



EU Climate and Energy Policy for 2030

Egmont / Development Group High Level Conference

10 November 2015

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**Climate
Action**

IPCC - Intergovernmental Panel on Climate Change (2013)

- Warming of the climate systems is unequivocal and observed changes are unprecedented on scales of decades to millennia.
- Human influence on the climate system is clear.
- Continued emissions of greenhouse gases will cause further warming and changes to the atmosphere, land and oceans in all regions of the globe.
- Limit climate change to 2°C compared to pre-industrial level

Mitigation measures



More efficient use of energy



Greater use of low-carbon and no-carbon energy

- Many of these technologies exist today



Improved carbon sinks

- Reduced deforestation and improved forest management and planting of new forests
- Bio-energy with carbon capture and storage



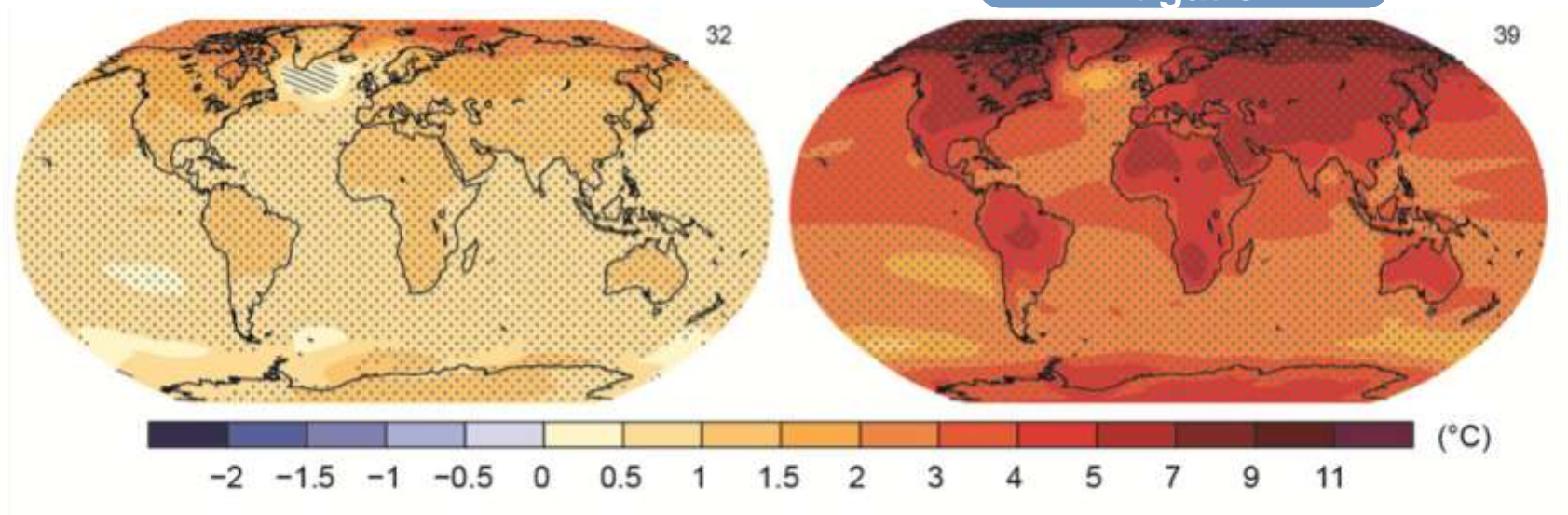
Lifestyle and behavioural changes

Source : IPCC AR5 Synthesis report

The choices we make will create different outcomes

With substantial
mitigation

Without
additional
mitigation



Change in average surface temperature (1986–2005 to 2081–2100)

Source : IPCC AR5 Synthesis report

- **1992 – Rio 'World Summit'**

UNFCCC – UN Framework convention on climate change

- **1997 – Kyoto**

Kyoto Protocol

Divide developed / developing countries

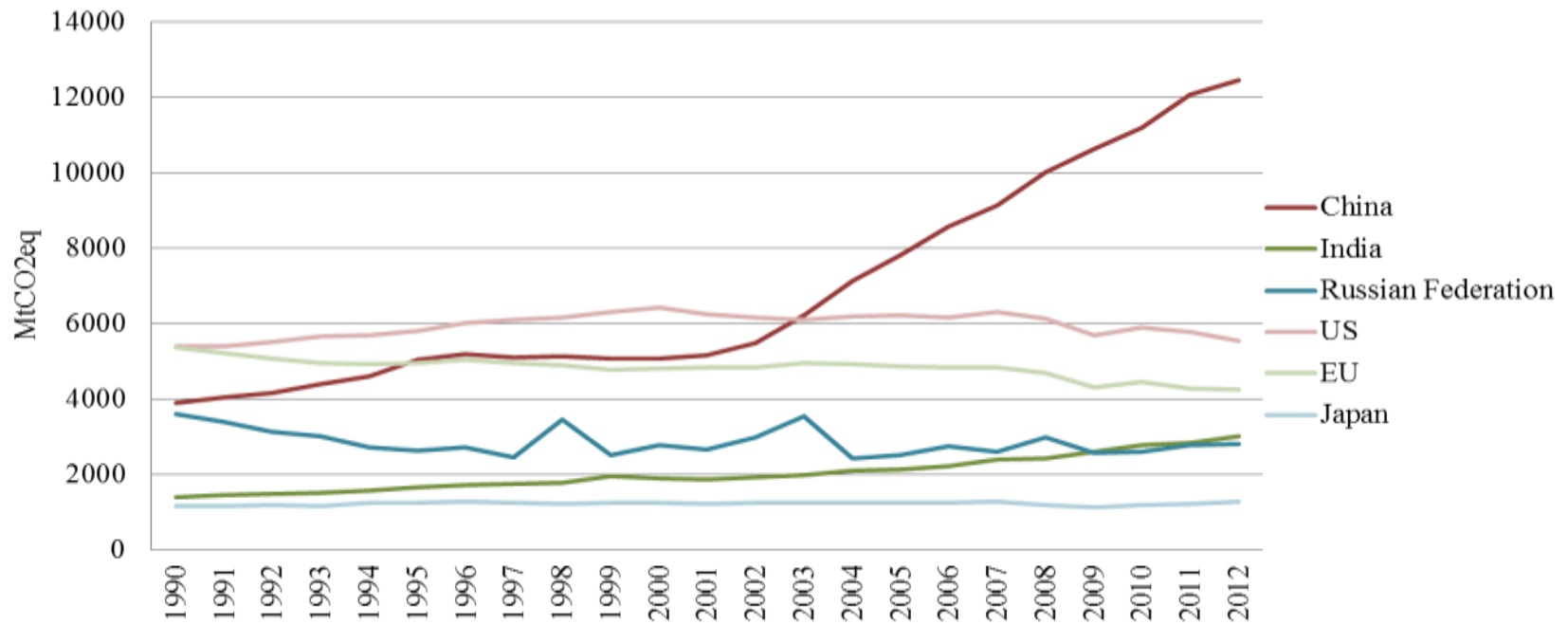
- **2015 – Paris**

Recognition that the world has changed

Also a change in UN approach ?

