4 September 2024
10:00 a.m. – 12:30 p.m. (EAT)
United Nations Conference Centre, ECA – Addis Ababa

DIGITAL ECONOMY REPORT 2024

Conference on shaping an environmentally sustainable and inclusive digital future in Africa

Background

While the global digital sector drives significant economic growth and offers unique opportunities for developing countries, it has become more apparent that the environmental repercussions are becoming more severe. Over the past two decades, the number of Internet users has jumped from 1 billion to 5.4 billion. With this surge, the demand for smartphones has more than doubled, with annual shipments rising from 500 million to about 1.2 billion in the past decade.

Notably, this demand brings with it certain spillover costs. In 2020 alone, it was estimated that the ICT sector emitted between 0.69 gigatons and 1.6 gigatons of CO_2, accounting for 1.5-3.2% of global greenhouse gas emissions. With the growing number of end-user devices, the boom of artificial intelligence and cryptocurrency mining, this figure is only expected to rise.

Previous editions of the Digital Economy Report – one of the flagship publications of UN Trade and Development (UNCTAD) – have focused on the implications of digitalization for inclusive development. These reports have placed great importance on bridging digital and data-related divides by enabling value creation in developing countries, as well as fostering better governance of data and digital platforms. The 2024 edition shifts the focus to the interrelation between rapid digitalization and environmental sustainability, a topic that has been underexplored.

Digital Economy Report 2024

The Digital Economy Report 2024 highlights the urgent need for sustainable strategies throughout the life cycle of digitalization. The rapid pace and expanding scope of digitalization make it increasingly important to understand the relationship between digitalization and environmental sustainability. From depletion of finite raw materials for digital and low-carbon technologies, escalating water and energy consumption and the growing issue of digitalization-related waste, the report explores the nature and scale of the sector's environmental footprint, which remains largely unassessed.

While the use of digital technologies can help to reduce greenhouse gas emissions across various sectors, these potential benefits are often offset by rebound effects of the increasing consumption of goods and services, leading to negative environmental impacts. The report underscores the double challenge faced by developing countries, not least in Africa. These nations are disproportionately affected by the adverse environmental effects of digitalization while also missing out on economic development opportunities due to widening digital divides. On the one hand, they are often the most vulnerable to potential negative environmental and social effects arising from digitalization, relating to raw material extraction, carbon emissions, water consumption and waste from digitalization. On the other hand, they are less equipped to harness digital technologies to mitigate risks from climate change and other environmental crises.

To reverse previous trade imbalances and promote a more inclusive and environmentally sustainable digital economy, resource-rich developing countries need to add more value to extracted minerals and diversify into other parts of the value chain. The production of critical minerals such as graphite, lithium and cobalt, which are essential for the transition to low-carbon and digital technologies, could increase by 500% by 2050 to meet the growing demand, according to the World Bank. While such trends risk depleting available minerals, the demand presents opportunities for countries like the Democratic Republic of the Congo, which holds 55% of the global reserves of cobalt, to add value to raw materials and achieve structural transformation. The report calls on governments and companies to balance the strategic importance of critical minerals with sustainable practices and implement policies that effectively address environmental concerns and demand for local resources.

The report highlights the significant environmental impacts of digital technologies, particularly through end-user devices, data networks and data centres. As the demand for data centres rises, including in Africa, concerns about their environmental footprint and the need for better water use and recycling practices become crucial. Moreover, the rapid growth of digitalization-related waste presents management challenges and poses health and environmental risks. The report emphasizes the need for international collaboration to promote a circular digital economy through sustainable practices, skills development and formalized waste management. It also stresses the importance of further digitalization in many developing countries.

Objective

UNCTAD and the United Nations Economic Commission for Africa (ECA) are co-organizing this event to bring together different stakeholders to discuss the key findings for Africa from UNCTAD's Digital Economy Report 2024.

The objective of this event is to highlight the urgent need for systematic shifts in the ICT sector to protect our planet and ensure the well-being of all.

The aim is to explore ways to achieve economic prosperity while conserving our planet and promoting intergenerational equity. Additionally, the event seeks to generate actionable policy recommendations and foster strategic collaborations to address the dual challenges of digitalization and environmental sustainability in Africa.

Target participants

The event will target stakeholders in Addis Ababa and elsewhere in Africa with an interest in digitalization and environmental policy on the continent. Target participants include policymakers, international organizations, development partners, academia, civil society, industry leaders and youth.

Modalities

The event will take place in a hybrid format at the United Nations Conference Centre, located at the ECA premises.

Contacts

1. Ms. Diane Sayinzoga
   Chief, Regional Office for Africa
   UN Trade and Development
   diane.sayinzoga@unctad.org

2. Mr. Torbjörn Fredriksson
   Head, Ecommerce and Digital Economy Branch
   UN Trade and Development
   Torbjorn.fredriksson@unctad.org

3. Mr. Mactar Seck
   Chief, Emerging and Frontier Technologies, Innovation and Digital Transformation Section
   Economic Commission for Africa
   Seck8@un.org