

Global Solar Energy Standardisation Initiative

- The role of standardisation in scaling up solar energy investment



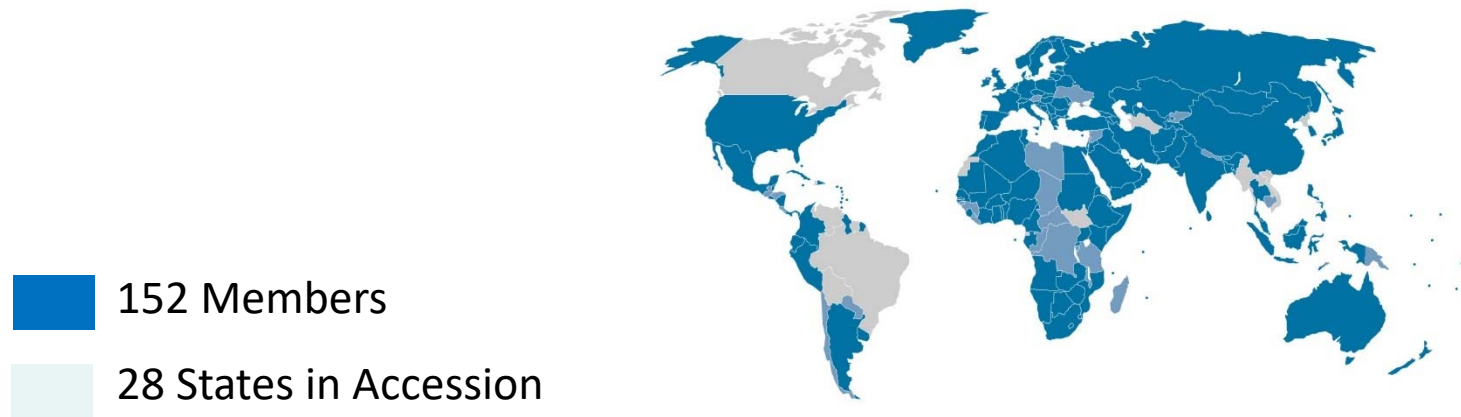
Joanne Jungmin Lee
Associate Programme Officer –
Renewable Energy Finance

InterSolar Middle East
Global Perspectives of Photovoltaics
Dubai, 26 September 2017

