

“SOLAR TO POWER AFRICA: BUILDING PARTNERSHIPS THAT DELIVER RESULTS”

The banner features logos for ISA, European Investment Bank, THE WORLD BANK, ESMAP, and the Ministry of Foreign Affairs of Denmark. The event title is in a blue box, followed by the date and time. Below are eight portraits of participants with their names and titles. At the bottom, it identifies the event as an EU Side Event at COP 26 in Glasgow, UK.

Solar to Power Africa - Building Partnerships that Deliver Results
2nd November, 2021 | 11.30 am - 12.30 noon (UK time)

Dr. Ajay Mathur,
Director General,
International Solar Alliance

Ms Kadri Simson,
European Commissioner
for Energy

Jagjeet Sareen,
Assistant Director General,
International Solar Alliance
(Moderator)

Dr. Mariama Sido,
Director of Niger's National
Agency for Solar Energy
(ENERSOL)

Dr. Demetrios Papathanasiou,
Global Director,
Energy and Sustainable,
World Bank Group

Ms. Peace Kalisa,
External Links & Donor Coordina-
tor, Ministry of Infrastructure,
Rwanda

Mr. Máté Heisz,
Director of Global Affairs,
SolarPower Europe

Henrik Pilger Engelmann,
Senior Energy Specialist, Energy
Department, Projects Directorate,
European Investment Bank

European Union side events
COP 26
1-12.11.2021
GLASGOW, UK

Summary of the Event

The International Solar Alliance, European Union (EU), European Investment Bank, World Bank, Energy Sector Management Assistance Program (ESMAP) and Government of Denmark came together to organise a high level discussion on, “Solar to power Africa: building partnerships that deliver results” as an EU Side Event at Cop26 in Glasgow on 2nd November 2021.

The electrification rate in the region has grown from 33% to 46% in the last decade, but this pace of progress will leave nearly half a billion people in Africa without electricity by 2030.

With around 570 million people (more than 120 million households) across sub-Saharan Africa lacking access to electricity, the need for renewable energy is now. Solar energy is at the centre of renewable energy initiatives in Africa. Sub-Saharan Africa accounts for three-quarters of the global electricity access deficit and hosts the top three access deficit countries in the world.

The situation is most dire in rural areas, where 83% of the population lack electricity access, and in countries affected by fragility, conflict and violence. This lack of electricity is constraining economic development and human capital formation, and it increases vulnerabilities to climate, health and other shocks, especially for the poor. These negative impacts have been exacerbated by the COVID-19 pandemic, which has brought millions of people in Africa back to energy poverty and left un-electrified communities even more isolated and cut off from economic opportunities.

De-risking investments, strengthening and expanding grids, strong collaborations and fostering a culture for systemic innovations across value chains, processes and products were some of the key points that were highlighted by **H.E. Dr Ajay Mathur, Director General, International Solar Alliance** in his welcome remarks during the session. He further stated, “Across some countries, cutting edge concentrated solar-thermal generation is poised to replace fossil power. Some others, like Morocco, once North Africa’s biggest energy importer, is headed for a grid that is 40% renewable powered, as well as the world’s largest fleet of concentrated solar power. Developing countries in Africa are also

deploying solar to enable farmers to adopt a more climate-friendly and sustainable agriculture solution. The ability to adapt solar for any purpose - from solar water pumps to individual rooftops to micro-grids to serving gigawatts of demand at a powerful cost advantage - makes it ideal for any use, and is on the back of attractive economics. To ensure that we capture the immediate benefits of solar energy, governments, businesses, and investors must act with urgency to scale investment. Many countries in Africa lag far behind global needs of solar investments, and now is a pivotal moment for action.” To take forward ISA cooperation in Africa, a blended finance programme has been launched by the Alliance.

European Commissioner for Energy, H.E. Ms Kadri Simson emphasised Europe’s commitment to support and strengthen initiatives of the International Solar Alliance. She stated “With the International Solar Alliance, we launched recently a programme to share European experiences in solar energy technologies, policies and practices with all member countries. The Commission is supporting energy cooperation actions in over 20 African countries and is financing energy infrastructure, such as grids and interconnections, across the continent. To do this, we work closely with the European Investment Bank, and other European, African and multilateral development banks.”

The session focused on how to reduce and remove barriers to investments and technology, creating access to reliable, affordable and the abundantly available solar energy. The discussions also focused on issues of equipment supply, regulatory challenges, access to finance, and technical expertise that are major roadblocks for the deployment of solar energy. The panel discussion addressed the need for businesses to be engaged more intrinsically in the clean energy goals of Africa.

Observations from a recent EIB/ISA feasibility study on solar home systems were presented by **Mr Jagjeet Sareen, Assistant Director-General, International Solar Alliance**. The study has identified five key barriers to the expansion of solar home systems in Africa: (i) limited ability of customers to afford SHS products, (ii) uncertainty in markets to effectively run businesses, (iii) high costs to serving last-mile populations, (iv) cash-flow constraints stemming from working capital, and (v) instability in the political and economic environment. The study recommends a set of blended-finance approaches and innovations that can be applied in different country contexts and calls for better coordination of development partners, governments, private sector and other stakeholders active in the off-grid solar sector.

