

## NEWSLETTER

May 2023 • Volume 17



## EASING SOLAR Deployment globally

### FROM DIRECTOR GENERAL'S DESK



#### Dear Readers,

The 2022 ISA World Solar Investment Report in its findings had reported that the various uncertainties of the global energy landscape had highlighted the need for countries to become self-dependent in terms of energy requirements and increase penetration of solar energy adoption, with solar energy being abundant and cheaper than other non-renewable forms of energy. Of the projected investments required, solar energy is expected to draw the most investments as solar and wind technologies together are expected

to meet 90% of the electricity needs by 2050.

I was delighted to read the insights from IEA's latest World Energy Investment report, which echoed the findings of ISA's World Solar Investment Report. The fact that investment in the future in solar is slated to be greater than oil this year is both an effective incentive and a compelling propellant for ISA and all our stakeholders. We at ISA have demonstrated through our actions and activities that it is by understanding the current trends and anticipating future developments that we can make informed decisions that drive financial returns and contribute to a sustainable and resilient energy future for all.

By introducing solar energy, the people and the planet as a whole are benefitting. The past month witnessed the World Health Organisation host its 76th World Health Assembly in Geneva, Switzerland. ISA's forays in this space have been spectacular and hold much promise to bridge last-mile gaps in the healthcare system, reduce carbon emissions, and pave the way for a resilient healthcare system universally. The advent of mid-year at ISA brings with it the significant activity of Governance Meetings, which facilitate in-depth analysis and review of ISA activities under its strategic priorities through deliberations among its Member Countries. We look forward to these discussions to help fine-tune our interventions and enhance our capabilities to deliver tailored responses.

Our capacity-building initiatives saw a new feather being added with the completion of a training programme for government officials from ISA Member Countries, which very effectively enhanced their capacity to

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apply improved knowledge and skills in integrating solar energy into existing schemes and design new solar energy-based schemes in their respective countries. ISA, with support from the European Union under the project 'EU Cooperation with ISA' also brought subject-matter experts in the solar sector to discuss the direction, setup and function of an intended ISA Research and Innovation Sounding Board to advise ISA and its Member Countries on new research and innovation developments in the solar sector.

With our partners and allies, we are seizing opportunities to shape a sustainable world with the strategic and responsible investment of our finances, alliances, partnerships, and ideas.

With best wishes

**Ajay Mathur** Director General, International Solar Alliance

#### **OVERVIEW**

# 2023 GOVERNANCE MEETINGS OF THE INTERNATIONAL SOLAR ALLIANCE

In an age where climate change has necessitated the need for sustainable energy sources, the International Solar Alliance (ISA) has emerged as a global leader dedicated to promoting the adoption of solar energy for the clean energy transition. Established in 2015, the ISA has a clear objective: to accelerate the worldwide deployment of solar power by facilitating cooperation among its Member Countries, international organisations, and other stakeholders like the private sector. With its membership comprising 115 Signatory and Member Countries, the ISA brings together countries from different regions to foster international cooperation. The ISA advocates for supportive policies and financial mechanisms to make solar energy affordable, accessible, and adaptable to diverse socio-economic contexts.

The ISA governance structure comprises the Assembly, Standing Committee, Four Regional Committees and the ISA Secretariat. The Assembly is the apex decision-making body comprising all ISA Member Countries. The Assembly is convened annually at the seat of the ISA in New Delhi, India. The Standing Committee is constituted by the Assembly under its Rules of Procedure to facilitate consultation among the ISA Member Countries and provide advisement on matters to be recommended to the Assembly for a decision. The Standing Committee meets twice a year at the Ministerial level and is chaired and co-chaired by the President and Co-President of the ISA Assembly, respectively. The other members comprise eight regional Vice-Presidents of the ISA. To facilitate regional coordination among the Member Countries, the ISA has four Regional Committees for (1) Africa Region, (2) Asia and the Pacific Region, (3) Europe and

the Others Region, and (4) Latin America and the Caribbean Region. The Regional Committees meet annually and are chaired by two Vice-Presidents from each region, selected for a one-year duration each in order of the submission of the instrument of ratification of the ISA Framework Agreement.

The governance meetings facilitate in-depth analysis and review of the ISA activities under its strategic priorities through deliberations among its Member Countries. The Standing Committee establishes the overarching agenda for the vear, which is then deliberated upon in the Regional Committee Meetings with a regional context. The ISA Assembly serves as a forum to collate and synthesise these deliberations, where the outcomes of the deliberations conducted throughout the year are placed for conclusive decisions. The governance meetings of the ISA hold great significance as they play a crucial role in shaping the roadmap for the ISA.



