

Update on the Multilateral Development Banks and Development Finance Institutions Joint Mission

Summary

The Working Document presents the report of the recent Joint Mission of the Multilateral Development Banks (MDBs) and Development Finance Institutions (DFIs) to the ISA.

The Standing Committee may wish to provide guidance to the Secretariat on the implementation of recommendations made by the MDBs-DFIs Joint Mission.

UPDATE ON THE MDBs AND DFIs JOINT MISSION

I. Introduction

Institutional engagement between the International Solar Alliance (ISA) and the Partner Organizations had been anticipated from the outset of the design and operationalization of the ISA. There are specific Articles of the Framework Agreement (FA) of the ISA providing guidance in this regard.

In particular, Article VIII(1) of the *Framework Agreement on the Establishment of the International Solar Alliance* (the Framework Agreement) provides that 'Partner Organization status may be granted by the Assembly to organizations that have potential to help the ISA to achieve its objectives, including regional inter-governmental economic integration organizations constituted by sovereign States and at least one of which is a member of ISA'.

At the first meeting of the Assembly of the International Solar Alliance (ISA) (the first Assembly), on 3 October 2018, the Assembly provided Partner Organization status to many Multilateral Development Banks (MDBs) and Development Finance Institutions (DFIs). The first Assembly also ratified the Partner Organization status provided to many MDBs and DFIs by the International Steering Committee (ISC) before the Assembly.

The ISA Secretariat and these Partner Organizations and other potential Partner Organizations have been collaborating to develop actions plans to support member countries in achieving of objectives of the ISA.

II. MDBs and DFIs Joint Mission

To strengthen ISA's partnership with the MDBs and DFIs, a Joint Mission by the MDBs and DFIs was received at the ISA secretariat from 12-14 June 2019. The Joint Mission had representation from various MDBs and DFIs, including the World Bank, the Asian Development Bank, the African Development Bank, the Asian Infrastructure Investment Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the International Finance Corporation, the French Development Agency, the Department for International Development of the UK, the Japan Bank for International Cooperation, the Japan International Cooperation Agency, the German Development Bank (KfW) and the Export-Import Bank of India.

Various leading global consulting and research firms, including E&Y, Deloitte, PwC, KPMG, Dalberg, McKinsey & Co, Bridge to India, Bloomberg New Energy Finance and Edelman also participated actively during the Joint Mission.

The Mission covered the following agenda:

- a) Day 1: Building a roadmap for mobilizing USD 1000 billion by 2030
- b) Day 2: ISA's programmes and synergy with MDBs' and DFIs' investments
- c) Day 3: Enhancing ISA-MDBs-DFIs collaboration for scaling up solar investments

This Working Document presents the summary and recommendations made during the Joint Mission, along with the detailed Joint Mission report at Annexure A.

III. Summary of discussion and key takeaways

The “Joint MDBs & DFIs Mission” enabled an enriching discussion on various aspects including experiences of MDBs and DFIs in member countries, their commitment towards ISA’s goals and key gaps in scaling up solar power globally. Participants also shared their views on how ISA can play a vital role in bridging these gaps. Key themes and takeaways from the Mission is summarised below.

Day 1: Mission started with welcome remarks and introduction by ISA Secretariat, followed by a presentation by Dalberg on ISA’s objectives, goals and work done so far. BNEF shared key facts about solar power and its penetration around the world. Delegates shared their views on how innovative financing models worked in Africa and how ISA can play a role in protecting investor’s interests to encourage future investments in the solar space. Later, McKinsey presented on the multi-regional grid concept to address electricity access issues around the globe with a case study on India-Myanmar-Thailand grid connectivity. Bridge to India shared country profiles on solar market and access to electricity for Peru, Uganda and Bangladesh. EY and Invest India presented on the concept of Solar Investment Index for ISA member countries and how it can help both member countries as well as investors in bridging gaps and identifying opportunities. The World Bank & AfD shared experience from Solar Risk Mitigation Initiative (SRMI) and key components of the SRMI program. EIB shared innovating concept of financing for rooftop solar and how risks can be covered through grant financing while scaling up solar capacities. Later, Ms. Mahua Acharya shared her experiences on setting up a green investment services practice area. Several insightful learnings were shared from GGGI and how challenges could be mitigated effectively. Some of the key takeaways from day 1 are:

- a) ISA’s role – provide technical expertise and act as a knowledge aggregator to member countries
- b) Domestic FIs should be encouraged to develop a pipeline of projects to attract MDBs’ investments
- c) Learning from GGGI- Define business model up-front clearly, define success & failure clearly, must be integrated and central to the organization

Day 2: Detailed deliberations held on experiences of mini-grids, solar pumps and rooftops. Participants shared the existing bottlenecks in Africa and how ISA can play an important role in addressing these bottlenecks. Dalberg started the session with a presentation on “ISA’s program- Strategy and Theory of Change” covering key aspects of ISA’s vision, goals and possible roles. KPMG presented on “Scaling Solar Applications for Agricultural Use” and shared cases of Morocco, Kenya, Ethiopia and Nepal. ISA and Deloitte presented on scaling up solar mini-grid with a focus on Africa and how issues can be addressed. Later, ISA and PwC made a presentation on rooftop solar where key aspects of addressing challenges for scaling up were deliberated. This was followed by presentation by ISA and EY on “Affordable Financing at scale”. MDBs and DFIs shared their views on key areas of interventions where ISA & MDBs-DFIs can collaborate to catalyse financing in solar especially in rooftops, agriculture pumps and mini grids. Some of the key takeaways from day 2 are:

- a) Possible roles of ISA: technical support to enable financing to projects, transaction/ procurement support, capacity building of domestic FIs, identifying and promoting innovating financing methods, identifying and promoting innovative technology solutions

- b) Africa- Solar can help in creating demand via mini-grids and in replacing diesel generators. Solar for clean water can be attractive from the SDG enhancement point of view.
- c) Solar rooftops - Low hanging fruits such as large/Govt buildings, Schools, Hospitals can be targeted first in member countries

Day 3: On the last day of the Mission MDBs-DFIs shared their perspective of collaboration opportunities in member countries with interesting past/ongoing initiatives which can be replicated and scaled up with ISA. H.E. Mr Upendra Tripathy, DG, ISA, gave insights on ISA's vision of mobilizing more than USD 1000 billion of investments by 2030. Mr Kumar V Pratap, Joint Secretary (Infrastructure), MoF, Government of India, shared Ministry of Finance perspective on renewable energy and its importance from energy security point of view. MDBs & DFIs shared real opportunities and gave insightful suggestions on key areas of work such as refinancing & partial credit guarantees, risk mitigation for initiatives, capacity building of domestic FIs. Some of the key takeaways from day 3 are:

- a) Mobilization of private sector funding is key to scaling up large scale deployment of Solar
- b) Key areas of focus for ISA -Engagement and capacity building of domestic FIs, support to SMEs and engagement of large corporates for CSR investments in solar
- c) Innovative financing models – Loan to small businesses via Line of credits to domestic FIs with grant to cover risk of default/delays

Annexure A

MDBs-DFIs Joint Mission: Summary of key discussions and learnings

Day 1: Building a roadmap for mobilizing USD 1000 billion by 2030

On day 1, healthy discussions were held around various initiatives planned by ISA. Key learnings from previous programs and global as-is scenarios were shared by various consulting firms. MDBs also shared their experiences and suggestions on innovative models that could work for ISA.

