. In addition, it encompasses enabling climate action through the promotion of decent jobs and social justice, providing support to countries in achieving a just transition, and facilitating an inclusive recovery from the COVID-19 pandemic.

Box 5. Uruguay greening the hydroponics and empowering rural women under PAGE

PAGE in the second half of 2021 started the implementation of a green job creation program for people with disabilities in Uruguay to strengthen productive enterprises through hydroponics in centres working with people with disabilities (PwD). The aim was to promote a circular, green, inclusive, and sustainable economy, generating new employment opportunities while fostering social and labour inclusion for people with disabilities. Additionally, a comprehensive training programme titled “capacity building project for rural women” was developed to empower 51 rural women in transitioning to a green economy.

Both programmes were implemented in multiple departments throughout the country, such as Montevideo, Canelones, Colonia, Maldonado, and Paysandu. This broad geographical coverage is essential to ensure that the benefits of the programmes are accessible to diverse areas and communities.
### Key interventions and results:

- **Knowledge and skills:** A series of five training workshops on hydroponics and related techniques were organized, combining theory and practical activities. In addition, a series of eight virtual workshops were held with rural women to strengthen their knowledge and practices.
- **Ongoing support and monitoring** were provided to production centers and to the selected rural enterprises.
- **Facilitated networking opportunities and collaboration** among rural women and between the centres and local communities as well as local enterprises and other organizations.
- **Established a revolving fund** to provide financial support for the development and growth of women’s enterprises, ensuring access to sources of funding and acting to remove some of the existing barriers for these groups.

### Outcomes:

- **Equipped participants** with valuable skills and knowledge in hydroponics and self-cultivation practices, as well as on green jobs, formalization mechanisms, circular economy and other core topics.
- **Promoted a greener, more inclusive economy and sustainable entrepreneurship**
- **Strengthened community centres** and empowered individuals with disabilities in economic participation.
- **Enhanced the well-being and resilience of local communities,** by fostering employment opportunities, embracing sustainable practices, and empowering rural women and people with disabilities.
2.2 ILO’s support for advancing and achieving a Just Transition

To prepare for the macroeconomic shift green economic transformations entail, countries must thoroughly assess what is at stake and how to minimise damage. How will the structural changes affect workers, different sectors, and regions? Who are likely to be the winners and losers? And most importantly: What social protection measures need to be put in place to ensure that no one is left behind?

Assessment of green employment potential

The ILO offers partner countries the « Green Jobs Assessment Model » (GJAM), a macro-economic modelling framework that projects, through a global scenario-based tool, and analyses the employment impact of green policies. The GJAM assesses and guides policymaking and strengthens institutional capacity on all levels. By analysing the options available for maximizing job gains, minimizing job losses, ways to redress gender and income inequality, etc., the GJAM helps national policymakers to make informed decisions based on empirical methods and evidence-based research (see examples in Box 6).

Although sharing a common vision and methodological framework, the GJAM models vary in scope, context, and specific objectives, depending on country needs, circumstances and capacities. The model is developed in collaboration with governments and national partners to ensure national ownership, by developing sustainable tailored work programs for a duration of 2-3 years. These programs are guided by a technical research team and steering committee composed of a national research institution, the national statistics office and government ministries.

Currently under the PAGE, the ILO is supporting the implementation of GJAM work in partner countries (namely in Burkina Faso, Ghana, Guyana, and Mauritius),
resulting in the production of green jobs assessments globally. Furthermore, as per country interest the ILO is preparing to commence similar assessments in Rwanda and Morocco as well.

Box 6: ILO's Green Jobs modelling and assessment reports

Green jobs and employment impacts of a green and low carbon strategy in Mauritius: Mauritius’ Climate Change Act entered into force in April 2021 and the National Determined Contributions (NDC) were submitted to the Climate Secretariat in October 2021, stepping up the island’s long-term commitment to sustainable development. Mauritius aims to reduce overall Greenhouse Gas (GHG) emissions by 40% in 2030 compared to the Business-as-Usual (BAU) scenario, levelling up existing green strategies and climate policies. This report sets out to quantify the impact of climate policies (as reflected in the NDC strategy) on the social, economic, and labour market outcomes.

Global employment impact of COVID-19 crisis and recovery policies: methodology and sample results: The objective of this report is to illustrate the modelling of employment outcomes of country-based policies to stimulate the economy, notably a green and climate friendly economy.

Source: ILO webpage as of May 2023.

Social dialogue for a just transition

At the core of PAGE’s just transition agenda is policy coherence, governance and effective institutional arrangements, facilitated via social dialogue among relevant stakeholders. The ILO defines « social dialogue » as all types of negotiation, consultation or information sharing among representatives of governments, employers, and workers, or between those of employers and workers, on issues of common interest relating to economic and social policy.