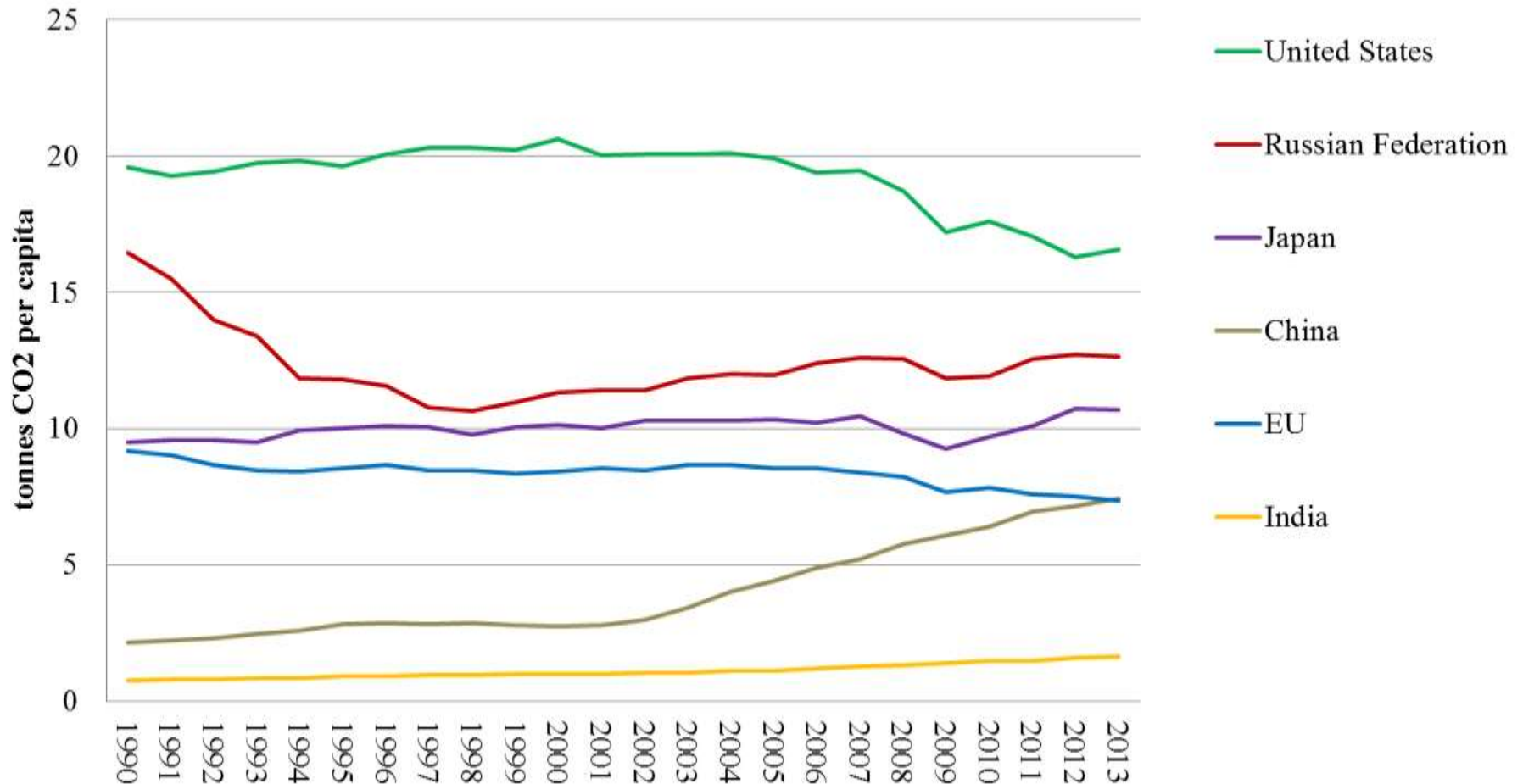
Hybrid between 'top down' and 'bottom up' ?

Emissions of major economies, 1990-2012 (all greenhouse gases, all sources & sinks)

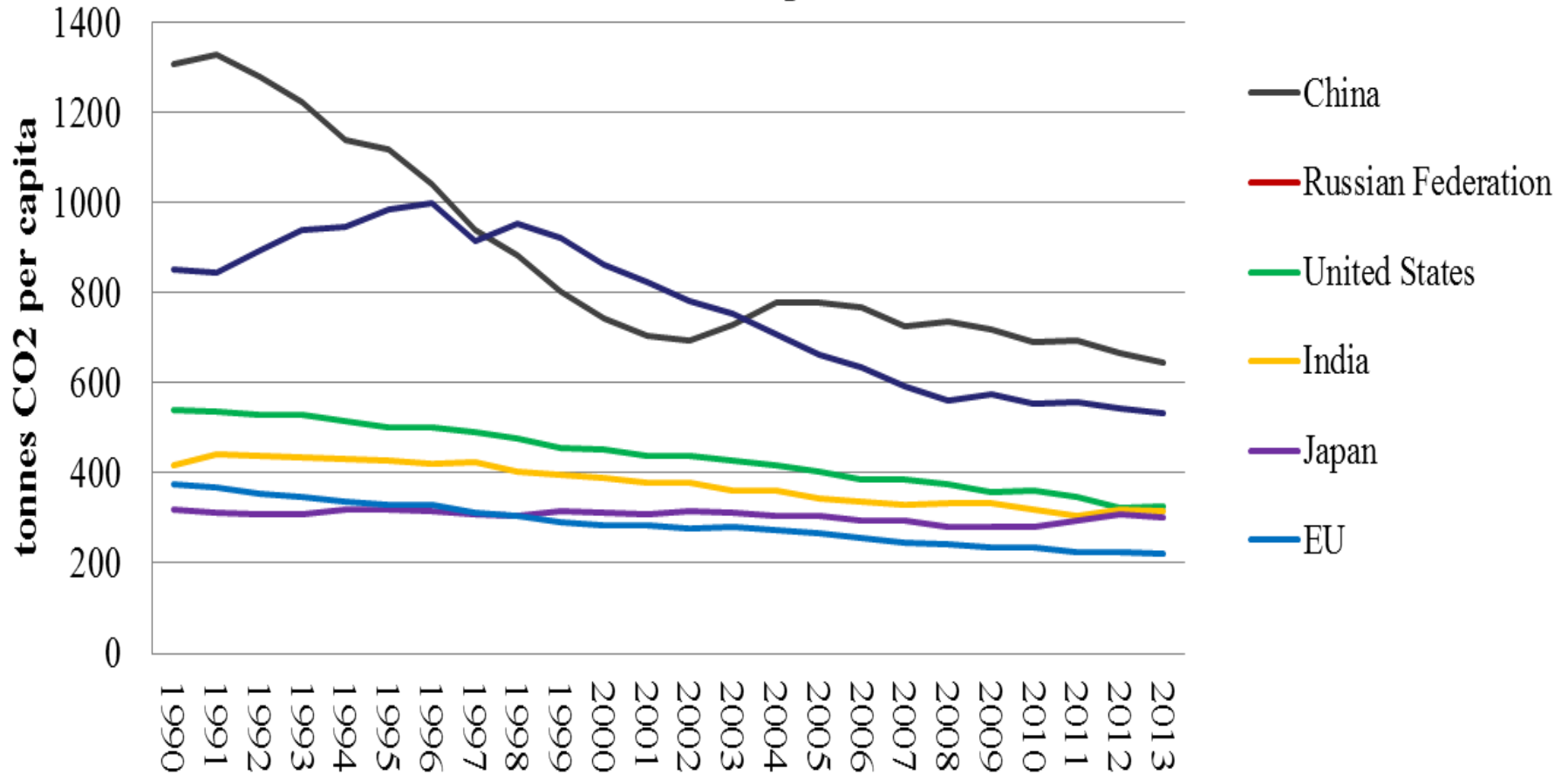


(Source: historical emissions data: inventories data to the UNFCCC (http://unfccc.int/national_reports/))

