



EASING SOLAR DEPLOYMENT GLOBALLY

NEWSLETTER

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FROM DIRECTOR GENERAL'S DESK



June 2024 witnessed ISA hit a century, with the Republic of Paraguay becoming the hundredth country to ratify the ISA Agreement, bringing the overall tally to 100 Member Countries and 19 Signatories. The circle of ISA's activities to advocate and implement solar energy-based solutions for rapid decarbonisation of the energy mix in its Member Countries and promote solar as a first choice for climate change mitigation and adaptation continues to grow with vision and velocity.

The International Solar Alliance has evolved from a coalition into a transformative global movement, empowering communities worldwide to achieve the ambitious goal of net-zero carbon emissions by the mid-century. Our 'Towards 1000' philosophy, aimed at mobilising USD 1,000 billion in solar energy investments by 2030, is a testament to this transformation. This initiative will provide energy access to 1,000 million people and install 1,000 GW of solar energy capacity, significantly reducing global solar emissions.

Our mission at the International Solar Alliance is to enable equitable solar adoption among everyone. This is the core reason for our existence. We aim to provide a platform for Member Countries to collaborate and address identified gaps with tailored solutions through a commonly agreed approach, promoting solar energy as the energy source of choice. For example, the Country Partnership Agreement that ISA has inked with Bhutan and Bangladesh is designed to facilitate the development of a robust solar roadmap, establish a pipeline of financially viable solar projects, and attract investments in the country, keeping in mind local priorities and prevalent conditions.

Taking our advocacy efforts a notch up, we announced the first edition of the International Solar Festival earlier this month. The festival is poised to be a moment of celebration with partners and Members and a powerful symbol of ISA's steadfast commitment to advocating and implementing solar energy-based solutions. This festival, to be held in New Delhi on 5 -6 September, will not only celebrate the role of solar energy in transforming and uplifting communities but also serve as a platform to highlight solar's role in providing universal energy access as defined by SDGs 7 & 13 and globalising its benefits to a larger audience with a particular focus on youth: the ambassadors of change.

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Since our inception as an Indo-French initiative at COP21 in Paris, the International Solar Alliance has made significant strides. We now support our 119 Member and Signatory Countries through a range of initiatives, including enhancing data availability, adopting solar technologies, training of the workforce, and providing support in securing funding and reducing risk in investments. The activities and initiatives hosted over the past month are defined in detail in the following pages.

Ajay Mathur

Director General, International Solar Alliance

ROUND UP

MAURITIUS ADVANCES IN SOLAR ENERGY WITH ISA CARES INITIATIVE AT JAWAHARLAL NEHRU HOSPITAL

On 3 June 2024, the solarising initiative at Jawaharlal Nehru Hospital in Mauritius was inaugurated by Dr the Hon. Kailesh Kumar Singh Jagutpal, Minister of Health and Wellness, and Hon. Georges Pierre Lesjongard, Minister of Energy and Public Utilities. The event was graced by the presence of several dignitaries, including Hon. Mahen Kumar Seeruttun, Minister of Agro-Industry and Food Security; Hon. Naveena Ramyad, Minister of Industrial Development, SMEs and Cooperatives; Hon. Teenah Jutton, Parliamentary Private Secretary; and H.E. K. Nandini Singla, the High Commissioner of India in Mauritius, alongside senior officials from the Ministry of Energy, Ministry of Health, Mauritius Development Bank, and the International Solar Alliance (ISA).

This initiative is part of the broader ISA Cares Initiative,

launched in October 2020, which aims to solarise primary healthcare centres in Small Island Developing States (SIDS) Member Countries. Mauritius, leveraging this initiative, has made significant strides in integrating solar energy into its healthcare facilities. The Ministry of Health and Wellness, in collaboration with the Ministry of Energy and Public Utilities, the Central Electricity Board, and the Development Bank of Mauritius, has efficiently implemented the project, enhancing healthcare services in the process.

Jawaharlal Nehru Hospital, which previously consumed 141,846 units of electricity monthly at approximately 1.2 million Mauritian rupees, is now equipped with solar PV panels capable of producing 3,200 units of electricity per hour. This installation is set to substantially reduce the hospital's fixed electricity costs, allowing for the reallocation of funds to improve public healthcare services.

In 2021, Mauritius received a grant of 50,000 US Dollars (approximately 2.3 million Mauritian rupees) to install around 25 kilowatts of solar panels at Jawaharlal Nehru Hospital. This pilot project, co-financed by the Ministry of Health and Wellness and the Development Bank of Mauritius, successfully installed a 26.4 kW solar rooftop system. The project's success has increased confidence in replicating such initiatives across

public buildings in Mauritius, paving the way for a sustainable and brighter future for all Mauritians. The formal grant agreement between the Ministry of Health and Wellness and the ISA, signed on October 31, 2023, marked a significant milestone in this collaboration.

