

26<sup>th</sup> April 2021

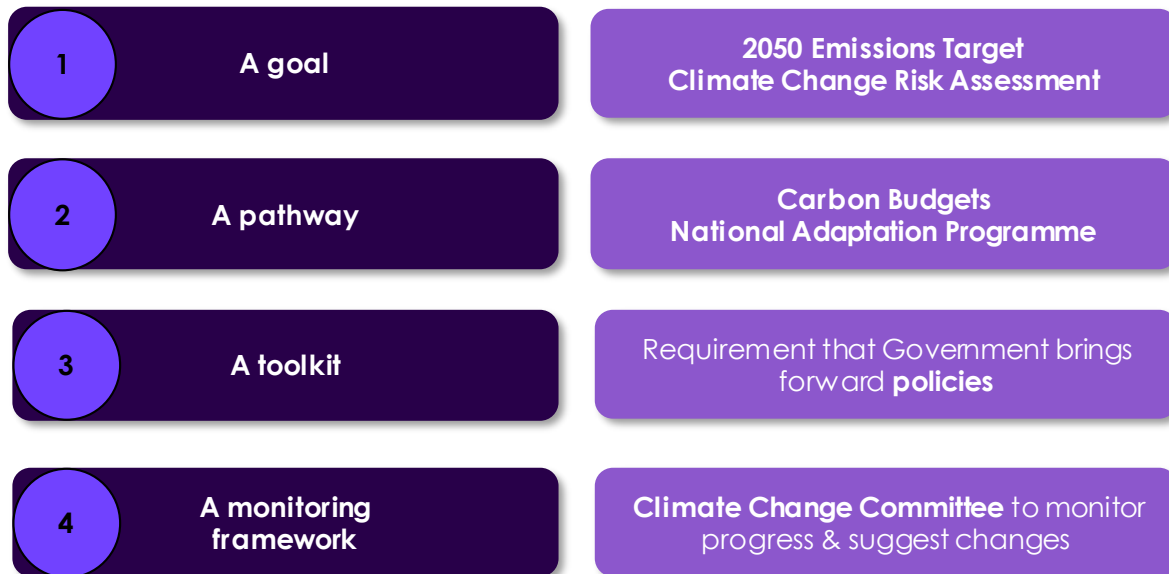
# The UK Climate Change Committee and the UK's Sixth Carbon Budget advice – the pathway to Net Zero

Dr Rebecca Heaton, UK Climate Change Committee

# The CCC's role under the UK Climate Change Act

# UK Climate Change Act

Four pillars underpin the UK Climate Change Act



# UK Climate Change Committee

Independent, Expert-led, Evidence-based

## Mitigation Committee



Lord Deben  
Chair  
(Fmr Minister)



Dr Rebecca Heaton  
(Business)



Prof Piers  
Foster  
(Climate Science)



Prof Corinne  
Le Quéré  
(Climate Science)



Prof Keith Bell  
(Energy  
systems)



Paul Johnson  
(Economics)



Prof Nick Carter  
(Behaviour)



Prof Michael  
Davies  
(Building Physics)

## Adaptation Committee



Baroness Brown  
Chair  
(Engineering)



Ece  
Ozdemiroglu  
(Economics)



Rosalyn  
Schofield  
(solicitor)



Prof Michael  
Davies  
(Building Physics)