CO₂ emissions per capita



CO2 emissions per unit of GDP

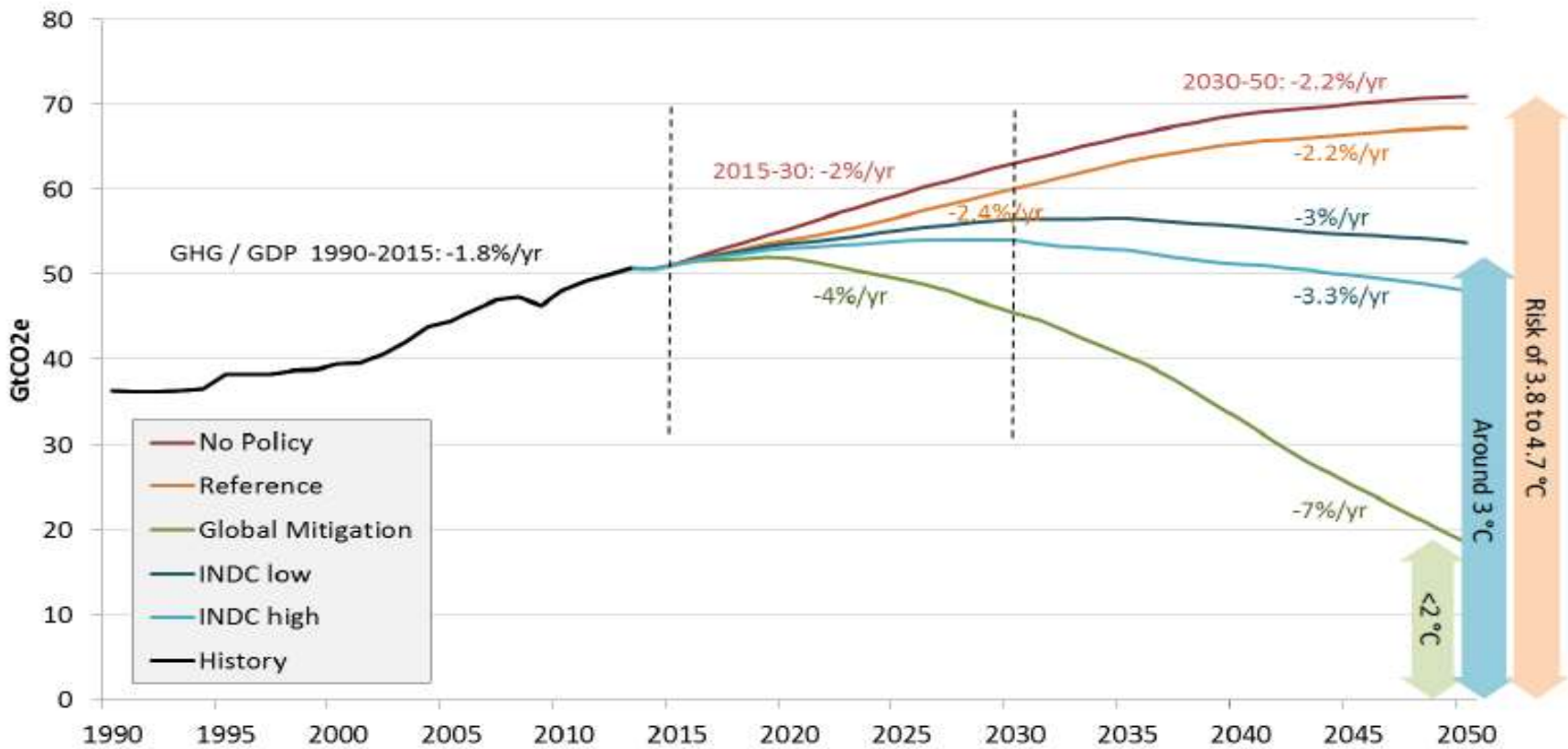


Road to Paris : Climate Policy Pledges (INDCs)



- ***INDCs submitted representing around 90% of global GHG emissions***
- ***Over 150 countries***
- ***UNFCCC Secretariat Synthesis Report by 01.11.2015***
- ***Rather 3° instead of 2°C outcome***

World emissions (GtCO₂e, total excluding sinks) and percent change in emission intensity per unit of GDP