Key Facts - IRENA

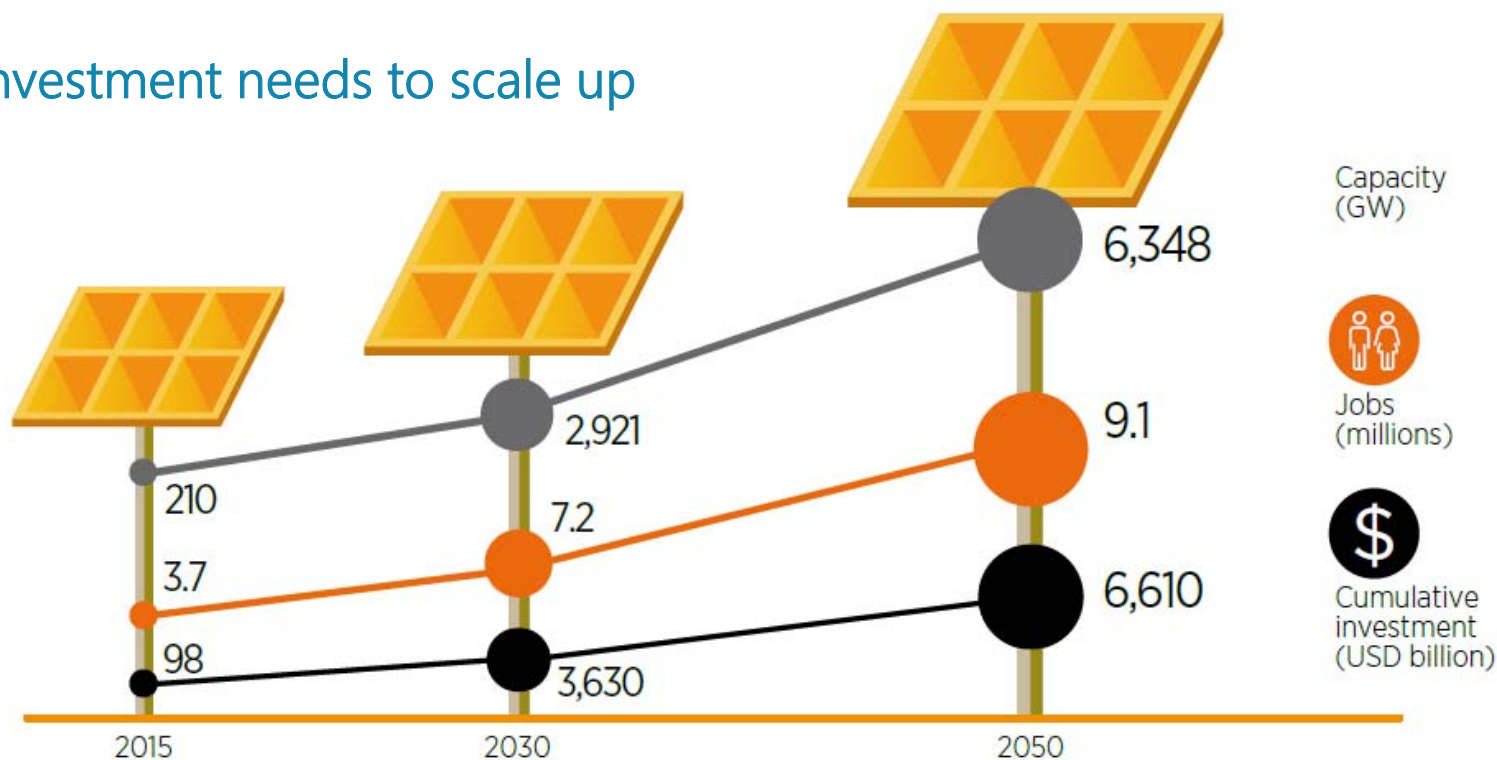


- » Established in 2011
- » First global intergovernmental organisation headquartered in Middle East
- » Headquartered in Masdar City, Abu Dhabi, UAE
- » IRENA Innovation and Technology Centre – Bonn, Germany
- » Permanent Observer to the United Nations – New York



Solar PV boom will accelerate

But investment needs to scale up



Note: Jobs include solar water heating jobs.

Sources: IRENA, 2016b; IRENA, 2017a

Figure: IRENA (2017). Renewable energy benefits leveraging local capacity for solar PV
Data: IEA and IRENA (2017). Perspectives for the energy transition – investment needs for a low-carbon energy system

IRENA's report on financing renewables

UNLOCKING RENEWABLE ENERGY INVESTMENT:

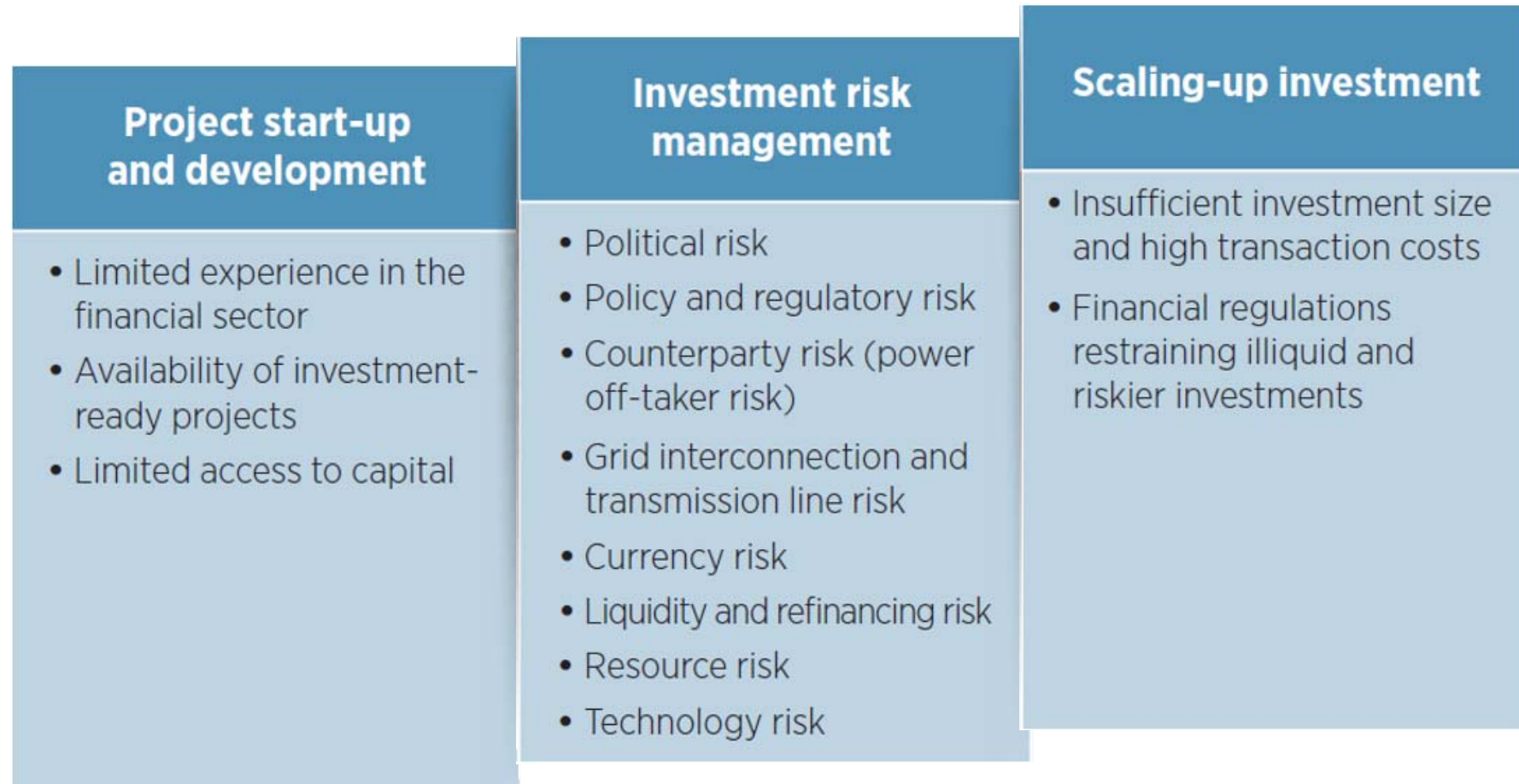
THE ROLE OF RISK MITIGATION AND STRUCTURED FINANCE



Based on surveys and case studies:

How to bring investment into renewables to scale, fast enough to meet global objectives

Key challenges in unlocking renewable energy investment from the private sector



Standardised contracts create a common industry language for assets, contracts or markets, addressing terms and features across the variety of contractual relationships necessary to develop renewable energy projects.

Why standardise contracts for solar energy projects?

- Easier and faster project development and review process
- Reduce transaction costs
- Basis to advance aggregation and securitisation
- Contracts for solar PV can be (relatively) easily standardised and projects can hence be scaled up more rapidly

Ongoing public sector-led initiatives

- Climate Aggregation Platform (CAP) led by Climate Bonds Initiative, UNDP and Global Environment Facility (GEF) – focuses on small-scale projects (including both renewable energy and energy efficiency)
- Solar Access for Public Capital (SAPC) led by the U.S. Department of Energy – focused on the US market

