

Global energy prospects and policy priorities post COP-21

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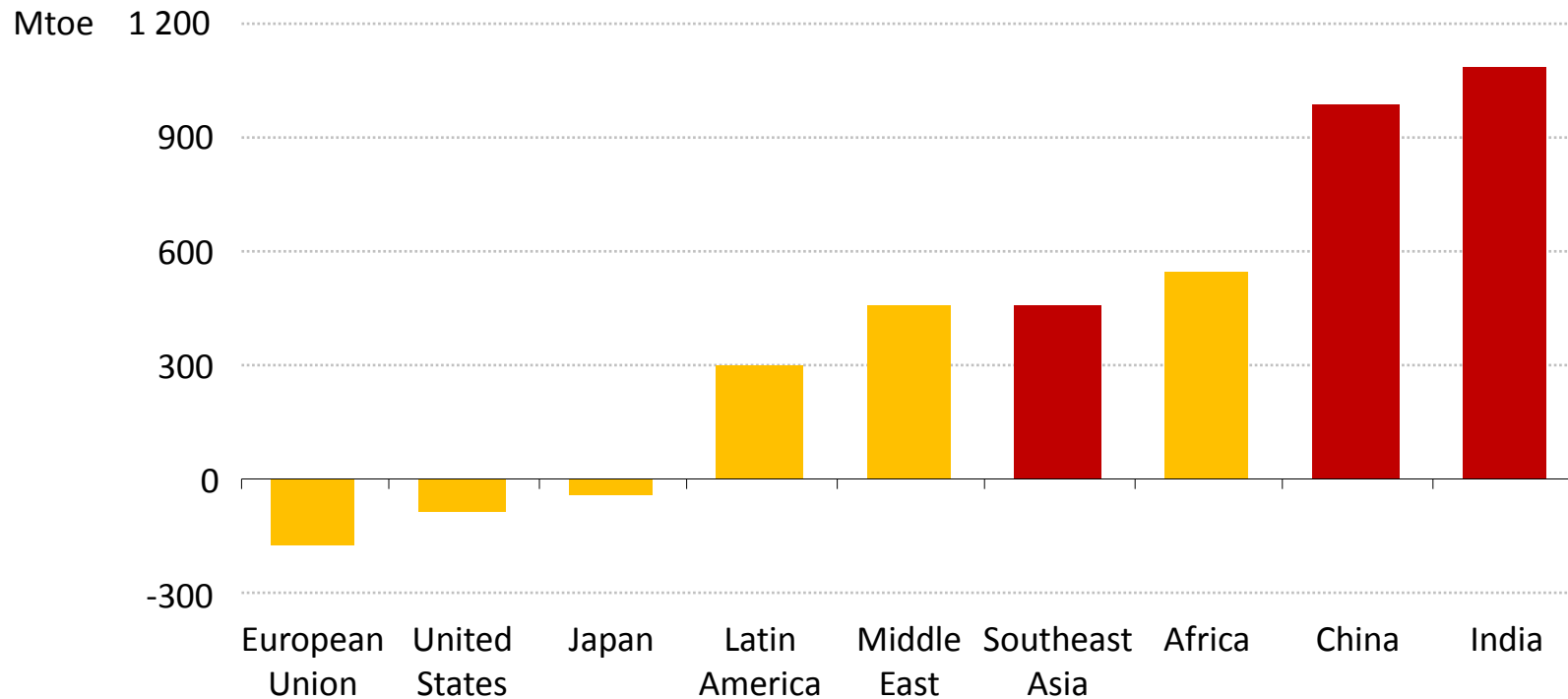
Executive Director, International Energy Agency

