



INTERNATIONAL  
SOLAR  
ALLIANCE

# International Solar Alliance

*Making solar a preferred choice of energy*

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# Agenda

## 1. About ISA

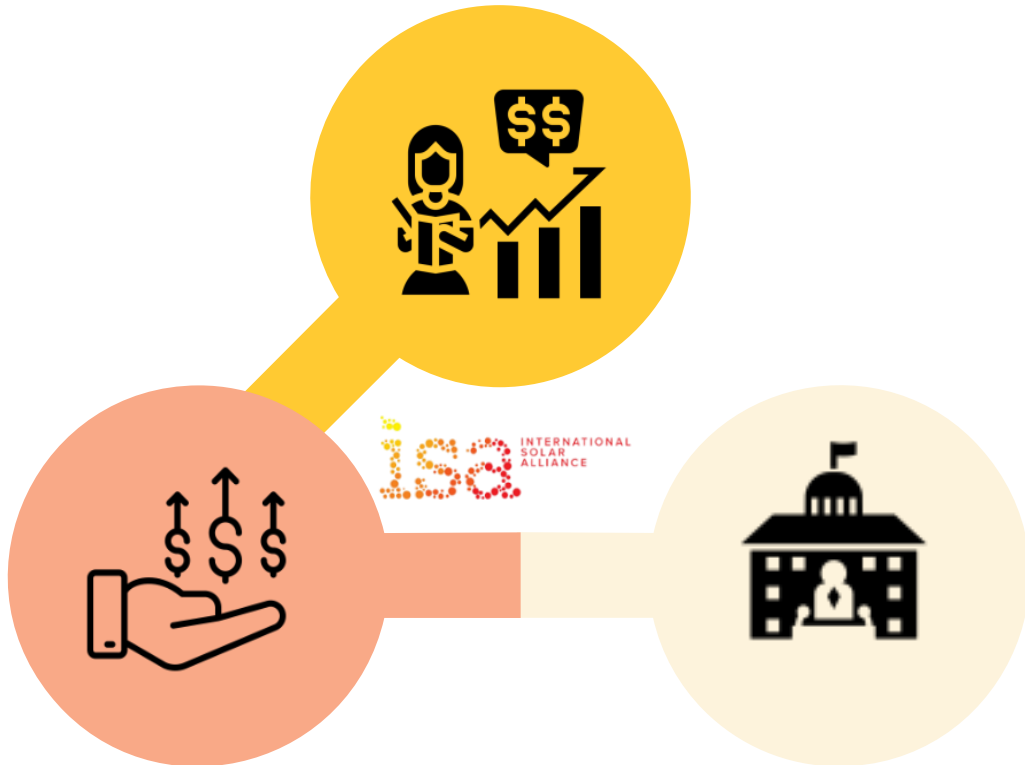
### 1a. Programmatic Support

### 1b. Resource Mobilization

### 1c. Capacity Building

## 3. Supply Chains

# Who are we?



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Inter-governmental treaty-based international organization.

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United Nations Observer Status.

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Global mandate to catalyse global solar growth by helping to reduce the cost of financing and technology for solar

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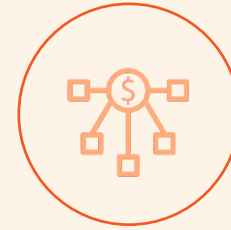
**114** Signatories

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Universal and Affordable last-mile electricity connectivity towards facilitating economic development and environmental impact

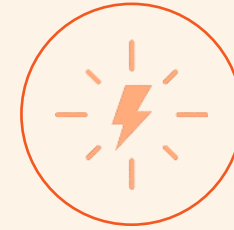
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# Journey So Far



**USD 83M+**

Resources mobilized from member countries & global foundations



**9.5 GW+**

Aggregated Concept proposals received from 44 members



**2,974**

Personnel trained on aspects of solar



**27 Demonstration Projects**

Demonstration projects in pipeline for 27 LDC & SIDS Member Countries, all DPRs approved. 3 Projects commissioned



