



## **Industrial Development Board**

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### **UNIDO activities in the environment and energy**

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### **Report by the Director General**

The present document reports on the implementation of General Conference resolution GC.18/Res.7 and provides information on latest developments. It supplements the information presented to the Industrial Development Board in the document [IDB.48/17](#).

## **I. Introduction**

1. In line with the strategic priority of the medium-term programme framework 2018–2021<sup>1</sup> of safeguarding the environment, UNIDO is advancing environmentally sustainable industrial development through its four complementary core functions: (i) technical cooperation; (ii) analytical, research and policy advisory services; (iii) normative function; and (iv) convening and partnerships.

## **II. Response to the COVID-19 pandemic**

2. As part of the international community's response to the COVID-19 pandemic, UNIDO is refocusing and realigning its activities to facilitate both emergency measures and long-term recovery plans in developing countries. Under the Partnership for Action on Green Economy,<sup>2</sup> UNIDO is supporting government-led efforts to initiate a job-focused green economic recovery that leaves no one behind in Brazil, Thailand, and Uruguay. In addition, UNIDO is assisting in the provision of medical and personal protective equipment in various countries, as well as promoting environmentally sound management of medical and health care waste in Belize, China, India, and Senegal.

\* Reissued for technical reasons on 2 June 2021.

<sup>1</sup> [IDB.45/8/Add.2](#).

<sup>2</sup> [www.un-page.org/](http://www.un-page.org/).

For reasons of sustainability, this document has not been printed. Delegates are kindly requested to refer to electronic versions of all documents.



### III. Technical cooperation

3. General Conference resolution GC.18/Res.7 requested UNIDO to continue integrating its energy and environment activities, focusing on supporting governments and industries to:

(a) Provide sustainable and resilient, soft and hard infrastructure for industrial development;

(b) Contribute to climate neutrality and the circular economy;

(c) Fulfil national commitments under multilateral climate and environmental agreements.

4. In response to this request, under the first focus area mentioned above, UNIDO is supporting Albania, Jordan, the Philippines, and Tunisia in their shift to electric mobility by accelerating and scaling up innovation and technology transfer. Projects for another five countries are under preparation, to consolidate a global programme on electric mobility.

5. In March 2021, Ukraine adopted its National Economic Strategy 2030, based on good practices and lessons learned from the UNIDO Eco-Industrial Parks Programme. The strategy incorporates financial support measures for the reduction of waste generation, the promotion of renewable energy, as well as energy and resource-efficient technologies and high-quality energy audits to scale up the transformation of industrial parks into eco-industrial parks.

6. By fostering the cooperation between Brazilian and foreign companies, providing technical support and mentoring for market and capacity development, UNIDO is supporting industries in Brazil to improve their biogas production and localize related technological solutions and business models.

7. Under the second focus area mentioned in paragraph 3, UNIDO has partnered with the European Investment Bank, Circle Economy and Chatham House for the joint global project “SWITCH to circular economy value chains”. The project promotes circularity actions in the global textiles, garments and plastics value chains, which have been identified as significantly contributing to climate change, biodiversity loss and air pollution.

8. In collaboration with the French Development Agency, UNIDO is supporting Algeria in its transition to a green and circular economy by promoting the adoption of resource efficiency practices and innovations among business clusters, associations and incubators. UNIDO is also cooperating with the Philippines on safe informal e-waste recycling through a project that has been highlighted by the Global Environment Facility as a good practice example for sustainable and inclusive programming.

9. The Global Cleantech Innovation Programme (GCIP), which accelerates local start-ups to develop and commercialize innovative technological solutions with tangible environmental, economic and social benefits have been expanded to include 11 new country projects. A GCIP global coordination platform is being developed to enhance programmatic coherence, efficiency, cross-fertilization, and synergies between activities in partner countries. GCIP also enlarged its thematic scope by focusing on innovative technologies for climate change adaptation in the agriculture, water, and energy sectors in the Democratic Republic of the Congo and Sierra Leone.

10. Another example of strengthening resilience and promoting nature-based solutions in the food-energy-water nexus is UNIDO’s cooperation with the Food and Agriculture Organization of the United Nations (FAO) under the Global Bioenergy Partnership to support Cambodia, Indonesia, Nepal, the Philippines, and Viet Nam in introducing charcoal as a soil amendment in farming.

