

# Renewable Energy and Climate Change: Policy Links

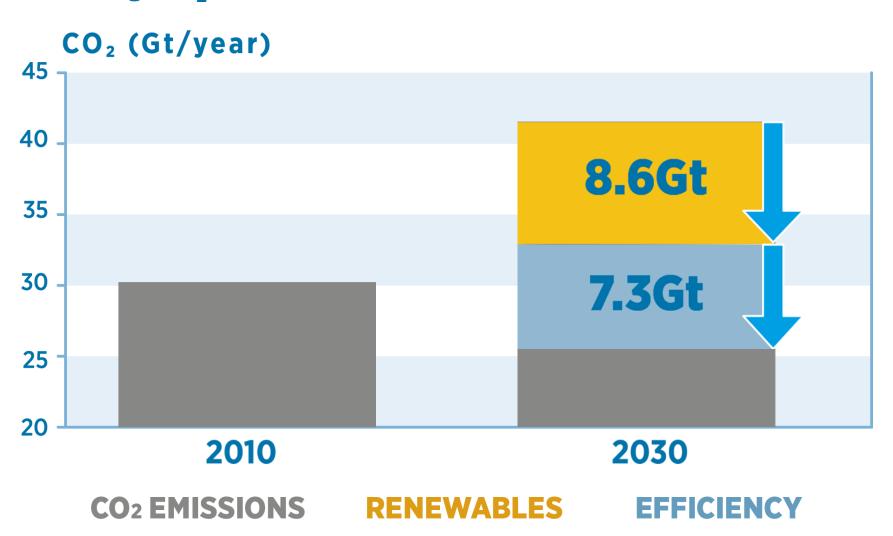
Henning Wuester, Director Knowledge, Policy and Finance Centre of IRENA







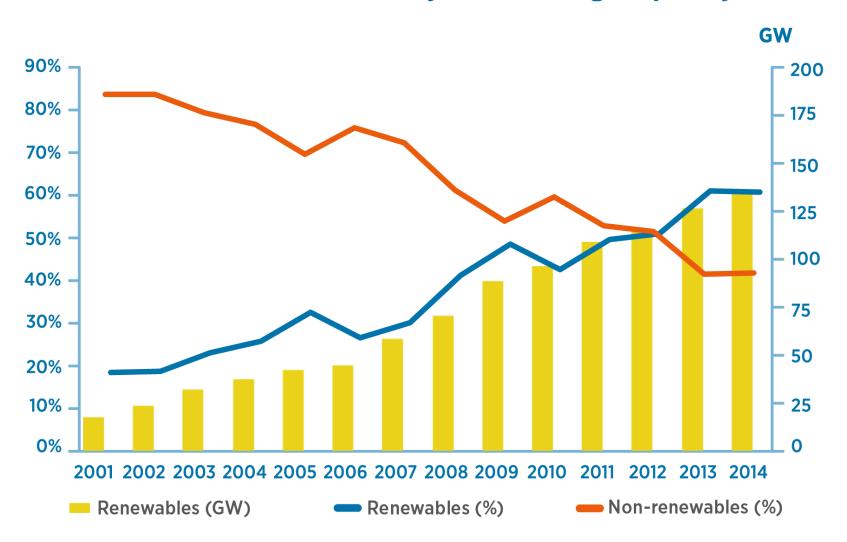
#### Reducing CO<sub>2</sub> Emissions with Renewables







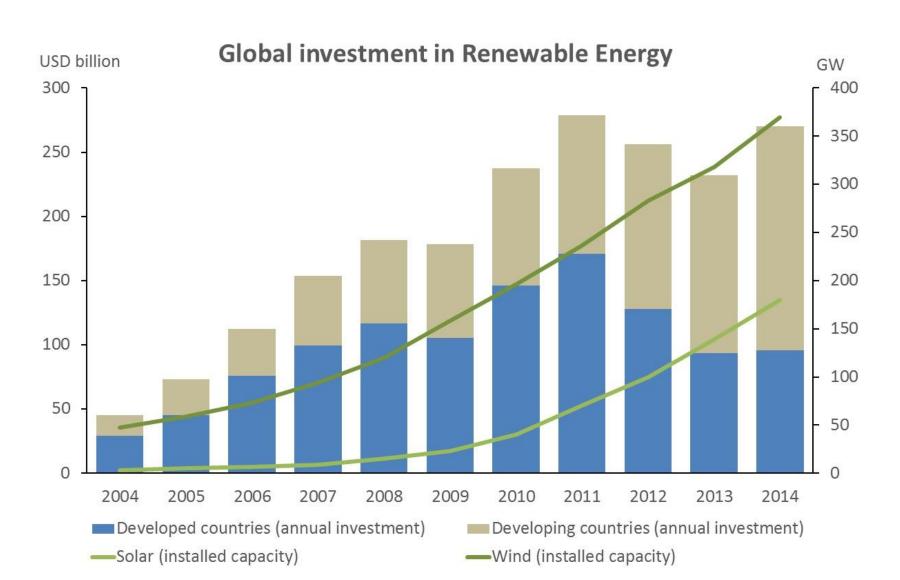
#### **Growth of Renewable Electricity Generating Capacity**