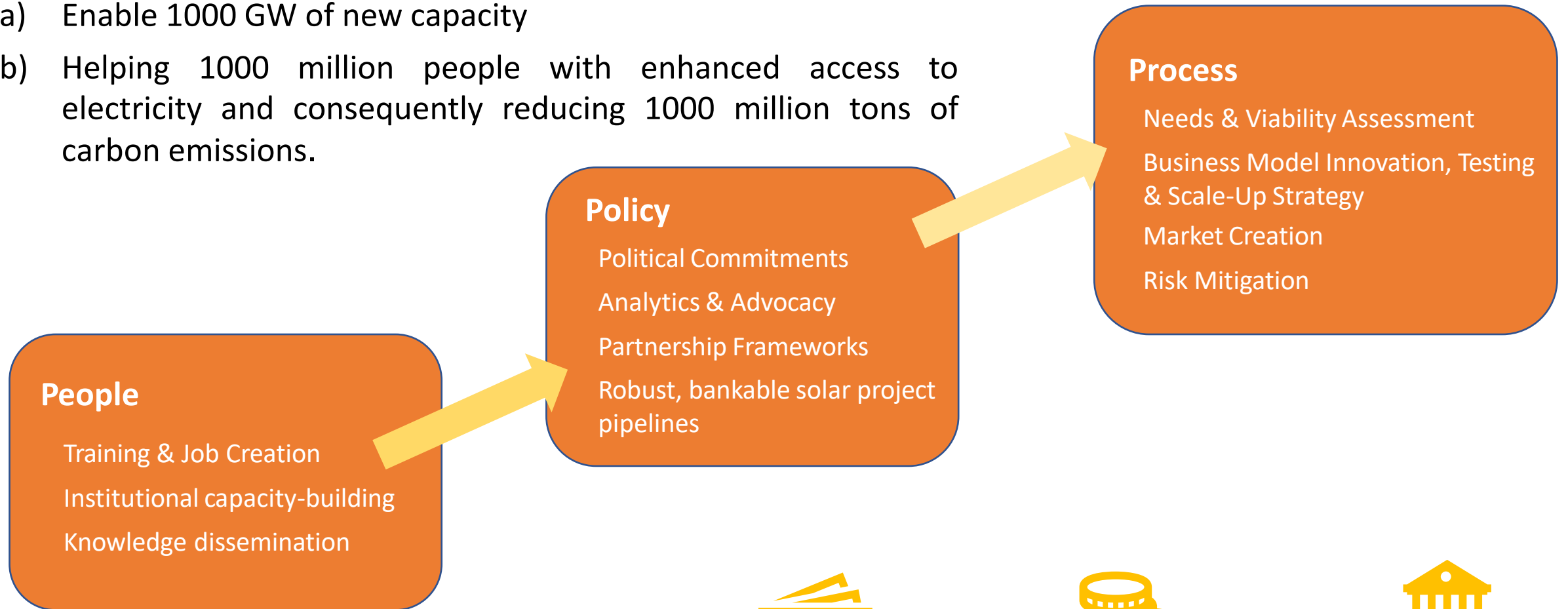
**ISA Flagship Reports**

Solar Technology Report, Solar Market Report & Solar Investment Report, ISA's "Ease of Doing Business" Report

# ISA's Mandate

*Mobilize USD 1 trillion in solar investments till 2030*

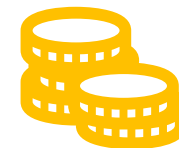
- a) Enable 1000 GW of new capacity
- b) Helping 1000 million people with enhanced access to electricity and consequently reducing 1000 million tons of carbon emissions.



[Roadmap to mobilize USD 1 trillion launched](#)



