



ADVANCING CIRCULARITY AND RESOURCE EFFICIENCY THROUGH PARTNERSHIP

The timely adoption of sustainable consumption and production patterns is key to mitigate threats to human wellness, to economies and to the planet. Choosing more efficient production methods and use of natural resources can be one of the most effective ways to reduce our impact on the environment while simultaneously advancing human wellbeing. Decisions taken now, in response to the impacts of COVID-19, will shape economies for the decades to come. Green stimulus packages, that include a focus on resource efficiency, have the potential to stimulate economic growth and lead to cost savings. The Global Resources Outlook 2019, shows that the extraction and processing of materials, fuels and food make up about half of total global greenhouse gas emissions and more than 90 percent of biodiversity loss and water stress. A global shift is essential: Enacting resource efficiency and sustainable consumption and production policies, growth in global resource use can slow by 25 percent while global gross domestic product could grow by 8 percent by 2060, according to the International Resource Panel.

PAGE has a track record of providing demand-driven policy and capacity-building support combining agendas for growth, jobs, sustainability and reduced inequalities. Using its toolkit and years of experience working towards green economic growth, PAGE has supported countries in achieving multiple targets of SDG 12 — Responsible Consumption and Production. Using Uruguay as a key example and referring to achievements towards resource efficiency and circular economy in an additional thirteen partner countries, this brief highlights PAGE's contribution SDG12.

Resource efficiency and circular economy allow us to advance the transition towards inclusive green economies and achieve multiple targets of a number of SDGs, especially SDG 12, essential to building back better, stronger economies. This involves optimizing systems of consumption and production to increase the value of products, materials and resources, as to increase their lifespan and minimize the generation of waste.

Transformational changes in consumption and production processes are essential for improved prosperity that leaves no one behind, while respecting planetary boundaries, as they

enable new employment opportunities and green growth whilst minimizing material and fiscal resources used. It is also a pathway to achieve global climate targets and protect nature from further degradation. According to the recent International Resource Panel report "Resource Efficiency and Climate Change", implementing material efficiency strategies can reduce emissions by up to 70% in housing and 40% in cars throughout the material cycle by 2050.

By bringing together the specialized expertise of five UN Agencies, PAGE supports national efforts for sustainable consumption and production (SCP), through improving resource efficiency and promoting circular economy principles. This brief explores some practical methods, employed by PAGE and its partners, to implement SCP strategies to contribute to inclusive, sustainable development, using Uruguay as a primary example.



PAGE is a partnership of five UN agencies, 8 funding partners and 20 countries. While this brief focuses on one area of thematic work, the partnership takes a holistic approach and provides demand-driven, technical assistance and capacity-building to support nations in placing sustainability at the heart of economic policies and development planning.

<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>Contributing to Sustainable Development Goal 12</p> <p>RESPONSIBLE CONSUMPTION AND PRODUCTION</p>
<p>17 PARTNERSHIPS FOR THE GOALS</p>	<p>Contributing to Sustainable Development Goal 17</p> <p>PARTNERSHIPS FOR THE GOALS</p>



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PAGE gratefully acknowledges support from the following funding partners:





URUGUAY — PAGE COOPERATION ON CIRCULAR ECONOMY

Uruguay joined PAGE in 2017 and prioritized a circular economy on its pathway to an inclusive green economy. PAGE has supported the country in the following areas:



Policy development and implementation

- Mainstreaming of circular economy into the national programme “Transforma Uruguay”, which is focused on transformation of the economy to increase its competitiveness.
- Operationalizing “Transforma Uruguay” through the National Circular Economy Action Programme that was published in September 2019.
- Capacity-building for the implementation of the National Circular Economy Action Plan.
 - A training course for the analysis of international markets for waste products has been developed.
 - PAGE and the University of the Republic have developed training on raw materials and clean production practices.
 - Development of an online course on cleaner production, together with the University of Montevideo. The course will be used for a training-of-trainers on cleaner production practices and labour formalization.
 - Capacity building to analyse impacts of the artisanal brick industry.
 - Together with Plan Ceibal, a national initiative providing information and communication technology (ICT) equipment to schools, PAGE is supporting development of prototypes of brick-like blocks from recycled plastics that can be used as furniture.
 - PAGE is now supporting the creation of a clean Brick Production School and Park.