Meeting Agenda	Building a roadmap for mobilizing USD 1000 billion by 2030 - Joint MDBs and DFIs Mission
Meeting Date and time	June 12, 2019, 10:00 Hrs – 18:00 Hrs
Session on “Brief Overview of the International Solar Alliance” - Presentation by Dalberg	
<ul style="list-style-type: none"> Discussed Introduction to ISA, its objectives, goals and work done so far 	
Key points deliberated:	<ul style="list-style-type: none"> Roadmap, Organizational structure, Business plan and partnership strategy ISA’s role as Demand aggregator: <ul style="list-style-type: none"> Issues- Scale (economic impact), quality related aspects (often affordable but not reliable), beneficiaries may not turn up, validity of demand data points
Key Learnings:	<ul style="list-style-type: none"> Important to develop network of national focal points Smaller countries can be explored for solar deployment, ISA can play role in structuring & risk mitigation at a wholesale level Enabling environment such as effective market structure, supply of equipment & grid is very important ISA can explore to provide technical expertise and knowledge aggregator
Session on “Global Context on Solar Investments and roadmap to mobilize investments of more than USD 1000 billion by 2030 in solar sector” - Presentation by BNEF	
<ul style="list-style-type: none"> Key data points on growth of Solar globally, special discussion on Africa and cases from India, China & Chile 	
Key points deliberated:	<ul style="list-style-type: none"> Institutional issues Innovative financing models globally How to reduce risk perception about the RE
Key Learnings:	<ul style="list-style-type: none"> Development of Market place is very important more than cost reduction Further investment will come only if current investments are successful & well protected (ISA can play a role in protecting investor’s interests) There can be a sovereign guarantee or DFI guarantee is very important to mobilize affordable finance

Meeting Agenda	Building a roadmap for mobilizing USD 1000 billion by 2030 - Joint MDBs and DFIs Mission
	<ul style="list-style-type: none"> There is some traction to Green bonds, some pension funds don't know where to fund where ISA can channelize these funds to the demanding countries
<p>Session on – “Developing One World One Sun One Grid-Vision and Implementation plan” - Presentation by McKinsey & Co.</p> <ul style="list-style-type: none"> How One World One Sun One Grid-Vision can help solve various issues related to access to electricity 	
<p>Key points deliberated:</p>	<ul style="list-style-type: none"> Sahel Region (Africa) – Desert to Power – highest tariffs in the world but immense solar potential Assurance is required that if once the PPA is signed, the PPS should not be renegotiated – could be facilitated by ISA
<p>Key Learnings:</p>	<ul style="list-style-type: none"> Countries with highest Solar intensity are the ones with least access to electricity Intercountry (Regional) grid connectivity could be explored to match with the time of supply & demand mismatches (with Thailand -via Myanmar example) Challenges varies from region to region (Africa- access vs Asia scaling up) Develop power markets – If market decides where to source its electricity, some of the problems could be solved.
<p>Session on “Developing Solar Investment Analytics and Investment Attractiveness Index”- Presentation by Bridge to India, Invest India and EY</p> <ul style="list-style-type: none"> Cases of Peru, Uganda and Bangladesh was shared by Bridge to India, EY and Bridge to India shared Solar Investment Index methodology 	
<p>Key points deliberated:</p>	<ul style="list-style-type: none"> Developing country level data collection in infrastructure should be difficult – WB/ADB may be already doing it- inputs may be sought
<p>Key Learnings:</p>	<ul style="list-style-type: none"> Huge potential for solar with issues in financing- need low cost financing with support from IFIs & donor agencies. There is a need for capacity building & skill development. Countries should benefit from the indexing in bridging gaps while investors can be more informed for their investments in the countries
<p>Session on “Solar Risk Mitigation” – Presentation by WB & AfD</p> <ul style="list-style-type: none"> Solar Risk Mitigation Initiative of WB & AfD 	
<p>Key points deliberated:</p>	<ul style="list-style-type: none"> Discussed various development risks for Solar Existing platforms of NCI & TCIL can be explored Possibility of insurance products to cover some of the risks
<p>Key Learnings:</p>	<ul style="list-style-type: none"> Operations – Off-taker risk (liquidation & termination) is one of the biggest risks Mitigation – Sovereign guarantees one of the biggest solutions
<p>Session on “Off-grid Solar Finance Program” – Presentation by EIB</p> <ul style="list-style-type: none"> Discussion majorly around off-grid solar finance program by EIB 	