Source: POLES – JRC Model

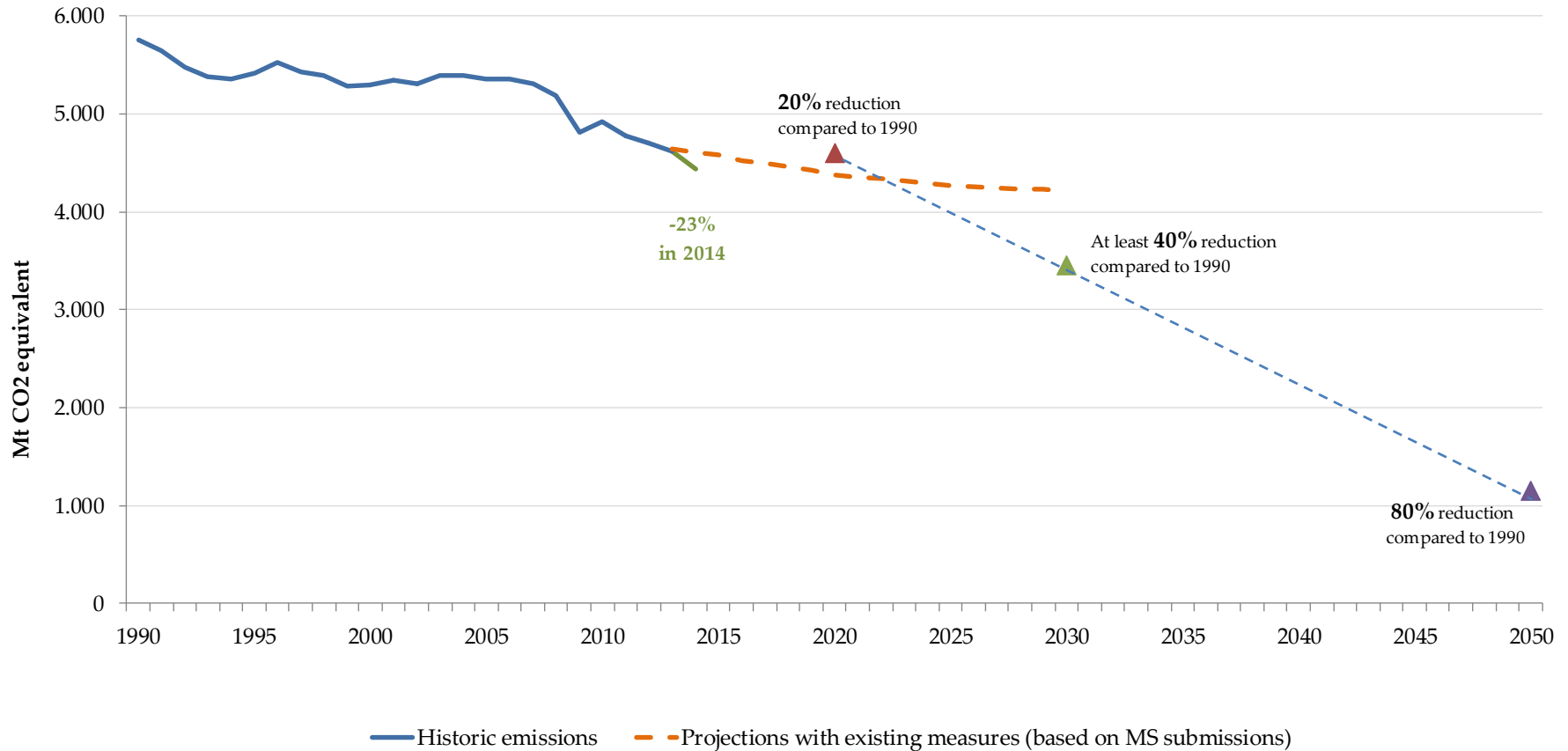
What the EU expects Paris to deliver

- **Long-term target based on IPCC**
- **Fair, ambitious and legally binding agreement** with targets for all Parties
- **Transparency and accountability** through robust common rules
- **5 yearly reviews**
- **International support** for low carbon, climate resilient sustainable development

