

# SDG7 Bulletin



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## ENERGYNOW SDG7 Action Forum 2024: 25-27 September 2024

Recent global crises, including the climate crisis, ongoing conflicts, and a constrained global economic outlook, have compounded the "fragility of past hard-earned progress" on the Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development, including on SDG7 (ensuring access to affordable, reliable, sustainable, and modern energy for all by 2030). With only six years left to achieve the SDGs, there is still time to realize SDG7; however, efforts must be ramped up and accelerated as energy is critical for meeting the rest of the SDGs, as well as the goals of the Paris Agreement on climate change.

The ENERGYNOW SDG7 Action Forum 2024 provided a platform for stakeholders, including decision makers and practitioners, in support of "driving momentum and mobilizing action." The third edition of the Forum showcased the Energy Compacts, which are voluntary, trackable commitments designed to incentivize action towards realizing SDG7 in line with netzero goals. Thus far, USD 1.4 trillion in investment has been committed to over 200 energy compacts.

The <u>SDG7 Action Forum programme</u> included close to 20 sessions focused on advancing progress on SDG7 and the global energy agenda towards 2030 and beyond. The <u>Energy Compacts Annual Progress Report 2024</u> was launched during the High-Level opening.

The first day focused on the theme of Energizing Sustainable Development, including a session on distributed renewable energy technologies in rural and remote areas. Throughout the Forum, many speakers discussed the energy transition and put forward suggestions on how energy could be addressed in a post-2030 agenda, which the UN General Assembly (UNGA) is expected to take up in 2027. On several occasions, Mission 300 was highlighted as a goal to bring electricity access, by 2030, to 300 million people in Africa, where the majority without access are located.

The second day included discussions on the theme of Creating Pathways for Investments, with a high-level ministerial segment discussing ways for the significant critical mineral resources in Africa to benefit Africans, instead of being exported. As Monica Chang'anamuno, Minister of Mining, Malawi, lamented: "When all the minerals are gone what will be left for Africa?...They will not grow back like a tree."

The final day addressed the theme of Accelerating a Just and Inclusive Energy Transition, with sessions on universal energy



access, digitalization, and gender, among others. The importance of women's visibility was highlighted, with one speaker announcing that "women make up 50% of the population... if our voices are not heard, the world misses out on 50% of the solutions."

The ENERGYNOW SDG7 Action Forum 2024 took place from 25-27 September 2024 in New York and was organized by UN-Energy supported by the UN Department of Economic and Social Affairs (UN DESA) on the sidelines of the 79th session of UNGA and just after the Summit of the Future. UN-Energy

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is a consortium of nearly thirty UN agencies and international organizations who collaborate on various aspects of energy, with the aim of catalyzing achievement of SDG7 by 2030 and net-zero emissions by 2050.

## A Brief History of the ENERGYNOW SDG7 Action Forum

Prior to the first ENERGYNOW SDG7 Action Forum, UNGA resolution 74/225 invited the UN Secretary-General, with the support of relevant UN system entities, to convene a High-Level Dialogue on Energy in 2021 to promote implementation of the energy-related goals and targets of the 2030 Agenda for Sustainable Development, including SDG7 on affordable and clean energy for all, among others – in support of implementation of the UN Decade of Sustainable Energy for All (2014-2024).

UN DESA served as the Secretariat for the Dialogue and continues to serve as the UN-Energy Secretariat. UN-Energy Co-Chairs—Achim Steiner, Administrator, UN Development Programme (UNDP), and Damilola Ogunbiyi, Special Representative of the Secretary-General (SRSG) for Sustainable Energy for All—served as Dialogue Co-Chairs. To prepare a substantive outcome for the High-Level Dialogue, a series of technical consultations was convened to develop recommendations in five areas: energy access; energy transition; enabling the SDGs through inclusive, just energy transitions; innovation, technology, and data; and finance and investment.

On 24 September 2021, the Dialogue convened with the participation of 130 Heads of State and Government and global multi-stakeholder leaders. This event was the first summit-level UN event on energy in 40 years. A key result of the Dialogue was the UN Secretary-General's Global Roadmap for Accelerated SDG7 Action. Another outcome from the Dialogue was the initiation of the "Energy Compacts" which include voluntary commitments from Member States and other stakeholders, and identify key outcomes, milestones, and implementation timelines, with clear tracking frameworks towards 2030. To date, over 200 Energy Compacts have been mobilized.

The first ENERGYNOW SDG7 Action Forum convened one year after the High-Level Dialogue, in September 2022, bringing together a range of stakeholders to focus on ways to accelerate energy access and the energy transition. They gathered



Navid Hanif, Assistant Secretary-General for Economic Development, UN DESA

to take stock of progress of the Energy Compact commitments that were announced since the Dialogue in September 2021, as well as discuss opportunities and remaining challenges. Eight roundtables took place during the virtual event, focused on the global context, accelerating SDG7 action, and partnerships for action. Speakers underscored the importance of energy quality and access, energy efficiency, decentralized energy, and funding in realizing a just energy transition. During a closing session, participants briefed participants on the findings of the Energy Compacts Annual Report 2022, including that, one year after the Compacts were launched, 51% had reported progress.

The ENERGYNOW SDG7 Action Forum 2023 convened more than 15 events from 13-22 September on the sidelines of the 78th session of UNGA. Events addressed mobilizing climate finance for powering health care, clean cooking, gender, the 24/7 Carbon Free Energy Compact, and global synergies for climate action and the SDGs, among others. The <a href="Energy Compacts">Energy Compacts</a> <a href="Annual Report 2023">Annual Report 2023</a> was launched during a press briefing.

#### Report of the 2024 ENERGYNOW SDG7 Action Forum

#### High-level Opening

Opening the high-level session on Wednesday 25 September, Eduarda Zoghbi, Student Energy and the World Energy Council (WEC), moderated this session, emphasizing that SDG7 is not just about renewable and energy efficiency, but also about leaving no one behind and that those not in the room, including women and youth, are the most affected.

Navid Hanif, Assistant Secretary-General for Economic Development, UN DESA, welcomed participants on behalf of Li Junhua, UN Under-Secretary-General of the Department of Economic and Social Affairs, which serves as the secretariat of UN-Energy. He said that progress on the SDGs, and SDG7 in particular, has been hindered by climate change, conflict, and economic uncertainty. He called for affordable, reliable, and sustainable energy for all to meet the 2030 Agenda and Paris Agreement to avoid energy poverty, as well as to transform economies and society.

Damilola Ogunbiyi, SRSG for Sustainable Energy for All and Co-Chair of UN-Energy, highlighted the links between climate action and development, and called for integrating the Energy



**Michelle Muschett Zimmermann**, UN Assistant Secretary-General and Assistant Administrator, UNDP



Group photo of the launch of the Energy Compacts Annual Progress Report 2024

Compacts into Nationally Determined Contributions (NDCs). She thanked the African Development Bank (AfDB) and the World Bank for their efforts to increase access to electricity through the Mission 300 initiative, and highlighted the Bridgetown Initiative, spearheaded by Barbados, to reform development finance and finance institutions in this regard.

Michelle Muschett Zimmermann, UN Assistant Secretary-General and Assistant Administrator, UNDP, delivered a message on behalf of Achim Steiner, UNDP Administrator, and Co-Chair of UN-Energy, calling for harmonizing work on energy access beyond project development towards a more holistic approach. She highlighted UNDP's efforts to increase investment in solar energy grids, noting mini-grids are the lowest-cost approach to bringing electricity to 265 million people in 21 countries by 2030, as laid out in the <u>Africa Minigrids Program</u>. She also stressed the need for adequate financial instruments for investments in minigrids and opportunities to further align NDCs with SDG7.

Francesco La Camera, Director-General, International Renewable Energy Agency (IRENA), discussed IRENA's role as a custodian agency for tracking progress, formulating policies, and providing technical assistance and capacity building on SDG7. Reflecting on the status of SDG7, La Camera drew attention to the fact that 685 million people remain without access to electricity and called for scaling financing and international cooperation to establish robust infrastructure, draft policy frameworks, and develop the skills needed for progress.