Meeting Agenda	Building a roadmap for mobilizing USD 1000 billion by 2030 - Joint MDBs and DFIs Mission
Key points deliberated:	<ul style="list-style-type: none"> Combining loans & grants innovative financing pilot concept Operating framework of the loan program (TA + Loan) including role of different stakeholders. TA to cover risk of default & loan to pass on to small businesses via LOC to domestic FIs
Key Learnings:	<ul style="list-style-type: none"> Domestic FIs may do an upfront work to show the pipeline in exchange with the free guarantee Risk to EIB – The Domestic may take up bad projects to develop the pipeline since it does not have much to lose Designing such instrument – Equity or debt is an issue? – may be deliberated to cover the equity side partially instead of debt. May be equity is a bigger challenge than debt. Targets may be well deliberated to get the best out of the fund
Session on “Experiences with setting up a green investment services practice area at an intergovernmental organization” – Presentation by Mahua Acharya <ul style="list-style-type: none"> Conceptualization of GGGI and key learnings from it 	
Key points deliberated:	<ul style="list-style-type: none"> Three strategies for to bridge finance gaps - Better designed policies, Better projects, Stronger institutions What worked in GGGI- Staff embedded in countries is good, Countries quick to recognize value proposition, Unique products driven by unique projects, replication is very important
Key Learnings:	<ul style="list-style-type: none"> Define and be quick to identify failure, define business model up-front clearly, define success clearly, must be integrated and central to the organization Opportunity for ISA- Right timing and economics for solar, more replicable business models, Market differentiator with high and unique value-add

Day 2: ISA’s programmes and synergy with MDBs’ and DFIs’ investments

On day 2, detailed deliberations were held on experiences of mini-grids, solar pumps and rooftops. Participants shared what are the existing bottlenecks in Africa and how ISA can play an important role in minimizing issues.

Meeting Agenda	ISA’s programmes and synergy with MDBs’ and DFIs’ investments
Meeting Date and time	June 13, 2019, 10:00 Hrs – 17:00 Hrs
Session on “ISA programming Strategy and Theory of Change” – Presentation by Dalberg	
<ul style="list-style-type: none"> • Discussion on ISA’s roles, objectives, vision and mission 	
Key points deliberated:	<ul style="list-style-type: none"> • Discussion around what additional roles can ISA play around demand aggregation, Technical assistance, pre-feasibility etc.
Key Learnings:	<ul style="list-style-type: none"> • Possible roles of ISA : Technical support, Demand aggregation, Transaction/ procurement support, Capacity building, Innovating financing methods, Innovative technology solutions
Session on “Scaling Solar Applications for Agricultural Use” – Presentation by ISA and KPMG	
<ul style="list-style-type: none"> • Access to electricity scenarios around the world especially in Africa 	
Key points deliberated:	<ul style="list-style-type: none"> • Various business models in Solar pumps • Cases of Morocco (ESCO model), Kenya, Ethiopia and Nepal •
Key Learnings:	<ul style="list-style-type: none"> • Role of EXIM banks can be explored in financing solar pumps projects • MDBs have stringent procurement rules, if procurement is done before they are approached, then it may create issues • Market assessment and design instruments should be done in advance & be well deliberated • Explore ways to use solar for water projects as water is a big challenge in Africa • Subsidy free model is required to be able to sustain solar pump projects in long term • ISA can provide TA to countries for pre-feasibility studies for funding institutions
Session on “Scaling Solar Mini Grids” – Presentation by ISA and Deloitte	
<ul style="list-style-type: none"> • Initiatives of ISA in the solar mini grids and demand aggregation 	
Key points deliberated:	<ul style="list-style-type: none"> • Key consideration in mini grid financing – policy, regulations & institutional structure
Key Learnings:	<ul style="list-style-type: none"> • Success of mini-grid projects is a combination of techno-commercial and community relates aspects

