

EEB 2018 Annual Conference An EU climate policy as if our lives depend on it 5 November 2018

Paris Agreement: Contributions

 Nationally Determined Contribution (NDC) = nonbinding target in annex Paris Agreement:

European Council (October 2014)

"a binding EU target of an at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990"



Paris Agreement Commitments

Article 2

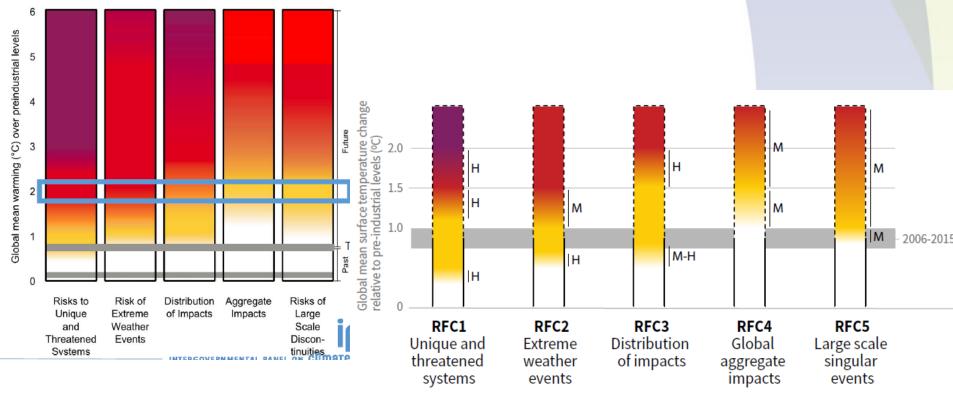
- 1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
 - (a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels <u>and</u> to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;

Commitments vs. Contributions

COP Decision accompanying the adoption of the Paris Agreement: Article 17

Notes with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 °C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and also notes that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2 °C above preindustrial levels by reducing emissions to 40 gigatonnes or to 1.5 °C above pre-industrial levels by reducing to a level to be identified in the special report referred to in paragraph 21 below;

1.5°C vs 2°C: shifting thresholds



AR5 (2014)

SR1.5 (2018)

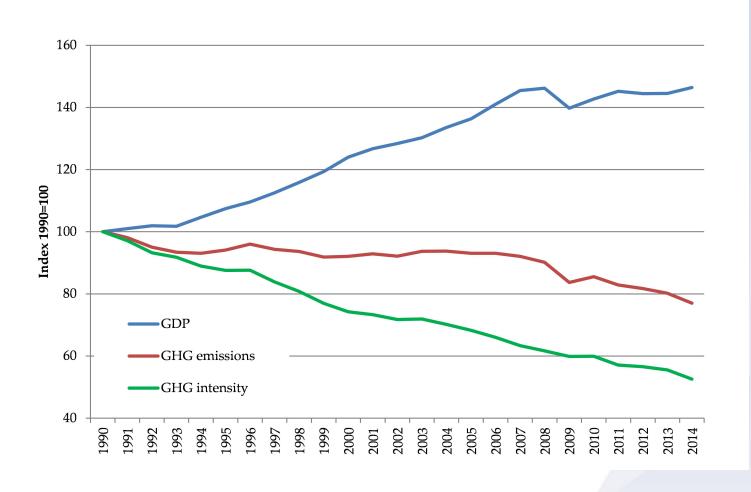


IPCC Special Report on Warming of 1.5°C

From: Summary for Policy Makers:

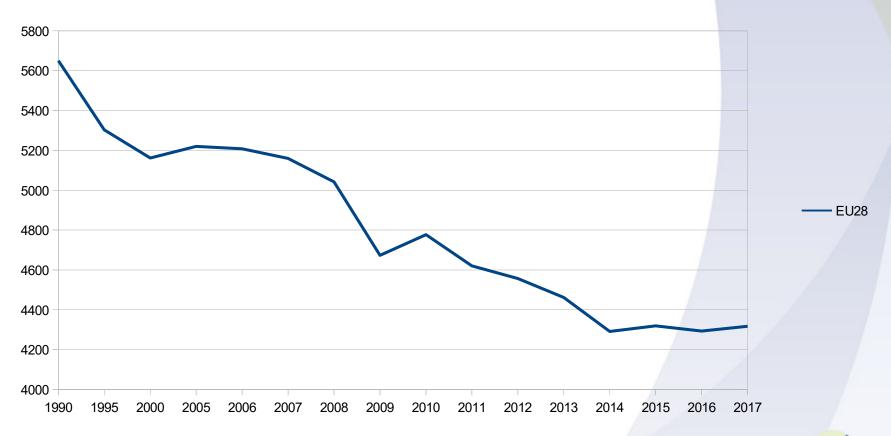
D1. Estimates of the global emissions outcome of current nationally stated mitigation ambitions as submitted under the Paris Agreement would lead to global greenhouse gas emissions in 2030 of 52–58 GtCO2eq yr-1 (medium confidence). Pathways reflecting these ambitions would not limit global warming to 1.5°C, even if supplemented by very challenging increases in the scale and ambition of emissions reductions after 2030 (high confidence). Avoiding overshoot and reliance on future large-scale deployment of carbon dioxide removal (CDR) can only be achieved if global CO2 emissions start to decline well before 2030 (high confidence).