Enabling and inspiring action on Circular Economy

Together with the National Directorate of Energy, PAGE is supporting the Energy Efficiency Programme focused on Micro, Small and Medium Enterprises (MSMEs) through:

- Development and application of an app to help MSMEs measure and improve their energy efficiency.
- The Strategic Environmental Assessment of the forest-wood-cellulose value chain.

To inspire wider action:

- In 2019, PAGE launched the competition for the “Uruguay Circular Award” — the first national award for initiatives and projects contributing to the country’s transition towards a circular economy. The award offered visibility and recognition to companies, entrepreneurs, communities and educational institutions whose processes, products or services advance circular economy principles and methods: reduce, reuse, repair and recycle.
- PAGE supported Uruguay in hosting an international event on cleaner production and the formalization of brick production activities.



PAGE has supported the creation of specific circular economy roadmaps and action plans, as well as contributed to the mainstreaming of SCP and resource efficiency principles into national policies, plans and frameworks.

In **Peru**, PAGE is supporting implementation of the National Competitiveness and Productivity Policy, aiming to increase and strengthen an inclusive and sustainable economic growth. Among its nine priorities, the policy calls for circular economy and sound waste management and has led to the development and approval of a National Roadmap on Circular Economy. Principles of SCP and circular economy are also key features of PAGE-supported national development plans; **Burkina Faso's** National Strategy and Action Plan for Green Economy outlines a vision of transformation to strong and inclusive economic growth through SCP patterns and the Green State Development Strategy: Vision 2040 of **Guyana** focuses on management of natural wealth as one of its three main objectives.



Sustainable management & use of natural resources



PAGE supports countries in shifting towards more efficient use of natural resources, through changes in policy and strategy, focusing on sectors such as agriculture, forestry and extractive industries. In **Burkina Faso**, an Action Plan was developed for the Sustainable Management and Export of Non-Timber Forest Products, followed by a stakeholder workshop, training on sustainable trade and the formation of a monitoring committee. A presidential committee on Environmental and Natural Resources was established in **Ghana**, with a mandate to coordinate the government's intervention in the fight against illegal small-scale mining, as well as actions for rehabilitation of degraded forest and farmlands. In response to **South Africa's** ongoing water crisis, PAGE is updating modelling of the water-biodiversity nexus to identify policy responses. In **Senegal**, sustainable management of natural resources has focused on oil and gas, with PAGE having informed legislation for managing revenues from

newly identified reserves. Furthermore, sustainable agriculture has been a priority area in many PAGE countries, resulting, amongst many other outcomes, in the development of a Council for Sustainable Rural Development in **Mato Grosso (State Brazil)** and integration of IGE principles into **Burkina Faso's** National Rural Sector Programme.



Substantially reducing waste generation



PAGE has supported the promotion of circular economy concepts in the waste sector with prevention, reduction, recycling and reuse methods. In **Senegal**, ILO and Women in Informal Employment: Globalizing and Organizing (WIEGO) have commenced work on a pilot project to establish cooperatives among waste pickers in Mbeubeuss, building on a waste management stakeholder workshop conducted by PAGE. An Industrial Waste Assessment conducted by PAGE in **Mauritius** has provided the basis for policy advice on implementation of the Extended Producer Responsibility Principle and a SWITCH Africa Green project which has established ten industrial symbioses in the waste industry. In **Mongolia**, one focus has been on improving the management and recycling of end-of-life vehicles, ultimately leading to a renewed Law on Waste Management. Further PAGE-supported policies on waste management include the **Kazakhstan** National Programme on Waste Management up to 2030, which incorporates principles of circular economy and a Governance Decree on economic mechanisms in the field of waste management in the **Kyrgyz Republic**, both currently under development. PAGE also supported the establishment of a Competitiveness Board for the Circular Economy within the Ministry of Production in **Argentina** to promote recycling and improve waste management processes.





Supporting green entrepreneurship & sustainable business development

In transitioning towards IGE, a key objective for PAGE is to promote sustainable industries and facilitate the creation of green jobs, specifically among small and medium-sized enterprises (SMEs). PAGE's work in this area has involved various workshops and events, such as the Youth Green Entrepreneurship for Circular Economy in **Mongolia**, aiming to mainstream circular economy concepts within the building practices Aimag log-frames. In **Guyana**, PAGE co-organized the International Small Business Expo and Summit, featuring plenary sessions, high-level discussions and promotion of sustainable business practices, as well as opportunities for small-scale entrepreneurs to showcase green and innovative products.