Country contributions

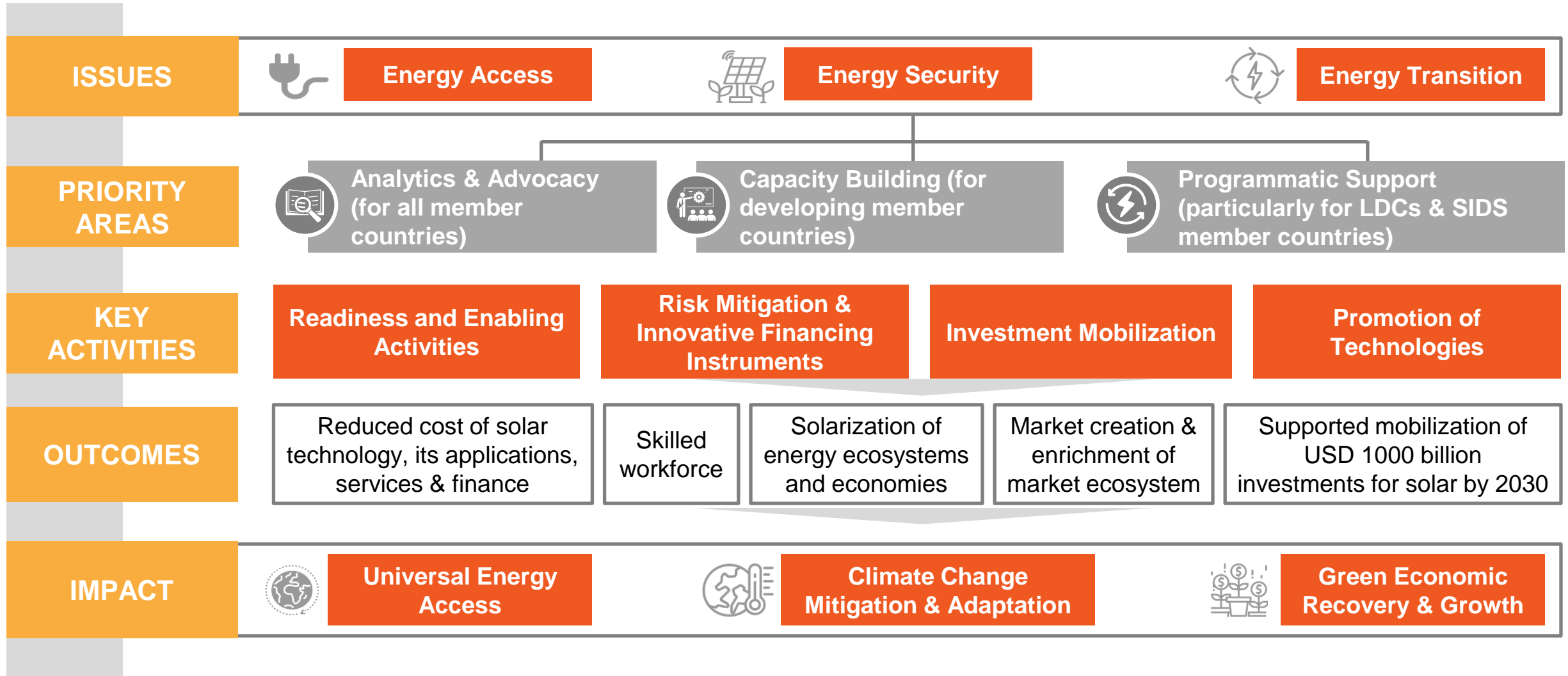


Philanthropic capital



Membership fee

# Theory of Change – ISA’s Strategic Framework for Global Solarization



# ISA's Multi-faceted Support

## 9 ISA PROGRAMMES



Scaling Solar  
Application of  
Agriculture Use



Affordable  
Finance at  
Scale



Scaling Solar  
Mini-Grids



Scaling Solar  
Rooftop



Scaling Solar  
E-Mobility &  
Storage



Solar Park



Solar Heating  
and Cooling  
Systems



Solar PV Battery  
and Waste  
Management



Solar for Green  
Hydrogen

## STRATEGIC PRIORITY AREAS

### Advocacy and Analytics

### Capacity Building

### Project Implementation

3 upcoming Global Analytical Reports:

- ▶ The World Solar Technology Report
- ▶ The World Solar Market report
- ▶ The World Solar Investment Report

### ISA's Capacity Building Initiatives for Various Stakeholders



### Impact Areas:

Energy Access | Energy Security | Energy Transition



# Driving Multiplier Effect through Collaboration: 1+1 = 11

|  <b>Readiness and Enabling Activities</b>  |  <b>Risk Mitigation &amp; Innovative Financing Instruments</b>   |  <b>Investment Mobilization</b>   |  <b>Promotion of Technologies</b>  |
|---|---|--|---|
|  <p><b>EIB</b><br/>Enhancing energy access through Solar Home Systems</p>                        |  <p><b>World Bank</b><br/>Sustainable Renewables Risk Mitigation Initiative for mobilizing USD 850 million in 20 countries</p> |  <p><b>GGGI</b><br/>Joint fund raising for deployment of 1 Million Solar Irrigation Systems</p> |  <p><b>ADB</b><br/>Programmatic Support for solar applications</p>                               |
|  <p><b>AfDB and GCF</b><br/>Technical Assistance for Decentralized Solar Applications</p>        |  <p><b>BP-WRI</b><br/>Developing roadmap for mobilizing USD 1 trillion in solar sector</p>                                     |  <p><b>IBSA and UNDP</b><br/>Solar Water Pumps in 10 countries with IBSA fund</p>               |  <p><b>UNEP</b><br/>Solar Waste Recycling Study</p>  |
|  <p><b>UNIDO</b><br/>Creating a network of Solar Technology and Application Resource Centres</p> |  <p><b>CIFF</b><br/>Investment Series to engage Institutional Investors</p>  |  <p><b>UNAIDS</b><br/>Joint Fund Raising for Solarizing Health Centres</p>                      |  <p><b>WB Lighthouse</b><br/>Transfer of best practices and innovative business models</p>       |
|  <p><b>Rockefeller</b><br/>Technical Assistance for developing DRE markets</p>                  |  <p><b>IRENA</b><br/>Collaboration on finance, technologies and R&amp;D</p>   |  <p><b>CIF and BNEF</b><br/>Global Solar Investment Report</p>                                 |  <p><b>European Union</b><br/>Development of knowledge products</p>                             |
|  <p><b>WAPP</b><br/>Scaling Up Utility-Scale Solar Projects</p>                                |   |  |  <p><b>Olade</b><br/>Facilitate development and implementation of policies and regulations</p> |





