



First Assembly of the International Solar Alliance

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Proposed Work Plan and Budget for calendar years 2019 and 2020 (Jan-Dec)

Summary

The document presents the ISA workplan and budget for the calendar years 2019 and 2020 for consideration of the Assembly.

1. Strategic context

The world added more renewable power capacity annually than it added (net) capacity from all fossil fuels combined. In 2016, renewables accounted for an estimated 62% of net additions to global power generating capacity as per the Renewables Global Status Report 2017 (GSR). Within renewables, solar photovoltaic (PV) generation led the way in 2016, accounting for about 47 percent of total additions. Developing countries already represent more than half of solar deployment worldwide.¹

Solar PV generation costs have been falling rapidly, thanks to technology scale-up initially driven by incentives like feed-in tariffs, and recently by solar auctions and tenders in many countries. In several countries, solar PV power has already reached lower costs than coal and gas. New investment in solar PV generation in 2016 totaled at \$113.7 billion. This presents a historic opportunity to scale-up collective efforts to realize the objective of mobilizing more than US\$ 1000 billion in solar investments in member countries of the International Solar Alliance (ISA).

2. ISA's Interests and Objectives

The ISA has been *conceived as be an action-oriented, member-driven, collaborative platform for increased deployment of solar energy technologies to enhance energy security and sustainable development, and to improve access to energy in developing member countries* (ISA 2016). The ISA has 121 sun-belt countries that lie between the two Tropics as its prospective member countries.

As guided by the Framework Agreement of the ISA, the interests and objectives of the ISA are as follows:

- a) To collectively address key common challenges to scale up solar energy applications in line with their needs;
- b) To mobilize investments of more than USD 1000 billion by 2030;
- c) To take coordinated action through programmes and activities launched on a voluntary basis, aimed at better harmonization, aggregation of demand, risk and resources, for promoting solar finance, solar technologies, innovation, R&D, capacity building etc.;
- d) Reduce the cost of finance to increase investments in solar energy in member countries by promoting innovative financial mechanisms and mobilising finance from Institutions;
- e) Scale up applications of solar technologies in member countries, and
- f) Facilitate collaborative research and development (R&D) activities in solar energy technologies among member countries.

- g) Promote a common cyber platform for networking, cooperation and exchange of ideas among member countries;

3. Governance of the ISA

The institutional structure of the ISA includes the Assembly, its members; Partner countries; the ISA secretariat; Partner Organizations and other relevant organizations.

Assembly: The Assembly, on which each member is represented, is established pursuant to Article IV of the Framework Agreement. The Assembly is the supreme body of the ISA to make decisions concerning the implementation of this Agreement and coordinated actions to be taken to achieve its objective. The Assembly is mandated to assess the aggregate effect of the programmes and other activities under the ISA, in particular in terms of deployment of solar energy, performance, reliability, as well as cost and scale of finance. Based on this assessment, members are requested take all necessary decisions regarding the further implementation of the objective of the ISA.

The Assembly makes all necessary decisions regarding the functioning of the ISA, including the selection of the Director General and approval of the operating budget.

Secretariat: Pursuant to Article V of the Framework Agreement, a Secretariat has been established to assist parties in their collective work under this Agreement. The Secretariat comprises of a Director General, who is the Chief Executive Officer, and other staff as may be required. The Director General is selected by and responsible to the Assembly, for a term of four years, renewable for one further term. The Director General is responsible to the Assembly for the appointment of the staff as well as the organization and functioning of the Secretariat, and also for resource mobilization.

The Secretariat prepares matters for Assembly action and carries out decisions entrusted to it by the Assembly. It ensures that appropriate steps are taken to follow up Assembly decisions and to co-ordinate the actions of members in the implementation of such decisions.

The Secretariat, *inter alia*, shall:

- a) Assist the National Focal Points in preparing the programmes' proposals and recommendations submitted to the Assembly;
- b) Provide guidance and support to members in the implementation of each programme, including for the raising of funds;
- c) Act on behalf of the Assembly, or on behalf of a group of members participating in a particular programme, when so requested by them; and in particular establishes contacts with relevant stakeholders;
- d) Set and operate all means of communication, instruments and cross-cutting activities required for the functioning of the ISA and its programmes, as approved by the Assembly.

Members: Membership is open to those solar resource rich states which lie fully or partially between the Tropic of Cancer and the Tropic of Capricorn, and which are members of the United Nations. Such states become members of the ISA by having signed this Agreement and having deposited an instrument of ratification, acceptance or approval. National Focal Points (NFPs), designated by member countries as the ISA correspondent for that country,

Partner Countries: Partner Country status may be granted by the Assembly to the States which fall outside the Tropic of Cancer and the Tropic of Capricorn, are members of the United Nations, and are willing and able to contribute to the objectives and activities provided in this Agreement. Partner Countries are eligible to participate in programmes of the ISA, with the approval of members participating in the programme.

Partner Organizations: Partner Organization status may be granted by the Assembly to organizations that have the 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 the ISA. United Nations including its organs will be the Strategic Partner of the ISA.

Observers: Observer status that may be granted by the Assembly to applicants for membership or partnership, whose application is pending, or to any other organization which can further the interest and objectives of the ISA.

Value Proposition of the ISA: The value proposition of the ISA to its member countries governments and other key stakeholders, includes the following:

- a) **Aggregation of Demand and Supply of Solar Equipment:** This will help reduce the cost of solar power generation by aggregating demand from multiple countries for solar panels and other equipment such as batteries, inverters, and other balance of system equipment and facilitate mechanisms to aggregate procurement and supply of these equipment. This in turn will enable small countries to take advantage of economies of scale to make solar power generation more cost-effective and affordable in these countries.
- b) **Policy and Implementation De-Risking:** By bringing together developing member countries in the Sunbelt region, the ISA can help create favourable policy frameworks and enabling environments by showcasing successful policy and regulatory interventions and implementation experience in other larger developing countries such as India, South Africa, and Thailand along with government-to-government dialogue.

- c) **Financial De-Risking:** Addressing existing investor risks that affect the financing costs and competitiveness of solar energy in developing countries is imperative. ISA can add value in reducing the cost of capital and enabling access to capital for solar energy projects in developing member countries by forging partnerships with multilateral and bilateral development banks, private equity/venture capital investors, infrastructure funds and other institutional investors as well as international commercial banks, to enable the flow of capital and arrange financial de-risking instruments.
- d) **Project Development/Structuring Support to Members and Facilitating Investments and Partnerships:** ISA's position as a global collective of countries with the highest solar energy potential will enable it to facilitate investments and partnerships, provide advice and technical assistance for project conceptualization, project planning and development, documentation and investment structuring activities in its member countries.
- e) **Enabling Collaborative Research and Development:** ISA can play an important role in bridging the R&D gap in solar energy technologies between developed and developing countries, by enabling increased R&D activities in developing countries. ISA could consider inviting academic institutions and private companies to set up their solar energy focused R&D facilities. Additionally, ISA also needs to work towards resolving issues such as lack of state funding and providing a pathway for technology commercialization. I-STAR C and INFOPEDIA will play an important role in these areas.
- f) **Knowledge Management and Capacity Building:** ISA's proposed activity of setting up an INFOPEDIA that contains a digital library of best practices in solar applications with information and statistics will be part of the knowledge management and capacity building component of the framework agreement.

4. ISA Journey So far

The ISA was jointly launched by India and France at COP 21 in Paris. The ISA Framework Agreement was opened for signatures in CoP22, Marrakech, Morocco, on 15th November, 2016. As on date, 67 countries have signed the agreement and out of these, 40 countries have ratified the ISA Framework Agreement. As per Article XIII (1) the ISA Framework Agreement has entered into force on 6th December, 2017. With ISA Framework Agreement's entry into force, ISA has become a *de jure* treaty-based International Intergovernmental Organization.

The International Solar Alliance and the Ministry of External Affairs, signed the Host Country Agreement on Monday, the 26th March, 2018. The Government of Republic of India also issued the Gazette notification on application of UN (privileges and immunities) Act, 1947 to representatives and officers of ISA on 5th June, 2018.

The ISA member countries have agreed to implement four programmes:

- a) Scaling Solar Applications for Agricultural Use,
- b) Affordable Finance at Scale,
- c) Scaling Solar Mini-grids running, and
- d) Scaling Solar Rooftops.

ISA member countries are considering an additional programme on Scaling E-Mobility & Storage. These programmes will help in achieving ISA its stated mandate and help achieve universal energy access target, thereby speeding economic development.

To expand its reach, the ISA has entered into strategic and financial partnerships with the UNDP, the World Bank, the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the African Development Bank (AFDB), the Asian Development Bank (ADB), the Asian Infrastructure Investment Bank (AIIB), New Development Bank (NDB), and the Green Climate fund (GCF), IEA, IRENA, Climate Parliament and UNIDO on enhancing cooperation on solar energy deployment to further the mandate of the ISA. The United Nations including its organs are strategic partners of the ISA.

ISA is also developing a Common Risk Mitigating Mechanism (CRMM) for de-risking and reducing the financial cost of solar projects in the ISA member countries. The instrument will help diversify and pool risks on mutual public resources and unlock significant investments. An international expert group has been working on the blue print of the mechanism.

