

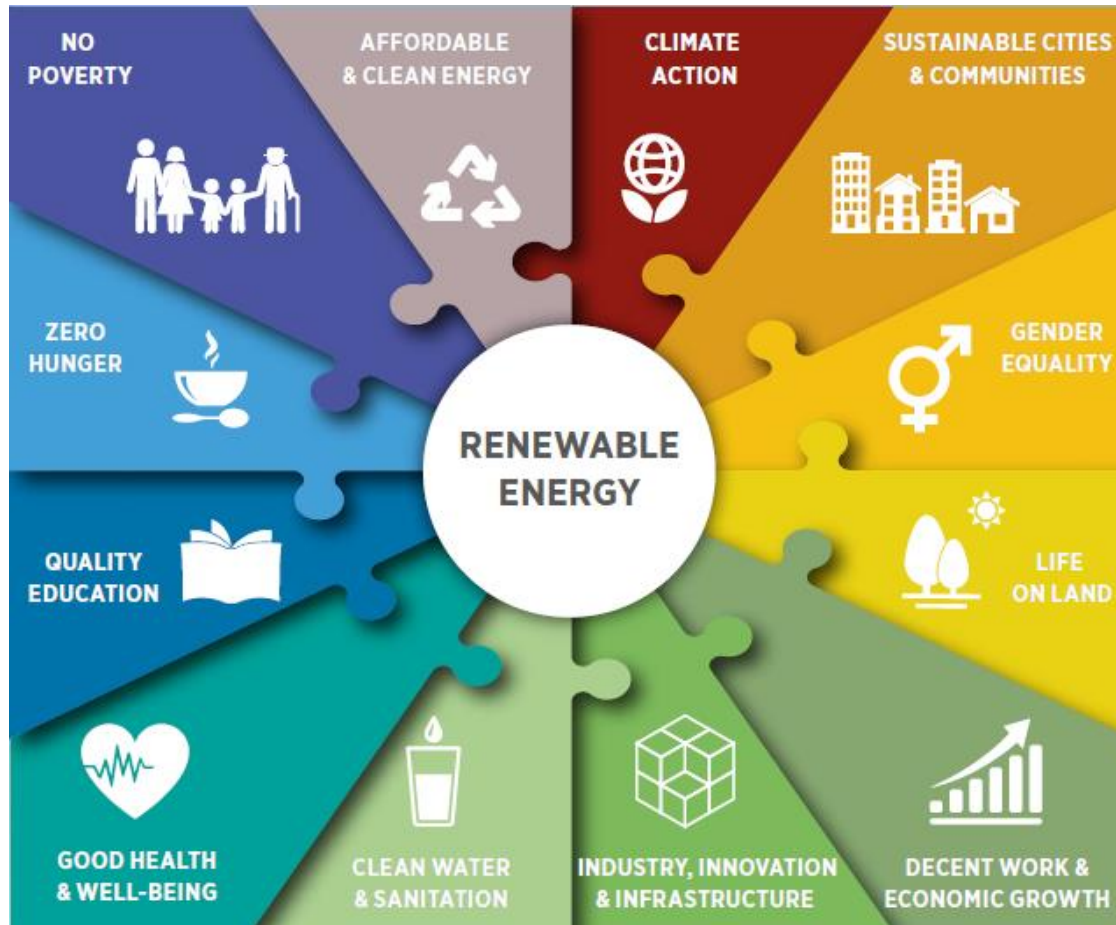
## **SDG 7.2**

# **Substantially increase the share of Renewable Energy in the global energy mix**

**21 July 2016**

# Linkages between renewables and SDGs

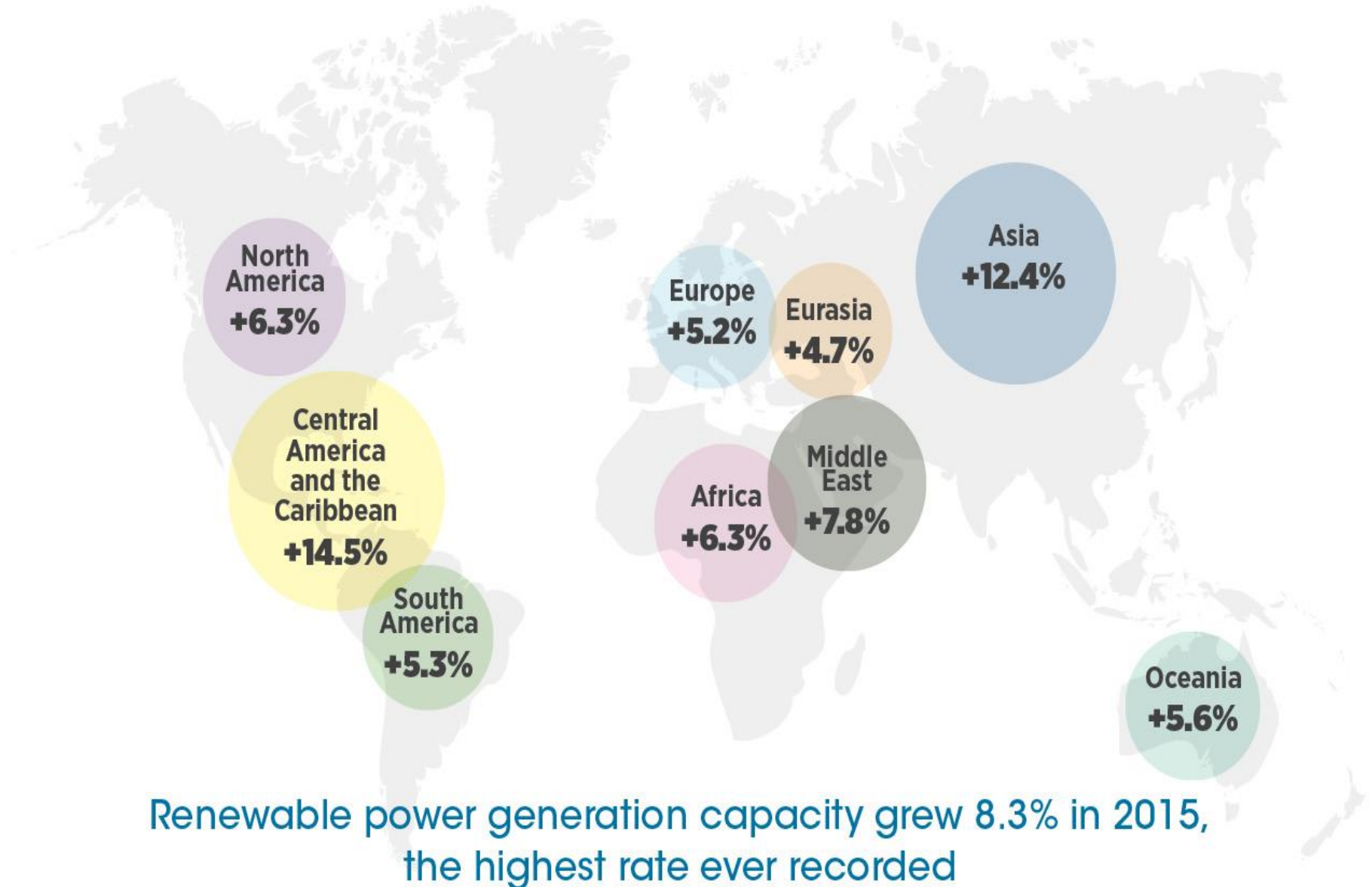
**Achieving the Sustainable Development Goal on energy will transform the energy system while helping meet other SDGs**



## Renewable Energy is essential to achieve Universal Access to modern, affordable and sustainable energy:

- To meet the 100% energy access target by 2030, the pace of electricity infrastructure expansion will have to nearly double.
- Renewable Energy technologies (solar PV, wind, small hydro, biomass) are cost-competitive, mature, modular, adaptable, environmentally friendly.
- Success stories:
  - China has provided electricity to more than 50 000 villages through small hydropower mini-grids.
  - In Bangladesh, more than 60 000 solar home systems are sold every month, and 2.4 million systems have been installed.
  - Solar and wind based hybrid mini-grids are making inroads on islands and in rural areas of Africa and Asia.

