

RENEWABLE ENERGY

Medium-Term Market Report 2015

Medium-Term Renewable Energy Market Report 2015: Renewables poised to lead world power market growth

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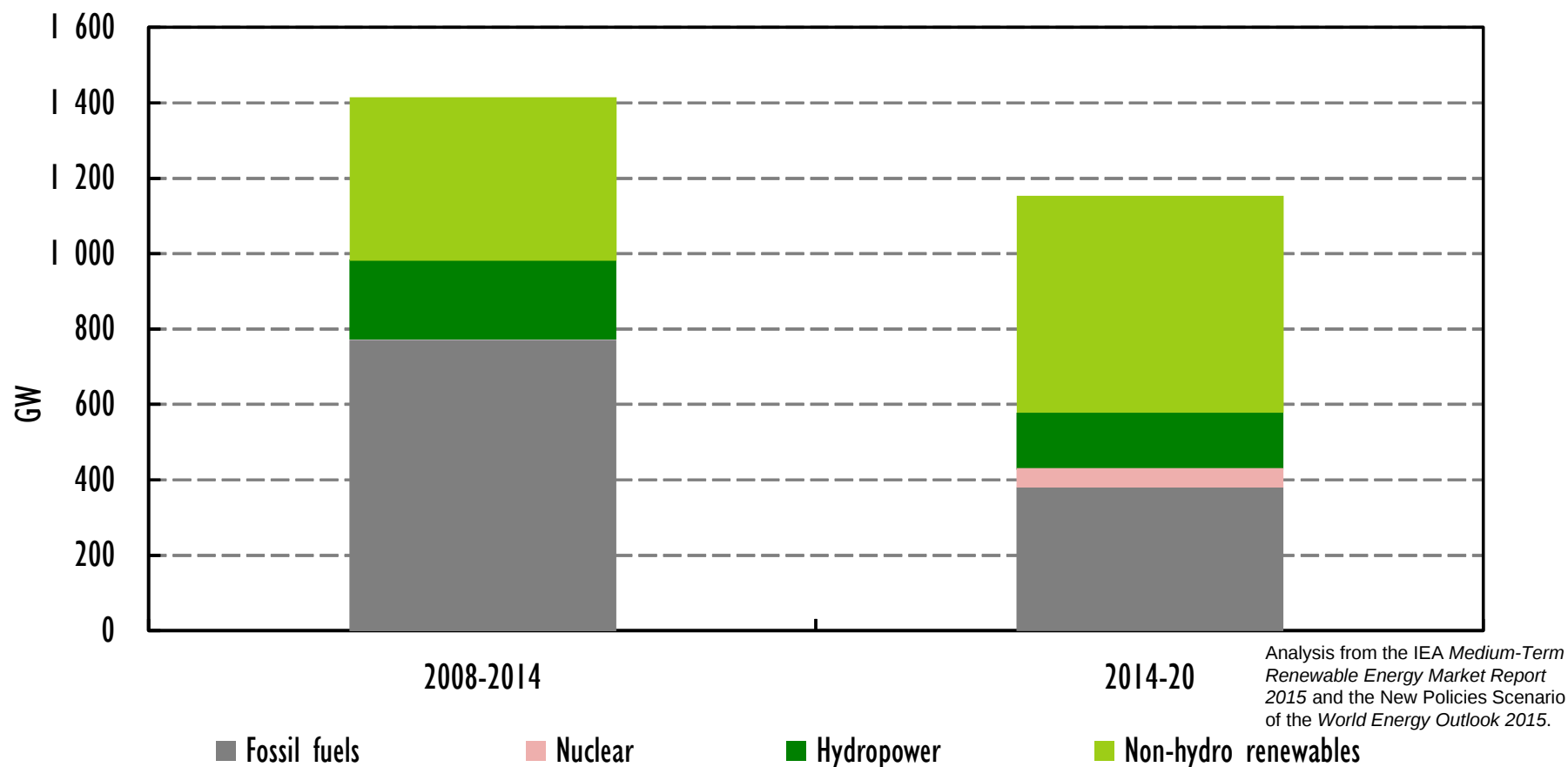
Market Analysis and Forecasts to 2020

Profound changes underway in energy markets

- Signs of decoupling of energy-related CO₂ emissions and global economic growth
- Fossil-fuel prices at multi-year lows; emerging market economic growth slowing; uncertainty over monetary policy and interest rates in US
- But overarching policy drivers for renewable electricity – energy diversification, local pollution and decarbonisation – remain robust
- Renewables are key to the unprecedented pledges ahead of COP 21
- Renewables to become first source for electricity in the longer term, but addressing policy uncertainty in the next five years is crucial