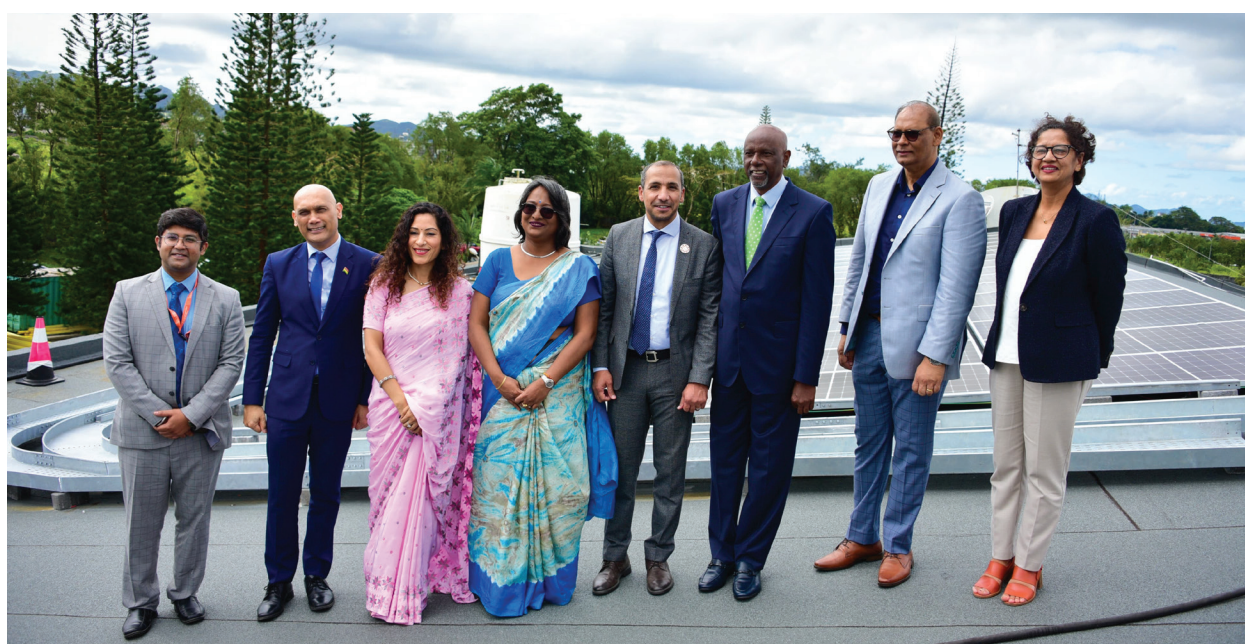


Dr Ajay Mathur, Director General of ISA, remarked, “This initiative highlights Mauritius’s commitment to renewable energy and the successful implementation of solar technology in public health infrastructure, showcasing the country’s progress towards sustainable energy solutions. Floating solar, agro-photovoltaics, and rooftop solar are innovative solutions that can enhance earnings for the Mauritian people, provide new jobs, and help the government secure its goal of generating 60% of its electricity by 2030 with solar. My congratulations to the government and the people of Mauritius. ISA remains a steadfast partner in Mauritius’s clean energy transition journey, enthusiastically supporting the nation’s efforts to meet its renewable energy goals by 2030.”



Looking ahead, the Mauritian government is committed to maximising the use of solar PV panels across all government institutions, including public health infrastructure. This initiative aligns with Mauritius’s target of achieving 60% renewable energy in its electricity mix by 2030. The maturity and viability of rooftop solar technology make it a pivotal solution for increasing solar energy penetration in Mauritius.

This milestone event not only underscores Mauritius’s dedication to clean energy but also exemplifies the collaborative efforts between international partners and local government bodies in advancing sustainable development goals.



ROUND UP

INTERNATIONAL SOLAR ALLIANCE CHAMPIONS SOLAR INNOVATION IN MADAGASCAR

The International Solar Alliance (ISA) made significant strides in advancing solar energy initiatives during a pivotal workshop hosted by Madagascar's Ministry of Energy and Hydrocarbons (MEH) in Antananarivo. Themed 'Energy Emergence through Solar Energy: Innovative Solutions for Rapid Impact Projects', the workshop brought together key stakeholders, including Madagascar's Minister of Energy and Hydrocarbons, H.E. Olivier Jean-Baptiste, and leading figures in the energy sector.

Representatives from ISA, led by Dr Barakat Ahmed, Head of Programmes for Africa Region, and Mr Sudhanshu Mishra, Distribution & Solar Mini-grid Specialist, highlighted the

Alliance's commitment to fostering a sustainable and rapid energy transition in Madagascar. The workshop explored innovative technologies and strategies to develop rapid-impact solar energy projects, focusing on advanced solar panels, energy storage solutions, and community-based solar microgrids. These initiatives are crucial for reducing reliance on fossil fuels and improving energy access for local communities in Toamasina and Sainte Marie Island.

H.E. Olivier Jean-Baptiste underscored the significance of ISA's support, stating, "This mission and support of the International Solar Alliance to implement solar energy projects in Madagascar, such as solar water pumping and solar cold storage, align with the presidential initiative in the Alaotra Mangoro region. This initiative supports the state's general policy under its second pillar, 'Industrialisation and Economic Transformation.' The implementation of these projects will contribute to the 'One District One Factory Project,' aiming to provide at least one processing unit in each district, adapted to existing production sectors."

A Clear Objective: Uninterrupted Power Supply for Healthcare

In his opening remarks, Dr Ahmed outlined the specific projects proposed by ISA, including initiatives in Comoros, Madagascar, and Seychelles, supported financially by the Quadrilateral Security Dialogue (QUAD). "This year, ISA proposes implementing projects such as installing solar cold storage units in rural areas, solarising healthcare facilities for uninterrupted power supply, and implementing solar water

pumping systems for agriculture. These initiatives aim to enhance energy access, create jobs, ensure reliable and quality power supply, reduce dependence on fossil fuels, and promote economic development," Dr Ahmed stated.





