

CLIMATE CHANGE 2014

Mitigation of Climate Change

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IPCC WGIII Co-Chairs

IPCC Role, Activities and Findings

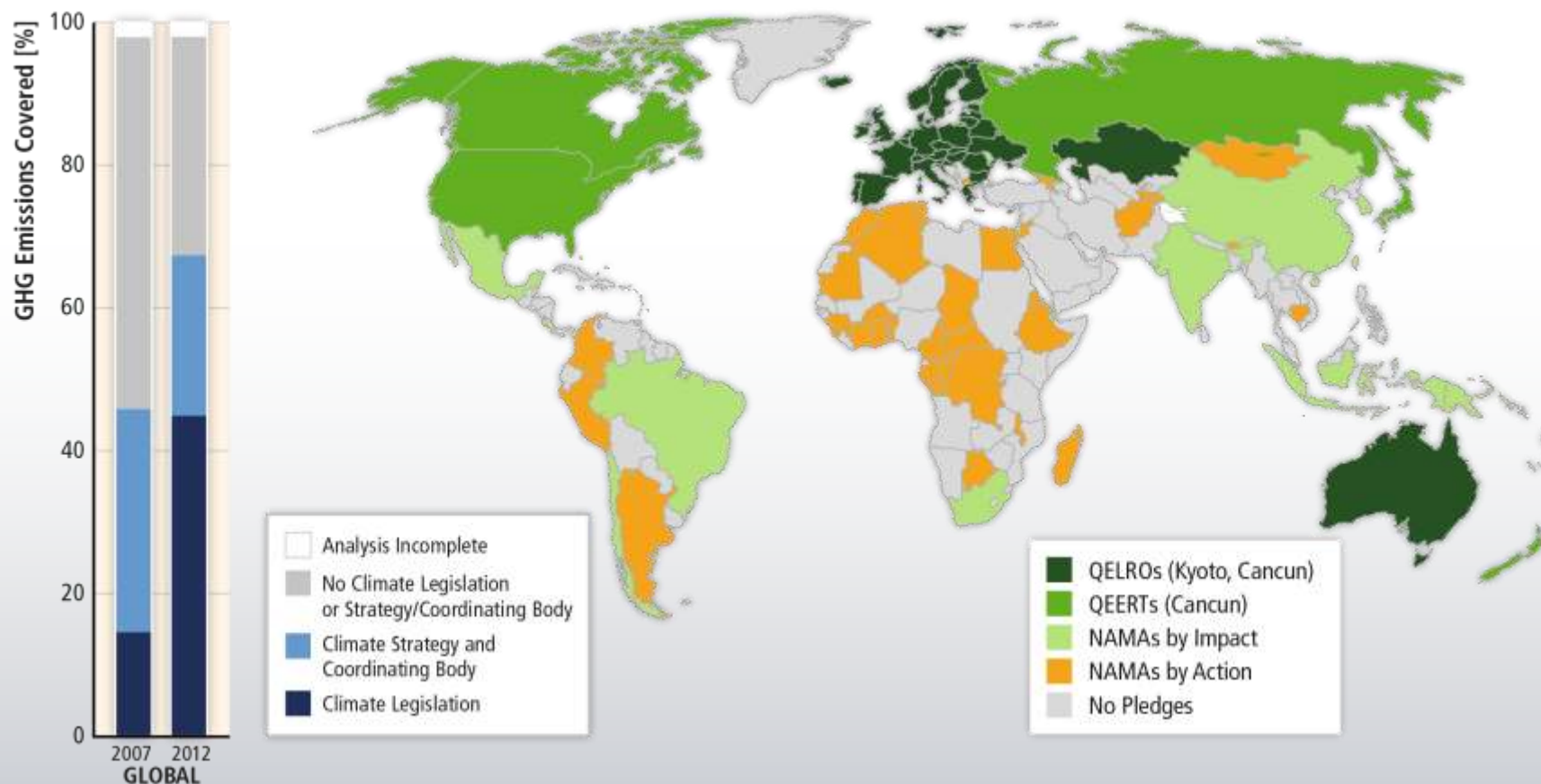
IPCC Outreach Event

15 October 2016, Bangkok, Thailand

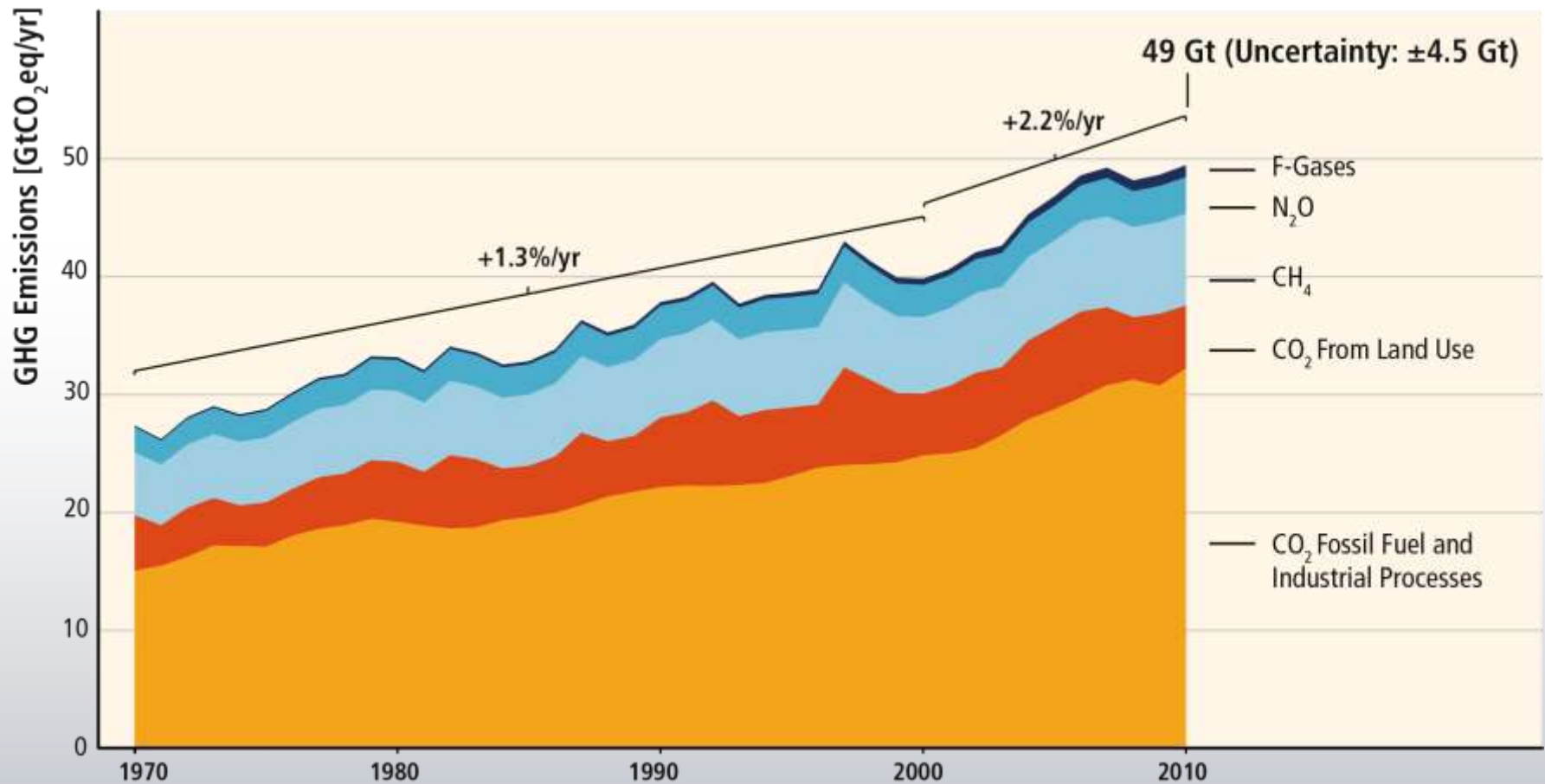
**GHG emissions growth has accelerated
despite reduction efforts.**



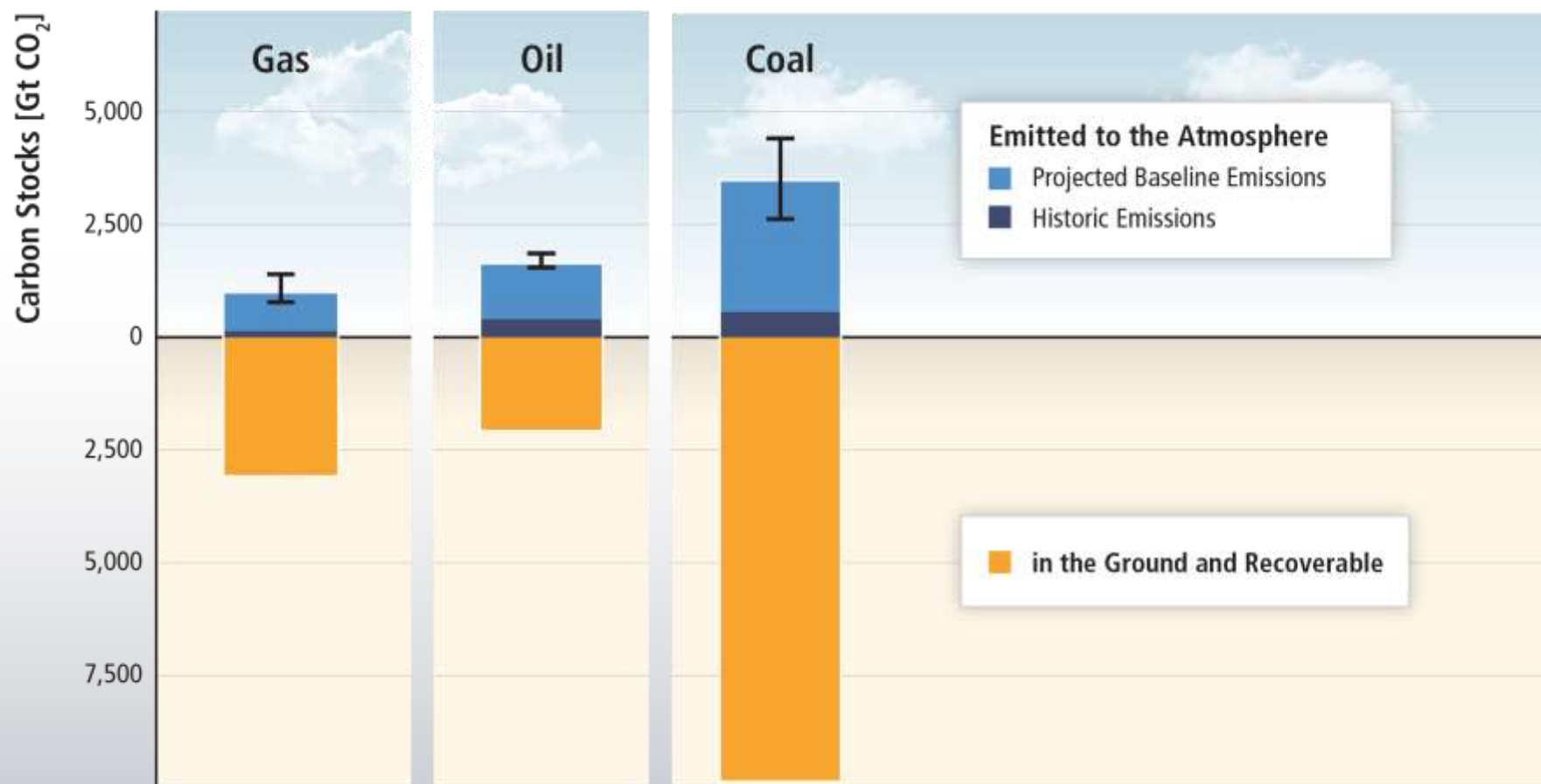
Plans and strategies have expanded since 2007.