Renewables are becoming the largest source of new power generation capacity

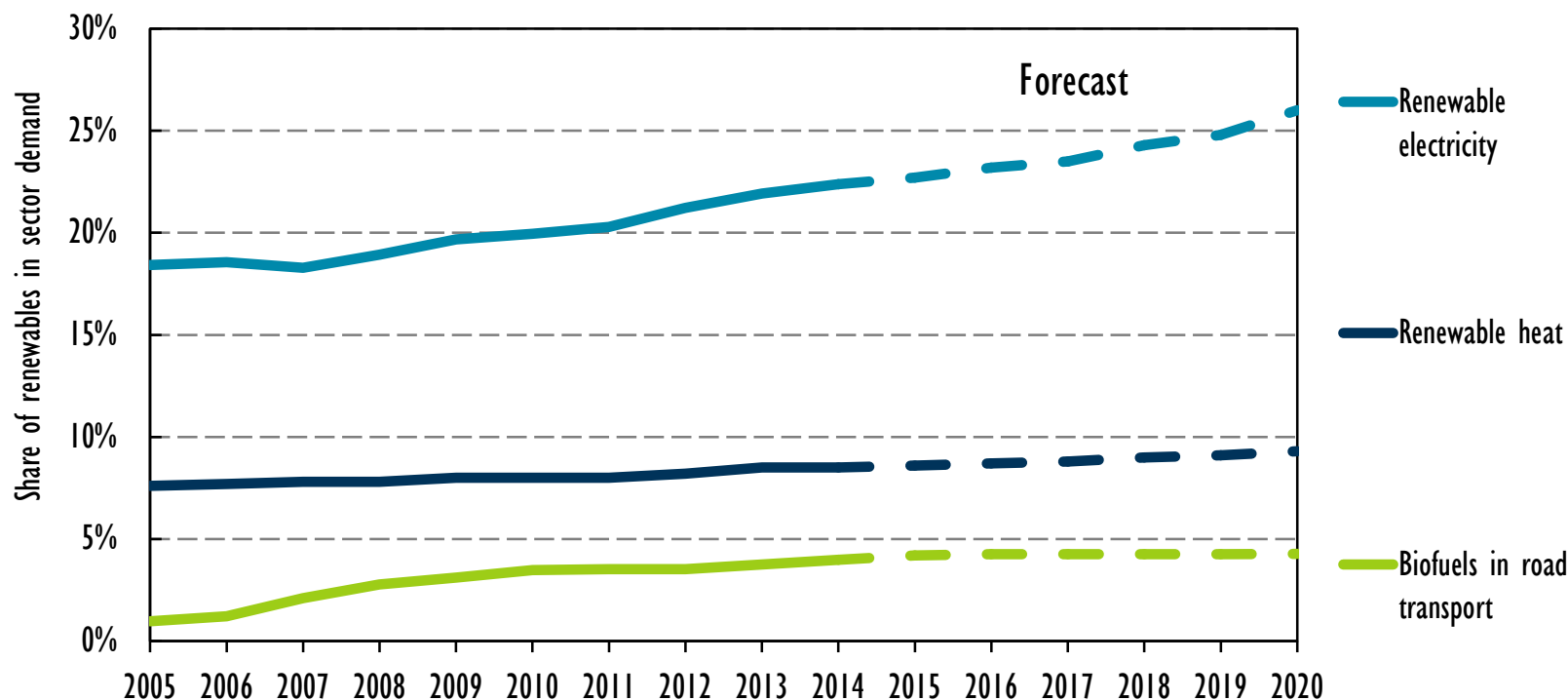
World net additions to power capacity



The share of renewables in net additions to power capacity continues to rise with non-hydro sources reaching nearly half of the total