#### **SNAPSHOT**

### ISA AT WORLD HEALTH Assembly 2023

Roundtable on Building Resilient Healthcare Systems Through Solar in progres

On the sidelines of the World Health Assembly 2023, the International Solar Alliance (ISA), in collaboration with Health Innovation & Investment Exchange (HIEx) and with the support of the European Union as a knowledge partner, organised a high-level roundtable discussion on 'Building Resilient Healthcare Systems through Solar'. The event brought together ministers and senior government officials from various countries to explore scalable business models and best practices in adopting solar energy for healthcare.



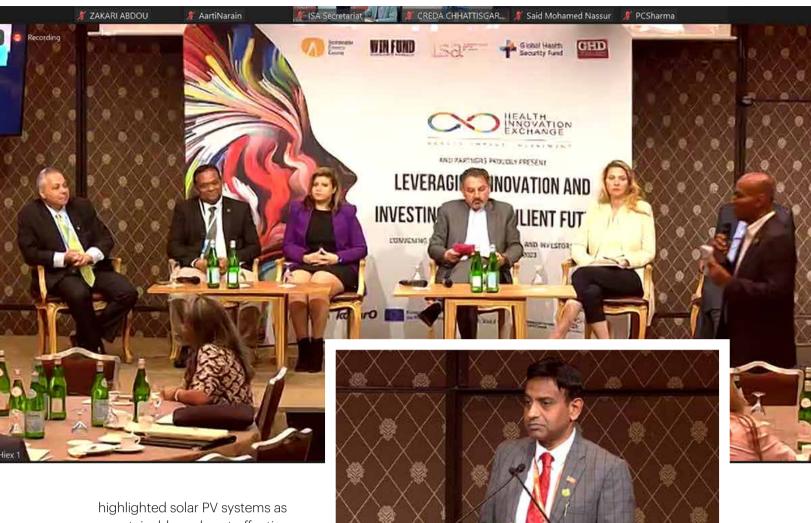
The roundtable, which was inaugurated by Mr Michel Sidibe, Chair of the HIEx Board & Special Envoy -African Medicines Agency and Former Minister of Health & Social Affairs, Mali, and Dr Ajay Mathur, Director General of ISA, highlighted the role of solar energy in building resilient health infrastructure and achieving the targets of Sustainable Development Goal 3 (SDG3). Ministers from Egypt, Guinea, Maldives, Côte d'Ivoire, Comoros, Ethiopia, and Benin actively participated in the discussions.

Mr Michel Sidibe emphasised the importance of addressing the electricity crisis in Africa and

The Roundtable engaged ministers and senior government officials steering health, energy & power portfolios in their respective countries.

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a sustainable and cost-effective solution. He stated, "The solarisation of healthcare bridges the gaps in electricity supply and availability and builds climate resilience in a continent prone to climate change.

Λ

Joshua Wycliffe, COO, ISA addresses the Roundtable

Solar energy is the ultimate solution, enabling us to bridge these gaps, combat air pollution, reduce carbon emissions, and pave the way for a brighter, healthier future for all."

Dr Ajay Mathur introduced ISA CARES, an exclusive initiative dedicated to solarising primary healthcare centres. He highlighted the significance of establishing a resilient energy infrastructure to provide essential healthcare services and enhance health outcomes, especially in the aftermath of the COVID-19 pandemic. Several demonstration projects are being implemented in the Least Developed Countries (LDCs) and Small Island Developing States (SIDS) such as Benin, Burkina Faso, Mali, Guyana, Niger, Comoros, Mauritius, Uganda, and Fiji, which greatly benefit rural and marginalised communities while creating local employment opportunities.

Ministers and representatives from various African countries stressed the need for a diverse and balanced energy mix. They emphasised the

Discussions showcased scalable business models in solar for healthcare across different ISA member countries and how these can be leveraged to build resilient health infrastructure and achieve the targets of Sustainable Development Goal 3 (SDG3). importance of building capacity, utilising local resources, and implementing sustainable financial models and storage solutions to ensure a reliable and consistent energy supply. The roundtable also featured interventions from Mr Khaled Abdel Ghaffar, Minister of Higher Education & Scientific Research, Egypt, who shared the success story of Egypt's 1.6-gigawatt solar facility in Aswan, and Mr Harish Hande, Co-founder of SELCO and recipient of the Magsaysay Award, who discussed the ambitious mission to establish 25,000 solar-powered health centres in India by 2026.

Mr Joshua Wycliffe, Chief Operating Officer of ISA, highlighted the need for unified efforts, cooperation, and enhanced coordination among countries. He underscored the role of ISA in driving change through initiatives such as the SolarX Startup Challenge and the Solar Finance Facility, which foster entrepreneurship, innovation, and access to finance in the solar energy sector.