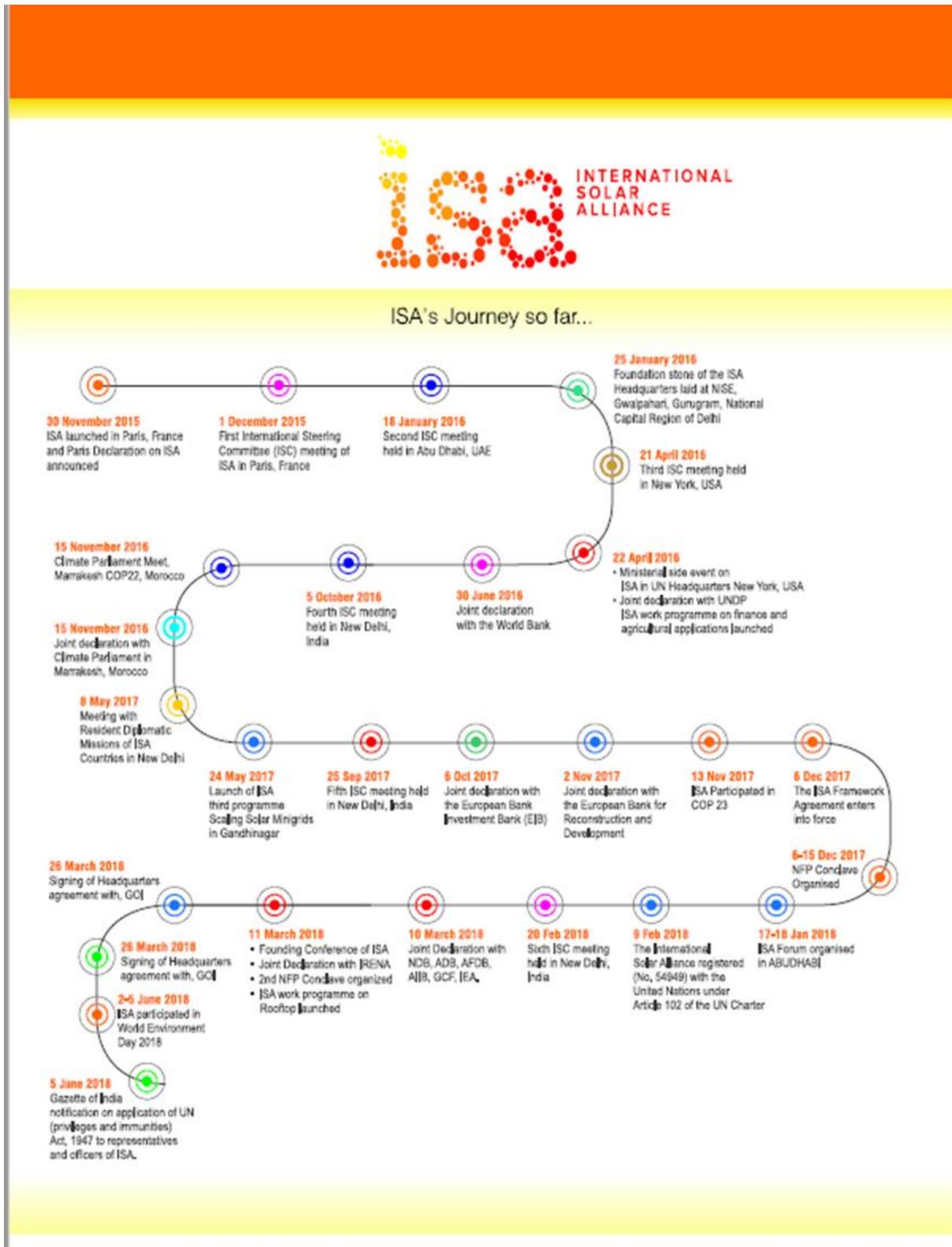
Another major initiative of ISA includes establishment of DIGITAL INFOPEdia which serves as a platform to enable policy makers, Ministers and corporate leaders from ISA countries to interact, connect, communicate and collaborate with one another. EU is supporting ISA in Operationalization of INFOPEdia and will be operationalize by the end of 2018.

On the request of the ISA, the Government of India has earmarked around US \$ 2 billion Line of Credit (LoC) to the African countries for implementation of solar and solar related projects out of its total US \$ 10 billion LoC under the Indian Development and Economic Assistance Scheme (IDEAS) to various African and other developing countries. India has set up a project preparation facility which will provide consultancy support to partner countries to design bankable projects. Following these commitments, India has provided \$ 1.4 billion concessional financing to 27 solar projects in 15 developing countries so far.

As a co-founding member of the ISA, Government of France through the *Agence Française de Développement*, has also offered €1000 million for solar projects across ISA member countries. 17 projects have been funded by AFD for approximately Euro 300 million. ISA will similarly persuade other countries to contribute to the cause of solar deployment globally.

The ISA also plan to administer global awards for solar R&D, applications and innovative financing. Membership of ISA will enable the prospective member countries to nominate suitable candidates in appropriate areas. The State Government of Haryana, India has agreed

to institute Kalpana Chawla Solar Award for the women Solar Scientists doing extraordinary work across the 121 ISA prospective member countries. The Haryana Government has been a trendsetter in this regard and has provided US \$ 1.5 million to institute the award.



5. Status update on ISA Programmes

In accordance with Articles I and II of the Framework Agreement, a Programme of the ISA consists of a set of actions, projects and activities to be taken up as voluntary but in a coordinated manner by members, with the assistance of the Secretariat. Programmes are designed in a way to ensure maximum scale effect and participation of the largest possible number of members. These programmes include simple and measurable targets. The activities under programmes on various solar applications will be led by the ISA Secretariat in close coordination with the NFPs in the member countries.

Scaling Solar Applications for Agricultural Use (SSAAU)

ISA's first programme, Scaling Solar Applications for Agricultural Use (SSAAU), was launched in New York, USA on 22nd April, 2016. The SSAAU Programme mainly focusses on decentralised solar applications in rural settings. Major focus areas of the programme include Solar Water Pumping Systems (SWPS), solar drying, solar chilling, solar milling, etc. Other activities under the programme include R&D, capacity building, and developing common standards, facilitate transfer of technology, etc.

To date twenty-one countries namely Bangladesh, Benin, Djibouti, Ethiopia, France, Guinea-Bissau, India, Kiribati, Mali, Mauritius, Niger, Nigeria, Rwanda, Senegal, Seychelles, Somalia, Sudan, Togo, Tonga, Uganda, Vanuatu, are participating. These countries have been frequently interacting regarding the programme strategy and implementation through the network of NFPs and country representatives *via* video conferencing. To understand specific requirements of these countries, needs assessment questionnaires have been developed for Solar Water Pumping System (SWPS) and Solar Street Lighting System (SSLS). These questionnaires have been circulated to all participating and signatory countries of the ISA as a first step towards demand aggregation.

Besides this, the ISA Secretariat has received a commitment from 15 SWPS manufacturers to jointly supply and install around 734,800 SWPS in the ISA member countries in Africa. Commitment for training 10,400 solar mechanics specifically to install and maintain the solar pumps, has also been received.

ISA is currently working on a price exploratory tender for SWPS with the help of Energy Efficiency Services Limited (EESL), a public-sector undertaking under the Ministry of Power, Government of India. In the meantime, the ISA Secretariat is making efforts to aggregate demand for 500,000 or more pumps from India, Bangladesh, Senegal, Uganda, Mauritius and Niger, etc. This bulk order is expected to lower the cost significantly.

Affordable Finance at Scale (AFS):

ISA's second programme—Affordable Finance at Scale (AFS) was also launched in New York on 22nd April, 2016. Major objectives of the AFS programme are to strive for mobilising low cost capital, for large scale solar project portfolios, developing common credit enhancement mechanism to de-risk these portfolios, develop common contractual documents and best practices in finance, organising multi-stake holder RE INVEST-type meets etc.

Currently twenty-eight countries are participating under this programme: Argentina, Bangladesh, Benin, Burkina Faso, Chad, Ethiopia, D R Congo, France, Guinea-Bissau, India, Ivory Coast, Kiribati, Liberia, Mali, Namibia, Nauru, Niger, Nigeria, Senegal, Seychelles, Somalia, Sri Lanka, Togo, Tonga, Tuvalu Uganda, Vanuatu and Yemen.

Two innovative financial products *Credit Enhancement Mechanism* and *First Loss Facility* have been developed and launched by Indian Renewable Energy Development Agency Ltd., (IREDA) for India. These two instruments can be replicated in other ISA countries. Two publications—*Compendium of Global Success Stories in Solar Energy* by YES Bank and *Innovative Finance Solutions to Drive Investment to Renewable Energy* by the Climate Policy Initiative (CPI) to overcome challenges in energy financing and to drive investment have been published for ISA. The ISA has established financial partnerships with the World Bank, the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), Asian Development Bank (ADB), New Development Bank (NDB) and Green Climate Fund (GCF), and Asian Infrastructure Investment Bank (AIIB).

On ISA's request, the Government of India has earmarked 15-20% of the US\$ 10 Billion line of credit operated by India in Africa for undertaking solar projects. The Government of India has also announced setting up of a US \$ 350 million Solar Development Fund for financing solar projects.

The ISA secretariat has been working with bilateral and multilateral banks to develop a portfolio of bankable projects and innovative financial instruments. The financial partners of the ISA are designing a risk mitigation mechanism with the objective of de-risking and reducing the financial cost of solar projects in the ISA member countries. The instrument will help diversify and pool risks on mutual public resources and unlock significant investments.

Based on a suggestion that emerged during the National Focal Point (NFP) Conclave of 2017, the ISA Secretariat, in consultation with NFPs has been working on a matrix based allocation of US \$ 1000 billion credit mobilization anticipated by the year 2030. Work is also undergoing to develop a country-wise credit mobilization strategy. This will be incorporated in the Solar Road Maps of each member country.

The ISA secretariat is also engaging private sector players to scale-up solar investments. At the Abu Dhabi outreach event, YES Bank committed to invest US \$1 Billion by the year 2022 and US \$ 5 billion by the year 2030 into suitable bankable projects. The ISA secretariat plans to approach other banks and encourage such commitments so that an aggregated and substantial figure can be mobilized. The ISA secretariat also constituted a Public- Private Corporate Global Task Force on innovation.

Scaling Solar Mini Grids:

The ISA's third programme— Scaling Solar Mini Grids was launched on 24th May, 2017. The SSMG Programme has been launched with a special objective to cater to the energy needs of ISA member states in identified areas with unreliable or no grid(s), and in island member states having abundant potential to tap solar energy.

Presently eighteen ISA countries: Benin, D R Congo, Djibouti, Guinea-Bissau, India, Kiribati, Liberia, Mali, Niger, Nigeria, Republic of Nauru, Senegal, Somalia, Sudan, Togo, Tonga, Tuvalu and Vanuatu are participating in the programme. A commitment to install 110 MW of mini grids has been made by Indian Industries under India's US\$ 2 billion soft loan for African member countries.

Scaling Solar Roof Top:

The main objective of Scaling Solar Rooftop Programme (SSRP) of ISA is to assess rooftop potential, harmonize demand, pool resources and promote rapid deployment of Solar Rooftop at scale in ISA member countries. This shall help ISA in fulfilling its objectives, as set out in Articles II and III (2) of the ISA Framework Agreement.

The SSPR Programme shall be of five years' duration, from the date of launch or till year 2022 and will cover Off-Grid and Grid-connected roof-top solar in ISA member countries including island nations. The programme also envisages future integration with e-mobility and storage.

All types, shapes and sizes of solar rooftop segments viz., residential, commercial, industrial, institutional and others, either public or private, in rural, semi-urban and urban areas are covered. This program will promote all kinds of existing or future technologies in the field of Solar PV Modules including hybrid technologies.

Scaling Solar Supported e-mobility and Storage:

The ISA's fifth programme is under preparation and will be launched in the near future. The draft text of the programme has been prepared which is under examination at the ISA Secretariat and is going to be opened for consultation to ISA's NFPs.

6. Work Program for the Calendar Year 2019

The Work Programme for the calendar year 2019 is based on the guidance received from countries participating in the Four ISA programmes and outcomes of the Founding Ceremony of ISA on March 11, 2018.

At the Founding Ceremony of ISA 11th March, 2018 in New Delhi, Hon'ble Prime Minister of India, articulated a 10 Points Action Plan. This Action Plan includes the following:

- a) Steps to be taken for better and affordable Solar Technology availability and accessibility to everyone in ISA member countries.
- b) Encouraging innovation through I-STAR C program so that solar solutions can be provided for various needs of ISA member countries.
- c) Need to develop regulatory aspects and standards which will speed up adoption and development of solar solutions in ISA member countries.
- d) Means to increase the solar proportion in energy mix of ISA member countries.
- e) Action to provide concessional financing and low risk finance for solar projects in ISA member countries.
- f) Initiative to develop Consultancy Support for Bankable Solar Projects in ISA member countries.
- g) Initiative to approach for emphasizing greater inclusiveness and participation within ISA member countries.
- h) Action to build an extensive network of Centre of Excellence that can take care of the local conditions and factors within ISA member countries.
- i) Initiate Solar Policies such that it encompasses the total development so as to achieve more contribution towards achievement of SDGs in ISA member countries.
- j) Make the ISA Secretariat more strong and professional.

