

# IRENA

## Renewable Energy and Climate Change

### Support towards NDC implementation

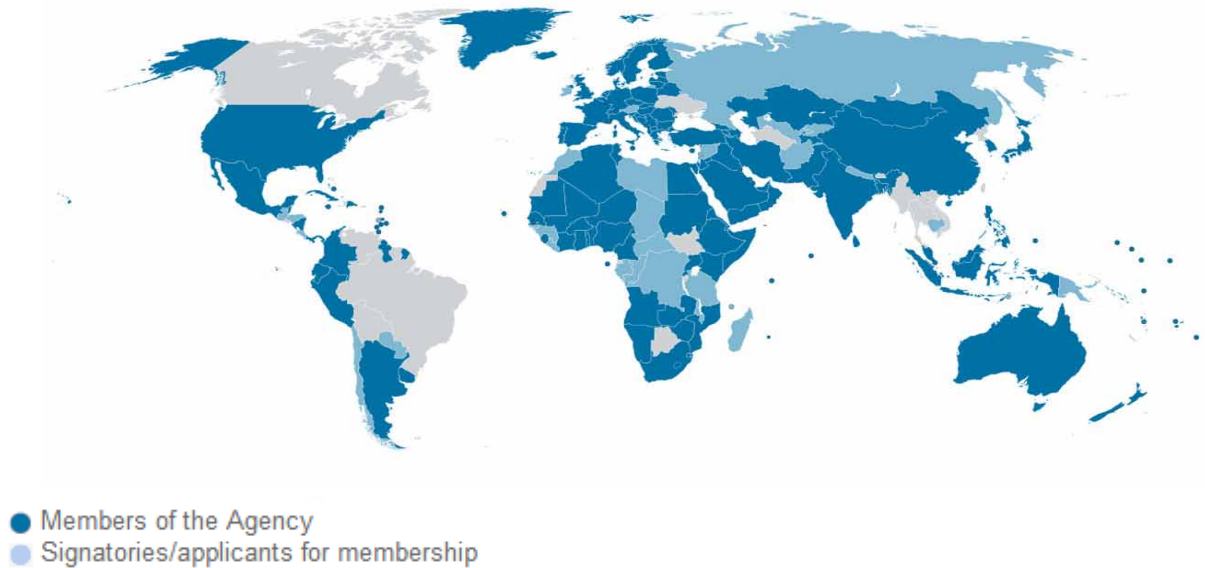
20 June 2016



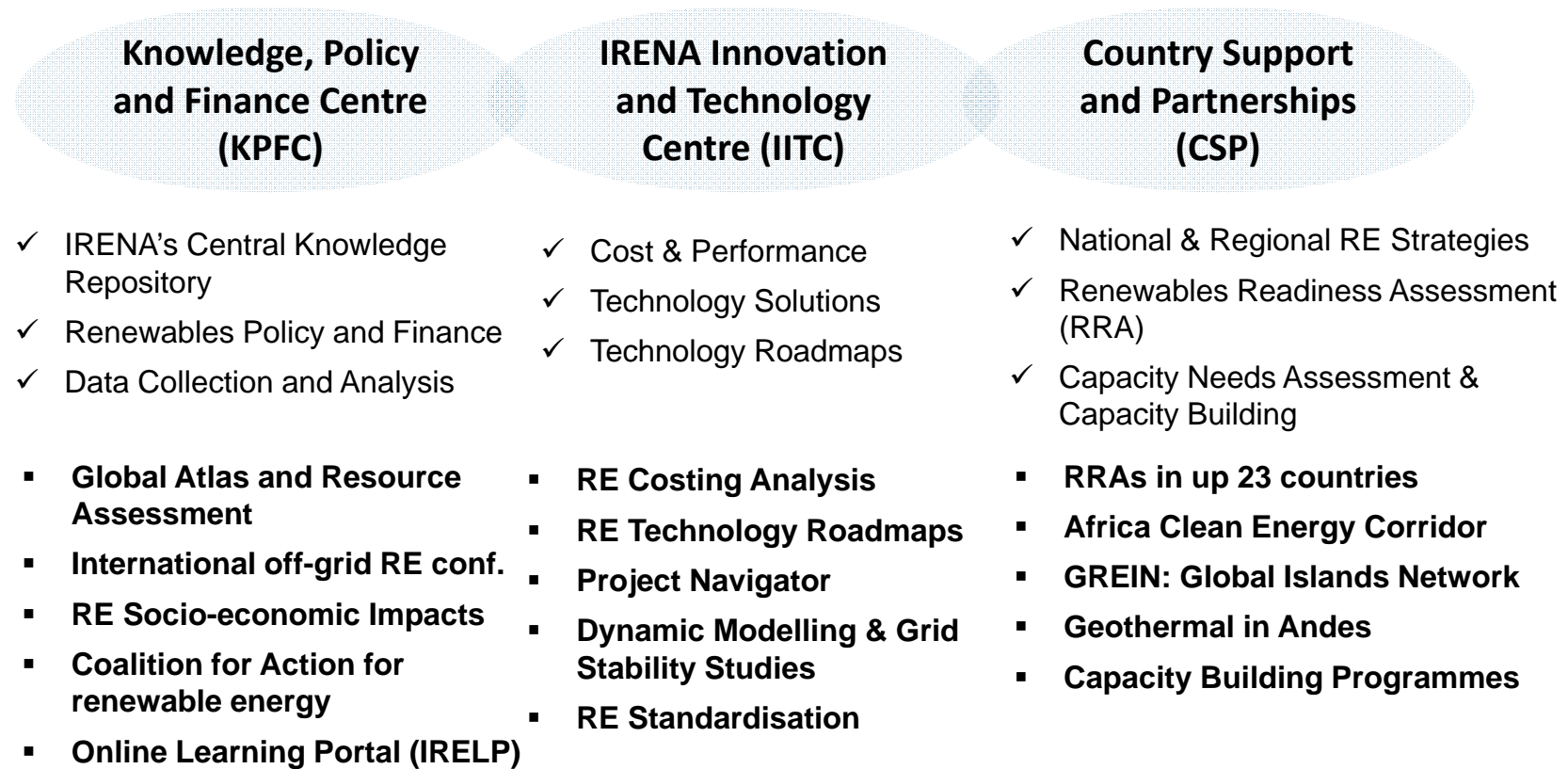
## IRENA: Introduction

- Intergovernmental renewable energy agency, headquarters in **Abu Dhabi**, United Arab Emirates. Innovation and Technology Centre (IITC) in **Bonn, Germany**
- **Established:** April 2011
- **Mandate:** Biomass, Geothermal, Hydro, Ocean, Solar, Wind
- **Membership:** 147 Members; 33 Signatories/States in accession