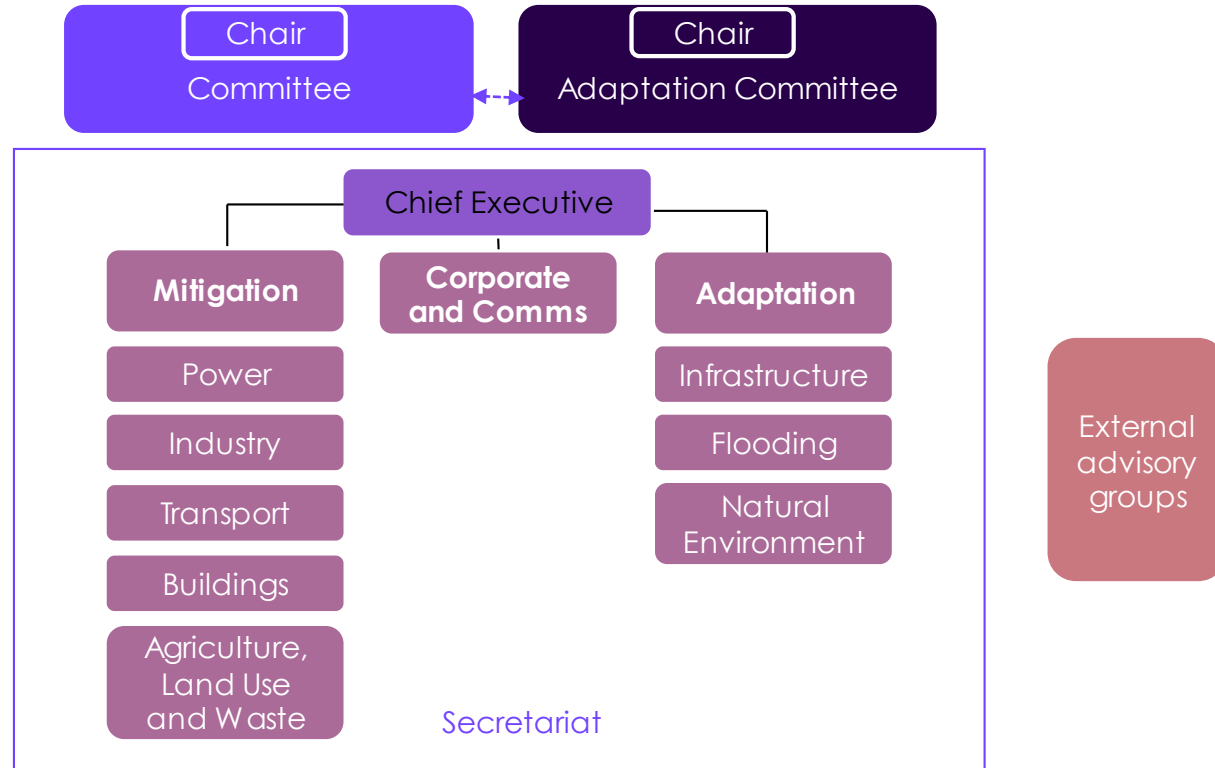


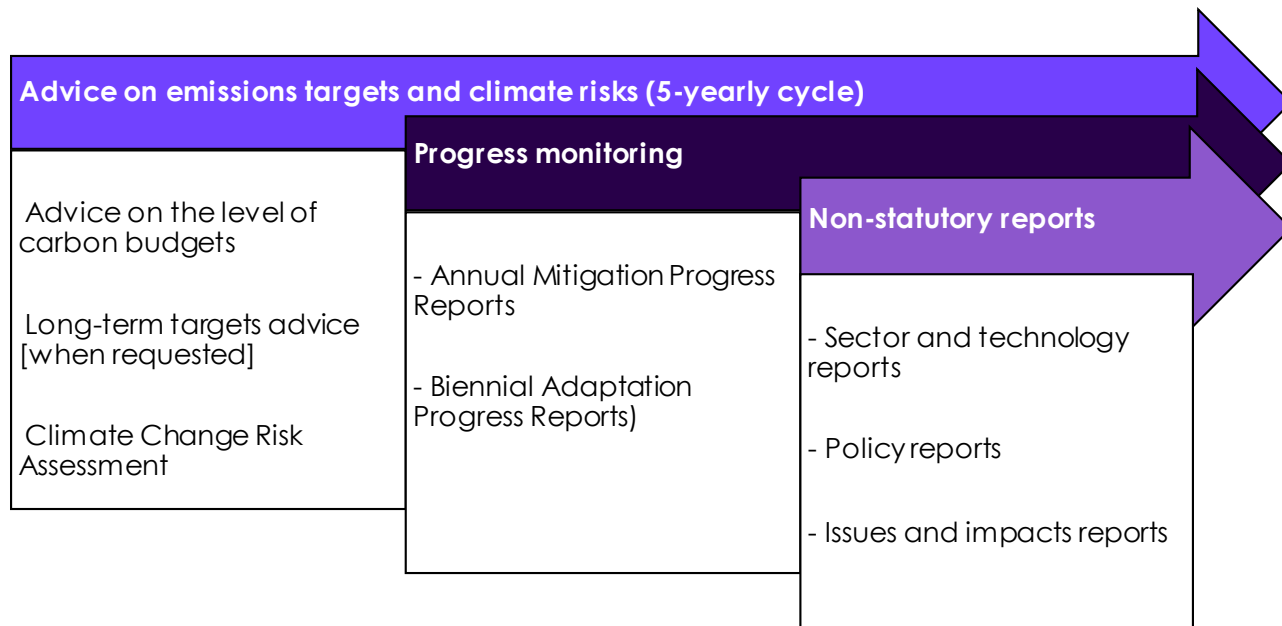
Prof Richard  
Dawson  
(Climate Risk)