Based on its tripartite structure and mandate, the ILO is uniquely positioned to facilitate social dialogue with various stakeholders, primarily representatives of governments, workers’ organizations, employers’ organizations and including the civil society organizations, to meet and agree on goals and action plans. Social dialogue plays a critical role in ensuring an inclusive, participatory, and fair transition process. It promotes stakeholder ownership, addresses the concerns and needs of different stakeholders, enhances equity and social justice, builds trust, and fosters collaboration. In other words, the transition to a green economy should be “just” in terms of both its outcomes, which are increased decent work opportunities, as well as the process, which must be inclusive and based on social dialogue. By facilitating open and constructive dialogue, a just transition can be achieved, leading to more sustainable, effective, and equitable outcomes.
Policy advice and development

As a guiding framework, the ILO released a set of « Guidelines for a just transition towards environmentally sustainable economies and societies for all » in 2015, designed to support policy coherence, fair and effective institutional arrangements and facilitate social dialogue among governments and social partners.\(^{44}\)

The Guidelines are the key international reference as policy tool and framework that outline key potential policy entry-points to promote a just transition. They were formulated by representatives of governments, workers’ and employers’ organisations with expert input and advice and enjoy broad-based support and endorsement across the world. The Guidelines contributes to recognising the social and employment impacts of climate policies as it puts the goals of decent work, social justice, and poverty eradication at the core of green policies, making sure that people at risk are protected. The ILO supports PAGE’s agenda to reshape labour markets by reframing macroeconomic, industrial and enterprise policies in key sectors for transformative change.

Furthermore, adopted Resolution and Conclusion of the 111th ILC as outcome of the General Discussion Committee on a Just Transition, discussed, agreed and included the roles of tripartite constituents to formulate, implement, promote full, productive and decent work as a core objective of a just transition within coherent and integrated measures into NDCs and net-zero targets.

Skills development

Skills development at all levels is essential to promote the greening of the economy. The availability of relevant skills is needed to secure investment in clean and digital economies and increase the employability of workers from declining industries. Socially inclusive opportunities for up- and re-skilling is crucial to levelling the playing field in the transition to green and digital economies and make sure no one is left behind. ILO studies show that male-dominated sectors are ahead in terms of greening compared to women-dominated work.\(^{45}\) To ensure a just transition, gender inequalities must be carefully considered in skills development policies and programmes. Similarly, skills development targeted for youth is essential to lift younger generations out of the poverty cycle.

Training and capacity development

Within the just transition framework, the ILO offers a range of online and face-to-face courses, both tailored to partner countries and inter-regional courses at its International Training Centre (ITC-ILO) in Turin, Italy, to increase the understanding of main just transition areas and provide technical and practical support for design and implementation at country, local, and sectoral levels. In addition to training courses in Turin, the ILO offers tailored country programmes, and designs public employment programmes which aim to create employment, fill gaps in the provision
of assets or services, complement social protection provisions and contribute to active labour market policies (ALMPs).

Moreover, PAGE supports and closely partners with the ILO and its agencies in the development of individual and institutional capacity, peer-learning and fostering of best practices towards more resilient, green, and inclusive recovery among PAGE countries through biannual Global Green Economy Academy (for detailed information refer to box 7 that ITC-ILO has designed four editions of since 2017. Main objective of this global learning platform is to solidify current knowledge and foster an exchange of practices in the transition to environmentally sustainable and socially inclusive economies.
3 Just Transition and Green Jobs policy progress

3.1 In sectors

Textiles and Garments

➔ Dialogue for just transition in Indonesia’s energy and textile industries

Indonesia is one of the world’s largest textile producers and the most extensive coal consumer in South-East Asia, making the garment industry and energy supply critical sectors for green economic transformation. In October 2022, the ILO facilitated a two-day workshop in Jakarta, titled “Achieving a Just Transition for Energy and Textile & Garment Sector” to spur stakeholder discussions on supporting a coal phase-out in Indonesia and South-East Asia and its implications on just transition. The workshop invited representatives from the government and spokespeople from employers’ and workers’ organisations to share their knowledge, experience and ideas for greening the two sectors whilst ensuring inclusive social protection. Participants stressed the importance of social dialogue at all levels of decision-making processes and the value of providing workers with certification and reskilling to safeguard new employment and income as the sectors transform. The workshop was conducted by PAGE in collaboration with the ILO project “Decent Work in the Garment Supply Chain in Asia” (DWGSCA), funded by the Swedish International Development Cooperation Agency (Sida).

