

# Sustainable Development Goals *Policy Brief*



## Innovative solutions for the environmental dimension of the 2030 Agenda for Sustainable Development



### About

The **Sustainable Development Goals Policy Briefs** highlight a hotspot of environmental challenges. The evidence provided builds on scientific data and information hosted on the online platform Environment Live and is complemented by stories from around the world. Readers are invited to explore the numerous clickable links throughout the Brief.

The global environmental governance framework is not keeping pace with the rate of change that is driving environmental degradation and climate change. Innovative solutions are required to accelerate the transition towards sustainable societies and achieve the development pathway set out in Agenda 2030. Innovation is required to better monitor the state of the environment and understand the drivers, for improved data collection, sharing, and analysis to assess progress towards the SDGs.



**UN Environment is the Custodian Agency for several key indicators related to Innovative Solutions:**

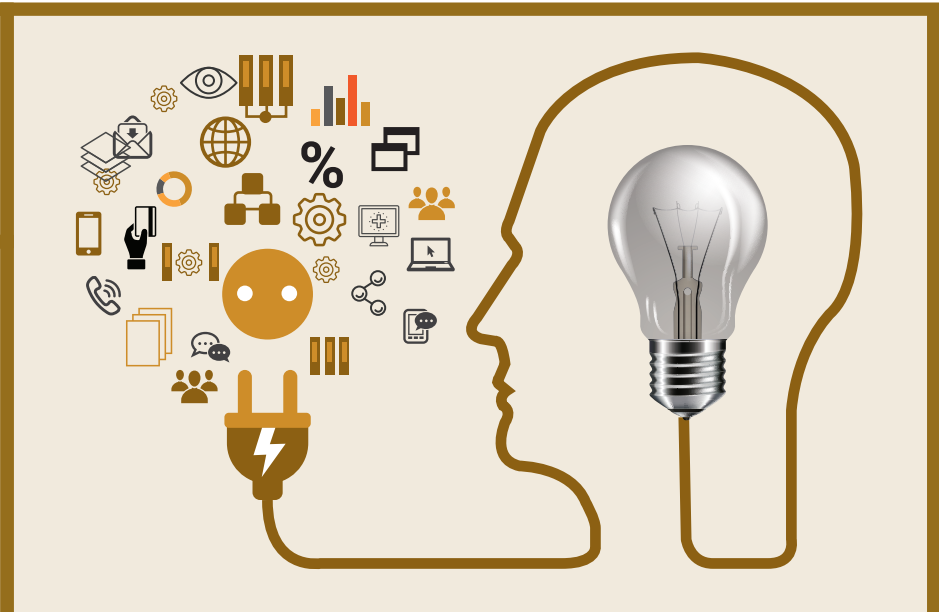
- 12.1.1 Sustainable Consumption and Production Policies [↗](#)
- 12.4.2 Generation and Treatment of Hazardous Waste [↗](#)
- 12.5.1 Recycling rates [↗](#)
- 12.6.1 Corporate Sustainability Reporting [↗](#)
- 17.7.1 Funding for Environmentally Sound Technologies [↗](#)
- 17.14.1 Policy coherence mechanisms [↗](#)

It is also providing innovative solutions to data collection for other indicators, such as 6.6.1 and 14.1.1, where satellite imagery is used to monitor change in extent of water-related ecosystems.

Innovation takes many forms, including creative approaches to policy, finance, partnerships, business, governance models, and the use of data, in addition to technological innovation. [↗](#)

[#science](#) [policy](#) [business](#)

The UN Global Science-Policy-Business Forum on the Environment provides a platform to promote advances in science and technology. [↗](#)

