Marrakech Partnership for Global Climate Action

Event Outcome
Energy Action Event: "Game Changers Accelerating the Global Energy Transition"
UNFCCC COP 27
Sharm El Sheik

Tuesday, 15 November 2022
10 AM – 12 PM

Organised by IRENA and Energy group partners[1]

[1] The Climate Group, Global Solar Council, Global Wind Energy Council, International Chamber of Commerce, International Energy Agency, REN21, Sustainable Energy for All, UN Environment Programme, World Business Council for Sustainable Development, World Climate Foundation, and World Economic Forum.

GCA "Energy": "Game Changers Accelerating the Global Energy Transition"

SECTION 1 - ACTION EVENT

Key Messages:

The COP27 Energy Action Event "Game Changers Accelerating the Global Energy Transition" showcased speakers who highlighted how the Climate Action Pathway on Energy can be brought to life. The global energy transition must accelerate rapidly—and energy transition technologies are mature enough to begin implementing. Several enablers, however, are needed. Significant financing is necessary to deploy existing programs and technologies at greater scale. Collaboration between people from different sectors, geographies, and segments of society are important for coordinating implementation, disseminating best practices, and ensuring a just transition. At the same time as societies invest in the technologies of the future, we must manage a phasing down of the fossil fuel-based economy at every point from local communities to entire countries and regions.

Outcomes:

1- *Demonstrate implementation and showcase concrete examples of action;*

Layla Sawyer, Secretary General of CurrENT, showcased examples of how we can modernize the grid for a renewables-centered energy future. Existing technologies can measure in real time the additional electricity that different power lines can handle—and then redirect power to lines with remaining capacity. Sites in Chicago, USA and Essen, Germany have also demonstrated the feasibility of superconductors, which reduce power losses during transmission while requiring 150 times fewer mined materials than copper. The grid must be able to handle increased power flows as societies move toward electrification, and deploying the aforementioned technologies is a cheaper and faster way of accomplishing this goal than building new power lines.

Prince Essel, Co-Founder of Econexus Ventures Limited, shared his organization's work at the intersection of energy and health. Econexus Ventures produces smokeless ethanol cooking fuels from organic waste (sugarcane molasses, cashew apples, cellulose gel, water), as well as evaporative liquid ethanol stoves. A 2021 pilot study found that communities using these fuels and stoves experienced an 80 percent improvement in air quality.

Fatima Ahmed AlHallami, Negotiator in the Office of the UAE Special Envoy for Climate Change, highlighted the climate efforts of Abu Dhabi-headquartered clean energy company Masdar. The previous week, Masdar signed a contract to develop 10 GW of wind capacity. Masdar also operates a Youth 4 Sustainability initiative, which offers young people trainings and real-world experience in sustainability, and aims to reach up to one million youth by 2030.

2- *Contribute to the COP27 outcomes on progress in implementation of mitigation/resilience and finance goals;*

James Mnyupe, Economic Advisor to the President of Namibia, highlighted the work of the Hyron Steel Africa project. This project is Africa's first fully integrated iron ore mine to green steel plant, with revolutionary potential to become a green manufacturing hub. At present, Namibia imports much of its electricity, even though the country is rich in potential for solar and wind renewable energy. The

project, at full capacity, is expected to contribute 1.5 billion per year to the Namibian economy, as well as 300 permanent direct jobs and 2,000 permanent indirect jobs.

3- *Target near-term implementation and action to accelerate progress;*

Dr. Minh Ha-Duong, Chairman of the Vietnam Initiative for Energy Transition, reported that Vietnam is aiming to build 17 GW of offshore wind by 2035 with international support from the Global Offshore Wind Alliance (GOWA). As of now, Vietnam is home to zero offshore wind installations. Vietnam's collaboration with GOWA is now propelling the country toward not only its 2035 goals, but also its goal of hosting 88 GW of installed offshore capacity by 2050.