**Mission: Accelerate deployment of renewable energy**



# IRENA: Programmatic Structure

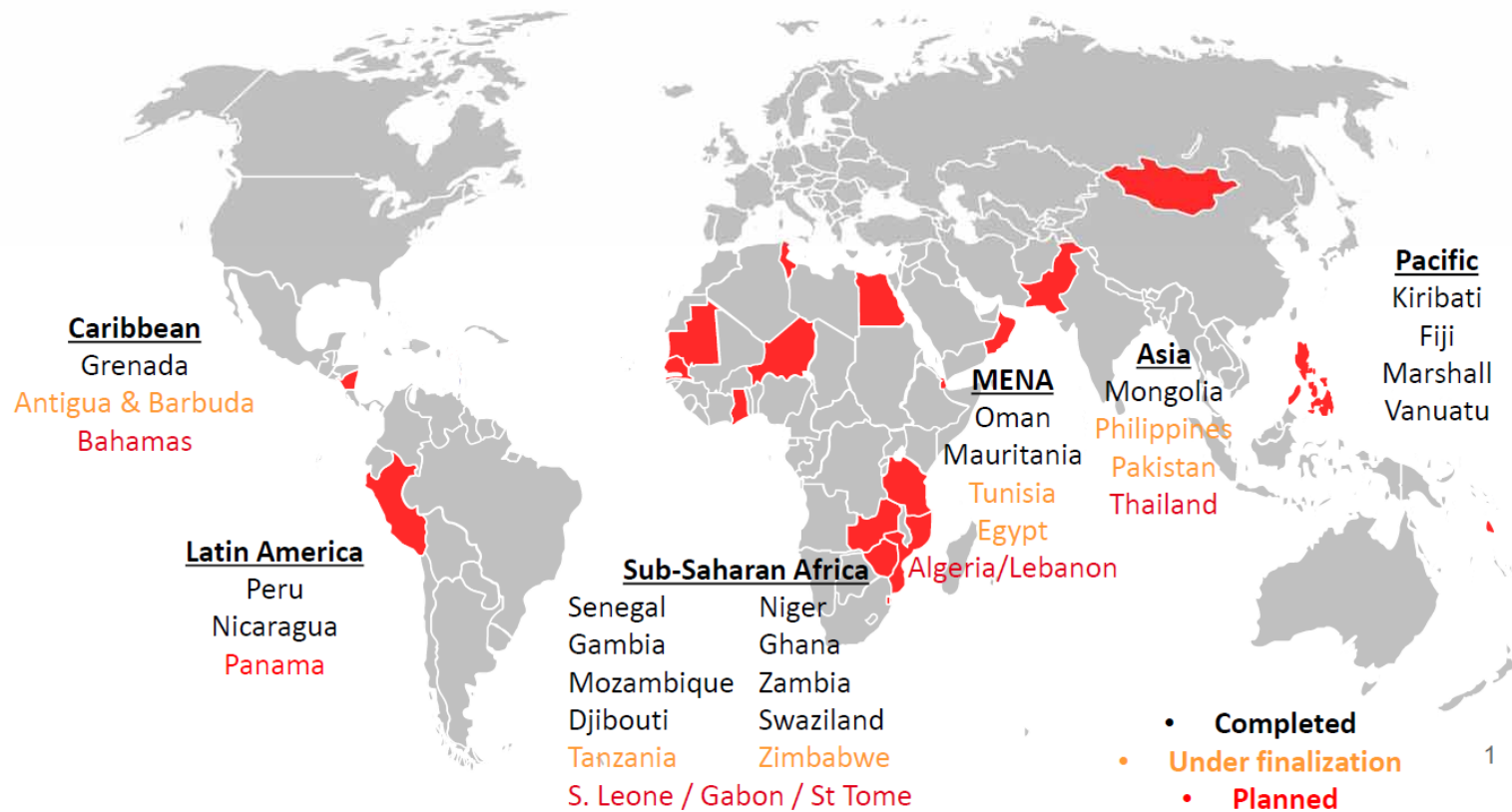


## **IRENA: Promoting deployment of renewable energy**

IRENA provides a range of products and services, including

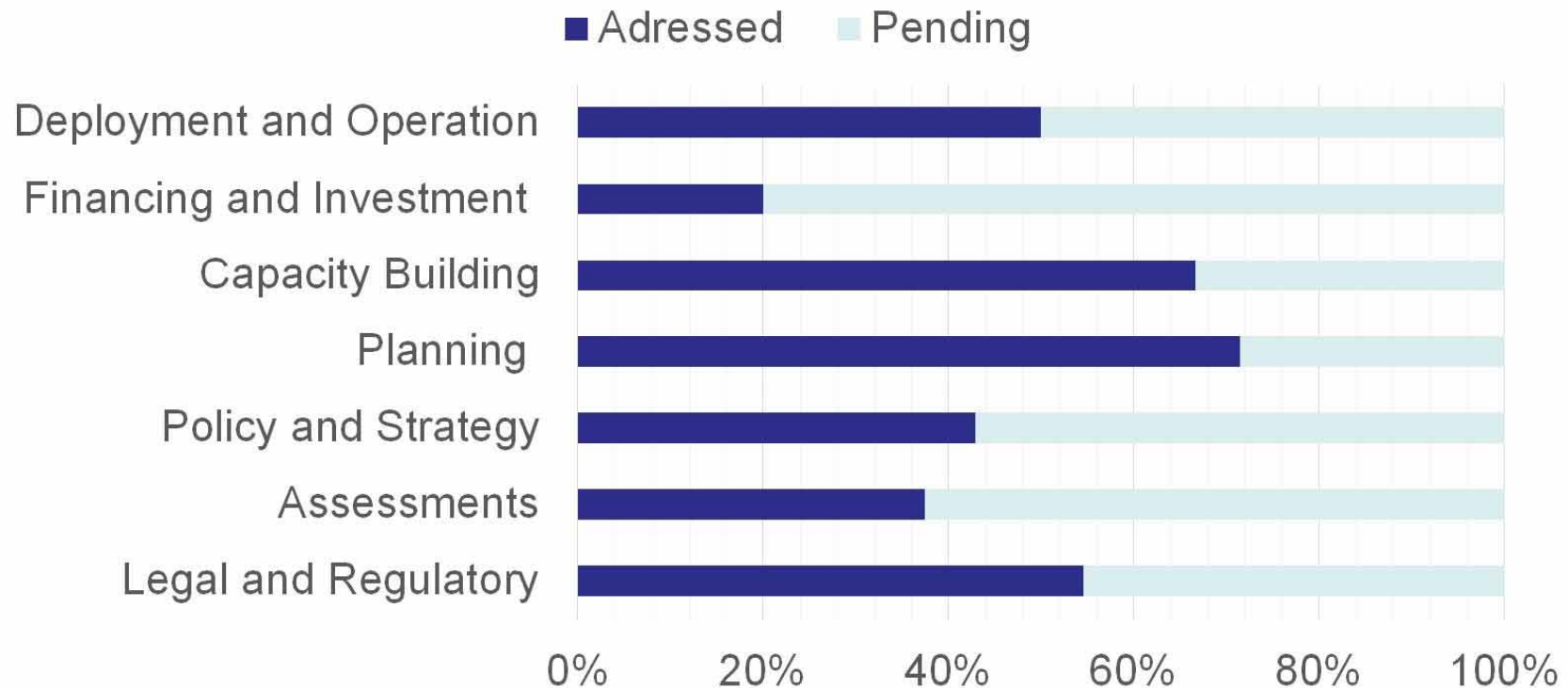
- Renewables Readiness Assessment, conducted in partnership with governments and regional organisations to provide policy guidance and facilitate the sharing of case studies and best practices;
- The Global Renewable Energy Atlas, hosted on the IRENA website, which maps solar, wind sources country by country;