Emphasizing electricity access and clean cooking, Guangzhe Chen, World Bank, noted that the current level of SDG7 investment will be insufficient to achieve the targets by 2030. Chen highlighted that Sub-Saharan Africa, in particular, requires a doubling of efforts to keep up with population growth, before sharing technologies and strategies currently targeting clean energy in the region.

Hans Olav Ibrekk, Special Envoy for Climate and Security, Norway, addressed the challenges facing meeting the SDG7 targets, including climate change, a bleak economic outlook, and an increasingly polarized world. In the wake of these challenges, Ibrekk noted the importance of using energy as a tool for peace since energy issues overlap with conflict and fragility, and underscored the need for partnerships with those working on peace relief and recovery.

Speaking to the importance of gender equity, Sheila Oparaocha, Executive Director, ENERGIA, noted that when homes are connected to electricity women are up to 23% more likely to gain employment outside of the home, but highlighted that only 18% of energy assistance is tied to gender equity. To promote an inclusive energy future, Oparaocha called for scaling up gender-smart investments and financing, embedding gender equity into accountability frameworks through disaggregated data, and fostering partnerships.

The Energy Compacts Annual Progress Report 2024 was then launched and the Energy Compact proponents were recognized. The report shows that new commitments to boost renewable energy and increase access to electricity and clean cooking technologies by 2030 have brought the finance and investment pledged through the Energy Compacts to USD 1.4 trillion. Since 2021, Energy Compact proponents have enhanced electricity access for 177 million people, an increase of 48 million people in the past year, and clean cooking access for 23 million people. Since 2021, USD 201 billion in finance has been mobilized or deployed for Energy Compact actions, nearly a three-fold increase from 2023, with the majority of funds used for installing new renewable power generation.

#### Day 1: Energizing Sustainable Development

Towards 2030 and Beyond: Leveraging the UN-System in Support of SDG7 and Net-Zero Emissions: This Wednesday session was moderated by Minoru Takada, UN DESA, who began the interactive discussion by asking participants to reflect on the role of the UN in the international discourse on energy towards the realization of SDG7, as well as looking beyond 2030 with respect to the energy landscape. He highlighted that SDG7 is the first universally-agreed energy goal and mentioned energy-related recommendations in the recently adopted Pact for the Future.

During the discussion, many participants highlighted the need for financing as the solutions already exist. One participant urged mainstreaming gender concerns into energy and noted the role of UN-Energy in catalyzing action on the ground. A World Bank representative said the post-SDG7 landscape should focus



**Minoru Takada**, UN DESA, moderates the session "Towards 2030 and Beyond: Leveraging the UN-system in Support of SDG7 and Net-Zero Emissions"

on closing the viability gap through, for example, expanding electricity to other energy services, such as clean cooking.

Limitations, one speaker explained, are rules and policy based, not technical. He noted his organization has already mapped out a path to carbon neutrality, and that permission and financing are needed to ensure sustainability. Another said those at the bottom of the income pyramid have not yet been reached and reaching out to them on a commercial basis is not viable.

#### Others mentioned:

- UN-Energy provides a platform to build political momentum, as does the UN writ large;
- having a target on clean cooking has made a difference;
- the need for a more consistent platform, possibly under UN DESA, to convene annually where Member States come together to discuss energy for development and to monitor progress;
- the potential for public-private partnerships;
- that UN country offices, specifically UNDP, could add a coordinator for access to energy and act as an aggregator; and
- the need to make mini-grids financially viable.

For the post-2030 phase, one underscored upgrading technologies for the energy transition and including more stakeholders, while another called for a consistent process with respect to technology assistance, which he hoped the subsequent targets and indicators would address.

Regarding the Pact for the Future, a participant lamented the lack of reference to a just transition and phasing out fossil fuels. She also called for bringing more women and youth into the process, and translating what happens globally to the local level.

A representative from the UN Children's Fund (UNICEF) highlighted the need for capacity, coordination, commitment, and collaboration, or what she called the "four Cs." Others emphasized the need for sustainable business models and raising awareness, including in academia, and making information available to younger generations at the grassroots level.

A representative from Senegal said Africa is the only continent lacking meaningful access to electricity and energy, and cited problems due to a change in government every few years. For example, he mentioned his country had a Ministry of Renewable Energy, but a subsequent government got rid of it.



Antoine Ndama Faye, Senegal

Concluding the session, Moderator Takada noted a final global review of SDG7 was expected in 2026 at the High-level Political Forum for Sustainable Development (HLPF), saying the Secretariat would work to include all stakeholders. He also said UNGA, in 2027, will begin discussions on the post-2030 agenda.

Integrating Distributed Renewable Energy Technologies for Sustainable Development in Rural and Remote Areas: This session was moderated by Mateo Salomon, UNDP. Riad Meddeb, Director, Sustainable Energy Hub, UNDP, provided opening remarks, asking participants to reflect on: opportunities for integrating distributed renewable energy into energy planning and strategies; financial solutions for integrating how innovative finance structures that are matched with realities in the renewable energy sector can be unlocked; how technologies, such as AI, can be accelerated to help with this integration; and how a disruptive approach that combines different technologies, such as grid expansion and solar home systems, can be better integrated into planning and deployment.

Anita Otubu, SEforALL, stressed the need to be "technologically agnostic," noting different technologies will meet different needs. She said public finance is insufficient, regulations must protect private sector investment, and a blended finance model with grants, subsidies, and concessional finance, should involve development partners, international financial institutions, and philanthropic organizations.

Jiwoo Choi, Acumen, said her organization focuses on the hardest-to-reach countries, where access to electricity is low and poverty is high. She stressed that needs and demand vary from country to country, and some companies who have different technologies, like mini-grid and home solar, within one business model, must meet these differing needs.

Patrick Tonui, Global Off-Grid Lighting Alliance (GOGLA), an industry association, emphasized that lighting is not only needed for homes, but for schools and health care facilities as well. He pointed out that, in some cases, we are talking to the wrong people within a ministry or government, and planning and integration must move beyond electricity. Tonui, on the need for coherence, cited an example from Lake Victoria where, in Uganda, fishermen switched from kerosene to solar lighting, but Tanzania banned it.



Riad Meddeb, Director, Sustainable Energy Hub, UNDP

Anna Coby, Schneider Electric, discussed how to make use of different technologies, noting her company is a leader in cutting edge technology and software related to automation, and said that digitalization is key. She cited the case of a Climate Smart Village in India, which uses renewable energy for agro-processing and solar powered irrigation. Noting intermittent power access in the village, she explained that Schneider Electric provides back-up power for these occasions. Coby underscored the need to address the devaluation of local currencies through, for example, currency swaps. She also mentioned deployment of technologies across Sub-Saharan Africa in UN refugee camps.

During the ensuing discussion, participants addressed, among others: decentralizing implementation to the district level; the need to think at the community, rather than household, scale; minimum quality standards for mini-grids; increasing financial commitments from philanthropic organizations to achieve SDG7; and working with companies that still have trouble "getting a seat at the table."

Sustainable Energy and Water: Supporting Women's Empowerment and Economic Development: Sofia Martínez, Green Economy Coalition, moderated this discussion on Wednesday. Sheila Oparaocha, ENERGIA, noted that access to water, electricity, and sanitation exists at a nexus that is not just a global crisis, but a women's rights crisis as well. Despite their interconnection, Oparaocha noted that current efforts to address these issues are siloed, which is minimizing the potential for change, and called for further investments in energy to also focus on ensuring gender equity.

Emphasizing that renewable energy is good for nature, the economy and women, Gonzalo Sáenz de Miera, Iberdrola, highlighted that 35% of jobs in renewables are held by women, compared to only 22% in fossil fuels. However, he noted that for this number to grow, firms need to adopt meaningful policies that seek equal representation, participation and leadership.

Stating that 30% of global energy is used in agricultural systems, Michela Morese, Food and Agriculture Organization of the UN (FAO), described the complexity of energy issues and their relationship to food production, urbanization, and changing diets.