The workshop provided a platform for in-depth discussions on the practical aspects of solar energy deployment in both rural and urban areas. Stakeholders deliberated on challenges such as financial resource availability, the need for specialised training for solar system maintenance, and the rapid evolution of technology requiring continuous learning and adaptation.

The Need for Collaboration Between Institutions and Energy Sector Players

Emphasising the importance of coordinated investments and enhanced cooperation among energy sector players, financial institutions like SE4All and the African Development Bank, and local governments, the workshop highlighted the need for training and raising awareness to encourage widespread adoption of solar energy in households.

The event marks a significant step towards achieving a sustainable energy future for Madagascar, demonstrating ISA's pivotal role in driving solar innovation and collaboration across the globe.





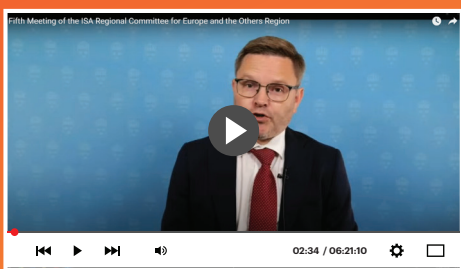
SPOTLIGHT

FIFTH MEETING OF THE INTERNATIONAL SOLAR ALLIANCE REGIONAL COMMITTEE FOR EUROPE AND THE OTHER REGIONS – UNDERLINES SOLAR AS A SOLUTION FOR ENGAGEMENT WITH THE YOUTH AND INCLUSION OF WOMEN AND LOCAL COMMUNITIES

The Fifth Meeting of the ISA Regional Committee of the Europe and Others Region was held in Brussels from 11 to 13 June 2024 with support from the European Commission. This event was graced by ministerial and senior government representatives from 20 countries and was a platform to chart the course for the sustained and equitable roll-out of solar in the European region and beyond. The meeting's comprehensive agenda focused on providing updates on the ongoing programmes and projects and the flagship initiatives of ISA, such as STAR-C, SolarX Startup Challenge, Global Solar Facility, and Solar for She. These initiatives underscore the ongoing collective efforts led by ISA to drive innovation and inclusivity within the solar energy sector.



WATCH



In his video message, **Mr Daniel Liljeberg, Hon'ble State Secretary to the Minister for Energy, Business and Industry, Sweden**, noted, "We all want to accelerate the transition to a clean energy economy rapidly. We all want to promote the power of solar energy. The urgency is clearer than ever. We know how much is at stake. Our climate, our security, our welfare. More finance is needed to have global climate action to limit global temperature warming. Different actors must come together to mobilise finance at an immense scale, moving us from billions to trillions." Appreciating the work of the Alliance, he said, **"I applaud the goal set forward by the International Solar Alliance to mobilise 1,000 billion US dollars of investments in solar energy solutions by 2030, provide clean energy access to 1,000 million people towards the deployment of 1,000 gigawatts solar energy by 2030."**

1,000 gigawatts of solar energy by 2030 is no small task. Although solar energy is abundant, it represents a tiny fraction of the world's current energy mix." Underlining the association, he remarked, "Denmark entered a green strategic partnership with India in 2020, and one of the key areas for cooperation was Denmark entering the International Solar Alliance. I hope we can drive our cooperation even further. Thank you very much to the Secretariat."

The ISA Regional Committees, a cornerstone of our collaborative efforts, meet annually. Chaired by two regional vice presidents, these meetings play a pivotal role in assessing and discussing progress, challenges, and opportunities related to ISA's programmatic support, flagship initiatives, partnerships, private sector engagements, and work plan for the region. A significant goal of the Regional Committee Meetings is to foster smooth coordination among the Region's Member Countries, ensuring a unified approach to solar energy initiatives. This coordination is vital for successfully implementing solar energy projects and achieving our shared goals.

The inaugural segment of the meeting was marked by the insightful addresses of key figures, including Mr Daniel Liljeberg, Hon'ble State Secretary to the Minister for Energy, Business and Industry, Sweden; Mr Matthew Baldwin, Deputy DG Energy at the European Commission; and Dr Ajay Mathur, Director General of ISA. Their speeches set the tone for the discussions that followed, providing valuable insights and perspectives.

In his statement to the Regional Committee, **Mr Matthew Baldwin, Deputy DG, Directorate-General for Energy, European Commission**, underlined ISA's role: *"We are proud to partner with ISA, a vital player in making energy more accessible and affordable, particularly in Africa. Our shared mission includes tripling renewable energy and doubling energy efficiency commitments worldwide, as pledged at COP28."*



He further added, "We appreciate France's role in supporting ISA's STAR-C initiative to boost solar energy capacity and innovation. Our commitment extends to the Global Solar Facility and other ISA initiatives, mobilising investments to scale up solar energy in underserved regions of Africa. The EU is exploring various financing options for the solar energy transition, with a strategic focus on equity, transparency, and sustainability.

Spotlighting the European renewables landscape, he expounded, "The Net Zero Industry Act aims to scale up domestic manufacturing for net-zero technologies, targeting 40% of EU annual deployment needs by 2030. Streamlined permitting processes and the availability of critical raw materials are crucial for meeting this demand.

Our partnership with ISA is key to job creation and

skills development for rapid solar energy deployment, avoiding new dependencies on fossil fuels. We remain committed to deepening our collaboration with ISA to harness solar power for a cleaner, more equitable future.

