

The Global Solar Energy Standardisation Initiative



Mobilisers of the Standardisation Initiative



The International Renewable Energy Agency (**IRENA**) is an intergovernmental organization with a mandate from countries around the world to support their transition to a sustainable energy future and to serve as the principal platform for international cooperation, a center of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy.

IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity.

Website: <http://www.irena.org/>

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Terrawatt Initiative ('TWI') is an independent global non profit association. It was forged during the historic Paris Agreement, in 2015.

TWI's mission is to make the energy clean, modern and universally accessible. We do so by systematically focusing on developing tools and programs aims to reduce the cost of clean electricity in the industry. We leverage real economic forces as the drivers of growth.

BLACKROCK



Website: <https://terrawatt.org>

Global Solar Energy Standardisation Initiative

Objective: Open-source, free, standardized and simple set of contracts for global development of solar

Target: 2018

The Solar Energy Standardisation Initiative

In late 2016 – IRENA and the Terrawatt Initiative launched the '**Global Solar Energy Standardisation Initiative**'. Which aims at standardising contracts to streamline the global development and finance of solar projects, to assist in meeting the objectives and quotas the governments around the world set via the '*United Nation's Sustainable Development Goals*' and the '*Paris Agreement*'.

Objectives:

- To structure and implement a framework for the engagement of relevant stakeholders to develop standardized contracts that will help streamline (& also increase the speed of) the development and financing process for solar projects around the globe; and
- To develop a simple, standardized contractual “project documentation” that will facilitate a scale up of solar PV investments around the globe.

Our Method



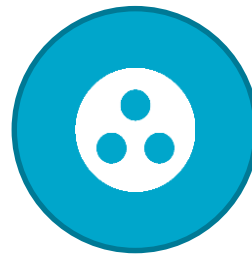
Streamline

Enabling aggregation



Innovate

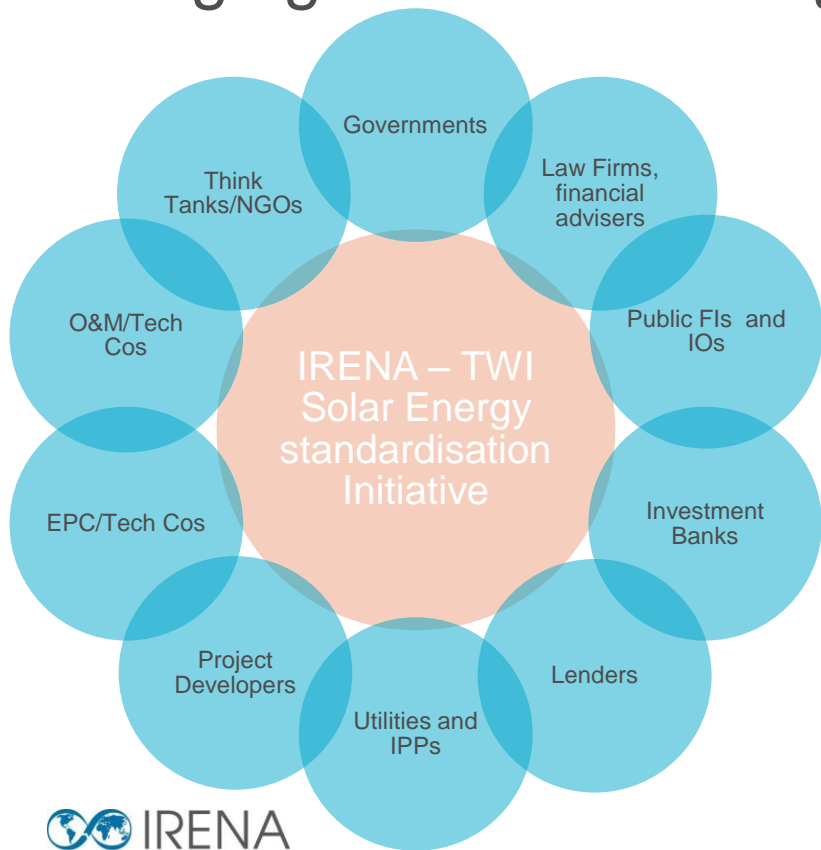
Challenging existing concepts and practices to create a bankable and cost oriented framework



Collaborate

Bring together stakeholders to define and agree on the core terms of the documentation adopting a (i) simplified and (ii) balance-risk approach

Bringing stakeholders together



Bring together a group of public and private sector stakeholders to define and agree on the core terms / approach to address the core risks and related issues and reflect it in the form of standard documentation for further deployment of solar projects

Overall aim is to have a full package of documentation ready for the global market for 2018.