# UK Climate Change Committee

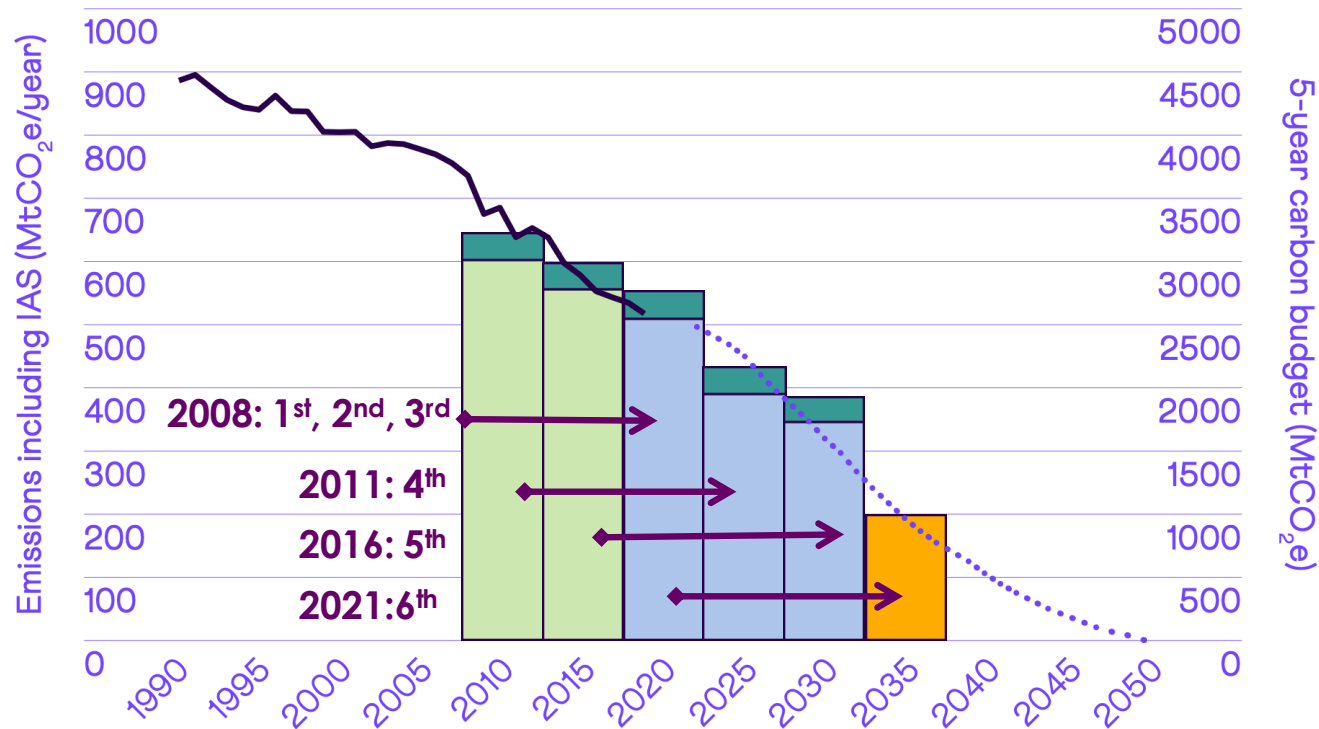
## Independence, Expertise, Evidence-Led





