

Executive Board Second Regular Session 2023: Interactive Dialogue
Infrastructure for Energy: Pathways towards a just, green and resilient transition

Date: 29.08.2023; 120-180 minutes Venue: New York

CONCEPT NOTE

A. Background and context

At the 2023 High Level Political Forum, we discussed how energy lies at the heart of both the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change. Ensuring access to affordable, reliable, sustainable and modern energy for all will open a new world of opportunities for millions of people through new economic opportunities and jobs, empowered women, children and youth, better education and health, more sustainable, equitable and inclusive communities, and greater protection from, and resilience to, climate change. What would well-implemented, fair, equitable and green energy access or transition mean for the world in 2030? And how do we get there? The year 2023 marks the halfway point for achieving the Sustainable Development Goals by 2030. Sustainable Development Goal 7 (SDG-7) outlines three related objectives: (a) to ensure universal access to affordable, reliable and modern energy services, (b) to substantially increase the share of renewable energy in the global energy mix and (c) to double the global rate of improvement in energy efficiency.¹ Modern energy, specifically electricity, is a necessary condition for development and yet the 2023 Energy Progress Report bluntly warns that we will not achieve SDG-7 without significantly accelerating progress. However, current projections estimate that if we do not take further action and continue on the current trajectory, 1.9 billion people will be without access to clean cooking and 660 million without electricity access in 2030.

The [Internal Energy Agency \(IEA\)](#) found that, for the first time in decades, the number of people without access to electricity started to increase in 2022. According to the IEA Report [Netzero by 2050 - A Roadmap for the Energy Sector](#), “the path to net-zero emissions requires immediate and massive deployment of all available clean and efficient energy technologies”: annual rate of energy intensity improvements averaging 4% to 2030 (about three-times the average rate achieved over the last two decades); scaling up solar and wind rapidly this decade, reaching annual additions of 630 gigawatts (GW) of solar photovoltaics (PV) and 390 GW of wind by 2030 (four-times the record levels set in 2020); and electric vehicles (EVs) go from around 5% of global car sales to more than 60% by 2030. This report also states that “reaching net zero by 2050 requires further rapid deployment of available technologies as well as widespread use of technologies that are not on the market yet. The biggest innovation opportunities concern advanced batteries, hydrogen electrolyzers, and direct air capture and storage”. Based on a joint analysis from the IEA and the IMF, under this path to net-zero emissions, “total annual energy investment surges to USD 5 trillion by 2030, adding an extra 0.4 percentage point a year to annual global GDP growth”. IEA also concluded that an unprecedented increase in clean energy investment in emerging and

¹ United Nations Department of Social and Economic Affairs, *Sustainable Goal 7*. Available at: <https://sdgs.un.org/goals/goal7>

developing economies is required to put countries on a pathway towards net-zero emissions: “by the end of the 2020s, annual capital spending on clean energy in these economies needs to expand by more than seven times, to above USD 1 trillion, in order to put the world on track to reach net-zero emissions by 2050”. The [SEforALL Knowledge Brief](#), “*The Energy Transition: a catalyst to address the global triple crisis*”, which was developed for the G20 Energy Transition Working Group and G20 Energy Ministerial meetings in July 2023, highlights the significant opportunity presented by the global energy transition towards cleaner and more sustainable energy sources for all sectors, through its cost benefits, job creation potential, local market creation, and climate benefits.

In its [World Energy Transitions Outlook](#), the International Renewable Energy Agency (IRENA) identifies the most realistic path towards halving emissions by 2030 as a combination of energy efficiency and replacing fossil fuels with renewables, which requires an investment of USD 5.7 trillion per year until 2030, with a redirection of USD 0.7 trillion in annual investment in fossil fuels towards energy transition technologies. For most economies, both developed and developing, this is a tall order. However, the cost is significantly higher for developing and least developed countries, while they battle the effects of the global economic, environmental and socio-cultural polycrises.