- The IRENA Renewable Energy Learning Partnership (IRELP), an online learning network;
- Handbooks for renewable energy policy development;
- Technology briefs and case studies to strengthen evidence-based policy-making and investment;
- Facilitation of renewable energy planning at regional levels;
- Project Navigator and Sustainable Energy Market Place
- RESOURCE: [Online information on renewable energy](#)**

# Renewables Readiness Assessment (RRA)



# RRA Recommendations – Implementation Status

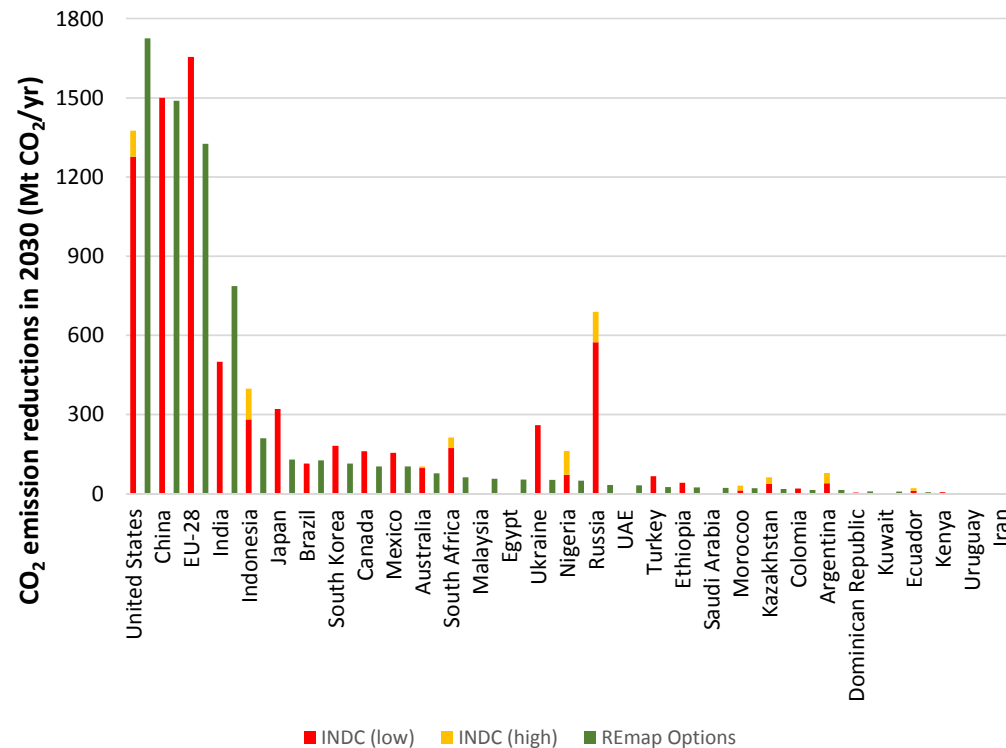
Result for 59 recommendations in 8 RRAs:  
IRENA work is being translated into action