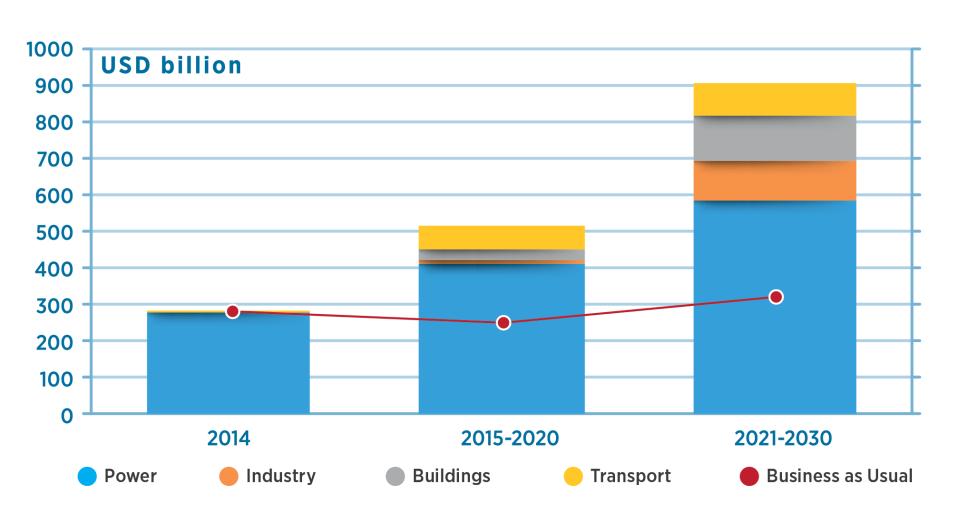
#### **Growth in Investment in Renewables**







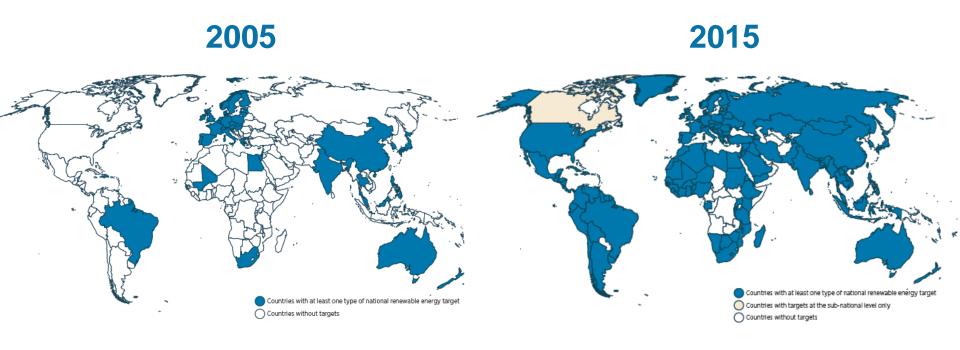
### Scaling Up Renewable Energy Investment – what is needed







# Targets in the renewable energy: 2005-2015



The number of countries that have at least one type of renewable energy target has grown from 43 in 2005 to 164 in 2015 – including 131 emerging and developing countries





#### INDCs in Africa: some examples from West Africa

- 53 out of 54 African countries have submitted INDCs covering mitigation and adaptation action across all sectors, some with start of implementation in 2016
- Include some action subject to internatinal support/financing

Examples from West Africa:

Burkina Faso: Add 20 MW of solar PV capacity every 10 years

Cabo Verde: Increase renewables in electricity to 100% by 2025

(30% unconditional)

Chad: Increase renewables in electricity from 0 to 750 GWh/year

in 15 years

Gabon: 80% of electricity generation from hydro

Gambia: Install solar PV, wind and hydro power plants

Guinea Bissau: 80% renewable energy in the national energy mix by 2030

Niger: Increase hydro capacity from 4 MW in 2010 to 250 MW

in 2030 and install 20 MW capacity in wind





# From Targets to Policy



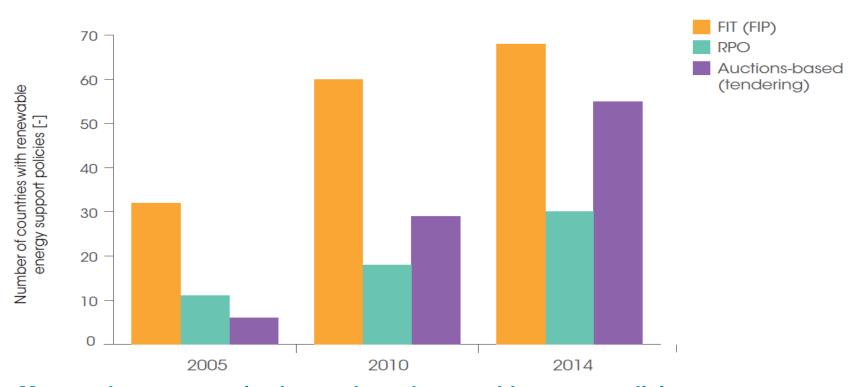
Turn political vision into specific policies to move from goals to actual renewable energy production or consumption.





# Renewable Energy Policies

#### Number of countries with renewable energy policies, by type



More and more countries have adopted renewable energy policies, increasingly shifting to auctions-based deployment schemes





#### **Conclusions**

- 1. Paris Agreement has injected strong political momentum to accelerate renewable energy deployment
- 2. NDCs need to be translated into energy policy and backed up by international support in order to have impact
- 3. To achieve climate objectives annual renewable energy investment needs to be scaled up to almost double in the period up to 2020 and more than triple in the decade up 2030
- 4. To attract private investors sound, stable and long-term policy frameworks are needed
- 5. NDCs are currently not sufficient to reach the below 2 degree target, but they can fuel market dynamics if followed up by strong policies



#### RENEWABLE ENERGY AND CLIMATE CHANGE













Further information: irena.org

Thank you