Responding to the 10 Points Action Plan, leaders of participating member countries at the Founding Ceremony agreed on a Delhi Agenda to increase their collective efforts in achieving the objectives of the ISA. The Delhi Agenda called for:

- a) To pursue an increased share of solar energy in the final energy consumption in our respective national energy mix, as a means of tackling global challenges of climate change and as a cost effective solution by supporting and implementing policy initiatives and participation of all relevant stakeholders, as applicable, in our respective states;
- b) To facilitate affordable finance, access to appropriate, clean and environment friendly technology and undertake capacity building, including forging mutually beneficial partnerships with reputable international institutions and reputable financial institutions for the benefit of developing countries;
- c) To explore innovative financing mechanisms that can generate a sustainable market for the deployment of cost effective solar technologies, coupled with constructive policy initiatives to catalyse public and private investments to reduce the cost of solar projects in developing countries;
- d) To facilitate joint Research and Development efforts among member states and other stakeholders to develop appropriate business models, cost effective standards, innovative technical applications, equipment and storage designs to suit members' climatic conditions and to realise clean and low cost operations;
- e) To consider off-grid solar applications to cater to the energy requirements of poorer and/or remote communities; To facilitate awareness and skills enhancement of local communities in the monitoring and maintenance of solar technologies in the member countries;
- f) To leverage and emphasize the key characteristics and strengths of solar energy in our national energy plans and strategies and to assist through the implementation of solar strategies,
- g) To proceed with the designation of National Focal Points; and
- h) To strengthen ISA to become an action-oriented and member-driven multilateral organization.

Following the above guidance, ISA secretariat has prepared a work programme with the following key components:

1. Supporting implementation of the ISA Programmes
2. Communication, knowledge management and outreach
3. Cross-cutting activities for capacity building
4. Strategic engagement, partnerships and strengthening ISA network
5. Management support- strengthening the ISA Secretariat

1. Supporting Implementation of the ISA Programmes

During 2019, the following activities are planned to support the implementation of the four ISA Programmes that have been launched already.

Programme 1: Affordable Finance at Scale (AFS)

Summary of the activities proposed for AFS for the calendar years 2019 and 2020 is as follows:

- a) Strengthening a toolkit for Exploring Affordable Financing Mechanisms for Solar Energy - ISA will collaborate with Financial partners / Think Tanks to facilitate development of a toolkit in a layman language which can be translated in all UN languages.
- b) To coordinate CRMM study with the Task Force, Member Countries and World Bank.
- c) To conduct discussions with the Corporate sector, on the optimal terms and conditions for investment flows in ISA member countries; the risk analysis criteria used for solar power generation asset financing, and their expectations in terms of regulatory environment.
- d) To hold a workshop in collaboration with World Bank and others to bring together key stakeholders such as International Financial Institutions, Multilateral Development Banks, Bilateral Agencies and other financing partners to deliberate on developing financial roadmap including first loss facility and minimization of hedging costs, bond raising in locally denominated currencies, insurance products, innovative financial instruments, etc.in ISA countries.
- e) Establish Financial Partnership Agreements with IFIs and MDBs in all ISA regions, in particular regional and sub-regional financial institutions.
- f) Training courses in member countries on Solar PV business models for Banks in ISA countries such as Capex, Opex and reverse auctions including deputations of experts.
- g) Procurement training for ISA members and courses on Public Private Partnership including deputations of experts.
- h) Training for technical, financial, commercial, legal and communications aspects of Solar PV promotion.
- i) Initiate the constituted Global Leadership Task Force of Corporates on Innovation to provide strategy to ISA for mobilization of \$ 1000 billion by the year 2030.
- j) Action to Transaction meets for developers and financial institutions and development of app in INFOPEdia to facilitate match making.
- k) Workshop on financial innovation and best practices in ISA countries.
- l) Establishment of an Off-Grid Fund.
- m) Organization of Continent/Region wise Investment workshops

Programme 2: Scaling Solar Applications for Agriculture Use (SSAAU)

Summary of the activities proposed for SSAAU for the calendar years 2019 and 2020 is as follows:

- a) In collaboration with National Focal Points and Country Representatives, need assessment questionnaires for Solar Water Pumps(SWPs) and Solar Lighting systems (SLS) will be completed and will be shared to all National Focal Points and will also be available at ISA website.
- b) Obtaining of data on Demand Aggregation of Models, Type and quantity of SWPs and SLS. This will be completed along with Roadmaps and Baseline study.
- c) Designing Solar Water Pumping system, Street Lighting System, Solar Home Lighting System/Off-Grid Application.
- d) Facilitating ISA Member Countries in Specifications, Standards, Performance Benchmarks, Testing and Certification Protocols of SWPs & SLS through identified test centers in collaboration with NFPs and CPs.
- e) Development of Base document by selected Agencies on Global Tendering & best practices for procurements, installation & maintenance for SWPs.
- f) Monitoring and field inspection of the programme through Experts/Consultants.
- g) Completion of tender process, fixation of the base price, identification of manufacturer(s), supplier(s) for each of the Participating ISA Member Countries for SWPs and SLS.
- h) Development of Jingles and media outreach for SWPs & SLS programme.
- i) Constitution of Global Task Force for SSAAU.
- j) Organization of Seminars and Workshops on SSAAU in India and Other regions with respect to the consent of the ISA Member Countries joining the Programme of SSAAU.

Programme 3: Scaling Solar Mini Grids (SSMG)

Summary of the activities proposed for SSMG for the calendar years 2019 and 2020 is as follows:

- a) Obtaining of Data on Demand Segregation, conceptualization of standard Min-grid Models, and targets for the year 2019 will be fixed based on data received through the Baseline study to be conducted by Think-tank's.
- b) Facilitating ISA Member Countries in preparation of Bankable Projects of SSMGs.
- c) Monitoring and field inspection of the Programme through Experts/Consultants.
- d) Assisting ISA Member Countries in designing of Specifications, Standards, Performance Benchmarks, Testing and Certification Protocols through identified test centers in consultation with NFPs and CPs.
- e) Development of Base document by selected Agencies on Global Tendering & best practices for procurements, installation & maintenance for SSMGs.
- f) Assisting ISA Member Countries in identification of contractors, financiers, banks, signing of deals between manufacturer(s), financiers and the participating member countries by selected agency in consultation with NFPs and CPs.
- g) Development of Jingles and media outreach for SSMG Programme.
- h) Constitution of Global Task Force for SSMG.

- i) Organization of Seminars and Workshops on SSMG in India and Other regions with respect to the consent of the ISA Member Countries joining the Programme of SSMG.

Programme 4: Scaling Rooftop Solar (SRS)

Summary of the activities proposed for SRS for the calendar years 2019 and 2020 is as follows:

- a) Organization/participation in workshops, roundtables and conferences at national, regional and international level on rooftop solar as a major sub-set of solar energy development including organizing visit of member country teams, experts etc. to key existing / under construction rooftop solar installations with a view to create awareness and share best practices.
- b) In collaboration with National Focal Points, Country Representatives and think-tanks/ Knowledge Partners/Consultants get prepared solar rooftop potential assessment in the cities and also in various segments viz. industry, commercial, social and residential sector by deploying a combination of physical survey, GIS tools and satellite imagery etc. with a view to develop and get under implementation structured solar rooftop program in ISA member countries. Such Rooftop potential assessment reports and country plan of implementation will be made available at ISA website/ Info-pedia.
- c) Assisting Member countries in adopting progressive rooftop solar policies and regulations, business models, grid-connectivity and net-metering processes and also relevant changes in building code and other legislation, for ease of business in rooftop solar through a combination of sharing of best practices and commissioning services of experts/consultants
- d) Assisting/sensitizing member countries in developing/ adopting Model RFPs, Model PPAs and in designing/launching Programs/Schemes in phase-wise manner with a clear Roadmap.
- e) Facilitating ISA Member Countries in Specifications, Standards, Performance Benchmarks, Testing and Certification Protocols of SRS through iSTAR-C and identified test centres in collaboration with NFPs and CPs.
- f) Development of standard document on Global Tendering & best practices for procurements, installation & maintenance of rooftop solar and sharing through Info-pedia.
- g) Monitoring, field inspection and quality assurance of global standard of SRS through government-accredited and third-party agencies, Experts and Consultants.
- h) Development of media outreach for SRS program
- i) Constitution of an International Expert Group for SRS
- j) Organizing and participating in Capacity building/ training program for various stakeholders viz. entrepreneurs, bankers, Lenders/investors, distribution companies, project developers etc.

In addition, the fifth programme of the ISA will be developed in consultation with ISA NFPs and be launched.

Programme 5: Scaling E-mobility and Storage (SEM&S)

The activities included in the table below would be implemented in the next two calendar years for Scaling E-Mobility and Storage.

Planned Activities	Sub-activities
Demand aggregation in consultation with NFP’s, local contacts, country representatives by holding video conferences, NFP conclaves and sending CEI	Printing of the need assessment questionnaires & video conferencing and communication arrangements with NFPs of ISA member countries. Hiring of agency for: <ul style="list-style-type: none"> • Obtaining of data of models, type, and quantity of Solar e-Mobility Applications. • Development of roadmaps and preparation of pre-feasibility report for programme implementation of e-mobility programme within ISA member countries. • Floating of Price exploratory tender for Solar E-Mobility Applications. Coordination cost including travel cost, meeting cost, incidental cost etc., for Demand Aggregation.
Designing of Specifications, Standards, Performance Benchmarks, Testing and & Certification protocols	Hiring of agency for identifying specifications of Solar e-Mobility application, Standards, Performance Benchmarks, Testing and Certification Protocols in collaboration with NFPs and CPs Coordination cost including travel cost, meeting cost, incidental cost etc., for Demand Aggregation.
Development of Tender Document for Solar E-Mobility Systems	Hiring an agency for development of best practices for international procurements, installation, maintenance for SEM & S in various languages for assisting implementation of SEM & S programme within the ISA member countries. Coordination cost including travel cost, meeting cost, incidental cost etc., for Demand Aggregation.
Programme Monitoring and Outreach	Hiring an agency & expert/consultant for scheme preparation, monitoring and outreach for effective programme implementation and communication of the SEM & S programme within the ISA member countries.

2. Communication, Knowledge Management and Outreach

Engaging with member countries and stakeholders is an integral part of ISA’s agenda as it is expanding the membership base. Further, expanding its network of partner organizations would enable the ISA to utilize its resources efficiently and effectively. The ISA’s network of NFPs, STAR-C, regional hubs and other technology/research partners will act as ambassadors for achieving the interests and objectives of the ISA. The specific activities proposed in the work programme on communication, knowledge management and outreach are:

ISA WEBSITE AND DIGITAL INFOPEDIA

The website is an important means for ISA to communicate updates on its activities. In 2019, it is proposed to revamp the actual website to professionalize it and make it more user friendly

Additionally, the ISA Secretariat wants to be sharing global knowledge and best practices with their member states and the wider public. The ISA “Infopedia” intends to develop an online information platform and repository dedicated to the development and promotion of solar energy. The European Union is supporting the ISA Secretariat to develop this Infopedia. It will be ready by December 2018.