But emissions growth has accelerated in the last decade – driven by CO₂ from fossil fuel combustion

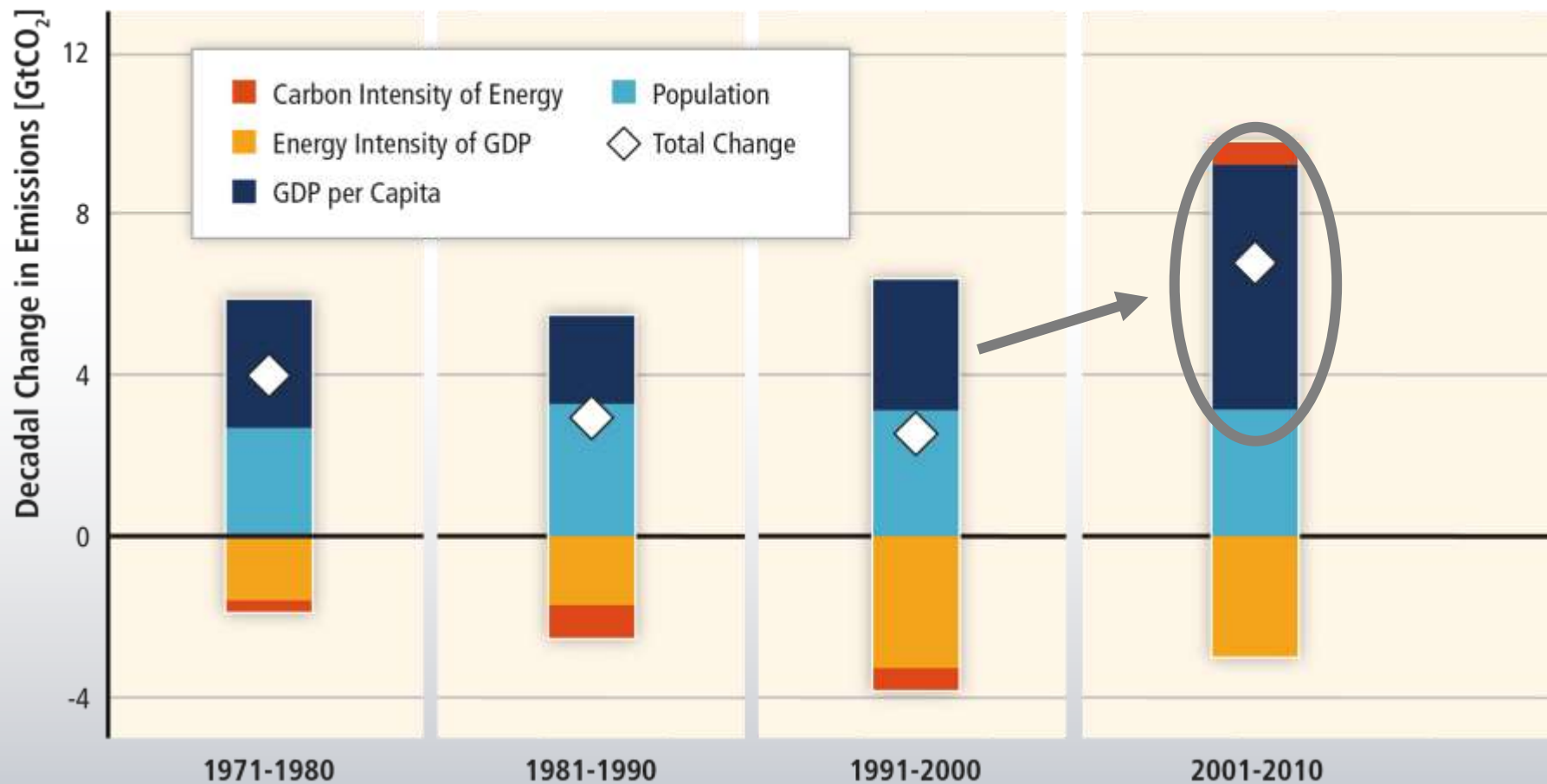


There is far more carbon in the ground than emitted in any baseline scenario.

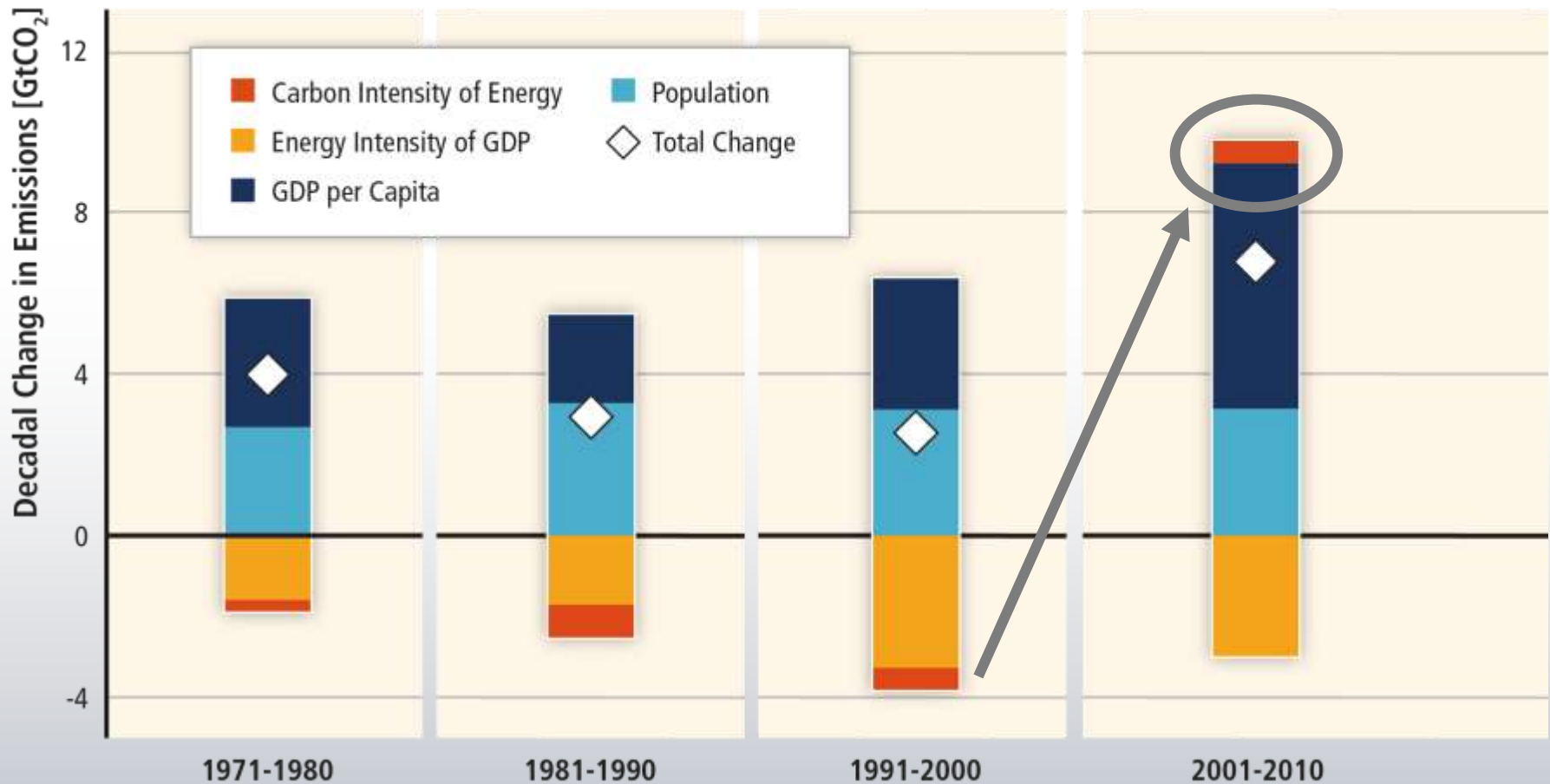


Based on SRREN Figure 1.7

GHG emissions rise with income and population - but are moderated by energy efficiency



