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## **Industrial Development Board**

### **Fiftieth session**

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Item 8 (b) of the provisional agenda

**UNIDO strategy in response to climate change**

## **UNIDO Strategy in response to climate change**

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

This document presents the UNIDO Climate Change Strategy prepared in response to General Conference resolution GC.19/Res.2 through a consultative process with UNIDO Member States.

## **I. Introduction**

1. The General Conference, in its resolution GC.19/Res.2, requested the Director General to develop a draft strategy in consultation with Member States, for consideration by the Industrial Development Board at its fiftieth session, that will enhance the efficiency, effectiveness and coordination of UNIDO's activities in support of Member State inclusive and sustainable industrial development-related climate priorities and to implement climate-related best practices across its operations. It further requested the Director General to report to the fiftieth session of the Industrial Development Board on the developments regarding the implementation of this resolution.
2. In response to these requests, the Secretariat convened two development dialogues, invited inputs and guidance from Member States through a survey and bilateral meetings, and circulated two draft versions of the strategy for review by Member States.
3. The UNIDO Climate Change Strategy resulting from this consultative process is contained in an annex to the present document.

## **II. Action required of the Board**

4. The Board may wish to consider the document included in the annex and provide guidance to the Secretariat on further action as appropriate.



## Annex

### UNIDO Climate Change Strategy

#### Background

1. Human-induced climate change is affecting every region on Earth in multiple ways, while affecting the world's most vulnerable communities first and hardest.<sup>1</sup> Widespread and severe impacts to people and their livelihoods, infrastructure and ecosystems have resulted from increases in the frequency and intensity of severe weather events, extreme heat, heavy rainfalls, droughts and fires.<sup>2</sup>
2. Within the global climate regime, governments and non-State stakeholders have to take action to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels; increase the ability to adapt to the effects of climate change; and make finance flows consistent with a pathway towards low-emission climate-resilient development in accordance with the goals of the Paris Agreement.<sup>3</sup>
3. The United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement must be implemented based on the principles of equity and common but differentiated responsibilities and respective capabilities in light of different national circumstances. Climate protection, built on the implementation of the Paris Agreement, must be pursued together with respect for human rights, the protection of biodiversity, and the right to development. These are anchored in the 2030 Agenda and the Sustainable Development Goals (SDGs). Developed countries in particular must honour their responsibilities related to climate action and provide climate finance, technology transfer and capacity-building to developing countries, if we are to achieve these goals.
4. The role of industry in the climate change context is threefold. Industry is one of the largest emitters of greenhouse gases; it is itself adversely affected by the changing climate and resource depletion; and it has a potential to become a leading provider of technological solutions, business models and green jobs, while influencing consumer behaviour and lifestyles across the globe. Inclusive and sustainable industrialization is a key element of an effective climate change strategy.

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<sup>1</sup> IPCC, 2021, Climate change widespread, rapid, and intensifying <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>.

<sup>2</sup> IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press.

<sup>3</sup> Paris Agreement, Article 2.

## Mandate

### Box 1: Climate change and industry: the imperative to act

- 3.5 billion people are highly vulnerable to climate impacts and severe water shortages.
- Between 2010 and 2020, human mortality from floods, droughts and storms was 15 times higher in highly vulnerable regions.
- 30 per cent of the world’s population is exposed to deadly heat stress, rising to 50–75 per cent by 2100.
- One billion people living on coasts will be at risk by 2050, with small island settlements and low-lying areas projected to disappear.
- 34 per cent of anthropogenic greenhouse gas emissions in 2019 came from the industrial sector.
- Unabated emissions from industrial processes risk consuming the world’s entire carbon budget by 2050.
- Economic losses from extreme weather events total \$174 billion per year and rising.

5. Guided by the Abu Dhabi Declaration, which reconfirms the commitment of UNIDO Member States to the Paris Agreement, the Medium-Term Programme Framework 2022–2025 sets “climate-neutral industry and circular economy” as one of the priority areas of intervention of the Organization.