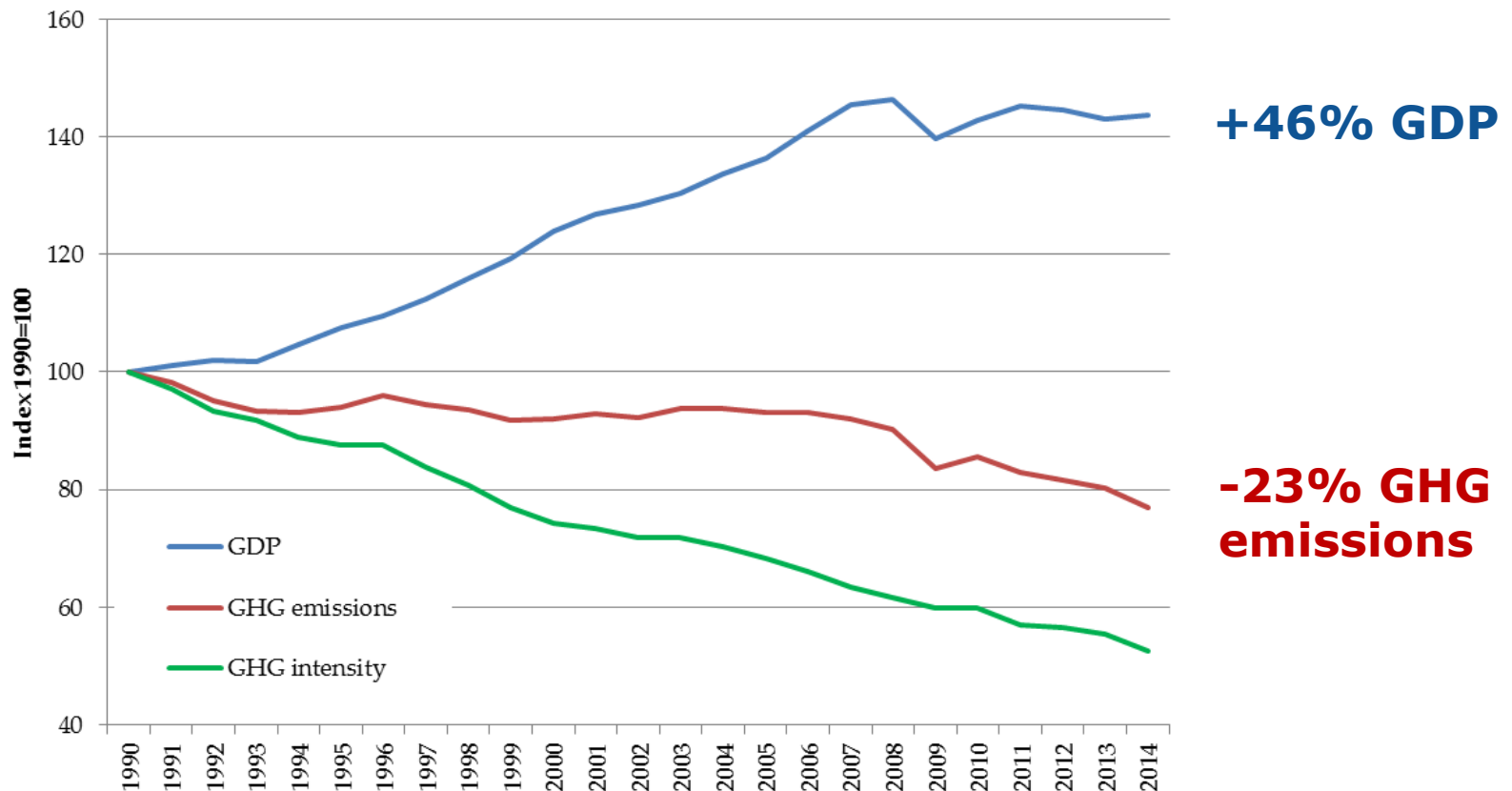


PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

Total EU GHG emissions trends and projections

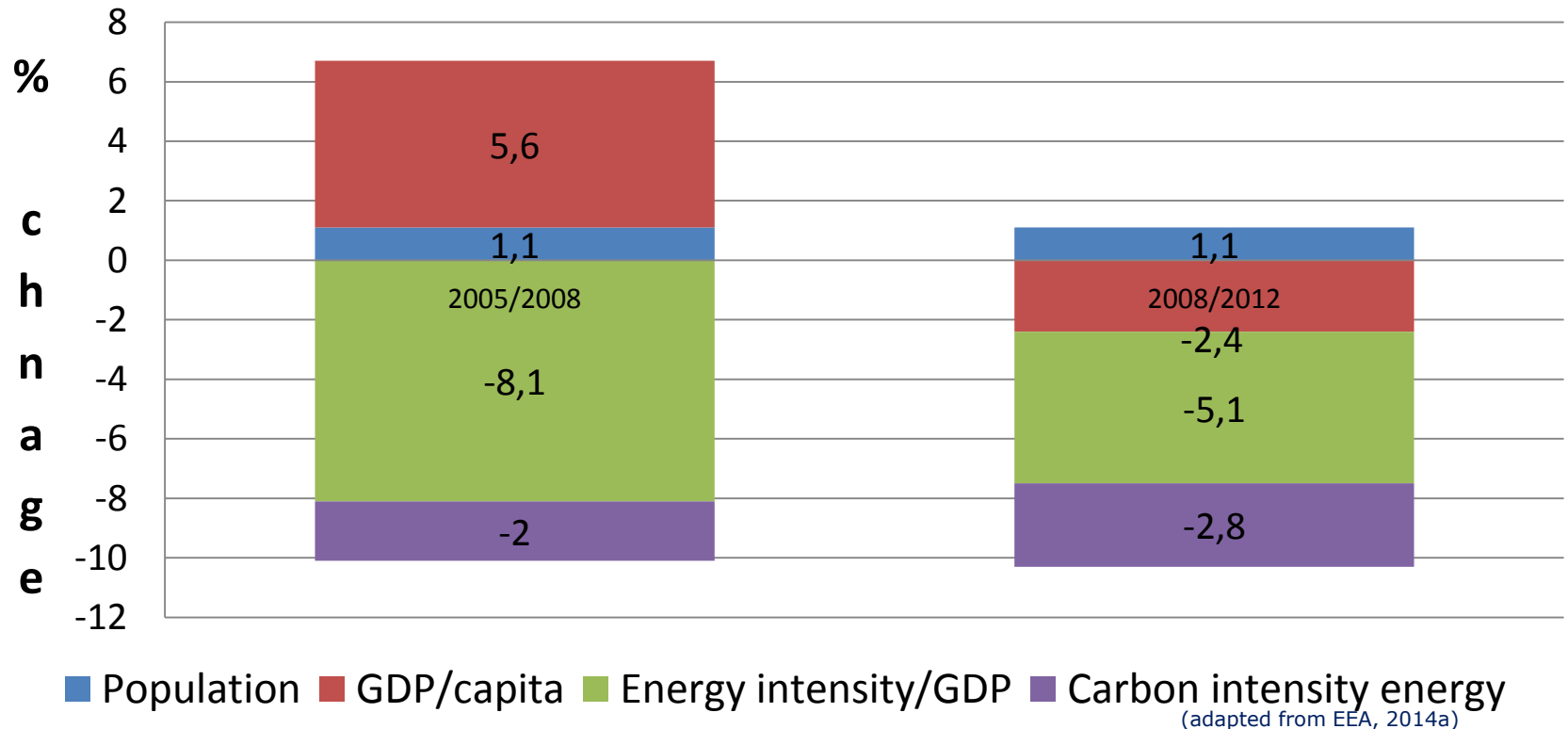