Emphasizing the role of hydropower alongside solar and wind, Eddie Rich, International Hydropower Association, underscored the need for representation in the sector, stating that "if you don't



Sofía Martínez, Green Economy Coalition



Miquel Muñoz Cabré, SEI

reflect the users of your energy—you can't communicate or understand their needs."

Discussing the impacts of cogenerating projects, Jacqueline Hazbun, Executive Director, Association of Independent Cogenerators, (ACI), shared success stories involving women in clean energy work in Guatemala. She drew attention to how clean energy jobs were highly skilled and resulted in higher wages and incomes, which afforded women an opportunity to not only meet their own needs but to also invest in electric appliances rather than biomass as a source of energy.

Miquel Muñoz Cabré, Stockholm Environment Institute (SEI), shared stories of science, technology, engineering, and mathematics (STEM) and non-STEM roles being filled by women in renewable energy projects across Kenya, Colombia, and Ghana, while noting that more jobs for women can be created by including appropriate policies and eliminating stereotypes.

Anastasia Kefalidou, IRENA, addressed barriers facing women when trying to participate in renewables, including a lack of professional development services, education opportunities, and awareness. She then shared a survey IRENA developed to better address these issues.

Noting that 85% of the population in Ethiopia lives in rural areas, Samson Tsegaye, Solar Energy Foundation, outlined how women are disproportionately responsible for collecting water and energy resources before sharing examples of projects aimed at mitigating these burdens.

Jorge Alvarez-Sala Torreano, UNICEF, discussed his organization's work providing technical assistance, strengthening supply chains, and developing water systems to help empower women to be part of the energy revolution. He also noted the need for efforts to reduce energy consumption, not only transitioning to renewables.

Report Launch: Mobilizing Investment for the Developing World's Sustainable Cooling Needs: Denis Medvedev, International Finance Corporation (IFC), introduced this Wednesday session, highlighting the recently published IFC-UN Environment Programme report on Mobilizing Investment for the Developing World's Sustainable Cooling Needs.

Martina Otto, Head of Secretariat, Climate and Clean Air Coalition, said with record-breaking heat year after year, we



Group photo of the session "Report Launch: 'Mobilizing Investment for the Developing World's Sustainable Cooling Needs'"

need to rethink ways to be cool. She emphasized that sustainable cooling is essential for keeping vaccines stable and food safe and fresh. She suggested better planning, different modes of building, greening cities, and better ventilation. She pointed to national cooling action plans in the Middle East and North Africa and highlighted the Global Cooling Pledge agreed at the 28th session of the Conference of the Parties (COP 28).

Camilo Mondragón-Vélez, IFC Global Industries, provided an overview of the report, which makes the business case for sustainable cooling and describes why cooling is so important for developing economies. He explained that accessible, affordable, and scalable cooling solutions are needed that minimize environmental impacts. He said cooling provides a USD 300 billion a year market in developing countries, which could double to USD 600 billion per year, with South Asia and Africa being the fastest growing markets. Emphasizing the need for more passive cooling, he cited huge potential in retrofitting buildings. He stressed the importance of high efficiency fans and lower-cost solutions. He said that private finance is essential, but policy changes are also necessary. Report recommendations, he noted, include partnerships, improving data, doing more locally, strengthening tools and standards, and increasing understanding of financing for sustainable cooling.

Diep Nguyen-van Houtte, IFC, moderated the subsequent panel discussion. Ayoola Dominic, President and Co-Founder, Koolboks, noted cooling opportunities in Sub-Saharan Africa, where millions lack access to electricity and cannot store food, leading to food waste. He said his company produces pay-as-yougo solar freezers that can cool up to four days without sunlight. He said traditional financing does not work for this and we need to "think outside of the box."

Nic Watchorn, Investment Principal, International Housing Solutions, discussed cooling in the housing sector, noting his company finances energy efficient, affordable housing communities in Africa that utilize passive cooling systems. He explained that the buildings are <a href="EDGE">EDGE</a> certified, a green building certification programme for developing countries that is less complex than Leadership in Energy and Environmental Design (LEED) certification.

Edward Borer, International District Energy Association, Princeton University, explained that district energy powers multiple buildings from a central plant that produces hot and/ or cold water that flows through a network of insulated pipes to provide power to nearby buildings. Cooling towers, he said, capture the heat to help solve the cooling problem. Although the initial cost is high and permission is needed to put pumps in the ground, it was noted that the level of efficiency is up to 400%.

Monia Bianco, JP Morgan Development Finance Institution, underscored the need for blended financing in developing countries, including grants as initial catalytic funds to de-risk or bring down costs before scaling up. Panelists also discussed the financing challenge for smallholder farmers and small and medium enterprises, carbon credits as a way to finance, and challenges faced due to currency depreciation and making financing available in local currencies.

During the discussion, participants mentioned: that climate finance is heavily regulated; continuing problems with greenwashing by companies; and the IFC's <a href="TechEmerge">TechEmerge</a> programme, which matches innovators with companies in emerging markets to help de-risk investments, scale solutions, and undertake pilot projects.

The Many Facets of Energy Transition: From India to the World: To kick-off of this Wednesday session, Abhishek Jain, Powering Livelihoods, shared a film showcasing renewable energy livelihoods in India, and Divyam Nagpal, SEforALL, presented on the strengths and challenges of energy mini-grids.

Noting that 13,000 people would need to connect to energy grids every hour for the next six years and three months to meet the SDG7 targets, moderator Arunabha Ghosh, CEO, Council on Energy, Environment and Water (CEEW), invited participants to discuss energy transition challenges and stories.

Soumya Swaminathan, M S Swaminathan Research Foundation, discussed the importance of framing climate and energy conversations as health conversations, highlighting the fact that nine of 10 people globally are breathing air that is below World Health Organization (WHO) standards.

Riad Meddeb, UNDP, discussed accelerators for transitioning to renewable energy, which included: sharing lessons learnt; marketing projects to ensure they are bankable and attractive investments; and using AI and data to identify and measure investment and impact.



Session participants listen to the intervention by **Jessica Seddon**, Yale Jackson School of Global Affairs.

Reflecting on their early experiences in mini-grid development, William Brent, Husk Power Systems, stated that a sustainable mini-grid business cannot be achieved by selling electricity alone. Instead, he explained, it needs to be coupled with investments in livelihood opportunities and generating additional demand.

Jessica Seddon, Yale Jackson School of Global Affairs, stressed the importance of setting the right goals for energy transitions so there is a clear path to follow. She emphasized the need to build performance benchmarks at the local, state, and national levels to monitor progress.

Underscoring the potential of rooftop solar as the next frontier for renewable energy in India, Priya Shankar, Bloomberg Philanthropies, noted that setting high-level policy and ambitious national frameworks helps cultivate an environment for action. Shankar highlighted the importance of framing energy as a crosscutting issue that would resonate and align with donor interests, while Rishika Das Roy, India Climate Collaborative, focused on strategies for securing funding for the energy transition.

Parameswaran Iyer, Executive Director, The World Bank Group, delivered the keynote address by sharing lessons learnt on several water, sanitation, and energy projects, including India's transition away from open defecation. Iyer emphasized the importance of the 'four Ps' when implementing successful projects: political leadership, public finance, partnerships, and public participation. He further stressed the difficulty of changing public behavior when it comes to energy and sanitation projects but noted that interpersonal relationships and "boots on the ground" are necessary for creating change.

After a video presentation of a 'solar anthem' song, Wase Khalid, CEEW, closed the panel, urging participants to keep citizens at the center of the energy transition pathways.

### Day 2: Creating Pathways for Investment

The Global Clean Cooking Roadmap: Advances and Challenges: During this Thursday session, Sheila Oparaocha, ENERGIA, shared how, by 2030, only 79% of people will have access to clean cooking tools and technology if current trends continue, before inviting participants to share insights and lessons learnt.



Sheila Oparaocha, ENERGIA

Noting that USD 8 billion would be required to meet any SDG7 targets by 2030, Fanny Missfeldt-Ringius, Energy Sector Management Assistance Program (ESMAP), World Bank, emphasized the role of partnerships, stating that traveling together can lead to more success and opportunities than when traveling alone

On sharing ideas and strategies for advancing clean cooking, Riad Meddeb, UNDP, noted the importance of understanding the reality of consumers when designing clean cooking solutions while also underscoring the importance of using data to improve decision making and de-risking investments.