EU leadership: decoupling



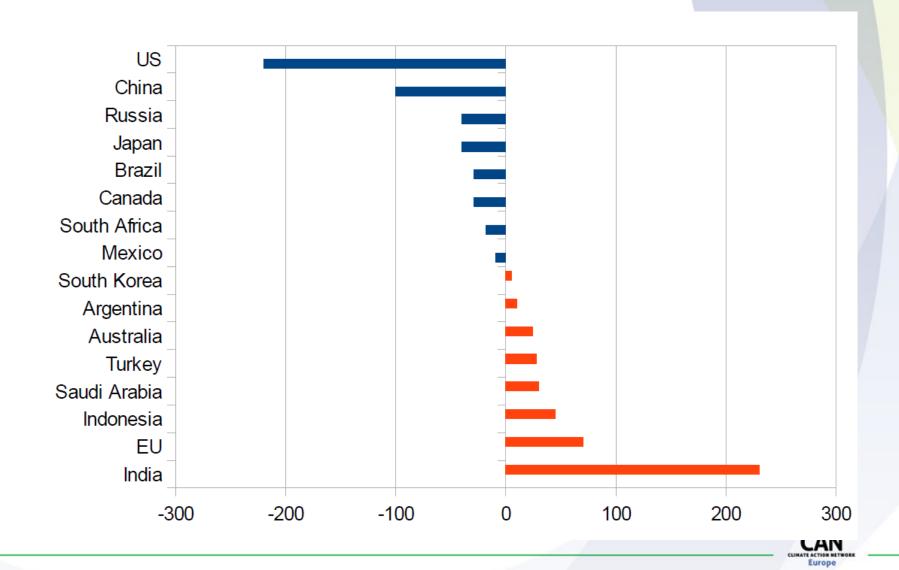


EU GHG Emissions 1990-2017

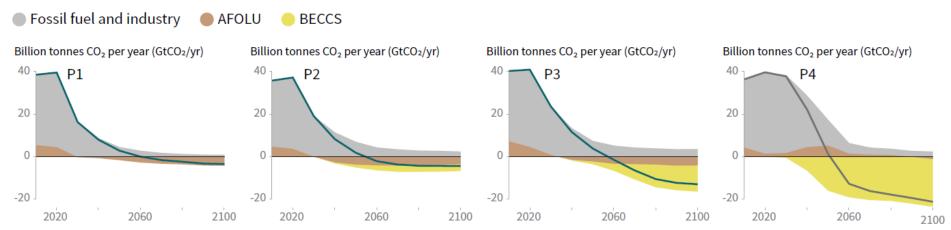




EU leadership: emissions 2014-2016 in G20



Breakdown of contributions to global net CO₂ emissions in four illustrative model pathways



P1: A scenario in which social, business and technological innovations result in lower energy demand up to 2050 while living standards rise, especially in the global South. A downsized energy system enables rapid decarbonization of energy supply. Afforestation is the only CDR option considered; neither fossil fuels with CCS nor BECCS are used.

P2: A scenario with a broad focus on sustainability including energy intensity, human development, economic convergence and international cooperation, as well as shifts towards sustainable and healthy consumption patterns, low-carbon technology innovation, and well-managed land systems with limited societal acceptability for BECCS.

P3: A middle-of-the-road scenario in which societal as well as technological development follows historical patterns. Emissions reductions are mainly achieved by changing the way in which energy and products are produced, and to a lesser degree by reductions in demand.

P4: A resource- and energy-intensive scenario in which economic growth and globalization lead to widespread adoption of greenhouse-gas-intensive lifestyles, including high demand for transportation fuels and livestock products. Emissions reductions are mainly achieved through technological means, making strong use of CDR through the deployment of BECCS.



Global indicators	P1
Pathway classification	No or low overshoot
CO ₂ emission change in 2030 (% rel to 2010)	-58
→ in 2050 (% rel to 2010)	-93
Kyoto-GHG emissions* in 2030 (% rel to 2010)	-50
→ in 2050 (% rel to 2010)	-82
Final energy demand** in 2030 (% rel to 2010)	-15
→ in 2050 (% rel to 2010)	-32
Renewable share in electricity in 2030 (%)	60
→ in 2050 (%)	77
Primary energy from coal in 2030 (% rel to 2010)	-78
→ in 2050 (% rel to 2010)	-97