Although the [United Nations Emissions Gap Report 2022](#) notes the fall in the cost of renewable energy, it also highlights serious obstacles to ensuring a just transition and universal energy access, which require substantial investments in creating more efficient, resilient and sustainable energy systems through innovative approaches including digitization and systematically integrating renewables into energy grids, while improving their reliability. The [UNDP Derisking Renewable Energy Investment \(DREI\)](#) framework identifies particular risks that can hold back private sector investment in renewable energy and assist policy makers with putting in place targeted and context specific interventions to address these risks. In his foreword, within the [United Nations Climate Change Annual Report 2022](#), United Nations Secretary General Antonio Guterres emphasised the importance of The Acceleration Agenda, which asks all governments to prepare clear national energy transition plans to accelerate the phasing out of fossil fuels, scaling up of renewable energy and the decarbonization of high emitting sectors. The World Bank’s 2023 Report, [Scaling up to Phase Down](#) maps the steps to assist governments with scaling up reliable, clean energy through growing political appetite, creating a supportive regulatory environment, increasing capable institutions and creating a pipeline of bankable projects.

Green energy lays the foundation for a modern, sustainable and resilient economy through the modernization of infrastructure, digitization and innovation in telecommunications that have the potential to spur economic growth, improve efficiencies across production, enable access to local and international markets and create transformational change in the lives of people and communities. Through its extensive expertise in infrastructure, procurement and project management services, especially in fragile, conflict affected and vulnerable regions, UNOPS has the expertise to enhance the implementation capacity of the U.N system and Member States in advancing progress towards the transition. Through partnering with key stakeholders, learning from experiences from the field and engaging across the spectrum to holistically understand priorities, gaps, best practices and challenges in implementing the transition, UNOPS will be able to enhance its expertise, suitably tailor interventions, enhance local capacity, facilitate the transfer of skills and support its partners through the technical expertise and infrastructure that is indispensable to the transition. The promise of sustainable development is rooted in the ability of populations across the world, especially in increasingly vulnerable and fragile contexts, to

access clean, reliable and sustainable sources of energy and it is only through collective, coordinated and efficient action, that we can advance ambition and progress towards meeting the targets set forth in the 2030 Agenda.

B. Panelists

- H.E. Martin Kimani, Executive Board President, Ambassador and Permanent Representative of Kenya to the United Nations
- H.E. Ms. Maritza Chan Valverde, Executive Board Vice-President, Permanent Representative of Costa Rica to the United Nations
- UN Under-Secretary-General and Executive Director, UNOPS, Mr. Jorge Moreira da Silva
- H.E. Mr. Tijjani Muhammad Bande, Permanent Representative of Nigeria to the United Nations
- H.E. Ms. Shino Mitsuko, Deputy Permanent Representative of Japan to the United Nations
- H. E. Ms. Matilda Bartley, Deputy Permanent Representative of the Independent State of Samoa to the United Nations

C. Description

Through the course of an interactive discussion consisting of three thematic segments - on transformation, acceleration and inclusive action - this dialogue seeks to provide a platform for the exchange of views and ideas to share knowledge, experiences, challenges, lessons learned and best practices through our collective work in accelerating the global, just, green energy transition. Through creating a forum for engaging on key thematic elements of the energy transition, this dialogue seeks to facilitate an important conversation with respect to the needs of Member States in the context of accessing clean energy, the gaps and challenges that currently exist and the opportunities and modalities through which the U.N development system may be able to best support these needs, especially in the context of bridging the implementation gap. By rooting the discussion in the context of transformation, acceleration and inclusive action, this dialogue seeks to catalyze a practical, impactful and results driven conversation by convening key stakeholders in the formulation of efficient and sustainable solutions to address the energy crisis that we are confronted with today. The dialogue will consist of the following segments:

(i) Segment 1: Transformation:

This segment will focus on sustainability and the need to transform the way we produce, consume and transfer energy, identifying solutions and pathways towards optimizing sources of renewable energy, including access to data. ***Guiding question: What role can the UN development system play in assisting countries with leaping beyond fossil fuels to enable universal access to clean energy?***

- **Video: [UNOPS Renewable Energy in Gaza Project](#).**

Since 2006, Gaza has suffered from chronic electricity shortages. This further exacerbates already difficult living conditions for the majority of its nearly two million residents, who live on just a few hours of electricity every day. The constant energy shortages disrupt the daily lives of residents, inhibiting access to basic and essential services – including healthcare, water and sanitation – as well as economic opportunities. A lack of electricity further poses risks to the health and safety of Palestinians living in the area, who often resort to using less sustainable

and potentially dangerous forms of electricity and light, such as batteries and candles. As part of efforts to strengthen the electricity supply system in Gaza, UNOPS with funding from the government of Japan has installed solar photovoltaic systems for 188 households. The hybrid solar systems help provide a sustainable source of power that is more reliable and cost-effective for households than energy produced by traditional methods. And this video shows the impact it has on people's lives.

- **Video:** [ETP: Supporting Indonesia's energy transition](#) (6 mins)

Southeast Asia is home to around 670 million people. Here, economies are growing rapidly and expanding middle classes are moving to urban centres. This growth brings with it both enormous opportunities and enormous challenges. As access to energy and income levels rise, so too does the level of air pollution, hazardous emissions and reliance on fossil fuels, like coal. A key challenge is how to push the energy transition in order to address emissions while generating positive socio-economic impact. The Southeast Asia Energy Transition Partnership (ETP) supports Indonesia, Vietnam and the Philippines to accelerate the transition towards a sustainable energy system. Managed by UNOPS, it brings together a range of stakeholders, including government, philanthropies, academia and the private sector to foster a just and equitable energy transition and helps countries achieve the objectives of the Paris Agreement and the Sustainable Development Goals. The video shows this work in Indonesia.

(ii) Segment 2: Acceleration:

This segment will focus on accelerating the energy transition through mobilizing technical expertise, capacity building and finance by effectively collaborating across the UN system and engaging the private sector. **Guiding question:** *How can renewable energy projects be made more bankable so the demand side meets the supply side?*

- **Video:** [Sierra Leone Rural Renewable Energy Project](#) (1:50)

In Sierra Leone, UNOPS support helped provide [clean energy](#) to rural areas, electrifying community health centers, installing distribution grids in villages and establishing significant generation capacity, in a programme that benefited nearly half a million people. To ensure financial sustainability, the project opened up to the private sector to run the power supply network in villages. Improved energy access resulted in better health and education outcomes, more income generating opportunities at the local level and better vaccination ability during the Pandemic.

- **Video:** Yemen: [YEEAP: Access to Water](#) (2:30)

In Yemen, years of conflict have caused a humanitarian crisis. The country's public services and infrastructure have been severely impacted by the conflict, economic deterioration and the impacts of the climate crisis. Over 80 per cent of the country's population struggles to access food, safe drinking water and adequate health services, while nearly 90 per cent of the population has no access to publicly supplied electricity. There, funded by the World Bank, UNOPS helped increase access to water and sanitation services in urban, peri-urban and rural areas of the country. This work included, as this video shows, procuring and installing water wells with solar-powered pumps as well as solar panels in disadvantaged areas of Yemen, to provide a clean, cost-effective and reliable source of energy

(iii) Segment 3: Inclusive Action:

This segment will focus on the need for the energy transition to be inclusive, just, fair and equitable in order to achieve sustainability. Panelists may speak about a human rights based approach to the energy transition that is essential to ensuring its long term sustainability and resilience, especially through the active participation of the diverse stakeholders that will be affected. **Guiding question: How can we ensure that the voices of the most vulnerable and most affected are listened to and incorporated within the energy transition?**