Sharing insights from the report <u>Sustainable Scaling: Meeting</u> the <u>Clean Cooking Challenge in Africa</u>, Ed Brown, Modern Energy Cooking Services (MECS), provided key takeaways and recommendations to advance clean cooking in the region. This included the need for: Africans to develop solutions for Africa; considering the overall economic impacts of not addressing clean cooking; integrating clean cooking into general energy policy and planning; and building energy value chains across the continent.

Noting that 3.5% of global CO2 emissions are produced from non-clean cooking, and that an estimated 3.2 million people died the previous year due to household air pollution, Heather Adair-Rohani, WHO, stressed the need for change, while highlighting how progress has differed across the world regionally.

Tomás Antonio Rodríguez Sanchez, Under Secretary of State, Office of Renewable Energy and Energy Efficiency, Honduras, underscored how the traditional practices of communities in Honduras, and a cultural preference for the taste of food cooked over wood, has been an obstacle in moving towards clean cooking.

Highlighting the experiences of Bolivia, which has a large rural population, Karin Troncoso Torrez, WHO, emphasized the importance of subsidies when discussing approaches to shifting away from non-clean cooking fuels to liquefied petroleum gas (LPG), and noted that price and affordability is one of the most important factors for behavioral change.

John Mitchell, US Environmental Protection Agency (EPA), highlighted the EPA's continued work in developing standards and fostering an enabling environment for an energy transition. Mitchell also acknowledged the need for countries to look internally before asking others to abandon LPGs for green energy.



John Mitchell, US EPA

Highlighting the opportunity and potential for clean cooking, Maria Michela Morese, FAO, provided examples of their work in Rwanda and Zambia, where post-harvest waste has the potential to provide households with self-sustaining resources for clean cooking. She noted how these shifts may challenge cultural practices, where livelihoods and culture are ingrained in traditional cooking practice, including the use of fire and women selling charcoal in markets.

Ambition to Action: Scaling 24/7 Carbon-free Energy in the Global South: In opening remarks during this Thursday session, Caroline D'Angelo, US Department of State, discussed her government's efforts to achieve 100% Carbon-Free Energy (CFE) 24/7 by 2035, noting the federal government is the largest energy consumer in the US. She noted CFE is the fastest way to drive down emissions and achieve change to how we buy power, described the Clean Energy Demand Initiative (CEDI) which works with companies and governments around the world, and emphasized diplomatic engagement and technical assistance.

On the 24/7 CFE Compact, which was launched in 2021 and has 160 signatories, Divya Kottadiel, SEforALL, described the pathway to achieving equity in CFE 24/7 in the Global South. He said the pathway recognizes the historical and ongoing causes of equity, and encompasses including key stakeholders in decision making, even distribution of benefits, and restoring equity.

Albert Cheung, BloombergNEF, highlighted an upcoming report on CFE procurement in the Asia-Pacific region, noting the region's share of emissions has doubled over the last three decades, with the power sector contributing the most. He emphasized the need to accelerate investments in emerging market and developing economies, and enabling clean power procurement to address challenges faced in decarbonizing the power sector. To achieve a 24/7 clean power system, he highlighted "no regrets" actions: scale up wind, solar, and longer duration storage; accelerate grid expansion and utilize pumped hydro where feasible; evolve auction design and power purchase agreement (PPA) structures; and electrify and "flexify" demand sources

Moderated by Kottadiel, the panel discussion began with Sam Kimmins, The Climate Group, underscoring that the CFE



Group photo at the end of the session "Ambition to Action: Scaling 24/7 Carbon-free Energy in the Global South"

24/7 Compact builds on the success of RE100 and is focused on getting renewables in the right mix to the right place. He highlighted his group's spearheading of the 24/7 Carbon-Free Coalition. He mentioned geographical matching and buying in the same market where the energy is created, noting that if countries can buy electricity anywhere, then investment will dry up and the needed scale will not be reached.

Cheung described the role that corporate leadership can play in setting more ambitious climate targets and ensuring corporates have a voice to help open opportunities for clean power procurement.

Devon Swezey, Google, said his company is joining the 24/7 Carbon-Free Coalition. He stressed that CFE 24/7 is a journey that requires a portfolio approach, underscored the need to blend technologies on the same electricity grid, and highlighted the role of energy storage when consuming. Mentioning efforts by a Thai company to impose a tariff structure and momentum in driving this forward in the global South, he said this approach is being adopted by governments, not just corporations. He mentioned: work with governments and regulators to allow private companies in Taiwan to buy power directly; and timestamped clean energy certificates can open access to a wider set of consumers that may not be able to sign PPAs..

Trigya Singh, Global Renewables Alliance, with respect to CFE 24/7, emphasized that collaboration and education are key, and each country has a different set of scenarios. On next steps to achieve clean energy procurement, Singh emphasized corporate sourcing, capacity support to governments, more attention to long duration storage, and including academics in the discussion.

Amir Bahr, SEforALL, noted that when launched, the Compact was mainly for the global North, but now solutions have been put forward for the global South as well.

Advancing SDG7 in Central America and the Dominican Republic: The SICA Regional Energy Compacts: Welcoming panelists and participants to this session, Bahareh Seyedi, UN DESA, noted that although we are not on track to meet SDG7, there is hope since energy is now at the heart of the climate and development agendas, and articulated the benefits of Energy Compacts as tools for SDG7 acceleration.



Panelists during the intervention by **Stephanie Tatiana Orellana Rivera**, SICA

In opening remarks, Debora Ley, UN Economic Commission for Latin America and the Caribbean, highlighted Central America's leadership towards achieving SDG7, noting the region was the first to agree to meet SDG7.1.1 (proportion of population with access to electricity). Stephanie Tatiana Orellana Rivera, Central American Integration System (SICA), outlined energy compacts in the region, including on: achieving universal access to electricity; reducing wood fuel use; and improving energy efficiency through technical regulations in the region.

Ley then moderated a roundtable conversation focused on ideas for implementation and financing Energy Compacts in SICA countries, during which Orellana Rivera noted the importance of including public and private voices into dialogues around energy. She urged participants to remember to leave no one behind when discussing ideas on implementing Compacts.

Highlighting the interconnected needs and experiences of the region, Tomás Rodríguez, Honduras, stressed the importance of bringing regional actors together to share lessons learnt and reach consensus on how to address issues. He further underscored the role of energy in the region as a catalyst for change across multiple sectors, including education, healthcare, and business.

Carlos Cordero Vega, Ministry of Environment and Energy, Costa Rica, emphasized the need for programmes that transfer training and technology across the region. He underscored how El Salvador's strength in geothermal energy, Honduras' capacity in metrics and data, and Costa Rica's understanding of renewables demonstrates the region's diverse strengths that, when shared, provide a resource for advancing the Energy Compacts. At a local scale, Vega also noted the role the circular economy could play in providing green energy and encouraged more community involvement and innovation in the process.

Carmen Elena Padilla, SICA, emphasized that engagement from all technical offices within SICA countries is essential for implementation, as one country alone cannot achieve these Compacts. In addition to public support for the energy compacts, Padilla called for private sector and Indigenous community involvement to ensure projects are financially and economically sustainable.

Strengthening Local Value Chains for Energy Transition Solutions in the Global South: This ministerial session was introduced by Divyam Nagpal, SEforALL, on Thursday.

In opening remarks, Damilola Ogunbiyi, SRSG for Sustainable Energy for All, said many global South countries rely on imports of modules, batteries, and other products that use critical mineral resources found and extracted in the global South, only to be exported and then imported back as finished products. She said the energy transition must go hand in hand with building domestic capacity and reducing the dependency on imports.

Moses Engadu, Secretary General, Africa Minerals Strategy Group, noting Africa's large reserves of untapped and unexplored minerals, said the group was established to facilitate international cooperation within the mineral and mining sector, ensure transparency and the sustainable supply of minerals, protect the environment, and improve livelihoods. He said Africa must benefit from its minerals to achieve the energy transition, but emphasized the need for finance to develop infrastructure and build capacity and for Africa to "have a seat at the table." He



**Damilola Ogunbiyi**, Special Representative of the Secretary-General for Sustainable Energy for All

mentioned the <u>Council for Critical Minerals Development in the Global South</u> as an important initiative in this regard.