The main goals of Infopedia will be:

- a. to provide a window for each member country to present the most complete solar energy profile (Country counter),
- b. to provide dedicated information on solar energy projects and best practices, existing technologies and innovative solutions on solar energy coming from R&D, NGOs, corporate sector (Repository),
- c. to create a dedicated tool to provide webinars/e-learning on solar energy to all member countries and create a platform of dialogue between the National Focal Points (NFP) and all stakeholders from private and public sectors (Platform)

ISA JOURNAL / NEWSLETTER

To fulfil ISA’s mandate of knowledge generation and dissemination it has been proposed to launch an ISA quarterly journal. Shakti Sustainable Energy Foundation and the Council on Energy, Environment and Water (CEEW) are the knowledge partners for the preparation, publication and dissemination of the ISA journal on a quarterly basis. This may need to be reviewed in the coming year in order to rotate the responsibility for preparation of the publication to other international think tanks.

The ISA journal reports on the progress made on various fronts by ISA in each quarter and demonstrate its mission and add value. In addition, the journal would fill the need for improved information and regular communication from and about the ISA and improve ISA’s brand-value and visibility in the public domain. The journal is positioned as a medium of communication not just among ISA member countries and partners but also to engage with various segments of society that have linkages or can benefit from solar technologies.

RE-INVEST & ISA EXPOS

RE-Invest, the biennial global renewable energy investors’ meet & expo, aims at carrying out an information campaign on renewable energy to both established and newer segments of stakeholders (particularly investors, project developers, corporates) interested in clean energy. The first RE-Invest was held in February 2015 was well-attended with 202 speakers from 29 countries and 2860 delegates from 42 countries. Corporate representation included 578 Indian and 124 international companies.

The second edition will be 3-5 October along with the first Assembly of the ISA. The Re-Invest has been organized by the Ministry of New and Renewable Energy (MNRE), India, in partnership with the Indian Renewable Energy Development Agency (IREDA), the Confederation of Indian Industry (CII), and the Federation of Indian Chambers of Commerce (FICCI), with YES Bank as the knowledge partner.

Going forward, it is expected that the RE-Invest will emerge not just as a platform for potential investors but more importantly, as a hub of innovation. Solar innovators will be encouraged to share their work and find collaborators for piloting and scaling up their ideas. The meet will also travel across member countries and adopt a different thematic area in each edition.

ISA BRANDING AND OUTREACH

Wide publicity to the ISA and its activities will not only help ISA to grow but will also catalyse the expansion of demand for solar technologies. Over the period 2018–2022, the communication activities of ISA will include digital and print advertising, articles on internet, social media presence, television/films, radio and in international magazines, publications, case studies, development of user-friendly apps for knowledge-building and decision-making around solar applications. An annual report on the various activities of ISA and its member countries is also envisaged.

It is also proposed that December 6th, the ISA Foundation Day be observed as Universal Energy Access Day and December 5th–8th every year as Energy Access Week. This will entail organisation of an International Expo on Solar products that facilitate energy access along with a number of seminars and round-table meets.

The activities included in the table below would be implemented in the next two calendar years for enhancing communication, knowledge management and outreach.

Communication, Knowledge Management & Outreach	
Participation in conferences (National/International/Exhibitions)	Managing Secretariat services for organising the event, printing of brochures and fliers and other dissemination materials, manpower cost, travel & logistics cost of event management, sponsorship offered to Ministerial Delegations & Speakers which includes international ticketing, travel of ISA team which include DSA, travel, accommodation etc.
Participation in Regional and International events	
Updating the ISA website	Operation and maintenance of ISA website and emails of ISA officials. Upgrading and updating the website on regular basis.
Web based E-office and LAN etc.	Development of e-Office portal for office management including its maintenance.

Communication agency to develop ISA communication and Social Media Strategy	Hiring of agency/consultant/expert for development of ISA Communication and Social Media Strategy.
Organizing ISA Expo	Expenses related to development of concept note, coordination and logistic (travel, boarding lodging, DSA etc.) arrangement for organizing ISA Expo in ISA member countries.
Others	Miscellaneous expenditures.

3. Cross-Cutting Activities for Capacity Building

As part of its commitment to scaling up solar applications, ISA plans to train and build knowledge and capacity in member countries to deploy solar technologies to effectively meet a range of energy needs. Capacity-building will be required in many varied areas like technology development and customization, standards and testing protocols, policy design, and financing options.

In addition, there will be a series of Capacity Building and Training Outputs which will be cross-cutting, and will cover the above four programs but will also offer general foundational skill building at all levels and will focus on advancing a network of research and application Centres across ISA countries called Solar Technology and Application Research Centres, or STAR-C.

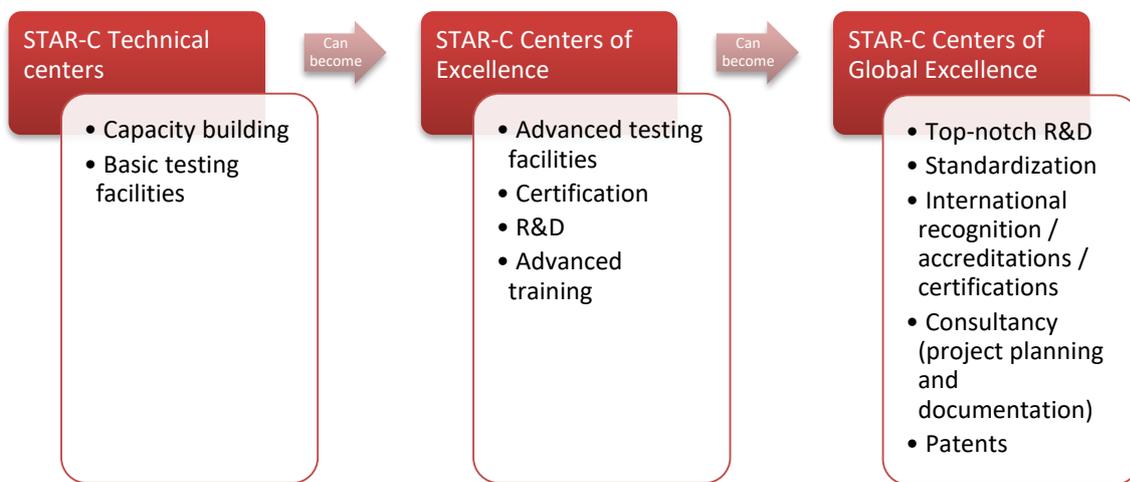
Solar Technology and Application Research Centres :

The STAR-C (Solar Technology Application Resource-Centre) program is a key element of this endeavour. Launched in March 2018, STAR-C aims at building a network of technical training and research centres in order to foster knowledge dissemination and capacity-building with regards to solar energy and infrastructure projects. In accordance with the Guiding Principles set out at the Article II of the Framework Agreement on the Establishment of the International Solar Alliance (ISA), STAR-C centers will be involved in harnessing solar finance, solar technologies, innovation, research and development, and capacity building for the benefit of Members.

The ISA member countries can build upon the existing institutes or set up new institution as a STAR-center. Several institutions in the same country, each covering one of the activities of the STAR-C programme, can qualify as STAR-C. STAR-Centers can be divided in 3 main categories according to the services provided, their seniority and level of scientific accomplishment. Each center / country to decide whether they would like to develop and provide additional activities covered in the STAR-C programme (R&D, quality control, etc.)

- a) STAR-C technical centres that provide at least one of the activities of the STAR-C programme (trainings, R&D, testing, etc.) ;
- b) Centres of Excellence (STAR-CoE) can provide at least two of the activities of the STAR-C programme ; and
- c) Centres of Global Excellence (STAR-GCoE), long-established institutions showcasing the most advanced facilities and outstanding results on solar energy research.

Example of STAR-Centers



Goals and targets:

The goals of STAR-C include the following:

- a) to build a network of training and technical (STAR) centers in ISA member countries
- b) to develop or disseminate training programs for all solar energy stakeholders (technicians, trainers, project developers, engineers, policy makers, etc).
- c) to build up on some training centers to give them test and certification technical resources.

The STAR-C aims at creating a network of existing 10 centers of excellence (which will ultimately expand to 100) covering the geographical diversity of ISA member states. Centers of excellence are defined as ISA participating countries’ key facilities responsible for policy, project preparation, documentation, R&D, training, testing, standardization and conformity assessment in the field of solar energy. INES, NISE and SERIS have already been identified as prospective STAR-C centers of excellence. Ultimately, each ISA participating country should have direct access to at least one STAR-C either on a domestic or a regional level.

The ISA, the Bureau of Indian Standards (BIS) and FICCI with the support of Ernst & Young are setting the stage for a comprehensive reflection on the standardization and the development of benchmark criteria for STAR-C.

The ISA Secretariat welcomes all the propositions and feedbacks from the Member countries and existing training centers on solar energy.

Partnerships:

STAR-C collaborates closely with leading institutions from ISA countries worldwide, such as:

- a) French National Institute for Solar Energy (INES)
- b) Clean Energy Solutions Center (CESC) with prominent contributions from the Australian Ministry of the Environment and Energy and NREL (US National Renewable Energy Laboratory)
- c) Indian National Institute for Solar Energy (NISE)
- d) Solar Energy Research Institute of Singapore (SERIS)
- e) French Development Agency (AFD)
- f) Schneider Electric Foundation
- g) University of Fiji in association with the Pacific Islands Development Forum as part of the Center of Renewable Energy (CORE)
- h) Amity University (India)
- i) East African Centre of Excellence for Renewable Energy and Energy Efficiency (EACREEE)
- j) The Energy and Resources Institute (TERI) & TERI University
- k) Indira Gandhi Open University
- l) National Power Training Institute (NPTI), India

The ISA Secretariat call upon all the ISA member countries and partner organizations to join the STAR-C programme should they be interested.

Identifying needs:

The ISA has launched a survey on Member states' and prospective members' specific needs regarding solar energy. About 15 Member countries have answered the survey or expressed interest about the program. According to preliminary results, the general trend shows that participating states are mostly interested in short- to medium term trainings (to be implemented in the next 6 to 12 months) for all types of audiences (solar technicians, solar engineers, trainers, policymakers, investors). In particular, specific needs have been mentioned with regards to the drafting of solar projects and solar entrepreneurship. The ISA is currently in the process of fine-tuning the needs assessments of a first group of interested participating states, aiming at a comprehensive overview by the end of summer 2018.

Besides, the East African Centre of Excellence for Renewable Energy and Efficiency (EACREEE) has identified gaps in rural electrification as well as quality issues and insufficient technical capacity that hinder the development of solar PV systems in East Africa. The ISA Secretariat welcomes more feedbacks from the member countries and its partners.