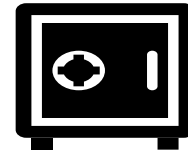
## ISA's Solar Facility

The **Solar facility** aims to catalyze solar investments in the underserved segments and geographies of Africa, thereby unlocking commercial capital. The facility would focus on investing across solar technologies – off-grid solar, rooftop solar, productive use solar, utility scale solar – across Africa through a country specific intervention approach

The facility was approved at ISA's Vth General assembly by Hon Minister, Sh RK Singh in Delhi, India

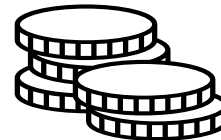


The Solar Facility would comprise of 2 funds and one mini-sub component:



### Solar Payment Guarantee Fund

The **Solar Payment Guarantee Fund** will support projects at the time of default and reduce risk of early closures/bankruptcy of solar energy projects



### Solar Insurance Fund

The **Solar Insurance fund** would accelerate solar project development in Africa via offsetting insurance premium related expenses (during construction and pre-revenue stages)



The **Solar Investment /PPF** would provide the core investment upto 10% of project costs in projects that are participating in the Solar payment guarantee fund and/or solar insurance fund

## *A blended finance entity with expertise*

- A specialized facility will become a focal point for mobilizing global solar financing
- Potential to become the leading global organization with knowledge and expertise in the energy source of the world
- Build own track record that can be leveraged for future fund raise

## *Nimble and market making*

- Play a market making role by helping countries build expertise themselves
- Nimble through specialized managers such that decisions are faster
- Independent of political considerations and focused on delivering results for investors
- Ability to work with all types of investors

## 3a. Structure of the facility- Value proposition/Purpose



### *Solar Payment Guarantee Fund*

|                                    |  |
|------------------------------------|--|
| <b>Sectors</b>                     | Solar energy (decentralized)   |
| <b>Geographic Focus</b>            | Pan Africa (ISA member states)   |
| <b>Initial Capital Requirement</b> | USD 100 million, from global funds   |
| <b>Expected Impact</b>             | With leverage of 5-10x, the facility can enable mobilization of USD 500-1000 million and support 500 MW – 1 GW solar installations |
| <b>Key Stakeholders</b>            | Project developers, off-takers, banks, and institutional investors active in the solar sector in Africa                            |



### *Solar Insurance fund*

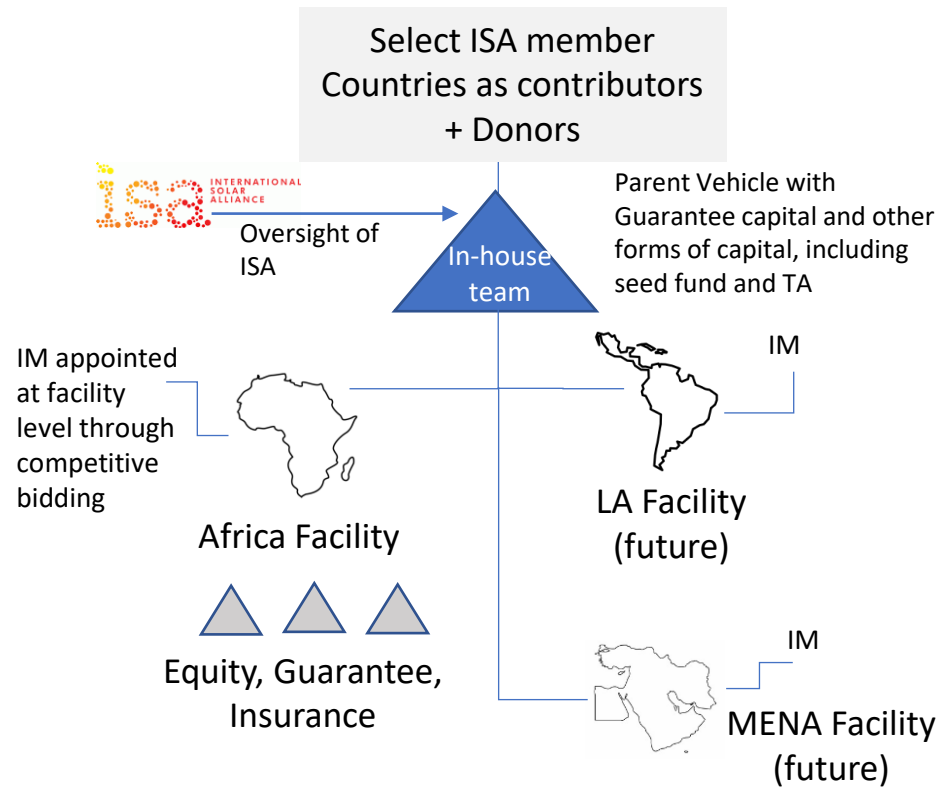
|                                    |   |
|------------------------------------|---|
| <b>Sectors</b>                     | Solar energy (decentralized)  |
| <b>Geographic Focus</b>            | Pan Africa (ISA member states)  |
| <b>Initial Capital Requirement</b> | USD 50 million  |
| <b>Expected Impact</b>             | With a leverage of 20x, the facility can support mobilisation of USD 1000 million of debt financing for projects and support 1 GW solar installations |
| <b>Key Stakeholders</b>            | Insurance companies, project developers, banks and institutional investors active in the solar energy sector in Africa                                |