IRENA – TWI Solar Energy Standardization Initiative

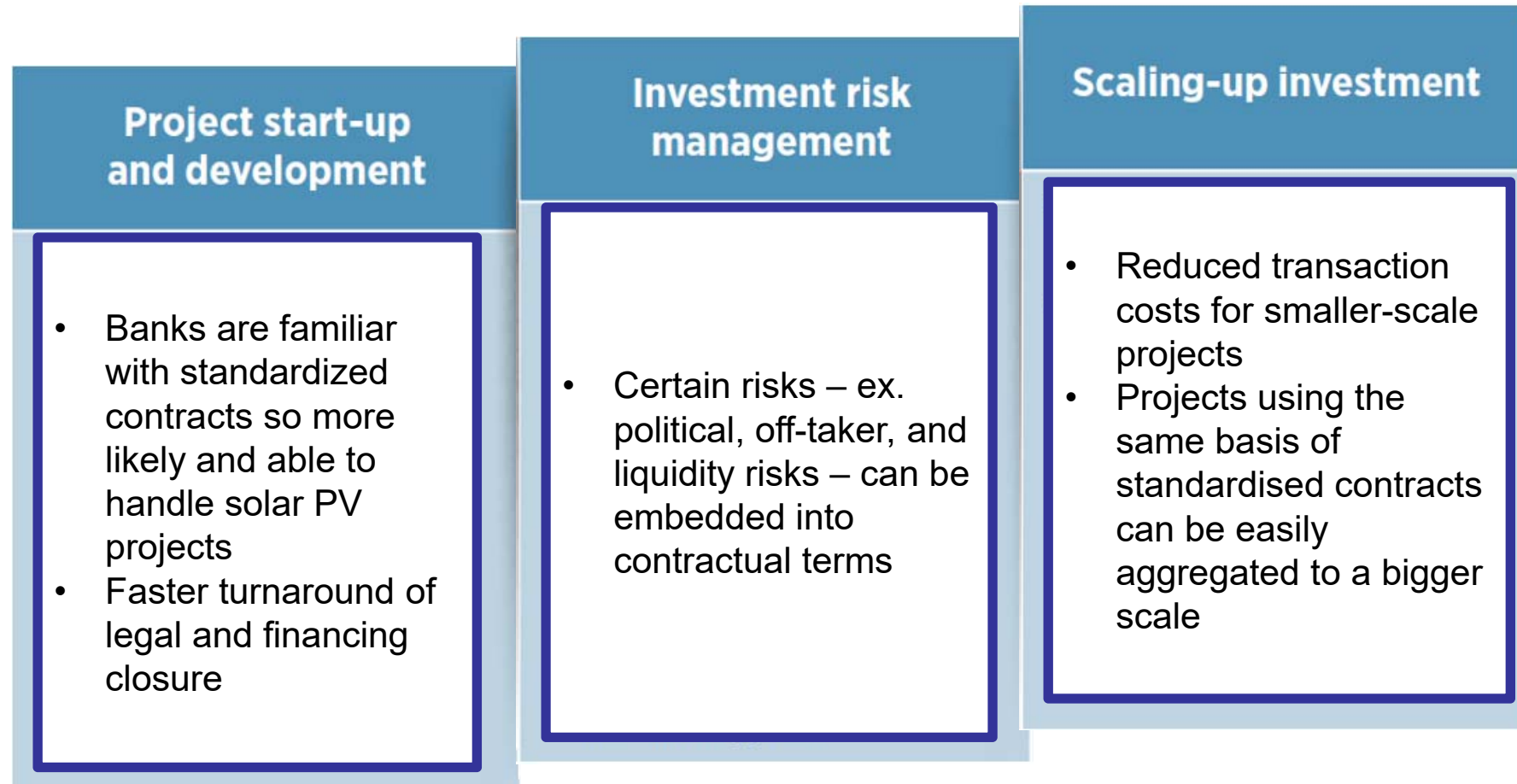
- Joint initiative by IRENA and TWI
- Launched in June 2016



Objectives: To structure and implement a framework through the engagement of relevant stakeholders to develop standardised contracts that will help streamline the development and financing process for solar projects