Dr Ajay Mathur, DG – ISA, underlining the important role of the region and its countries, said, *"I note that a very large number of European countries are today providing, at least on some days of the year, 100% renewable electricity. We see Spain, we see Italy, we see Poland, the Netherlands. So, because of all of this, you would certainly see renewables meeting 100% of your electricity needs by 2040. We note that the EU looks to meet 40% of its annual deployment needs through European-based production. This is important, and we have a roundtable with the private sector developers tomorrow about this. We have a short agenda item today where we will discuss this with all of you. I look forward to you providing us with the information on this. We can provide it to the private sector tomorrow as well, but the development of production capacity in Europe and other parts of the world is important. In Europe, you can go all the way through producing semiconductor solar cells, wafers, and ingots all the way to solar cells. However, we would need other parts of the world to start producing solar panels, even if they must import solar cells. **We believe this geographical diversification of manufacturing is important if we have to make solar the energy source of choice worldwide.**"*



In light of this context, I would be remiss if I did not acknowledge the generous contribution made to ISA by Denmark. In particular, I would like to say that solar is not only about electricity. It's also about providing the green electricity that helps hydrogen happen. Denmark has supported the ISA by providing a secondee who would focus on developing solar hydrogen capacity and, as a rule of thumb in Africa, as most of the investment goes to OECD countries and China, Africa receives only a fraction, despite being the region with the greatest need for electricity.

As a rule of thumb, we would like these solar green hydrogen capabilities to meet 50 per cent domestic requirements with 50% available for export. 100% export-based industry is a challenge, especially in times when this new technology is just beginning and therefore depends on public policy-related incentives for its initial demand. As we move towards a sustainable energy future, our commitment together is to embrace clean energy. And that's not just a choice; it's a responsibility that we owe to our planet. Together, we can turn the tide of climate change. And build a world where solar energy truly becomes the energy source of choice. I thank you for your steadfast support."

Highlights of the Regional Committee Meeting

During the course of the meeting, important developments were reported to the members present, spotlighting the past year's achievements in line with ISA's Five-year Strategic Plan.

- Under the Analytics Initiative, a significant step towards closing the information gap and accelerating solar energy adoption - led ISA to unveil four impactful reports at COP 28. These reports, focusing on solar waste management, global energy transition, and solar stocktake, are poised to drive significant change in the industry. These reports are available on [ISA's website](#).
- Policy and capacity-building efforts witnessed over 4,300 individuals from developing countries being trained, including specialised training for bankers and thematic sessions on ISA programmes.
- The STAR-C initiative has made significant strides, operationalising two centres and planning eight more in 2024. These centres are set to train about 1,500 participants in various solar energy aspects. A knowledge repository on emerging solar technologies, such as floating solar and agri-photovoltaics, is in the works. Along with extensive training programmes for stakeholders like bankers and regulators, solidifying our commitment to knowledge dissemination and capacity building. During the meeting proceedings, an important call was made to all EU countries, in particular to the private sector, to collaborate with STAR Centres in African countries – one, to mobilise funds to set up the centres, secondly, to invest in capacity building by leveraging technical know-how and work on the appropriate regulatory and policy frameworks.
- Regulatory workshops in Member Countries enhanced regulators' capacities, focusing on mini-grid deployment in Nigeria, Gambia, Bhutan, and Ethiopia.

Other vital updates included ISA's exclusive initiative for the global entrepreneurial community, the SolarX Startup Challenge, which witnessed over 200 applicants applying from the Asia-Pacific region. The Challenge will shortly announce winners, who will be entitled to receive a cash award of USD 15,000 each, combined with an immersive mentorship programme. ISA is taking a significant step forward in its Private Sector Strategy this year by organising a series of roundtables. These roundtables will serve as platforms for CEOs from solar companies and associated industries to convene and deliberate on crucial matters impacting the sector. Solar for She, an ISA gender equity and social inclusion (GESI) initiative, recently introduced, aims to empower women by increasing their access to energy and income through solar solutions – making them formidable players in the solar workforce. It promotes gender equality and social inclusion while advancing the sustainable development goals.

The meeting also featured a wide variety of side events addressing the themes of green hydrogen, a focused session on the STAR Centres as 'Catalysts for Africa-EU Energy Partnership (AEEP) Goals', and the inaugural session of the CEO Caucus: 'Addressing Bottlenecks for Building the Solar Energy Sector in LDCs,' which addressed global solar manufacturing and challenges to achieving net zero.

Another important announcement at the meeting was regarding the first edition of the International Solar Festival, slated for the first week of September 2024. The International Solar Festival is dedicated to celebrating and advancing the potential of solar energy as a sustainable and renewable power source. **It aims to bring together stakeholders from around the globe on a vibrant platform for knowledge sharing, innovation, and international cooperation in solar initiatives, emphasising youth engagement and fostering partnerships.** By inspiring collective action towards an energy transition, the festival will provide platforms for knowledge dissemination, celebrating achievements and innovations in solar, promoting collaboration among diverse industry stakeholders, attracting private-sector & investments and advocating for policies that accelerate the transition towards a sustainable and solar-powered future on a global scale.



ANNOUNCING THE FIRST INTERNATIONAL SOLAR FESTIVAL

UNIFYING STAKEHOLDERS FOR SOLAR ADVOCACY

Mark your calendars for **5 & 6 September 2024** as New Delhi, India, prepares to host ISA's inaugural International Solar Festival at Bharat Mandapam. This grand event, slated to be organised by the International Solar Alliance (ISA), is set to illuminate the global stage with discussions, innovations, and collaborations centered around solar energy and its pivotal role in addressing climate change. With this leap, ISA will channel its energy as a driving force dedicated to promoting solar power adoption to solve the climate challenge, not just among international governments but also among the masses.

