

Sustainable Consumption and Production

HOW **EGYPT** IS SWITCHING TO A CIRCULAR ECONOMY

Building climate resilience and resource efficiency



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ISBN: 978-92-807-4084-4

Job number: DTI/2575/NA

DOI: <https://doi.org/10.59117/20.500.11822/43850>

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Suggested citation: UNEP (2023) *How Egypt is switching to a circular economy*, United Nations Environment Programme, Nairobi

<https://wedocs.unep.org/20.500.11822/43850>



SwitchMed is an EU-funded initiative to support transformation towards Sustainable Consumption and Production (SCP) and Circular Economy in eight Mediterranean countries. SwitchMed directly supports the reinforcement of an enabling policy environment, practices by private sector, and experience-sharing among stakeholders to build a community of practice on SCP, circular and blue economy and reducing the environmental footprint of consumption and production activities.

SwitchMed is implemented by the United Nations Industrial Development Organization (UNIDO), the United Nations Environment Programme (UNEP), the United Nations Environment Programme Mediterranean Action Plan (UNEP/MAP) and the Regional Activity Centre for Sustainable Consumption and Production (MedWaves, former SCP/RAC). The initiative is carried out in close coordination with the Directorate-General for Neighbourhood and Enlargement (DG NEAR).

During SwitchMed's first phase (2013-2018) UNEP's collaboration with the countries focused on the development of National Actions Plans (NAPs) for the transition to SCP and demonstration projects. The Sustainable Consumption and Production National Action Plans (SCP-NAPs) feed into and are closely linked to related national strategies (Sustainable Development, Green Growth) and the regional SCP action plan developed by UNEP-MAP.

The second phase of the project (2019-2024) builds on the successes of the first phase by focusing on enhancing economic opportunities for businesses following green and circular economy models, enabling resource-efficient circular economies at national and regional levels. As a result, this action provides new employment opportunities, including for women. A special focus is encouraged to support their participation in trainings and capacity building activities and benefit from other supporting measures.

Acknowledgement

The United Nations Environment Programme (UNEP) would like to thank the authors, editor, reviewers and designer for their contribution to the development of this report:

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Special thanks to

Ms. Heba Shrawy, National Focal Point of SwitchMed for her contribution and valuable input to this report.

SCP: PLANNING FOR CHANGE – IMPLEMENTING THE CHANGE

The core aim of SwitchMed is to assist countries in making the transition to SCP and circular economy, one of the objectives the world set itself when it adopted the Sustainable Development Goals (SDGs) in 2015.



SwitchMed started back in 2013 – at a time when the SDGs were not yet adopted as the international Agenda for 2030. UNEP's first activities at country level were to present and raise awareness of SCP and present the positive impact such a switch could have.

As a first step, UNEP provided technical assistance and capacity reinforcement for countries as they developed National Action Plans (NAPs) for making this switch. The plans focused on resource efficiency in tandem with other social and environmental challenges such as gender equality and climate change.

Egypt's NAP was based upon its 2013 Green Economy Scoping Study, which assessed the potential for a transition to a green and more sustainable economy. The NAP is considered a significant milestone on the road to integrating sustainability into key economic sectors.

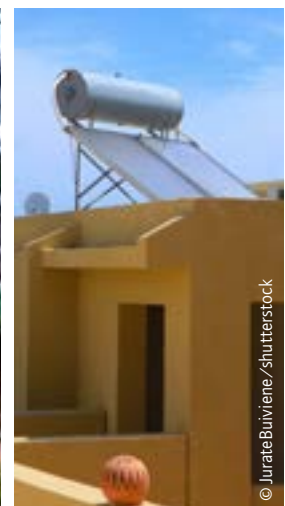
The plan aims to achieve SCP by promoting the efficient allocation and use of water and energy, sustainable agriculture and waste management, with a focus on waste reduction, recover, re-use and recycling.

Significant work was done on determining the regulatory framework and on the behavioural changes that would be necessary for the country to make the switch to SCP. Egypt hopes the transition in the specified sectors will enable it to see a more equitable distribution of wealth, a reduction in poverty, and improvements in health and human welfare as well as environmental wellbeing.

The NAP was developed after wide-ranging consultations with government, academia, the private sector, and community and international organizations. Some 92 experts from four different sectors – energy, water, agriculture and waste – as well as representatives from 13 government institutions and specialized research centres.