Persistent challenges slow growth in heat and transport

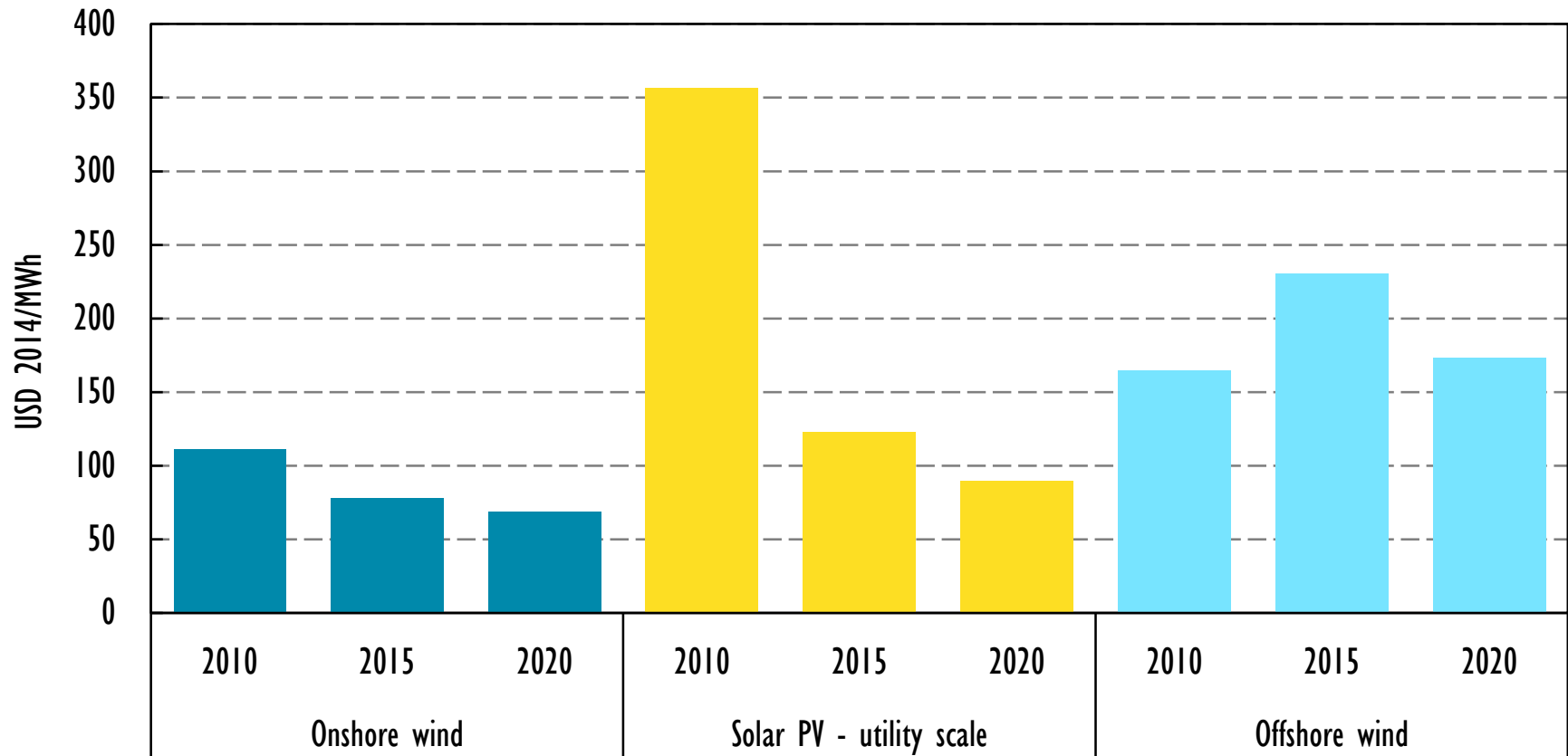
Historical and forecast share of renewables in electricity, heat and transport sectors 2005-20



Growth of renewable electricity generation is increasing, while renewable heat and transport are falling behind