In his scene-setting presentation, Aditya Ramji, Global South Clean Transportation Centre, University of California, Davis, explained that Africa must be able to capture the social and economic benefits of their resources. He suggested starting with a mineral budget whereby needed resources for the energy transition are identified, including how much can be captured internally. He emphasized sharing best practices, benefit-sharing agreements, and equitable distribution. He identified "pillars of activities" as research and insight, capacity building, collaboration and partnerships, creating local value chains, industrialization, and job creation.

The subsequent roundtable discussion was moderated by Zainab Usman, Carnegie Endowment for International Peace, who underscored the need for: a just, sustainable, and equitable energy transition; harnessing opportunities and mitigating risks; investment and financing; and mobilizing partnerships. She mentioned a report produced by the <u>UN Secretary-General's Panel on Critical Energy Transition Minerals</u> and warned against the risk of repeating the historical pattern of raw material extraction for export from developing countries.



A view of the roundtable session on "Strengthening Local Value Chains for Energy Transition Solutions in the Global South"



Monica Chang'anamuno, Minister of Mining, Malawi

Speakers first addressed efforts made by national governments and strategies they are considering to fully leverage possibilities to ensure local value of minerals. Monica Chang'anamuno, Minister of Mining, Malawi, noted that the discovery of minerals in her country is recent. She said a percentage of production must be done in country, and if that is not possible, production must first go to another country within Africa. She emphasized job creation and responsible mining. She lamented that "when all the minerals are gone what will be left for Africa?...They will not grow back like a tree."

Herbert Krapa, Minister for Energy, Ghana, underscored the need to be clear about what we want. He noted the development of a transition framework and investment plan, and that a conversation about critical green minerals is taking center stage. He commented that Ghana, which used to be known as the "Gold Coast," does not want to make the same mistake that was made with gold. In 2023, Ghana, he explained, put in place a critical green minerals policy, including for lithium and graphite, whereby the refinery must be set up in country so minerals cannot be exported in their raw state. He explained that any agreement signed must add value. Following up on this presentation, Ogunbiyi suggested that Malawi can learn from Ghana's experience.

Hajia Fatima Shinkafi, Chief Executive, Solid Minerals Development Fund, Nigeria, noted 1.3% of revenues from solid minerals development go to the fund monthly. She said communities must be part of the decision-making process and education must be promoted. She called for the implementation of a benefit-sharing mechanism that benefits communities.

Usman asked what role multilateral organizations can play in advancing this agenda. Minister Chang'anamuno emphasized their ability to invest in skills development to increase the number of local jobs and in projects like refineries. Minister Krapa emphasized that their assistance would enable Ghana to implement its own projects. Engadu added that minerals are also necessary for fertilizer to enhance food security and for cement to build homes.

Rana Ghoneim, UN Industrial Development Organization, supported bringing value closer to where the minerals are

sourced, noting that only 10 cents of a five-dollar Starbucks cup of coffee goes to the farmer. She noted the launch of a Global Alliance on Responsible and Green Minerals and its work on mining standards.

Andy Herscowitz, Mission300 Accelerator, recalled that Mission300 aims to bring electricity to 300 million people in Africa by 2030, noting there is no energy transition or mineral development without electrification. He underscored efforts to bring in philanthropic capital and dealing directly with consumers, and the need to build up predictable demand for electricity and diversify supply chains.

Juan José Martinez Badillo, UN Trade and Development, urged reconciling this issue with commitments made under, and "pushing the boundary of" the World Trade Organization, calling attention to the fact that "we are not just talking about foreign direct investment but trade as well."

Kristi Disney Bruckner, Initiative for Responsible Mining Assurance, highlighted the rights of Indigenous Peoples on whose land minerals are located, the right to prior informed consent for Indigenous Peoples, and enshrining industrial scale mining standards into law.

During an ensuing discussion, panelists and participants also mentioned:

- the possibility of accessing more funds if the narratives of climate and of minerals are linked;
- ensuring a free flow of goods between countries in Africa;
- the need for capacity and legislation;
- the need to learn from mistakes made with oil and gas;
- independent and public mapping, and feasibility studies to ensure transparency, accountability, and awareness of risks;
- the need to consider artisanal and small-scale mining; and
- · a green skills roadmap.

Unlocking Investments in Affordable and Clean Energy: San Rahi, 11VEN, introduced this interactive discussion, noting it would touch upon, *inter alia*, shaping policies to be capital efficient and the best capital structure for rapid innovation.

Moderator Bertrand Badré, Managing Partner and Founder, Blue like an Orange Sustainable Capital, began by asking how policy can be shaped and driven to lead to the deployment of more capital. He said changing the regulatory framework, while



Participants during the well-attended session "Unlocking Investments in Affordable and Clean Energy"

difficult, must be considered. A range of stakeholders then contributed to the conversation.

A representative from the Africa Enterprise Challenge Fund noted: the important role of technical assistance for policymaking; the need for capital allocators to think collectively about how and where we make interventions; and the need for the right incentives. The need to "break down silos," listen to one another, and be flexible was also emphasized. A representative from Wells Fargo said providing incentives, such as tax credits, for project development has been an attractive tool.

One venture capitalist emphasized that sometimes a big name, like Google, is necessary to attract capital. He said a calibrated funding scheme that does not depend on 100% subsidy, nor on 100% profits, is needed. Other points raised included: incentives must be in place long enough to effect change; pooling capital and collective action; spending more time on aligning interests; and innovations should advance more quickly than the regulations that will hold them back.

On putting ideas into practice, one representative stressed that venture capital firms need to take risks instead of waiting for traditional investors. This, she said, would create a track record so other investors could enter and take innovations to scale. She underscored the need to bring innovators and corporations together, and highlighted venture studios as an innovative concept that incubates ideas and provides funding in a de-risked environment.

One speaker considered energy a national security issue that should be addressed, suggested mobile energy solutions in rural areas and conflict zones, and called for policies that encourage competition. Other potential and existing innovations mentioned included carbon credits on a Master Card and crowdfunding mechanisms. A sustainable finance expert underscored looking for new investment opportunities and markets, including large investment firms. She identified insurance as the one financial instrument that mitigates risks from climate change.

One participant urged looking at expense ratios for a measure of how money is being spent. In response, another speaker said managing money is costly and expense ratios should not be so high. Another said the problem is not the lack of good projects to fund, but rather the type of funds is wrong, noting that rural



Leslie Labruto, Environmental Defense Fund

electrification is rarely funded with private capital. Another reiterated the need for improving understanding of the differences between different kinds of capital.

One participant commended the example of MacKenzie Scott, a billionaire philanthropist who provides unrestricted funding so innovations can continue uninhibited. Another recalled that Tesla and others were first funded by the public sector. Other issues raised included the need for "affordable debt" with low interest rates, pooling capital, and the role of the UN in "getting people together in the room."

Challenges and Solutions to Unlock the Green Hydrogen Market: During this Thursday session, moderated by Divyam Nagpal, SEforALL, panelists discussed the potential of green hydrogen as a renewable energy source, while also discussing the challenges, both past and present, that the sector has faced.

Pete Budden, Natural Resources Defense Council, emphasized the need to ensure green hydrogen is not "tarnished by dirty hydrogen" and emphasized the role standards play in safeguarding the sector. Budden drew attention to work done on green hydrogen standards in the US and the EU. He underscored the need to coalesce around scientific and evidence-based frameworks that will provide the strong and accurate emissions accounting necessary for the market to be accurately evaluated.

In conversation about his company's work, including efforts to decarbonize the marine sector, Anthony McMaken, HIF Global, discussed the many financial and capital challenges facing green hydrogen, including the cost of electrolysis. Despite the emergence of start-ups, which are providing inputs at lower costs, McMaken noted that lenders are worried about financing smaller companies without proven track records, resulting in higher project costs from major companies.