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TEN SUCCESS STORIES | EGYPT

01

TURNING SCP INTO NATIONAL STRATEGY

In its SCP National Action Plan, Egypt had three focus areas: **integrated solid waste management, renewable energy, and policy instruments for SCP**. Five years later, at the end of a two-year process that saw wide-ranging consultations, the country introduced an updated Sustainable Development Strategy, called Egypt 2030, building on the work of its NAP. The strategy prioritizes natural resource management including water, energy, and the food security nexus, while setting out plans to expand agriculture, tourism, especially sustainable tourism, and industry. But there is commitment also to a coordinated approach across all sectors to mainstream SCP in switching to a green economy. Projects are implemented at a national level, collaboratively and simultaneously within the integrated framework detailed in the strategy. Egypt hopes the strategy will be a key driver for the switch to a more sustainable, circular economy, where economic and industrial development is decoupled from environmental degradation. To this end, the country has developed a number of frameworks and regulations, including, for example, the Green and Smart Cities initiative, which presents a holistic approach to urban planning, and a housing strategy that aims to ensure that cities and human settlements are safe, resilient and sustainable, while providing affordable housing and services.



NEW LAW ON WASTE MANAGEMENT

For the first time in Egypt's history, the country has a waste management law that has recycling and re-use at its core. Promulgated on 13 October 2020, the integrated waste management law covers such things as extended responsibility for producers, energy production from waste, plastic bag distribution and use, and the safe collection, transfer, treatment and disposal of waste. The new law also introduces incentives to attract investors to the waste sector and seeks to integrate formal and informal workers in waste management, including rubbish collectors, contractors, small companies, and recycling workers. The law states that dumpsters will be provided close to the country's 53 rubbish dumps, and that landfills will be developed in coordination with the ministries of the environment, local development, and military production, and the Arab Organization for Industrialization. Rubbish will be recycled instead of burnt, with industrial and agricultural waste being directed to specific disposal zones.

02



03

ENDING SUBSIDIES

With Egypt keen to shift to a more sustainable, resource-efficient economic model, the country has re-visited its policies on subsidies for key resources. Reducing subsidies encourages consumers to be more efficient and at the same time protects and conserves the natural resources that support our daily lives. In Egypt, the government has decided to gradually lift subsidies on water, electricity and fuel, and will instead allow local or global market conditions to determine prices. This resulted in a 65 per cent cut in the fossil fuel subsidy in 2020. Consumer water bills have gradually increased, and are now 50 per cent higher, reflecting the true value of the scarce resource. Subsidies for electricity bills will be completely removed by 2025.



04 GREENING PUBLIC PROCUREMENT

Public procurement accounts for about 12 per cent of gross domestic product in OECD countries, and up to 30 per cent in developing countries. So, there is potential for significant improvement if a country begins to buy more resource-efficient low-carbon products and services. As part of its SCP National Action Plan, Egypt set up a pilot project on sustainable public procurement (SPP).

Working with SwitchMed, the country assessed the potential for SPP, and set about developing a toolkit for its implementation, as well as conducting a number of seminars and training sessions to help ministry and other public-sector staff familiarize themselves with the concept. A survey of existing legislation was conducted which determined that the Minister of Environment had the authority by decree to implement a preference for green products as part of the evaluation of tenders, without the need to amend or change laws. Further initiatives include the development of an Arabic-language manual that outlines how public institutions can adopt SPP, and awareness-raising activities within public entities and ministries.

05 THE “GO GREEN” CAMPAIGN

Mainstreaming SCP means everyone within a society, from children to adults, workers to employers, and teachers to decision-makers, will need to understand and adopt environmentally responsible practices and behaviours. Realizing this, Egypt launched the “Go Green” campaign, an initiative conducted under the Egypt 2030 national strategy on sustainable development. The campaign’s goal was to spread environmental awareness, and to urge citizens, and young people in particular, to protect and conserve the natural resources provided by the land and marine environments that surround them. Some 36 environmental issues were addressed – food waste, deforestation, recycling energy consumption and air pollution, to name just a few – with a different slogan and materials released each month. Some key achievements include the planning of trees in the Triumph district of Cairo, a cooperation between the Environment and Education ministries that will see ecological awareness incorporated into educational curricula, 102 stations have been set up at the country’s universities to help assess and study air quality, and a symposium for rural women to sensitize them to the role they play in protecting natural resources, particularly through water and energy consumption in their homes.