EU policies delivering

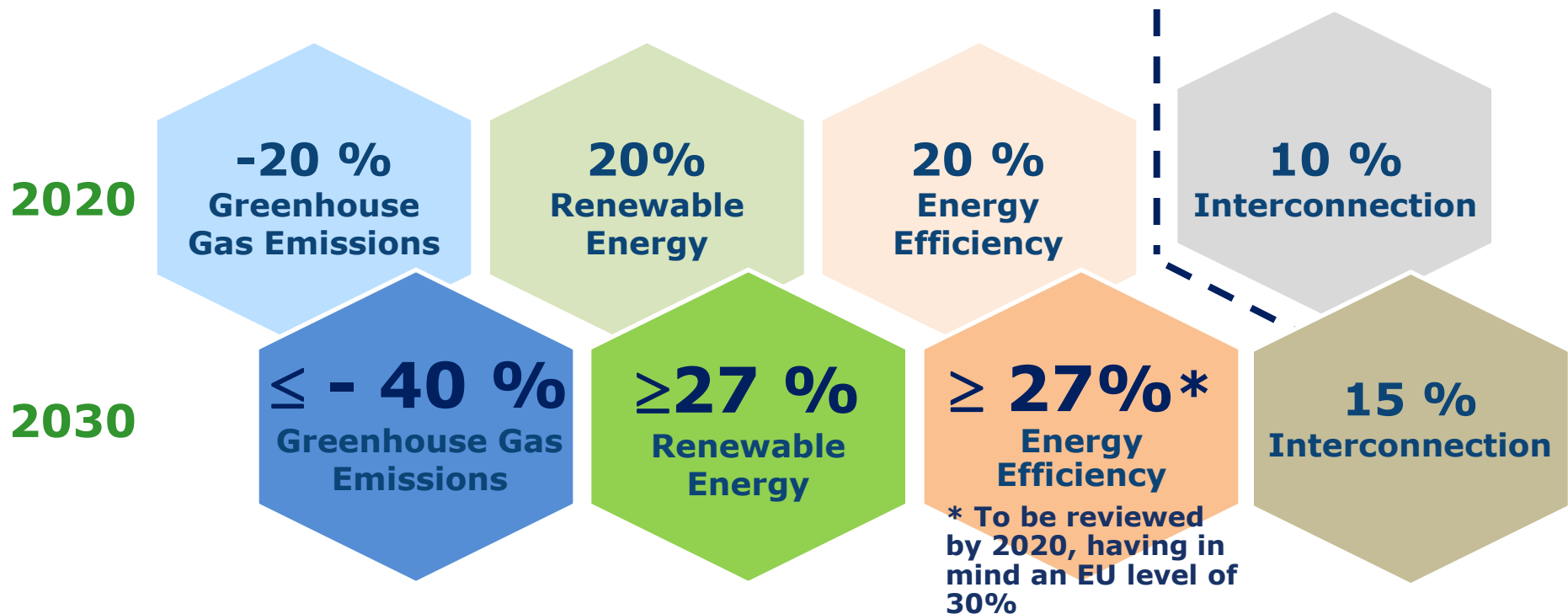


Source: European Commission based on data compiled by EEA

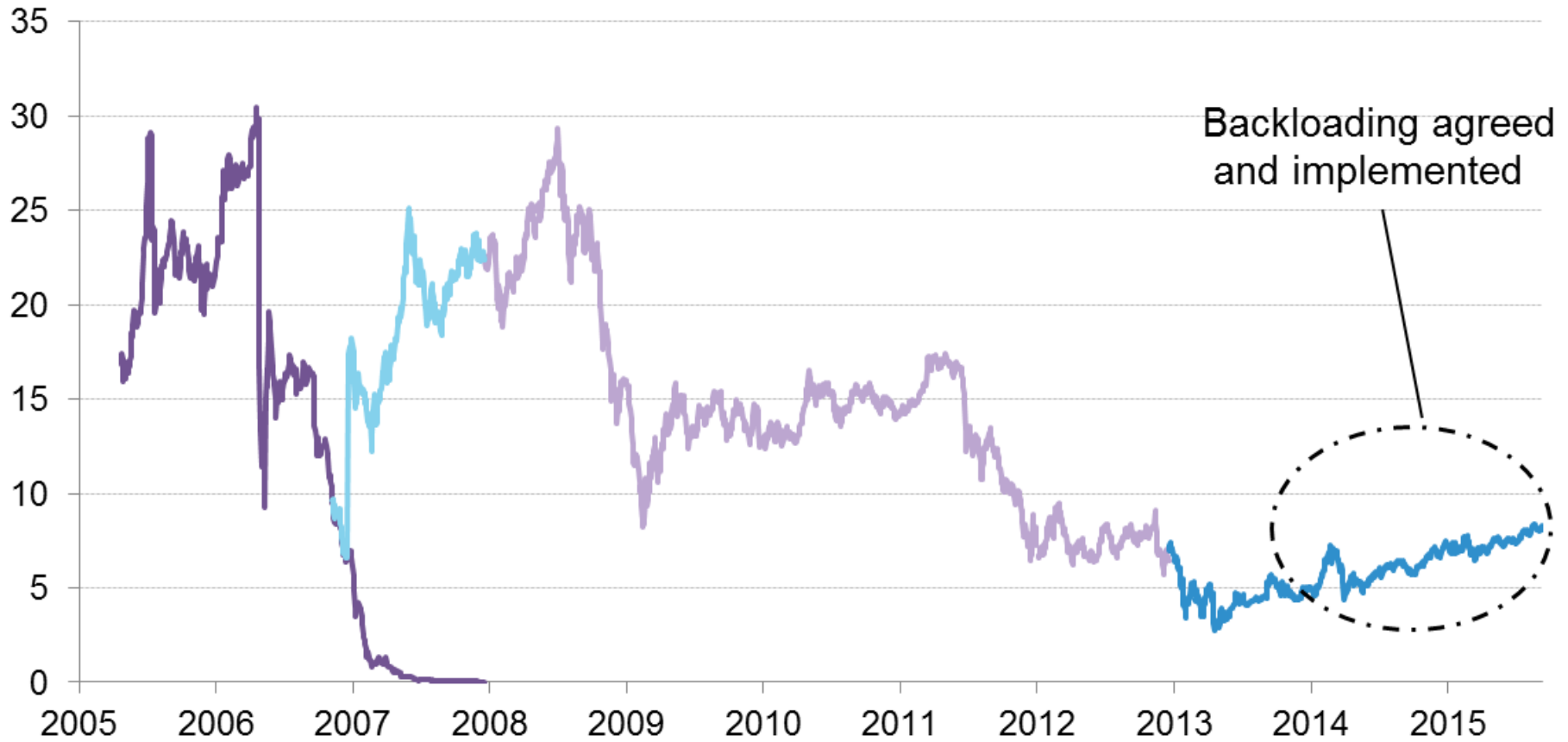
Why EU CO2 emissions changed (2005 – 2012)