11. Under the third focus area mentioned in paragraph 3, UNIDO is supporting Member States in fulfilling national commitments under the Stockholm Convention

on Persistent Organic Pollutants (POPs), through a combination of activities on capacity-building, technology transfer, waste management, and reduction or elimination of the release of POPs and other toxic chemicals from industrial processes into the environment. This resulted in 13,194 metric tons of polychlorinated biphenyls (PCBs) pesticides, and dichlorodiphenyltrichloroethane (DDT) eliminated or discontinued; 73,562 metric tons of PCBs, pesticides, and DDT safeguarded; 119,489 mg of unintentional POPs avoided; and 11,705 mg safeguarded.

12. To advance the implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer, UNIDO has designed an e-training scheme for refrigeration service technicians and trainers, which have been tested in nine countries. A concept to reduce refrigerant leaks to avoid emissions of ozone-depleting substances and greenhouse gases, while reducing energy consumption related to refrigerating systems has also been developed and applied in several Latin American countries. The aggregated impact of UNIDO's portfolio of projects under the Montreal Protocol in 2020 consists of more than 700 tons of ozone depleting substances phased out, resulting in approximately 72 million tons of avoided CO<sub>2</sub> emissions.

13. UNIDO has supported 22 countries in completing their initial assessments under the Minamata Convention on Mercury, with ongoing assessments in five additional countries. Four developing countries have completed their national action plans for the artisanal and small-scale gold mining sector, while seven countries are currently preparing these plans with UNIDO's support. Through the planetGOLD<sup>3</sup> projects, UNIDO is assisting Burkina Faso, Mongolia and the Philippines to increase gold recovery while eliminating the use of mercury.

#### IV. Analytical, research and policy advisory services

14. UNIDO and UN Women are partnering on the Economic Empowerment of Women in Green Industry project in Cambodia, Peru, Senegal, and South Africa. A synthesis report on policy assessment and analysis of opportunities, constraints, and possible measures to increase the participation of women in green industry<sup>4</sup> was published through the project in March 2021, for the sixty-fifth session of the Commission on the Status of Women. The report found that an increasing number of women are inspired to work in green industry as entrepreneurs or professionals due to a strong perception that green industry provides more opportunities for women to progress, compared to conventional industries.

15. The "Clean Energy Mini-Grid Policy Development Guide",<sup>5</sup> published in March 2021, aims to help policymakers navigate the renewable mini-grid market towards achieving universal electricity access.

16. In December 2020, the Global Eco-Industrial Parks Programme published the "Lessons Learnt from Assessing 50 Industrial Parks in Eight Countries against the International Framework for Eco-Industrial Parks",<sup>6</sup> as a guide for policymakers interested in transitioning from industrial parks in their countries to eco-industrial parks while "An International Framework for Eco-Industrial Parks, version 2.0"<sup>7</sup>, was published in January 2021.

17. A new publication resulting from UNIDO's collaboration with Austria, Germany, and Switzerland, on "Chemical Leasing Function to Impact: A performance-based business model for sustainable chemicals management",<sup>8</sup> provides guidance on

<sup>3</sup> [www.planetgold.org/about](http://www.planetgold.org/about).

<sup>4</sup> [www.unido.org/sites/default/files/files/2021-03/SYNTHESIS\\_REPORT\\_komprimiert.pdf](http://www.unido.org/sites/default/files/files/2021-03/SYNTHESIS_REPORT_komprimiert.pdf).

<sup>5</sup> [www.unido.org/sites/default/files/files/2021-03/CEMG\\_Development\\_Guide\\_EN.pdf](http://www.unido.org/sites/default/files/files/2021-03/CEMG_Development_Guide_EN.pdf).

<sup>6</sup> [www.greenindustryplatform.org/research/lessons-learnt-assessing-50-industrial-parks-eight-countries-against-international](http://www.greenindustryplatform.org/research/lessons-learnt-assessing-50-industrial-parks-eight-countries-against-international).

<sup>7</sup> <https://openknowledge.worldbank.org/handle/10986/35110>.

<sup>8</sup> [www.greenindustryplatform.org/research/chemical-leasing-function-impact-performance-based-business-model-sustainable-chemicals](http://www.greenindustryplatform.org/research/chemical-leasing-function-impact-performance-based-business-model-sustainable-chemicals).

how chemical leasing relates to circular economy, the Sustainable Development Goals (SDGs), digitalization, green chemistry, gender and inclusiveness, change management and long-term sustainability benefits.