# RENEWABLE CAPACITY HIGHLIGHTS

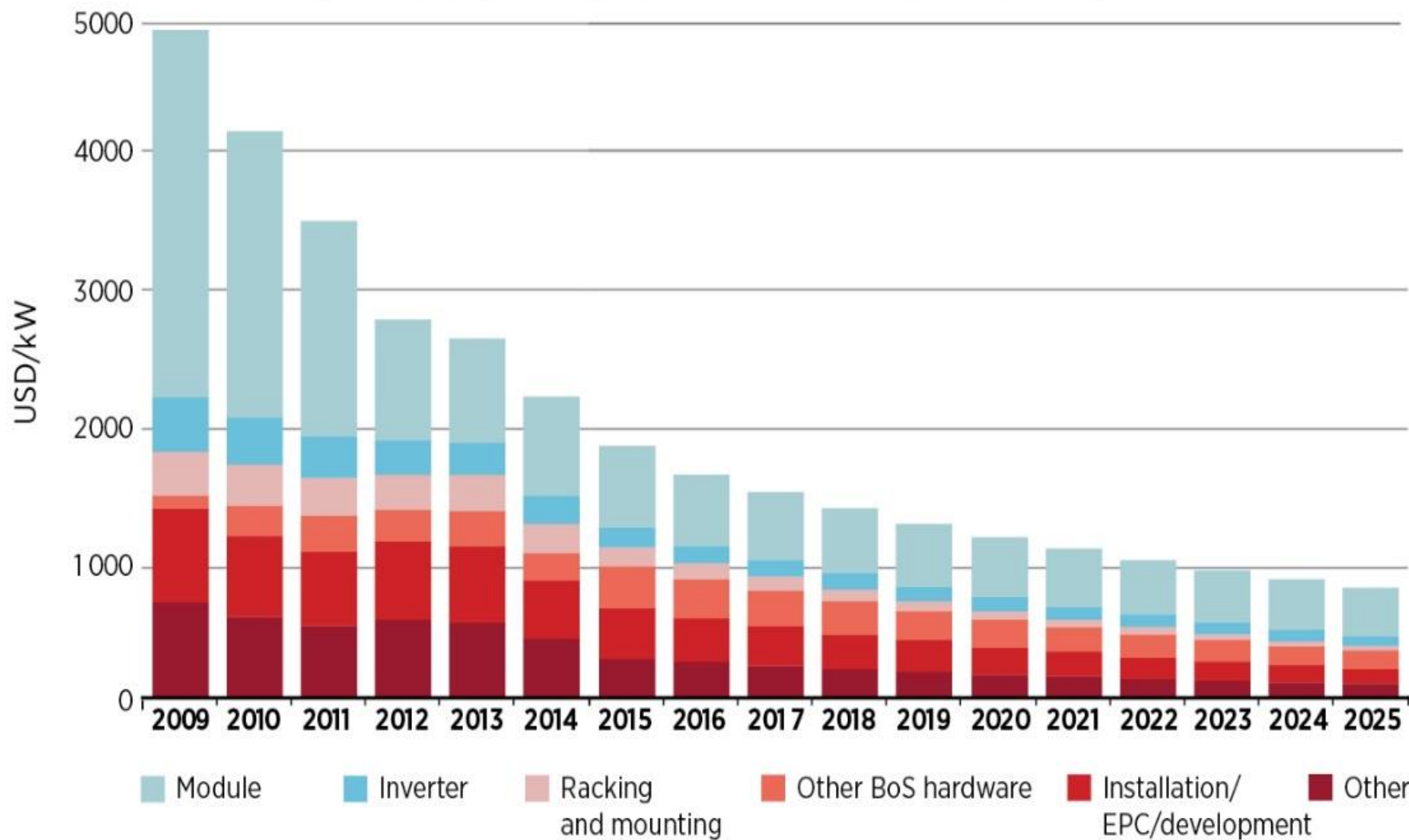


Number of countries with renewables targets increased from 73 in 2010 to 164 in 2015

