Session Outcome Document

Summary of Session 241: Enabling the Net Zero Transition – Harnessing ICT solutions to reduce GHG emissions

Organized by: International Telecommunication Union

17 March 2023, from 1100 to 1145 – Room 11+12

https://www.itu.int/net4/wsis/forum/2023/Agenda/Session/241

Key Issues discussed (5–8 bullet points)

- The session emphasized the importance of efficiency in the ICT sector and how ICTs can help reduce GHG emissions in other sectors.
- International standards such as Recommendation ITU-T L.1470 "Greenhouse gas emissions trajectories for the information and communication technology sector compatible with the UNFCCC Paris Agreement" demands a 45 per cent reduction of the ICT sector carbon footprint between 2020 and 2030, with reductions continuing towards Net Zero and ITU-T L.1471 "Guidance and criteria for information and communication technology organizations on setting Net Zero targets and strategies" defines the criteria for targets towards Net Zero, achieving Net Zero around 2040–2050 for the ICT sector.
- Speakers urged countries to collaborate with the ICT sector to promote efficiency and reduced GHG emissions when regulating emissions.
- It was highlighted by India that its 2018 National Digital communication policy prioritizes green technology and sustainable development. Moreover, at COP 27, India committed itself to achieving the goals of the Paris Agreement by 2070. India also aims to produce affordable green energy through domestic production and innovation within a decade.
- The session showcased how companies like Orange are committed to achieving Net Zero emissions through international standards like ITU-T L.1470. They are using digital solutions such as IoT, 5G, AI, and Edge Computing to reduce emissions in smart water management, metering, waste management and tracking.
- The session also highlighted, through a presentation from the World Bank, how digital technologies could enhance resilience and support countries in implementing mitigation and adaptation provisions. They can optimize energy efficiency and processes in sectors like agriculture, transportation, energy and urban planning. However, the session cautioned that digital technologies are not silver bullets and that there is an ongoing need to consider rebound effects, emissions tracking methodologies, adoption barriers and bridging the digital divide.
- Speakers stressed the importance of collecting data on the ICT sector's enablement aspects to reduce GHG emissions. International standards like ITU-T L.1480 can help assess the emissions of various ICT solutions such as virtual meetings, and provide a basis for more rigorous assessments and foster transparency.

Towards WSIS+20 and WSIS beyond 2025, please share your views on the emerging trends, challenges, achievements, and opportunities in the implementation of the WSIS Action Lines to date (5–8 bullets)

- Capacity Building (C4): Speakers highlighted the importance of ensuring that everyone is equipped with the necessary tools and skills to benefit from ICTs.
  - In order to successfully green ICTs, it is essential to implement policies and programmes and encourage local communities to reduce the digital divide.

- Enabling Environment (C6): Speakers emphasized the need to maximize the social, economic and environmental benefits of digital technology and ICT solutions, while minimizing any side effects.
    - There is a significant opportunity for governments and countries to support the implementation of international standards to foster transparent policy and regulatory frameworks to reduce GHG emissions through digital technologies.
- International and regional cooperation (C11): Speakers raised the need for international cooperation among all stakeholders to bridge the digital divide while reducing GHG emissions. In this regard, ITU-T has worked jointly with GSMA, GESI and SBTi, and with guidance from IEA, to develop the decarbonization trajectory of the sector (Recommendation ITU-T L.1470). ITU-T has also developed the Net Zero guidance (Recommendation ITU-T L.1471) to define the Net Zero criteria for ICT companies.
    - Countries play a critical role in support the adoption of ICTs and digital technologies that are adjusted to meet the needs of low and middle-income nations.

Tangible outcomes (such as key achievements, announcements, launches, agreements, and commitments (3–5 bullet points)

- The ICT sector has agreed to reduce carbon emissions and undertake mitigation activities.

- There is a general consensus to adopt international standards like ITU-T L.1480 to evaluate the impact of ICT solutions on GHG emissions of other sectors, while reducing the sector´s own footprint in line with Recommendations ITU-T L.1470 and ITU-T L.1471. ITU-T L.1470 demands a 45 per cent reduction of the ICT sector carbon footprint between 2020 and 2030, with reductions continuing towards Net Zero around 2040–2050.

- The ICT sector is dedicated to preserving biodiversity and exploring the potential of digital technologies as a part of the solution.

Actionable plan (2–5 points)

- To green the ICT sector effectively and make the best use of its solutions, there is a need for policy and regulation, monitoring reporting, research and innovation and capacity building.
- To support GHG emission reduction efforts in the ICT sector and beyond cites, countries and industries must implement international standards.

Suggestions for thematic aspects that might be included in the WSIS Forum 2024 (WSIS+20 Forum High-Level Event) (one paragraph)

It is recommended that biodiversity as a thematic aspect should be explored in more detail in upcoming WSIS Forums. The ICT sector impacts biodiversity significantly as it consumes vast amounts of energy and natural resources. Therefore, the industry must take responsibility and work towards reducing its environmental footprint. The double-edged sword aspects of ICTs and digital technologies mean that they can affect biodiversity positively and negatively. It is essential to assess both ICT solutions' direct and indirect impacts on biodiversity to understand their overall effect.

Another important thematic is to explore how countries could work to maximize the positive effects of ICT on global carbon emissions, while suppressing any negative effects, including the rebound effect.

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