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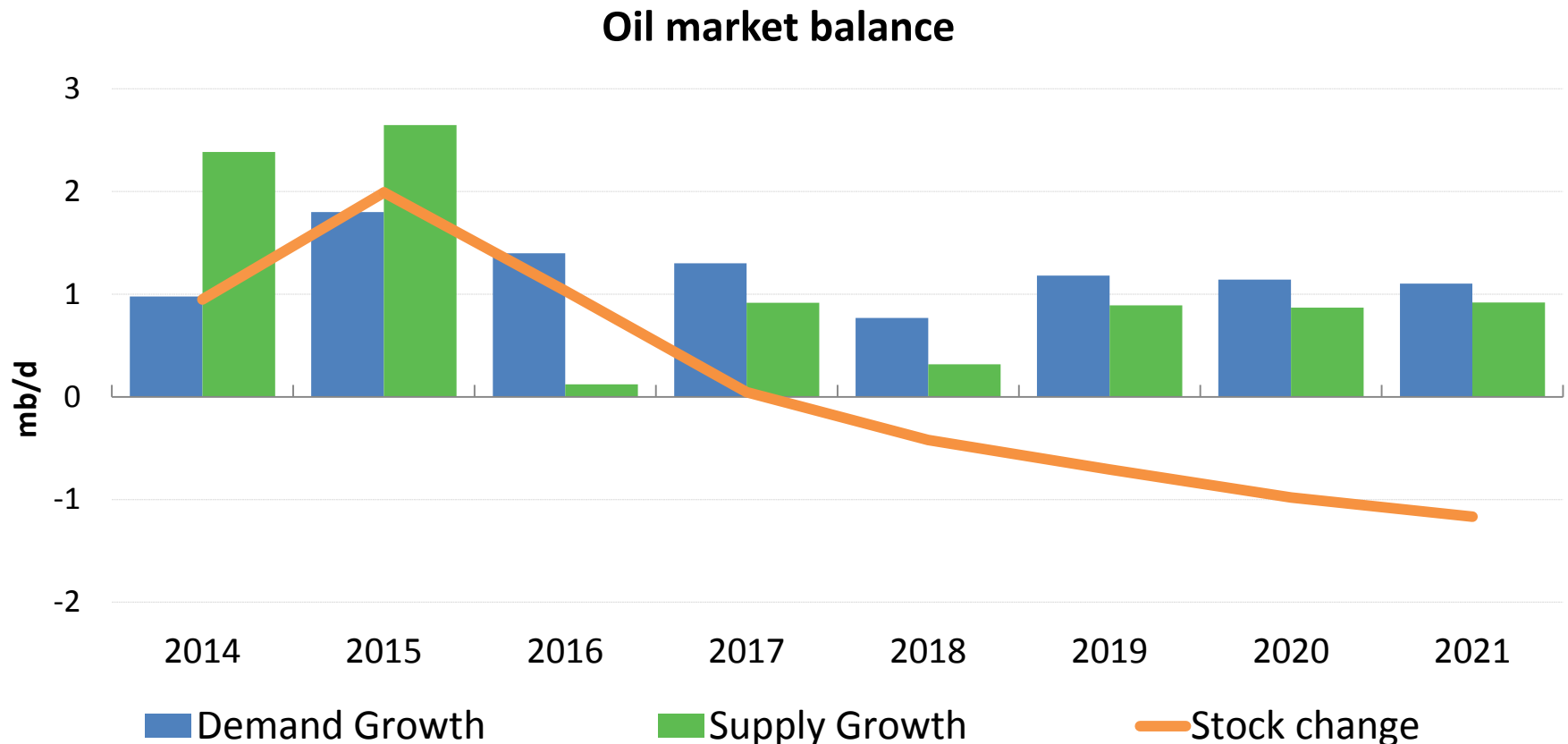
Demand growth in Asia