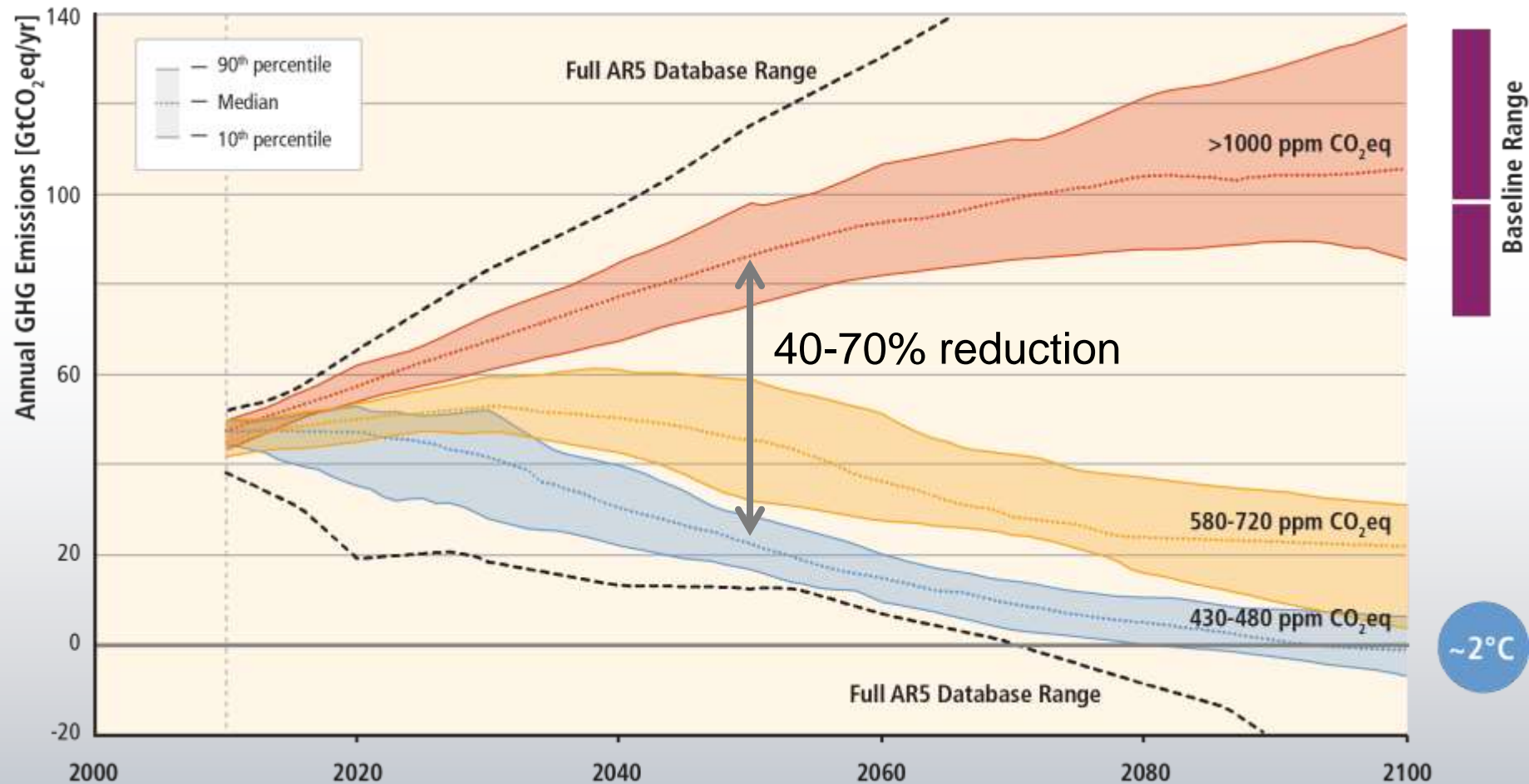
GHG emissions rise with income and population - but long-term energy decarbonisation has been reversed.



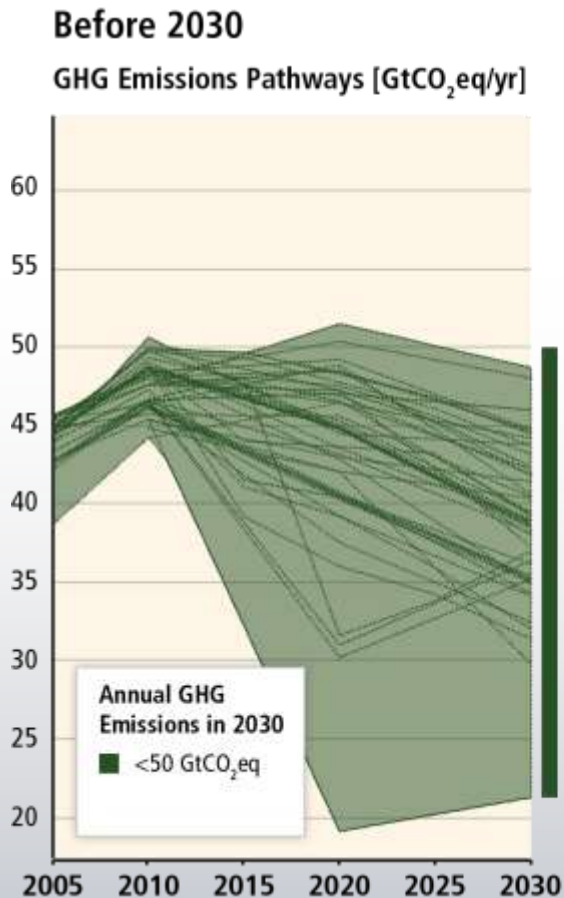


**Climate change mitigation is possible –
and early action will make it easier**

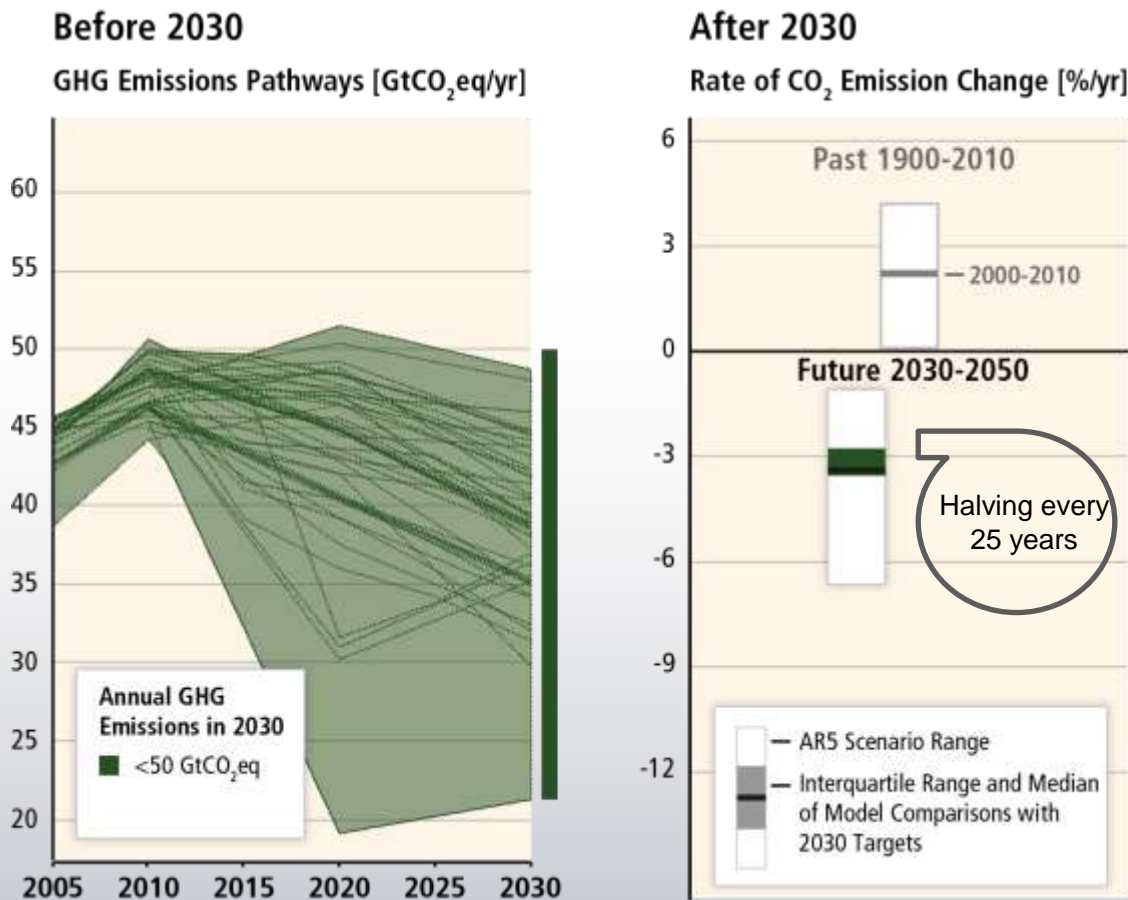
Stabilising the atmosphere means moving away from business-as-usual – regardless of how ambitious we are.



Delaying mitigation until 2030 increases the difficulty and narrows the options for limiting warming to 2°C.



