Permanent Mission of the Republic of Zambia to the United Nations in New York

Permanent Mission of Estonia to the UN

UN environment programme | Science Policy Business Forum | UN trade & development | UN environment programme

OFF-SITE SIDE EVENT AT THE UN SUMMIT OF THE FUTURE

21 September 2024, 16:30-18:30 HRS

Estonian House, New York

The Global Digital Compact: A Roadmap to Advance Sustainable Digital Transformation for an Equitable and Sustainable World

The Global Digital Compact is an outcome document of the Summit of the Future, co-facilitated by the Governments of Zambia and Sweden. It is designed to shape a more equitable, sustainable, and inclusive digital future, leveraging technology to advance all 17 Sustainable Development Goals. Through innovative financing models, sustainable infrastructure investments, and promoting sustainable digital practices, countries can embrace the digital economy and build a more equitable future.

The digital economy has become a cornerstone of global economic growth, contributing to an estimated 15.5% of global GDP, according to UNCTAD. For developing countries, the potential of digital technologies is especially profound. By leapfrogging over traditional development barriers, nations can accelerate economic progress, build resilient infrastructures, and open doors to global markets.

Digital technologies—if deployed responsibly—can facilitate more efficient resource use, lower carbon emissions, reduce pollution, and support the transition to renewable energy. The **Global Digital Compact** reinforces this by advocating for a digital economy that not only drives growth but also prioritizes the protection of the planet. It can create a path to leveraging digital transformation for economic development that is grounded in **environmental sustainability** as a core element of the **digital economy's value proposition**.

At the same time, digital technologies have a large impact on the environment, from rare minerals mining to E-waste, from water consumption to carbon emissions – these environmental impacts remain largely underexplored and insufficiently researched. This oversight is especially significant for the global south, where the effects of environmental degradation are more accurately felt and where economic growth is essential for development.

Sustainable Digital Infrastructure, Building the Backbone of the Digital Economy: Nearly a third of the global population lacks internet access, primarily in developing countries (ITU, 2023). The digital divide is stark in rural areas with inadequate infrastructure investment. The European Commission (EC) emphasizes investing in high-speed broadband and mobile networks to ensure universal access, noting that a 10% increase in broadband penetration can boost GDP by 1.5% in developing countries (EC, 2023). Accelerating infrastructure development is crucial for widespread digital inclusion and economic growth.

Resource Efficiency and Sustainable Value Chains: **UNCTAD's Digital Economy Report 2024** highlights the need for environmentally sustainable and inclusive digitalization strategies. The production and disposal of digital devices, along with increasing water and energy demands, take a toll on the planet. Digital devices, data centers, and ICT networks account for an estimated 6% to 12% of global electricity use. Countries that integrate green practices into their digital development strategies are more likely to see long-term benefits, both economically and environmentally. For instance, sustainable digital innovations—such as smart grids, AI-driven energy efficiency systems, and precision agriculture—have the potential to significantly reduce the carbon footprint while ensuring higher productivity and better resource management.

Financing Progress: Financing is a major challenge, with a substantial gap in infrastructure investment estimated at over $1 trillion annually (IMF, 2023). Only 20% of the population in low-income countries has access to basic

digital financial services (World Bank, 2023), limiting economic participation and exacerbating inequality. Blended finance and public-private partnerships are essential to bridge this gap and foster inclusive growth.

Developing countries face the environmental costs of digitalization while reaping fewer benefits. They export low-value raw materials and import high-value devices, increasing digital waste. Geopolitical tensions over critical minerals further complicate these challenges. UNCTAD's 2024 Digital Economy Report calls for a shift towards a circular digital economy, focusing on durable products, responsible consumption, reuse and recycling, and sustainable business models.

This High-Level Roundtable will create a platform for dialogue on actionable strategies for integrating digital technologies with environmental stewardship, offering insights for future action. By leveraging development financing, partnerships with technology leaders, and innovative governance frameworks, the GDC can guide developing countries to grow their digital economies sustainably.

A particular focus will be on how artificial intelligence (AI), one of the most transformative technologies of the digital age, can be harnessed to achieve environmental sustainability. This, while recognizing the energy demands and green-house gas emissions the technology is responsible for.

The forthcoming **UNEP Issue Note on the Environmental Impacts of AI** will provide critical insights into how AI can be deployed in ways that support climate action, reduce waste, and promote responsible resource management.

By fostering partnerships between governments, international organizations, and the private sector, the GDC can catalyze the adoption of digital technologies that drive sustainable development. As countries seek to bridge the digital divide, a stronger emphasis on sustainability is needed to ensure that digital transformation contributes to both economic growth and environmental preservation.

UNCTAD emphasizes that economic development that is not environmentally sustainable will also prove to be unsustainable economically.

The event will explore and address the challenges and opportunities in financing, infrastructure, and resource efficiency for implementing the Global Digital Compact and advancing the digital economy in developing and least developed countries (LDCs).

Expected Outcomes:

1. Collaborative initiatives and commitments to support the sustainable delivery of the GDC.
2. Identification of key barriers and opportunities in financing sustainable digital infrastructure.
3. Deepen the understanding on how digital technologies intersect with environmental sustainability and economic growth.
4. Understanding the Policy Harmonization strategies required to de-risk investment in sustainable digital economy in developing countries.
5. Strategies for effective public-private partnerships and innovative financing mechanisms.
6. Identify actions required to decouple digitalization from negative environmental impacts
7. Launch UNEP's Issue Note on AI's Environmental Footprint