Change in energy demand in selected regions, 2014-2040



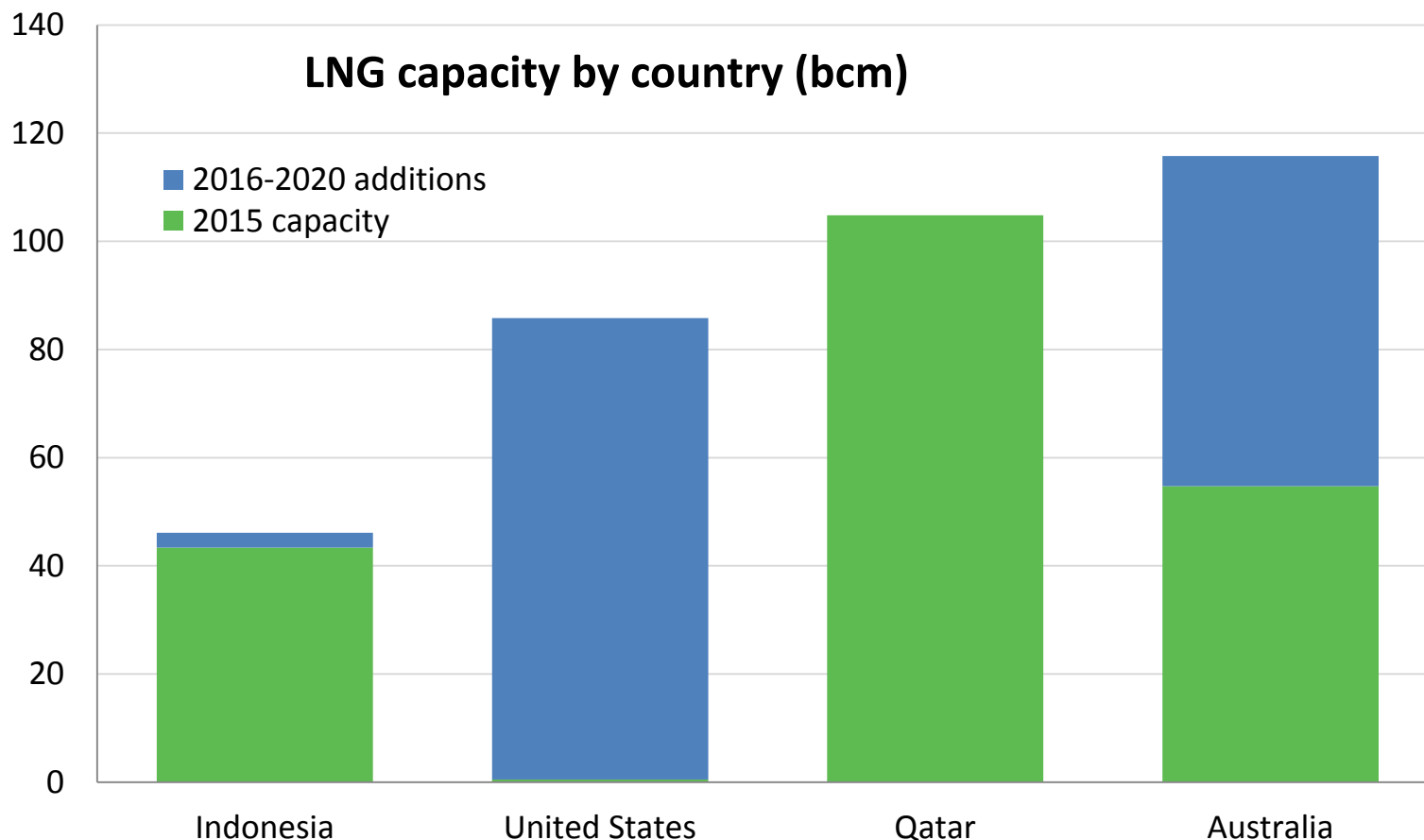
Energy use worldwide grows by one third to 2040, driven by Asia

Oil markets are gradually returning to balance as low prices take their toll



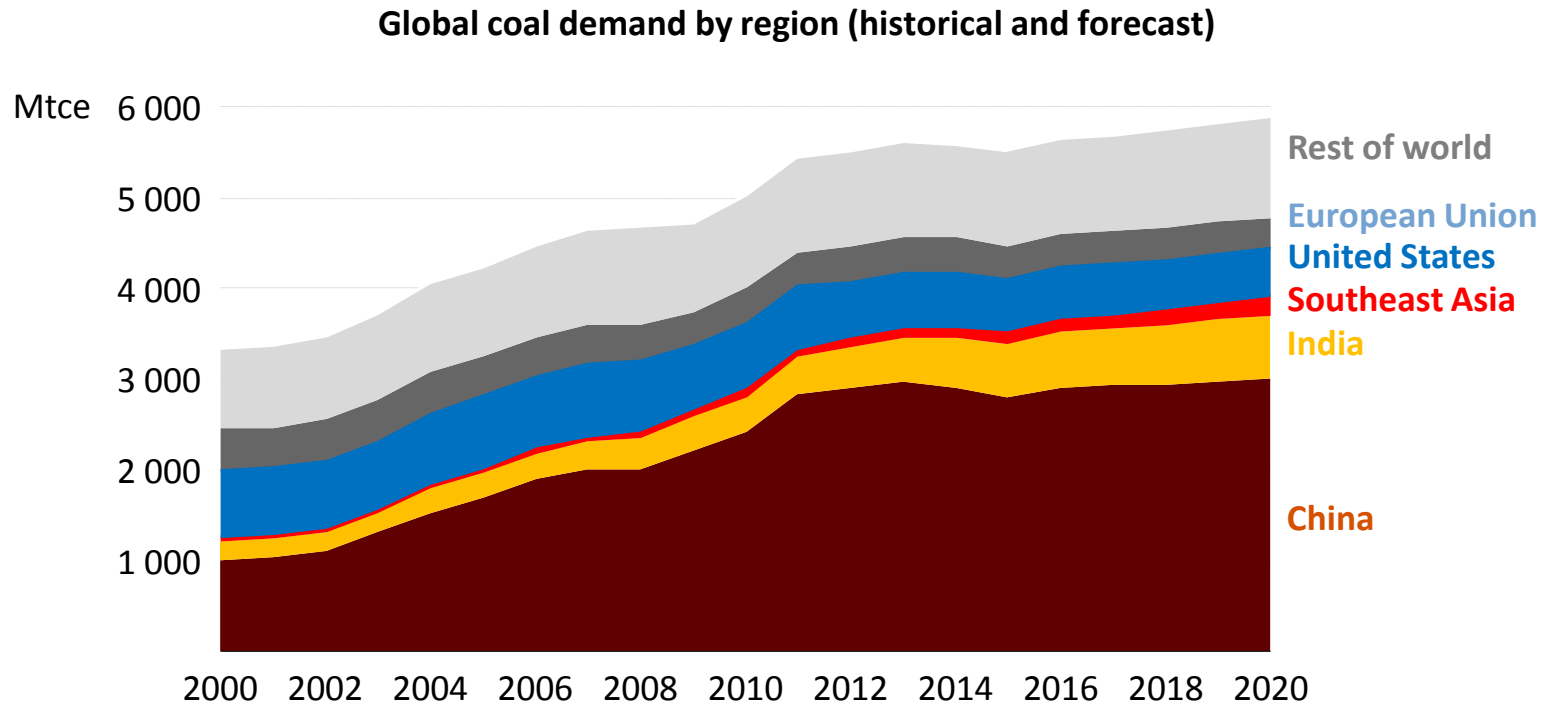
In 2016 non-OPEC supply set to drop by over 900k barrels per day, the largest fall since 1992, helping to push the oil market towards balance