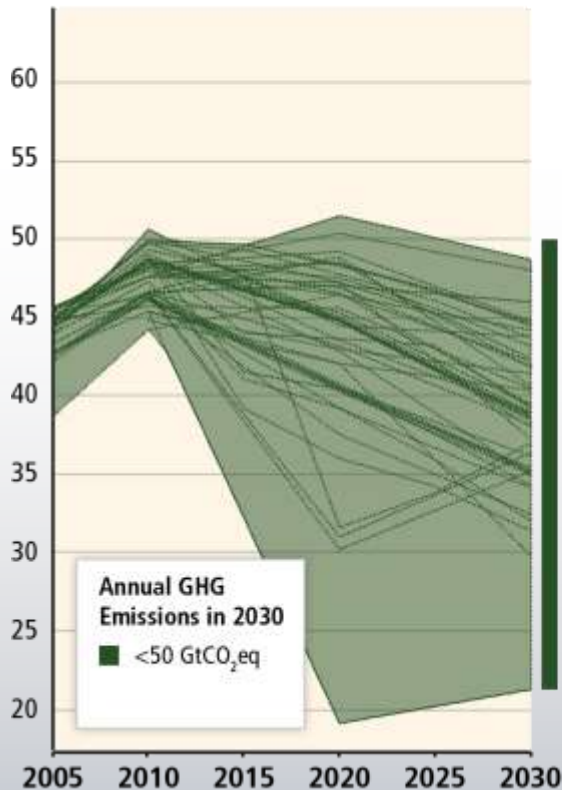
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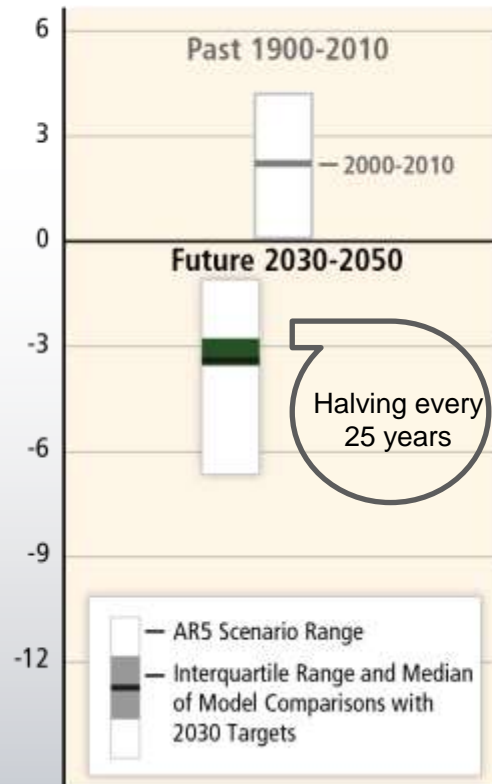
Before 2030

GHG Emissions Pathways [GtCO₂eq/yr]

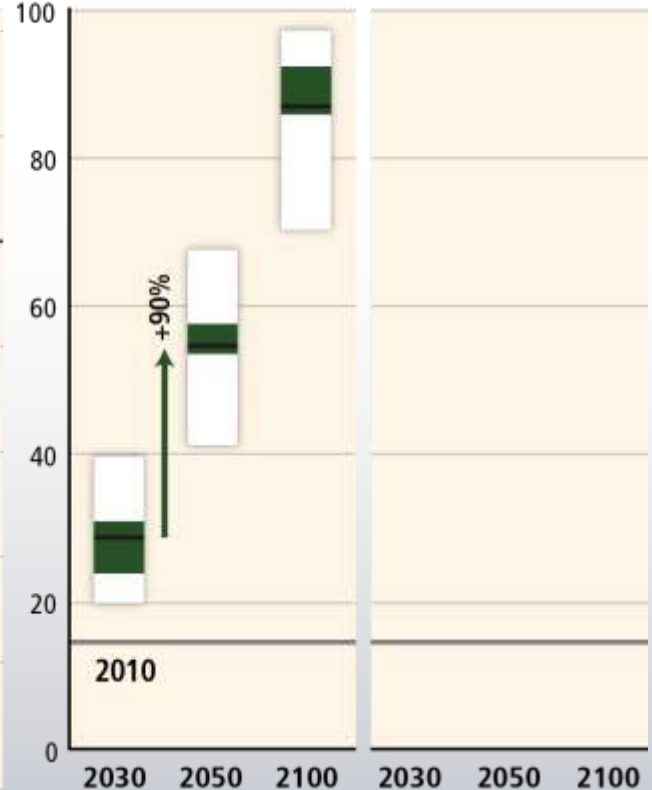


After 2030

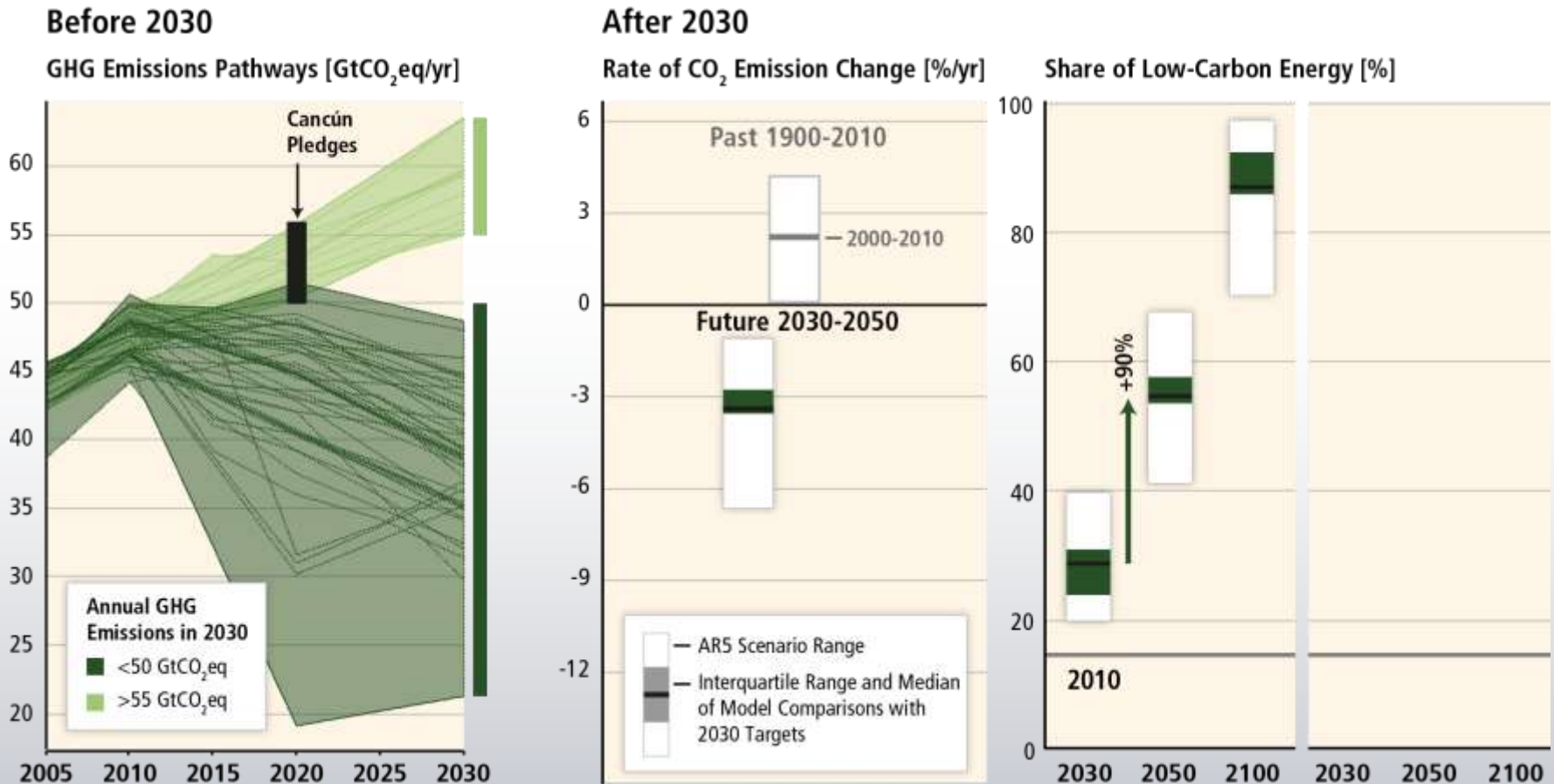
Rate of CO₂ Emission Change [%/yr]



Share of Low-Carbon Energy [%]



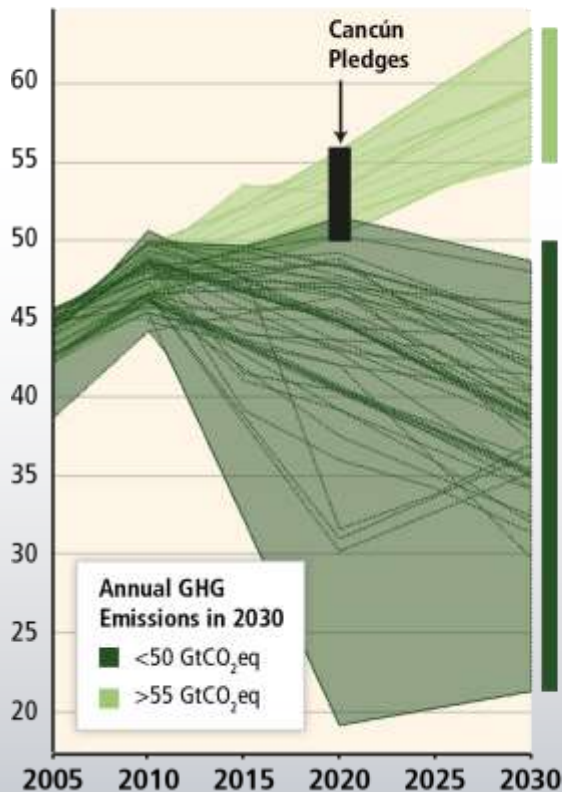
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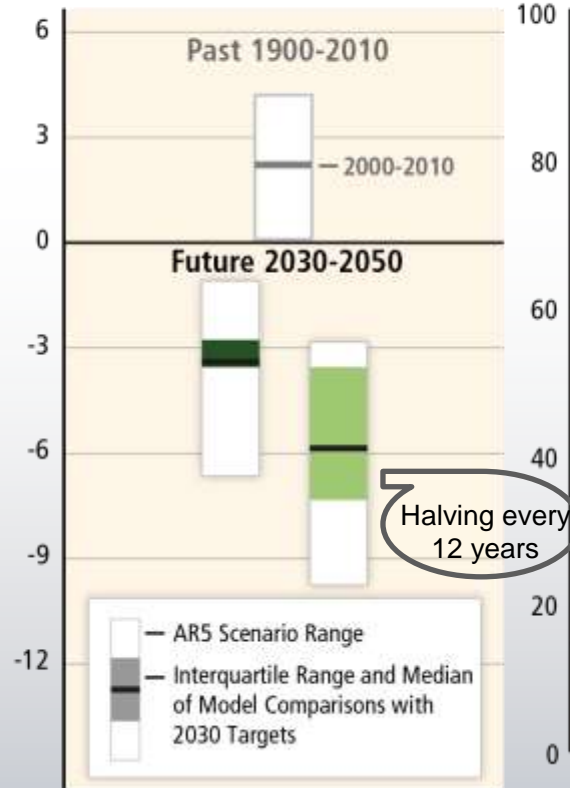
Before 2030