➔ Discussion series on just transition in Asia’s Textile and Garment Sector

A first conversation in a discussion series on just transition in the Textile and Garment Sector in Asia, as part of the ILO-Sida regional DWGSCA project, was held virtually organized by PAGE and China National Textile and Apparel Council (CNTAC) in November 2020, discussing the implications for a just transition in China’s textile sector. The main objective of the social dialogue was to collect data on the sectoral impact of Covid-19 lockdowns to identify and prioritise interventions for building back better. Despite the immense social and economic implications on the textile and garment sector in China and the Asia and Pacific region, the pandemic provided an opportunity to revisit weaknesses of the current supply chain model and create better jobs. The industry engages 20 million workers, making China the world’s largest textile producer, many being rural women and migrant workers. The conversation further aimed to strengthen multi-stakeholder engagement, collaboration, and capacity development for a just transition through social dialogue.

Tourism
Green jobs potential in ger and nature tourism in Mongolia

As a part of PAGE’s Green Recovery Project in Mongolia, the ILO conducted a study on green jobs and just transition challenges regarding ger and nature tourism, a concept which refers to eco and cultural tourism where guests stay with herder families in the countryside. The assessment results showed that ger tourism activities have a lower environmental impact than traditional tourism and contribute to the socio-economic development of herders and their communities by providing additional sources of income. Whilst revenue from livestock can be unstable, highly seasonal, and market-driven, sustainable tourism could be an economic complement for safeguarding herder communities’ livelihoods. However, as of now, the sector lacks knowledge of decent work attributes as it is characterised by poor labour standards, long working hours, low wages, limited social protection and gender discrimination, with women accounting for much of the more labour-intensive activities, such as providing tourists accommodation and meals. The study findings highlight how community-based ger tourism, where tasks are shared evenly between community members to allow for a work-life balance and avoid gender discrimination, offers a pathway for a just and green transition in Mongolia.

Agriculture and Livestock

Study on green employment creation and entrepreneurship in Morocco

As part of ILO’s ProAro Marocco project and in collaboration with the Ministries of Agriculture and Employment, PAGE dcompleted a study on the potential for green job creation in (RSK) region was carried out for the organic and agro-ecological sectors of the Rabat-Salé-Kenitra region. Experts analysed the potential for economic growth in the two sectors, the involvement of youths and the inclusion of women and identified the gaps for skills upgrades. The research provided practical recommendations for supporting the technical and vocational education and training (TVET) systems to catalyse green recovery by supporting green entrepreneurship in organic and agro-ecological sectors.

Green jobs and just transition promotion workshop in Thailand

Under the PAGE framework, the ILO organised a workshop in November 2022 in Chiang Mai to build the capacity of local government, SMEs and farmers’ communities to promote greenjobs and just transition in the sustainable agriculture sector through institutional strengthening and social dialogue. Participants discussed some challenges with Thailand’s greening policies, including the clarification of green jobs definitions, improving the representation of civil society and trade unions in social dialogue, and the need for analysis of the employment impact in the green economy. Participants also received advice on local income generation and green jobs opportunities as well as skills needed for sustainable agriculture based on the findings of the ILO Green Jobs assessment and case study analysis. The objectives of the event were to enhance awareness and exchange knowledge and experiences of local stakeholders and advise on local income
generation and skills needs for sustainable agriculture based on the findings of the ILO Green Jobs assessment and case study analysis.51

3.2 In countries

Argentina

Argentina is the third-largest economy in Latin America. While well-diversified, it has recently experienced a slowdown in economic progress with low levels of Economic fluctuations in growth and recession have negatively impacted productivity as well as investments in technology. This has led the government to pursue structural changes that can facilitate growth, employment, and sustainability within the context of an inclusive green economy.

The impacts of the global Covid-19 pandemic were hard felt in Argentina, as the country already struggled with external debt and record-high inflation. Despite this, Argentina’s newly appointed government has elevated green economy in its agenda and advanced policies in areas of green jobs, energy transition and social economy aimed at providing new growth opportunities through a sustainable approach. Argentina joined PAGE in 2018 to receive support in transitioning away from their fossil fuel dependence and transform the country’s energy landscape in a fair and socially inclusive way.

Stocktaking of PAGE initiatives and interventions in Argentina at glance:

➔ In September 2020, PAGE supported the Ministry of Labour with the formation of two Boards: one on Just Transition and Labour and one on Sustainable Production. The Boards act as a key national mechanism for green economy issues to be officially discussed in the policymaking process and under the umbrella of the National Cabinet of Ministers on Climate Change to channel PAGE-supported policy proposals towards national policymaking at the highest inter-ministerial level.

➔ A study on the linkages between the 2030 Agenda and Just Transition for Green Recovery was finalised in August 2020. The analysis emphasizes how green economy can be a tool to achieve sustainable development with a special focus on poverty eradication.

➔ The first tripartite High-Level Dialogue Event on Green Economy and Just Transition was held in 2020, offering an opportunity for key stakeholders to strengthen coordination on policies for a Just Transition and increase awareness and momentum on sustainable and inclusive outcomes.