Large LNG capacity additions on the way



Australia and the US accounts for 90% of new capacity additions by 2020

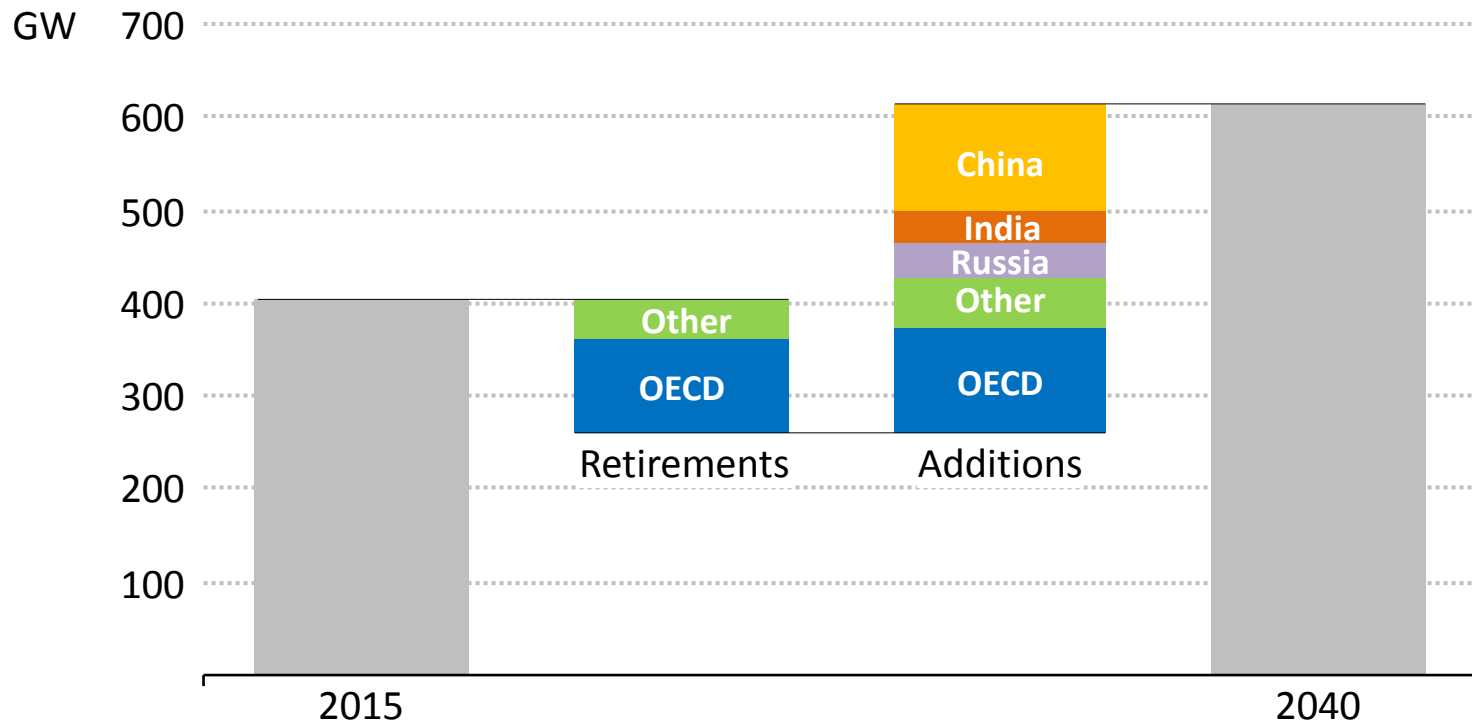
There is no “second” China waiting to drive global coal use