Partners collaborating to the Initiative

Law firms:

Baker & Mckenzie	Mason Hayes and Curran
Bird & Bird	Milbank, Tweed, Hadley & McCloy LLP
Eversheds - Sutherland	Norton Rose Fulbright LLP
Freshfields	Simmons & Simmons LLP
Covington	Reed Smith
Clifford Chance LLP	Trilegal
Gide Loyrette Nouel	Watson Farley & Williams LLP
Herbert Smith Freehills LLP	White & Case LLP
Latham & Watkins LLP	
Linkalters LLP	

Industry partners:

Asian PV Industry Association
China Photovoltaic Industry Association
Climate Bonds Initiative
First Solar
German Solar Association
Global Solar Council
Saudi Electricity Company (SEC)
Shams Technology
Solarpower Europe

International organizations:

United Nations Development Programme (UNDP)
World Business Council for Sustainable Development Partnership

Partners collaborating to the initiative

International and development financial institutions

Agence Française Development (AFD)

Asian Development Bank (ADB)

Development Bank of South Africa (DBSA)

European Bank For Reconstruction and Development (EBRD)

Inter-American Development Bank (IADB)

International Finance Corporation (IFC)

KfW Bankengruppe

Export Credit Agencies

African Trade Insurance Agency (ATI)

Atradius Dutch State Business

Multilateral Investment Guarantee Agency (MIGA)

Nippon Export and Investment Insurance (NEXI)

Servizi Assicurativi del Commercio Estero (SACE – Italian Export Credit Agency)

Commercial banks & Financial Advisers

Banco Bilbao Vizcaya Argentaria. S.A. (BBVA)

Bank Muscat SAOG

Concilium

Mizuho Corporate Bank

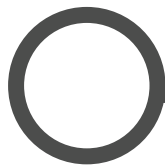
The Bank of Tokyo-Mitsubishi UFJ, Ltd.

responsibility Investments AG

SAMBA CAPITAL

Working Process

Phase 1 Brainstorming Process



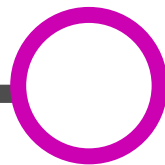
Detailed discussion between members and preparation of assumption papers

Phase 2 Contractual Drafting



Drafting of detailed contract and guidelines

Phase 3 Review Process



Overseeing and reviewing of the set of document by an ad-hoc Committee

Phase 4 Launch



Launching of the final product to the market

Our Working Structure

(7) CORE WORK-STREAMS

- Power Purchase Agreement
- Supply Agreement
- Fit & Commissioning
- O&M Agreement
- Finance Facility Agreement
- Implementation Agreement
- Project Development Guideline

(5) ADDITIONAL WORK-STREAMS

- Drafting Approach
- Governing Law and Dispute Resolution
- Corruption and Sanction
- Force Majeure
- Financial Reference

REVIEW COMMITTEE

Example: Approach (Power Purchase Agreement - PPA)

- The contractual structure is designed to minimise the risk of back-to-back risk mismatches across such suite of development and financing documents for solar PV.
- Each work-stream takes account of the impacts that its drafting positions will have on other work-streams, and of the inputs from other work-streams.
- Question and challenge what has been done in the past / market practice. We highly encourage an open dialogue and innovative/creative thinking process to ensure the highest quality of output.
- Solutions should lean towards simpler / more user-friendly approaches that might simplify the end product and facilitate its acceptance by future users.

Example: Considered Paths (PPA)

- Duration of the off-take 25 years
- No sovereign guarantee
- CRMM intended to cover host state/off-taker related risks (i.e. energy payments, early termination payments)
- Fast-track authorization process
- Simplified Implementation Agreement with cut-down CP
- Deemed energy payments from pre-commissioning for off-taker default
- Flexible commissioning date and capacity (i.e. no delay LDs for reasonable delay and possibility to commission with lower capacity with safeguards)
- Sponsor's decommissioning obligation may also be covered by the CRMM

Our main forthcoming events:

**November 2017
COP 23**

**January 2018
IRENA Assembly
&
World Future Energy
Summit**



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Thank you for helping us make a positive impact
on our planet



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