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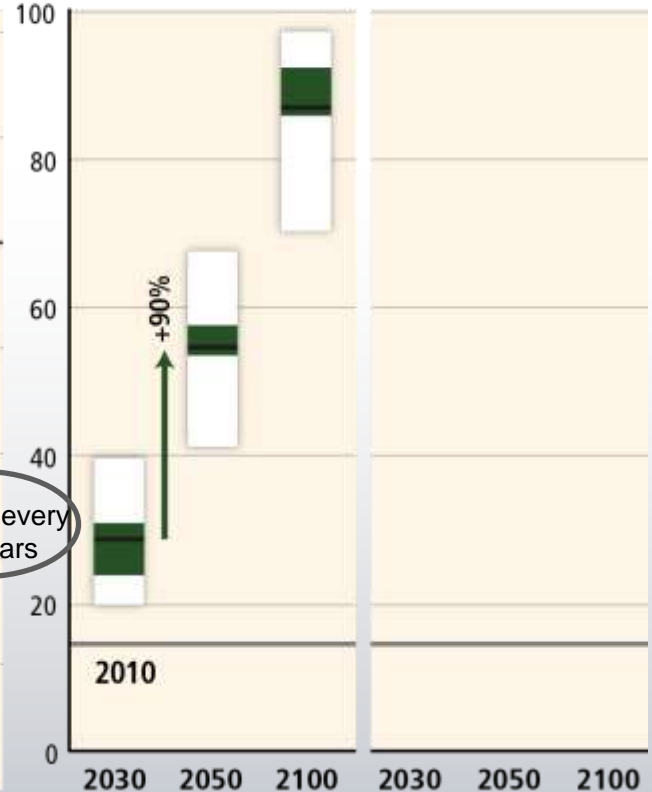


After 2030

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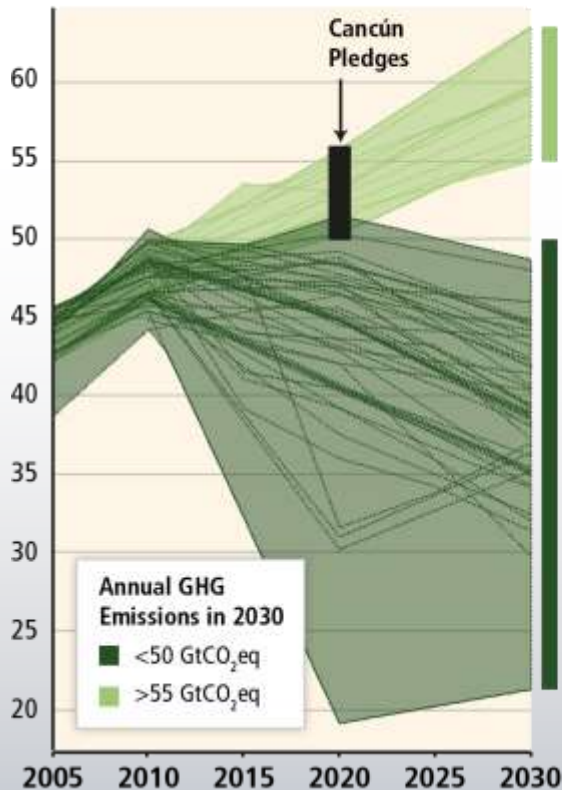
Share of Low-Carbon Energy [%]



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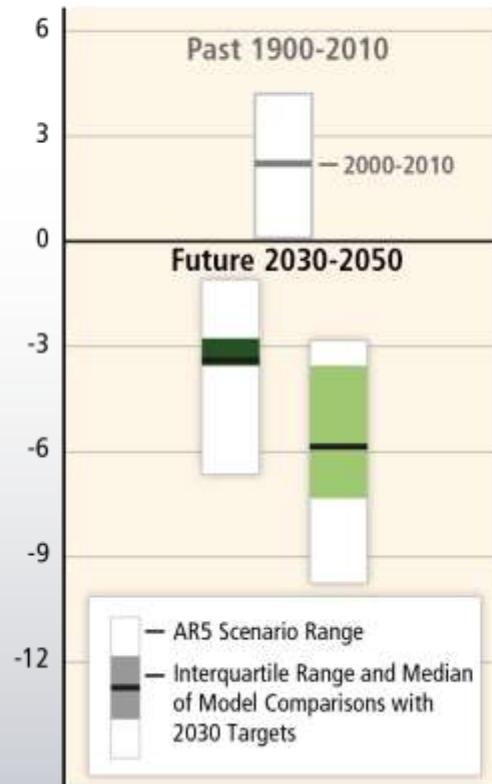
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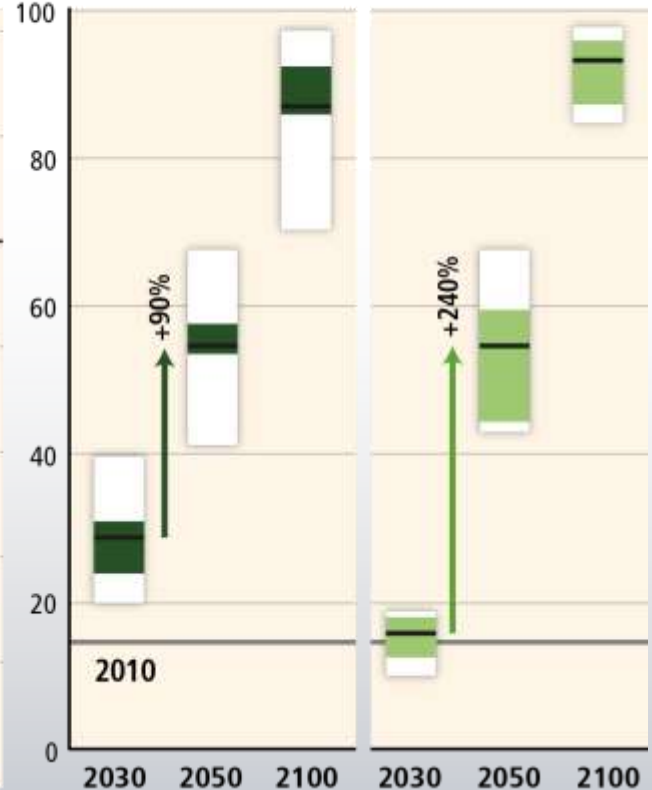


After 2030

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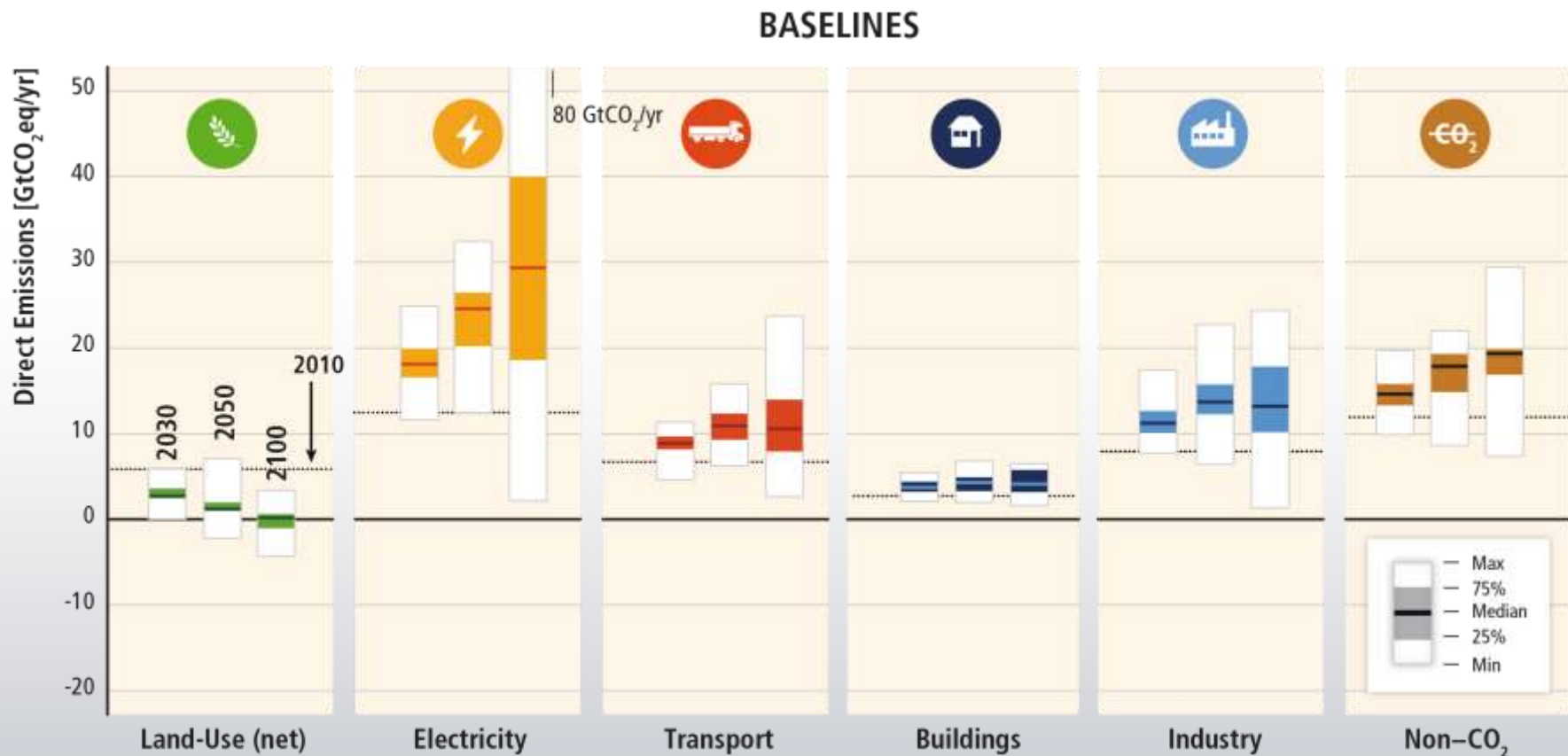
Share of Low-Carbon Energy [%]