Strong growth in coal use in India & Southeast Asia offset declines in the EU & the US, but does not match the rise seen over last decade in China

Nuclear capacity increases, but no nuclear renaissance in sight

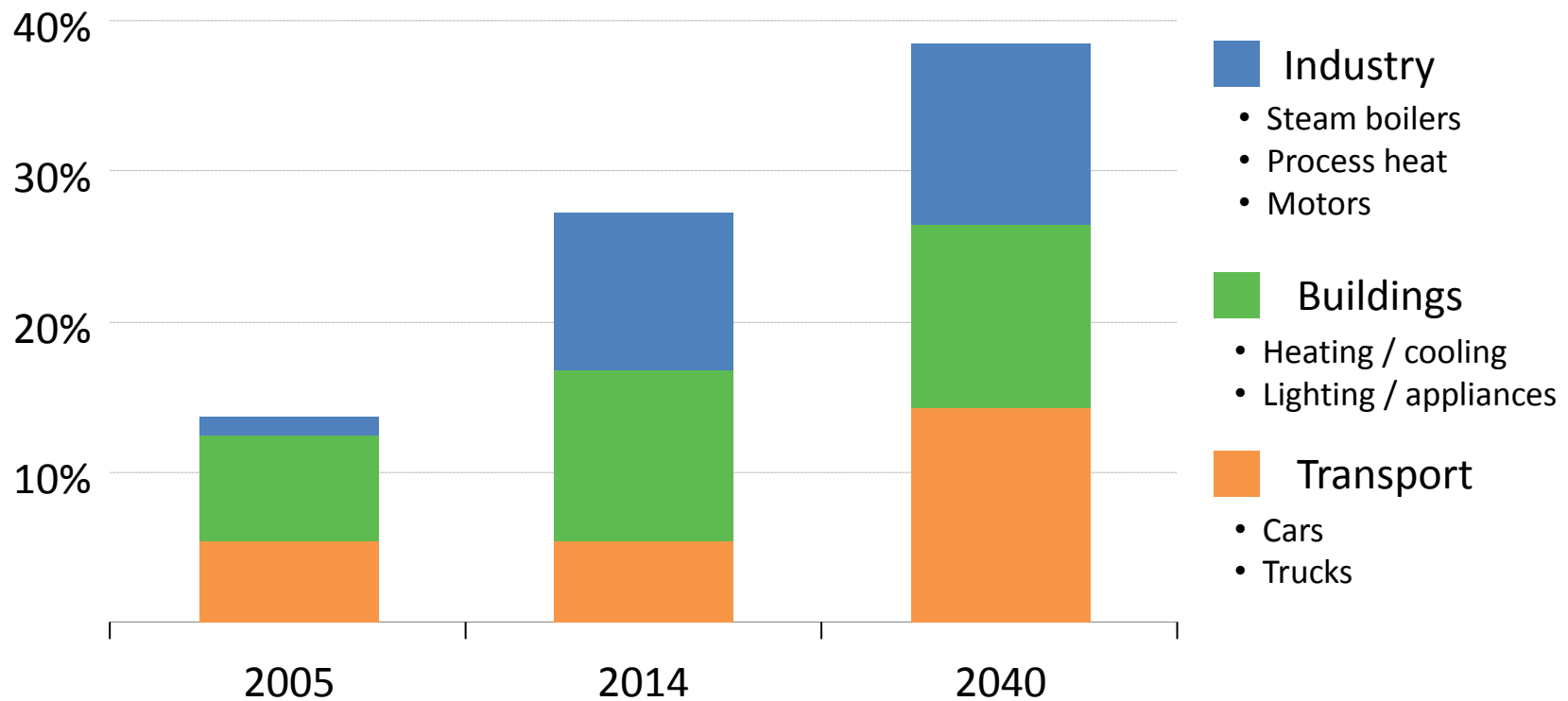
Nuclear capacity by selected region



Capacity grows 50% to over 610 GW in 2040, led by non-OECD, notably China & India; yet the share of nuclear in the global power mix remains well-below its historic peak