### *Solar Investment fund*



|                                      |
|--------------------------------------|
| Stimulate demand through TA          |
| <b>Investment facility of 100M</b>   |
| <b>TA facility of 10%- USD 10M</b>   |
| Attract commercial capital providers |

## Structuring Option: Suggested Option



### Description

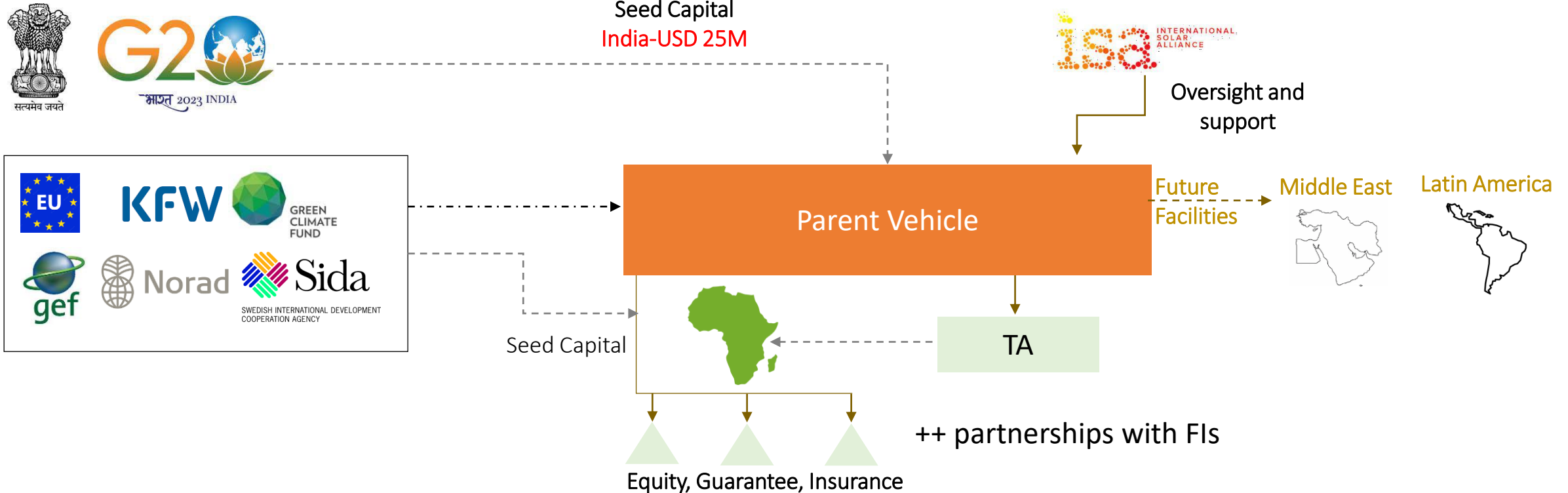
- A Parent entity with permanent capital which it can keep raising for future facilities as well
- Countries can choose to invest in overall facility or for a specific facility
- This capital is available for Sponsor / Junior Capital and TA support
- Parent entity can be self sustaining by i) charging service fee to the funds; ii) profits on fund investments
- It will develop its own track record over time and have a global knowledge base for future

### Our analysis

- Creates self sustaining vehicle that will provide platform for future facilities; Can be used for flexible capital
- Good balance of internal capacity building and external expertise
- Will help in proper governance
- Will keep building track record which is important for capital raise in future
- Can work with global FIs on need basis – for example for guarantee we can partner with MIGA

# A Facility seeded by India

Long-term value creation through self-sustaining ParentCo and establishing track record



**Flexibility for Investors:** Investors like EU can choose to invest at ParentCo or at the respective Regional Facility level

**Professionally Managed:** Each component will be managed by a professional Investment Manager selected through a competitive bidding. Given the strategic nature of EU participation and for TA and Grant ISA would request EU participation at ParentCo level.