Focus Groups	 Youth Mobilize the youth to solarize the world	 Gender Transforming women into climate action catalysts & leaders	 Communities A just energy transition to empower & energize communities	 Private Sector Powering markets, empowering the world
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The two-day festival will include

Announcements by Heads of States
Attended by world leaders who are championing renewable energy



Keynote sessions
Featuring global climate leaders



Plenary and Technical Sessions
Helmed by industry and global leaders

CEO Caucus Roundtable
To explore innovative financial and technological levers to accelerate solar adoption



Innovation Showcase
Featuring pioneering solutions and entrepreneurs who are at the forefront of transforming the energy sector



Exhibition Booths and Pavilions
Hosting organizations from across the solar and allied sectors



Interaction and Engagement
Community groups, youth organizations, and policymakers

Activity Zone
Cultural performances by renowned artists





Mr B.S. Bhalla
Secretary, MNRE
Government of India

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As a global climate leader, India champions pragmatic, affordable and sustainable solutions that help nations meet their developmental needs. The International Solar Alliance catalyzes this vision by creating an ecosystem of support to solarize underserved communities across the globe. As a founding member of the ISA, we stand ready to support the Global South, ensuring an inclusive path to a sustainable future for all nations. The upcoming International Solar Festival in September will accelerate the global transition to equitable, accessible clean energy. Together, through shared knowledge and collective action, the festival will take ahead our ambition to achieve a future where clean energy is accessible to all.”

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While the urgency of climate action has never been greater, the opportunity has also never been more profound. Solar energy is reaching and transforming the world's underserved communities, creating new jobs, stimulating local economies, fostering innovation, and reducing emissions. The International Solar Festival 2024 will highlight and celebrate the transformative power of solar energy and its role in powering new opportunities across the globe, leading the way to universal energy access and advancing the Sustainable Development Goals (SDGs). Through our framework of partnership and purpose that ties together businesses, colleges, youth, women, and communities, we will unlock the full potential of solar energy, drive significant investments, and pave the way for a sustainable and vibrant future.”

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Dr Ajay Mathur
DG-ISA

Glimpses from Curtain Raiser held in New Delhi



Panel discussion moderated by Ankita Mukherjee with Secretary MNRE; DG-ISA; Arushi Sana, Founder of Santerra Living and the Co-Founder of NYK Daily; and Saina Nehwal, Indian badminton player & former world number one



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The solar energy transition must engage, involve and empower women to build stronger, more resilient communities and ensure the benefits of clean energy reach everyone. As we prepare for a challenging climate future, we need to consider the long-term impact on rural women everywhere. We must also make clean energy a topic of conversation among our youth, inspiring responsible choices for generations to come.”

”

Ms Saina Nehwal
Indian badminton player & former world number one



WATCH



Arushi Sana
Youth Climate Influencer & UAE COP28 Official Ambassador

WATCH

We invite you to participate in this historic event, network with global solar energy leaders, gain insights into the latest solar innovations, and contribute to shaping a sustainable future. Save the date, and stay tuned for more First International Solar Festival updates!



SPOTLIGHT

ISA HOSTS REGULATORY WORKSHOP FOR ELECTRICITY REGULATORY AUTHORITY (ERA), BHUTAN ON SOLAR INTEGRATION



The International Solar Alliance (ISA) is dedicated to providing regulatory support to establish viable solar energy frameworks that promote and integrate solar energy in Member Countries. As part of this initiative, the ISA Secretariat hosted a four-day regulatory workshop in Delhi for the Electricity Regulatory Authority (ERA) of Bhutan from June 17 to 20, 2024

The workshop commenced with a welcome address by Dr Ajay Mathur, Director-General, ISA. Dr Mathur emphasised the importance of aligning project development with capacity-building efforts to create a holistic ecosystem for solar energy integration. Highlighting India's example, he discussed the role of solar energy in achieving last-mile electrification using mini-grids and encouraged Bhutan to adopt solar energy as a complementary clean energy source for its energy security. He also mentioned the role of ISA's STAR Centres in bringing tailored energy expertise to Bhutan, reducing the time gap between workforce certification and their integration into the system.

Ms Nima Zangmo, the head of the Bhutanese delegation expressed gratitude for the regulatory support from ISA, noting the improvements in solar energy regulation resulting from this assistance.

The workshop featured industry experts and members of the Indian Central Regulatory Commission (CERC) who shared their practical wisdom and experiences. The Bhutanese regulators learned about the regulatory and technical aspects of both on-grid and off-grid solar systems and visited multiple solar plants for practical exposure.

The ERA technical team participated in hands-on sessions that covered:

- **Intricacies of solar system design and implementation in India from regulatory and utility perspectives**

- **Insights from former regulators and experts from CERC, the Ministry of New and Renewable Energy (MNRE), and the Central Electricity Authority (CEA) on solar grid integration**
- **Guidance on Bhutan's draft regulations for utility-scale solar grid integration**
- **Insights into metering RTVP decentralized systems and evolving solar business models in Bhutan**
- **In-depth understanding of - solar energy system integration, components of PV systems, adherence to IS/IEC/international standards, grid interconnection and metering**

This workshop is a significant step in enhancing the regulatory framework for solar energy in Bhutan, aiming for sustainable energy development and integration. The immersive learning experience equips Bhutanese regulators with the knowledge to ensure the safety and compliance of solar systems as Bhutan's solar market expands.