Action on energy efficiency must begin to match its potential

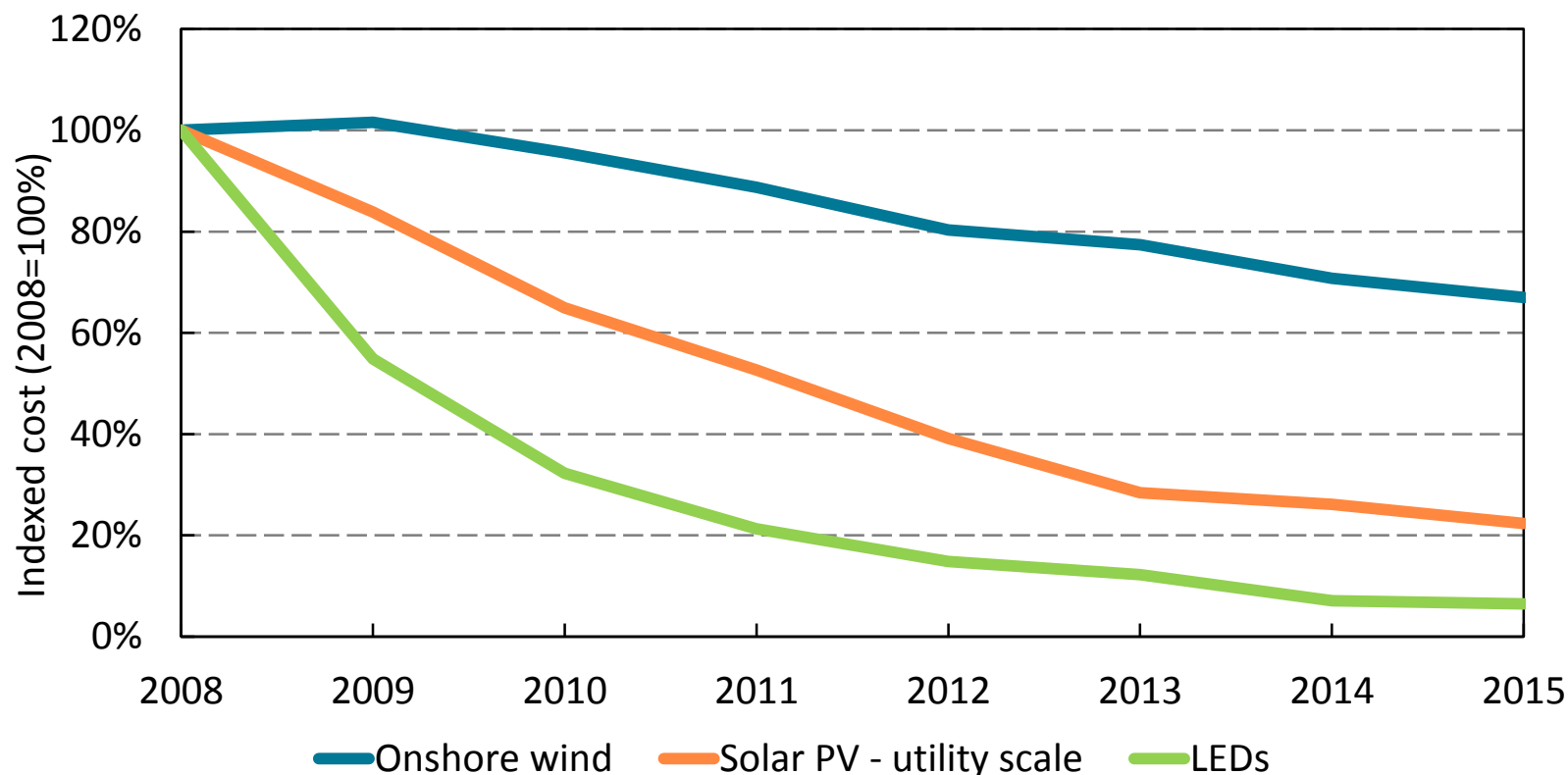
Share of energy consumption covered by mandatory efficiency regulations