# Drumbeat budget cycle for emissions reductions

- Legally binding interim 5 year budgets set path providing focus for Government and business.
- Budget set 12 year ahead gives time to plan and deliver and gives clarity of direction across government cycles.



## UK Climate Act a successful model for climate mitigation policy making

- Clear targets and a transparent framework has improved public and business engagement.
- Legal obligation on specific Minister ensures climate change has high profile in Government.
- 12 year ahead commitment is effective balance of political distance and policy immediacy.
- The Net Zero Target has focussed minds (no 'free' 20%).
- An evidence-led independent advisor has helped resolve political differences.

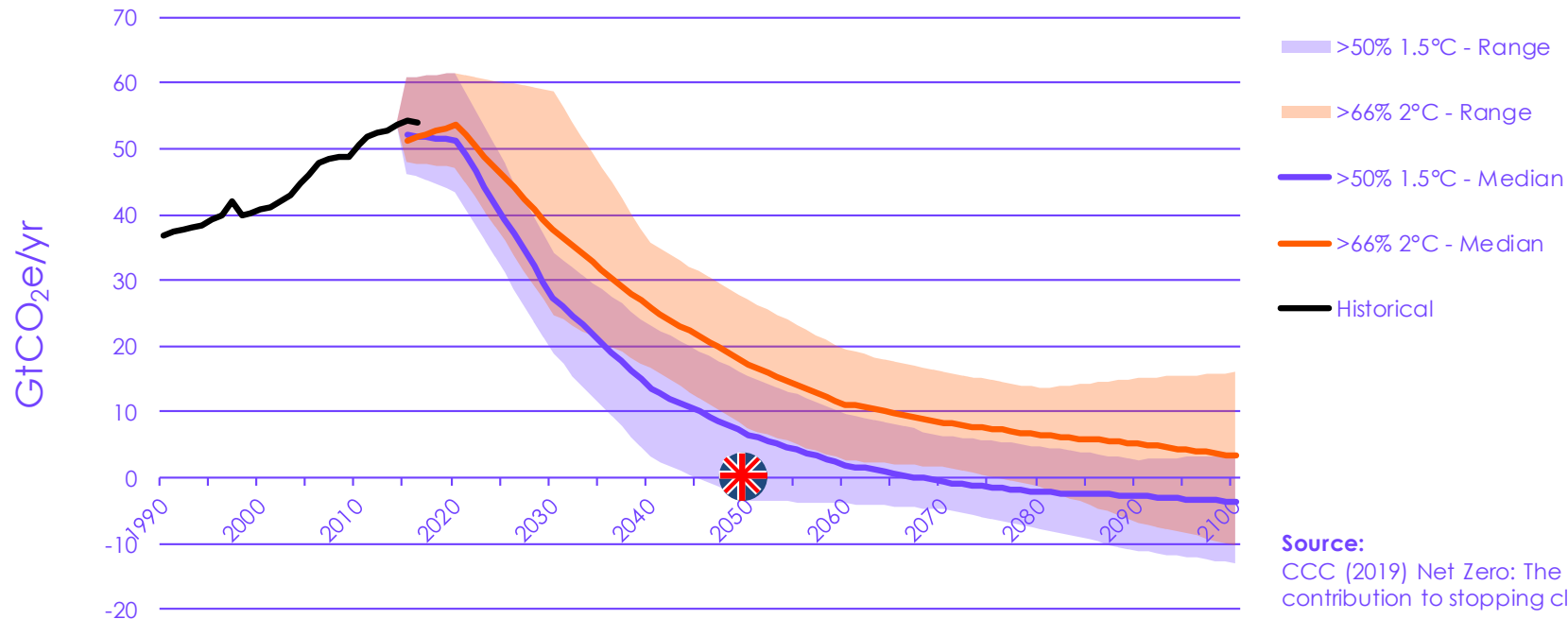
***“The UK experience shows that an expert advisory body can strengthen climate governance by serving as an impartial knowledge broker, contributing to more evidence-based and ambitious policymaking.”*** London School of Economics - Grantham Research Institute on the role of the CCC (2021)