Furthermore, PAGE has supported the implementation of green entrepreneurship training, including a pilot project in **Arequipa, Peru** focusing on waste management training to promote sustainable business activities. In **Senegal**, a workshop for plastic waste management, solar equipment manufacturing and energy efficient transport sectors, supported the implementation of the National Programme for the Promotion of Green Jobs (PACEV). In the next years, work will continue in **Mauritius** on green entrepreneurship in line with its 10-year SME Master Plan, following on from recent consultations and forums, and **India** will explore roadmaps for intervention on Resource Efficiency in MSME's building on from a 2019 National Workshop.



Encouraging companies to adopt sustainable practices

TARGET 12-6



ENCOURAGE COMPANIES TO ADOPT SUSTAINABLE PRACTICES AND SUSTAINABILITY REPORTING

Incorporating principles of circularity and IGE into industrial policies and programmes is key to ensure sustainable production practices. PAGE supports this progress in a variety of its partner countries, informing policy from the findings of Green Industry Assessments, seen in **Peru's** Green Industry Policy, **Burkina Faso's** National Industrial Strategy and Action Plan, and **Mato Grosso's** Green Industrial Development Policy. In **Ghana**, PAGE is facilitating the development of a National Industrial Resource Efficiency Policy and Programme, using lessons learned from demonstration projects in the steel and palm oil industries.

Similarly, a resource efficiency demonstration of the metal industry in the **Kyrgyz Republic** will supplement the recently approved National Sustainable Industrial Development Strategy. In **Jiangsu province, China**, a major focus has been on improving the sustainability of industrial parks, with PAGE having supported national dialogues, various assessments, reports and workshops in the region. Furthermore, countries such as **Ghana** and the **Kyrgyz Republic** have organized training in Energy Management Systems to build capacity within energy intensive industries.

Industry value chains are also a focus for PAGE. A value chain analysis study is currently being completed on the agro-processing industry in **Guyana**, advising industry reforms. Focused on herders and cooperatives (including the critical cashmere market), a public-private investment facility was established in **Mongolia** to support a more market-based value chain. Further, a project is underway in **Jiangsu** on the sustainability of garment industry value chains.



Promotion of Sustainable Public Procurement processes

TARGET 12-7



PROMOTE SUSTAINABLE PUBLIC PROCUREMENT PRACTICES

From its inception in 2013, PAGE has been engaged in the area of sustainable procurement processes, with visible outcomes in different PAGE countries. In **Mongolia**, PAGE contributed to the development of the National Green Development Policy (NGDP), a goal of 20 percent "green" public procurement by 2020. To support this target, PAGE worked to incorporate sustainability principles into the national public procurement framework, resulting in the Amendments to the National Law on Public Procurement. The **Kyrgyz Republic** has also experienced similar advances to develop a New Amendment to the Law on Public Procurement, aiming to catalyse sustainable public procurement (SPP). Moving forward, PAGE will complete analysis and consultations on the feasibility of introducing an SPP Policy and Action Plan for the implementation of SPP in **Kazakhstan**, as well as focusing on developing SPP criteria for selected product categories in **India**.



Supporting scientific & technological capacity on SCP

TARGET 12-A



SUPPORT DEVELOPING COUNTRIES' SCIENTIFIC AND TECHNOLOGICAL CAPACITY FOR SUSTAINABLE CONSUMPTION AND PRODUCTION

A main outcome for PAGE's work is to ensure that individual, institutional and planning capacities for IGE action are strengthened at the national and global level. PAGE has developed training for institutions and universities to share

knowledge and build capacity on SCP, through promotion of policies, practices and indicators for resource efficiency and circular economy implementation. For example, in **Peru**, PAGE has designed two university courses on green growth, development and green economy modelling. Similarly, in **Mongolia** PAGE has been working with universities on integrating IGE concepts and approaches into tertiary programmes and curricula. PAGE prepared agreements to establish a master's degree on green economy at Université Ouaga II in **Burkina Faso**, as well as a professional training on IGE for staff of the agricultural sector. In **Mauritius**, PAGE has trained civil servants to design and deliver effective e-learning programmes on green economy, build capacity on circular economy implementation within the Government.