- **Video:** *Pakistan Solar Schools Project: [Journey of solar panel \(4.15\)](#) , [school girl \(2.20\)](#)*

In Pakistan, developing and supporting sustainable infrastructure and renewable energy technologies is critical for eliminating the country’s energy gap, addressing environmental challenges and improving people’s lives. A lack of basic facilities in government schools in Pakistan contributes to low enrolment and high dropout rates – a problem that is especially severe in remote areas. There, UNOPS has worked with partners such as the UK and Saudi governments to support access to solar energy, which is helping power a more promising start for school children in Pakistan. As this video shows, bringing renewable energy to remote areas of Pakistan has not been without its challenges. More than 10,000 solar panels had to be sourced and delivered to locations that were extremely isolated. But the effort has been worth it: Reliable access to energy means that students benefit from better learning conditions for years to come.

- **Video:** [Mobile Boiler Houses in Ukraine \(1.20\)](#)

The ongoing conflict in Ukraine has caused significant damage to the country’s infrastructure and energy networks. Earlier this year, damage to Ukraine’s power, gas, and heating infrastructure was assessed to be [in excess of \\$10 billion](#), with more than \$1.2 billion urgently needed for emergency repairs to critical infrastructure. In Mykolaiv, like in several other Ukrainian regions, UNOPS helps deliver essential equipment and supplies for vulnerable communities, including securing access to electricity and heating. This video shows how, through a partnership with the government of Denmark, UNOPS has provided electricity generators and heating devices to people living in the Mykolaiv region.

D. Programme

1. Opening (35 mins)
President of the UNDP/UNFPA/UNOPS Executive Board introduction
UNOPS Executive Director Opening Statement
Executive Board President provides reflections on the topic
Video 1: How green energy can help African cities
Video 2: Keynote Address: Ms. Damilola Ogunbiyi, Special Representative of the United Nations Secretary General and CEO of Sustainable Energy for All
2. <i>Segment 1: Transformation (45 mins)</i>
The Executive Board President introduces the first segment, including the guiding question for this segment
Video 3: Pre-recorded video statements from heads of agencies

Video 4: UNOPS Renewable Energy in Gaza Project
The Executive Board President gives the floor to the Executive Director for remarks on the video and moderates the remarks from the expert panelist for this segment and interventions
Video 5: ETP: Supporting Indonesia’s energy transition
The Executive Board President moderates the second round of interventions
3. Segment 2: Acceleration (45 mins)
The Executive Board President introduces the second segment, including the guiding question for this segment.
Video 6: Pre-recorded video statements from heads of agencies for this segment
Video 7: Sierra Leone Rural Renewable Energy Project
The Executive Board President gives the floor to the Executive Director for remarks on the video and moderates the remarks from the expert panelist for this segment and interventions
Video 8: YEEAP: Access to Water (2:30)
The Executive Board President moderates the second round of interventions
4. Segment 3: Inclusive Action (45 mins)
The Executive Board President introduces the third segment, including the guiding question for this segment.
Video 9: Pre-recorded video statements from heads of agencies
Video 10 : Pakistan Solar Schools Project: Journey of solar panel (4.15) , school girl (2.20)
The Executive Board President gives the floor to the Executive Director for remarks on the video and moderates the remarks from the expert panelist for this segment and interventions
Video 11 : Mobile Boiler Houses in Ukraine (1.20)
The Executive Board President moderates the second round of interventions
5. Closing (10 mins)
Closing statement by the Executive Director
The Executive Board President closes the dialogue

E. Planned outcomes

The outcome of this interactive dialogue will feed into a long term project culminating in a possible Inter-Agency Flagship Report on *Bridging the Implementation Gap for a Just, Green and Resilient Energy Transition*. This will also feed into subsequent UNOPS hosted dialogues, events and conferences on the energy transition, including the publication of research and guidance material based on the experiences, challenges and context specific lessons learned in implementing renewable energy projects across the different regions.