Mr Pradeep Kakkattil, CEO of HIEx, expressed excitement about strengthening political leadership and investment in solarising health centres to achieve SDG 3. The event showcased over 25 cutting-edge innovations selected to address specific health needs and emphasised the potential of women innovators in driving progress. The Health Innovation Marketplace set up alongside the roundtable, exhibited miniature models of successful demonstration projects and showcased select innovators from WINFund, a non-profit fund investing in African women entrepreneurs improving access to healthcare.

The roundtable deliberations helped facilitate partnerships and collaborations among countries, innovators, and investors. The event marked an important milestone in advancing universal resilient healthcare and driving progress towards a sustainable and equitable future for all.

### **TUNE IN!**





DG-ISA speaks about the role of ISA in Solar for Healthcare (https://www.youtube.com/watch?v=9UanVtOasC4)

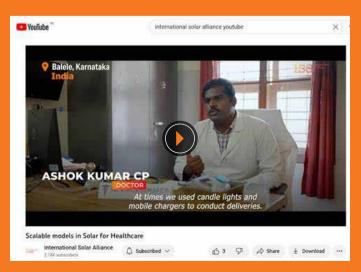
Watch 👹

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ational solar alliance youtube



ISA Demonstration Projects Solarisation of Rural Healthcare Centre in Guyana https://www.youtube.com/watch?v=\_bEXLebnz4E



Scalable Models in Solar for Healthcare https://www.youtube.com/watch?v=AoRMNejLXrY

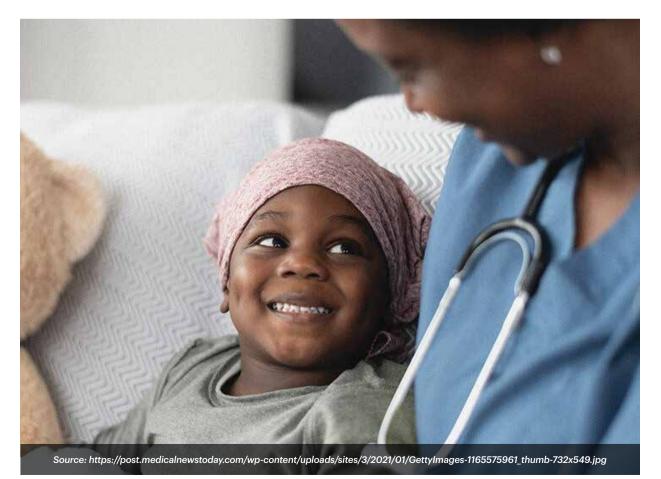
#### SPOTLIGHT

### ISA CARES: DEPLOYING SOLAR Energy for the health sector

ISA CARES is an exclusive initiative dedicated to solarising healthcare centres. ISA CARES aims to provide essential solarbased power infrastructure to enhance health outcomes, strengthen healthcare capacity, and bolster preparedness.

An assessment of healthcare facilities by the World Health Organization (WHO) in low-income and lower-middle-income countries between the years 2015 and 2022 found that 12% of the healthcare facilities in South Asia and 15% of the healthcare facilities in sub-Saharan Africa lacked any access to electricity whatsoever, and close to one billion people were served by either health care facilities with no electricity access, or those with unreliable electricity supply at best. The assessment also showed that nearly 64% of the healthcare facilities in low and middle-income countries required urgent intervention in the form of a new connection or a backup power system to improve healthcare delivery and patient outcomes

The International Solar Alliance, at its Third Assembly in 2020, unveiled ISA CARES, aimed at deploying solar energy for the health sector in Member Countries, with a special focus on the Least Developed





Countries (LDCs) and Small Island Developing States (SIDS). The primary objective of ISA CARES is to solarise primary healthcare facilities in Member Countries, aimed at providing essential solar-based power infrastructure to enhance health outcomes, strengthen healthcare capacity, and bolster preparedness.

The initiative launched in the thick of the COVID-19 pandemic underlined the criticality of resilient health systems more than ever. The ISA CARES initiative has led to multiple impacts through better access to healthcare, clean water, education, economic opportunities, and real-time disease information. The ISA CARES initiative aims to raise \$50 million as grants for projects/technical assistance and leverage an additional \$100 million as investments to scale up the interventions. The initiative is leveraging ISA's networks and developing synergies with other solar initiatives for maximum global solarisation impact.

UNAIDS, Health Innovation Exchange (HIEx), and the Commonwealth of Australia are key partners in the initiative, and AUD 92,000 has been pledged to the initiative by the Australian government.