6. To operationalize this priority, the General Conference, at its nineteenth session, requested the Director General to develop a draft strategy in consultation with Member States, for consideration by the Industrial Development Board at its fiftieth session, that will enhance the efficiency, effectiveness and coordination of UNIDO’s activities in support of Member States climate priorities related to inclusive and sustainable industrial development (ISID) and to implement climate-related best practices across its operations.<sup>4</sup>

### Vision 2050

7. A world without poverty and hunger, where industry drives low-emission economies, improves the living standards and preserves the liveable environment for present and future generations, leaving no one behind.

### Mission statement

8. Low-emission climate-resilient development is the guiding principle for UNIDO’s activities on inclusive and sustainable industrial development (ISID). It will be well anchored in its strategic documents and result metrics, and reflected in its institutional structure. Low-emission climate-resilient development also forms a key pillar of UNIDO’s engagement with its Member States, the United Nations System and other partners and stakeholders.

### Scope

9. UNIDO’s actions to achieve climate neutrality will be aligned with the 2030 Agenda for Sustainable Development, the UNFCCC and its Paris Agreement; informed by scientific findings of the Intergovernmental Panel on Climate Change; and driven by national climate and industry priorities and needs. The Joint Declaration signed by UNIDO and the Secretariat of the UNFCCC will guide collaboration between the two entities.

10. The Strategy seeks to create a flexible framework for action supported by all Member States. It will be aligned with other guiding documents, including the

<sup>4</sup> GC.19/Res.2.

Strategy for Post-conflict/-crisis Situations, the Strategies for Small Island Developing States, Least Developed Countries and Middle-Income Countries, the Strategy for Gender Equality and Empowerment of Women, as well as regional strategies.

11. The implementation of the Strategy will maximize synergies with other priority areas of UNIDO, such as energy, agribusiness development and food security, circular economy and biodiversity. UNIDO will seek to provide solutions to global challenges in a holistic and integrated way, handle trade-offs and maximize co-benefits.

### **Operational principles**

12. **Support the needs and priorities of developing countries in line with their right to development:** Advisory and technical cooperation services of UNIDO are provided in a demand-driven manner, tailored to local conditions and open to the use of a broad range of technologies critical to achieving low-emission climate-resilient development. Technological options for avoiding and reducing greenhouse gas emissions must be further developed. UNIDO seeks to provide a platform for technology transfer, investment mobilization and climate partnerships to accelerate this process.

13. **Strive for a level playing field for industrial policies to promote low-emission climate-resilient development:** It is important that global and regional market-based approaches are rooted in the principles of equity and environmental integrity and take into account special circumstances of countries that are most vulnerable to climate change. Fair, transparent, and balanced implementation of such policies would enable developing countries to benefit from significant transfer of know-how, climate technologies and capacity development to modernize and decarbonize industries, especially hard-to-abate sectors, while reducing greenhouse gas emissions.

14. **Promote transformational change through economy-wide, sectoral and cross-sectoral approaches:** Ultimately, climate neutrality cannot be achieved through a piecemeal approach. Developed countries should continue taking the lead by undertaking an economy-wide approach that combines sector-specific solutions with cross-sectoral priorities.

15. **Mainstream climate adaptation and resilience in industrial development:** To overcome the already drastic effects of climate change, reducing emissions alone will not be sufficient. Climate adaptation measures to reduce the damage resulting from climate change or to take advantage of technological innovations or development opportunities need to be fully integrated into industrial development activities, including the pursuit of climate-proofing and risk management-oriented approaches for greater climate resilience.

16. **Target results at the global, regional, national, and local levels:** To enhance impact of climate-related interventions, the Organization will concentrate programmatic efforts on well-defined areas of intervention where it adds value in line with its mandate and expertise.

17. **Empower MSMEs, small-scale industries and entrepreneurs:** Micro, small and medium-sized enterprises (MSMEs) form the backbone of the economy and generate a large share of economic value. When empowered, they can act in an innovative manner, foster alternative business models and respond to evolving demand. Given the scale of climate mitigation and adaptation action needed, it is critical that MSMEs are supported to be part of the solutions, be it as entrepreneurs, in the context of small-scale industries and clusters or through their participation in regional and global value chains.

18. **Harness industrial capabilities of the future:** To achieve the transformation needed for climate neutrality, the transfer of know-how and technologies, policy and

technical skills development and the creation of conducive regulatory frameworks and business operating environments will be critical.