**Track Record:** This structure will also allow solar facility to become a self-sustaining organization in the future and raise funds from market based on its track record

# Locations for the facility



- Easy for Infra sharing with ISA
- Can potentially get tax exemptions?
- Investors not very familiar with GIFT city
- Treaty network of India is decent but not very good
- Not yet seen as hub for global investments



## Netherlands

- Central location in Europe – easy to access Africa
- Good treaty network across the world
- Closer to donors and solar professionals
- Seen as a neutral venue
- Cost of operations can be high



## Mauritius

- Very good treaty network across the globe
- Central location
- Well recognized for global hub of investments
- Low cost hub
- Far away from ISA and investors



## Luxembourg

- Well recognized as hub for global investments
- Tax jurisdiction is favourable
- Far away from ISA and other investors
- Central location for a global agency

# ISA's SolarX Grand Challenge

International Solar Alliance is organizing a **Global Startup Challenge** to attract entrepreneurs from African region

The first leg was launched in **Africa** on Nov 10, 2022 during COP27

## The Purpose



Attract Global Investments in Solar Energy Sector



Catalyze the solar adaption-rate



Motivate innovators and researchers to add value to the solar sector



Promote NFPs to invest more in the startup ecosystem enablement



Make Africa energy independent and reduce dependance on fossil fuel resources



Identify innovations that can offer cost-benefits



Following the approval from the Fifth Assembly, the ISA, in collaboration with Invest India, jointly launched the 'SolarX Grand Challenge' at CoP27 on November 10, 2022.

# Structure of SolarX Start-up Challenge

## The Process Flow



## Parallel Activities



## Incentives to the winners

- 1 **Cash incentives** for the winners
- 2 **Acceleration Program** for winning startups





## Progress- Capacity Building (1/3)

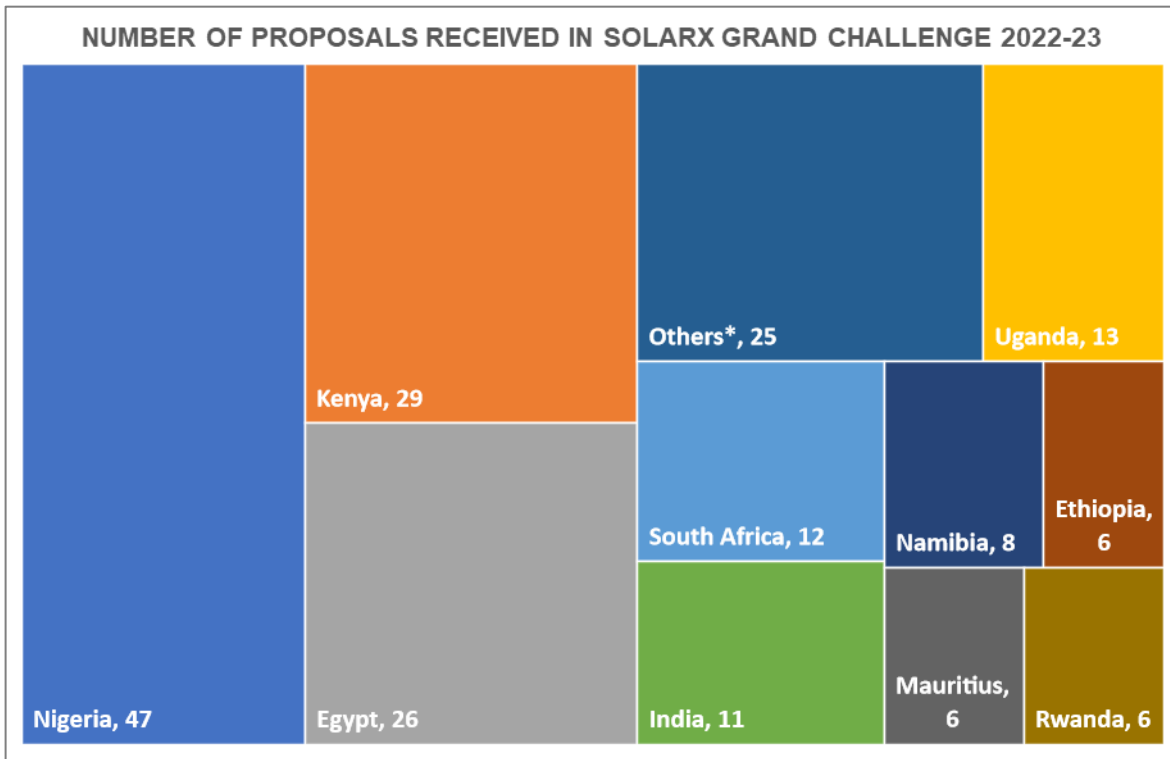
ISA, in collaboration with Invest India, has conducted a series of **Capacity-Building workshops** in Egypt (Cairo), Kenya (Nairobi), South Africa (Cape Town), and Mauritius in February-March 2023 to support capacity-building efforts for local stakeholders in the African region.