It is widely acknowledged that the initiative could be leveraged to help developing and least-developed Member Countries improve their human development indices, particularly those reflecting Maternal Mortality (MMR) and Infant Mortality (IMR).

Access to low-cost energy is critical to healthcare systems across Member Countries. Access to energy in the health sector is indispensable and an overarching prerequisite for the success of other ISA initiatives, such as cold chains for vaccines and pharmaceutical products.

ISA has supported demonstration projects in its LDCs and SIDS Member Countries, benefiting rural and marginalised communities. These projects not only electrify public healthcare services but also create employment opportunities and contribute to the growth of allied industries.

Four demonstration projects of solarisation of health

centres in Guyana, Mali, Niger, and Comoros have been completed, and five in Benin, Burkina Faso, Fiji, Mauritius, and Uganda are in the implementation phases.

Evidently, access to electricity may be considered a key enabler of health service provision: diagnostic, imaging and other medical equipment and appliances, such as ultrasound, ventilators, dialysis machines, and cold storage for vaccines, blood, and medicines, depend on electricity. Procedures such as sterilisation of instruments and equipment, emergency surgical services, management of chronic conditions, etc., also need electricity. Electricity access could also increase the working hours of healthcare facilities, extending the services into the night. Moreover, healthcare facilities could expand beyond medical services to include in-house accommodation for staff, with amenities such as water supply, lighting, and ventilation, which could help attract and retain skilled health workers, especially in rural and remote settings.

Future plans for the initiative include launching a Grand 'Solar for Health Challenge,' dedicated to researching and finding innovative solar solutions for health while generating economic opportunities for young entrepreneurs in ISA Member Countries.

#### **ISA ENABLERS**

### ISA RESEARCH AND Innovation symposium

On 18 May 2023, the International Solar Alliance organised a virtual Symposium with support from the European Union under the project 'EU Cooperation with ISA'. The Symposium aimed to bring together a panel of experts in the solar sector to discuss the direction, setup and function of an intended ISA Research and Innovation Sounding Board to advise ISA and its Member Countries on new research and innovation developments in the solar sector.

The lineup of speakers included Dr Ajay Mathur, Director General, ISA, Mr Joshua Wycliffe, COO, ISA and Mr Edwin Koekkoek, First Counsellor, Energy and Climate Action, Delegation of European Union to India, along with several other eminent global experts in the field.

The panel discussion touched upon several topical and forward-looking themes. Dr Ajay Mathur commenced by explaining ISA's intent of setting up a Sounding Board with a broad-based group of experts to regularly discuss and address the "here and now" problems in setting new directions for projects and smoothening the issues encountered during project implementation.

Mr Edwin Koekkoek represented the EU in commending a good start for the ISA's research programme. He focused on the importance of research and dissemination of findings to further the capacity building and knowledge uptake across ISA's Member Countries. He also discussed the EU's interest in hosting research-focused side events at the forthcoming G20 event in Goa, India.

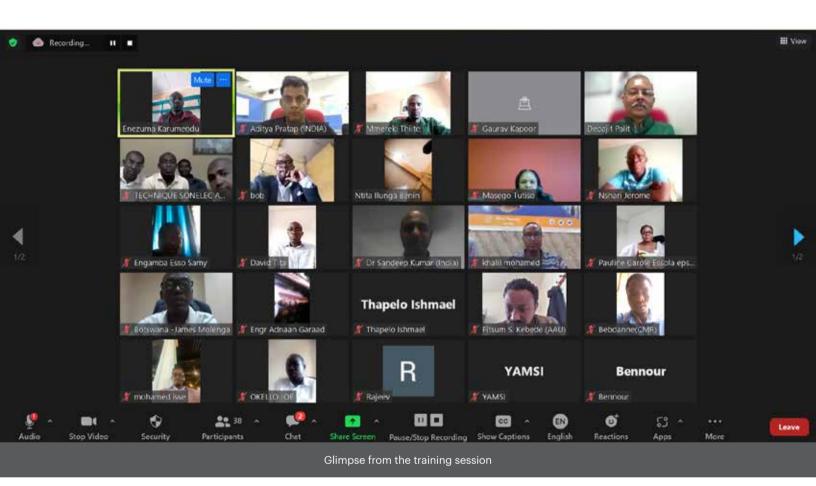
The esteemed panellists touched upon several other topical issues, such as the need for innovation in new financing mechanisms and technologies for underserved communities, challenges in policy and regulatory frameworks when implementing new solar technologies, long-term capacity building and engagement for ISA Member Countries for maximum impact, space-based solar technology and its intended viability and more.