➔ In 2020, PAGE finalised the Labour Diagnostic of the Just Transition to a Green Economy report. The research is composed of five interrelated studies that provided inputs for different elements of the country’s IGE
transition. The study will feed into the design and implementation of policies aimed at promoting a fair transition process, with a special focus on gender.

➔ In 2020, Following two online ITC-ILO training courses titled “Green Jobs for Sustainable Development” and “Managing Just Transition Policies”, PAGE Argentina facilitated a tripartite delegation where key decision makers from the Argentinian Ministry of Environment, Ministry of Production and Ministry of Labour, the business sector and trade unions discussed how to incorporate sustainability into core policies that affect workers, enterprises, and industry.53

➔ In 2021, PAGE Argentina, with the ILO in the lead, finalised a National Green Jobs Promotion Strategy and Roadmap which provides concrete actions for greening the active labour market policies in the country. Supporting the development of the Strategy and Roadmap, PAGE helped build new institutional capacities to guarantee informed and tripartite decision-making on the issues of just transition.

➔ In 2021, under the leadership of a senior economist in Argentina, PAGE developed a concept document on Just Transition as a vehicle for the achievement of the 2030 Agenda in Argentina that gives a theoretical in-depth analysis for policymaking. The document provides a conceptual framework of the link between the SDGs and the just transition towards a green economy from the perspective of environmental economics. In turn, it concludes with policy recommendations so that the transition that will take place after the Covid-19 pandemic can be fair and sustainable.

➔ In 2020, PAGE launched a Communication Campaign to promote a Just Transition to a Green Economy emphasizing the potential to create new decent jobs and preserve and restore the environment.

➔ In 2022, PAGE supported the Social and Economic Council of the Presidency in developing a Study on the Labour Impacts of Green Hydrogen Projects across the country. Economic specialists mobilized by the Green TEAM supported the Social and Economic Council of the Presidency in developing a study on the labour impacts of green hydrogen projects across the country, feeding into the National Sustainable Hydrogen Promotion Law to be presented at the Parliament in 2023.

➔ In 2022, Within the framework of PAGE the Nationally Determined Contributions (NDCs) and employment: Analysis of possible future scenarios and their impact on the labour market in Argentina study was also prepared.

➔ In 2022, PAGE also contributed to the “Green Economy” mission building. It also worked on “National Determined Contributions (NDCs) and Employment: Analysis of Possible Future Scenarios and Their Impact on the Labour Market in Argentina”. The project aims to develop a methodology for assessing the impact of climate change policies on economic, social,
and environmental factors. It focuses on transforming the productive matrix by promoting sustainable activities and cleaner techniques, while considering priority sectors with significant environmental impacts. The study analyses both quantitative and qualitative aspects, including vulnerable employment categories and greenhouse gas emissions. The results emphasize the importance of understanding the social impacts of transitioning to a green economy. The project includes a methodology for forecasting the impact of greenhouse gas reduction policies on employment using an input-output (IO) model for Argentina.

➔ In 2023, PAGE supported the government of Argentina with focusing on key principles and definitions of decent work, just transition and environmental sustainability. Adopted new Ministerial Decree called upon to create new “National Green Jobs Promotion Programme” with own national resources with budget allocations.

Senegal

Senegal has established itself as one of West Africa’s economic hubs and made significant strides towards improving the well-being of its population. But, with approximately 50 per cent of its territory classified as semi-arid, the country is especially vulnerable to climate change. As a large share of the population relies heavily on natural capital for their livelihood, committing to a green economy is key for developmental success.

In October 2022, Senegal celebrated eight years of PAGE collaboration after joining the partnership in 2014. With a young active population, Senegal’s labour market is characterized by a constant stream of new workers, providing opportunities for green job creation.

Stocktaking of PAGE initiatives and interventions in Senegal at glance:

➔ In 2021, the ILO under PAGE Senegal developed an operational directory on green jobs and occupations which aimed to further support the creation of new green jobs and the adaptation and transformation of existing jobs and identifying learning gaps. The directory allows stakeholders in the labour market to measure and define green skill requirements, thereby helping guide the training sector in developing programmes to meet this new demand more accurately. The directory provides a reference for labour market actors, both in the public and private sectors, to identify, express, and meet their needs with respect to green skills. In addition, the training institutions benefit from guidance on how to develop training services in line with labour market demand.

➔ Following different training sessions between 2017 and 2019, which trained 76 eco-business owners (including 32 women), PAGE conducted in 2021, three training sessions on Green Start and Improve Your Business (SIYB) tools as part of targeted activities of the green recovery program. The training (which benefited 47 people, of whom 75% were women), aimed to reinforce
entrepreneurial capacities in line with PAGE’s additional green recovery activities and the Ministry of Environment and Sustainable Development’s policy to promote green jobs.