# Advice on the path to Net Zero

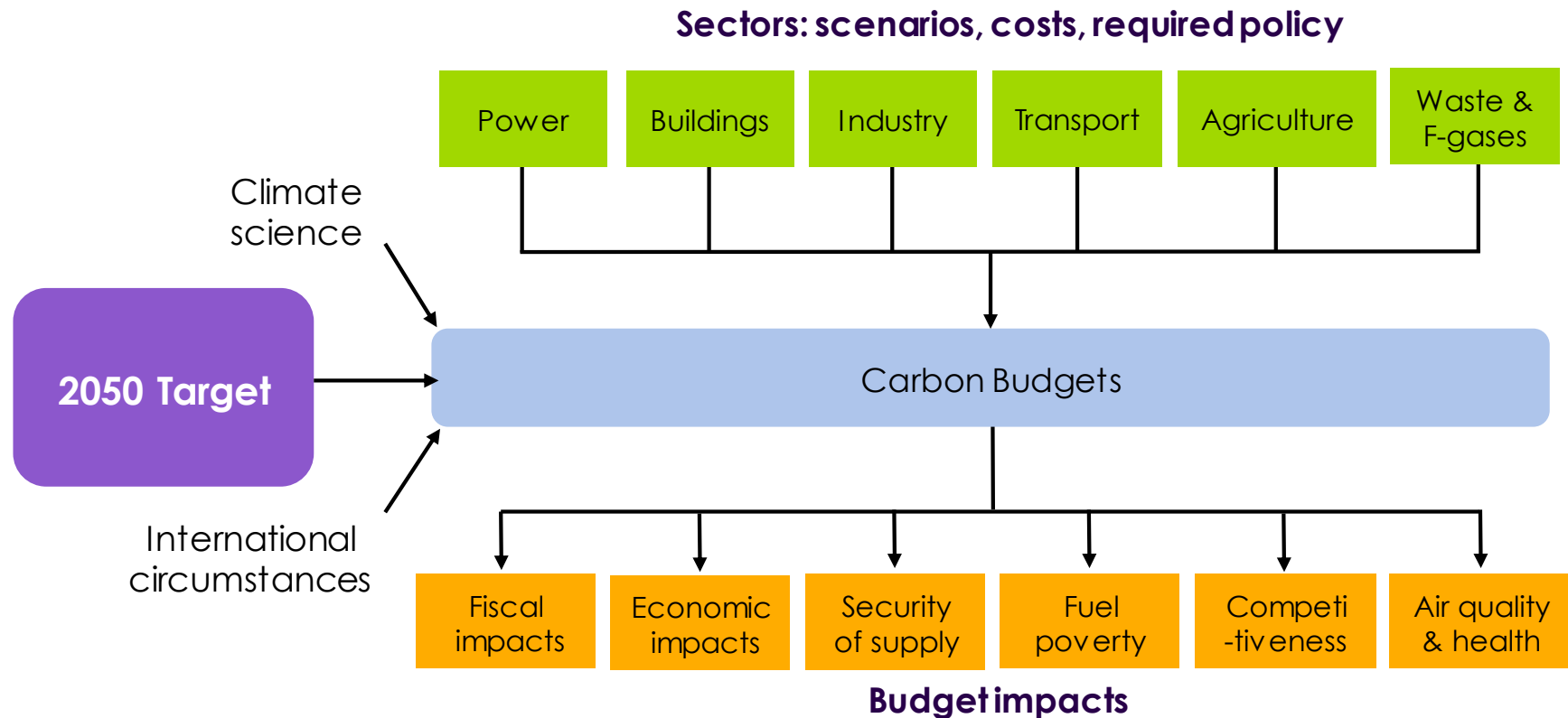
# Global emissions (all GHGs) pathways consistent with the Paris Agreement