The next steps from this virtual session will include developing a clear plan to outline ISA's research and innovation strategy, inviting core participants to such a forum, and having two follow-up meetings in the next few months. The first discussion featured participation from: Smita Singh, EU Delegation to India; Cecile Leeman, European Commission; Yogi Goswami, University of South Florida; Juzer Vasi, IIT Bombay; Dan Brian Millison, Asian Development Bank; Shwetha Ravi Kumar, Florence School of Regulation; Natalia Caldez Gomez, EU Commission, DG INTPA; Sanjay Vijendran, ESA; Yerassimos Lazaris, Greek Trade Office, Embassy of Greece, Delhi; Tirthankar Mandal, World Resources Institute; Venizelos Efthymiou, EPR Technology Frontiers Limited.



#### **ISA ENABLERS**

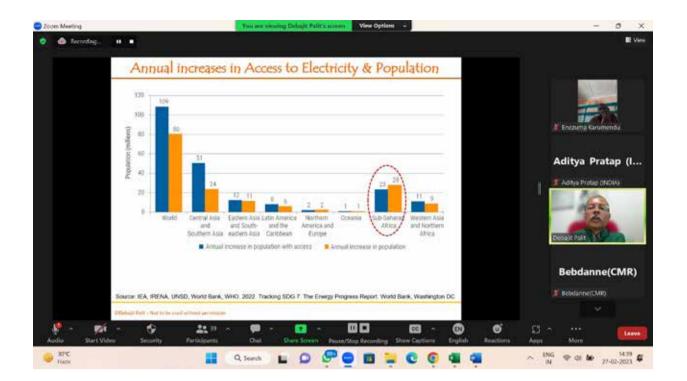
### TRAINING PROGRAMME ON Integrating Solar Energy



ISA Member Countries are increasingly prioritising solar energy for sustainable economic growth and the well-being of their people. The countries require innovative schemes and development programmes for accelerated solar energy uptake to drive investments and economic growth. However, at the national and provincial levels, processes are required to integrate solar energy in developing and implementing development schemes/programmes to minimise the cost and maximise the multi-sectoral impact.

SIDs and LDCs look for different ways to design and deliver government-led development schemes/programmes capable of responding to various challenges, including the energy access issues rural areas face. The way governmentled development programmes are conceived differs widely across countries according to the specificity of their institutional and political frameworks and the local context. For example, in many countries, the need for modernising the agricultural sector is dominant, but often a lack of knowledge on integrating solar energy for a sustained impact. While individual Government Ministries devise development plans/programmes, an adequate understanding of how solar energy can be integrated to maximise the impact in respective sectors is limited at operational levels.

To fill this gap, ISA designed a global training programme to help ISA Member Countries understand the entry points for integration and the potential benefits of integrating solar energy to maximise the impact of government-led development schemes. 9



The training programme was organised under the ambit of ISA's flagship initiative, the Solar Technology Application Resource Centre, from February to May 2023 and trained 368 participants from around 30 Member Countries. ISA partnered with the NTPC School of Business (NSB), a learning & development centre, building capacity on various aspects of solar energy. Each training programme was of 3 days duration and organised in 9 batches region-wise, combining countries based on the market maturity, type of development schemes and language preference. The training programme very effectively enhanced the capacity of government officials from ISA Member Countries, enabling them to apply the enhanced knowledge and skills in integrating solar energy in existing schemes and design new solar energy-based schemes for improving access to reliable energy services for the residential and public institutions, and to create sustainable livelihood opportunities in rural areas.

Dr Ajay Mathur, Director General, ISA, inaugurated the programme for the Africa region and remarked, "We have seen an unprecedented momentum for solar energy deployment globally, and this is becoming the least cost option in almost all African countries. In fact, in most countries worldwide, solar electricity is the cheapest electricity amongst all options, especially when the sun is shining."

Rasoarimala La Marie Emondine, Design Engineer from Madagascar, thanked ISA on behalf of Madagascar for the training conducted for the African region. She remarked, "I would like to thank ISA for the presentation as it is very interesting for me and my country. I think my country really needs it."

Ms Coleen Fletcher-Perry from Guyana Energy Agency remarked after attending the programme organised for the LAC region that "the three days training was very informative even though we are in the energy sector. It was kind of a refresher, and there were very important points that we had overlooked earlier and how we could develop and improve what we were doing."

In the training programme for the Asia Pacific region, a participant, Mr Ahmed Al-Dowsary, from the Ministry of Energy, Saudi Arabia, remarked, "The experiences have been delivered in so many aspects in terms of solar energy application and use cases or project implementation. We look forward to such trainings and physical trainings and continuous collaboration for such joint programmes."

In the training programme for the Asia Pacific region, a participant, Er Ashutosh Roy from BR Power Gen Company Ltd., Bangladesh, commented, "In the last three days, I was highly engaged with this programme. Every one of us learnt a lot as you have explained everything in detail. The materials that have been provided and presented over here are very nice and going to be fruitful for our daily work especially designing and implementing of any solar project."