Available and prospective content:

Best practices, lessons learned and educational resources (including MOOCs) used in the context of STAR-C will be made available to ISA partners as part of the ISA's Infopedia platform which is being developed under European Union funding and will be launched in December 2018.

More specifically, prospective content from our partners include:

- a) INES¹:
 - i. 9 e-learning modules on solar energy (off-grid; PV cells; BIPV-solar PV, solar thermal and lighting; self-consumption, off-grid theories; off-grid sizing; on-grid: off-grid and auto consumption) available in French and English from September 2018.
 - ii. Training of trainers (technician- and engineer-level) in PV system installation, practical application tools and basic teaching methods based on e-learning, completed by on-site workshops on technical platforms (4/10 days) subject to the availability of funds
- b) CESC²
 - i. 45 webinar series on solar energy for policymakers developed by NREL will be made available to ISA member countries in English starting from September 2018
 - ii. In person trainings at workshops delivered by trainers from the Solutions Center (depending on the availability of funds)
 - iii. The Solutions Center has offered to send an expert team to fill information gaps in the ISA website and provide further information into the Infopedia database.
- c) National Institute of Solar Energy³
 - i. Responsible of the ITEC programme on solar energy for Master Trainers⁴, which will select 165 professional / graduate engineers in ISA countries to train them as "Master Trainers" by March 2019 (5 per country). First batch in September 2019.

¹ <http://www.ines-solaire.org/?lang=en>

² <https://cleanenergysolutions.org/>

³ <https://nise.res.in/>

⁴ www.itecgoi.in (cf. annexure 2)

- d) EACREEE⁵
 - i. Conduct a 5-year project in cooperation with ISA and UNIDO on Standalone Solar PV capacity-building in East Africa in order to create an “East African Solar Energy Academy” delivering trainings in EAC Partner States
 - ii. Review of the existing solar PV training curriculum in the East African region and beyond
- e) Schneider Electric Foundation⁶:
 - i. Vocational training centers are being opened in several ISA countries to train technicians specialized in the installation and maintenance of solar appliances (cf. below)
 - ii. At least 10,000 young technicians to be trained in ISA countries between 2018 and 2022 through such training centers
- f) Barefoot College (within the “Solar Mamas” program):
 - i. In partnership with Schneider Electric Foundation, vocational training centers will be opened in some countries in order to train women in non-electrified rural communities to operate and repair solar light appliances.
- g) AFD:
 - i. AFD proposes to support the organization by the African Network⁷
 - ii. AFD support is also being explored in order to fund trainings of trainers in African countries

In addition, the CESC⁸ will provide access to its “Ask-an-Expert” service in order to deliver technical support and expertise on the drafting and design of solar projects for the benefit of governments and affiliated agencies.

Role of the ISA Secretariat:

- a) Create a network of 100 STAR-centers in the ISA Member countries. In the case a Member country doesn’t already have a training center on solar energy, the ISA Secretariat will provide the necessary support to create one if willing;
- b) Moderate this network and proposing cooperation projects on training, R&D, standardization (annual meetings);
- c) Support the STAR-C to become centers of global excellence;
- d) Gather on ISA Infopedia all the training materials on solar energy provided by the Member countries and the partners;
- e) Support the organization of physical training sessions in the 4 geographical zones of the Member countries;

⁵ <https://www.eacreee.org/>

⁶ <https://www.schneider-electric.co.in/en/about-us/sustainability/foundation.jsp>

⁷ <http://www.ancee-racee.org/>

⁸ <https://cleanenergysolutions.org/expert/profiles/renewable-energy>

- f) Provide assistance to the Member countries thanks to the “Ask-an-Expert” service delivered by CESC;
- g) Secure funding to set up training and certification centers in the ISA countries;
- h) Promote the STAR-C programme during outreach campaigns and events;
- i) Create synergies with ISA task forces (i.e. International Corporate Committee (ICC), Task Force for development of a Common Risk Mitigation Mechanism (CRMM), Global Leadership Task Force of Corporates on Innovation; International Committee of Chambers of Industry and Business (ICCIB), Global Task Force of Foundations for achieving the objectives of Sustainable Development Goal).
- j) If the Member countries requires any of the additional assistance they may approach ISA Secretariat who will explore possibilities of training and other capacity building activities.

Role of the ISA Member countries and partners:

- a) Member Country will provide their feedback on STAR-C programme and express their needs ;
- b) Member Country will identify existing and prospective centers that could become a STAR-C (training, testing, certification, innovation) ;
- c) In the case the member country doesn't have a solar energy center, it could take the support of the Secretariat and the Schneider Electric Foundation to create one. The Member country will be required to provide then a building / university / institution to host the training center and the list of the trainers / teachers who could be trained by Schneider Electric Foundation ;
- d) Member country will identify existing solar energy training if there is any ;
- e) Member country will identify existing standardization process if there is any ;
- f) Member country will identify existing fundings and partnerships to support STAR-C activities.

SOLAR CHAMPIONS / EXPERTS (The Equinox Circle)

Through a consultative process, the ISA will identify experts/champions (for technology, policy, financing, procurement/commercial, training, etc.) to be drawn from ISA countries. These champions will guide the ISA Secretariat and STAR-C network in specific programmes and also be available for advice/strategic inputs on a need basis. This group is to be modelled along the lines of Doctors without Borders, as a team of experts and resources who would provide specialist inputs wherever in the world, they are needed, acting in a neutral and impartial manner. They would champion solarization, identifying opportunities where energy access impacts are high but commercial interests are likely to be low to begin with, e.g., new untested technologies, community/social development applications; remote or under-served areas, etc. Experts/champions will also contribute to advocacy and dissemination as writers and speakers for ISA's publications and events.

They will also contribute to journal publications and guide the development of Solar Intelligence Reports. While the experts may be roped in on a voluntary basis initially, specific contributions may be sought from solar companies, solar associations or ISA financial partners to extend moderate compensation to experts over a period of time. The model of endowed professorships may be followed where a position is permanently paid for with the revenue from an endowment fund specifically set up for that purpose. Initially, the airfare will be paid by the ISA and the Host Country will bear other costs for project formulation.

The following are some of the areas for which experts/champions may be identified. If deemed necessary, groups of experts may also be constituted.

- a) Technology: solar technology applications, solar resource assessment, standards, testing and certification.
- b) Financing: financing and investment analyses, insurance, credit risks, due diligence, costing.
- c) Capacity building: digital and other knowledge platforms, design of training material and programmes, linkages with academia.
- d) Corporate issues: identifying corporates for partnerships, reaching out to corporates, branding, event planning.
- e) Legal and regulatory: energy laws and regulations, contracting and procurement, model agreements, tendering.
- f) Policy and planning: energy policy, climate policy, geo-politics, results-based monitoring frameworks.

Solar Training: Blended Programmes across Regions and Aspects

The ISA training activities will be geared towards preparing a workforce for rapid and effective adoption of solar technologies for various applications. The programmes may be blended, involving distance-learning modules; face-to-face/classroom sessions; visits to solar project sites; experimental sessions in laboratories; inspirational exchanges with solar sector leaders.

Digital learning material developed by ISA (some of which will form a part of the Infopedia) will contribute to distance learning programmes specially designed to cater to the widely dispersed audience across the Sunbelt region. The ISA is launching through IGNOU (Indira Gandhi National Open University) a distance learning/online programme related to solar water pumps in partnership with NISE, NPTI (National Power Training Institute), SCGJ (Skills Council for Green Jobs), SECI (Solar Energy Corporation of India), and USAID.

Over the next five years, the ISA is committed to training at least 100,000 solar technicians at NISE and other centres across member countries. These technicians will be equipped to install, repair, maintain, and customise a range of solar applications including solar-powered pumps, dryers, cold storage, water heaters and mini grids.

While some programmes will be focussed on a certain type of application, others for more advanced levels will cover a wider array of technologies. Alongside, over the next five years, similar programmes will be launched for other countries/regions in consultation with NFPs and regional hubs. New partners including INES (France) and other specialists and think-tanks will be invited to provide expertise on specific regions and aspects (technology, specific applications/products, financing, policy, regulation, developmental impacts, etc.)

For ISA, eventually its regional training centres may evolve around STAR-C and its network of regional hubs with the involvement of and contribution from member countries in the region.

PROMOTING AND RECOGNIZING INNOVATION

Through awards and incubation possibilities, the ISA will accelerate and catalyze innovation in the solar sector.

Collaborations for Cutting-Edge Research

Four institutions with a large body of research including applied research in the solar sector have been identified as possible collaborators to provide inputs in terms of the state-of-the-art in the sector including solar photovoltaics (PV), solar thermal, e-mobility and energy storage for ISA's applied research on various solar technology applications. These institutions are the National Solar Energy Institute (INES) - France; the Fraunhofer Institute for Solar Energy Systems (ISE) – Germany; the National Renewable Energy Laboratory (NREL) – USA; and the National Institute of Solar Energy (NISE) – India.

Solarization Prize

As part of its commitment to expanding solarization to provide affordable and sustainable energy access and to power a range of community and productive services, a Solarization Prize will be announced to encourage under-graduate and post-graduate students in academic institutions in ISA member countries to come up with innovative ideas relating to solarization. These innovations may be in the form of technologies, financing or policy mechanisms.

A beginning would be made in this effort with the help of Climate Policy Initiative, India along with some of the premier institutes to lay out the structure and process for establishing an incubator-accelerator for the solar space.

ISA Solar Awards

ISA Secretariat has developed a Solar Award Policy to promote and incentivize advances made in the solar energy sector under the aegis of ISA. The draft policy provides for funding Solar Awards by any ISA prospective member countries. However, if a particular member country accepts the responsibility of funding the award, the same member country shall have the authority to suggest a different title for the award as well. There will be no financial implication for ISA.

The Government of India is considering instituting a Solar Awards programme to recognize, promote and incentivize advances made in the solar energy sector under the aegis of ISA. Further, the State Government of Haryana, India has instituted a solar award under the aegis of ISA for women solar scientists on the name of Late Ms. Kalpana Chawla, an astronaut and the first woman of Indian origin in space.

Research and Development

As stated in the ISA Roadmap Programming Strategy developed by UN in 2017, collaborative R&D efforts of ISA (done under the supervision of its globally-recognized expert partner research agencies), may be centred around STAR-C and coordinated internationally through its regional hubs. The focus of R&D activities would have to be on application and scaling up. Therefore, research would be centred around issues raised in member countries on the ground level. Concerns are likely to be around costs/affordability, customizing to local climatic conditions and cultural preferences, scale adjustments to suit needs etc. Therefore, there is a need to move away from conventional pure/academic research to purposive and applied research. Collaboration between researchers and industry would be critical with each bringing in a set of strengths.

Typically, research organizations are able to offer a band of graduate students, subject expertise in the form of faculty and research teams, knowledge of patent rights, access to cutting edge scientific equipment and research grants from various sources. Industry, on the other hand, can provide crucial user feedback including on-ground challenges that can become research goals, knowledge, and experience in commercialization, integrated work-learning opportunities for students and sponsor research activities.

