Event name:
Accelerating Energy Access through Technology Innovation

Event date and time:
22nd June 2021 – 4:30pm to 5:45pm

Organizers:
UNDP with contributions from the Department of Energy*, Vanuatu,* Power Blox*,* Reinder Lemoine Institute *and* InputOutput*.*

Number of participants:
33

Main speakers and brief summary [max 300 words]:
Dr. Catherina Cader *is Co-Head of the Research Unit Off-Grid Systems at Lemoine Institute, an expert in Geographic Information Systems (GIS) and rural electrification planning. She joined*
Armand Martin *is the CEO, Chairman, and Co-founder of Power-Blox, a company, that develops disruptive electrification solutions for off-grid applications in Europe, Asia and Africa.*
Dr Mihaela Ulieru *founded the **IMPACT Institute for the Digital Economy** aiming at policy reforms for the adoption of latest digital technologies in all areas of society and sectors of the economy.*
Antony Garae Liu *is the Director Department of Energy of the Government of Vanuatu.*

One in ten of the world's people still lacks access to electricity, including half the population of sub-Saharan Africa. Another 2.8 billion people lack access to electricity that is reliable enough to secure their livelihoods or power modern healthcare facilities and schools. The pandemic has only increased the inequality of global energy access. The side event focused on various aspects of innovation for achieving universal energy access to unleash the full potential of distributed renewable energy systems. Achieving universal access to affordable, reliable and sustainable energy will require innovations in energy systems, their planning and the associated business models. Planning and implementation must be highly efficient, digital and delivered in the shortest possible time. Technologies must also be simple, flexible, expandable and specialized for the use-case to avoid

stranded assets. Placing livelihoods at the centre, the infrastructure expansion must align with the development of the communities they intend to serve and their energy demand. In addition, payment and management systems must be cost-effective and automated, and above all, the overarching tariff system must be affordable for a large part of the population.

Key outcomes:

Catherina Cader *spoke about how pattern recognition processes and artificial intelligence-based algorithms can support governments' top-down strategic decision making for electrification planning.*

Armand Martin *presented modular technologies that be plugged together based on the LEGO® principle to create an "energy swarm." The power, the battery capacity and energy generated increases with each cube. Since the system is modular, it adapts flexibly to the needs of communities.*

Mihaela Ulieru *talked about blockchains for identity management and for tools to document households and track mobile payments to improve the bankability of off-grid solutions and increase the trust of investors in the financial management of revenues generated through productive use activities.*

Antony Garae Liu *showcased a concrete example of applied modular systems in the [Lelepa nano-grid](): An energy access pilot project on the small island of Lelepa in Vanuatu, implemented by the Department of Energy in the Ministry of Climate Change and Natural Disaster. The project consists of setting up three nano-grids to provide clean, affordable and reliable electricity to the island's 140 households.*

Links to livestream recording/website/social media:
<mark>To be provided</mark>

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