In the coming months, ISA will organise more such trainings supporting Member Countries to achieve their long-term energy goals with enhanced knowledge and skills.

#### **ISA ENABLERS**

### WORKSHOP ON UNDERSTANDING Sustainability standards of Solar modules epeat



International Solar Alliance (ISA), in collaboration with Global Electronics Council (GEC) & Ultra Low Carbon Solar Alliance (ULCSA), hosted a workshop on Understanding Sustainability Standards of Solar Modules EPEAT on 11 May 2023.

The workshop brought together subject matter experts, associations, policymakers, developers, and manufacturers to discuss the EPEAT standards. The panel discussed how manufacturers could adopt and meet requirements and discussed policies and regulations around this subject.

The gradual demand for sustainable solar modules will increase in the coming days. The Global Electronics Council (GEC) and Ultra Low-Carbon Solar Alliance (ULCSA) have developed a new global certification for solar modules and inverters. It is a crucial resource for procurers, installers, retailers and other stakeholders committed to reducing the carbon footprint and promoting a more sustainable solar PV industry. This Electronic Product Environmental Assessment Tool (EPEAT) criteria for modules and inverters will help manufacturers and buyers make a conscious decision on a product which not only has a reduced environmental impact but also includes the impact of technology on human and labour rights. The webinar opened with Alexander Hogeveen Rutter from ISA setting the context by stating that there is a huge opportunity for new manufacturers worldwide to compete at a level playing field and create solar manufacturing in the most sustainable way possible.

The session featured speakers from Global Electronics Council, Ultra Low-Carbon Solar Alliance, QCells and NSEFI

Michael Parr, Ultra Low-Carbon Solar Alliance, presented a broad overview of the EPEAT Eco Label Type 1 for photovoltaic modules & inverters with a deep dive into the carbon footprint criteria. Multiple studies have highlighted the significant differences in the carbon footprint of PV manufacturing by region. In response, several



governments have developed policies creating standards/ preferences for sustainable low-carbon solar. The private sector has also been moving in this direction. The Clean Energy Buyers Institute, an NGO which gathers large developers, corporate and utilities, has also embraced low-carbon solar using EPEAT Ecolabel and is building preferences for EPEAT-registered modules into their buying guidance to their members.

He further stated that the benefits of a buyer from using EPEAT for Solar Eco Label include improved transparency, traceability and sustainability in the supply chains but also gives confidence in higher sustainability in the supply chain and reduction in Scope 3 emissions. EPEAT is very easy to implement. It is rigorous and reliable. There is a demand signal for more low-carbon, sustainably manufactured PV that travels through the entire supply chain and incentivises more low-carbon PV manufacturing expansion.

Debbie Graham Clifford, Global Electronics Council, highlighted the EPEAT Ecolable method. EPEAT Eco Label is owned & managed by the non-profit Global Electronics Council. As per the Global Ecolabelling Network GEN, Ecolabel is a voluntary method of environmental performance certification and labelling practised worldwide. Ecolabel identifies those products or services proven to be environmentally preferable within a specific product category. Contrary to regulations, which can, in some cases, disincentivise certain behaviours, Ecolabel provides manufacturers with an opportunity to innovate and competitively differentiate their products on sustainability factors. The United Nations Environment programs recognise type 1 Ecolabels as the most reliable.

Kelly Weger, QCells, is a solar manufacturer that prides itself on being a leader in sustainability, and standards such as the EPEAT process allow them to reinforce that leadership and further differentiate themselves. One of the keys is that it can help drive Scope 3 emissions reductions and support them in conversations with key customers, such as the federal government and Microsoft, who want to improve their sustainability and Scope 3 emissions. This standard can also help drive demand for lower carbon, sustainably manufactured Solar PV

Subrahmanyam Pulipaka, NSEFI, remarked that, over the next six to seven years, India will emerge as the second-largest module manufacturing base after China. Still, it will be competing in the leagues of the United States and Europe, who are also equally poised to ramp up their domestic manufacturing capability. It is wiser to have a uniform and joint collaborative approach when deciding and finalising the standards with a very thorough discussion from the industry. One such thing is this particular webinar, thanks to ISA for bringing this discussion to their platform, which will have a very positive impact when all the countries together talk in unison regarding standards.