**19. Deliver through partnerships for maximum impact:** Strategic partnerships will be essential to achieve climate-neutral industrial development at the global level, strengthen climate advocacy and deliver solutions that build on such synergies. UNIDO as a coordinating platform, including by making use of its field structure, will further enhance its status as a neutral broker to facilitate partnerships for maximum impact.

**20. Achieve net zero for UNIDO's activities by 2030:** Under the United Nations Greening the Blue initiative, UNIDO and its field offices will adopt climate-related best practice across its operations and be climate-neutral by 2030.

#### Areas of work

**21. Raise the profile of ISID in the international climate change discourse and engage industry stakeholders in climate advocacy:** UNIDO will foster a global understanding and raise awareness of the role of industry as a solution provider in achieving the goals of the Paris Agreement. Through its Member States, UNIDO will contribute to a higher profile of industry as part of essential climate solutions, and step up the debate on emerging issues of the climate-industry nexus in the UNFCCC process.

**22. Facilitate international industrial cooperation for climate action:** International cooperation plays a central role in developing national solutions that contribute to stabilization of the global climate system. UNIDO will facilitate the establishment of global and regional alliances and partnerships to accelerate collective action, decarbonize global value chains, and expand markets for green industrial products.

**23. Promote Paris-compatible industrial policies:** Industry transition is a complex process with actions taken today that will have an impact on economies and societies for decades to come. UNIDO will influence the global discourse on issues at the intersection of climate action and ISID, such as circular economy and industrial decarbonization, but also enhance ongoing work on digitalization, renewable energies and technology solutions, as well as on sustainable agricultural development and climate-smart agriculture.

**24. Provide evidence-based industrial policy advice for low-emission climate-resilient development:** UNIDO will support Member States to identify, prioritize and undertake climate action in the industry sector that is nationally appropriate, country-driven and aimed at transformative change. Upon request, UNIDO will assist developing countries in incorporating industry considerations into their national strategies and plans, including National Adaptation Plans, Nationally Determined Contributions under the Paris Agreement, long-term low greenhouse gas emission development strategies, disaster risk reduction and humanitarian response plans.

**25. Facilitate technology and knowledge transfer to achieve low-emission climate-resilient development:** UNIDO will continue assisting developing countries in identifying “low-hanging fruit” mitigation measures and adopting mature climate technologies. At the same time, UNIDO will act as a thought leader for a bold climate action in industry that embraces disruptive technologies, climate risk-informed management new business models and mentality shifts to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. It will proactively foster South-South, North-South and triangular cooperation to enable transfer of a broad range of technologies and innovations.

**26. Boost the use of renewable energies in achieving low-emission climate-resilient development:** The development of renewable energy sources in

developing countries is of great importance for improving livelihoods, creating jobs, enhancing learning opportunities and decarbonizing energy systems. UNIDO will support the fostering of global clean energy cooperation and work with partner countries to leverage suitable technologies to promote industry-related energy and resource efficiency and explore diverse renewable energy applications, including green hydrogen, to achieve significant emissions reductions. Green hydrogen is a viable solution to decarbonizing the industry, energy and transport sectors while creating green jobs opportunities and other socioeconomic benefits.

**Box 2. UNIDO’s Global Programme for Green Hydrogen in Industry**

Green Hydrogen (GH2) will have a catalytic role for energy transition towards climate change mitigation. With their rich renewable energy potentials, developing countries are uniquely positioned to become key producers of GH2 and benefit from new paths to low-emission industrial and economic development. Investing in renewable power projects and electrolyzers, attracting energy-intensive steel or base chemicals investments or promoting downstream industries using green steel or chemical feedstock, can generate new jobs and welfare benefits.

Responding to this opportunity, UNIDO launched its Global Programme for Green Hydrogen in Industry in July 2021 to accelerate the global application of GH2 to decarbonize industry and promote low-emission industrial development. The programme is based on two pillars:

(1) Global Partnership pillar – focusing on policy dialogue, development and distribution of knowledge, technical guidelines and standards;

(2) Technical Cooperation pillar – focusing on supporting the uptake of national green hydrogen industrial clusters, road maps and joint development of projects.