➔ In 2022, PAGE played a key role in empowering women to participate in the green transition and conducted a series of training sessions for women involved in processing of agricultural and beekeeping products from the classified forest of Mbao, Senegal, to help increase their income generated from the conservation of the forest and processing of bio-organic products. The trainings aimed to empower women business owners by improving market access of local produce and focused on biological control methods and the safe use of low residual biopesticides, quality and hygiene, post-harvest conservation and packaging. One third of the group members were designated as leaders to disseminate the key learnings to community groups and youth in the surrounding areas of the capital Dakar. Through training sessions using the ILO’s Start and Improve Your (Green) Business tool, market gardening groups and women farmers from the classified forest of Mbao have been equipped with entrepreneurial skills and knowledge in agroecology and product processing. This support aims to strengthen their socio-economic resilience, promote agroecological practices, and add value to their products. By enhancing their capacities and improving the quality of their products, women can increase their income and contribute to the preservation of the forest and local biodiversity.

➔ In 2020 and 2021, PAGE supported waste sector entrepreneurship and formalization, resulting in the preparation of a cooperative of waste pickers working in the Mbeubeuss landfill. Through this cooperative, waste pickers gain access to economic formalization and social inclusion, providing benefits like market access, occupational safety and health measures, social protection, and a stable income.

South Africa

South Africa has become one of the largest economies in Africa, benefiting from high levels of industrialisation and abundant natural resources, including large mineral deposits. The country has significantly lowered poverty rates and increased access to public services. Being a resource-intensive economy with large coal dependence and carbon-intensive consumption patterns has resulted in a heavy ecological footprint.

Considering its geographical location, South Africa is particularly exposed to the effects of climate change, putting the most vulnerable communities at most risk. The economy is still expanding, but economic growth has slowed in recent years, with many social and environmental challenges persisting — such as high levels of inequality, poverty, and unemployment. The economic and employment fallout resulting from the Covid-19 crisis has further exacerbated these challenges.

Recognizing the potential of green economy strategies, the South African government embarked on a development path linking economic prosperity to
environmental sustainability and social equity. A comprehensive green economy policy framework was already in place when South Africa joined the partnership in 2015, hence PAGE work has been structured around improving policy coordination, deepening collaboration between different stakeholders, and supporting policy implementation. PAGE has also helped to identify sectors and industrial segments with potential for inclusive green economy transformation and strengthened capabilities through green economy learning and capacity development. PAGE and the ILO supported several national and sectoral dialogues against priority interventions with the aim of strengthening South Africa’s transition towards sustainable energy and energy efficiency. Firstly, in the National Economic Development and Labour Council (NEDLAC) as the statutory National Social Dialogue structure that brings together government, workers, employers and civil society, but also through the O.R. Tambo Debate Series, organized by the Wits University School of Governance, debates focused on the theme of renewable energy and industrialization in South Africa in the context of the National Development Plan, which commits the country to diversifying its energy mix and expanding renewables. Subsequently, the ILO supported the National Planning Commission (NPC) to review and revise the National Development Plan (NDP) 2030-2050 with a clear focus on just transition reflected in the 2050 Vision and Pathways for a Just Transition to a low carbon, climate resilient economy and society.

Stock-taking of PAGE initiatives i and interventions in South Africa at glance: PAGE activities have contributed to South Africa assuming a leadership position as a green economy champion, as demonstrated by hosting the Third PAGE Ministerial Conference in Cape Town in January 2019, the first hosted by a PAGE partner country. The Conference culminated in the Cape Town Action Pathways Towards 2030 which summarizes key policy messages and vital action pathways to advance inclusive and sustainable economies to achieve the 2030 Agenda for Sustainable Development.

In 2019, the Green Jobs Assessment Institutions Network (GAIN) regional training hub for Africa was launched by the ILO and the University of Pretoria at the Third PAGE Ministerial Conference in January 2019, the first such conference hosted by a PAGE partner country. The hub will support institutional capacity development for the measurement and modelling of the social and employment outcomes of climate change and sustainable development policies. The first GAIN training edition was held in September 2019 with six countries participating.

In October 2019, PAGE in collaboration with the ILO Country Office in Pretoria and the ITC-ILO delivered the training course Promoting a just transition to low-carbon and climate-resilient economies in Southern Africa, with tripartite delegations from Botswana, Eswatini, Lesotho and South Africa. The course was tailor-made to the challenges and opportunities that countries in Southern Africa face. The one-week training was rounded off with an action planning session where each country delegation discussed the next steps on the pathway towards a just transition in their countries.
In September 2020, PAGE South Africa contributed to the EU Climate Diplomacy Week as a panellist in a webinar on Reimagining Our Future – Entrepreneurship for A Just Transition, sharing experiences on tools to advance just transition approaches as part of just and green recovery efforts, with South Africa as a leading example.55

In 2021, following the onset of the COVID-19 pandemic and the deepening socio-economic crisis with a large drop in employment rate, PAGE engaged in a Rapid economic modelling exercise to assess the impact of South Africa’s relief package on inclusive green economy to promote decent employment.