The role of standardised contracts in addressing the investment challenges



REVIEW COMMITTEE

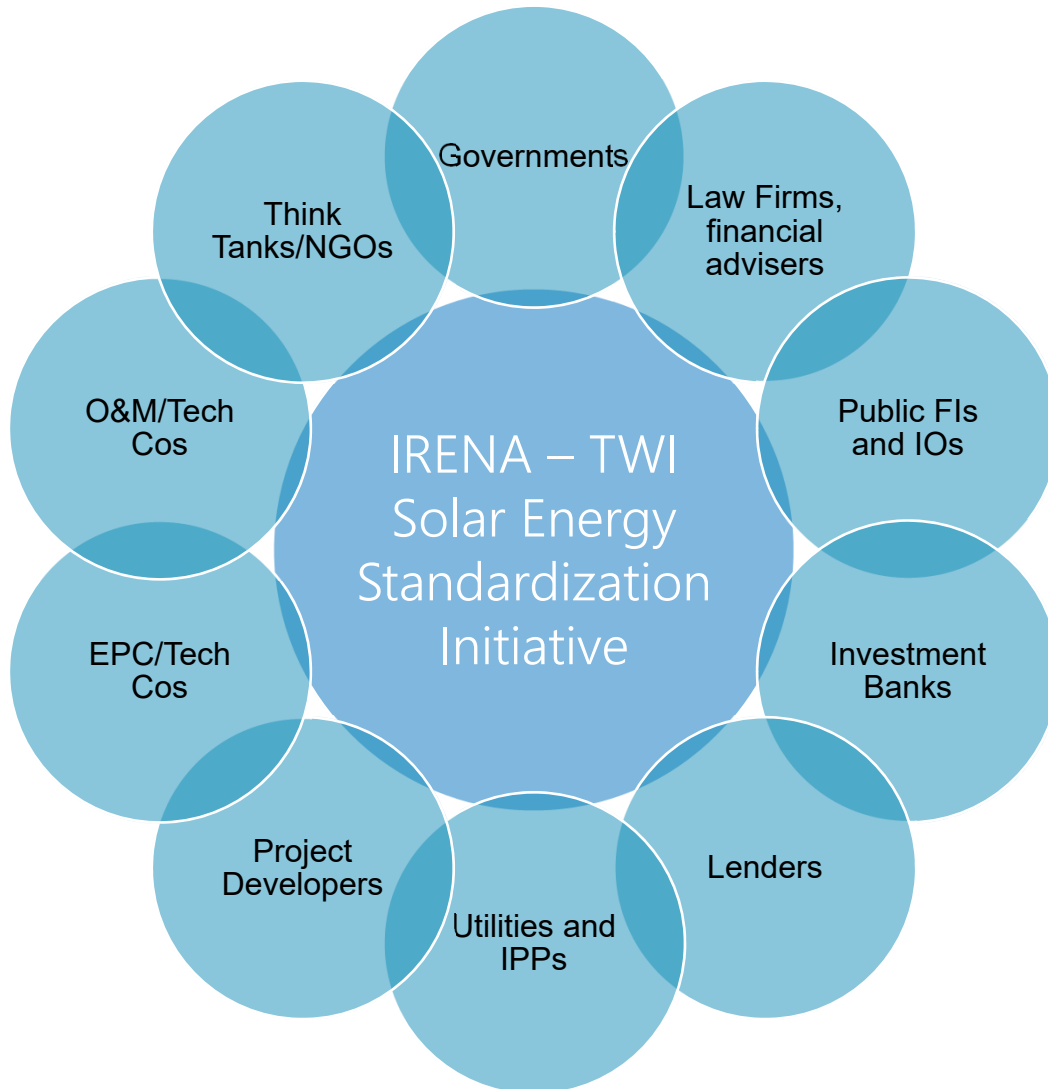
7 CORE WORKING GROUPS

- PPA
- Supply Agreements
- Fit & Commissioning Agreements
- O&M Agreement
- Finance Facility Agreement
- Implementation Agreement Guideline
- Project Development Guideline

ADDITIONAL (smaller) WORKING GROUPS

- Drafting Approach
- Governing Law
- Dispute Resolution
- Force Majeure
- Financial References

Collaborations



- Bring together a group of public and private sector stakeholders
- Initial working groups participating in the Initiative on a pro-bono basis
- To date, four workshops have taken place for in-depth discussion

Key members



Law firms

Baker & McKenzie
Chadbourne & Parke LLP
Clifford Chance LLP
Covington
Eversheds LLP
Freshfields
Gide Loyrette Nouel
Herbert Smith Freehills LLP
Latham & Watkins LLP
Linklaters LLP
Mason Hayes & Curran
Milbank, Tweed, Hadley & McCloy LLP
Norton Rose Fulbright LLP
Simmons & Simmons LLP
Trilegal
Watson Farley & Williams LLP
White & Case LLP