**Knowledge-sharing sessions and Capacity Building Workshops held by ISA, in collaboration with Invest India, in Cairo (Egypt), Nairobi (Kenya), South Africa (Capetown), and Mauritius**

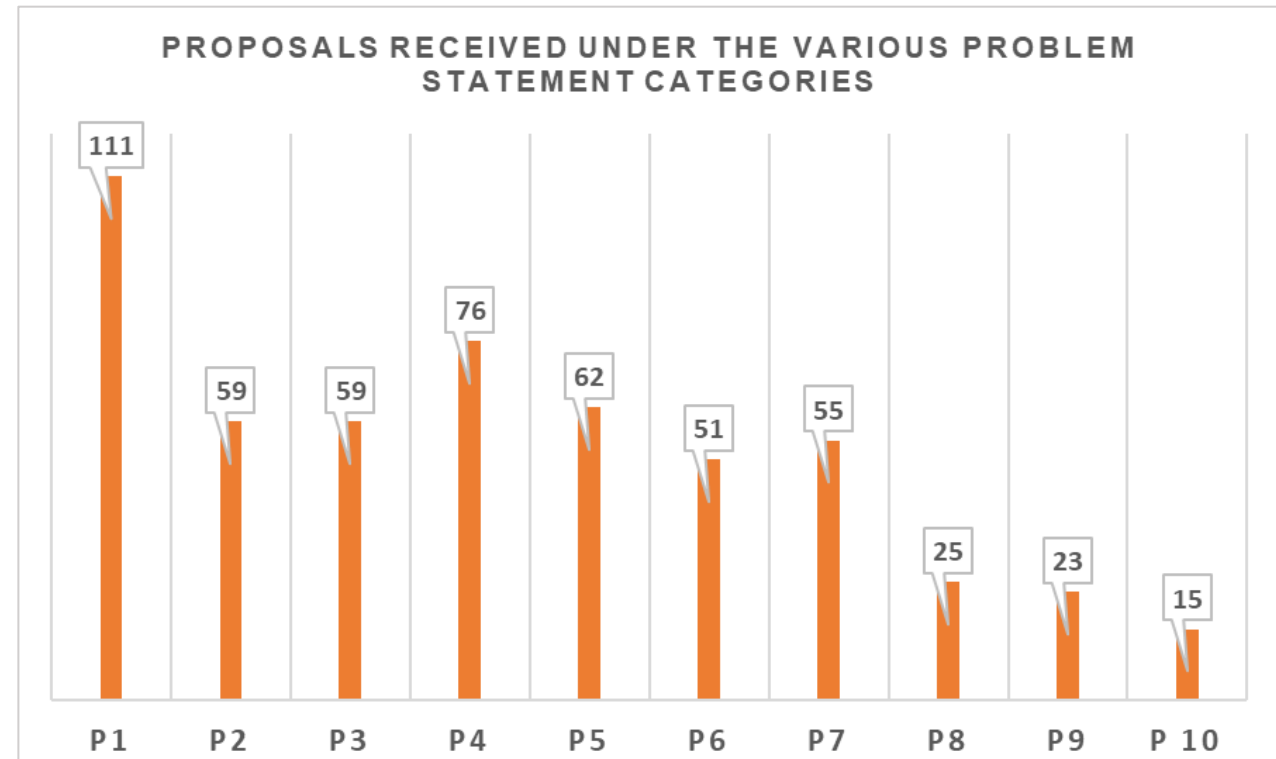
## Progress- Closure of Applications (2/3)

The SolarX Start-up Challenge 2022-23 edition garnered a remarkable response from start-ups from all over the African continent and beyond, **with over 180 applications received from 28 countries.**



**Note-** 92% of the proposals have been received from the African Region, followed by 6% from Asia, and the remaining from Europe and North America.

\*Other countries include (18)- Ghana, Tanzania, Zimbabwe, United Kingdom, Botswana, Burundi, Cameroon, Republic of the Congo, Côte d'Ivoire, France, Israel, Mozambique, Sierra Leone, Somalia, Togolese Republic, Tunisia, United States of America, and Zambia.