In 2021, PAGE South Africa, in partnership with GIZ and the Department of Forestry, Fisheries and the Environment (DFFE) which is the Government Focal Point of PAGE, hosted a virtual Green Jobs for a Better Future Dialogue Series, consisting of five webinars that explored avenues for creating employment opportunities, particularly for young people, through green jobs as an important element of a just transition and a green recovery from the COVID-19 pandemic. The webinars brought together different stakeholders to share their views on enabling policies, job opportunities in specific sectors, and prevalent skills gaps and discuss with participants implementable actions to support young people in their aspirations to work in the green economy.56

In 2021, PAGE, in collaboration with South Africa’s DFFE, hosted the Driving Force for Change II (DFC II) Youth Challenge, an award calling on young green entrepreneurs between 18 and 34 years of age, who are already running a small or medium-sized business in South Africa, but who wish to further develop entrepreneurship skills and competencies. The long-term objective is to support the country’s green economy development by unlocking green opportunities and create quality jobs for youth.57

The DFC II in 2022 was organized and supported with PAGE while 16 young green entrepreneurs were announced by the Minister of Forestry, Fisheries and the Environment, Ms Barbara Creecy, during the award ceremony organized in August. One of the main objectives was to create green jobs ideas through business modules and youth green entrepreneurship. The DFC II challenge enhanced the youth-led businesses’ viability and success so that they, in turn, are better equipped to drive change for IGE and a more just economic recovery.58

In 2022, in partnership with iSpani, a youth-led start-up, PAGE supported Youth Barometer on Just Transition, employing young people to collect data from the youth. The barometer helped to surface the views and perceptions of diverse youth groups regarding climate change, the green economy, and a just transition. To implement the Barometer, over 100 unemployed youth were trained to conduct interviews and do surveys in their communities and surrounding areas using an app. The survey reached 10,000 youth respondents across the country, including in rural and peri-urban areas and generated

5 PAGE COVID-19 IGE Rapid Modelling exercise
insights on how young people feel climate change will impact their future, what skills will be necessary for the future of green jobs, and which green sectors they would be most interested working in. Based on the results, an in-depth policy analysis of policies and interventions related to youth and climate change, green economy and a just transition is being conducted to highlight barriers and opportunities.

➔ Under the leadership of Department of Forestry, Fisheries and Environment (DFFE), PAGE supported the revision of the “Guideline for the Development of Integrated Waste Management Plans” and associated model by-laws. A report for the revision of the guidelines provided recommendations on how to mainstream the principles of the National Waste Management Strategy 2020, integrate waste pickers in the municipal waste planning process, and follow best practices and principles of a circular economy. It was based on consultations with national stakeholders, the UN Country Team, and the Council for Scientific and Industrial Research. A second report provided an analysis of existing waste management model by-laws, their alignment with available legislation, and recommendations to the DFFE for by-law revisions. A validation workshop was organized on 31 May 2022 to share the results of the two reports. The updating of both the bylaws and the Guideline, to be inclusive of circularity, has prompted the appointment of a consultancy to inform the updating of the South African Waste Information Centre online platform for reporting. The inclusion of circularity in the waste sector has informed broader policy through mandatory reporting requirements, once actioned by the successful service provider. Information and outreach sessions for municipalities on the proposed revisions will take place in 2023 before the adoption of the guideline.

➔ In celebration of the seven years of successful partnership towards IGE and a green recovery, a close-out ceremony in October 2022 showcased the progress made by national stakeholders over the years. A video of the PAGE story in South Africa and an infographic on the impact and achievements of PAGE were released, whilst the event also looked into the future to ensure sustained positive impact.

3.3 Knowledge Exchange through Global Initiatives, South-South Cooperation and engagement in “One UN”

To spread the word on countries’ IGE progress, PAGE supports its partner countries with developing and implementing national communication strategies and knowledge sharing platforms, where country voices are heard, and best practices shared. The latest virtual « PAGE Family Gathering », held on 2 March, celebrated the results from the 2022 Annual Report and provided an exchange on crisis response considering the most recent global disruptions: the global Covid-19 pandemic and armed-conflicts.59
In May 2021, the ITC-ILO and PAGE organized the 4th edition of the Global Green Academy, uniting 120 participants from 29 countries. The biannual Global Academy covered the following topics in 2021, with key experts and country representatives sharing their knowledge and experiences:

- **Green Recovery**: Including recovery plans, stimulus packages, principles, and different phases of the green recovery cycle.
- **Assessment of Worldwide Recovery Plans**: Examining the "green" aspects of recovery plans globally and extracting lessons from exemplary cases.
- **NDCs for Green Recovery**: Exploring experiences and challenges in utilizing NDCs as entry points for green recovery.
- **Green Recovery and Just Transition**: Addressing employment, equality, and the principle of leaving no one behind.
- **Financing Tools and Mechanisms for Green Recovery**.
- **Budgeting and Tax Policy Tools for Green Recovery**.
- **Case Studies of Green Recovery Measures in Various Sectors**: Including renewable energy, energy efficiency, circular economy, agriculture, ecosystems, and transportation.
- **Greening Industries and Enterprises**.