Energy efficiency policies are being introduced in more countries and sectors; they continue to slow demand growth, but more can be done

The cost of clean energy continues to fall

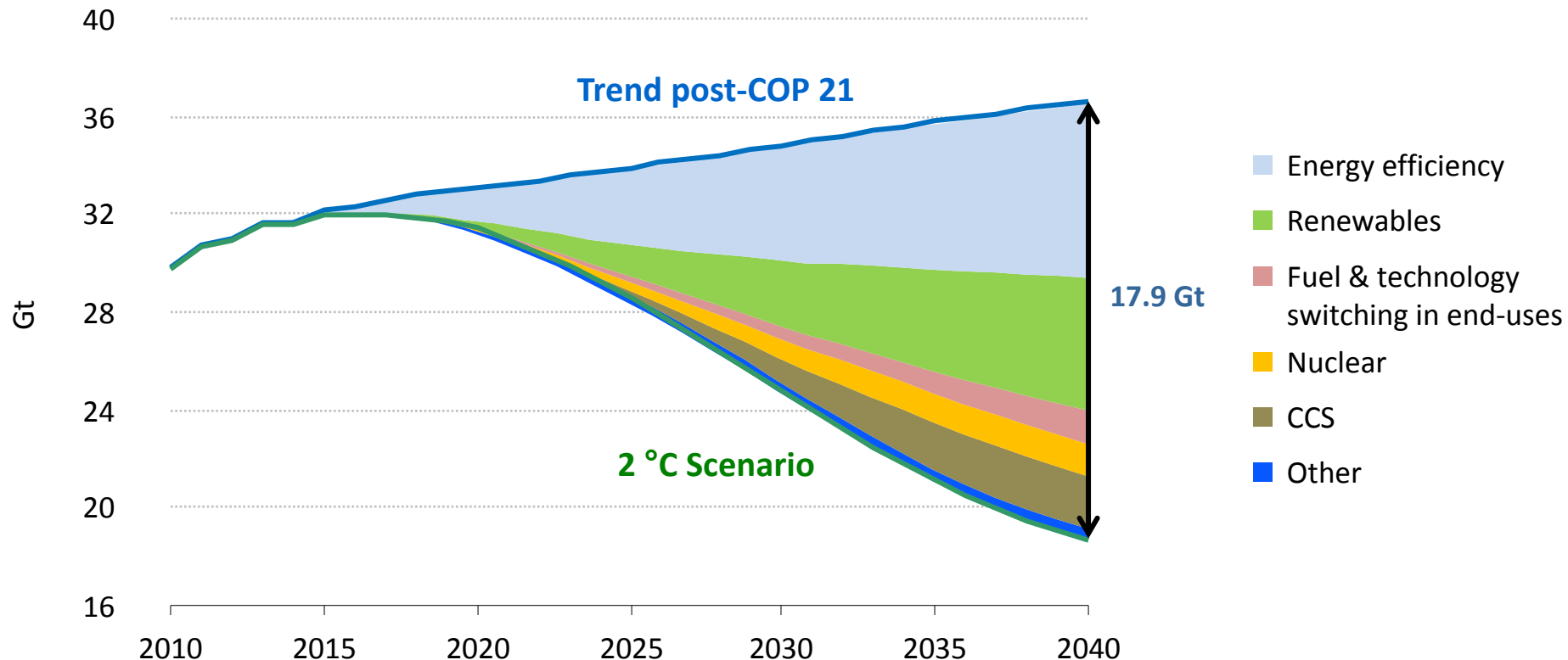
Indexed cost of onshore wind, utility scale PV and LED lighting



The falling cost of clean energies opens new opportunities but appropriate market design and regulatory frameworks remain critically important

A 2 °C pathway requires more technological innovation, investment & policy ambition