**Ambitious mitigation involves
transformation of the energy system.**

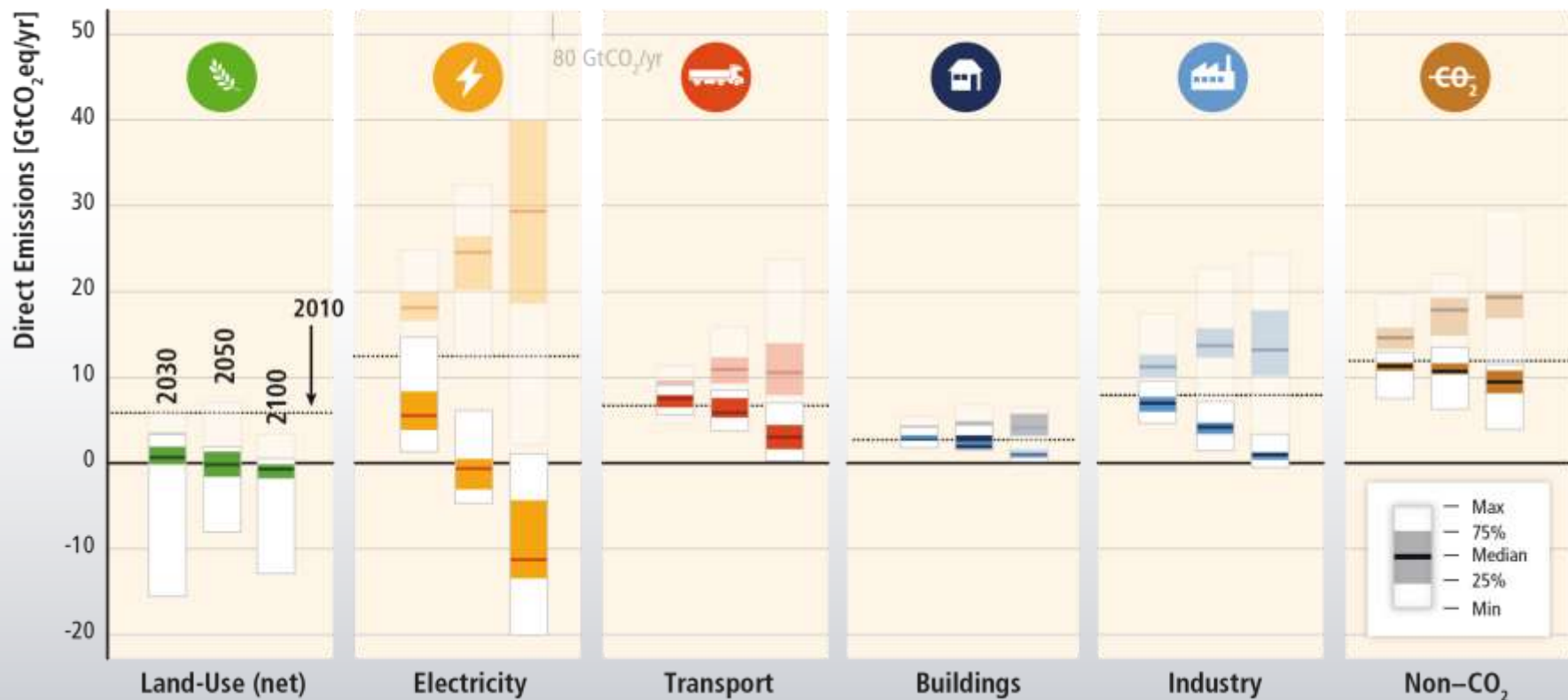


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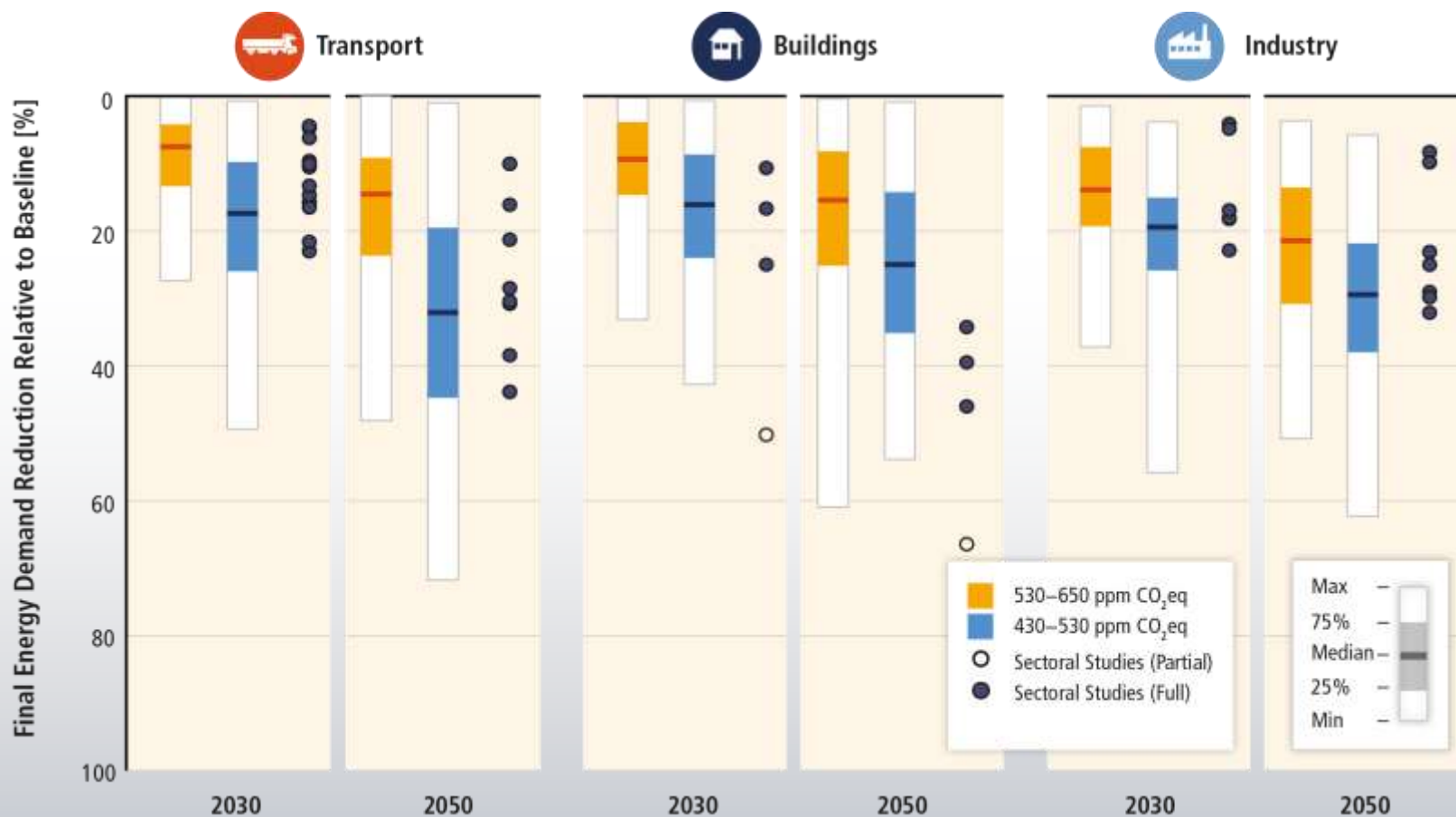
450 ppm CO₂eq with Carbon Dioxide Capture & Storage



Reducing energy demand is key - efficiency and behavioural change.