FEATURE

BETTING ON LOCAL TALENT AND REGULATORY ADJUSTMENTS TO ENABLE SOLAR ENERGY

The International Solar Alliance (ISA) has been at the forefront of promoting solar energy adoption across its Member Countries. With a steadfast commitment to universal energy access, energy security, and climate change mitigation, ISA's initiatives are designed to create sustainable and viable solar-receptive regulatory frameworks. Recent capacity building and regulatory training programs in Bhutan, Ethiopia, The Gambia, Liberia, Fiji, Uganda, and Nigeria highlight ISA's multifaceted approach to achieving these goals



Bhutan's Vision for a Solar Powered Future

In Bhutan, the Electricity Regulatory Authority (ERA) has been working with ISA's regulatory support initiative to develop a country framework for solar energy development. This initiative which commenced with the review of the commercial facets of solar energy deployment to generate private sector interest and participation in the sector in Bhutan, prioritised technical assistance on Licensing and Exempt Licensing Regulations, Solar Feed-In-Tariff Regulations, and a Tariff Pricing and Methodology Policy Paper, along with an excel-based Tariff Model tool. **These efforts aim to provide long-term regulatory stability, power offtake, and price certainty for stakeholders, including project developers, lenders, and investors.**

Further to the technical assistance within the regulatory support initiative, a two-day introduction and strategy workshop followed by a one-day stakeholder consultation was conducted by ISA along with consultants from Idam Infrastructure in a second mission to the country. During these sessions, various approaches to solar tariff pricing were discussed, such as feed-in tariff (FIT), market-linked pricing, and competitive bidding. The FIT RoE-based (Return on Equity) approach was highlighted as particularly advantageous in the early market development phases due to its lower investor risk and high long-term stability.

The workshops also focused on sensitising the ERA team about their roles under the Licensing Regulation, discussing provisions and rationales extensively. The joint discussions between ERA and the consultants led to comprehensive feedback, forming the foundation for the draft regulations. These draft regulations were then validated through stakeholder consultations, engaging entities like Bhutan Power Corporation, Bhutan Chamber of Commerce & Industry, and Druk Green Power Corporation.

Enhancing Mini-Grid Tariff Tools in Ethiopia: the Digitalization of licenses

In Ethiopia, ISA, along with consultants from INENSUS GmbH, conducted workshops to enhance the mini-grid tariff tool and digitalise the licensing process. Held from April 22-24, 2024, in Addis Ababa, these workshops involved key stakeholders from the Ethiopian Petroleum and Energy Authority (PEA), the Ministry of Water and Energy (MOWE), and the Ethiopian Electric Utility (EEU).

The first two days were dedicated to introducing and refining the enhanced mini-grid tariff tool. Participants engaged in exercises to fill the tool with sample data and discuss the outputs, providing valuable feedback on review processes for mini-grid applications, including types of users, their rights and responsibilities, as well as timelines/deadlines for each step of the review process, IT policy as well as server and security requirements, language requirements etc. for further

improvements. The final day focused on digitalising the mini-grid licensing process, aiming to create an online portal for applications. This portal, inspired by a similar tool used by the Nigerian Electricity Regulatory Commission, will streamline the application process, offering features like user registration, document submission, and status tracking.



Addressing Solar Energy Challenges in The Gambia: from regulations to the simplification of approval processes

ISA's mission to The Gambia, conducted from February 20-23, 2024, focused on identifying and addressing regulatory impediments to solar energy deployment. Through workshops and bilateral meetings with entities like the Public Utilities Regulatory Authority (PURA) and the Ministry of Petroleum and Energy (MOPE), ISA sought to validate information, discuss potential challenges, and prioritise interventions.

Workshops highlighted the need for standard PPA templates, grid stability studies, and capacity building

for solar energy integration. Specific focus groups addressed utility-scale solar, solar for agriculture, solar mini-grids, and rooftop solar. Recommendations included developing standard tariffs, simplifying approval processes, and integrating solar energy solutions into national policies. The workshops underscored the importance of creating a supportive regulatory environment to attract investments and foster solar project development in The Gambia.



Liberia’s Path to Solar Energy Regulation: a focus on tariff calculation and license durations

In Liberia, the ISA’s efforts focused on strengthening the regulatory framework for solar energy. Following the election of a new administration, ISA and its consulting firm, INENSUS GmbH, conducted bilateral stakeholder consultations in April 2025. Meetings with the Environmental Protection Agency, Liberia Electricity

Regulatory Commission, and other key institutions revealed the need for technical assistance in tariff setting, mini-grid regulation review, and the development of a solar feed-in tariff. By focusing on specific issues like tariff calculation formulas and license durations, the ISA aims to create a more conducive environment for solar energy projects in Liberia.



Fiji’s Solar Energy Initiative: understanding the need for policies on renewable energies and carbon emissions control

In Fiji, the ISA’s efforts have been instrumental in shaping a sustainable solar energy framework. The initiative began with comprehensive workshops aimed at regulatory training and capacity building. These sessions brought together representatives from the Fijian government, local energy authorities, and private sector stakeholders to discuss the creation of a robust regulatory environment for solar energy projects.

Key focus areas included the development of tariff regulations, licensing procedures, and incentive schemes to encourage investment in solar energy. **The workshops emphasised the need for a cohesive policy that aligns with Fiji’s commitment to reducing carbon emissions and promoting renewable energy.** Through these initiatives, Fiji aims to enhance its energy security and contribute to global climate change mitigation efforts.