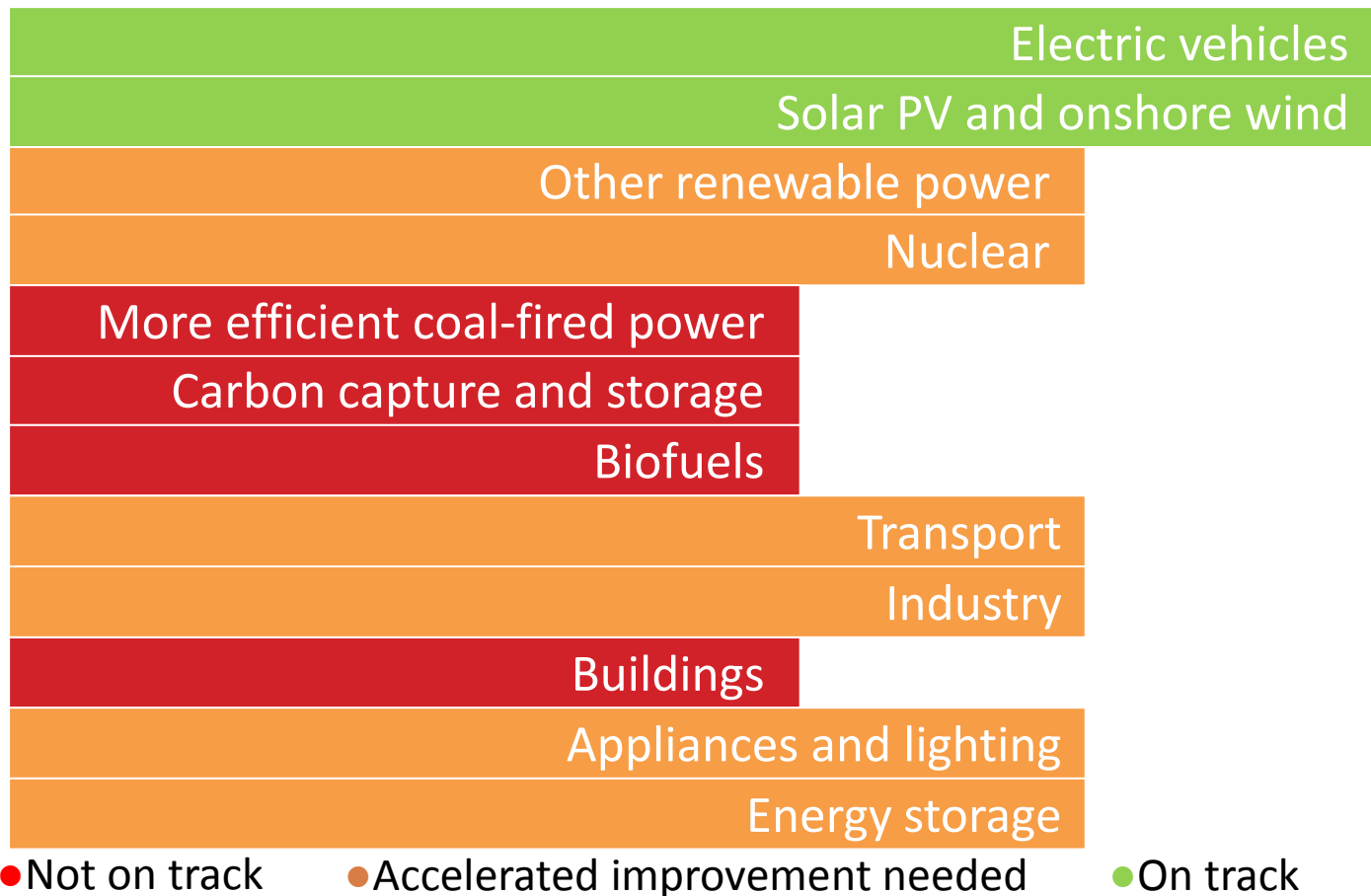
CO₂ emissions in a post COP 21 world



Even greater efforts in efficiency, renewables, nuclear power and other low carbon technologies would be required to get close to a 1.5 °C pathway

Global progress in clean energy still needs to accelerate

Technology Status today against 2DS targets



Global clean energy deployment is still overall behind what is required to meet the 2°C goal, but recent progress on electric vehicles, solar PV and wind is promising

Priorities in moving to a sustainable energy future

- Be wary of cuts in upstream oil and gas investment - they pose threats to energy security and could lead to greater price volatility
- COP21 was historic and a catalyst for more innovation, research and investment in clean energy technologies
- 2015 saw progress in solar PV, wind and electric vehicles, but other areas such as CCS and biofuels are lagging behind
- Nuclear power can play a role in energy security & carbon abatement – but financing & public concerns remain key issues
- International collaboration is crucial to respond to energy security & environmental challenges; IEA is pursuing modernization efforts:
 - I. *“Opening its doors” to the emerging economies*
 - II. *Taking on a new role to safeguard natural gas security*
 - III. *Becoming a global Clean Energy Hub*