Reflecting on their origins as a first mover in Australia, Shanta Barley, Fortescue, called attention to the difficulties of generating green hydrogen when the cost of power is so high, before sharing experiences working on policies to reduce costs and inputs.

Roland Roesch, IRENA, discussed the potential of green hydrogen to decarbonize hard-to-abate sectors like shipping, steel, and aviation, while also praising its potential to provide economic opportunities to developing countries by creating renewable energy, jobs, and exportable goods. When discussing



Roland Roesch, IRENA

what frameworks needs to be in place for green hydrogen to succeed, Roesch emphasized standards for ensuring that green hydrogen quality and place of origin are safeguarded.

**De-risking for Renewable Energy Investments: Cracking the Code:** This Thursday session, which was moderated by Mateo Salomon, UNDP, addressed what has and has not worked to advance progress on energy access.

Leading off the discussion, Daniel Schroth, AfDB, addressed the need to mobilize local financing and investment from commercial banks for distributed renewable energy, noting local financial institutions are not involved to the extent that they should be. He also cited other issues in current financing frameworks, including: the issue of currency mismatch, as projects are funded in foreign currencies, while revenues are generated in local currency; the lack of understanding by banks of the market for mini-grids; an unproven track record for energy access companies; and the utility of partial credit guarantees. Given these constraints, Schroth noted that blended financing, at this point, is almost a requirement for renewable investments since other financing models are difficult to implement.

Ije Okeke, Rocky Mountain Institute (RMI), mentioned different ways to deploy philanthropic and public funding to crowd in the private sector. Noting that philanthropic capital is finite, she said it could help with project preparation and development, as well as building capacity, before bringing in private capital and scaling up. She mentioned the Caribbean Community Resilience Fund, which provides equity and expressed hope this type of fund will be replicated in Africa. Okeke also discussed the untapped potential of local capital, noting that large pension funds in Nigeria are currently tied to treasury bills.

Filippo Berardi, Global Environment Facility (GEF), mentioning a recent IFC and IEA report on Scaling Up Private Finance for Clean Energy in Emerging and Developing Economies, said that for each 10 dollars of private capital, one dollar is used for climate finance. On how to make the money go further, he mentioned tools to make regulatory changes, grants to develop pipelines, and using a range of instruments for guarantees. He said the GEF can help with increasing flows to developers.

Discussing Mission300's goal of supplying 300 million people with electricity in Sub-Saharan Africa by 2030, Raihan Elahi, ESMAP, World Bank, drew attention to funding constraints, noting current commitments would only reach half of the targeted population on the grid. He argued that private sector support is required but acknowledged that remote populations are so difficult to reach that "even greed won't take people there." Elahi also urged for a continued culture shift, currently underway, in which governments must be willing to borrow from banks to provide grants and subsidies targeting private sector investment, rather than allocating funding to public utilities.

Sofia Maia, BloombergNEF, drew attention to the renewable energy milestones being achieved in Africa, noting that 2023 saw over USD 15 billion in renewable investments across 42 countries. However, she highlighted that much of this funding was concentrated to South Africa, Egypt, and Morocco. Maia called for additional policies in other countries to create stable and enabling environments for renewable energy investments.



Mateo Salomon, UNDP

Day 3: Accelerating Just and Inclusive Energy Transition
Post-2030 Vision: Prioritizing Gender Indicators for a
Just and Inclusive Energy Transition: This Friday session was
moderated by Ava Strasser, SEforALL, who lamented that SDG7
lacks a gender indicator, an omission that should be rectified in
the post-2030 energy agenda.

Leading off the session, Papa Seck, UN Entity for Gender Equality and the Empowerment of Women (UN Women), cited the publication Progress on the Sustainable Development Goals: The gender snapshot 2024, and explained that access to data is one of the key challenges across the SDGs. Mentioning the Gender Data Outlook, he emphasized the need to improve data production, and ensure an enabling environment for statistics and data availability and use. He said we cannot combat climate change with existing gender data and policies.

Elizabeth Cecelski, ENERGIA, proposed an accountability framework for a gender just energy transition and called for prioritizing a gender indicator in any post-2030 gender framework, noting that political buy-in is necessary in this regard. She highlighted the need to identify indicators that could help close gender-related energy gaps related to energy poverty, employment and leadership, entrepreneurship, and enabling environment. Cecelski urged better linking between



Online and in-person panelists of the session "Post-2030 Vision: Prioritizing Gender Indicators for a Just and Inclusive Energy Transition"



Elizabeth Cecelski, ENERGIA

SDG5 (gender equality) and SDG7 targets and indicators, and disaggregating energy access and clean cooking data by gender.

Fanny Missfeldt-Ringius, ESMAP, said only 20% of gender-specific indicators are widely available for tracking and much of the existing data is outdated. She highlighted two ESMAP programmes: the Revolutionary Indicators for Sustainable Energy (RISE) programme, which provides a snapshot of national policies and regulatory frameworks in the energy sector organized by the three pillars of sustainable energy (energy access, energy efficiency, and renewable energy); and the Multi-Tier Framework (MTF) initiative, which redefines the way energy access is measured, going beyond the traditional measure of "connected or not connected" for electricity access and "solid vs nonsolid fuels" for cooking. In conclusion, she said that "women make up 50% of the population...if our voices are not heard, the world misses out on 50% of the solutions."

Kristian Holmberg, Swedish International Development Cooperation Agency (SIDA), said 70% of SIDA's development cooperation has a gender tag. He lamented that energy access is going down in some places. He hoped that the post-2030 agenda would help bridge the gender and energy data gaps and encourage mainstreaming the use of disaggregated data by gender in reporting.

Kathryn Tobin, Women's Environment and Development Organization, noted that her organization was created at the intersection of gender and climate justice. She suggested that the achievements of the Beijing Platform for Action, adopted in 1995, could be built upon. She highlighted the need to take a structural approach toward a gender just transition. She mentioned the Gender + Environment Data Alliance, which collects, analyses, and uses data, and said international policies and agreements must be guided by communities and women's movements on the ground.

Irene Giner-Reichl, Global Women's Network for the Energy Transition, speaking virtually, said the energy transition: could provide an avenue toward equal participation with men in society at large; and is also a reskilling transition as some jobs will be lost and others gained. She said bottlenecks are due to lack of a skilled workforce and of adequate financing, highlighted the role of media

in increasing awareness regarding women's role in the energy sector, and said national and regional energy transition strategies are an entry point toward greater equality in the transition.

During the ensuing discussion, participants and panelists raised issues such as: data related to gender and mining; the potential of crowdsourcing data; civil society's contribution to data through the Copenhagen Framework on Citizen Data, which provides guidance on the contribution of citizens to data collection and use; the need to hold civil servants accountable; and the need for national energy transition strategies and guidelines for their preparation.

In conclusion, Martin Niemetz, UN DESA, lamented that for the first time in 10 years the number of people without access to electricity globally has increased again, and emphasized the need for an indicator on linkages between energy and gender.

Rosemary Idem, SEforALL, reiterated the need to improve energy data to enhance gender equality. She highlighted the <u>Gender and Energy Compact</u>, which now has 91 signatories, and, in closing, invited all to join the compact.

Advancing Digitalization in Support of SDG7: Challenges and Opportunities: Andrei Covatariu, Energy Policy Group and Co-Chair of the UN Economic Commission for Europe (UNECE) Task Force on Digitalization in Energy, opened this session by acknowledging that, although different views exist on which policies and technologies are needed for the energy transition, there is consensus that digitalization plays an important role in improving energy access and affordability.

Riad Meddeb, UNDP, provided opening remarks in which he welcomed the potential of AI, digitalization, and data to disrupt current ways of thinking and usher in new innovations for the next decade of sustainable development and climate action. Meddeb asked participants to reflect on: how digitalization and AI can reduce inequality and accelerate a just energy transition; what financial solutions have untapped potential for the energy revolution; and how technology can go beyond solutions, and act as a pathway accelerator for a sustainable future. He concluded by saying that the "future of energy is not only clean, but just."

