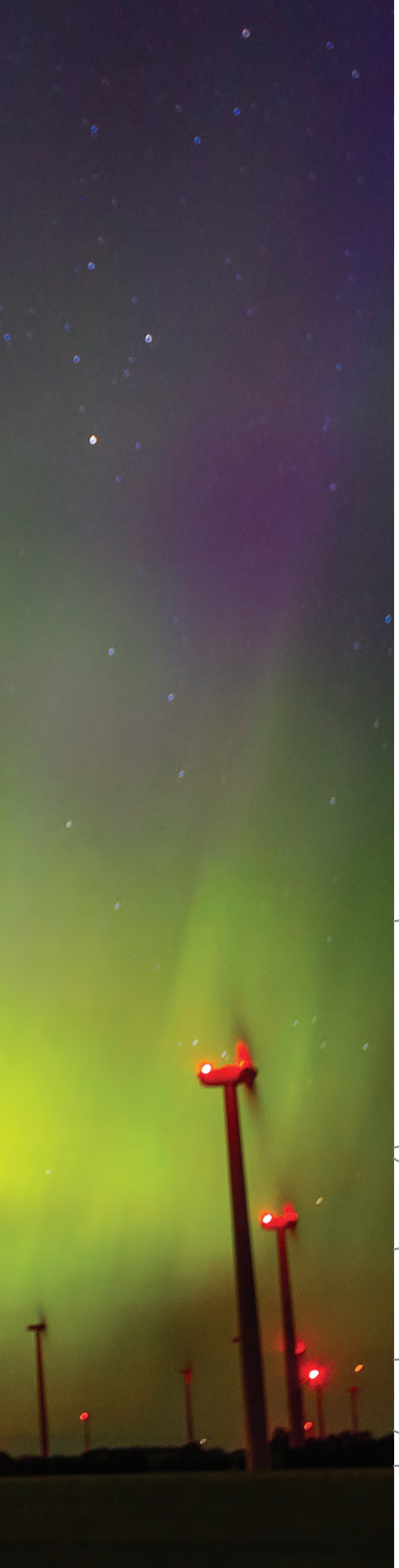

RESOURCE EFFICIENCY AND SUSTAINABLE CONSUMPTION AND PRODUCTION

ACCELERATING THE TRANSITION TO SUSTAINABLE SOCIETIES

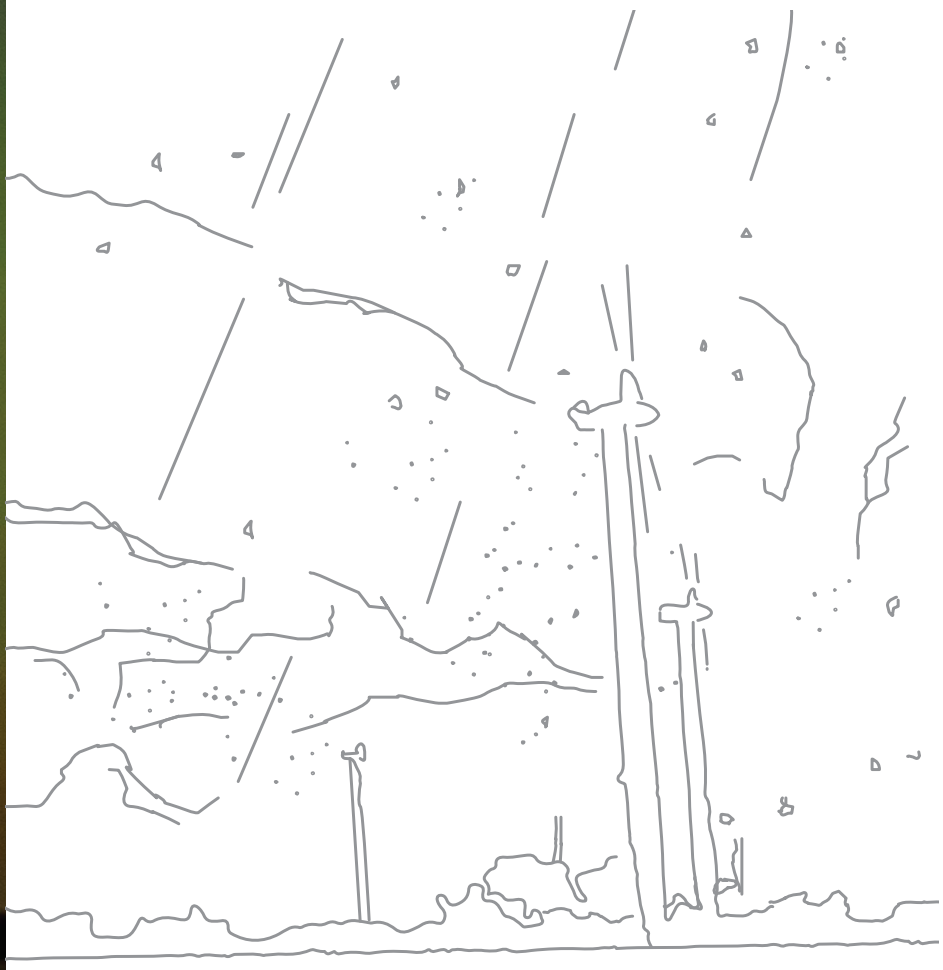

Image © Mike Theiss / National Geographic Creative

RESOURCE EFFICIENCY AND SUSTAINABLE CONSUMPTION AND PRODUCTION

On resource efficiency and sustainable consumption and production – which is a standalone goal in the 2030 Agenda for Sustainable Development, but also impacts on other goals such as climate change, poverty, zero hunger, and sustained, inclusive and sustainable economic growth – UNEP focuses on three areas:

- **Enabling environment** – Supporting countries in creating an enabling policy environment that promotes resource efficiency, sustainable consumption and production and the transition to green economy pathways.
- **Sectors and supply** – Enhancing the ability of governments, businesses and other parties to adopt sustainable consumption and production practices in key sectors across global supply chains.
- **Lifestyles and consumption** – Enhancing the ability of countries, businesses, civil society and individual consumers to make informed choices for sustainable consumption and lifestyles.

Enabling environment

UNEP supports countries and regions to integrate green economy and sustainable consumption and production approaches into policies. Green economies are low carbon, resource efficient and inclusive, and create employment and enhance human well-being – all essential to the implementation of the 2030 Agenda for Sustainable Development and the Paris Agreement.

