

Summary Note of the Green Digital Transformation Side Event (Happened Alongside Africa Centre for Energy Policy's Annual Future of Energy Conference 2024.)

Tue, 27 Aug 2024, from 11:50 GMT - 14:00 GMT.

Summary:

Introduction to the Future of Energy Conference

Patrick Stephenson set the stage for the conversation, emphasizing the significance of digital transformation and its connection to the energy transition. He provided details about the program, which includes a keynote presentation by Professor Eric Nyarko-Sampson and a panel discussion on digital innovation's role in driving a sustainable future for Africa. The section delved into the global focus on green digital innovation within environmental policies, highlighting the transformative impact of digital technologies in achieving a sustainable future. The introduction also acknowledged the virtual participation of attendees from various countries.

Emphasizing the urgency of green transition, the panel discussed the role of digital innovation in energy sector transformation, inclusive growth, and the importance of empowering communities across Africa through accessible and tailored technology.

- Policy Frameworks for Green Digital Transformation
- Challenges and Opportunities in Green Digital Innovation
- Digital Transformation for Sustainable Energy
- Integration of Digital Technologies in Renewable Energy

Key Questions asked during the discussions:

- How can digital technologies be deployed to improve the efficiency, transparency, and sustainability of renewable energy in Africa?
- What are the key barriers to the implementation or deployment of digital technologies for sustainability projects in Africa, and are there opportunities for unlocking these barriers?
- What role does policy play in integrating regional value chains around moving technology forward, and how enabling has the policy infrastructure been in this conversation?

Panel Discussion on Green Transformation for a Sustainable Future

Patrick Stephenson acknowledges Professor Nyarko-Sampson's thought-provoking insights on honesty and enterprising approaches in policy discussions. He highlights the importance of inclusivity and regional cooperation in harnessing digital innovation for clean energy solutions in Africa.

Introduction of Panelists

Patrick Stephenson introduces the diverse panel of speakers from different countries for the discussion, including Dr. Lawrence Nderu, Maida Hernandez, Nihal Manzoori, Gideon Plange, and Abdulrahim Shaibu-Issa. Each panelist's background and expertise in renewable energy, innovation, and entrepreneurship are briefly outlined, setting the stage for a diverse and insightful discussion.

Energy Solutions and Environmental Impact

Lawrence Nderu emphasizes the use of digital technology and natural energy sources to address energy needs in underserved areas. He discusses the implementation of smart solutions, such as using solar energy for mushroom farming, and highlights the environmental impact of traditional energy sources like coal. Patrick Stephenson follows up with a question about the financial challenges of deploying alternative energy solutions and the impact of climate change on African countries.

Discussion on Digital and Green Innovation Opportunities in Africa

Patrick Stephenson and other panel members discuss the opportunities and benefits of integrated value chain systems for energy transition technologies in Africa, focusing on digital and green innovation. They also explore cross-cutting solutions provided by digital innovators, such as AI applications for landslide prediction and monitoring bee populations. The barriers to implementing digital technologies for sustainability projects in Africa, including infrastructure and human capital capacity building, are also discussed.

Examples of Digital Technology in Green Transition

Abdulrahim Shaibu-Issah discusses the use of IoT for energy management in rural communities in Ghana, Sierra Leone, and Liberia, highlighting the cost-cutting benefits and real-time data collection. He also mentions the solar energy value chain in Chile and the West African Power Pool's efforts to connect national grids using digital tools for a unified regional electricity market. Patrick Stephenson then raises the question of the role of policy in integrating regional value chains for technology advancement.

Action points from the discussion

- There is a need to coordinate the implementation of smart energy systems using artificial intelligence and the Internet of Things.
- Think tanks and centers need to organize workshops on digitalisation for sustainable energy.
- The need to work with pan-African organizations such as Smart Africa and the African Union to integrate digital innovation and renewable energy value chains into policy documents and digital roadmaps.
- The development of digital twin models to monitor environmental parameters and energy consumption.
- The need to work on improving infrastructure and capacity building for human capital to support digital transformation for sustainable energy.