



Contribution by the Chair

DRAFT OPINION 2: GREEN DIGITAL TRANSFORMATION: CLIMATE CHANGE AND ENVIRONMENTAL SUSTAINABILITY

Purpose

This document presents interim version of Draft Opinion 2: Green Digital Transformation: climate change and environmental sustainability, for the Seventh World Telecommunication/Information and Communication Technology Policy Forum (WTPF-26). The edits reflect changes agreed by members of the Informal Expert Group during the January 2026 IEG meeting.

Action required

The Informal Expert Group on WTPF-26 is invited to **consider** this document.

References

[IEG-WTPF-26 webpage](#)

DRAFT OPINION 2: Green digital transformation: climate change and environmental sustainability

The seventh World Telecommunication/ICT Policy Forum (Geneva, 2026),

recalling

- a) Resolution 70/1 of the United Nations General Assembly, on transforming our world: the 2030 Agenda for Sustainable Development, in particular, Sustainable Development Goals 12 on Responsible Consumption and Production and 13 on Climate Action;
- b) Resolution 70/125 of the United Nations General Assembly, on the outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society (WSIS);
- c) Resolution 182 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, on the role of telecommunications/ICTs in regard to climate change and protection of the environment;
- d) Resolution 1429 of the ITU Council, adopted at its 2024 session, on ITU's role in facilitating ICTs' contribution to sustainability and climate action;
- e) Resolution 73 (Rev. New Delhi, 2024) of the World Telecommunication Standardization Assembly, on information and communication technologies, environment, climate change and circular economy;
- f) Resolution 79 (Rev. New Delhi, 2024) of the World Telecommunication Standardization Assembly, on the role of telecommunications/ICTs in handling and controlling e-waste from telecommunications and information technology equipment and methods of treating it;
- g) Resolution 66 (Rev. Kigali, 2022) of the World Telecommunication Development Conference, on information and communication technology, environment, climate change and circular economy,

emphasising

- a) that climate change and biodiversity loss and pollution represent significant challenges of our time and that addressing them requires progress towards sustainable development;
- b) that limiting global warming requires rapid, deep and sustained reductions in global greenhouse gas (GHG) emissions in line with the principles and commitments set out in the UNFCCC and the Paris Agreement, in the light of different national circumstances,

taking into account

- a) that telecommunications/ICTs contribute to climate change throughout their life cycle;
- b) that a green digital transformation combats climate change by developing, deploying, and disposing of telecommunications/ICTs in environmentally sustainable ways;
- c) that a green digital transformation reduces the environmental footprint of telecommunications/ICTs by promoting circularity throughout their life cycle: extending the life of equipment, combatting software obsolescence, promoting the repair and refurbishment of devices, and improving the recovery and reuse of material resources from related waste;
- d) that new policy initiatives, such as a green digital transformation, are essential to meet agreed climate change targets laid out in the Paris Agreement signed at the 21st UN Climate Change Conference (COP21), with the United Nations Environmental Program (UNEP) reporting that limiting global warming to 1.5°C is impossible under the current Nationally Determined Contributions (NDCs),

considering

- a) ITU's Green Digital Companies Report with the World Benchmarking Alliance, that revealed that the race to develop artificial intelligence and expand data centres is driving unprecedented growth in the digital sector and fuelling a sharp rise in GHG emissions and energy consumption;
- b) the importance of leveraging digital technologies for achieving the ultimate objectives of the United Nations Framework Convention on Climate Change (UNFCCC), in the context of sustainable development, and the Paris Agreement signed at the 21st UN Climate Change Conference (COP21);
- c) that public procurement frameworks and market mechanisms can encourage the deployment of environmentally sustainable telecommunication/ICTs,

recognising

- a) that the environmental benefits and damage of telecommunications/ICTs are not evenly distributed and that many developing countries suffer from environmental hazards due to e-waste;
- b) according to the United Nations' 2024 *Digital Economy Report*, in per capita terms, developed countries generated on average 3.25 kg of digital-related waste compared with less than 1 kg in developing countries, and 0.21 kg in the least developed countries (LDCs);
- c) that industry practices should promote opportunities and incentives for consumers to reuse, repair, and recycle ICT products, which aim at reducing e-waste, particularly in developing countries;
- d) that telecommunications/ICTs infrastructure, including data centres, can lead to high energy consumption and carbon emissions if they are not managed sustainably;
- e) that the rapid development of telecommunications/ICTs can lead to increased electronic waste, which poses environmental hazards;
- f) that SIDS and other countries with small populations may face challenges in implementing green digital transformation programs without partnerships to scale up operations;
- g) that developing countries may have challenges meeting Paris Agreement targets and facilitating the green digital transformation without financial and technical support;
- h) that a green digital transformation must factor in that many developing countries still need to digitalize further in order to participate effectively in the global economy and society;
- i) the contributions made by relevant ITU Study Groups across all three Sectors, such as ITU-T Study Group 5, ITU-R Study Group 7, ITU-D Study Group 2,