Numar Alfonso Blanco Bonilla, Executive Secretary of the Latin American Energy Organization (OLADE), highlighted regional progress on renewable energy implementation. OLADE is an intergovernmental public body comprised of member states from Latin America and the Caribbean. The organization is aiming for a regional target of at least 70 percent renewable energy penetration by 2030, up from 61 percent in 2020. Renewable energy auctions and long-term contracts will be important tools for achieving this target.

4- *Contribution towards achieving the goals/milestones set in the Climate Action Pathways, 2030 Breakthroughs and Adaptation and Resilience Outcome Targets;*

Dr. Maria Neira, Director of the Department of Public Health and Environment at the WHO, focused on the health-energy nexus. She described the dramatic health harms of air pollution, including chronic asthma and lung cancer, which demand medical care. Yet, more than half of hospitals across the African continent do not have a reliable supply of electricity. She urged stakeholders to electrify all of the continent's healthcare facilities and expedite the roll-out of renewables—aligned with the Climate Action Pathway for Human Settlements goal of having "companies across the built environment value chain set net-zero commitments and collaborate within the system towards achieving a net-zero built environment."

Siân Bradley, Head of Secretariat of the Beyond Oil and Gas Alliance (BOGA), emphasized the need to stop expanding fossil fuel use. BOGA is the first government-led alliance that aims to facilitate the managed phase-out of oil and gas production. The Alliance's work supports the Climate Action Pathway for Energy goal that "no exploration for new oil resources is required and, other than fields already approved for development, no new oil fields are necessary"

5- *Highlight the importance and elevate efforts of resilience and adaptation*

H.E. Dr. Vann Monyneath, Director General of Policy and Strategy in Cambodia's Ministry of Environment, highlighted Cambodia's efforts in the area of cooling. Cooling is becoming an increasingly important aspect of adaptation as climate change makes extreme heat more frequent and intense. Cambodia's National Cooling Action Plan contains minimum energy performance standards and promotes green infrastructure—both of which can limit the energy needs associated with cooling.

H.E. Haija Samira Bawumia, Global Ambassador for the Clean Cooking Alliance, emphasized that universal access to clean cooking is vital for combating poverty and inequality, especially for women, girls, and children. Irene Karani, Director of Africa Climate for the Children's Investment Fund Foundation, described the broader importance of a low-carbon world in securing a healthy future for children—and the important role philanthropy can play in supporting local institutions.

6- *Strengthen collaboration with all stakeholders, including the national governments and non-Party stakeholders;*

Eduarda Zoghbi, Master's Student at Columbia University, highlighted that only 10 percent of ministerial positions are filled by women in Brazil and policies are often gender-blind. Continuous and better engagement with young people, women, and Indigenous communities are vital to the energy transition.

Mahmoud Mohieldin (UN High-Level Climate Champion for COP27) and Tonderayi Gumunyu (Energy Expert, AUDA NEPAD) emphasized the importance of further collaboration across the African continent. Mahmoud Mohieldin highlighted work with consultancies such as BCG and the importance of further partnerships with the private sector, while Tonderayi Gumunyu described work with IRENA, IEA, and other partners to support the continent's energy transition. Racquel Moses, CEO of the Caribbean Climate-Smart Accelerator, echoed similar themes in highlighting the need for investors to see the Caribbean not as a victim of climate change, but as an integrated energy nexus.

7- *Showcase concrete examples of accountability and/or progress tracking (when applicable).*

Jarand Rystad, CEO of Rystad Energy, highlighted nine technologies necessary for limiting global warming to 1.5C and pointed to the ability of aerial imaging technologies to track the construction of new plants that manufacture components necessary for renewable energy deployment (e.g. polysilicon).