**73**  
countries  
2010

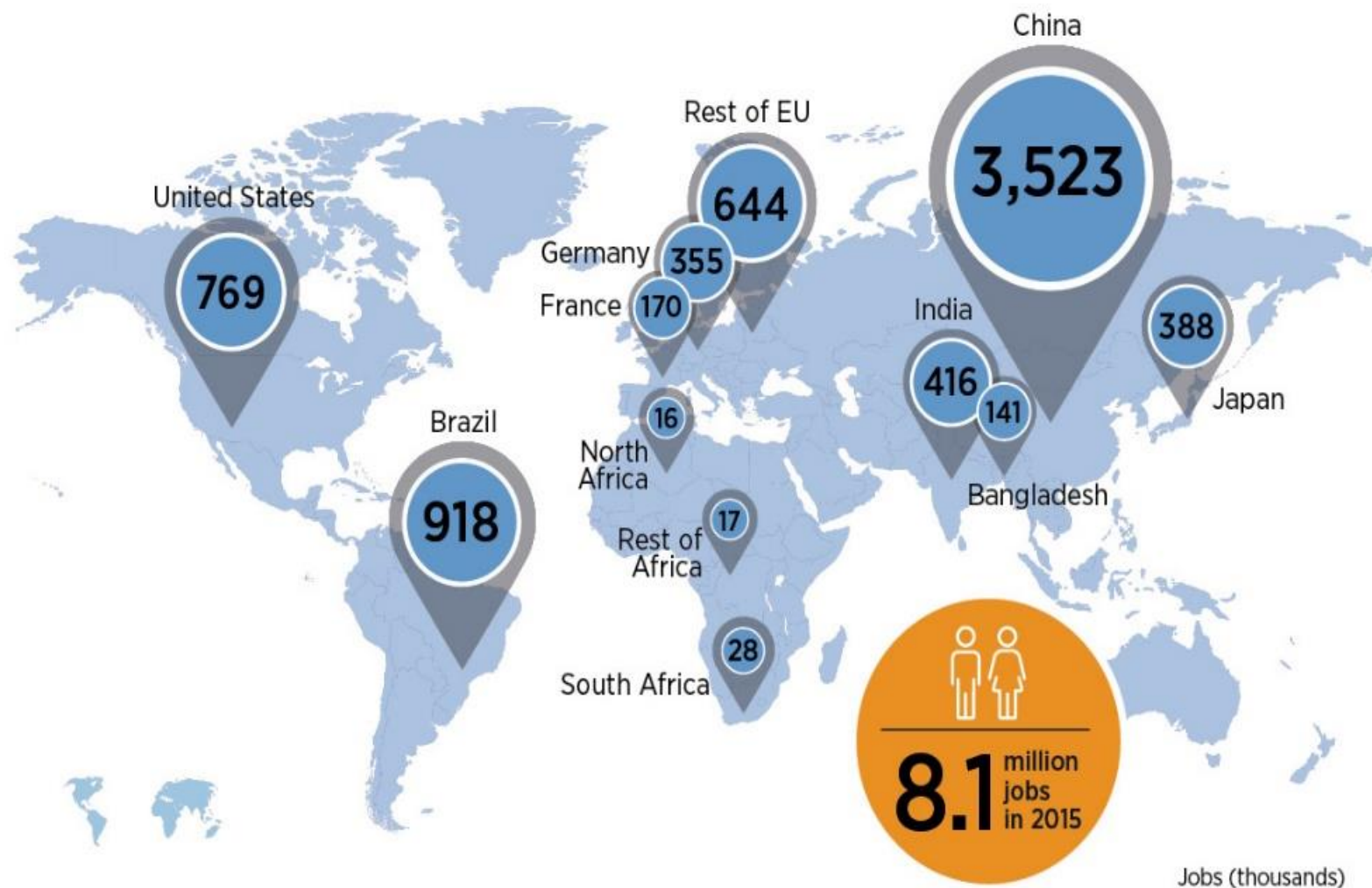
**164**  
countries  
2015

Global weighted average utility-scale solar PV total installed costs, 2009-2025





## RENEWABLE ENERGY EMPLOYMENT IN SELECTED COUNTRIES AND REGIONS



# REmap 2030: Roadmap to double the global share of Renewable Energy by 2030

- **Doubling the share of renewable energy by 2030 is critical** for the achievement of sustainable energy and climate change objectives
- Doubling renewables in the world's energy mix by 2030 will lead to **savings exceeding costs up to 15 times**
- The transition to renewables, with greater energy efficiency, can **limit the global temperature increase to 2 degrees or below**
- Doubling the share of renewable energy by 2030 is feasible, but only with **immediate, concerted action in transport, buildings and industry.**
- **Technology, market, regulatory, business model innovation.**



## Country potentials and technology roadmaps

- REmap global analysis issued 17 March 2016
- 40 country roadmaps based on bottom up analysis of technology options to accelerate RE deployment.
  - Developed in close cooperation with country experts
- All data, assumptions and detailed results are available online:
  - [www.irena.org/remap](http://www.irena.org/remap) - new roadmap indicator dashboard
- Analysis can inform regarding areas for cooperation and joint action, including investment, cost and benefits (climate, environment, energy security, macro-economics) of possible new G20 RE deployment objectives.

# Benefits of a doubling of the global share of RE:



Limit average global temperature rise to **2 °C** or below (when coupled with energy efficiency)



Avoid up to **12 gigatonnes** of energy-related CO<sub>2</sub> emissions in 2030



**24.4 million jobs** in the RE sector by 2030, compared to 9.2 million in 2014



Reduce air pollution enough to save up to **4 million lives** per year



Boost global GDP by up to **\$ 1.3 trillion**

## Five actions to increase the deployment of Renewable Energy:

1. Strengthen the policy commitment to renewable energy
2. Mobilize investments in renewable energy
3. Build institutional, technical and human capacity to support renewable energy deployment
4. Harness the cross-cutting impact of renewable energy on sustainable development
5. Enhance regional engagement and international cooperation on renewable energy development

## Examples of IRENA regional and international initiatives

- **Africa Clean Energy Corridor:** Accelerated deployment and cross-border trade of renewable power in a continuous network from Egypt to South Africa. Specific priorities include: zoning, planning, regulation and capacity building.
- **Global Geothermal Alliance (GGA):** Countries with geothermal potential are scattered around the globe, but share common challenges, including exploration risks, high upfront development costs, regulatory challenges, limited human resources and low awareness. The GGA offers customized support in addressing key investment challenges to scaleup geothermal energy deployment.
- **SIDS Lighthouses Initiative:** Disconnected from mainland electricity grids, islands are especially vulnerable to price fluctuations for imported fossil fuels. The initiative supports the transition of islands to greater renewable energy use in a structured and holistic way by fostering partnerships for project development and sharing crucial data, analysis and expertise.



# THANK YOU!!!