Over the last two years, with UNEP's support, eight countries and nine cities developed and/or started implementing sustainable consumption and production and green economy policies, meeting UNEP's target for the end of 2015. This brings the total to 29 countries and nine cities that have adopted or started the implementation of sustainable consumption and production and green economy pathways since 2011 – including those engaged through the Partnership for Action on Green Economy (PAGE).

The International Resource Panel, which provides policymakers with scientific assessments and reports on how to decouple economic growth from environmental impact, is another important way to improve the enabling policy environment. Over the last two years the UNEP-hosted body has released influential reports on metal recycling, climate change and city-level resource decoupling approaches.

Green Economy in Europe

UNEP supported six Eastern European countries through the EU-financed Greening Economies in the Eastern Neighbourhood (EaP-GREEN) programme. Using scoping studies and training, this programme shows how economic growth can be decoupled from environmental degradation and resource depletion in Armenia, Georgia, Azerbaijan, the Republic of Moldova, Belarus and Ukraine.

Moldova can expect to earn back investments in renewable energy within ten years, for example. Investments in energy efficiency in the country can offer savings in energy consumption worth over €100 million by 2020.

The foundations were also laid for Belarus, Moldova and Ukraine to adopt their first sustainable public procurement plans thanks to UNEP guidance. This work will boost the domestic market for sustainable products.

MOLDOVA CAN SAVE $100 MILLION BY 2020
BY INVESTING IN ENERGY EFFICIENCY

29
COUNTRIES
AND NINE CITIES HAVE ADOPTED OR STARTED THE IMPLEMENTATION OF SUSTAINABLE CONSUMPTION AND PRODUCTION AND GREEN ECONOMY PATHWAYS SINCE 2011.