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CUTTING PLASTIC WASTE

Some regions in Egypt heavily dependent on tourism took steps on their own to clean up plastic waste. South Sinai and the Red Sea governates banned single-use plastic bags and cutlery in shops throughout their regions. Plastic bags are banned in favour of eco-friendly alternative bags made of paper, cloth and other materials. The use of plastic knives, cups, dishes and hooks are also forbidden. Only black garbage bags made of plastic are allowed.

The move was unusual in Egypt where it is customary for such changes to be made at a national level first, but the regions went ahead, with some having campaigns also about the environmental dangers of plastic disposed of carelessly, particularly to marine creatures. But in this case, things have been different. Country-wide, at the end of the SCP-NAP process, the Government of Egypt decided to work with youth groups and NGOs to develop a participatory approach to reducing plastic consumption. The government is also working on including plastic in the new law on integrated waste management. Meanwhile, the Environment Ministry aims to reduce the use of plastics through gradually by promoting SCP behaviours and patterns.

07

PROMOTING ECO-TOURISM

Long a popular tourist destination, Egypt has moved in recent times to encourage eco-tourism, making it one of the key pillars of the country's tourism strategy released in 2019. Natural areas rich with biodiversity that have been listed under international conventions will be promoted as eco-tourism sites of special significance.

A unit was created within the Environment Ministry to oversee the development of policies and promotions that would rebrand Egypt as an eco-tourism destination, and a ministerial decree (number 760 of 2019) was adopted that set new green criteria for ranking hotels. The Green Star eco-label, which has been in operation since 2007, was revised to encourage hotels and resorts to commit to improving their environmental and social performance, and the ministry issued guidelines, dubbed "Green Destinations", for hotels to reduce water and energy use and cut their greenhouse gas emissions. Some 16 sites have been identified as emblematic of what constitutes eco-tourism in Egypt and will be featured in the "eco-Egypt" campaign, which aims to raise awareness among citizens about the need to protect Egypt's environment.



08 RECYCLING RICE WASTE

Burning rice straw sends GHG emissions into the atmosphere, along with a black plume of smoke that adds to a country's air pollution burden. Rice straw is a by-product of rice production that is either piled up or spread out across fields, where it decomposes too slowly to be incorporated into the soil during intensive rice farming (IRRI 2018). But rather than burn this natural resource, Egypt set up an initiative in which it collected 1.4 million tons of rice straw and recycled it into useful products. The straw, collected at 621 locations across the country, was turned into organic fertilizer, paper, furnishing and non-conventional feedstuff.

The recycling has given farmers an additional income source, created new jobs for young people in six regions, and ended the significant environmental problem of the polluting smoke that resulted from random burning by farmers.



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09 MANAGING WATER

Water scarcity has been declared a national security priority in Egypt, making efforts to educate citizens to reduce their consumption a critical step in the country's water management plan. Egypt has adopted an integrated management plan that takes a holistic approach from awareness-raising campaigns, to reducing water subsidies, and wastewater treatment and desalination plants.

In 2018, the El-Gabal El-Asfar wastewater treatment plant was inaugurated providing a cost-effective and environmentally friendly treatment facility for about 2.5 million people, and in 2019 the government approved the building of four seawater desalination plants in South Sinai. In 2020, Egypt announced a \$US 2.8 billion investment to build 47 desalination plants nationwide. It plans to invest over \$US 20 billion to develop desalination plants all over the country in the medium-long term.



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UPSCALING RECYCLING

Reducing, re-using and recycling lies at the foundation of SCP. By adopting an integrated waste management plan Egypt is encouraging understanding of an investment in recycling. The country has seen an increase of start-ups and companies focusing on recycling of waste, textile, industrial inputs and even electronics are contributing to the creation of a recycling sector. Wood, furniture, metal, agricultural waste, textile, and plastic products are being recycled.

Increasing digitalization of industry and services is also driving an upsurge in e-waste recycling. In 2016, the Governments of Switzerland and Egypt signed an agreement to launch the Sustainable Recycling Industries project in Egypt. Implemented by the Centre for Environment and Development for Arab Region and Europe (CEDARE), a SwitchMed implementing partner, the project supports the participation of small- and medium-sized enterprises in the global recycling of secondary and non-renewable resources. The project has conducted a number of seminars, workshops, trainings, study tours, technical trainings, Extended Producer Responsibility (EPR) report, and an incubation programme in e-waste.