2030 Framework for Climate and Energy

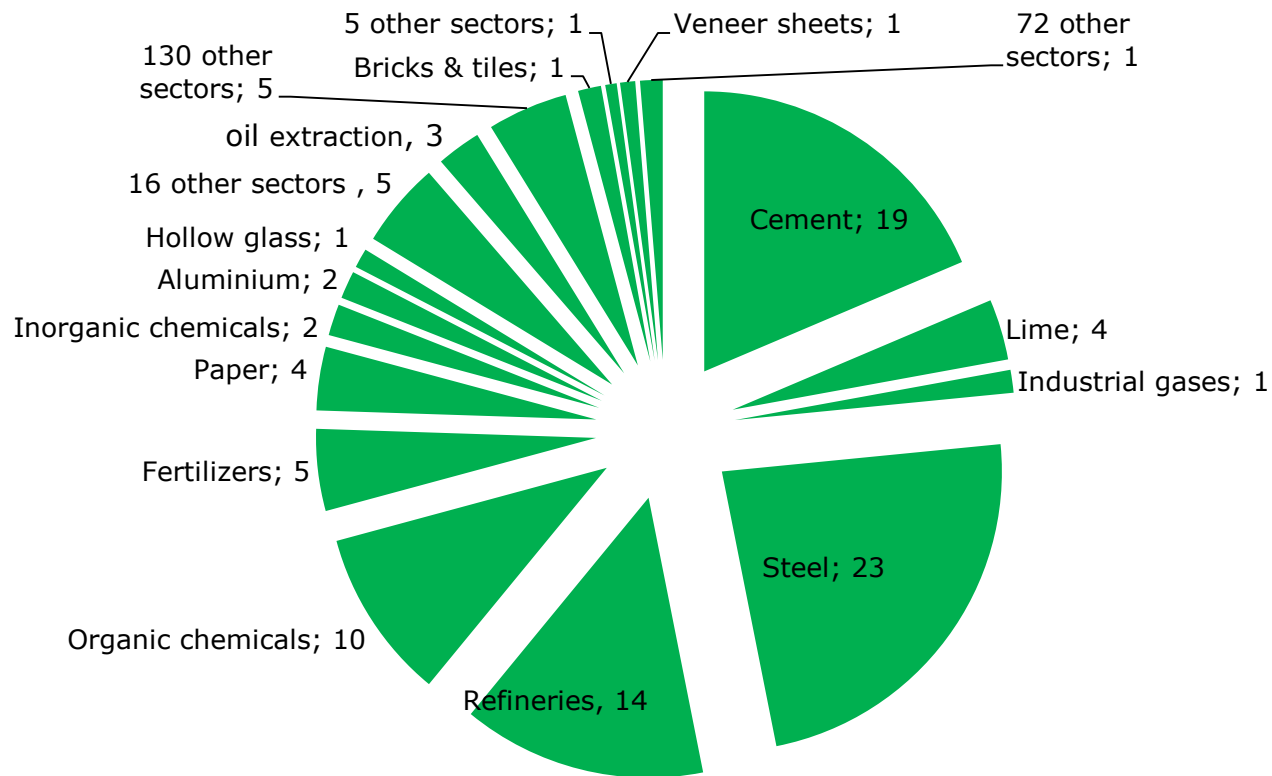


The European carbon market

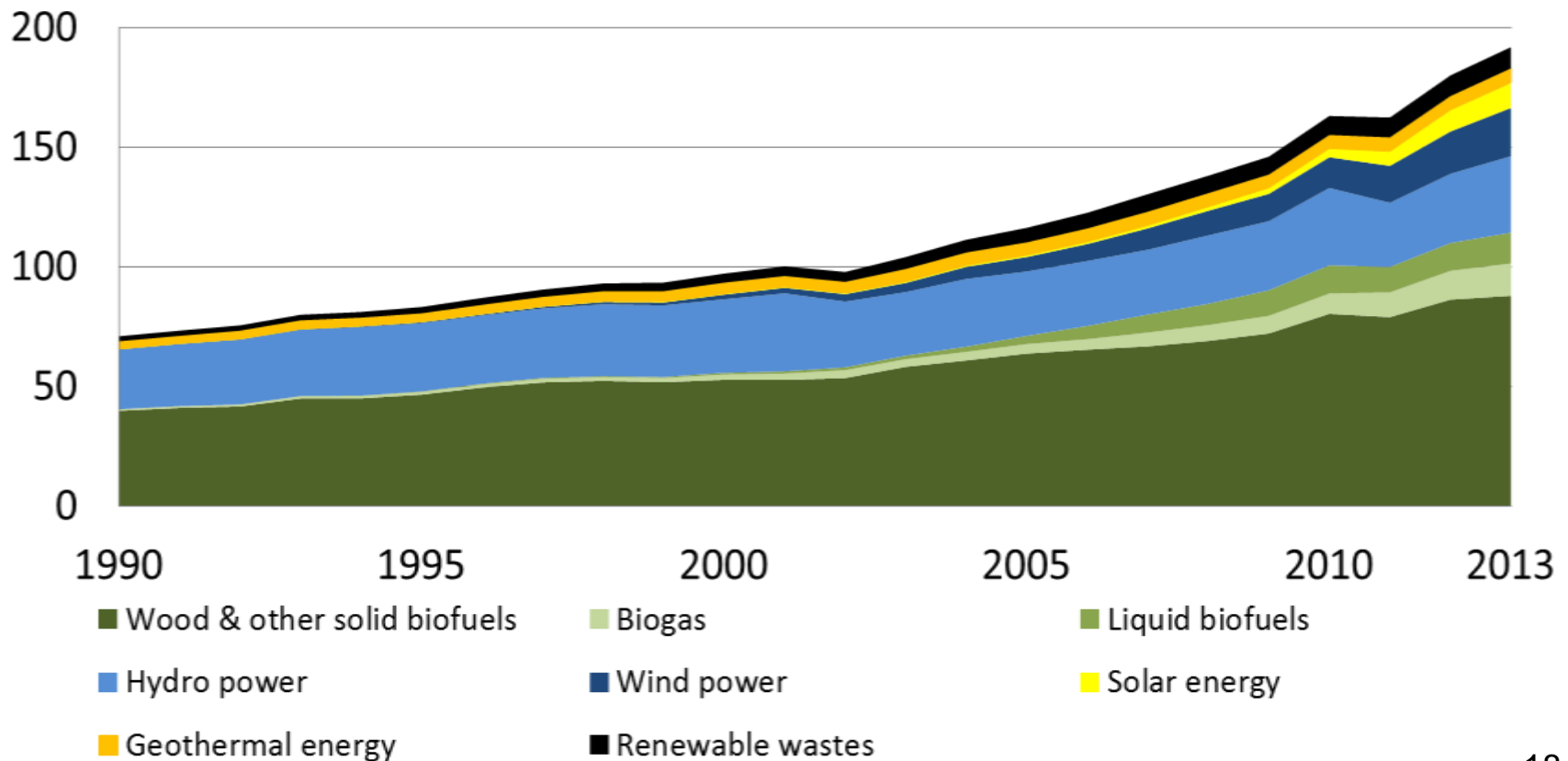


Source: adapted from Bloomberg New Energy Finance (2015)

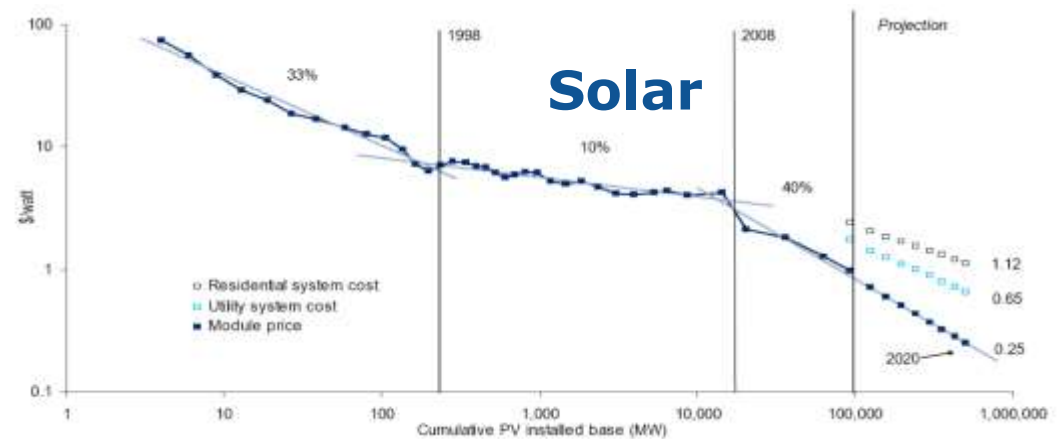
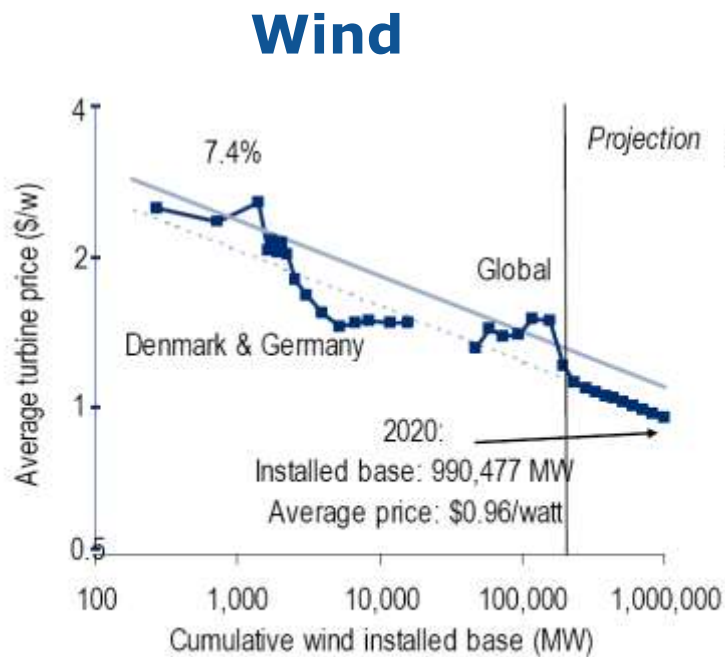
Share of free allocation (%) based on carbon leakage list 2015-2019



Development renewable energy use in the EU by type of renewable (Mtoe)(EUROSTAT)