Following this, Covatariu moderated the panel discussion where Stefano Pistolese, UNDP, noted the potential of digitization and AI to improve energy access and sustainability, highlighting its ability to reduce power outages by up to 30%



Panelists listen to the intervention by Stefano Pistolese, UNDP

in developing countries. He emphasized that while we tend to discuss the digitization of energy from the supply side, conversations often fail to consider the potential of the demand side of energy systems. Discussing this new era where people become producers of energy, not just consumers, Stefano provided examples from Pakistan where individuals are embracing these economic opportunities by purchasing solar panels to sell electricity back to the grid.

Olga Khakova, Global Energy Center, Atlantic Council, addressed the relationship between digitization and security, highlighting the rate of digitization underway in Ukraine and the accompanying challenges. Regarding the process towards digitization, Khakova emphasized strong planning, and the need to understand the intended data uses, as failing to plan will result in wasted resources. She also touched on issues surrounding security and privacy, noting that as digitization occurs, new nodes for cyber security attacks emerge. Looking to the future of energy and digitization, Khakova discussed the human capacity required, and stressed the importance of creating interesting, creative, and inspiring jobs to appeal to the emerging labor force.

Jessika Trancik, Massachusetts Institute of Technology (MIT), suggested that despite collecting more data now than ever before, the information needed for addressing energy issues and societal challenges is still missing due to a lack of economic incentives to collect it. Trancik called for more democratized data, noting that personal data is creating economic benefits for businesses, but no framework is in place for compensation for individuals sharing their data. Reflecting on the benefits and potential of digitization, she drew attention to the environmental reality of the transition, noting emissions from data centers have overtaken emissions from air travel. She called for the government to step in with 'nudges' to steer private investment where needed.

Energy for Sustainable Agri-food Systems and Clean Cooking: During this Friday session, Chibulu Luo, UNDP, emphasized the need to include clean cooking in NDCs under the Paris Agreement, which would provide opportunities to enhance interlinkages and integration between climate, agriculture, and clean cooking. She also said that education and capacity building are critical.

Ed Brown, MECS, cited a forthcoming report on meeting the clean cooking challenge in Africa, which recommends, among other things, that African governments integrate clean cooking transition as a part of their overall national energy and economic planning, and that Africa's cooking transition must be led by African governments and institutions. He highlighted: large parts of Africa are remote with limited options for clean cooking; Africa is rapidly urbanizing, demands for charcoal are increasing, and agricultural systems are changing; and potential opportunities of commercial agriculture and locally-produced ethanol.

Raihan Elahi, ESMAP, World Bank, noted the approval of an Energy Access Program in ESMAP's new business plan that focuses on households, businesses, and public institutions. He suggested bringing clean cooking into the Mission 300 efforts to



Raihan Elahi, ESMAP, World Bank

increase both electrification and clean cooking. He posited that "perfection should not be the enemy of the good" and cleaner cooking is progress toward clean cooking. He said NDCs should provide clear pathways for clean cooking solutions.

During the panel discussion, Semida Silveira, Cornell University and Council of Engineers for the Energy Transition, emphasized: how clean cooking projects are being integrated with income generation; affordability as the biggest hurdle to advance on clean cooking; empowering local and remote communities; and using the energy transition to address poverty.

Chris McKinney, BURN Manufacturing, speaking virtually, said carbon markets have been critical to the growth of his company, which produces clean cookstoves and operates across Africa. He hoped this success can be replicated elsewhere to get other private sector entities to invest in clean cooking. He noted that a single stove creates monetary, health, and other benefits far beyond the initial cost of USD 15-100.

Hanaan Marwah, KOKO Network, also presenting virtually, explained that her company is using liquid bioethanol fuel for cooking. She said liquid fuel is easily stored, including in tanks, petrol stations, and shops. However, she cautioned that policies can be as much of a barrier as financing if they constantly change with every government change.

Brian Mainza, Ministry of Energy, Zambia, speaking virtually, underscored the need to support enabling environments and the right policy and regulatory framework to stimulate the sector and investment. He said his ministry is promoting the use of clean cooking stoves, and suggested incentives, such as removing taxes to facilitate their uptake.

During the ensuing discussion with panelists and the audience, Solar Cookers International expressed concern that solar was not included in the clean cooking energy mix, noting the "sun is free" and available in areas that lack access to fuel. He underscored the need for increased awareness about solar technologies, and a target or indicator for solar cookstoves.

Other comments addressed increasing concessionality so more companies enter the mix, how electric stoves can get resources from the carbon market, and the importance of equity with respect to incomes from carbon credits.

Mainstreaming Gender and Youth for SDG7: Challenges and Opportunities for Young Women Entering the Energy Workforce: Fanny Missfeldt-Ringius, ESMAP, World Bank, opened the session by highlighting the current disparity in employment opportunities and the underrepresentation of women in the energy sector. Noting that renewables could triple the number of jobs created, Missfeldt-Ringius emphasized that more work is needed to increase the number of women receiving an education in STEM, currently at 10%, if women are to benefit from these changes, while also stating the importance of partnering with young thinkers and innovators to turn opportunities into realities.

Joining virtually, Asma Rouabhia, SDG7 Youth Constituency, advocated for systemic change and discussed the needs for platforms and networks that amplify the voices of youth and women in the decision-making process, before calling on all women and youth to "step-up, speak-out, and take your place at the forefront of the movement."

Grace Young, Student Energy, then moderated a panel discussion where speakers shared interventions on challenges and opportunities for young women in the energy sector.

Arunima Sen, We Are Family Foundation, focused on issues of representation during conversations about the energy transition, and drew attention to the fact that despite the rhetoric, women and youth continue to be underrepresented on panels that are not focused specifically on them, and called for more spaces for their voices to be meaningfully heard. Sen also mentioned shifting the energy transition narrative away from a strictly technical perspective and focusing instead on the intersectional and intergenerational approaches needed.

Jessika Trancik, MIT, shared how her work is, in part, studying technology evolutions to understand emerging challenges and opportunities to better focus time and resources where needed. Trancik emphasized the importance of not just paying lip service to inclusive growth, but to actively seek opportunities to bring underrepresented groups into the energy transitional workforce, calling the inclusion of youth voices a "moral imperative."

Ciara Remerscheid, Shortlist, noted that an expected 3.3 million jobs, directly tied to the green economy, will be created in Africa by 2030. Remerscheid explained that while 40% of these



Jessika Trancik, MIT



Fanny Missfeldt-Ringius, ESMAP, World Bank

jobs will be available to an unskilled labor force, a majority will be categorized as 'general,' which requires proficient writing and speaking skills, or 'specialized,' which can be fulfilled with vocational training that can be obtained in less than a year. Reflecting on the impact of their work, Remerscheid underscored the transformative experience having a job can be for women.

Drawing attention to the fact that over 85% of global employment is in the private sector, Laura Hohmann, CDP, noted that many people are directly affected by the actions of companies. She urged the private sector to lead in gender equity polices, lower barriers to employment for women, and implement SDG actions. Hohmann noted that even once women are employed by companies, there needs to be pathways for fair growth, equal pay, and safe workplace environments in place to ensure change continues. To advance progress, she called for more accountability and transparency, and urged participants to ensure their organizations are collecting gender-based data.

Josh Oxby, SDG7 Youth Constituency, discussed the intersection of youth and gender strategies when addressing employment in the energy sector. Oxby drew attention to the fact that youth must often justify their presence during energy conservations, before sharing his experiences in connecting youth to public and private organizations to help them get firsthand experience and mentorship so they can level-up and gain the skills needed for a career in the sector.

From Concept to Impact: Energy Partnerships for Universal Access: During this session on Friday, Carolina Pan, Power for All, said her organization focuses on growing the market for distributed and decentralized renewable energy to end energy poverty, which is greatest in Sub-Saharan Africa. However, this poverty is also problematic to overcome, she explained, as growth in energy access rates lags behind population growth. She emphasized that the best path forward is forging clean energy partnerships to accelerate energy access at the lowest cost.