UK 2019: Net Zero 2050



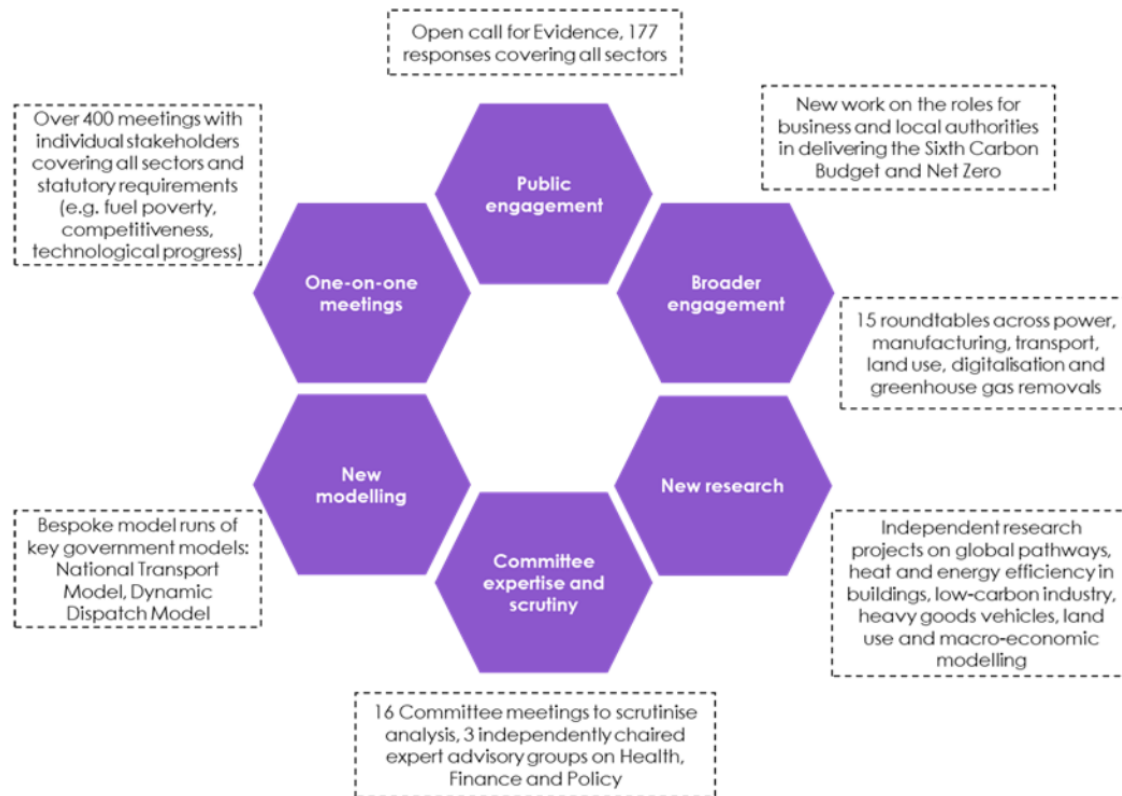
# Setting the path to Net Zero – an approach defined by the Climate Act