SCP IN EGYPT: LOOKING AHEAD

Around the world, humanity is making ever-increasing demands on nature, taking from the planet natural resources at a rate far greater than that with which nature is able replenish them. Simply, we are living beyond our planetary means.

How we adapt to this challenge of rising demand for shrinking resources will be our legacy to future generations. We have a choice: we can leave them a diminished world, or a more resource-efficient low-carbon one. The true value of programmes such as SwitchMed is that they show a way forward to this new world, one where we still produce the goods and services that we need, but do so in a cleaner, greener way. Switching to SCP also contributes to the UN Decade on Ecosystem Restoration (2021-2030) which aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. It can help to end poverty, combat climate change, and prevent a mass extinction.

The current Covid-19 pandemic has provided a tragic illustration of how closely linked human and environmental well-being are. Biodiversity loss, shrinking habitats, dwindling natural resources, pollution and climate change all adversely affect humans as well as flora and fauna.

But the pandemic has also created a rare opportunity to begin again, to adopt a systemic life-cycle approach that balances nature's needs with national priorities. Implementing sustainable consumption and production practices across all sectors would be a significant step towards achieving this equilibrium.

Sustainable consumption and production policies also provide important opportunities to trigger transformative changes in economic and social systems and promote the human rights of women and girls as well as men and boys. It is imperative to integrate a gender perspective into sustainable consumption and production work in general and national action plans, which are the key policy instruments at national level that create the enabling policy environment to achieve SDG 12.

Currently, for instance, about one-third of all food produced is wasted, or spoiled because of poor transportation. This equates to 1.3 billion tonnes of food worth about \$US 1 trillion. And if the world switched to energy-efficient light bulbs we would save \$US 120 billion a year. Additionally, in the decade between 2010 and 2019, electronic waste grew by 38 per cent but only 20 per cent of that waste was recycled.



The National Action Plans developed by countries with the support of SwitchMed recognize the potential of making the transition to SCP and circular economy and set out the pathways they intend to follow.

In its National Action Plan the Arab Republic of Egypt focused on integrated community development, sustainable water management, sustainable energy applications, and solid waste management.

SCP and the circular economy have great potential to respond to national priorities, and to the three global crises (biodiversity loss, pollution, and climate change) the world is facing. Switching to more sustainable patterns of consumption and production across these sectors and others will need behavioural change at both national and individual levels but could generate significant economic benefits. Research by the International Resource Panel shows that more efficient use of materials and energy could add an extra \$US 2 trillion to the global economy by 2050 (UNEP 2017), while a study by the International Renewable Energy Agency (IRENA) shows that transforming the energy system could boost cumulative global Gross Domestic Product gains above business-as-usual by \$US 98 trillion by 2050, nearly quadruple renewable energy jobs to 42 million, and expand employment in energy efficiency to 21 million.



The opportunities for countries from sustainable consumption and production are rich and varied. Some ideas for building on successes and moving forward, subject, of course, to alignment with national priorities, include:



+ TOURISM. Tourism around the world has been hard hit by Covid 19, so, as the sector turns its mind to recovery, now may prove an opportune moment to support and encourage doing things differently. Embedding resource and energy efficiency, waste reduction, and protecting flora and fauna could build resilience in a sector that, traditionally, is jobs intensive. Working to reduce food waste from restaurants in the hospitality sector, as well as promoting locally grown in-season food, could help Egypt achieve some of its goals on GHG emissions, waste management, and circular economy.

Additionally, for some marine or coastal destinations, a focus on sustainable actions could support Egypt's efforts to expand its "blue" economy as a pillar of development. For instance, Egypt was the first country in the region to officially adopt the Green Fins Initiative, a United Nations Environment Programme collaboration with The Reef-World Foundation that aims to conserve coral reefs by promoting sustainable diving and snorkelling in the tourism.

+ PROMOTING CIRCULAR ECONOMY. A circular economy is a strong first step on the path to more sustainable consumption and production in that it encourages us to reduce, reuse, and recycle, but a truly circular economy closes the loop by encouraging the repair and remanufacture of goods produced.

Egypt is already taking steps along this path with the introduction of regulations that promote polluter-pays principles and extended producer responsibility. Projects that support the creation of a market for repaired and remanufactured items (where goods at the end of their useful life are made into something else) could be valuable. Examples here could be creating standards for second-hand or remanufactured goods, making room for them within public procurement regulations, putting in place incentives for their purchase, and supporting factories and start-ups in the production of remanufactured goods. Targeting particular sectors, such as housing and construction, for instance, where much of the waste produced could be reused, may prove useful, and could aid in mainstreaming the principles of SCP and circular economy more broadly through society.