Market Scoping Activities

In the next five years, the ISA envisages the expansion of its efforts to cover new solar applications that (a) can provide first time clean/formal energy access, (b) can provide output/service comparable in cost and quality to formal/conventional energy supply, and (c) can flexibly connect with existing or upcoming formal energy networks (such as the electricity grid). With a view towards expanding the scope of existing applications and exploring new ones, ISA will engage in structured market scoping in member countries, outreach activities with potential investors and developers while also helping member countries to develop/strengthen solar mission documents to strategize the way ahead.

Country Solar Mission / Roadmap Documents

Countries like India have seen a visible surge in activity in the solar sector following the development of Solar Mission documents, which have helped to systematically plan government and non-government activity in the sector. The ISA proposes to work with member countries directly and through the regional hubs to strengthen/develop solar mission/roadmap documents.

A key component of developing and strengthening country roadmaps for solar technologies towards expanding the adoption of solar technologies is an in-depth understanding of user needs. Given the local flavour required for this effort, the various regional centres and NFPs will be identified and mobilized to conduct market scoping in member countries.

4. Strategic Engagement, Partnerships and Strengthening ISA network

The activities included in the table below would be implemented in the next two calendar years for strategic management, partnerships and strengthening ISA’s network.

Strategic Management	
Development of Project Formulation Unit	Hiring of agencies/experts/consultants for developing Project Formulation Unit & development of ISA Rate Contract Platform.
Development of ISA Rate Contracts Platform	
Financial Assistance to National Focal Points	Providing financial assistance to support NFPs for ISA related administrative activities.
ISA Third Wednesday Sun Meet Event with Contact Points and other stakeholders	Organizing Monthly Get-togethers of ISA along with Contact Points & other stakeholders to enhance the pace of ISA Programmes and capacity building.
Hiring agency for mobilization of Corpus Fund Enhancement Scheme for ISA	Hiring of agencies/experts/consultants for mobilization of Corpus Fund Enhancement Scheme (\$1000 mn) for ISA
Holding ISC and Assembly Meetings	Organization of Assembly Meet of ISA
National Focal Point Conclaves	Organization of Conclave of National Focal Points including Field Visits, meetings for preparation of Country wise Road Maps.
Fellowships	Providing Fellowship to 20 Mid Carriers from 20 ISA Ratified Countries in the field of Solar Energy.
ISA study tours	Launch a scheme, including a ISA study tours Fund (ISA-STF), to undertake International Study Tours
Hiring of consultants/experts	Hiring of consultants/experts for supporting ISA Activities.
Others	Miscellaneous and discretionary expenditures

5. Management support- strengthening the ISA Secretariat

Headed by the Director General, the ISA Secretariat acts as the fulcrum, leading several activities and coordinating others in the ISA institutional structure. ISA's ability to deliver its programmatic responsibilities depends on effective, transparent, efficient and accountable administration and management services. ISA aims to maintain a lean administrative structure while achieving the highest levels of efficiency, accountability and effectiveness.

The ISA secretariat will ensure the efficient, effective and transparent allocation of the human and financial resources and other assets of the organization to meet its strategic and operational priorities and promote transparent resource management, effective reporting and strong accountability.

Finance

To support sound financial management and greater efficiency, the ISA is outsourcing its financial management to a Chartered Accountant Firm to continue the administration of financial resources of the Secretariat in compliance with ISA's Financial Regulations and Procedures, as well as the relevant legislative mandates, accounting, and finance policies to facilitate sound management of all resources entrusted to the Secretariat. This will include the development of key performance indicators related to monitoring and reporting of financial implementation consistent with approved activities.

ISA will provide effective financial support and ensure the receipt of a clean external audit opinion. Processes and procedures will continue to be closely monitored for further improvement to ensure effectiveness and efficiency, as well as accountability through accurate and regular reporting and adherence to Rules and Regulations. In addition, the management of ISA's budgetary resources will remain central to facilitate the coherent utilization of approved budget and monitoring of the budgetary resources, in coordination with divisions – Finance & Investment Programme, Strategic Management & Communications and Human Resource Management. This function will also support internal and external audit processes; ensure effective follow-ups and implementation of all audit recommendations; promote and enforce sound risk management systems and practices aimed at improving the overall performance and accountability of the Secretariat.

Human Resources

Attracting, developing and retaining high-quality staff will be key to ISA's priority. To meet this objective, ISA will focus on strategic workforce planning to meet its needs in a timely manner. This will include proactive sourcing of candidates and staff development. Human resources policies and procedures will continue to be refined to ensure responsiveness to the needs while safeguarding the Secretariat's set principles and policies. Performance management and staff development will be addressed in a systematic manner.

The performance management system will be strictly applied to ensure excellence and alignment of skills with the needs of the Secretariat. Human Resources policies will also include an active promotion of staff wellbeing and introduction of policies, where appropriate, to facilitate work-life balance. ISA will also develop a Business Continuity Plan to enable the Secretariat to maintain continuity of highly critical functions during and following a disaster and/or crisis event.

The ISA secretariat proposes to recruit 21 international professionals and 9 General Staff. UN rules will be applied in making the recruitments, in remuneration and benefits. Apart from this, there will be up to 20 officers on secondment and deputation. Support staff will be outsourced through NISE who have handled ISA's birth as per cabinet decision of the Host Country and provided rent free accommodation. A proposed ISA Secretariat Organogram is at Annexure XI.

The proposed budget requirements for the period January to December 2019 totals \$1.7m for 30 posts, under Management Support, comprising: regular positions; deputations; and secondments. The estimated operational expenses totals to \$0.22m which includes meetings, travel of staff, contractual services, supplies and materials and information technology, etc.

Procurement

Ensure that procurement of all goods and services, required for the proper functioning of ISA are in line with general principles that govern all procurement transactions, in line with the Financial Regulations. These include fairness, integrity, transparency of the procurement process, best value for money and effective competition. Procurement activities will be strategically implemented to benefit from timeliness and economies of scale, while ensuring effective competition and timely procurement of goods and services with best value for money. The procurement policies and manual will be reviewed and updated as appropriate.

Facility management and travel services will also be strengthened with efforts made to find more cost-effective and efficient ways of holding meetings such as through investing in video conferencing facilities at ISA.

General Services and Travel

Provide cost-effective and efficient facility management and travel services, as well as other general services for the Secretariat. As ISA is in the establishing stage and office space is in planning stage, it entails continuous review, updating, remodelling and maintenance of building management systems to ensure ISA is taking advantage of the modern facilities. Logistical arrangements for ISA events and workshops worldwide will continue to be provided, including ticketing, venue, hotel bookings, transportation and other logistical matters. Continuous efforts will be made to continue to find more cost effective and efficient ways of managing events, including thorough increased use of video conferencing facilities.

ICT Service

ISA will provide effective ICT service for its office and ensure optimal ICT resource utilization. ISA will establish an electronic archiving system for all ISA’s official documents for easy access and safekeeping. ISA will support the external and internal communication by maintaining Information and Knowledge Management portals, collaboration tools and conference and meeting facilities. ICT services will facilitate effective programme implementation and internal communication.

Proposed ISA Secretariat staff strength						
Sl. No.	Details	Year				
		2018	2019	2020	2021	2022
1.	ISA Staff	14	22	24	26	30
2.	Staff on Secondment and Deputation	6	8	12	16	20
	Total	20	30	36	42	50

7. Proposed budget for the calendar years 2019 and 2020

As per the Article VI (1), Budget and Financial Resources, of the Framework Agreement of the ISA, operating costs of the Secretariat and Assembly, and all costs related to support functions and cross-cutting activities, form the budget of the ISA. They are covered by:

- a) Voluntary contributions by its members, partner countries, UN & its agencies and other countries;
- b) Voluntary contributions from private sector. In case of a possible conflict of interest, the Secretariat refers the matter to the Assembly for approval of the acceptance of the contribution;
- c) Revenue to be generated from specific activities approved by the Assembly.

The Secretariat will make proposals before the Assembly to establish and enhance a Corpus Fund which will generate revenues for the budget of the ISA, with initial dotation of US \$16 million.

Financial resources required for the implementation of a specific Programme, other than administrative costs falling under the general budget, are assessed and mobilized by countries participating in this Programme, with the support and assistance of the Secretariat.

The finance and administration activities of the ISA other than Programmes may be outsourced to another organization, in accordance with a separate agreement to be approved by the Assembly.

Given that the ISA is presenting the first budget and work plan of ISA, the IDG/DG will be authorized to make inter changes in the interest of ISA and implementation of projects in general from one head to another and to fund any contingencies and new initiatives. General posts to be filled up will depend on outsourcing under Article VI.5. The number of International posts to be filled up will depend on the number of officers ISA mobilizes on secondment basis from member countries and partners.

Estimated Fund Status for the Calendar Year 2019

Cash Inflow	Amount (in US Million \$)	
Opening fund balance as on 1 st Jan, 2019	=	6.9999
Corpus fund received from		
• Opening Balance	=	24.3760
Grant received from MNRE / GOI	=	2.3077
Total Interest received		=Nil*
• Saving Bank Account	=	0.0015
• Fixed Deposit (Net of TDS)	=	2.0004
Total Cash Inflow (A)	=	11.3096
Cash Outflow		
• Personnel Cost	=	1.6039
• Programme Cost	=	4.9616
• Office and Admin Expenses	=	0.5210
Total Cash Outflow (B)	=	7.0865
Total Closing fund balance	=	4.2231
As on 31 Dec 2019 (A - B)		
Expected amount to be received back through mobilization from ISA member countries, if received back (C)	=	4.0123
Total expected closing fund balance	=	8.2354
As on 31 Dec 2019 (B – C)		

*Funds Received from Corpus have been frozen in Fixed Deposits.

Table: Proposed budget for the calendar years 2019 and 2020 (in USD)

Thematic Areas	Proposed budget for calendar years 2019 and 2020 (in USD)	Proportion of the total budget (%)
Affordable Finance at Scale (AFS) Programme	528,000	5.62%
Scaling Solar Applications for Agriculture Use (SSAU) Programme	819,923	8.73%
Scaling Solar Mini Grids (SSMG) Programme	446,825	4.76%
Scaling Rooftop Solar (SRS) Programme	731,923	7.79%
Scaling E-mobility and Storage (SEM&S) Programme	302, 076	3.22%
Capacity Building	911, 818	9.71%
Communication, Knowledge Management & Outreach	331,692	3.53%
Strategic Engagement, , Partnerships and Strengthening ISA Network	604,514	6.44%
Management Support - 2019	2,218,489	23.62%
Management Support - 2020	2,495,508	26.57%
Grand total	9,390,769	100.00%

Note: Budget for the year 2020 is prospective in nature.

See a detailed break-down of the budget in Annex.

Part 1: ISA Secretariat’s Administrative Budget

Management Support & Administration, Strategic Management and Cross-cutting activities forms Part 1 of the budget

	<i>Amount in USD Millions</i>
Management Support & Administration	4.7
Communication, Knowledge Management & Outreach	0.33
Strategic Engagement	0.6
Total	5.65

As per the Article VI (4) Budget and Financial Resources, financial resources required for the implementation of a specific Programme, other than administrative costs falling under the general budget, are assessed and mobilized by countries participating in this Programme, with the support and assistance of the Secretariat.