Meeting Agenda	ISA's programmes and synergy with MDBs' and DFIs' investments
	<ul style="list-style-type: none"> • Africa has a large population dependent on Diesel generators, some countries do not have a properly developed national grid • Demand related issues in Africa, however mini-grids can help in kick-starting the demand initially • Low hanging fruits to be targeted initially – by decentralized supply • MDBs can play a critical role in mini-grid for grant+loan type financing
<p>Session on " Scaling solar rooftops" – Presentation by ISA and PwC</p> <ul style="list-style-type: none"> • Solar rooftop scenario globally, especially in African countries including Morocco, Kenya, SA, Tanzania <p>In terms of policy and govt support</p>	
<p>Key points deliberated:</p>	<ul style="list-style-type: none"> • Role of ISA in rooftops – TA, demand aggregation, Capacity building, procurement
<p>Key Learnings:</p>	<ul style="list-style-type: none"> • C&I demand is picking up as it makes economic sense, Residential buildings are still a challenge – large buildings can be targeted • Key challenges- Barrier at every stakeholder level, Low cost financing, Lack of net metering and compliances • Go after the low hanging fruits – schools, govt building, railways, hospital – where even funding is taken care of. One counterpart helps • Commitment is bigger issue than money • ISA could push for targets to the Govt – with a periodic review
<p>Session on "Affordable Financing at scale" – Presentation by ISA and EY</p> <ul style="list-style-type: none"> • Funding requirements, key activities planned and what more can be done 	
<p>Key points deliberated:</p>	<ul style="list-style-type: none"> • NDC commitment of countries as well as share of solar in it (if any) • Risks perceptions of private sector banks • Where ISA can help in scaling up
<p>Key Learnings:</p>	<ul style="list-style-type: none"> • Ambitious target backed with commitment is required to bring stakeholder commitment/ on-board • Countries with high tariffs could be easily targeted (since it makes more economic sense) • Regional perspective is important – policy, buy-in, interventions required • TA & Quality certifications can help in reducing risk • ISA can collaboration with Sub-Regional development banks to push the agenda • NISE like institution in ISA countries – Targeting – under building national capacities

Day3: Enhancing ISA-MDBs-DFIs collaboration for scaling up solar investments

MDBs-DFIs shared their perspective of collaboration opportunities in member countries with interesting past/ongoing initiatives which can be replicated and scaled up with ISA.

Meeting Agenda	Enhancing ISA-MDBs-DFIs collaboration for scaling up solar investments
Meeting Date and time	June 14, 2019, 10:30 Hrs – 15:00 Hrs
Remarks by H.E. Mr Upendra Tripathy, DG, ISA	
ISA-MDBs-DFIs partnership status	
Key Learnings:	<ul style="list-style-type: none"> • Key pillars of Technical Assistance - Project identification, Financing instruments for solar deployment/scale up, Knowledge management/capacity development, Pilot testing • Wish list of two-year action plan shared • Intend to do more than just signing MoUs – with agreed concrete activities, for ex: • Need to follow investments in Solar year-on-year with segmented breakups • To make initiatives mutually beneficial • More focus on on-ground work • Learns from existing missions of MDBs-DFIs
Session on “Options for scaling-up MDB & DFI Solar investments in ISA member countries	
Key points deliberated:	MDBs-DFIs shared their experiences in solar investments including some investments in ISA member countries
Key Learnings:	<p>AfDB</p> <p>Projects:</p> <ul style="list-style-type: none"> • Togo – Electrification project in Togo, project involves water pumping for irrigation purpose. The project will be developed by private investments whereas AfDB is giving subsidies to Govt on grant basis to utilize money for O&M of the project. • Burkina Faso – Rural electrification / Mini grid project to electrify ~100 villages. There is combination of microfinance in the financing model. The project will help increase demand of electricity in the area. Similar model can be replicated in Mali, Tunisia etc <p>Other learnings:</p> <ul style="list-style-type: none"> • In Rural electrification, if offered tariff is greater than prevalent tariff in the country then, there may be a lot of difficulty to implement. • Many countries part of - Desert to power are part of ISA as well • Sudan – Deploy PV systems can substitute their fuel engines for pumping