Renewables generation costs will decrease further

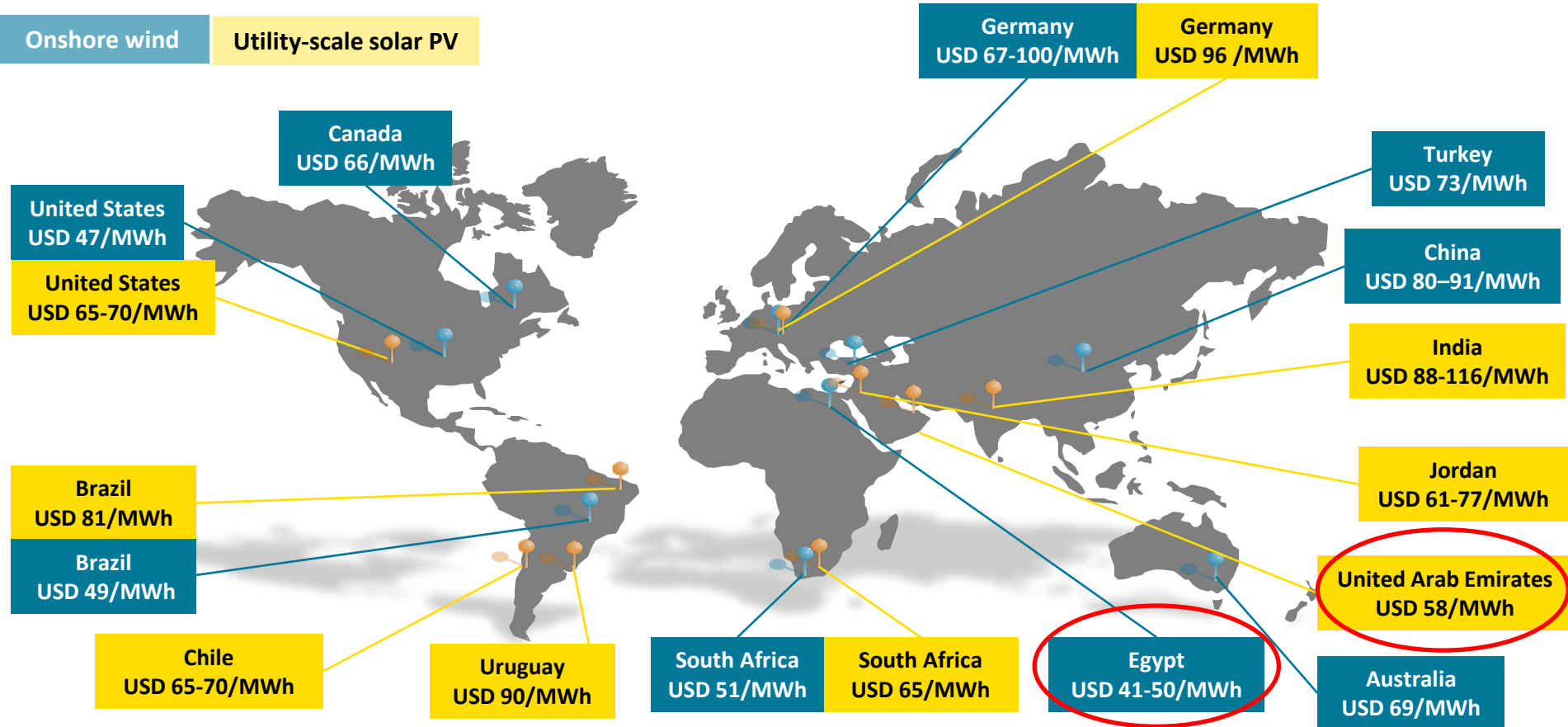
Historical and forecast global weighted average generation costs for new plants



High levels of incentives are no longer necessary for solar PV and onshore wind, but their economic attractiveness still depends on the regulatory framework and market design