**Note-** The problem statements are detailed in the [Annexure](#), as well as the next slide, of this presentation.

## Progress- Evaluation and Shortlisting (3/3)

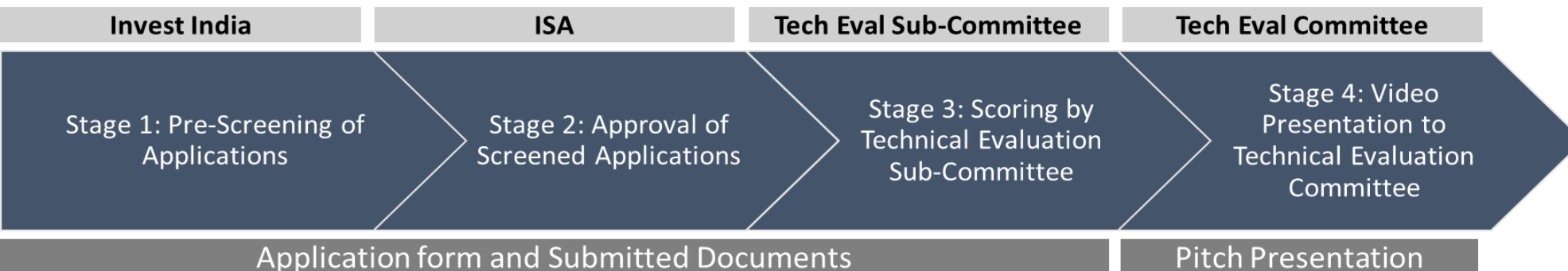
A High-Level Evaluation Committee, chaired by the Director General of ISA, has been constituted for reviewing, evaluating, and selecting the applications under this challenge as per guidelines approved by the Fifth Session of the ISA Assembly.



As of now, the **180+ applications** received under this year's SolarX edition, have been reviewed and evaluated thoroughly by the Evaluation Committee

As a result, **50 applications** have been shortlisted as of May 31, 2023, with 5 applications shortlisted under each of the 10 problem statements.

The **top 20 applicants** would be given technical and financial assistance, with the winners being declared in July 2023 at the G20 Energy Ministers Meeting.



## Next Steps

### Evaluation & Selection of the Proposals received

- Evaluation and shortlisting of the applications has been done by the Evaluation Committee – for top 50
- Evaluation and Shortlisting of the top 20 applications is expected to be completed by 30th June 2023

### Declaration of the winners

- The winners of this year's SolarX edition will be announced in July, during India's presidency of G20

### Financial and Technical assistance through the Acceleration program

- ISA would provide cash prizes for the 20 winners, who would be awarded USD 15,000 each (including for outstation travel if need be).
- All the selected innovators will be assisted through an in-house acceleration programme. The programme shall largely include pillars of Mentorship, Funding, and Market Access. (from July-Oct 2023)

### Potentially launch the second edition of SolarX at CoP28

- Based on the learning of the first edition, the ISA Secretariat will present recommendations for future editions of the initiative to the ISA Assembly.
- As per chair's recommendation, launch of 2<sup>nd</sup> leg of the SolarX Start-up Challenge at CoP28 in Dubai during December 2023.

# Our team has significant experience across renewables, multilaterals and organization building



**Dr Ajay Mathur**

**Director General**

Prior Work Experience

- Director General, The Energy and Resources Institute (TERI)
- Director General, Bureau of Energy Efficiency



**Mr Joshua Wycliffe**

**Chief of Operations**

Prior Work Experience

- Permanent Secretary, Ministry of Environment, Republic of Fiji



**Ms Pragya Gupta**

**Resource Mobilisation Specialist**

Prior Work Experience

- Country programming, Green Climate Fund
- Financial Management Specialist, Asian Development Bank



**Ms Nidhi Bakshi**

**Human Resource Analyst**

Prior Work Experience

Project Fin-HR Manager- MEDECINS SANS FRONTIERES-France



**Mr Philippe Malbranche**

**Assistant Director General**

Prior Work Experience

- Director General, INES (French Solar Energy Research Institute)



**Mr Remesh Kumar**

**Acting Chief of Unit PPIC**

**(Secondment from NTPC)**

Prior Work Experience

- General Manager: (Project Planning and Monitoring), NTPC



**Onyi Iyizoba**

**Legal Specialist**

Prior Work Experience

- Senior Legal and Regulatory Consultant Nextier Power, The Nextier Group



**Mr Nikhil Kumar**

**Senior Consultant, Communication and Advocacy**

Prior Work Experience

- Associate Vice President, Edelman

**Thank You**

# Demonstration Solar Projects

- ❖ Eligible LDCs/ SIDS member countries: 47
- ❖ Total proposal received from LDCs/ SIDS member countries: 27
- ❖ Total DPRs finalized: 27
- ❖ Projects Commissioned: 06