Renewables policies contribute to reduce technology cost



Challenges ahead

Integration into the electricity system including intermittency

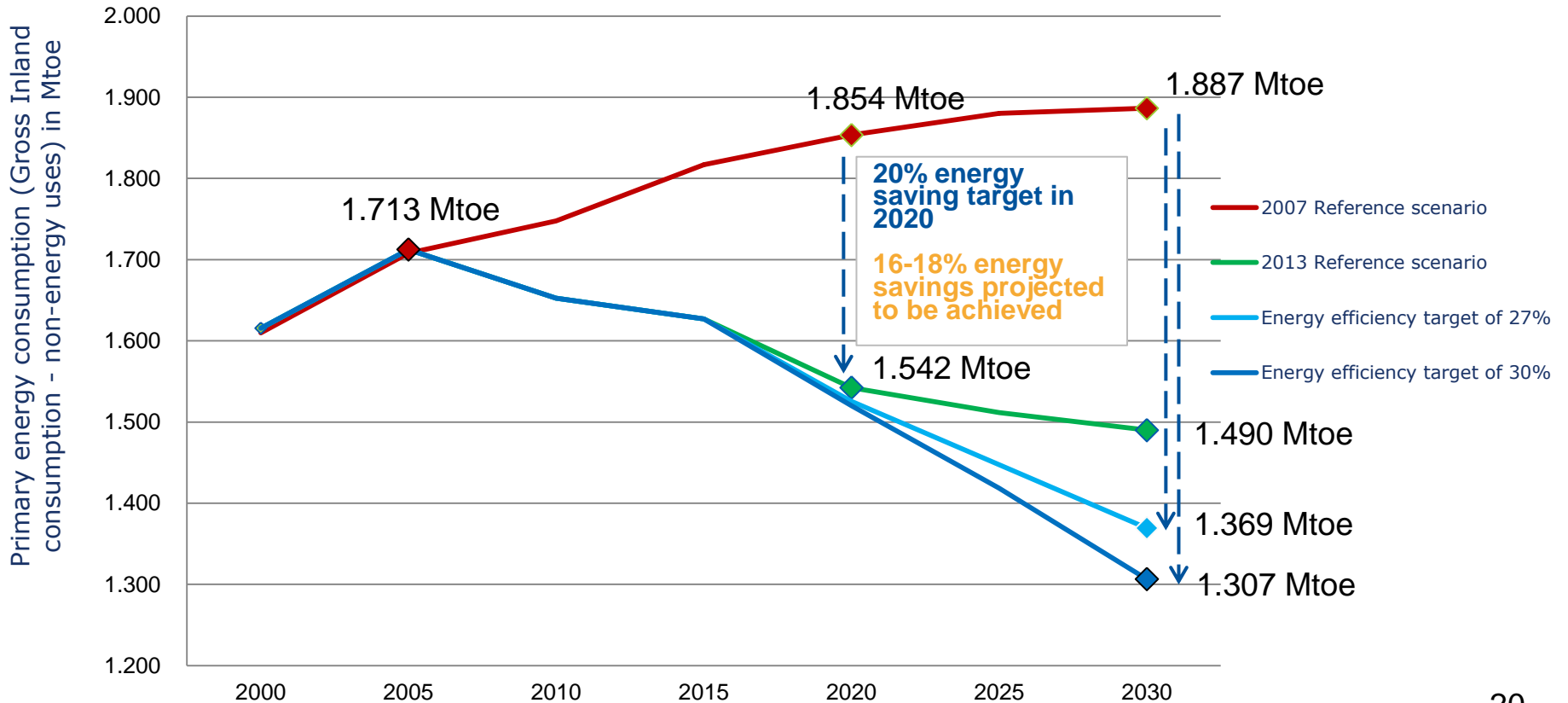
investments in grids, cross-border infrastructure,

need for cost-efficient support schemes

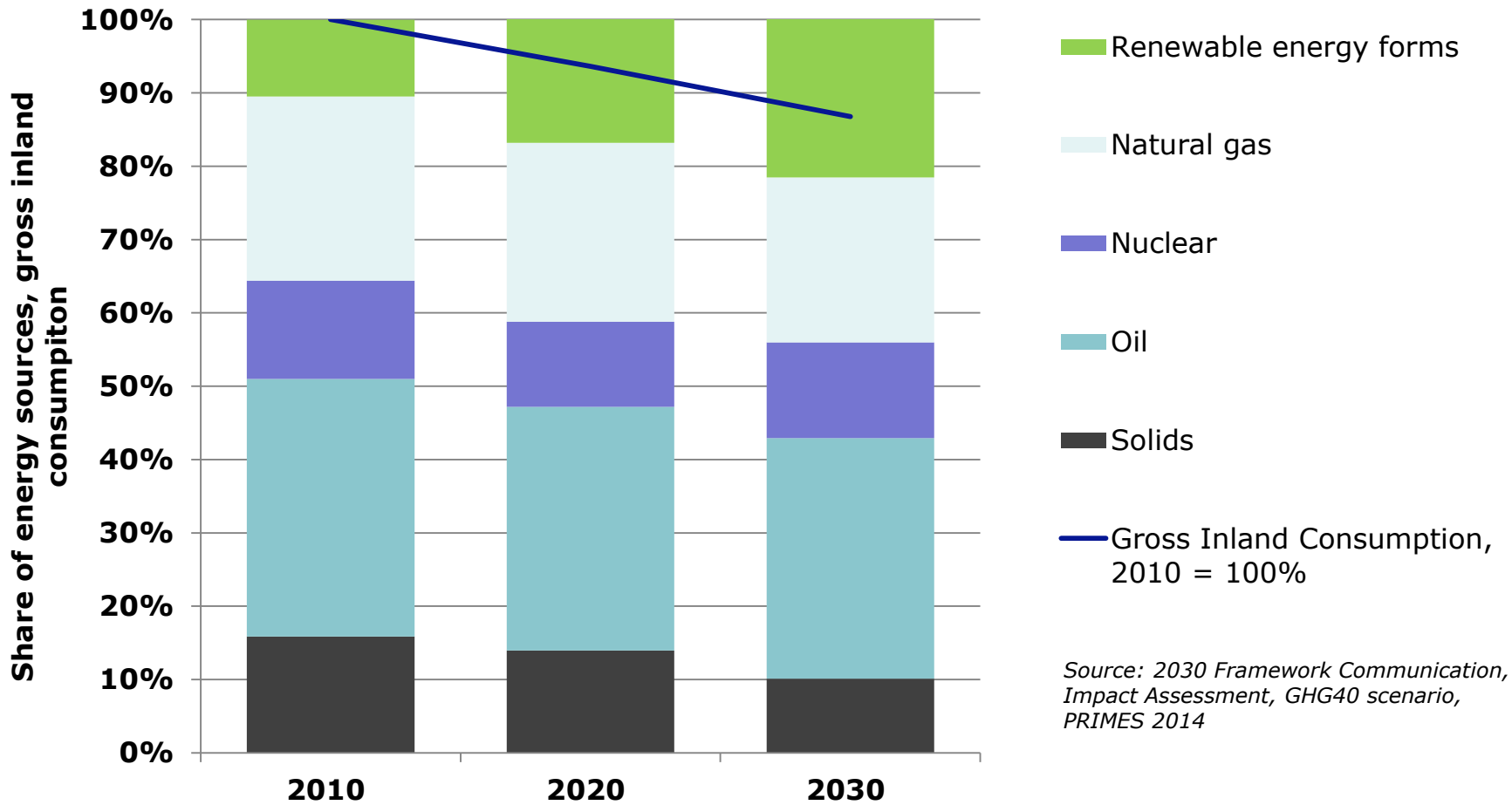
Source: Bloomberg New Energy Finance, Citi Research

Energy efficiency: EU 2030 target: at least 27% of energy savings

2020 and 2030 energy savings targets



Energy Mix



Source: 2030 Framework Communication, Impact Assessment, GHG40 scenario, PRIMES 2014

Thank you!