The workshop concluded with remarks by Dwaipayan Chakraborty, International Solar Alliance

#### **#IDEASTHATHAVEWORKED: SOLAR IMPACT STORIES FROM AROUND THE GLOBE**

### DJIBOUTI AIMS TO BE THE FIRST AFRICAN COUNTRY ENTIRELY Reliant on green energy



The EU Cooperation with ISA aims to deepen further the links between the ISA, its Member Countries, and international academic, financial, and business communities, including the relevant European Union (EU) communities. The project aims to support and strengthen ISA's role as a solar energy platform, including supporting concrete communication activities. Over 250 case studies of solar uptake and road mapping across the globe have been put together as part of this project. Every month the ISA newsletter showcases innovative solar interventions that have carved positive outcomes on the ground.

Located near some of the world's busiest shipping lanes between the Red Sea and the Indian Ocean, Djibouti is an important node for large oil tankers carrying oil to various global markets. However, in order to fulfill its own energy needs, the country has been dependent on its neighbour, Ethiopia. In 2011, a 283-km high-voltage line was built linking the Ethiopian town of Dire Dawa to the suburbs of Djibouti City, meeting 60-65% of the country's electricity demand that year. The electricity demand in Djibouti has been increasing at the rate of 10% each



With a significant potential in renewable energy such as solar, geothermal, and wind, the Djibouti government is aiming for a

### 100%

share of renewables in the country's energy mix in a bid to increase energy security and ultimately aid sustainable economic and social development.

government has committed to achieving 100% electrification by 2030. In addition, at the 2012 World Energy Forum in Doha, the President of Djibouti announced the government's intention to become the first African country to entirely rely on green energy by 2025. Subsequently, the government even established a roadmap to achieve these goals.

According to MERN, with an estimated solar potential of more than 70 MWh per year, the potential for its development is substantial, both for on-grid and off-grid applications. One of the first projects approved towards the country's 100% RE goals was a 50MW solar power plant to be built at the Grand Bara desert. Slated to be built by Swiss company Green Enesys, the project was part of a bigger solar power complex of 300MW, whose cost was estimated at €360 million. However, no progress was made even after three years of laying the foundation stone in 2016.

The government then collaborated with France's Engie to build a USD 40 million (~€44.7 million) – 30MW solar power plant. This project was to be expanded to 100MW in the next phase once production estimates were confirmed. Djibouti's [sovereign] financial arm, the FondsSouverain de Djibouti (FSD) has 20% stake in the project.

In parallel, the government has also been looking at other renewable energy options to help reach the 100% green energy goal. A USD 160 million - 60MW Goubet wind power plant was to be built by Spanish company Siemens-Gamesa and was expected to be completed by the end of 2022. A USD 150 million – 35MW - 40MW biomass plant was also being planned in collaboration with US investors CREC Energy. Djibouti also has an estimated potential of 500 - 1,000 MW of geothermal energy, explored by Kenyan companies and Djibouti's Red Sea Drilling Company.

In 2019, it was also estimated that the country may have vast pockets of pure hydrogen in its subsoils, which could be exploited. France plans to invest USD 5 billion annually in Djibouti to develop this alternative fuel. A delegation from the University of Paris is already based in Djibouti to explore the possibility of harnessing this energy source.

While the roadmap to achieve its goals has faced obstacles, support of strong partnerships, Djibouti is on its way to substantially increasing its share of renewable energy.

#### **#IDEASTHATHAVEWORKED: SOLAR IMPACT STORIES FROM AROUND THE GLOBE**

### USING SOLAR FOR SAFE Drinking water in Tanzania



With limited access to clean drinking water in rural Tanzania, poor health conditions and the use of polluting wood fuel were on the rise. Using a solar wave water purifier made by the Swedish Company, Tricorona helped address this issue using solar technology.



SolarWave Water Purifier (Image credit: SolarWave Uganda)

Ensuring sustained access to clean and safe drinking water for people in sub-Saharan Africa has always been challenging. The problem is more acute in some countries than others, where natural spring water is high in certain harmful salts or chemicals. UNICEF estimated that nearly half the population in Tanzania had no access to clean drinking water, contributing to widespread and largely preventable deaths.

People in rural areas of Tanzania use a 3-stone stove to boil water that is available for drinking to remove impurities and contaminants and make it safe to drink. However, this led to another issue in the country: deforestation. Due to a lack of access to cooking fuel, people were rampantly chopping wood from forested areas across the country to use as fuel to boil water.

Extracting wood from natural forests and using such fuelwood interferes with the natural carbon capture (ecological services) the trees offer. It releases greenhouse gas emissions (particularly carbon-dioxide) and particulate matter upon burning. This adds to air pollution



and thereby worsens health conditions among people. Additionally, women and young girls spent considerable time collecting wood and water supplies on foot from long distances.