# REmap 2030 – A roadmap for doubling the RE share

- REmap explores the **potential, cost** and **benefits** of doubling the renewables share in the global energy mix
- **Technology options**
  - No target setting; options characterised by their cost and potentials
  - Technology options can be combined into scenarios and translated into policy action
- Focuses on power, district heat and end-use sectors
- Coverage: **40 countries; 80%** of the global energy use
  - 2014 REmap analysis for 26 countries developed together with and validated by country experts
  - 14 additional country analyses ongoing

## Comparison of INDCs with REmap by country (DRAFT)



Renewables alone offer higher potential than the total of all technologies in the INDCs for the US, India and China. In others, INDCs (renewables & other techs) are higher than what is envisioned by REmap



## Regional Expert Meetings in Africa: towards INDC implementation

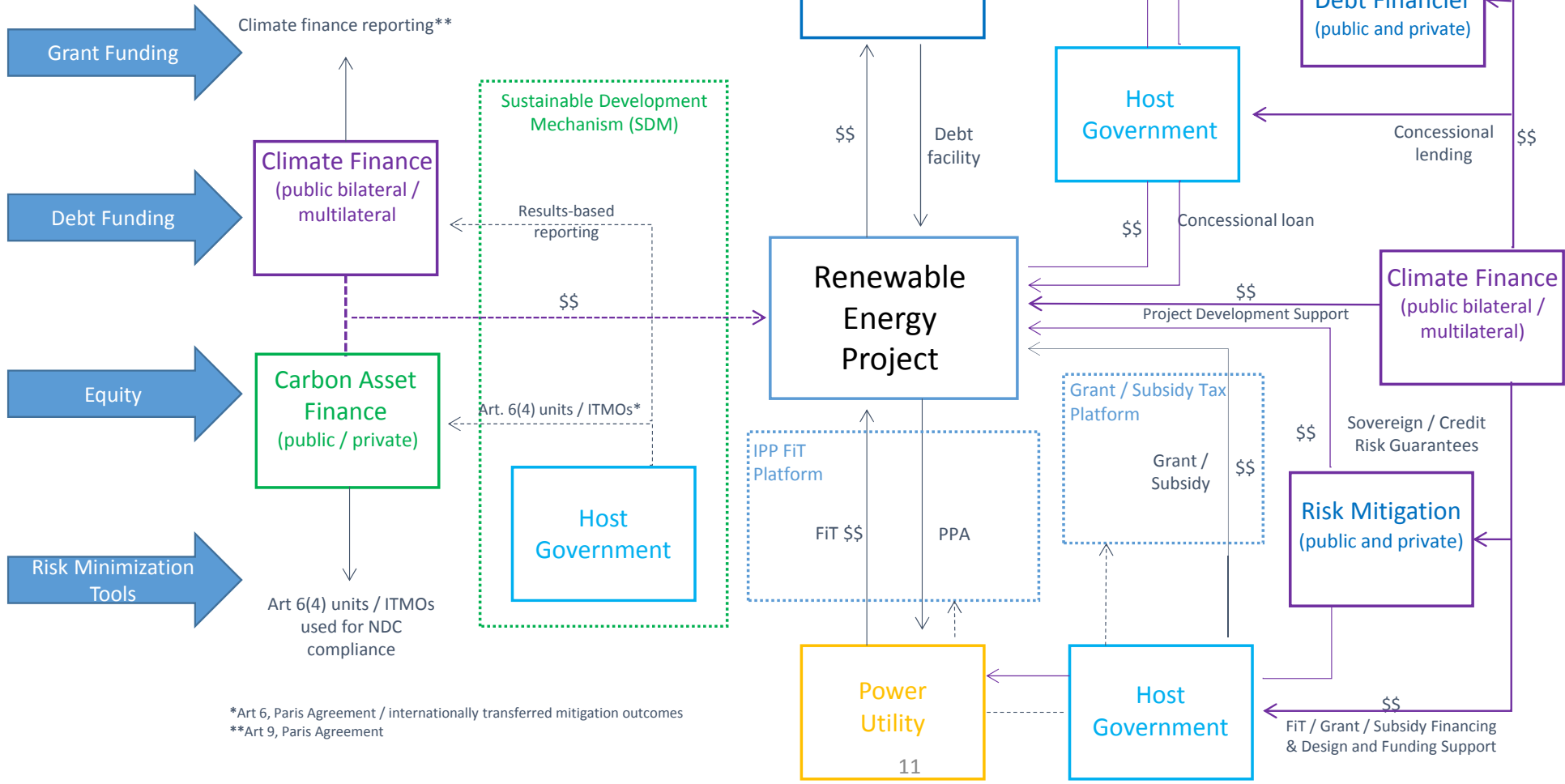
- The expert meetings focused on:
  - The context of climate change action in Africa and the present and projected potential of renewable energy ;
  - Renewable energy measures provided for in the INDCs; and
  - Issues relating to financing and investments for renewable energy, which are highly relevant for the realisation of the plans and strategies included in the INDCs.
- For many African countries, preparing INDCs was **challenging**:
  - little guidance and limited time to prepare;
  - limited buy-in by all relevant actors in governments;
  - inconsistencies with existing plans and strategies.