Associations/Think Tanks

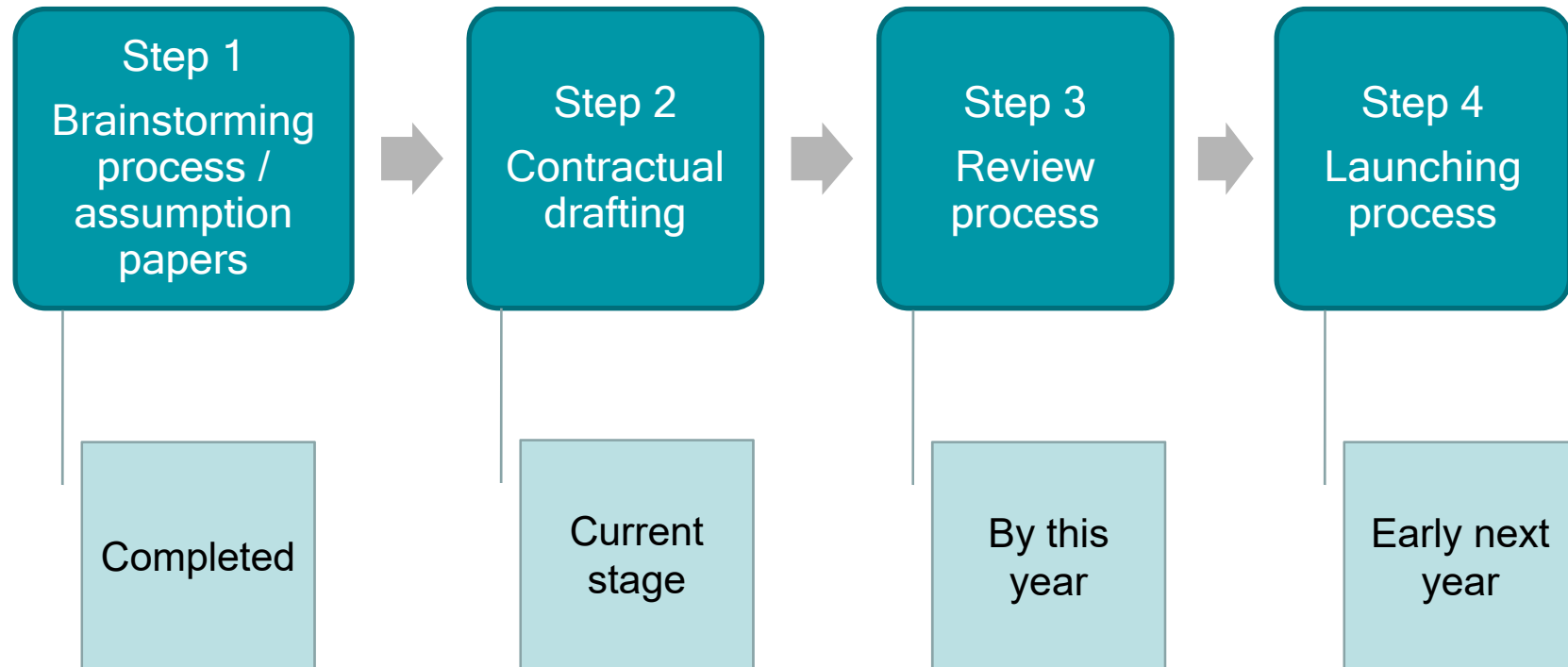
Climate Bonds
Global Solar Council
Saudi Electricity Company
Solarpower Europe

Financial institutions

African Trade Insurance Agency
Agence Francaise Development (AFC)
Asian Development Bank (ADB)
Atradius Dutch State Business
Banco Bilbao Vizcaya Argentaria, S.A. (BBVA)
Bank Muscat SAOG
Development Bank of South Africa (DBSA)
European Bank For Reconstruction and Development
(EBRD)
Inter-American Development Bank (IADB)
International Finance Cooperation (IFC)
KfW Bankengruppe
MIGA
National Bank of Kuwait
Rabobank
Renewable Energy & Energy Efficiency
SACE
SAMBA CAPITAL
The Bank of Tokyo-Mitsubishi UFJ, Ltd.

And growing...

Work in progress



How to join the Initiative?

Open to law firms, financial institutions (both private and public) and project developers interested in the development and facilitation of solar PV projects

Draft phase

- Currently work in progress
- Participate in drafting the agreements in one or more working groups as members
- Provide input and feedback on terms and consistency

Review and launch phase

- Phase to start once drafts are ready
- Review one or more agreements to provide industry/financial/legal feedback
- Contribute to delivering a set of standardised contracts for solar PV projects



Thank you!
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