UNIDO will collaborate with public and private sectors, financial organizations, and academia to ensure input from all stakeholders and along the GH2 value chain.

**27. Strengthen the capacity to integrate low-emission climate-resilient good practices into ISID:** UNIDO will assist developing countries in enhancing the national capacity to assess impact of climate change on enterprises, food and energy systems and infrastructure to climate change, and devise measures to prevent and reduce the impacts of weather-induced extreme events, while strengthening resilience to future crises. UNIDO will place a special emphasis on promoting nature-based solutions and ecosystem-based adaptation. UNIDO will further support the identification and scaling up of existing good practices and innovative solutions for climate action in industry and strengthen capacities to tap climate finance opportunities.

**28. Build the capacity of Member States to effectively participate in market-based mechanisms:** The new market mechanisms established under the Paris Agreement could facilitate the implementation of NDCs, foster sustainable development and stimulate the broad participation of a broad range of stakeholders in climate action. They can induce increased financial flows to developing countries. Engaging in international market mechanisms requires specific capacities for private and public actors. UNIDO, in collaboration with its partners, will support such capacity-building efforts in developing countries, in particular in least developed countries and small island developing States, including through knowledge-sharing and dissemination of good practices, peer-to-peer exchanges or learning-by-doing approaches.

**29. Coordinate and leverage climate finance opportunities:** UNIDO will assist in leveraging industrial development to mobilize private sector investments and international climate finance to enable a paradigm shift towards low-emission

climate-resilient development in developing countries, in particular in least developed countries, landlocked developing countries and small island developing States. UNIDO will seek to broker partnerships to mobilize, facilitate, de-risk and leverage investments for climate-friendly projects and technologies in developing countries from various private, public and unconventional sources.

**30. Foster green and digital skills to enable a just transition of the workforce:**

Addressing climate change requires a paradigm shift towards building low-emission climate-resilient economies and societies, while ensuring a just transition of the workforce that creates decent jobs, taking into consideration social dimensions of such transition. Given that many labour-intensive industries may be subject to automation in the coming decades, it is essential to equip women and men with the skills they need for the future of manufacturing. UNIDO's integrated initiatives will include skills development, technical and vocational training, open-access learning platforms, labs and enhanced remote learning options.

### **Implementation of the Strategy**

31. An Action Plan including measurable indicators and targets will be developed to operationalize the implementation of the Strategy. The indicators and targets will be harmonized, to the extent possible, with those of the UNIDO Integrated Results Performance Framework and aligned with the Paris Agreement milestones.

32. The Action Plan will cover the capacity development, resource mobilization, partnerships and communication activities required to implement the Strategy. A capacity needs assessment will be conducted to identify the climate-related learning, knowledge and capacity gaps of the UNIDO headquarters and field offices and inform the development of an internal capacity-building plan. A resource mobilization plan, including a core budget and external climate financing through diversified partnerships and financing agreements, will be developed as part of the Action Plan. A targeted communication plan will be created to raise awareness of the linkages between climate change and industrial development and facilitate the engagement with partners, financiers and stakeholders.

33. As an organization with limited staffing and resources, UNIDO has to rely on a broad range of partners to be effective and relevant. Partnerships and inter-agency cooperation are essential for leveraging expertise, accessing research and knowledge, harnessing investments and social capital, creating momentum, sparking innovation, avoiding duplication and enhancing complementarities, expanding capacity development and strengthening outreach to deliver impact at scale. A partner engagement plan will be developed to enhance impact of existing partnerships and establish new ones.

#### **Box 3. Leveraging strategic partnerships**

- UNIDO's field structure including offices in 48 countries and covering many more through regional representation;
- Liaison Offices in Brussels, Geneva and New York and UNIDO's global network of Investment and Technology Promotion Offices;
- The Global Network of Regional Sustainable Energy Centers;
- Partnerships with the climate finance architecture: the Global Environment Facility, the Green Climate Fund and the Adaptation Fund;
- New partnerships with international financial institutions, corporations, philanthropists and impact investors.

34. The Strategy will be updated periodically to reflect outcomes of monitoring and evaluation and in response to emerging global trends and deliberations under the UNFCCC and other sustainable development processes.