SECTION 2 – STOCKTAKE ON ACTION

Overview of progress and implementation in 2022

Compounding crises underscore the pressing need to accelerate the global energy transition. Events of recent years have accentuated the cost to the global economy of a centralised energy system highly dependent on fossil fuels. Oil and gas prices are soaring to new highs, with the crisis in Ukraine bringing new levels of concern and uncertainty. The COVID-19 pandemic continues to hamper recovery efforts, while citizens worldwide worry about the affordability of their energy bills. These crises have diverted attention from the focus to fight climate change, but have also proven that an energy transition based on renewable energy and energy efficient solutions must equitably be accelerated and enhanced around the world.

At the same time, the impacts of human-caused climate change are increasingly evident around the globe. The Intergovernmental Panel on Climate Change (IPCC) warns that between 3.3 and 3.6 billion people already live in settings highly vulnerable to climate change.

Short-term interventions to ameliorate immediate challenges must be accompanied by a steadfast focus on a successful energy transition in the medium and long term. Governments today shoulder the challenging task of tackling seemingly opposing agendas of energy security, resilience, and affordable energy for all. In the face of uncertainty, policy makers must be guided by the overarching goals of arresting climate change and ensuring sustainable development. Any other approach, notably investing in new fossil fuel infrastructure, will only perpetuate the existing risks and raise the long-established threats of climate change.

Given the inadequate pace and scope of the transition, anything short of radical and immediate action will diminish – possibly eliminate - the chance of staying on the 1.5°C or even 2°C path. While some progress has been made to achieve this goal, it falls woefully short of what is required. Acceleration of the energy transition is essential for long-term energy security, price stability and national resilience. Such a profound shift would make countries less dependent on energy imports through diversified supply options and help decouple economies from wide swings in the prices of fossil fuels. This path would create jobs, reduce poverty, and advance the cause of an inclusive and climate-safe global economy.

SECTION 3 – ACTION DURING 2023-2025

Further progress of an accelerated energy transition will depend on policy packages that incorporate political will, well-targeted investments, and a mix of technologies. Given that energy touches all aspects of society, these objectives must be underlined by concerted action and international cooperation within and among all sectors to ensure a timely and holistic approach.

Increasing ambition in national energy plans and in the Nationally Determined Contributions made under the Paris Agreement must be firm enough to provide certainty of direction and guide investment strategies. In addition to increasing ambition in their revised NDCs, Parties need to develop national implementation plans that include clearly defined targets, including efficiency, renewables and end uses. The largest energy consumers and carbon emitters will have to implement the most ambitious plans and investments by 2030. This will require going beyond long-term decarbonisation commitments and setting out concrete operational targets, plans and policies for the short and medium term. G20 and G7 countries have a critical role in leading the global energy transition effort at the international level.

The energy transition will require between USD 4-6 trillion per year. Investment decisions are long-lived, and the risks of stranded assets are high, so decisions should be guided by long-term logic. IRENA estimates that USD 0.7 trillion in annual investments in fossil fuels should be redirected towards energy transition technologies. Measures to eliminate market distortions, coupled with incentives for energy transition solutions, will facilitate the necessary changes in funding structures. Most of the additional capital is expected to come from the private sector. But public financing will also have to double in order to catalyse private finance and create an enabling environment for speedy transition with optimal socio-economic outcomes.

A comprehensive set of policies covering all technological avenues is needed to achieve the necessary levels of deployment by 2030. Deployment policies should support market creation, thus facilitating reductions in technology costs and their scale up and increases in investment levels aligned with energy transition needs. Strong institutions will be needed to co-ordinate structural and just transition policies and manage potential misalignments. Only a holistic global policy framework can bring countries together to orchestrate a just transition that leaves no one behind and strengthens the international flow of finance, capacity and technologies.

Given this, the energy thematic group will continue to collaborate with each other to build a stronger, more comprehensive voice on the energy transition. To do so, the group will also collaborate with other thematic groups to take all sectors and actors into account, with a particular focus on resilience. The energy thematic group will continue to showcase energy transitions as a solution to climate change in climate events and fora, including Regional Climate Weeks. These discussions will also align with the Global Stocktake; taking stock of progress rhus far in the energy transition, what a 1.5C future looks like for the energy transition, and how to achieve this.