

Let us make the sun brighter

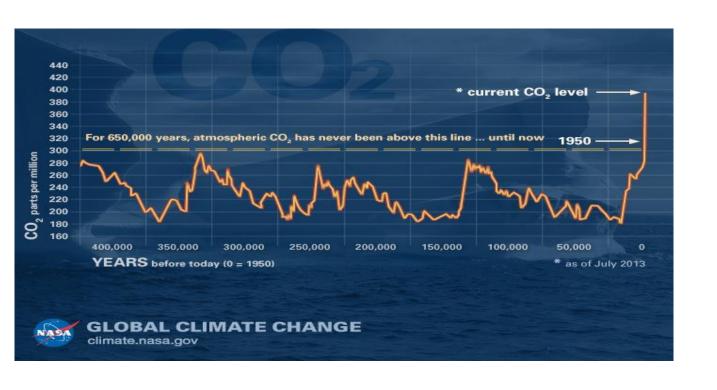
K K Sharma, Adviser, ISA

ISA and Floating Solar (SCALING UP)

www.isolaralliance.org

#### Alarming rise in CO2 levels – Period 1950 to 2017

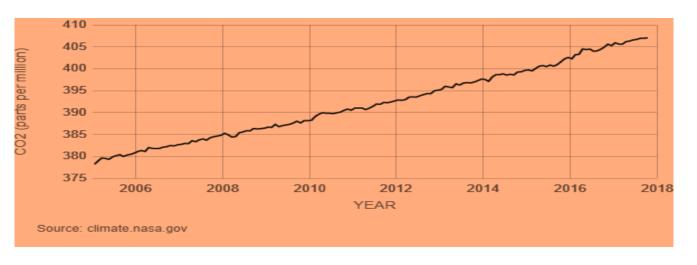






#### **Carbon Dioxide**

407.06 ppm



Prime Minister of India, President of France and UN Secretary General at ISA launch on 30<sup>th</sup> November, 2015



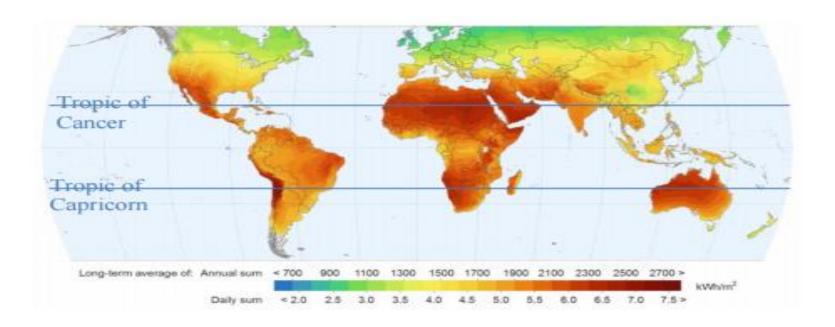


# Prime Minister of India, President of France and Head of States at the ISA Founding Conference – 11<sup>th</sup> March, 2018