Uganda’s Solar Energy Roadmap: Initial Steps to the Solar Energy Adoption

Uganda has been working closely with the ISA to develop a comprehensive roadmap for solar energy integration. The collaboration included a series of workshops and stakeholder consultations aimed at identifying regulatory gaps and opportunities for solar energy expansion.

The workshops, attended by representatives from the Uganda Electricity Regulatory Authority, Ministry of Energy, and various private sector players, focused on creating a conducive regulatory framework for solar energy projects. Discussions included the formulation of tariff policies, licensing regulations, and investment incentives. **The ISA’s technical assistance is expected to play a key role in accelerating the adoption of solar energy in Uganda, thus enhancing the country’s energy security and sustainability.**

ISA is working with the government to develop and publish a Guideline for Mini-grid Investments in Uganda. The project’s purpose is to be a compass for investors in navigating private investments through the legal and institutional requirements for mini-grid development in Uganda. It aims to facilitate interest in the sector with its clarity and precision.





Nigeria's Solar Energy Transformation: incentivizing solar energy

In Nigeria, the ISA has been actively involved in capacity building to support the country's ambitious solar energy goals. The initiative kicked off with a series of workshops in Abuja, bringing together key stakeholders from the Nigerian Electricity Regulatory Commission (NERC), Ministry of Power, and private sector entities.

The capacity-building sessions focused on the regulatory framework for enhancing solar energy integration,

including the development of standard tariff models, licensing procedures, and other policy instruments for integration of solar energy to the grid, including net metering systems, Feed-In-Tariff systems, tax and duty exemptions, R&D tax credit, micro-generation support scheme etc. One of the key highlights of the workshops, was the extensive learning by participants on various aspects of carbon trading mechanisms and its applicability in Nigeria.

STAR-C Training Sessions in Somalia and Ethiopia

A crucial aspect of the ISA's capacity building efforts is the hands-on training provided at the Solar Technology Application Resource Centres (STAR-C) in Somalia and Ethiopia. These sessions have garnered overwhelming responses from trainees and strong support from their respective governments, reflecting a growing prioritization of solar energy training.

To develop a proficient and empowered solar energy workforce globally, ISA has operationalised four STAR Centres in Ethiopia, Bangladesh, Kiribati, and Somalia. This year, more Centres are planned to be operationalised in Cuba, Cote d'Ivoire, Bhutan, Uganda, Ghana, and Cameroon. These Centres are equipped with the latest equipment, pedagogy, and knowledge resources to create a skilled workforce and conditions; capable enterprises supporting a strong solar value chain; testing and standardization; access to required information and data for informed decision-making. The global network of STAR Centres is cultivating an environment marked by enriched capabilities and appropriate administrative processes.

The STAR Centres have planned an extensive nine-day training program for eight batches of 240 technicians,

scheduled to run until September 2024. These sessions are designed to equip local technicians with the necessary skills and knowledge to install, maintain, and operate solar energy systems. This initiative not only addresses the technical skill gap but also promotes local employment and fosters sustainable development.

The ISA's capacity building and regulatory training programs in Bhutan, Ethiopia, The Gambia, Liberia, Fiji, Uganda, Nigeria, and through the STAR Centres in Somalia and Ethiopia illustrate a comprehensive approach to fostering solar energy adoption. **By addressing regulatory challenges, providing technical assistance, and engaging stakeholders, the ISA is paving the way for sustainable and scalable solar energy projects.**

These initiatives not only enhance energy security but also contribute significantly to global efforts in combating climate change, showcasing the ISA's role as a critical driver of inclusive growth and environmental sustainability.



SNAPSHOT

SPECIAL CELEBRATION OF WORLD ENVIRONMENT DAY AT THE ISA SECRETARIAT HIGHLIGHTS COMMITMENT TO SUSTAINABILITY

A special celebration for World Environment Day recently took place at the International Solar Alliance (ISA) Secretariat, underscoring the organisation's steadfast commitment to promoting sustainable practices and environmental awareness. The event brought together esteemed guests and participants to emphasise the importance of solar energy and broader environmental conservation goals.



The opening address was delivered by Dr Ajay Mathur, DG, ISA, who highlighted ISA's commitment to solar energy as a sustainable solution. He underscored the importance of solar energy in mitigating climate change and fostering sustainable development worldwide.

Following Dr Mathur's address, Dr Mohammad Rihan, DG, NISE, provided insights into the latest advancements in solar technology and their impact on sustainable development. His address demonstrated the crucial role of technological innovation in achieving sustainable energy solutions.

Shri Yugal Kishore Joshi, Adviser Programme Director (SDG)/NER/Communication at NITI Aayog, Government of India, shared insights on how Sustainable Development Goals (SDGs) influence policy and encourage sustainable practices. He emphasised the role of effective communication strategies in advancing environmental sustainability both in India and globally.

The event featured a series of engaging activities that fostered a sense of community and shared purpose among participants. Key activities included:

- 'Sustainability Warrior' Quiz - For the one who practices the most Sustainable Lifestyle in their daily life.
- 'Emoji Challenge' - Best common environmental terms/ taglines/ concepts expressed through emojis.
- 'Sustainability Advocate' - For the best implementable suggestions to make the workplace eco-friendly.

Prizes were given out to the winners of these activities, celebrating their commitment to sustainability and innovative contributions.