18. In partnership with the International Network on Small Hydro Power and, with the input of around 80 international experts and 40 international agencies, UNIDO supported the process leading to the International Working Agreement 33-3: “Technical Guidelines for the Development of Small Hydropower Plants, Part 3: Design Principles and Requirements” under the auspices of the International Organization for Standardization.<sup>9</sup>

## V. Normative function

19. The project, resulting from the partnership between UNIDO, the European Commission and, the Climate Parliament, “Parliamentary Engagement on Renewable Energy” is raising awareness, building capacity, and mobilizing the political will of policymakers from Africa and the Middle East to address the climate crisis and to accelerate the transition to renewable energy. Between July 2020 and June 2021, the project will have held over 30 parliamentary roundtables with the participation of over 300 members of parliament, including 100 women.

20. In the Latin American region, UNIDO is working with 13 countries to draft and reinforce regulatory frameworks and fill the gaps in national environmental, health, work policies, and regulations to ensure the sound management of e-waste. In total, 231 environmental policies and regulations have been approved under the UNIDO POPs programme. UNIDO is also building national capacity to adopt regulatory frameworks to prevent industrial accidents, reduce their frequency, severity and mitigate their effects, including in a transboundary context.

## VI. Convening and partnerships

21. In preparation for the 2021 high-level political forum on sustainable development, UNIDO led the development of two policy briefs on interlinkages between SDG 7 and SDG 9 as well as SDG 7 and SDG 12, to be launched under the umbrella of the Multi-Stakeholder Technical Advisory Group on SDG 7. Together with the FAO and the United Nations Human Settlements Programme, UNIDO is co-leading the thematic Working Group on Innovation, Technology, and Data in preparation for the High-level Dialogue on Energy,<sup>10</sup> to be convened by the United Nations Secretary-General in September 2021.

22. Upon the request of the General Conference,<sup>11</sup> UNIDO is convening consultations on circular economy for Member States to deliberate on the means to promote the transition to a circular economy, identify challenges and devise solutions. The global consultations<sup>12</sup> aim to arrive at actionable policymaking organ decisions, which will advance the work of UNIDO and its Member States on circular economy in intergovernmental processes, thereby promoting inclusive and sustainable industrial development in the framework of the United Nations Decade for Action. Furthermore, UNIDO partnered with the European Commission and the United Nations Environment Programme to launch the Global Alliance on Circular Economy and Resource Efficiency<sup>13</sup> to provide a global impetus for initiatives related to the circular economy transition, resource efficiency and sustainable consumption and production.

<sup>9</sup> [www.iso.org/standard/82192.html](http://www.iso.org/standard/82192.html).

<sup>10</sup> [www.un.org/en/conferences/energy2021](http://www.un.org/en/conferences/energy2021).

<sup>11</sup> GC.18/Res.7.

<sup>12</sup> [www.unido.org/our-focus-safeguarding-environment/global-consultations-circular-economy](http://www.unido.org/our-focus-safeguarding-environment/global-consultations-circular-economy).

<sup>13</sup> [www.unido.org/news/launch-global-alliance-circular-economy-and-resource-efficiency-0](http://www.unido.org/news/launch-global-alliance-circular-economy-and-resource-efficiency-0).

23. Due to travel restrictions caused by the COVID-19 pandemic, the Vienna Energy Forum, a flagship event co-hosted by the Government of Austria, the International Institute for Applied Systems Analysis and UNIDO, was recalibrated to convene in the form of a virtual series<sup>14</sup> of online events running from October 2020 to April 2021. This series brought together over 500 speakers and 1,500 participants to explore the role of energy vis-à-vis the food systems, industry and product sectors in the context of green COVID-19 recovery.

## VII. Outlook

24. In the framework of the United Nations Decade of Action, UNIDO will amplify its efforts to assist its Member States in achieving the targets of SDGs relating to the environment, climate change and sustainable energy, through ISID approaches and in synergy with the green COVID-19 recovery efforts.

25. UNIDO will expand its work on green hydrogen as a technology option to decarbonize energy value chains associated with hard-to-abate industrial sectors through the launch of a global partnership on hydrogen application in industry. UNIDO will continue promoting the transition to a circular economy along fashion, plastics, electronics, construction and, building materials value chains at the global, regional and country levels to mitigate climate change, slow biodiversity loss and reduce pollution.

26. Having obtained accreditation to the Green Climate Fund on 20 August 2020, and in line with resolution GC.18/Res.7, UNIDO will strive to facilitate access of Member States to climate finance required to meet their national commitments under the Paris Agreement.

## VIII. Action required from the Board

27. The Board may wish to take note of the information provided in the present report.

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<sup>14</sup> <https://www.viennaenergyforum.org/vef-virtual-series>.