# Key Messages and Context to IRENA Implementation Handbook



- RE to play key role in climate change strategies across the continent
- Climate action is **opportunity** to achieve development objectives
- Coordination for **strengthened cross-sectoral collaboration** and policy coherence
- Continue sharing of information and dialogues across sectors, **between countries**, and organisations for **partnerships** supporting support the implementation of RE actions
- Climate finance could **incentivise ambitious action** and leverage **other forms of RE investment**
- **Moving forward, need clarity on the process** of the development of implementation plans

# Climate Financing for Renewables



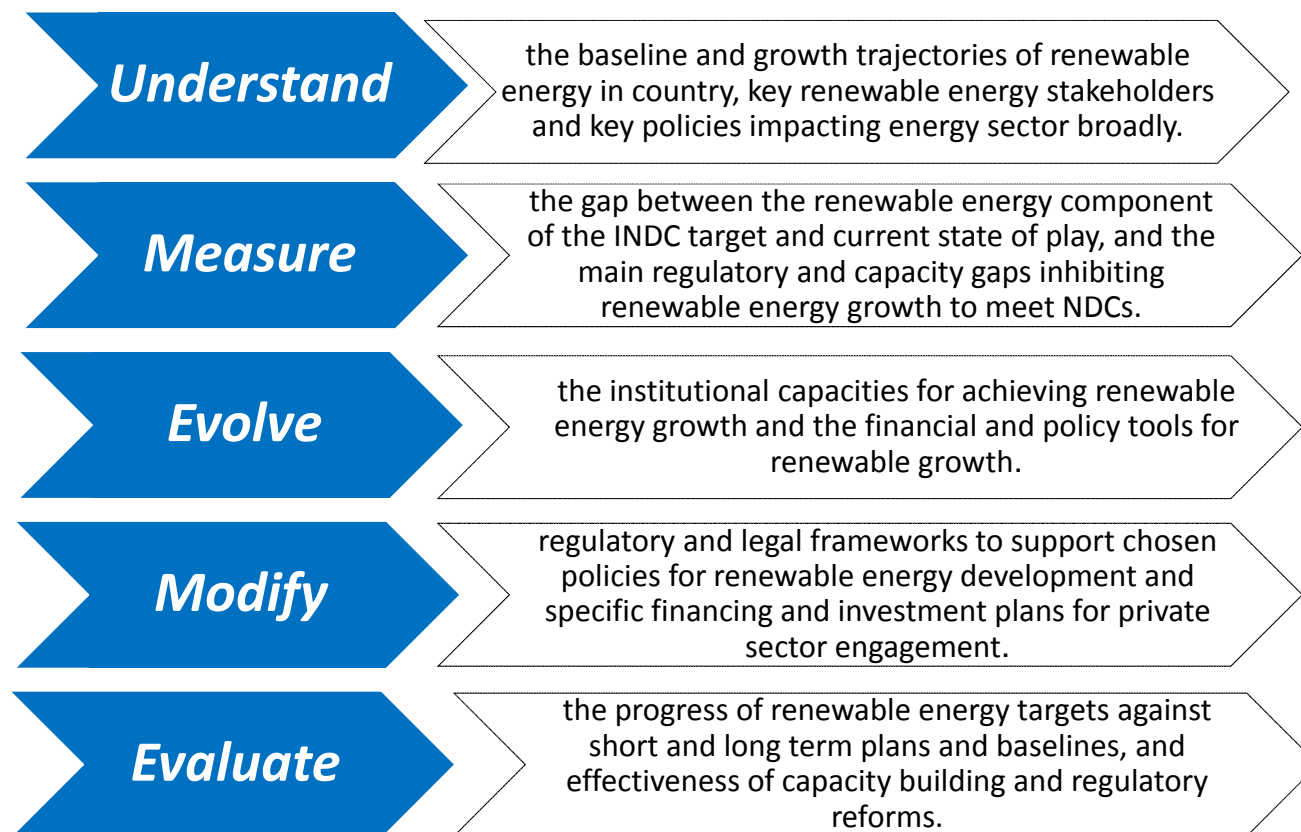
## Implementation Handbook – Five-stage process