Dr Mariama Sido, Director of Niger’s National Agency for Solar Energy (ENERSOL), highlighted that access to energy is a catalyst for achieving sustainable and inclusive growth. For this reason, the Government of Niger is moving forward with an ambitious electrification program that is based on the National Electricity Access Strategy, which was developed with support from the World Bank. The program aims to raise electrification rate from the current 20% to the universal access, following an integrated geospatial plan that leverages grid, mini grid and off-grid technologies. Solar energy can significantly accelerate electrification in Niger through innovative business models – it allows expanding grid-connected generation at least-cost, which enables an expansion of affordable grid electricity and expansion of mini grids, as well as individual off-grid solar systems, which in Niger will be required for 22% of population, as well as a pre-electrification. Niger is developing off-grid solar market. One lesson is that both supply- and demand-side barriers need to be addressed in parallel. A new Haske program that the Government is developing with support of the World Bank and ESMAP will provide therefore financing for off-grid solar companies, as well as to consumers to close the electrification gap, while also supporting productive uses and electrification of essential public institutions, such as healthcare clinics and schools.

Dr Demetrios Papathanasiou, Global Director for Energy and Extractives at the World Bank, highlighted the role of partnerships and how ESMAF is leveraging its collaboration with its donors, partners, as well as client Government to support ambitious and innovative electrification programs, such as Rwanda and Niger. He challenged all stakeholders to move out of the comfort zone to support more innovation and ambition, by creating policy and market frameworks attractive to the private sector; by building and maintaining strong political commitment; by thinking about what the customers want, and by embracing innovation and leveraging new technologies. He presented examples of transformative innovations. Geospatial electrification planning that uses satellite imagery and smart algorithms, now allow developing electrification plans at fraction of costs of traditional methods. Solar technologies are enabling innovative business models, which provide more cost-effective and affordable alternatives to millions of people that otherwise would need to wait decades for power, as well as for productive and social uses. He highlighted that the technology and business model innovation now also needs to be matched with financial innovation, such as de-risking facilities to attract private sector, social impact bonds to bring in new sources of funding, and end-user subsidies to bridge the affordability gap.

Ms Kaliisa, External Links and Donor Coordination Officer, Ministry of Infrastructure, Rwanda presented Rwanda's experience, which has allowed the country to increase electrification rate five-fold in less than a decade. Ms. Kaliisa described how a comprehensive, integrated geospatial electrification plan allowed the Government to gather all public and private financiers around the same goal and approach, and as a result significantly reduce the costs and increase the pace of electrification efforts in Rwanda. She highlighted the importance of solar energy in Rwanda's efforts to achieve universal access, and how Rwanda's approach to off-grid electrification is leveraging private sector investments, while providing pro-poor results-based financing that helps close affordability gap of the low-income households. She has highlighted how important energy access has become during the time of COVID-19, but also how the pandemic has affected the off-grid solar companies and their users, who require continued support to overcome the crisis impacts.

Mr Máté Heisz, Director of Global Affairs, Solar Power Europe, highlighted that "The solar potential in Africa is immense thanks to high irradiation and strong demand. Yet the continent's installed capacity today represents less than 1% of the world's solar capacity and less than 3% of Africa's power generation capacity. SolarPower Europe will continue working closely with its members and partners, including the European Commission, the International Solar Alliance, as well as local associations, to support the scale-up of solar energy on the continent. This can be done by enhancing local regulatory frameworks and streamlining international support schemes, and by strengthening capacities of local businesses and associations." His remarks pointed towards the need to work closely with businesses in the solar energy sector both in the EU and in Africa.

The session came to a close with remarks from **Mr Henrik Pilger Engelmann, Senior Energy Specialist, Energy Department, Projects Directorate, European Investment Bank** focusing on energy access and energy transition linkages. He stated that "Energy Access and Energy Transition can work hand in hand, as evidenced by the essential role of solar off-grid solutions in closing the energy access gap – esp. for rural populations in SSA. Coordinated blended finance approaches are critical in accelerating access for currently unserved populations."

Significant initiatives are already afoot in Africa, such as the Lighthouse Initiative jointly mobilised by the ISA and the World Bank, and supported by the British High Commission and Ministry of New and Renewable Energy, Government of India which has been deployed to enable knowledge sharing and transfer of experience, technology, and investments in the solar energy sector from India to countries in Africa. The Lighthouse Initiative aims to enable countries in Africa with information on

best practices, learnings, and lessons for development of a solar ecosystem. It also provides insights into the factors that must be avoided to create a comprehensive solar sector.

Related links:

- **Launch of the EU/ISA project**, funded by the EU, aiming at further strengthening the engagement of EU, EU Member States, and EU academic, business and financial communities with the International Solar Alliance: https://eeas.europa.eu/delegations/india/105916/european-commission-executive-vice-president-european-green-deal-mr-frans-timmermans_en