A traffic light for cyclists next to a combined heat and power plant in Hanover, Germany. The plant is powered with natural gas and produces 255 MW electrical and 185 MW district heating at an efficiency factor of 90%. © Wolfgang Rattay / Reuters

Illustrative policy changes in countries and cities

Mongolia adopted a Green Development Strategy with UNEP's assistance.

Addis Ababa and Bahir Dar, Ethiopia, mainstreamed sustainable consumption and production and green economy approaches into urban policy instruments.

Rwanda and Brazil began implementing sustainable consumption and production plans.

Da Nang, Viet Nam, defined its resource footprint and established targets to become more resource efficient.

Sectors and supply

At the core of UNEP's work is enhancing the capacity of governments, businesses and other parties to adopt sustainable production and consumption practices in global supply chains in building and construction, food and agriculture (see the In Focus feature on page 43), finance and tourism sectors. Over the last two years, with UNEP support, 140 countries, institutions and businesses improved management practices or strategies in these sectors, bringing the total number reporting improved practices and the use of more resource-efficient tools to 222.

The financial sector is an increasingly vital target for UNEP engagement, which the organization carries out through both the UNEP Finance Initiative (see Climate Change chapter for more details) and the UNEP Inquiry, which in 2015 launched its report: *The Financial System We Need: Aligning the Financial System with Sustainable Development.* The report, which shows how to harness the assets of the world's financial system for sustainability, found that financial policymakers and regulators were increasingly taking steps to integrate sustainable development considerations into financial systems to make them fit for the 21st century. In Peru, for example, new due diligence requirements have been introduced for banks to help reduce social and environmental externalities.

Changes in practices resulting from UNEP support

Country	Sector/Area of support	Result
France	Tourism 	34 professionals and eight businesses achieved environmental certification labels and standards. Certified businesses decreased their energy and water consumption. The city of Nantes became the first European city to have co-certified hotel rooms.
India	Buildings and Construction 	A social housing developer involved in slum re-development adopted sustainable design standards, increasing energy efficiency.
Global	Eco-Innovation and Supply Chains 	175 stakeholders exposed to UNEP's operational approach to eco-innovation to boost profitability and sustainability in three supply chains (agri-food, metals and chemicals). 11 countries selected for implementation.
Sweden	Buildings and Construction 	A construction company changed its sourcing and selection of construction materials of its 50,000 suppliers. As a result overall sustainability of its products has increased.

"THE UNEP INQUIRY REPORT DELIVERS A VISION OF EMBEDDING SUSTAINABLE DEVELOPMENT INTO THE CORE OF FINANCIAL AND CAPITAL MARKETS."

YI GANG, DEPUTY GOVERNOR OF THE PEOPLE'S BANK OF CHINA

RESOURCE EFFICIENCY AND SUSTAINABLE CONSUMPTION AND PRODUCTION

Lifestyles and consumption

UNEP aims to provide enabling conditions for promoting more sustainable consumption choices and lifestyles. Progress here is demonstrated by the number of public and private sector institutions that put in place policies and measures conducive to sustainable consumption patterns. Supporting sustainable public procurement is one way to stimulate demand for, and supply of, sustainable products. Over the last two years, UNEP supported 20 countries on sustainable public procurement. Six of these countries are developing or implementing action plans in close coordination with the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP), which is running programmes on Consumer Information, Sustainable Lifestyles and Education, Sustainable Public Procurement, Sustainable Buildings and Construction, Sustainable Food Systems, and Sustainable Tourism. Additionally, with UNEP's support, 27 companies –based in Brazil, Cameroon, Colombia, India, Peru and Uganda – have increasingly used life cycle-based approaches and tools.