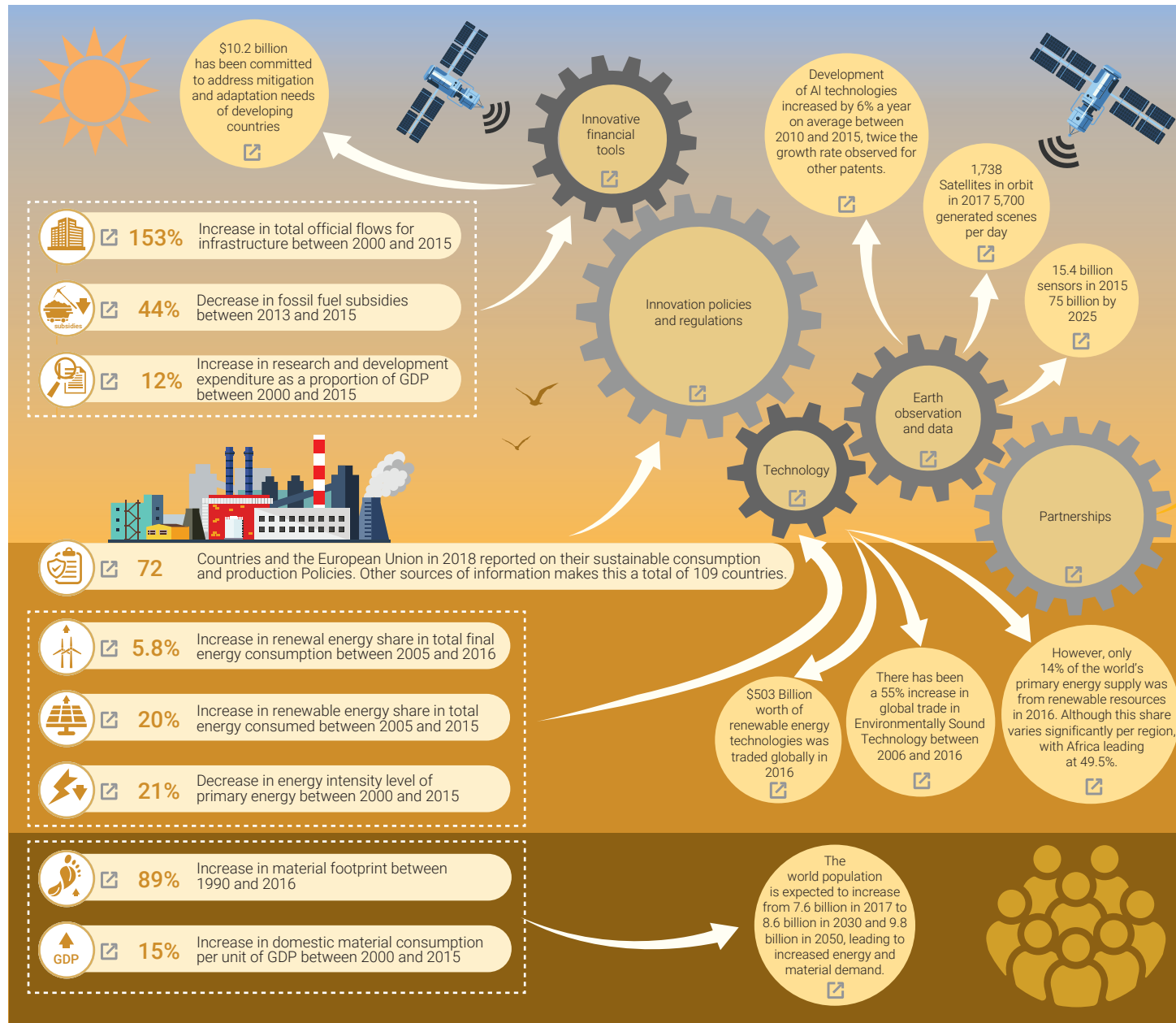


**Innovation is important for all of the Goals, and central to the following:**



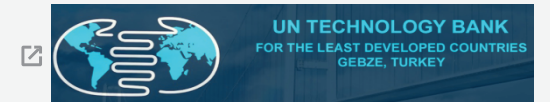
**Goal 12 on Sustainable Consumption and Production is key to innovation and to the attainment of the other Goals**, yet it remains the Goal with the least data availability, least funding, and appears to be awarded low priority from Member States. Efforts towards the achievement of the targets on SCP should therefore be upscaled. [↗](#)

# Facts and figures



# Partnerships and Action

## Towards solutions ...



47 Beneficiary Countries



Supported by 22 International Organisations



14,978 Information materials  
478 Members  
133 Responses to Technical Assistance Requests



65+ Member Organisations

... for achieving the **SUSTAINABLE DEVELOPMENT GOALS**

Eco-innovation manual for businesses



One Planet Network Knowledge Hub

Sustainable Rice Platform: Tool for climate-smart rice cultivation



CTCN Technology Opportunity renewable energy and energy efficiency Analytics Tools