is of the view that

- 1 rapid, deep and sustained reductions in global GHG emissions are necessary to achieve a sustainable green digital transformation;
- 2 that national, regional and local governments, the private sector, civil society, the technical community and academia should partner together and work towards green digital transformation;
- 3 while telecommunications/ICTs make a significant contribution to global GHG emissions, their transformative power can be harnessed in order to address climate change;
- 4 the increasing, dynamic pace of the telecommunications/ICTs sector should be compatible with a green digital transformation and represents an opportunity for economic growth, improved competitiveness, and sustainable development across all economic sectors, while simultaneously decreasing GHG emissions from other sectors;
- 5 telecommunications/ICTs could help to mitigate the environmental impact of other sectors by multiple ways, such as identifying data-driven actionable insights;

6 transitioning to a more circular economy would optimize the economic and environmental impacts of telecommunications/ICTs, including supporting business opportunities and job creation;

7 Sustainability, energy efficiency, *inter alia*, voluntary infrastructure sharing and reducing e-waste should be integral considerations in the development, deployment and use of telecommunication/ICTs,

invites Member States

1 to utilise telecommunications/ICTs as an effective method for reducing GHG emissions across multiple economic sectors;

2 to formulate appropriate strategies and policies at the regional, national, and local level that promote the circularity of telecommunication/ICTs equipment at the public sector, consumer and industry level;

3 to promote the development of low-cost safe and sustainable-by-design solutions with reduced carbon footprint across their lifecycle;

4 to foster an enabling environment for investment into environmentally sustainable telecommunication/ICTs;

5 to invest in research and development into environmentally sustainable telecommunication/ICTs;

6 to consider using government procurement requirements to encourage deployment of sustainable telecommunications/ICTS among relevant organisations, if appropriate;

7 to encourage the evaluation of the full range of environmental impacts of telecommunications/ICTS across their life cycle, from planning to disposal, to inform policy, innovation, and sustainable design practices;

8 to implement public awareness campaigns on e-waste disposal and recycling that increase understanding among consumers about the waste implications of their devices;

9 to incentivize use of renewable energy and energy efficient devices with low GHG emissions, taking into account circumstances and capabilities of individual Member States;

10 to strengthen frameworks for disposal of e-waste management by way of developing policies, regulations, frameworks and strategies,

invites Member States, Sector Members and other stakeholders

1 to take urgent and immediate steps to reduce the negative environmental impact and risks of telecommunication/ICTs and all relevant infrastructure;

2 to strengthen their commitment to tackling e-waste, by planning for future recycling at the design stage of future ICTs, to encourage the use and development of sustainable and robust telecommunication/ICT equipment as well as recyclable materials as part of the circular economy;

3 to promote sustainable consumption and production patterns, by participating in the circular economy of telecommunications/ICTs, by encouraging the repair, reuse, and resale of relevant devices, and by raising public awareness on e-waste disposal and recycling;

4 to develop policies that promote energy-efficient technologies, which can contribute to reducing the sector's carbon footprint;

5 to adopt e-waste management policies, including recycling programs and responsible disposal of old electronics;

6 to harness the power of digital transformation to advance inclusive and sustainable development, while mitigating its negative environmental impacts by shifting towards a circular digital economy, characterized by responsible consumption and production, renewable energy use, and comprehensive e-waste management;

7 to incentivize the reduction of carbon emissions to encourage sustainable practices in digital industries;

8 to utilize telecommunication/ICTs to combat climate change and promote circularity in other sectors, such as energy, manufacturing industries, transportation, buildings and agriculture to achieve the sustainable development goals;

9 to recognise the importance of international collaboration for a green digital transformation, including voluntary and mutually agreed technology transfer and development, across all actors of society, sectors and regions, in contributing to progress towards the goals of the UNFCCC conferences and the Paris Agreement;

10 to consider adopting relevant ITU-T recommendations on e-waste and the environment;

11 to participate actively in ITU's activities on sustainable development and the intersectoral related efforts;

12 to promote infrastructure and resource sharing (and cross-sector infrastructure sharing where feasible), in order to reduce redundant infrastructure, minimize resource consumption, lower energy use, and leverage assets across sectors such as energy, transport and telecommunication/ICTs;

13 to integrate telecommunications/ICT into environmental protection strategies to create an overall ecosystem for moving towards sustainable future,

invites the ITU Secretary-General

1 to work on raising the capability of all related stakeholders, especially those most affected by climate change, and having regard to their development plans, on ICT environmental protection issues and for the well-being of the population;

2 to promote international partnerships for green digital transformation that empower countries, particularly developing countries, to participate in the digital economy;

3 to further strengthen coordination between the three sectors on their work addressing green digital transformation;

4 to facilitate collaboration among Member States, regional entities and other key stakeholders, to share knowledge, and best practices to support institutional capacity building of member states to advance green digital transformation initiatives.