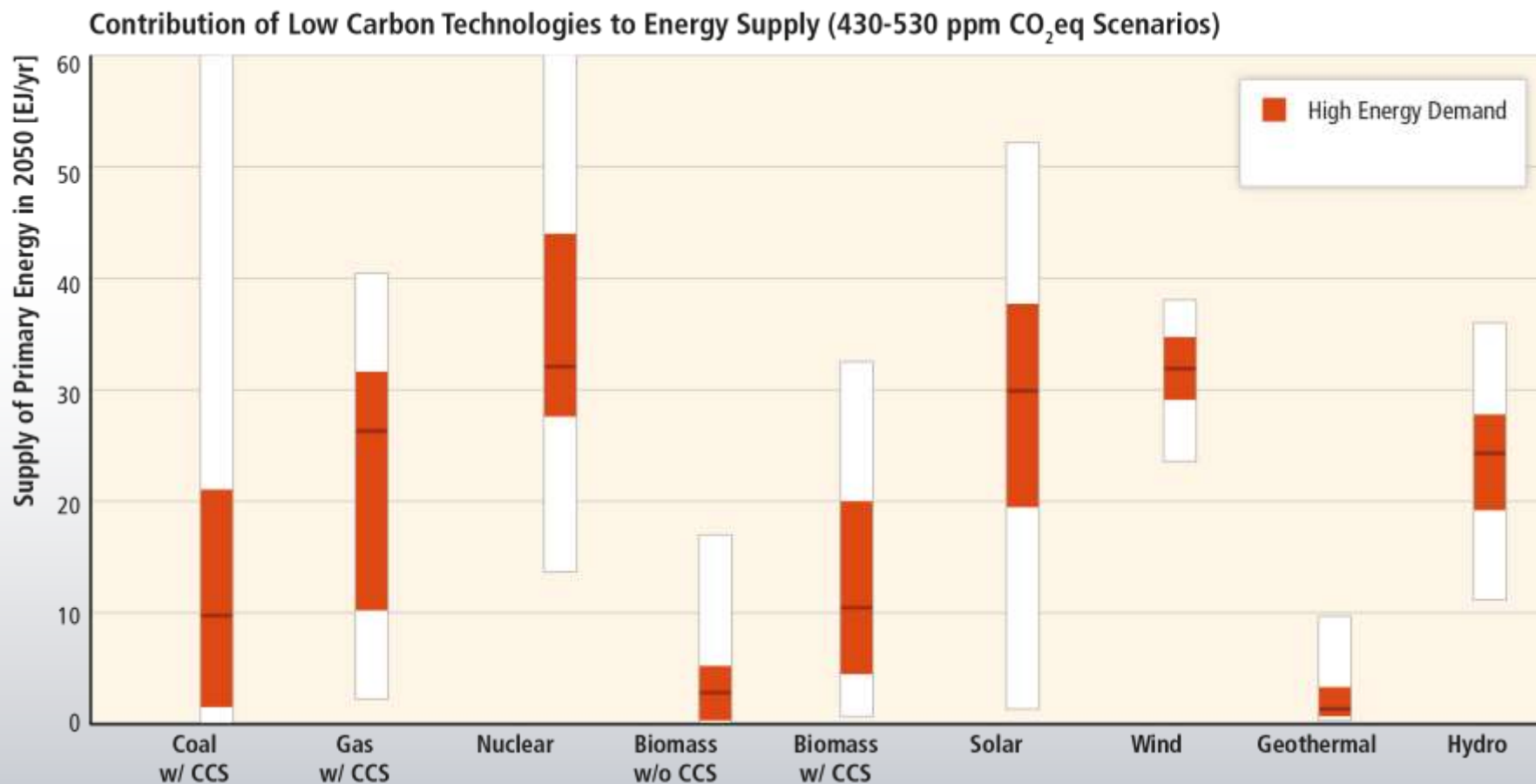
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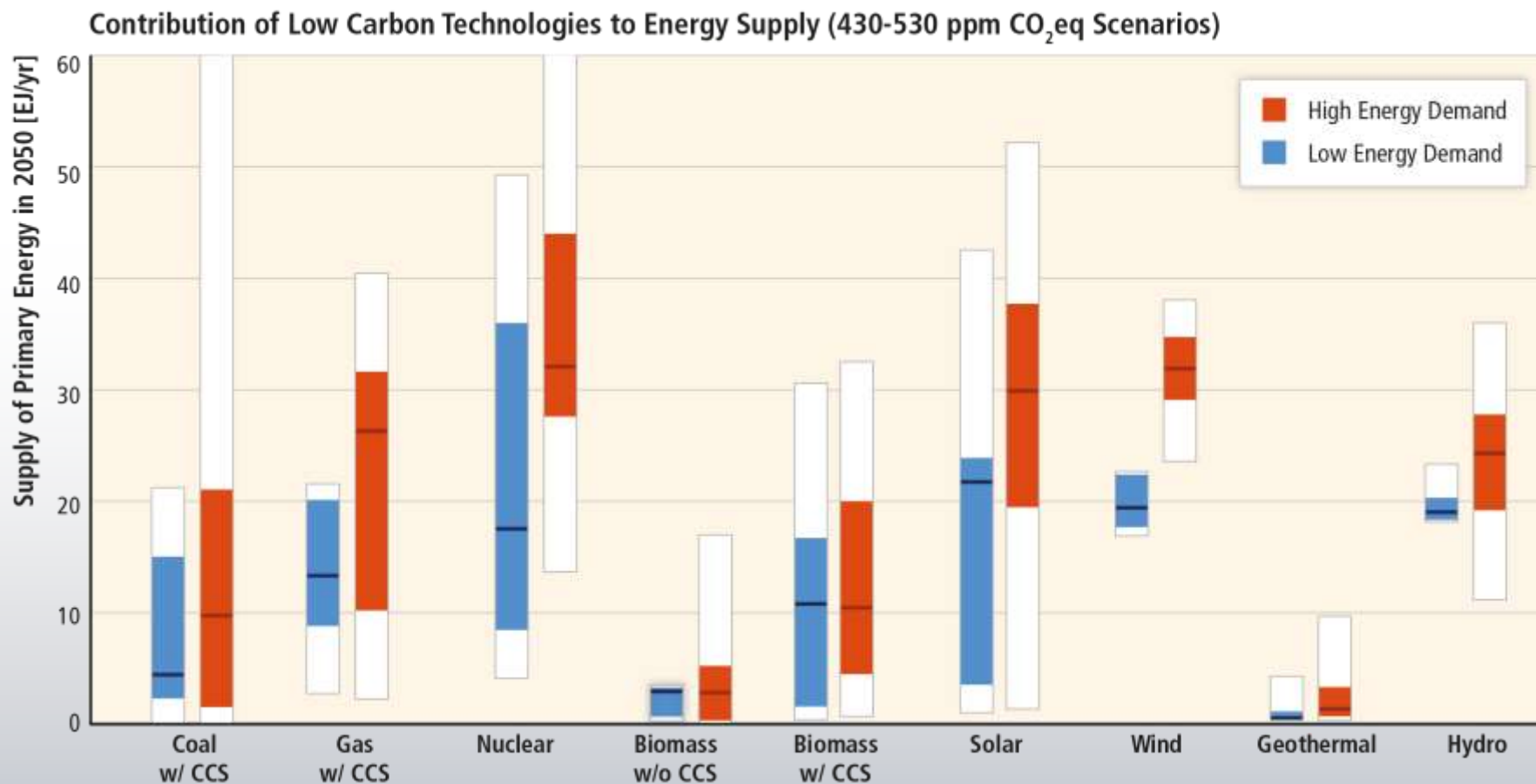
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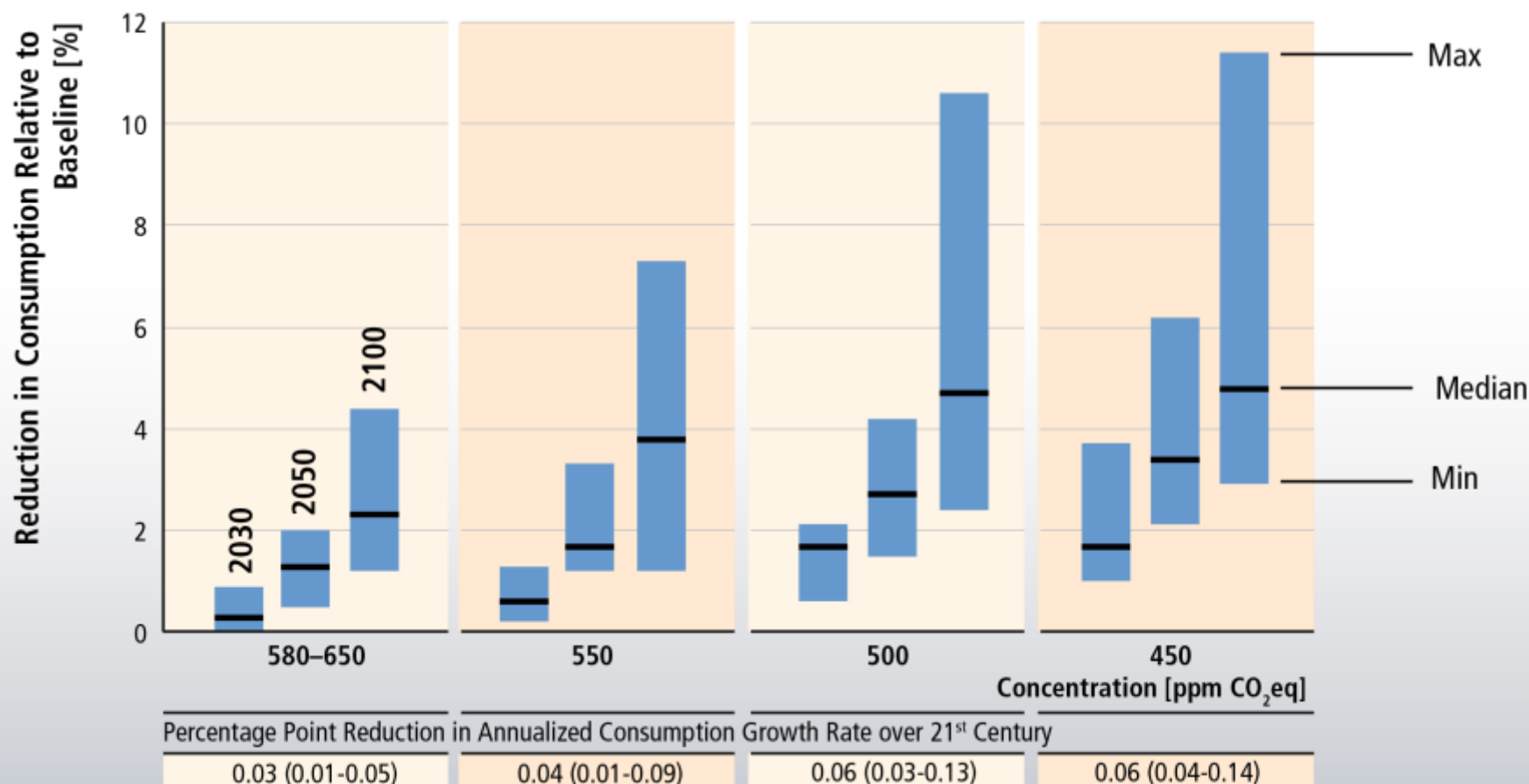
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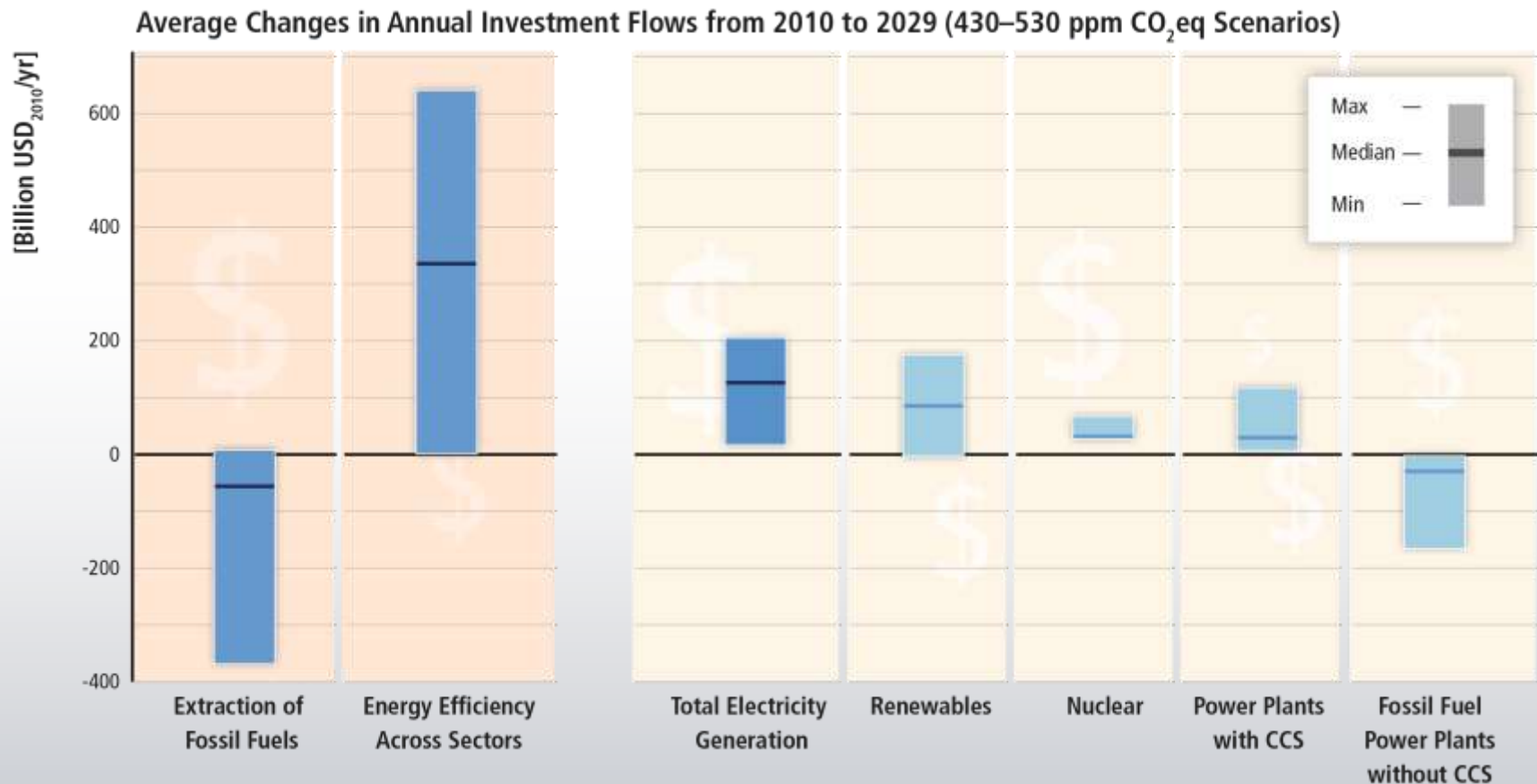
**Mitigation comes at a cost,
but strong economic growth can continue.**