Part 2: Budget to be mobilized by ISA Member Countries

Therefore, Programme Specific Activities to be mobilized by member countries participating in the Programmes.

Amount in USD Millions

Programme 1 to 5 proposed budget	2.83
Capacity Building	<u>0.91</u>
Total	3.74

Note: ISA Secretariat proposes to create the Working Capital to fund the Part 2 of the Budget i.e. Programme Specific Activities and later when the funds are mobilized will be adjusted against the funds loaned.

8. Monitoring and Evaluation

Monitoring and evaluation activities will be aligned with ISA initiatives and indicators. In support of the ISA vision and action plan, and in accordance with the central aims of ISA, ISA will measure and report on the global stakeholders’ and funders’ contribution to making solar energy development strategies more effective, efficient, inclusive and sustainable:

- a) The ISA will track the increase in investments in solar energy in ISA member countries.
- b) The ISA will track efficiency by reviewing the reduction in cost of solar products.
- c) The ISA will track inclusivity by reviewing the number of people benefitted with energy access who did not have access earlier.

The ISA will track environmental sustainability by measuring the increase in solar installations in terms of GW.

ISA alone is too small and new to contribute to any measurable outcomes in the first FYP.

Therefore, in terms of its own performance measurement, ISA will track its quantifiable outputs that are all centered in the direction of influencing a single outcome, which is an increase in the rate of adoption of solar energy in Sunbelt countries.

ISA's own quantifiable outputs in YEAR ONE will include:

- a) Number of countries supported to prepare high quality Solar Roadmaps
- b) Number of Solar Roadmaps that are submitted with the help of ISA to the existing high-level working groups responsible for the country's national renewable energy master plan.
- c) Number of people supported with solar training and capacity building at different levels.
- d) Number of Star-C dialogues initiated in ISA countries.
- e) Number of countries in which there is some measurable on-ground progress in all four of the programme areas, towards planning and mobilizing investment.
- f) Value of in-kind resources mobilized from financing partners to help ISA member countries.

As a part of commitment to ISA members, regular reviews of ISA, FYP progress will be undertaken using mechanisms and tools proposed by the ISA Secretariat approved by the Assembly. These reviews will be designed to monitor the efficient, transparent and accountable use of resources. In accordance with the ISA procedures, partners/consultants will provide periodic reports on the progress, achievements and results of their assignments.

Mid-way through ISA YP, a comprehensive programme review will be undertaken with the aim of tracking progress and, if required, adjusting the programme direction. The ISA YP will be subject to independent evaluations during the mid-term and final year of the programme cycle with the aim of assessing programme achievements and providing data of strategic use in the design of next ISA YP.

A number of management tools will be introduced during ISA YP implementation. Result-based management will be systematically integrated across all ISA supported programmes and projects. Participatory approaches to monitoring and evaluation will be developed and applied in partnership with member countries. Financial monitoring tools will be developed and implemented to ensure transparent and efficient use of resources. Audits will be commissioned by ISA and undertaken by private audit services and assessments and audits of non-government implementing partners will be conducted in accordance with the policies and procedures of ISA.

Implementing partners will be asked to cooperate with ISA to monitor all activities supported by ISA funding and will provide access to relevant financial records and personnel responsible for the administration of funds provided by the ISA. To that effect, implementing partners will be asked to:

- a) co-operate with ISA to monitor all activities supported by ISA funding and will provide access to relevant financial records and personnel responsible for the administration of cash provided by the ISA;

b) programmatic monitoring of activities following ISA standards and guidance for site visits and field monitoring; and

c) special or scheduled audits.

The ISA Secretariat, in consultation with member countries and with inputs from STAR-C and regional hubs, will elaborate an annual audit plan and seek approval from the Assembly. To facilitate assurance activities, implementing partners and ISA may agree to use a programme monitoring and financial control tool allowing data sharing and analysis.

Objective: To effectively and efficiently manage the Alliance and its Work Programme	
Expected Accomplishments in 2019	Indicators of Achievement in 2019
Provision of support to members of the committees of ISA	Timely delivery of documentation ,Effective Secretariat support to all the high-level meetings to enable efficient policy making.
Improved quality in the formulation and implementation of the Programme of Work.	Effective programme formulation, implementation and evaluation.
Timely and adequate mobilization of financial resources.	Percentage of resources mobilized in a timely manner to implement the programme of Work. Enhancement in Corpus Fund.
Capacity Building initiatives launched.	Handholding on establishment of I-Star C centers (some upgrading and some new construction) and certifications thereof.
Solar Roadmaps completed and shared with national renewable energy working groups.	Number of roadmaps completed and presented to national authorities.
Preparation of Bankable Projects.	Number of projects developed in member countries.
Operationalization of risk mitigation funds.	Number of financial instruments developed and funds established.
Mobilization of Investments in Solar Sector.	Amount of investments flowed in solar sector.

Annex

Proposed Annual Work Plan and Budget for Calendar Years 2019 and 2020

Thematic Areas	Division	PLANNED ACTIVITIES	Planned Budget for 2019 & 2020 (USD)	Expected Outcomes in members countries
Affordable Finance at Scale (AFS) Programme	Finance & Investment Division	In collaboration with National Focal Points and Country Representatives, need assessment questionnaires for Affordable Finance at Scale will be completed and shared with National Focal Points and will be available at ISA website.	-	Knowledge about financial requirements for solar energy deployment
		Generate awareness to enable the uptake of the two instruments formulated and implemented by IREDA for India in ISA countries and to replicate by Financial Institutions in their respective countries. To persuade Exim Bank to make it a condition that member countries should make such facilities for their developers	-	Additional Flow capital into the sector
		Strengthening a toolkit for Exploring Affordable Financing Mechanisms for Solar Energy - ISA will collaborate with Financial partners / Think Tanks to facilitate development of a toolkit in a layman language which can be translated in all UN languages.	7,692	Increase ability of policy makers to raise finance
		Operationalization of Joint declaration with bilateral organizations	-	Increased outreach and enhanced flow of capital & capacity building
		Operationalization of Joint declaration with multilateral development banks and organizations	-	Increased outreach and enhanced flow of capital & capacity building
		Mobilization of concessional financing and earmarking for dedicated solar projects in ISA countries with Bilaterals, ODA Countries, Multilaterals, IFI's and other financial players	-	Adequate financing of Solar Projects
		To coordinate with the Multilaterals (World Bank, EIB, EBRD, ADB, NDB, AIIB, GCF, GGGI, etc.) to finalize on the activities envisaged in the joint declarations through an action matrix	-	Achievements of objectives under Article 2 of ISA FA
		Create awareness among ISA African member countries regarding the decision of Gol earmarking 15-20% of US\$ 10 billion LOC for Africa for solar projects and Government of France has committed € 1 billion for solar projects in ISA Member Countries	-	Awareness about Solar Finance
		Coordination with DEA, MEA, Exim Bank and MNRE, Gol for \$ 2 billion line of credit earmarked for African countries and with AFD of France for € 1 billion commitment via Project appraisal & multi-country ISA Solar Trade delegations with the help of World Bank and other partners.	-	Faster deployment of Solar Projects
		Coordination with DEA, MEA and MNRE, Gol for \$ 1 billion line of credit proposed by ISA for non-African countries	-	Faster deployment of Solar Projects
		To Coordinate CRMM study with the Task Force, Member Countries and World Bank	61,538	Increased flow of capital & credit to the solar sector
		Operationalization of regional risk mitigation funds	-	

		To adopt and circulate harmonized and model documents such as for PPA, PSA, VGF and other contractual documents and regulations etc. for bankable projects finalized by IRENA	-	Reduced in Transaction costs and Tariff
		To conduct discussions with the Corporate sector, on the optimal terms and conditions for investment flows in ISA member countries; the risk analysis criteria used for solar power generation asset financing, and their expectations in terms of regulatory environment	15,385	Increased flow of capital & credit to the solar sector
		To hold a workshop in collaboration with World Bank and others to bring together key stakeholders such as International Financial Institutions, Multilateral Development Banks, Bilateral Agencies and other financing partners to deliberate on developing financial roadmap including first loss facility and minimization of hedging costs, bond raising in locally denominated currencies, insurance products, innovative financial instruments, etc.in ISA countries.	76,923	Generation awareness among policy makers on project finance
		Training Courses in Member Countries on Solar PV business models for Banks in ISA countries such as capex, opex and reverse auctions including deputations of experts.	30,769	Enhanced knowledge & capacity building on Solar PV business models
		Procurement Training for ISA members, and courses on Public Private Partnership including deputations of experts	30,769	Enhanced knowledge of International Procurement and PPP models among member countries
		Training for technical, financial, commercial, legal and communications aspects of Solar PV promotion	30,769	Enhanced knowledge & capacity building on various aspects of Solar PV applications
		Constitution of a Global Leadership Task Force of Corporates on Innovation to provide strategy to ISA for mobilization of \$ 1000 billion by the year 2030	7,692	Enabling all ISA member countries to be able to access solar energy in an equitable manner
		Action to Transaction meets for developers and financial institutions and development of app in INFOPEDIA to facilitate match making	15,385	Better facilities of financing projects and development of pipeline projects.
		Workshop on Financial Innovation and Best Practices in ISA countries	30,769	Increased flow of capital & credit to the solar sector
		Establishment of develop the off-Grid Fund	61,538	Uptake of off grid Solar appliances
		Organization of Continent/Region wise Investment Workshop	92,308	Organization of Continent/Region wise Investment Workshop (Budget category C)
		Regular Interaction with NFPs and Country Representatives	-	Implementation of Programme with the guidance of NFPs and CRs under Article 3
		Aggregation of risk and resources (by outreach and communications)	-	Increased flow of capital & credit to the solar sector
		Hiring of Consultant/Expert	18,462	
		Misc and contingencies (10%)	48,000	
			Total (A)	528,000
Scaling Solar Applications for Agriculture Use (SSAU) Programme	Programme Division	In collaboration with National Focal Points and Country Representatives, need assessment questionnaires for Solar Water Pumps(SWPs) and Solar Lighting systems (SLS) will be completed and shared to all National Focal Points and will be available at ISA website.	4,615	Knowledge about SWPs and SLS requirements
		Obtaining of data on Demand Aggregation of Models, Type, and quantity of SWPs and SLS will be completed along with Roadmaps and Baseline study for e.g. Hydrology data app as developed by CEEW for India	76,923	Better Programme implementation