The Academy culminated in a Knowledge Fair, where PAGE countries showcased their experiences and best practices through virtual booths, promoting peer learning and exchange. This interactive event provided experts and leaders with a platform to explore key topics including green recovery plans, just transition, financing mechanisms, and budgeting tools, facilitating real-time and real-world experience sharing to support policymakers in their recovery agendas.

The academy specifically catered to policymakers, decision-makers, and technical staff from various sectors such as civil society organizations, trade unions, employers’ organizations, businesses, and research institutions. Additionally, it welcomed staff and practitioners from PAGE partner agencies, as well other UN and collaborating agencies, and funding partners.

Source: 2021 PAGE annual report and information note developed by ITC-ILO in 2021.

« South-South and Triangular Cooperation » (SSTC) allows countries to exchange knowledge and learn from one another on decent work and lifelong learning approaches on specific areas such as agriculture development, social protection and climate change, thus fostering inclusive partnerships. On 18 November 2020, PAGE participated in a webinar on *green jobs and a just transition: Country perspectives*, hosted by the Green Growth Knowledge Platform (GGKP) and in collaboration with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). The dialogue featured national counterparts and representatives from Workers’ Unions from two PAGE countries – South Africa and Argentina – both struggling with systemic problems such as high unemployment and poverty rates alongside environmental degradation and climate change. The panel shared their
experiences and best practices for overcoming social, political, and technical challenges within their local contexts. Fruitful discussions on how governments and businesses can better lead a just transition to greener economies followed. Participants highlighted the need to put social dialogue and principles of social justice at the core of policymaking, ensuring that the future of green employment must entail the conditions for decent work – social protection, secure employment, and workplace health and safety regulations.

In addition to knowledge sharing and capacity development, PAGE can drive and support in encouraging South-South cooperation through various mechanisms such as clean technology transfer, peer-learning, policy advocacy, including for climate adaptation and mitigation measures (see Table 2).

Table 2: Possible and forward-looking actions for a climate adaptation under the South-South Cooperation and PAGE

| Capacity development Programs | Creating and implementing capacity development programs aimed at strengthening the technical and institutional capacities of PAGE member countries in climate change adaptation and mitigation. This could include training workshops, knowledge transfer initiatives, and mentorship programs. |
| Technology Transfer Initiatives | Facilitating the transfer of climate-friendly technologies from more developed countries to PAGE member countries. This could involve identifying suitable technologies, establishing partnerships with technology providers, and implementing pilot projects to demonstrate the effectiveness and feasibility of these technologies in local contexts. |
| Funding Mechanism | Exploring innovative funding mechanisms to support climate change initiatives in PAGE countries. This could involve establishing a dedicated fund or leveraging existing financial resources to provide grants, loans, or financial incentives for climate projects in PAGE countries. |
| Policy advocacy and collaboration | Engaging in policy advocacy at regional and international forums to promote the interests and priorities of PAGE countries in climate change negotiations. Foster partnerships and collaborations with relevant stakeholders, such as other international organizations, civil society, and research institutions, to amplify the impact of PAGE initiatives. |
| South-South peer learning | Facilitating peer learning exchanges among PAGE countries, where policymakers, experts, and practitioners from different PAGE countries come together to share experiences, challenges, and success stories in climate change adaptation and mitigation. This can foster a sense of solidarity and create opportunities for cross-country collaboration. |

Source: Authors, Policy Paper on South-South Cooperation for Climate Adaptation: the role of developing countries (unpublished paper)

« One UN » : recently organized forums and events by PAGE in close collaboration with ILO to foster effective collaboration in the UN system on a just transition and circular economy: The 4th Dialogue of the series "One UN for Accelerating a Fair and Green Economic Transformation," 63 jointly organized by PAGE and the
UNRCE, provided a platform for economists, experts, and practitioners to exchange ideas on leveraging green economic transformation to address multidimensional poverty and inequality. The dialogue explored sustainable policy interventions, successful practices in mitigating injustice and advancing social inclusion, including the role of social protection, and the integration of poverty and inequality into green economy frameworks. The discussion emphasized the importance of collaboration, capacity building, and the need for strong social protection systems to support vulnerable populations in the transition towards a fair and green economy.