Meeting Agenda	Enhancing ISA-MDBs-DFIs collaboration for scaling up solar investments
	<ul style="list-style-type: none"> • Clean cooking is problem in Africa. We need to explore whether this problem can be addressed by Solar as most people use biomass for the same as of now. <p>EIB</p> <ul style="list-style-type: none"> • EIB commitments to Solar key stats and investments were discussed • Envisaged areas of engagement with ISA: <ul style="list-style-type: none"> ○ Joint development of program ○ Investment of ongoing programs through ISA ○ Joint development of models for deployment of solar – including SDG impacts • Partnering with other multi-lateral banks – GIZ, AfDB & KfW etc (4) • Key issues: <ul style="list-style-type: none"> ○ Technical - areas where ISA can pitch in - development of mini grids, off-grid (business models), role of storage -relevant to international grid and smart meters in urban sectors ○ Quality projects – ISA to work on how solar projects can be perceived as the best projects ○ SDG enhancements – Potential consequences of Solar/Solar pumps (models that can be used to incentivized for deployment of these technologies) • Mobilization of private sector is important: <ul style="list-style-type: none"> ○ Domestic FIs/regional Development banks don't have expertise where ISA can work with them in capacity enhancements ○ Work with SME (small) – Grant resources required to support them through MDBs ○ Large international corporates – deployment of solar through them under their CSR programs ○ RE100 commitments – Solar contribution can be increased (by engagement with Corporates) <p>EBRD</p> <p>Areas of work where ISA can play a role:</p> <ul style="list-style-type: none"> • ISA certificate – Working on conceptualization of ISA certificates • To achieve a policy level impact – work needs to be done to reconfirm & increase the commitment of Govt in ISA countries • Knowledge transfer and support enabling environment • Floating Solar can be explored for large lakes / water bodies- it controls evaporation and also improved PLF because of lower temperatures around water

Meeting Agenda	Enhancing ISA-MDBs-DFIs collaboration for scaling up solar investments
	<ul style="list-style-type: none"> • Solar pump – Climate resilient water management (already working in this area) • Monetization the emission savings <p>EXIM</p> <ul style="list-style-type: none"> • Two categories of investments within countries (SPV or balance sheet) • Financing challenges could be addressed by having 5/7 years conventional financing & then 7th year onwards refinance (for remaining life) – MDB/DFIs guarantee to cover in case the local banks deny refinancing • Predictability of PPA & Land acquisition are key operational issues – Right to renegotiate because of delay by DISCOM should be removed by policy interventions • Capacity building for new technologies to invite new companies in the sector • For Africa - capacity building of countries can help manage strong procurement guidelines of MDBs <p>World Bank</p> <ul style="list-style-type: none"> • It is important to address issues related to project risks: • For example, in a WB program payment guarantees / off-taker risks are covered– Usually delay is covered instead of default • Refinancing guarantees- can be provided to the domestic FIs – buy backs can be provided by bank if local banks are not able to refinance • For example - Refinancing provided by WB in Peru for large hydro projects • SME financing – since credit risk involved –a partial credit guarantees are required to move the funds
Session on “Solarx: Developing Next gen solutions” by Invest India – Startup initiative	
Key points deliberated:	<ul style="list-style-type: none"> • How to engage member countries for Solar - innovative ideas • How to scale this up
Key Learnings:	<ul style="list-style-type: none"> • Support needed from MDBs in grant financing and cross-country market access • While ISA can help in finding countries who can support in terms of land and other resources for production • Seed funding may be required to kick start innovative start-ups in this area • Examples of - Infuse ventures used to support the project idea for funding in India and ADB also had a program to support such projects
Session on “Ministry of Finance perspective on Renewable Sources of Energy” by Kumar V Pratap Joint Secretary (Infrastructure), Ministry of Finance, Government of India	

Meeting Agenda	Enhancing ISA-MDBs-DFIs collaboration for scaling up solar investments
Key points deliberated:	<ul style="list-style-type: none"> • Ministry of Finance perspective on RE and its importance from energy security point of view • How RE plays a critical role for energy policy objectives of India
Key Learnings:	<ul style="list-style-type: none"> • Highest difference in potential vs actual in Solar • India needs to build half of its total generation capacity from RE by 2030 • Invest in Storage - discussion with WB on \$1bn loan on this (demand creation an economies of scale) • Encourage other MDBs for more support (like ADB -ISA TA support) for project development and technical assistance programs
Closing remarks by H.E. Mr Upendra Tripathy, DG, ISA	