Developing & implementing tools to monitor sustainable tourism

TARGET 12-B



DEVELOP AND IMPLEMENT TOOLS TO MONITOR SUSTAINABLE TOURISM

Ensuring that the tourism industry is involved in the transition to IGE is essential, and PAGE works towards developing sustainable tourism that creates jobs and promotes local culture and products. In **Mato Grosso State**, PAGE supported the elaboration of Guidelines for the Standardization and Certification of Sustainable Tourism Products in collaboration with the Brazilian Support Service for Micro and Small Enterprises-Mato Grosso (SEBRA-MT). This work supports infrastructure

suitability, capacity building and market access, focusing on responsible consumption, as well as defining strategies and actions for the Roadmap for Sustainable Tourism. In **Mauritius**, PAGE has focused on improving sustainable tourism through greening value chains of tour operators, having conducted various stakeholder workshops and studies. Building on PAGE's recommendations, a project will be implemented as part of the SWITCH Africa Green Phase 2 Programme for **Mauritius**, and UNEP's Responsible Industry Group will provide technical assistance and capacity building for resource efficiency in the tourism sector.



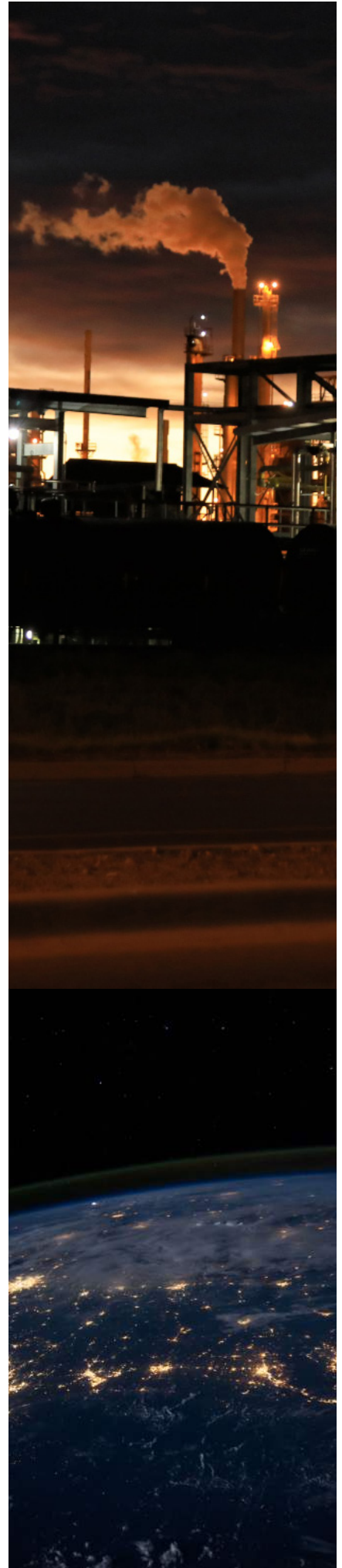
Promoting greater understanding of circular economy

TARGET 12-B



PROMOTE UNIVERSAL UNDERSTANDING OF SUSTAINABLE LIFESTYLES

PAGE has raised awareness and facilitated knowledge sharing of circular economy, SCP and resource efficiency principles through various global events and initiatives. In 2019, PAGE held its Third Ministerial Conference, which focused on exploring opportunities and barriers to accelerating a system-wide change based on circular economy and SCP, among other themes. Previous Ministerial Conferences and other PAGE events have explored similar areas, such as the Good Growth Conference co-organized by PAGE in May 2019, which focused on sustainable commodity supply chains in forestry and agricultural sectors, as well as an event emphasizing the role of global partnerships in unlocking resource efficiency, co-hosted by India at the UN Environment Assembly, Nairobi. PAGE also contributes to the implementation of the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, a multi-stakeholder partnership for SCP, that aims at generating collective impact in areas such as public procurement, buildings and construction, tourism and food systems whilst providing consumer information and education on sustainable lifestyles. These platforms have helped to increase awareness of circular economy on an international scale, as well as providing a platform for exchange of experience and knowledge relating to SCP.



Going forward, under its 2030 Strategy and in light of the COVID-19 crisis, PAGE aims to strengthen its support for countries in reframing of economic policies around SCP practices, as well as embedding circular economy principles into national strategies, increasing momentum on the transition to IGE.