The first Nexus Dialogue was organized in May 2023, co-organized by the ILO and PAGE co-organized the on sustainable consumption and production, titled “Digitalization for Circular Economy and Green Jobs for Youth”, in close cooperation UN Environment Management Group (EMG) and other UN agencies. The participants underscored the importance of providing youth up- and re-skilling measures to realise the full potential of digitalisation as engine and a catalyst for advancing the circular economy and creating green jobs for youth. It has underscored the importance of collaboration, innovation, and policy coherence in realizing the full potential of digitalization as a catalyst for advancing the circular economy and creating green jobs for youth. This nexus dialogue brought together experts from various UN agencies and sectors to share insights, strategies and collaborative approaches to tackle the intertwined challenges of a rapidly evolving digital landscape and the urgent need for environmental sustainability by promoting SCP patterns and circular economy.

The event featured vibrant discussions, thought-provoking presentations and innovative solutions for sustainable growth and jobs creation. Besides, key themes explored and discussed included the role of technology in advancing circularity, importance of the skills development and re (up) skillling measures for green and digital economies, the intersection of digital transformation and green jobs, and the imperative of inclusive and equitable opportunities for youth in green economy as response to triple-planetary crisis.
4  A Way Forward

The mapping piece provides a comprehensive overview to advance and achieve a just transition under the PAGE programme led by the ILO. By highlighting the adopted Resolution and Conclusions of the 111th Session of International Conference (ILC), it becomes evident that

- Urgent action to advance just transition is an imperative to achieve social justice, decent work and poverty reduction.
- The ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all is endorsed at ILC in 2023 as the central reference for policymaking and a basis for action.
- The ILO must take international leadership in the multilateral system to advance just transition.

Furthermore, addressing the social and economic implications in transitioning to a green economy is paramount. Moreover, the prospective gains from addressing the environmental crisis are not automatic and come by default, unless they are based on a just transition. Just transition reflects a common global purpose that entails responsibilities for everyone, including governments, employers, and workers.

Based on the Resolution and Conclusions the following points outline the possible way forward for PAGE and ILO to catalyze jointly ongoing and future interventions to promote a Just Transition at global, regional, sectoral and country work engagement to meet objectives of the Paris Agreement and 2030 Agenda for sustainable development:

- **Policy Coherence and Integrated Approach**: PAGE and ILO are already working in close coordination to ensure the integration of environmental sustainability and decent work agendas. By aligning green economy strategies with employment policies, both organizations are fostering mutually reinforcing and coherent approaches that promote productive and inclusive transition to facilitate and manage a just transition to environmental sustainability and the circular economy.

- **Building human and institutional capacities for a Just Transition**: Recognizing the importance of empowering workers and communities, PAGE and ILO have embarked on comprehensive capacity-building initiatives. Ongoing training programs, biannual Global Academy and knowledge exchange platforms are equipping individuals with the necessary skills to participate effectively in the green transition and adapt to changing labor market dynamics.

- **Promoting Social Dialogue**: PAGE and ILO have successfully facilitated inclusive and participatory social dialogues among governments, workers’ and employers’ organizations, and other stakeholders. By prioritizing open discussions and consensus-based decision-making, potential conflicts are being addressed, leading to the adoption of socially acceptable and equitable Just Transition policies.

- **Developing Innovative and blended financing mechanisms**: To support Just Transition initiatives, PAGE and ILO have been at the forefront of exploring innovative financing mechanisms. Leveraging public-private partnerships (PPP), accessing climate funds, and mobilizing resources for green investments and social protection measures are ongoing efforts that are already yielding positive results, particularly in regions and sectors heavily impacted by the transition.
• **Monitoring, Evaluation, and Learning**: PAGE and ILO have established a robust monitoring and evaluation framework to assess the progress of Just Transition policies and programs. This ongoing monitoring ensures that evidence-based decision-making and policy adjustments can be made. By continuously learning from experiences, successes, and challenges, both organizations can refine their approaches and achieve greater impact.

• **Strengthening South-South Cooperation**: Recognizing the global nature of the Just Transition challenge, PAGE and ILO have been actively promoting South-South cooperation and knowledge sharing. Through ongoing exchanges between countries facing similar transition challenges, valuable experiences, best practices, and innovative approaches are being shared. This collaborative effort ensures that effective and context specific Just Transition solutions can be developed and implemented.

• **Strong Partnerships**: PAGE has established new and strengthened existing partnerships with other relevant international and regional organizations, UN specialized agencies, funds and programs, civil society, and academia. Through these partnerships PAGE can continue to foster effective and more enhanced UN- collaboration for upstream policy support, resource-sharing and mobilization, and knowledge exchange thus driving forward the Just Transition agenda.
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