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INTERNATIONAL SOLAR ALLIANCE: MAKING INDIA SHINE

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International Solar Alliance (ISA), the 21st-century treaty-based intergovernmental organisation¹ on renewable energy was launched in 2015, on the sidelines of COP-21, the UN climate conference at Paris. The ISA's future plan was completed in Bonn on sidelines of the UN climate change conference (COP23) 2017. Co-led by India and France, it plans to enhance 1000 GW of solar power across the globe by 2030. The current installed global capacity of solar power is about 303 GW. The ISA's goal, institutional framework, and the mechanism are in line with the 7 of the UN Sustainable Development Goals adopted by all countries, making it easier to access international financing. India's brainchild finally became a legal entity on 6th December 2017.

ISA is India's initiative to bring 121 solar energy-rich countries lying fully or partially between the Tropic of Cancer and Capricorn to give a push to solar energy generation. It hopes to aggregate demand for solar energy, to reduce

prices, deploy technologies, and promote research and development. The ISA's working paper² highlights the importance of technical cooperation, developing financial mechanisms involving private players, effective knowledge management tools, and instituting assembly and a council to provide guidance and advice to ensure smooth functioning to achieve the goals. It also talks about increasing solar applications for agriculture use, affordable finance, and scaling solar mini-grids.

The Alliance will help in attaining the overall goal of increasing solar energy deployment for achieving energy access and speeding up economic growth of individual member countries. This can be a game changer for member countries since it could access latest solar technologies, and bring private and bilateral finance at much lower transaction costs. It is designed to effectively mobilise more than \$1000 billion in investment by 2030³ and to create a \$300 billion risk mitigation fund. The

World Bank has signed an agreement with the ISA to invest \$1 trillion by 2030. It adopted blueprints to bring significant investment in the solar sector and create common risk mitigating mechanisms (CRMM) for de-risking and reducing the financial cost of solar projects. The Alliance can tap into many areas of expertise, such as solar rooftops from Germany, cheap solar panels from China, thin film panels from the US, etc.

The ISA seeks to tackle the deployment of large-scale solar energy barriers through better harmonisation and aggregation of demand from solar rich countries. Most of these countries lie in Asia, Africa, and South America. Currently, 46 countries have signed and 19 countries have ratified the framework agreement⁴ of the ISA, headquartered in Gurgaon (India). This presents a big opportunity for businesses and innovation for the member countries on the solar energy sector. The alliance will certainly infuse seriousness among member countries about the issue of climate change, and enable switching to a low carbon growth path in the century.

It also displays India's commitment to helping harness the world's solar energy potential for inclusive energy access and responsible economic development. India has pledged to target installing 100 GW by 2022, thereby reducing emission intensity to 33-35% by 2030.⁵ The linkages between solar technology, finance, and consumer application are where India should focus and can add value to enhancing the ISA's efforts. With the ISA, India is

placing a big stake on solar energy. Nonetheless, India needs to promote extensive private sector involvement in the ISA, including reaching out to new segments of investors and entrepreneurs such as start-ups and venture capitalists interested in renewable energy, particularly in solar energy sector.

This impressive renewable energy project will push India's goal of obtaining 40% of its electricity from non-fossil fuels by 2030, besides embracing a climate-friendly energy policy. ISA will play a big role, if the country is to meet its goal to generate 175 GW of renewable energy by 2022 (Solar-100 GW, Wind- 60 GW, Bio-energy-10, and Small-Hydro- 5 GW), since the target of solar energy share is more than 50% of India's renewable energy goal, it certainly will help India in information campaign on renewable energy sector globally. This will help to make India as a leader among developing countries in terms of presenting the novel idea of harnessing the power of the sun and showing that developing countries can give the constructive and feasible impression for global problems like climate change.

But, India's new solar technology needs to be adapted to the conditions, economic realities and relate them to available financing and technological revolution. In the absence of such enterprises, new solar technology is unlikely to deliver positive impact in the rural area on an economically sustainable basis. While India's projected solar energy growth is likely to come

from large-scale projects such as solar parks, the country needs to scale up small-scale energy development, in order to provide energy to some 300 million people who are not connected by the power grid⁶ in rural area, ISA institutional framework will facilitate and strengthen this sector. The outcome of this solar gamble will fundamentally affect the chances for success of India's popular initiatives of "Power for all" and "Make in India" domestically.

The challenges of making solar energy compete with fossil-based energy is to reduce the cost of solar power generation through long-term policy, aggressive research and development, conducive environment for foreign investment, and skill labour development demands coherent policy efforts, synergies, innovation, collaboration, and knowledge sharing at the international level to scale up renewable energy generation.

The ISA is gaining momentum rapidly. The Alliance can be a good platform and can possibly play a vital role in exploring and enhancing India's solar energy in the future. It will also help to establish India as a voice of influence in the developing world on clean and renewable energy, and push to attain India as a leader of sun-rich countries and placed strategically on the global renewable energy map.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

¹ <http://mnre.gov.in/file-manager/UserFiles/ISA-Working-Paper.pdf>

² <http://mnre.gov.in/file-manager/UserFiles/ISA-Working-Paper.pdf>

³ <http://www.livemint.com/Politics/lbsLbfsF32mQk8i089tWGM/International-Solar-Alliance-to-be-a-legal-entity-tomorrow.html>

⁴ <http://www.livemint.com/Industry/97DgLussreA6CXvmH7LVQM/International-Solar-Alliance-becomes-Indias-calling-card-on.html>

⁵ <https://www.thebetterindia.com/123322/international-solar-alliance-india/>

⁶ <https://www.nrdc.org/experts/frances-beinecke/truth-power-indias-renewable-energy-boom>