Evidence of lower costs on the horizon

Recent announced long-term contract prices for new renewable power

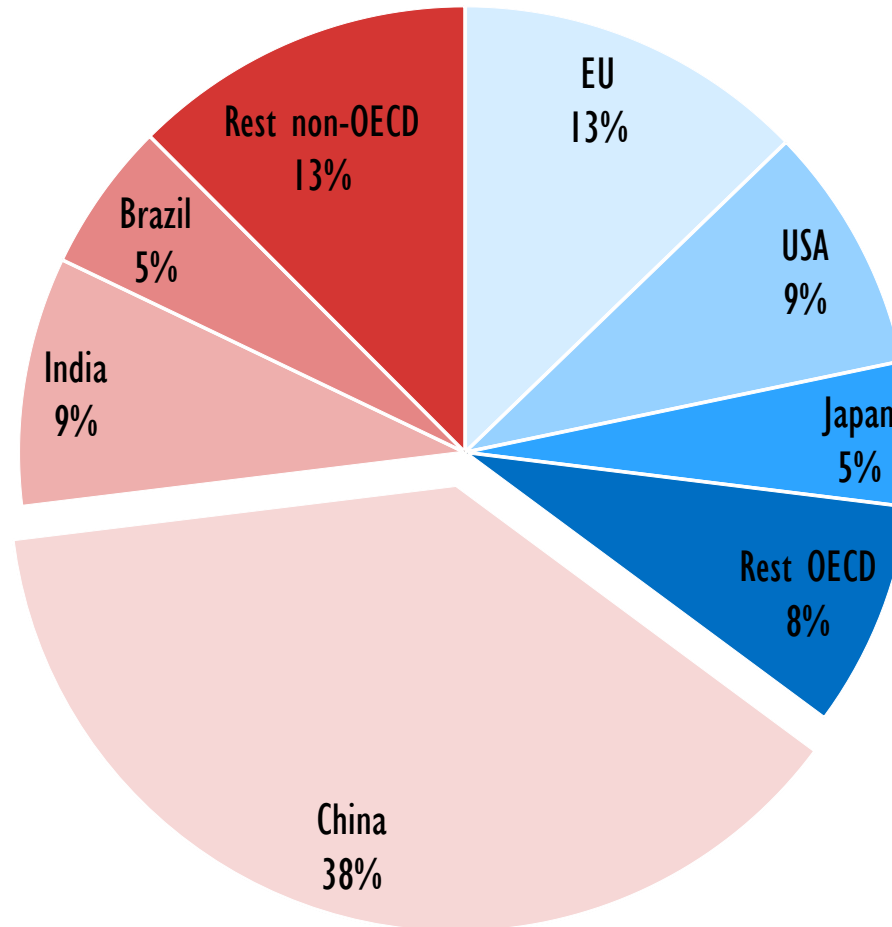


This map is without prejudice to the status or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area

A combination of price competition, long-term contracts, good resources and financial de-risking measures is creating deployment opportunities in newer markets and at lower costs

Growth shifting to emerging markets and developing countries

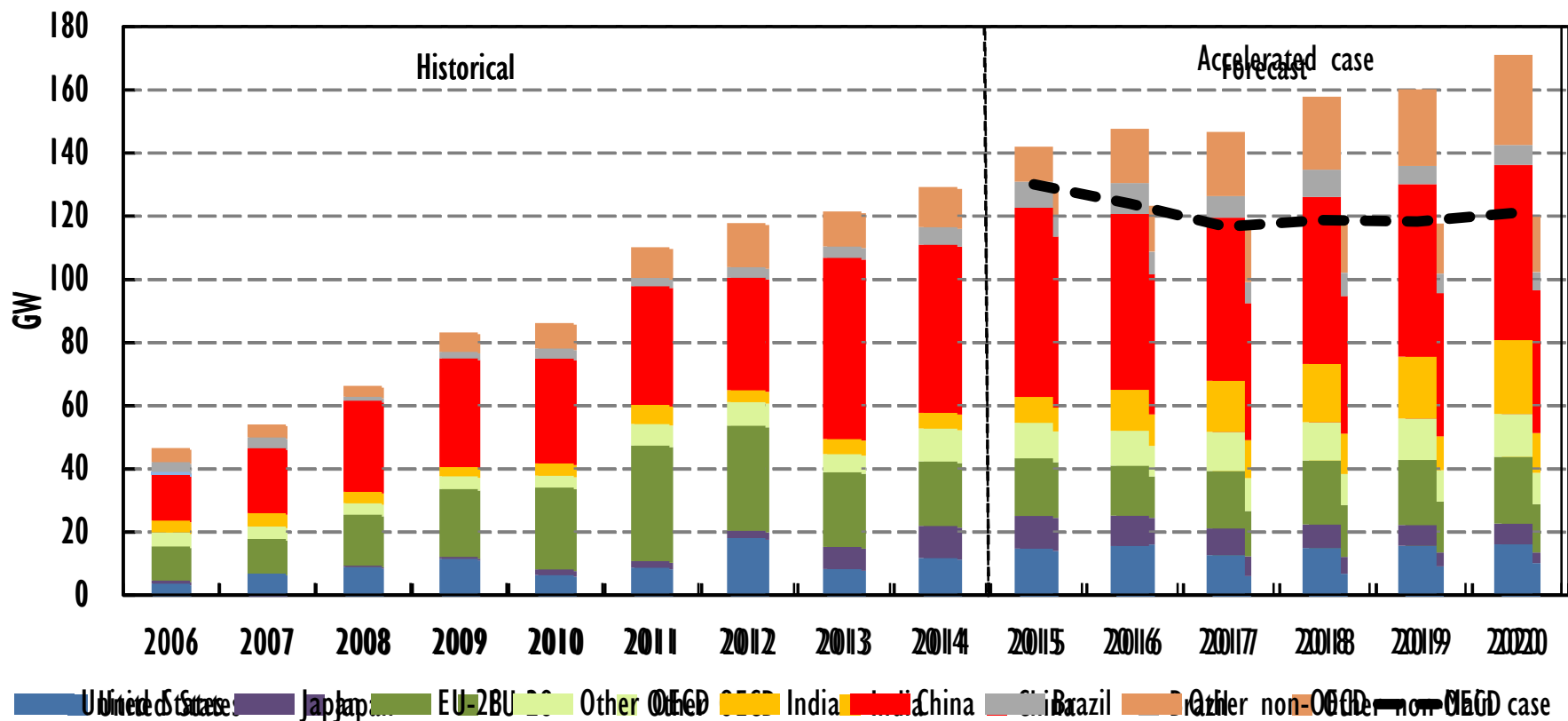
Shares of net additional renewable power capacity, 2014-20