# **International Solar Alliance (ISA)**

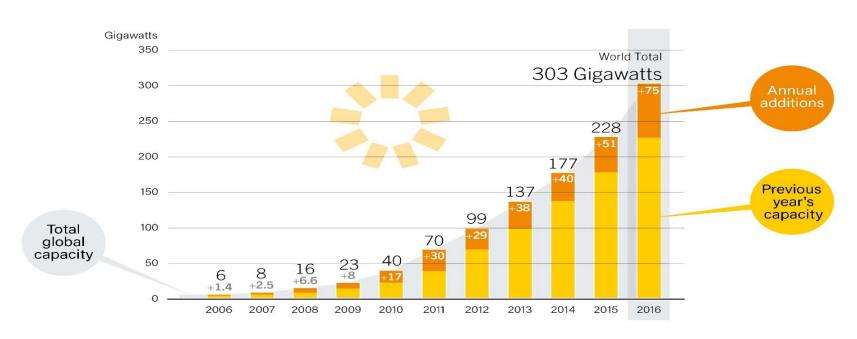


121 Prospective member countries
65 Signatory countries
35 countries have ratified as on 1st June, 2018

#### 2016 – An Extraordinary Year for Renewable Energy



#### Solar PV Global Capacity and Annual Additions, 2006-2016



REN21 Renewables 2017 Global Status Report

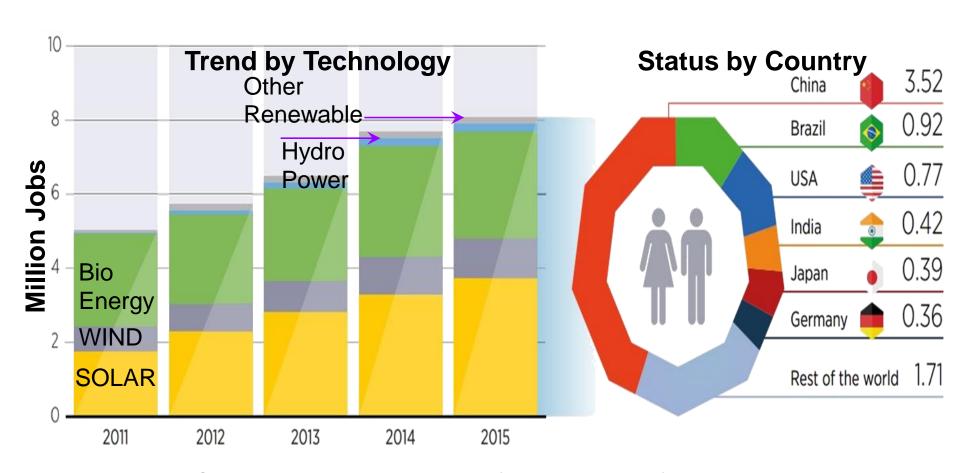


Global solar PV capacity 303 GW in 2016

Capacity addition 75 GW (47% of the total RE capacity addition)

# **Employment trends in Solar Energy 2011 – 2015**





Solar PV - largest employer (2.8 million jobs) out of estimated 8.1 million jobs in renewable energy sector (IRENA, 2016c)

#### **SOLAR INSTALLATIONS**



#### Conventional

- I) Ground-mounted
- II) Rooftop

#### Recent

- I) Canal-top
- II) Off-shore
- **III)** Floating

## **Potential Locations for Floating Solar**

Hydroelectric Dams

Other water bodies

**Reservoirs** 

**Water treatment plants** 

Lakes/Ponds



#### Why Floating Solar in Hydro Reservoirs



Will address following RE development issues :

(i) land availability,

(ii) variability of solar output (spare transmission capacity available)

(III) storage for daily load-shifting.

#### **Floating Solar Projects**



70 projects (globally)

**Mostly in Asia** 

Now shifting to large projects (100 – 200 MWs)

India 10 GW initiative (to cover 60 sites)

Source: ADB Consultants

## **Floating Solar Projects**



**Potential in ASEAN** 

Over 10 GW

(exclusive of Indonesian and Malaysian states on Borneo)

Source: ADB Consultants



## Floating Solar Potential in Greater Mekong Sub-region

Country	Potential	Information Source
Cambodia	1 GW	National Heritage Institute
Lao PDR	3.5 GW	ADB consultants
Myanmar	1 GW	ADB consultants
Peninsular Malaysia 1.2 GW		ADB consultants
Thailand	6 GW	EGAT
Vietnam	2 GW	Ciel et Terre
Total	12 GW	

#### **Role of International Solar Alliance**



#### ISA has mandate to

1. Scaling Solar programmes

1000 GW by 2030

mobilize 1000 B USD

2. Affordable Finance

#### **ISA PROGRAMMES**



Four (4) Programmes so far to aggregate demand & to reduce cost.

- 1. Scaling Solar Applications for Agricultural Use
- 2. Affordable Finance at Scale
- 3. Scaling Solar Mini-grids
- 4. Scaling Solar Roof top

#### **Solar Projects**



In member countries

And in collaboration with multilaterals, like

**ASIAN DEVELOPMENT BANK** 

(ISA will facilitate all types of Solar projects in Member countries)

#### **Digital Infopedia Platform of ISA**



- EU assisted ISA project to establish and maintain a Digital Infopedia Platform with three (3) major components
  - 1. Country Counter
  - 2. Best Practices
  - 3. Audio & Video interaction

#### **Contributing Organizations: ISA Corpus Fund**















US \$ 1 million each; Soft Bank US \$ 2 million

#### **Partner Organizations**





























ISA has signed Joint Declarations with Partner Organizations to promote solar energy globally

# Thank You kksharma@isolaralliance.org