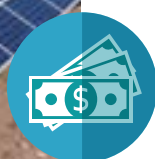


+ SUPPORTING CHANGE IN THE BLUE ECONOMY.

Egypt's coastal and marine resources and ecosystems are important economically, socially and culturally, and are a part of the country's historic identity. There is significant potential for SCP within the "blue" sector, from establishing more environmentally friendly port operations, to embedding resource efficiency in coastal and marine areas management plans, to innovative cleantech solutions, and standards for marine sports and eco-tourism.

Protecting the biodiversity of marine environments could have significant flow-on economic effects, particularly in eco-tourism, and also by improving the livelihoods of coastal communities with the development of small-scale projects that highlight the cultural traditions and crafts of the populations along the coast. Additionally, greening operations in busy ports could be useful in cutting GHG emissions and in creating jobs.

Egypt has the challenges of water pollution caused by urban waste production, tourist resorts and cruise ships. This may increase with the opening of a new branch of the Suez Canal and offshore gas extraction and seabed drilling. An expansion of existing programmes, or replicating them in other locations, might be useful in supporting SCP in a blue economy. For instance, Egypt is already engaging with the community to clean up the Nile River through the VeryNile project which rewards local fishers by exchanging recyclables collected from the river for extra income and access to education and health services.



+ SUSTAINABLE FINANCING. Globally, a switch to green financing is under way. A database maintained by UNEP and the Green Growth Knowledge Partnership (GGKP) shows that there are now at least 391 national and sub-national policy and regulatory measures on green finance in place around the world, with 79 new measures were implemented or announced in 2019 (UNEP 2019). These measures range from transparency in climate-related risks in investment portfolios, to providing incentives for investing in green assets, and strengthening environmental risk management practices within institutions. Projects that support green investment, or a shift towards considering environmental impacts as a fundamental pillar of investing and lending practices, could be a significant contribution to building a better, greener, post-Covid economy.



+ DIGITAL TRANSFORMATION Delivering on the 17 Sustainable Development Goals the world set itself in 2015 will require commitment and innovation. Projects that examine, develop and assess the digital tools necessary to scale up ambitions in existing projects, to measure and record their achievements against SDG indicators, to understand the digital needs of industrial sectors to transform to cleaner more sustainable production, or that support technological start-ups working on creative solutions to climate change, biodiversity loss and pollution or that collect and disseminate data, statistics and knowledge will be important steps in the transformation to a more sustainable society.

Egypt is already a regional hub for entrepreneurship and digital innovation, particularly in the areas of clean energy and waste management. Expanding the digital transition to other sectors could aid in the efficient management of resources, as well as improving economic resilience in the post-Covid world by providing new green jobs.

Whatever path Egypt decides to follow in the years ahead, it is important that environmental, economic, and social concerns especially on gender equality, remain at its core. The country's commitment to sustainable consumption and production provides a solid foundation, but behavioral change at all levels of society will be essential to achieve the transformation to a resource-efficient low-carbon world. An agile, resilient, innovative approach could see us all doing more and better with less as we work together to face any challenges that arise.

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SWITCHMED: INSPIRING CHANGE

SCP is about doing more and better with less. It is about meeting humanity's needs but remaining within planetary boundaries, about using the natural resources that the Earth provides without degrading the environment. Now in its second phase, the SwitchMed projects works to support the development of policies and practices that support a switch to sustainable consumption and production (SCP) in the Southern Mediterranean region and to make the circular economy the mainstream business model there.

Egypt has already developed an integrated development plan than has SCP at its core. For some time now, it has been building on this, expanding its waste reduction plan, establishing a circular economy, and further developing its work on sustainable water managements and energy solutions. It is clear that SCP is no longer just something discussed in meeting rooms. Now it is happening on the ground, across business and industry, in cities and regions, reducing pollution, improving the air we breathe, and promoting better use of nature's gifts through resource-efficient and low-carbon consumption and production practices.

In this document you will see 10 success stories inspired by the work of SwitchMed in the Arab Republic of Egypt. They show how what began in workshops developed into plans that created a ripple that flowed out around the country. This short publication shows that opportunities for countries from sustainable consumption and production are rich and varied.

The Switch to SCP is off and running. SwitchMed is proud to have supported Egypt in its work to build a society where people and planet thrive and prosper together.