As the OECD slows, non-OECD countries account for two-thirds of renewable growth, driven by fast-growing power demand, diversification needs and local pollution concerns

Can renewables get back on track to meet climate change goals?

World renewable power capacity growth, main versus accelerated case



With policy enhancements renewables can be back on track to meet long-term climate change goals

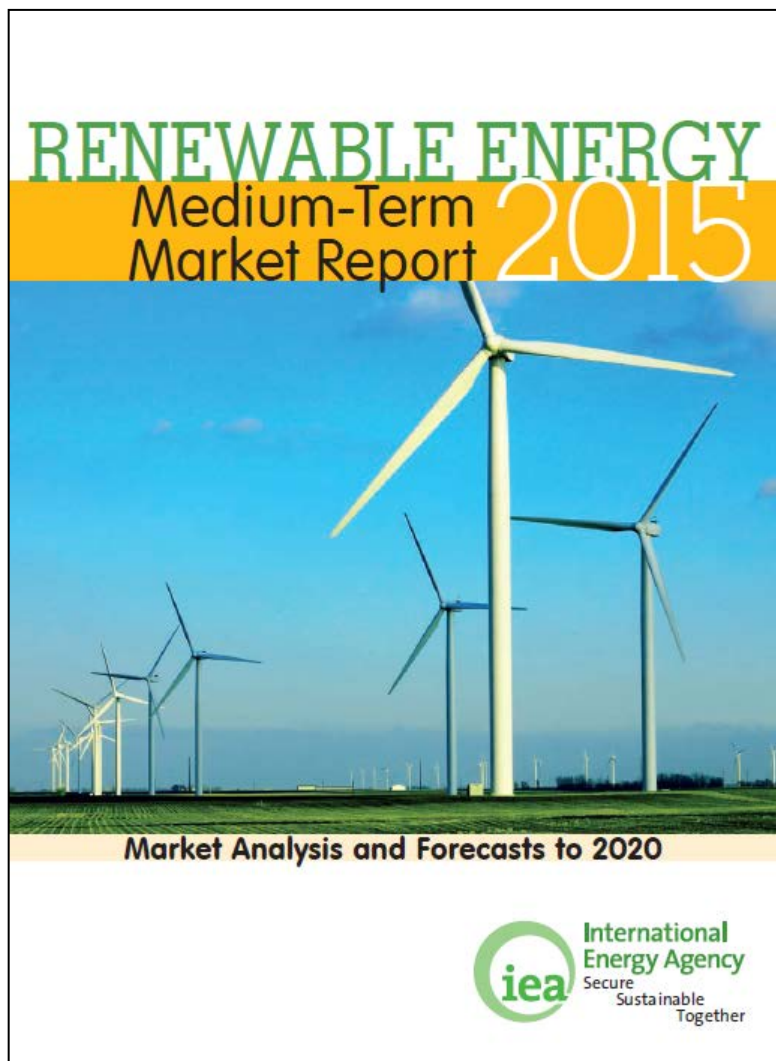
A decisive moment for the future of renewables

- Increasingly affordable renewables are set to dominate the growing power systems of the world
- Developing countries can now leapfrog to cleaner power systems
- The impact of the lower oil price environment on global deployment of renewables is limited – in particular for the power sector
- But greater progress in two areas is needed to accelerate the pace and meet climate change objectives:
 - *Financing and investments* – a better enabling environment and market rules to provide the right price signals for investment in renewables and flexibility
 - *Focus on heat and transport sectors* – advanced biofuels and renewable heat both require a long term policy vision

For further insights and analysis

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- The Medium-Term Renewable Energy Market Report 2015 can be purchased at:

www.iea.org/bookshop/

- Thank you for your attention!