Evidence-based, bottom up, whole economy approach



# Setting the path to Net Zero – engagement, evidence and scrutiny

Advice based on bespoke modelling and leveraging widespread expertise



## Our approach

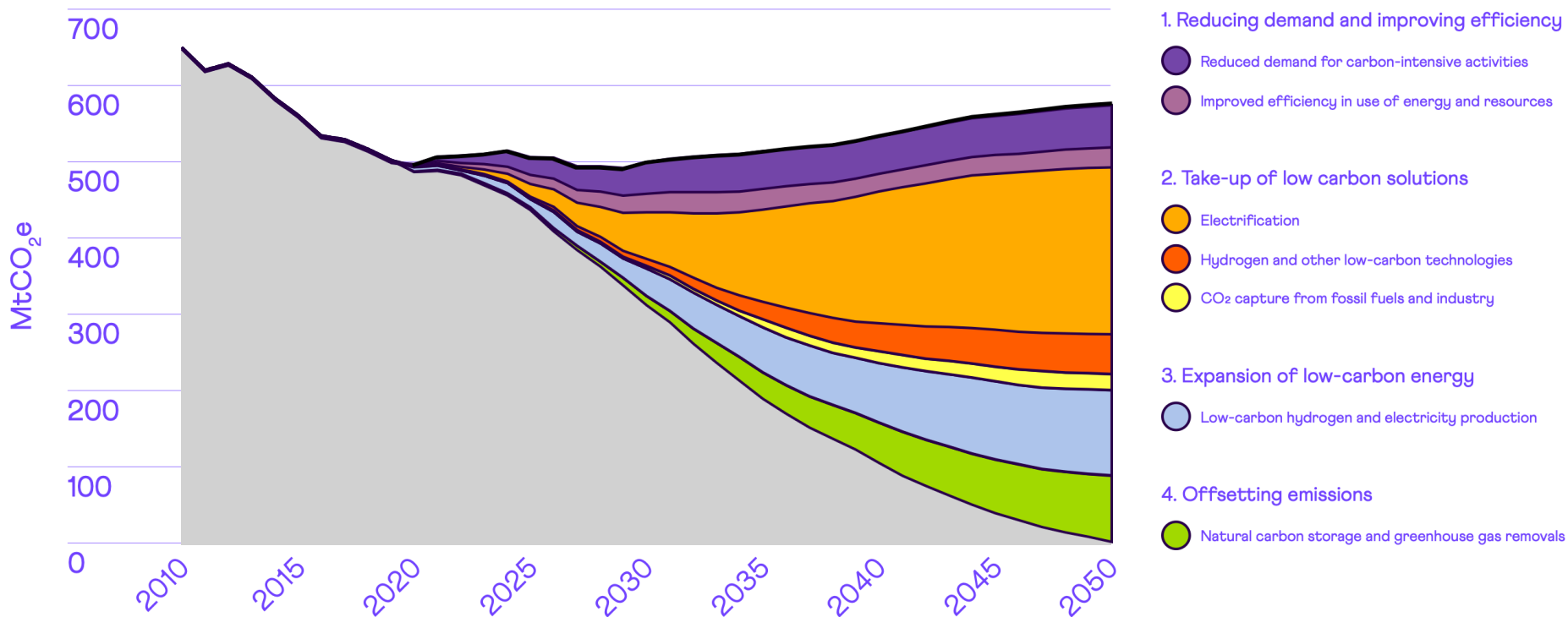
A very real-world constraint: asset lives

Sector	Asset	Lifetime
Transport	Light Vehicle HGV	14 years (average) 8 – 13 years
Manufacturing and Construction	Combustion (Boilers, furnaces, mobile machinery, generators, kilns, compressors, dryers, heaters, ovens, Other process assets.	10-35 years
Buildings	Fossil fuel boiler Air Source Heat Pump Ground Source Heat Pump Loft and cavity insulation Solid wall insulation	15 years 15 years 20 years 42 years 36 years
Power generation	Gas plant Offshore wind Nuclear plant	25 years 30 years 60 years
Aviation	Aircraft	30 year technical
Shipping	Ships	30 years technical

Source:  
CCC analysis.