UNEP Executive Director Achim Steiner and Goodwill Ambassador Yaya Touré arrive at World Environment Day 2015 celebrations in Italy in an electric car. The event ran under the theme 'Seven Billion Dreams. One Planet. Consume With Care.' The world's premier day for environmental action engaged the global community to encourage sustainable consumption practices. © UNEP

Bogotá, Colombia

In Bogotá, Colombia, 22 companies organized in a Life Cycle Management network and completed training in compliance. They are now implementing environmental management systems using life-cycle approaches.

Kashipur, India

In Kashipur, India, a company in the chemicals sector integrated life-cycle approaches into management practices.

Education and awareness-raising are also important enabling conditions for more sustainable lifestyles. Over the last two years, UNEP supported activities that catalyzed the engagement of 18 stakeholders into the promotion of sustainable lifestyles – including through the joint UNEP/Food and Agriculture Organization initiative on reducing food waste, Think.Eat.Save. – bringing the total to 28 stakeholders. This brings the cumulative total to 82.

For more information on UNEP's work on Resource Efficiency, visit unep.org or follow us on Facebook or Twitter.

Kaveh Zahedi, UNEP's Director for Asia and the Pacific, explains UNEP's work on food waste to Channel News Asia during a Think.Eat.Save event in Bangkok. © UNEP

NEW RICE STANDARD BRINGS HOPE TO SMALLHOLDER FARMERS

Rice farmers across Asia, such as the Cambodian woman pictured, are set to benefit from a new sustainability standard. © AFP Photo / Tang Chhin Sothy

Like most small farmers in Cambodia, Rong Hom, a 44-year-old from the village of Skol in the southwest, faces growing threats from drought and rising fertilizer prices. She doesn't know how long her 1.5 hectare rice paddy can insulate her family from poverty.

However, the world's first sustainability standard for rice, launched in October 2015, gives her hope. Rong, like many of her smallholder peers in Cambodia's Takeo and Pursat provinces, believes that implementing a globally accepted standard, as she is set to do, can lead to higher prices, stronger markets and ultimately better food security for her and her family.

The 46 criteria of the Standard for Sustainable Rice Cultivation aim to ensure that rice meets quality requirements and its cultivation benefits the environment, the economy and society at large. The standard can also be used to measure the sustainability of rice production systems and as a policy tool to promote wide adoption of sustainable rice farming.

The standard was developed by the Sustainable Rice Platform (SRP), a global alliance convened by UNEP and the International Rice Research Institute (IRRI) that comprises 32 rice research institutions, supply chain actors, and public sector and civil society organizations.

Global agribusiness giant Mars Food, one of several food industry leaders to have joined the SRP, has already promised to sustainably source 100% of its rice by 2020 through the standard.

"The benefit for us is that is that we are ensuring premium quality rice, whilst also ensuring benefits for farmers, and a better environment for current and future generations," said Fiona Dawson, president of Mars.

Rice, the daily staple for 3.5 billion people, sustains the livelihoods of more than 140 million smallholder farmers and is grown on over 160 million hectares globally, an area larger than Mongolia. It plays a critical role in food security; therefore, finding a way to produce smarter is of major importance to the implementation of the 2030 Agenda for Sustainable Development. Currently, the crop uses more than 30% of the world's irrigation water and is responsible for 5-10% of emissions of methane, a greenhouse gas. Intensive and inefficient use of agrochemicals adds to farmer costs and undermines the long-term sustainability of rice farming.

The SRP Standard comes with tools and trainings for farmers. For instance, farmers such as Rong will be trained on how to minimize their use of inorganic fertilizers, saving them money and reducing their greenhouse gas emissions, thus contributing to the global fight against climate change. Farmers will also be taught how to keep their paddies free from invasive species, and how to introduce fallow periods to help maintain their land's fertility.

Rice Partners Ltd, a venture-backed business in Pakistan that works with rural smallholder rice farmers, is already using the standard and has high hopes for significant impact.

"The standard indicators are incredibly helpful in designing and implementing sustainable rice supply chains worldwide. They have the potential to directly impact the world's poorest farming communities," said Aamer A. Sarfraz, the company's founder. "We now have a framework against which we can measure our goals of increasing farmer livelihoods, protecting the environment, improving water efficiency and strengthening women workers."