- Aimed at providing a high-level structure for planning, technical assessment and consultation process to translate RE aspects of INDCs into implementation plans
- Identifies relevant resources, tools and climate and other finance to support each of the 5 different stages of the process
- Serves to inform and structure capacity development support

# Implementing INDCs' RE targets

## Five-step process – 'Umeme' guide



# Stage 1: Understand

**Summary of Stage:** Complete a stock-take of existing energy policy as a whole, including by identifying economic and non-economic barriers. This stocktake should consider existing levels of, and potential for, renewable energy. This stage also requires policymakers to assess the main stakeholders working on renewable energy.

## Key attributes required:

- Public policy and economic analysis skills
- Energy market analysis and projection skills
- Stakeholder mapping skills

## Implementation steps:

(a) Appoint a team to carry out preliminary analysis.	(b) Develop projections for energy demand and supply growth.	(c) Analyse if feasible for renewable energy to be used to meet demand, and cost- benefits of using renewable v traditional energy supply.	(d) Overview of climate and renewables policy frameworks and institutions currently in place.	(e) Assess roles of stakeholders (public, private, civil society) in renewable energy production process.
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## Key support available:

### Tools

- IRENA (2013), 'Renewables Readiness Assessment: Design to Action'
- IEA (2014), 'Energy Technology Roadmaps: A Guide to Development and Implementation'
- [Others]

### Climate finance


- The World Bank's Energy Sector Management Assistance Program (ESMAP) program Africa Renewable Energy Access Program II (AFREA II)
- [Others]

# Relevant Climate Finance and Tools for Stage 1

## Climate Finance and Assistance

- IRENAs Sustainable Energy Marketplace
- The World Bank's Energy Sector Management Assistance Program (ESMAP) program Africa Renewable Energy Access Program II (AFREA II) provides support for analytical and advisory activities, institution and capacity building and technical assistance.
- Upon request, IRENA assists countries to develop effective enabling renewable energy policy and regulatory frameworks and assess the potentials and regulatory options through the Renewables Readiness Assessment (RRA) and advisory services.
- The World Bank's Readiness for Investment in Sustainable Energy scheme
- The World Bank's Energy Sector Management Assistance Program (ESMAP) provides analytical and advisory services to low- and middle-income countries to increase their know-how and institutional capacity to achieve environmentally sustainable energy solutions for poverty reduction and economic growth.
- ECREEE's ECOWAS Renewable Energy Potential Assessment Program aims at the establishment of a benchmark on renewable energy capacities, stakeholders, policies, investments resources and project sites in the Economic Community of West African

## Tools

- IRENA (2013), ['Renewables Readiness Assessment: Design to Action'](#)
- Country studies such as IRENA's ['Ghana: Renewables Readiness Assessment'](#) (November 2015)
-  [IEA \(2014\), 'Energy Technology Roadmaps: A Guide to Development and Implementation' in particular 'Phase 1: Planning and Preparation'](#)



**Thank you**