Kristina Skierka, CEO, Power for All, discussed the advantages and disadvantages of both centralized and decentralized energy and opportunities for their integration. She said there are only two profitable utilities in Sub-Saharan Africa



Kristina Skierka, CEO, Power for All

and utility companies often resist innovation. She explained that getting a connection can cost up to USD 2,000 more than the annual income of those who are not connected and lack consistent access. Decentralized energy, she explained, represents a patchwork of evolving regulations and limited concessional capital.

During the panel on energy partnerships for universal access, moderated by Pan, Vikram Singh, Senior Director, RMI, discussed what makes an optimal partnership. Reflecting on his work on undergrid mini-grids in Nigeria, Singh emphasized the need for local leadership, input, and decision making from the onset of projects. In addition to local partnerships, he highlighted the importance of relationships with banks and capital, noting the difficulties with securing funding. He also offered insights into what has worked for them, including creating de-risking funds and providing opportunities for investors to leverage economies of scale by investing in multiple projects.

Tombo Banda, Managing Director, CrossBoundary, discussed her work in making mini-grids more affordable, while underscoring the importance of private investment for capital to flow since governments often have too many competing priorities to accelerate action. Banda mentioned that successful partnerships must find synergies among all involved, and that if they are not profitable for all parties, they won't work. She noted that "if everyone gets their back scratched, then it's a good partnership."

Ifeoma Malo, Co-Founder and CEO, Clean Tech Hub Nigeria, highlighted the difficulties with government partnerships, including turnover in administrations and the need to educate them on financing strategies, such as blended finance. Malo expanded on other energy partnerships underway in Nigeria, including mini-grid developments, electric trucking projects to bring agricultural projects to market, and solar panel installation in remote communities. Discussing the future of renewables in Nigeria, Malo brought attention to the pressure for green hydrogen, stating that to avoid a situation in which green hydrogen follows the same path as the oil and gas sector, where resources were extracted and exported, developing a national value chain is important.



Carolina Pan, Power for All

Discussing how energy efficiency is often talked about as a demand-side issue, Bishal Thapa, Senior Director, Collaborative Labeling and Appliance Standards Program (CLASP), noted that when we shift perspectives and consider it from a supply side perspective it changes the narrative and dynamics of how we address energy issues. Reflecting on the history of successful electrification in countries, Thapa highlighted similarities between India, China, and the US, where electrification occurred not because the resources were available, but because the evidence showed that the supply could meet all the infrastructure needed. Thapa stated that when energy becomes reliable, it can have a massive impact on user behavior, noting New Delhi's increase in air-conditioning use as a result of stable power, rather than an increase in income.

#### Closing

Minoru Takada, UN DESA, closed the 2024 ENERGYNOW SDG7 Action Forum by thanking all participants for their insight and passion, while acknowledging the Governments of Norway and the Netherlands, the World Bank, SEforALL, ENERGIA, Iberdrola, the proponents and all those working on the energy compacts, and the UN DESA team for their support. Encouraging everyone to gather for the Action Forum in 2025, he closed the meeting at 3:20 pm.

#### **Upcoming Meetings**

CEM15/MI-9 Ministerial Meeting: This event will gather the Clean Energy Ministerial (CEM) and Mission Innovation (MI) communities with the G20 Energy Ministries with the aim of developing an action-oriented agenda for accelerating the global clean energy transition. dates: 30 September - 4 October 2024 location: Foz do Iguaçu, Brazil www: www.cemmibrazil.com/

Global Off-Grid Solar Forum & Expo 2024: The 8th Global Off-Grid Solar Forum and Expo will welcome exhibitors, policymakers, investors, and development actors to discuss disruptive technologies and to create new and innovative partnerships to promote universal electricity access and build climate resilience. date: 8-10 October 2024 location: Nairobi, Kenya www: www.offgridsolarforum.org/

**AfDB** 

#### 2024 UN Climate Change Conference (UNFCCC COP 29):

This event will include COP 29, the 19th meeting of the COP serving as the Meeting of the Parties to the Kyoto Protocol (CMP 19), and the sixth meeting of the COP serving as the Meeting of the Parties to the Paris Agreement (CMA 6). The Conference is expected to agree on a new collective quantified goal on finance and complete the first enhanced transparency framework, among other matters. The 61st sessions of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation will also meet. **dates:** 11-22 November 2024 **location:** Baku, Azerbaijan **www:** unfccc.int/cop29

**Fifth UN World Data Forum 2024:** The aim of the Forum is to spur data innovation, nurture partnerships, mobilize high-level political and financial support for data, and build a pathway to better data for sustainable development. The event is organized with support from the Statistics Division of the UN Department of Economic and Social Affairs. **dates:** 12-15 November 2024 **location:** Medellín, Colombia **www:** <u>unstats.un.org/unsd/undataforum/</u>

20th Annual General Meeting (AGM) of the Intergovernmental Forum (IGF) on Mining, Minerals, Metals and Sustainable Development: The IGF supports more than 75 nations committed to leveraging mining for sustainable development to ensure negative impacts are limited and financial benefits are shared. This meeting will, among other topics, include sessions on the use of non-metallic minerals for and the protection of nature during the energy transition, disruptive technologies, and standards in the sector. date: 18-21 November 2024 location: Geneva, Switzerland www: www.igfmining.org/annual-general-meeting/

Asia Pacific Wind Energy Summit 2024: This event will convene industry leaders, policymakers, and institutions to develop innovative and collaborative solutions targeted at growing the wind energy sector and working towards the triple energy renewable pledge made at COP 28. dates: 26-28 November 2024 location: Icheon, Republic of Korea www: gwec.net/apac-wind-energy-summit-2024/

Sustainable Energy for All Global Forum: This event, themed "Sustainable Energy for Equity, Security, and Prosperity," will focus on driving the actions and investments necessary for countries to meet their energy access, climate, and development objectives. dates: 12-13 March 2025 location: Bridgetown, Barbados www: www.seforall.org/forum

Second Global Conference on Air Pollution and Health: The second Global Conference on Air Pollution and Health will focus on the theme, 'Accelerating Action for Clean Air, Clean Energy Access, and Climate Mitigation'. The event will highlight policy solutions for air pollution and lack of energy access and catalyze evidence-based, multi-sectoral actions in cities, countries, and regions. date: 25-27 March 2025 location: Cartagena de Indias, Colombia www: www.who.int/news-room/events/detail/2025/03/25/default-calendar/second-global-conference-on-air-pollution-and-health

**HLPF 2025:** The High-level Political Forum on Sustainable Development (HLPF) in 2025 will address the theme of

"Advancing sustainable, inclusive, science- and evidence-based solutions for the 2030 Agenda and its SDGs for leaving no one behind." The SDGs to be reviewed in-depth are SDGs 3 (good health and well-being), 5 (gender equality), 8 (decent work and economic growth), 14 (life below water) and 17 (partnerships for the Goals). **dates:** 14–23 July 2025 **location:** UN Headquarters, New York **www:** hlpf.un.org

For additional upcoming events, see sdg.iisd.org

#### Glossary

African Development Bank

AIDB	African Development Bank
CEEW	Council on Energy, Environment and Water
CEO	Chief Executive Officer
CFE	Carbon-free Energy
COP	Conference of the Parties
EPA	Environmental Protection Agency
ESMAP	Energy Sector Management Assistance Program
FAO	Food and Agriculture Organization of the UN
GEF	Global Environment Facility
HLPF	High-level Political Forum on Sustainable Development
IEA	International Energy Agency
IFC	International Finance Corporation
IRENA	International Renewable Energy Agency
LPG	Liquefied petroleum gas
MECS	Modern Energy Cooking Services
MIT	Massachusetts Institute of Technology
NDCs	Nationally Determined Contributions
PPA	Power purchase agreement
RMI	Rocky Mountain Institute
SDGs	Sustainable Development Goals
SEforALL	Sustainable Energy for All
SICA	Central American Integration System
SIDA	Swedish International Development
	Cooperation Agency
SRSG	Special Representative of the Secretary- General
STEM	Science, technology, engineering and mathematics
UN DESA	UN Department of Economic and Social Affairs
UNDP	UN Development Programme
UNFCCC	UN Framework Convention on Climate
	Change
UNGA	UN General Assembly
UNICEF	UN Children's Fund
WHO	World Health Organization