'Solar wave' water purifier, funded by Swedish company Tricorona (https://tricorona.se/), was a water purification system powered by solar energy to fulfil rural Tanzania's basic drinking water requirement sustainably. The purification technologies complied with the relevant national drinking water standards (TZS 789 'Drinking (potable) water –



Specification'). They were installed in water kiosks, hospitals, schools, rural households and other locations across the country.

Carbon Asset Management Sweden AB implemented the project, while the coordinating/managing entity (CME) was SolarWave Tanzania Limited. A local partner in Tanzania managed distribution and monitoring requirements.

A single water filter unit can purify 700 litres of water every hour for eight hours, catering to at least 280 persons' daily consumption. Ten units were installed as part of the pilot project. In terms of impact, the project is estimated to have avoided the emissions of 5,184 metric tonnes of  $CO_2$  equivalent per annum from displaced fire-wood consumption.

The CDM-registered project was established based on each CPA being a micro-scale project that would emit less than 20,000 tCO2 emissions annually, against a nonrenewable emission-intensive scenario, in a least developed country like Tanzania.

### **ISA IN NEWS** May 2023





What is India bringing to the G20 table on climate?





International Solar Alliance



Hydrogen to play critical role in India's energy transition: DG ISA

**May 19** 

ISA trying to build

insurance fund

payment guarantee,

#### May 7



Climat. L'Inde envisage son avenir sans charbon pour la première fois

#### **May 18**



Cuba invites bids for 60MW of solar project

#### **May 22**



SÉNÉGAL: une centrale solaire photovoltaïque pour l'agriculture durable à Saint-Louis



**May 18** 

Hydrogène vert : entre mythe de la décarbonation et réalité financière

May 23

L'Afrique, futur

hub mondial de

l'hydrogène vert?





Liberia: President Weah Wants Liberia Benefit from International Solar Alliance

#### **May 29**



Roundtable Discussion on Building Resilient Healthcare Systems through Solar



#### **May 19**



International Solar Alliance & United Nations Launch Solar Agriculture Irrigation Program





Solar will lead to innovations in resilient healthcare





India-EU Collaborate on Clean Energy and Climate Partnership

<u>Solar Quarter</u>



ISA, HIEx, EU discuss building resilient healthcare systems through solar on the sidelines of World Health Assembly 2023



May 26



Breaking stereotypes: Women in energy are transforming India's clean energy space





### ISA INTERVENTIONS A Visual Record of Our Activities and Actions

















- 1. DG-ISA met H.E. Mr Mario Ronconi, DG INTPA, EU and H.E. Mr Ugo Astuto, Ambassador of the European Union to India, to discuss further strengthening EU-ISA cooperation in scaling up solar and promoting STAR-C.
- Remesh Kumar, Chief of Unit Projects and Programmes Implementation cluster ISA shared insights on the challenges and opportunities in scaling solar mini-grids during the session on 'Global Microgrid Collaboration Forum' at the India Energy Storage Week 2023 organised by India Energy Storage Alliance.
- 3. ISA hosted a Media Delegation from Maldives as part of a familiarisation visit by the Ministry of External Affairs, Gol to help journalists gain insights on ISA activities.
- 4. ISA delegation met with H.E Ms Nawal Al-Hosany, UAE's Permanent Representative to IRENA, to discuss areas of cooperation, including the upcoming Fifth Meeting of the ISA Regional Committee for Asia and the Pacific Region in Abu Dhabi.
- 5. ISA delegation met Mr Saamir Elshihabi, Head of Energy Transition and UAE Special Envoy for Climate Change in Abu Dhabi and explored possibilities for collaboration for accelerating solar deployment.





主题演讲

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- 6 DG-ISA met H.E. Mr Didier GAMERDINGER, Ambassador of Monaco to India today to discuss areas of collaboration for scaling up solar in Monaco.
- 7 International Institute for Democracy and Electoral Assistance (IIDEA) delegation led by H.E. Dr Kevin Casas, Secretary-General, visited ISA Secretariat and met DG-ISA and discussed areas of cooperation in climate action.
- 8 ISA team met with Banque Ouest Africaine de Développement (BOAD) delegation to discuss areas of collaboration in mobilising finance and resources to accelerate solar deployment in Africa.
- 9 Alexander Hogeveen Rutter, Private Sector Specialist, ISA, spoke on ISA's programmes, the Solar Facility and Solar PV manufacturing ecosystem at the SNEC PV Power Expo.
- 10 DG-ISA addressed the G20 International Seminar on 'Accelerating Energy Efficiency Progress and Promoting Life.'
- 11 DG-ISA addressed the high-level roundtable titled 'Synergising the Energy Transition pathways of G20 ETWG and B20 India' organised on the sidelines of the 3rd Energy Transitions Working Group Meeting in Mumbai.