A major highlight of the celebration was the showcase of innovative approaches to green living and solar energy. This reaffirmed ISA's commitment to a sustainable future and featured several noteworthy practices, including:

- Repurposing materials to reduce waste and minimise resource consumption
- Exploring alternative transportation options like walking, biking, or carpooling
- Opting for environmentally friendly goods and sustainably sourced products
- Choosing energy-efficient appliances
- Embracing reusable shopping bags and containers to combat single-use plastics
- Installing water-saving fixtures for efficient resource utilisation
- Switching to non-toxic, biodegradable cleaning products for a healthier environment

These practices were highlighted as ways to incorporate sustainability into daily life, not only reducing environmental impact but also saving money and paving the way for a sustainable future.

The celebration concluded with renewed commitments from participants to continue promoting sustainable practices within their respective organisations and communities. The ISA Secretariat expressed its gratitude to all participants and reaffirmed its dedication to advancing solar energy and sustainable development on a global scale.

#IDEASTHATWORKED

SOLAR IMPACT STORIES FROM AROUND THE GLOBE

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. The ISA newsletter showcases innovative solar interventions that have achieved positive outcomes every month.

Using Solar to Combat Noise Pollution

Of the many applications of solar energy, solar noise barriers are little talked about. Photovoltaic noise barriers, also known as PVNBs were introduced in Switzerland as early as 1989 and have since been scaled up for pilot projects in the EU.

The World Health Organization (WHO) has recognised traffic noise as an important contributor to noise pollution which causes discomfort and leaves a significant negative impact on the health of those living in the vicinity of noisy thoroughfares. Photovoltaic noise barriers (PVNBs) were often prescribed as a solution to this issue.

Such barriers involve the combination of noise minimization technology and clean energy generation. PVNBs, as an integrative concept, were introduced in Switzerland in 1989 and have since been successfully adopted by other countries.

Such barriers are designed to stand upright, lower noise reaching surrounding areas and to shield immediate residents from noise pollution generated by road or rail traffic, while also producing energy from solar PV systems.

The structure consists of a noise barrier system combined with photovoltaic (PV) panels. The photovoltaic modules are integrated into the barriers as support elements within the soundproofing/sound-absorbing panels. The barriers are also equipped with acoustic dampers, thereby reducing noise from all directions. The photovoltaic cells use the acoustic foam as insulators, which allow for more efficient collection of solar energy. In



order to guarantee optimal performance, the design of the photovoltaic noise barriers (PVNBs) was required to consider elements such as materials, location of the barriers, local climatic conditions, orientation, the amount of solar radiation, dimensions, and the azimuth of the barrier.

The performance of the photovoltaic panels within the noise barrier largely depended on factors such as orientation and tilt (inclination), the amount of dust accumulated and implementation of maintenance protocols, shading and climatic conditions. In recent times, the constraints on orientation had been overcome using bifacial PV technology which offered greater flexibility in deployment.

In addition, PVNBs also provided an easy option for installation without demanding additional land use in densely crowded areas, while enabling decentralised clean power generation, reduced costs of energy transmission and emission reduction of CO₂ and other pollutants. Since, vehicular traffic was also likely to affect the natural views and the visual quality of an area, these environmental noise barriers offered solutions to such issues.



Germany's Rooftop Solar Tiles With A Sunny Outlook For PV Innovation

The German company Creaton, in collaboration with building-integrated photovoltaic specialist Autarq, developed a new solar roof tile. Creaton is a leading European roofing company that produces clay roof tiles, concrete roof tiles, and system accessories, including a range of solar solutions. They distribute these products throughout Central and Eastern Europe. Creaton's roof-integrated and post-mounted photovoltaic arrays result in roof-mounted power plants that offer protection from rain and leaks. Creaton's strategic partner, the German company Autarq (funded by the European Union), is in the business of producing aesthetically appealing solar tiles 2.

The 'Creaton PV Autarq' product is based on the existing Domino black tile and consists of a smooth black brick that doubles as a carrier for small microcrystalline PV elements that Autarq created. These elements are protected by a 3.2-mm safety glass pane on the front side. The tiles are connected using plug-in connections, which remain under the bricks and are protected from weather-related damage.

The modular nature of the tiles allows for easy installation in combination with the existing tiles while also allowing for flexibility in the size of the photovoltaic (PV) array. The module's overlay grid pattern is closely attuned to the tile model as well as its shade of colour. The product is made available in two colour variants: black or anthracite engobe. Upon installation, this tile is designed to provide a back-ventilated in-roof system that integrates seamlessly into the roof.

The solar tile is designed to operate in temperatures between -40 °C and +85 °C and to withstand mechanical stress levels of up to 5,400 Pascal. The product is also compatible with all common inverters. The Creaton PV Autarq tile is IEC 61215 compliant for durability and quality and IEC 61730 compliant in terms of safety. Consequently, the product is offered with a guarantee of up to 25 years for its components.

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Select coverage of the International Solar Festival Curtain Raiser

अंतरराष्ट्रीय सोलर महोत्सव की मेजबानी को तैयार है भारत, सितंबर में होगा आयोजन

[Aaj Tak](#)

भारत आंतरराष्ट्रीय सोलर महोत्सवाचे आयोजन करण्यास तयार आहे, तो सप्टेंबरमध्ये आयोजित केला जाईल

[Aaj Tak Marathi](#)

India announces first solar festival to promote renewable energy growth

[The Tatva](#)

International Solar Festival to be held in Delhi in September

[Hindustan Times](#)

New Delhi to host inaugural International Solar Festival, focus on equitable clean energy

[ET Energyworld](#)

India to host first Solar Festival, aim to enhance renewable energy sector

[India Today](#)

India to Ignite Global Clean Energy Shift with First International Solar Festival

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