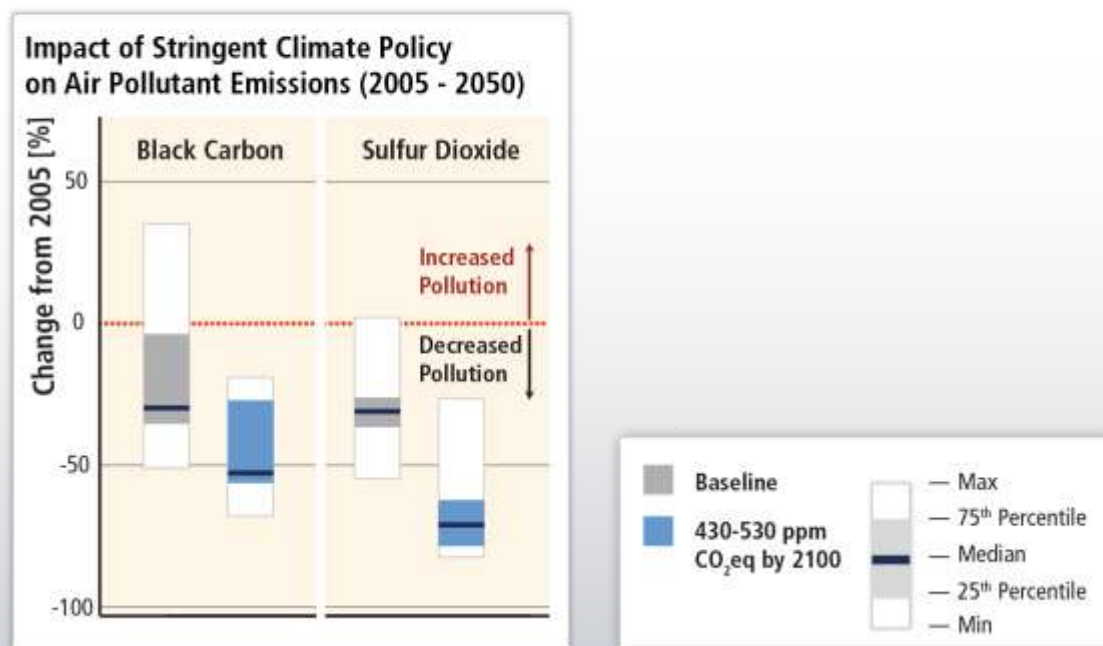
Global costs rise with the ambition of the mitigation goal.



Substantial reductions in emissions would require large changes in investment patterns.

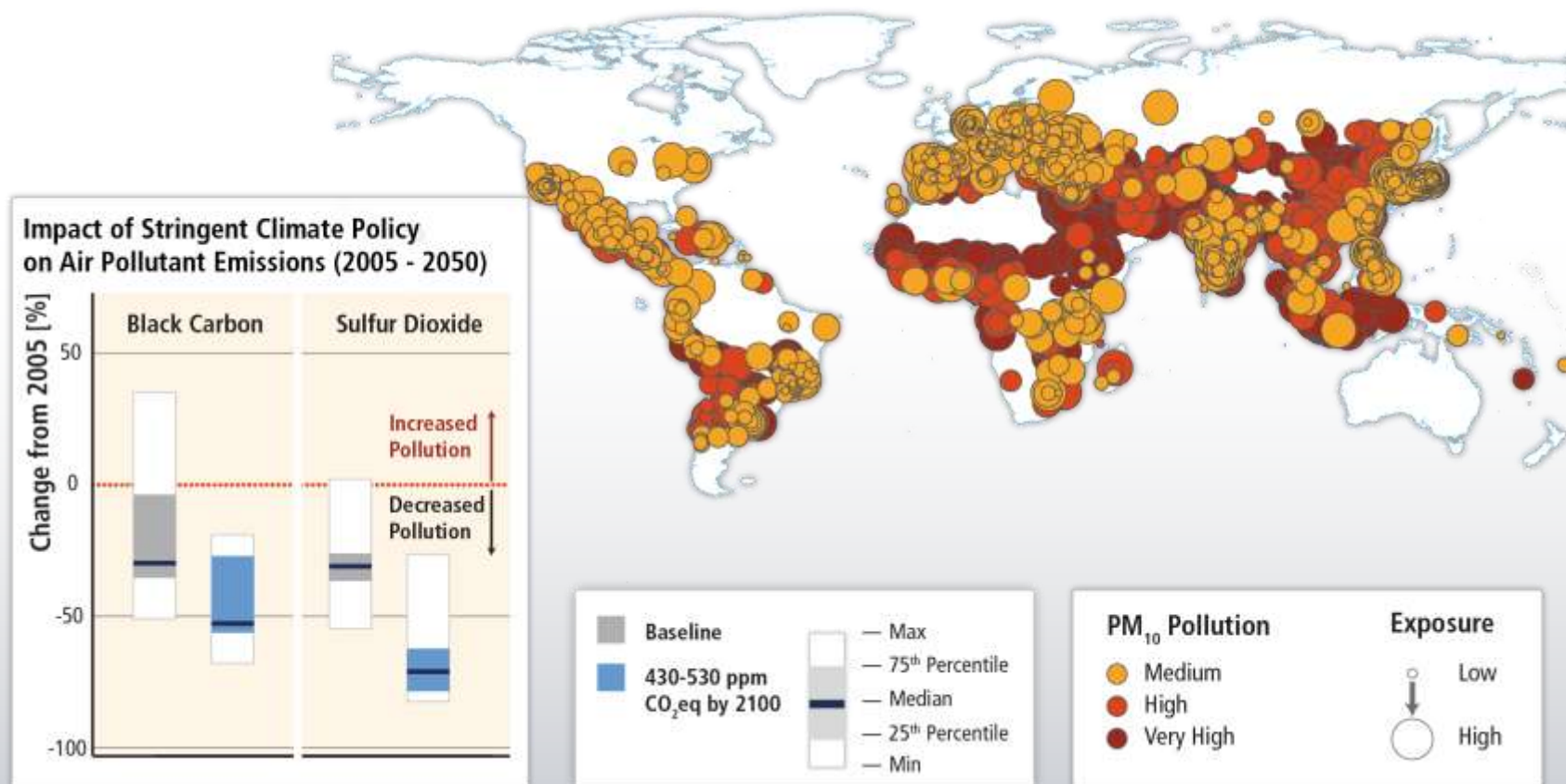


Climate change mitigation can bring co-benefits – health, energy security and other societal goals.



Based on Figures SPM.6 and 12.23

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Based on Figures SPM.6 and 12.23

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www.mitigation2014.org