## Initiatives on the ground

### Innovative laws promoting renewable energy

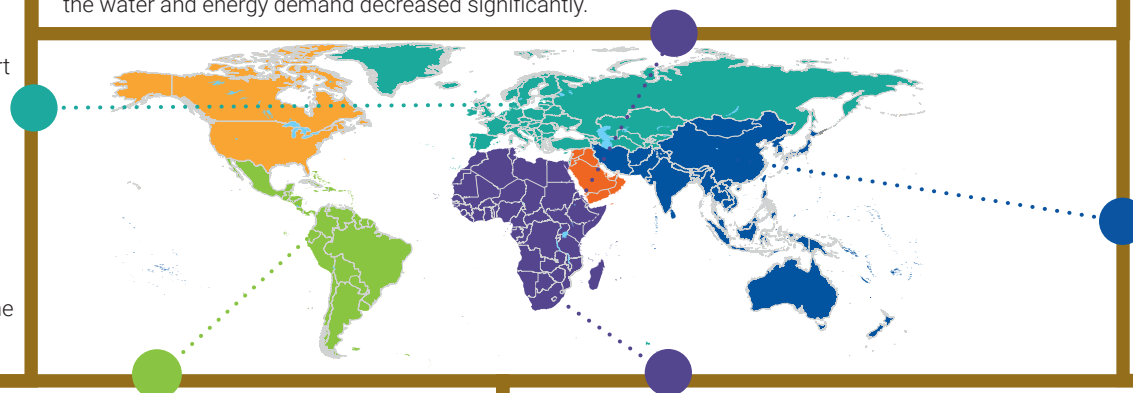
The Danish Renewable Energies Law contains a number of innovative initiatives aimed at promoting the production of energy based on renewable energy sources. In addition to providing feed-in premium tariffs for wind, biomass, biogas and other renewable energy source electricity production and a special fund to promote the development of small-scale, grid-connected renewable energy plants, the law includes measures to increase support for renewable energies, including those that may receive local opposition. These include compensation for loss of property value due to erection of wind turbines, opportunities for locals to invest in wind turbines erected in their communities, and 'green schemes' to enhance local scenery affected by the construction of wind turbines or compensation through the establishment of recreational facilities.

### Service-based business models: chemical leasing in Uganda

Conventional business models encourage inefficient use of chemicals and other resources, given that profitability is linked to the quantity sold. Promoted through the UN Environment-UNIDO RECP Net (Network for Resource Efficient and cleaner Production), Chemical Leasing is a service-oriented business model that shifts the focus from increasing sales volume of chemicals towards a value-added approach. The producer mainly sells the functions performed by the chemical. The responsibility of the producer and service provider is extended and may include management of the entire life cycle. It therefore increases the efficient use of chemicals while reducing the risks of chemicals and protecting human health. When Ugandan beverage company Crown Beverages Limited (CBL) introduced Chemical Leasing for bottle washing and conveyor lubrication, chemical consumption was reduced by 40 and 48%, respectively, and the water and energy demand decreased significantly.

### Influencing financial decision-making: Sustainable Digital Finance Alliance

Financing sustainable development is one of the greatest challenges of our time. Digital finance can drive environmental risks, opportunities, incentives and choices into the decision-making across the financing value chain. The 'Sustainable Digital Finance Alliance', launched in 2017 by Ant Financial Services Group (China's leading online and mobile financial services provider) and UN Environment, is a ground-breaking initiative to harness digital technologies in catalyzing financing that addresses global environmental challenges. One such innovative technology is Ant Financials' app which provides its users with a carbon account alongside their credit and savings accounts. Ant's 450 million users in China are now able to benchmark their carbon footprint, generated through algorithms of their financial transaction history, and to earn 'green energy' credits for reducing their footprint.



### Using spatial data to enhance biodiversity conservation in Ecuador

Technology is revolutionizing our ability to map nature. Satellite data provide an incredibly detailed view of the Earth's surface in real-time, while drones and mobile apps enable local communities and indigenous peoples to map their knowledge of local ecosystems. Ecuador's Ministry of Environment is developing a National Forest Monitoring System which will use spatial data to monitor deforestation and biodiversity loss with the aim of enhancing conservation efforts and preventing illegal deforestation. Through a UNDP- UN Environment partnership, and powered by MapX, the only UN-backed geospatial mapping software, the UN Biodiversity Lab is working closely with national governments to provide them with the best available spatial data to make informed conservation decisions.

### Earth Observation for Monitoring global surface water towards the SDGs in Namibia

Earth Observation technology is being used to monitor and track progress towards several of the SDG indicators. One example is Indicator 6.6.1 where satellite imagery is being used to monitor changes in the extent of water-related ecosystems over time. The Global Surface Water app provides free and open access to national, sub-national, basin and sub-basin aggregated data on water extent. The app was developed through an innovative partnership between UN Environment, Google, the European Union Joint Research Center (JRC), the European Space Agency (ESA), the United States National Aeronautics and Space Administration (NASA) and the Group on Earth Observations (GEO) to provide free and open data on the environment so that citizens and governments can easily assess what is actually happening to the world's natural resources, starting with data on water extent as a priority environmental issue. The Namibia Statistics Agency, in setting up a monitoring system for the SDGs, have attempted to integrate Earth Observation solutions, including the Global Surface Water App.