		Designing Solar Water Pumping system, Street lighting System, home lighting system/off-grid application: Specifications, Standards, Performance Benchmarks, Testing and Certification Protocols through identified test centres in collaboration with NFPs and CPs	92,308	Need based systems ensuring best International quality and standards
		Development of Base document by selected agency on Global Tendering: best practices for procurements, installation, maintenance for SWPs	153,846	Harmonizing tendering documents based on global best practices
		Monitoring and field inspection by Experts/Consultants	192,308	Ensuring further improvement in standards and recommended practices
		Completion of tender process, fixation of the base price(ex-factory), identification of manufacturer(s), supplier(s) for each of the Participating ISA Member Countries, (Financers, signing of purchase agreements, etc.) for SWPs during Action to Transaction meets	169,231	Ensuring quality control and better protection for the buyer
		Regular Interaction with NFPs and Country Representatives through INFOPEDA / Webinar / Video Conferencing	-	Implementation of Programme with the guidance of NFPs and CRs under Article 3
		Development of outreach for each programme	19,231	Increase ISA's programmes outreach in the public domain
		Aggregation of risk and resources (by outreach and communications)	-	Increased flow of capital & credit to the solar sector
		Hiring of Consultant/Expert	36,923	To support the programme implementation
		Misc and contingencies (10%)	74,538	
		Total(B)	819,923	8.73%
Scaling Solar Mini Grids (SSMG) Programme	Programme Division	In collaboration with National Focal Points and Country Representatives, need assessment questionnaires for Solar Mini Grids (SMGs) will be completed and shared to all National Focal Points and will be available at ISA website.	-	Knowledge about SMGs requirements
		Obtaining of Data on Demand Segregation conceptualization of standard min-grid Models, and targets for the year 2018 will be fixed based on data received (Baseline study to be conducted by Think-tank's)	92,308	Better Programme implementation
		Monitoring and field inspection by Experts/Consultants	92,308	Ensuring further improvement in standards and recommended practices
		Assistance in designing of Specifications, Standards, Performance Benchmarks, Testing and Certification Protocols through identified test centers in consultation with NFPs and CPs	76,923	Need based systems ensuring best International quality and standards
		Assistance in identification of contractors, financers, banks, signing of deals between manufacturer(s), financers and the participating member countries by selected agency in consultation with NFPs and CPs	88,512	Bringing affordable and reliable solar applications for scaling SMGs
		Development of outreach for each programme	19,231	Increase ISA's programmes outreach in the public domain
		Aggregation of risk and resources (by outreach and communications)	-	Increased flow of capital & credit to the solar sector
		Regular Interaction with NFPs and Country Representatives		Implementation of Programme with the guidance of NFPs and CRs under Article 3
		Hiring of Consultant/Expert	36,923	To support the programme implementation
		Misc and contingencies (10%)	40,620	
				Total(C)

Scaling Rooftop Solar (SRS) Programme	Programme Division	Development and launch of Programme on Scaling Rooftop Solar	46,154	Dissemination of the programme
		Framing of need assessment questionnaire, circulation to all National Focal Points & Country Representatives and compilation of report (Organsing 2 Workshops)	53,846	Knowledge about the potential and need based requirement of SRS
		Expression of Interest, assessment of rooftop potential, demand aggregation and development of projects through Technical Assistance by Experts / Think-tank's / Consultants	46,154	Better Programme implementation
		Assistance for development of rooftop solar policy, net metering regulation and building codes for participating member countries in consultation with NFPs and CPs	23,077	Enabling environment for investments in SRS
		Assistance in development of Model bidding document by selected agency on Global Tendering: best practices for procurements, installation, maintenance, and power purchase agreements in consultation with NFPs and CPs	169,231	Harmonizing tendering documents based on global best practices
		Assistance in designing of Specifications, Standards, Performance Benchmarks, Testing and Certification Protocols through identified test centers in consultation with NFPs and CPs	76,923	Need based systems ensuring best International quality and standards
		Assistance in identification of rooftop developers and bidding of aggregated demand capacities. Signing of contracts with participating member countries in OPEX / CAPEX models by selected agency	76,923	Bringing affordable and reliable solar applications for scaling SRSs
		Monitoring and field inspection by Experts/Consultants	92,308	Ensuring further improvement in standards and recommended practices
		Solar rooftop high visibility demonstration projects in participating member countries on an Opex model by reputed companies across the globe		Assist in easing out the policies of SRSs
		Development of outreach for each programme	19,231	Increase ISA's programmes outreach in the public domain
		Hiring of Consultant/Expert	61,538	To support the programme implementation
		Aggregation of risk and resources (by outreach and communications)	-	Implementation of Programme with the guidance of NFPs and CRs under Article 3
		Regular Interaction with NFPs and Country Representatives	-	To support the programme implementation
		Misc and contingencies (10%)	66,538	
			Total(D)	731,923
Scaling E-mobility and Storage (SEM&S) Programme*	Strategic Management and Communication Division	Development and launch of Programme on E-mobility	3,077	Dissemination of the programme
		Framing of need assessment questionnaire, circulation to all National Focal Points & Country Representatives and compilation of report (Organsing 2 Workshops)	15,385	Knowledge about the potential and need based requirement of SEM&S
		Expression of Interest, assessment of rooftop potential, demand aggregation and development of projects through Technical Assistance by Experts / Think-tank's / Consultants	30,769	Better Programme implementation
		Assistance for development of e-mobility and solar activities for participating member countries in consultation with NFPs and CPs	7,692	Enabling environment for investments in SRS

		Assistance in development of Model bidding document by selected agency on Global Tendering: best practices for procurements, installation, maintenance in consultation with NFPs and CPs	15,385	Harmonizing tendering documents based on global best practices
		Assistance in designing of Specifications, Standards, Performance Benchmarks, Testing and Certification Protocols through identified test centers in consultation with NFPs and CPs	30,769	Need based systems ensuring best International quality and standards
		Assistance in identification of contractors, financiers, banks, signing of deals between manufacturer(s), and the participating member countries by selected agency of the aggregated demand capacities in consultation with NFPs and CPs	23,077	Bringing affordable and reliable solar applications for scaling SEM&S
		Monitoring and field inspection by Experts/Consultants	92,308	Ensuring further improvement in standards and recommended practices
		Development of outreach for each programme	19,231	Increase ISA's Programmes outreach in the public domain
		Hiring of Consultant/Expert	36,923	To support the programme implementation
		Aggregation of risk and resources (by outreach and communications)	-	Implementation of Programme with the guidance of NFPs and CRs under Article 3
		Regular Interaction with NFPs and Country Representatives	-	To support the programme implementation
		Misc and contingencies (10%)	27,462	
		Total(E)	302,077	3.22%
Capacity Building	Human Resource Management Division	Establishment of i-STAR-C	497,972	Establishment of Centers of Excellence for Solar Energy and Coordination unit in the 3rd Floor of the Surya Bhawan
		Training of Trainers for Solar Mechanics for ISA Member Countries	384,615	Availability of skilled solar engineers in ISA member countries
		Certification programmes on Solar Energy Applications	15,385	E-learning platform – With IGNOU etc., for ISA Member Countries
		Hiring of Consultant/Expert	13,846	To support the programme implementation
		Total (F)	911,818	9.71%
Communication, Knowledge Management & Outreach	Strategic Management and Communication Division	ISA Quarterly newsletter	-	Improved information and regular communications
		ISA Solar intelligence reports for ISA Member Countries (Budget category C)	-	Knowledge generation and dissemination
		ISA Digital INFOPEdia Platform - e-Knowledge Portal	-	Common e-knowledge interactive platform for Solar Sector
		Participation in conferences (National/International/Exhibitions)	92,308	Awareness generation and dissemination information about ISA, its activities and programmes
		Participation to regional and international events - RE-Invest - COP climate conference - Intersolar Munich / India - WSDS TERI Delhi - WFES Abu Dhabi - other conferences, summits, workshops, organized in ISA member countries or in host country	92,308	Provide a common platform to manufacturers, project developers, investors and other stakeholders in the solar energy space
		Communication/Publications, Social media, articles etc	-	Updated Knowledge dissemination and Increase ISA's brand-value and visibility in the public domain

		Updating the ISA website	38,462	Reaching ISA member countries, stakeholders, academia, and public at large with information, updates, activities and partnerships of ISA
		Web based E-office and LAN etc.	30,769	Ease of Accessibility , Easy storage, and paperless office
		Identification of communication agency to develop ISA communication and Social Media Strategy	15,385	Increase ISA's brand-value and visibility in the public domain
		Enabling work on Joint declaration between ISA and UNDP	-	Synergy with UNDP programmes
		Organizing ISA Expo	32,308	Provide a common platform to manufacturers, project developers, investors and other stakeholders in the solar energy space
		Misc and contingencies (10%)	30,154	
		Total(G)	331,692	3.53%
Strategic Management	Human Resource Management Division	Development of Project formulation Unit	61,538	To formulate solar projects for member countries
		Development of ISA Rate Contracts Platform	15,385	Best price of solar applications for ISA member countries
		Financial Assistance to National Focal Points	30,769	Better Coordination of ISA programmes and activities
		ISA Third Wednesday Sun Meet Event with Contact Points and other stakeholders	18,462	Achieving ISA objective with coordinated actions
		Updating Database of National and Contact Points & Country Representatives of ISA member countries	-	Availability of Key contacts in ISA Member Countries
		Hiring agency for mobilization of Corpus Fund Enhancement Scheme (\$1000 mn) for ISA	7,692	Building Corpus which will help ISA to meet its expenditures
		Solar Awards Programme	-	Promote and incentivize advances made in the solar energy sector
		Holding ISC and Assembly Meetings	61,538	To make decisions concerning the implementation of ISA Framework Agreement
		Interns programme (40 per year, i.e. 25 International,15 National)	-	Get exposure on the mission and objectives of ISA and solar energy sector
		Increase technology options for Energy Access through R&D	-	Availability of latest technology for ISA countries
		10 action points presented by the Hon'ble Prime Minister of India in the first summit and founding conference of the ISA		Promotion of the use of solar energy through the complete ecosystem from technology availability and development, economic resources, reduction in prices, development of storage technology, mass manufacturing, and innovation
		National Focal Point Conclaves	123,077	Development of provisional road maps for Solar Energy Programmes of individual ISA member countries.
		Fellowships (\$ 10,000 / fellow * 20 fellows)	200,000	Developmental and long term capacity building needs of member countries by providing highly knowledgeable and qualified professionals for management of solar energy programmes.
		Hiring of Consultant/Expert	13,846	To support the programme implementation
Enabling work on Joint declaration between ISA and Climate Parliament ,	-	Cooperation with members of national and regional parliaments on solar energy		

		Finalizing Joint declaration with UN Agencies (ILO,EU,ESCAP, UN Women etc.)	-	Promotion of Solar Energy Globally through support and collaboration
		Forge Think-tanks, Foundations & Social Non-Profit Partnerships as Partner Organizations	-	
		ISA international study tours		
		Misc and contingencies (5%)	72,206	
		Total (H)	604,514	6.44%
Management Support - 2019	Human Resource Management Division	Management and Administration Cost (Salaries of staff, consultants, volunteers, Hiring of staff expenses etc.)	2,030,673	21.62%
		Contingency	187,815	2.00%
		Total(I)	2,218,489	23.62%
Management Support - 2020	Human Resource Management Division	Management and Administration Cost (Salaries of staff, consultants, volunteers, Hiring of staff expenses etc.)	2,307,692	24.57%
		Contingency	187,815	2.00%
		Total(J)	2,495,508	26.57%
Grand Total(A+B+C+D+E+F+G+H+I+J)			9,390,769	100.00%