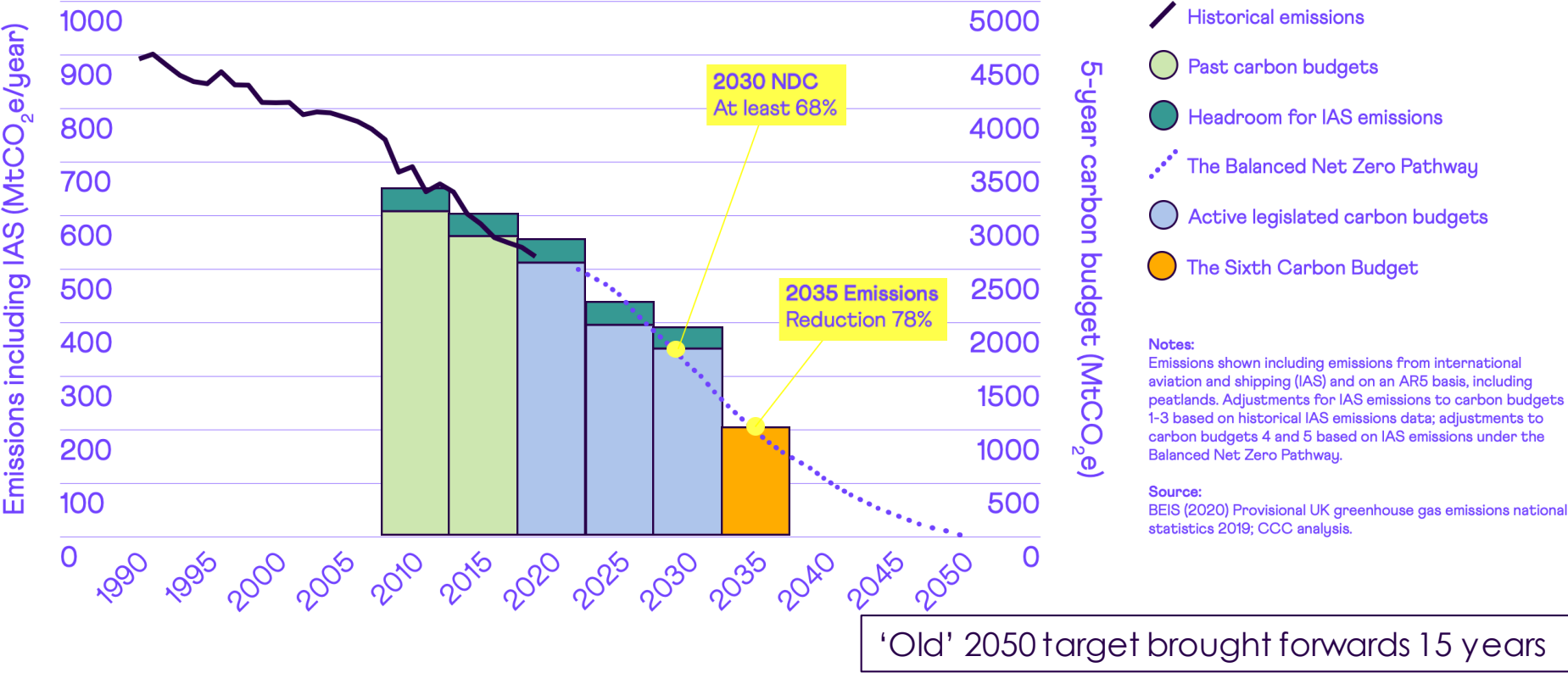
# Our recommended path to Net Zero

The path to Net Zero requires actions across four key areas



# Our recommended path to Net Zero

## The recommended sixth carbon budget and 2030 NDC



December 2020

### The Sixth Carbon Budget The UK's path to Net Zero



[www.theccc.org.uk/publication/sixth-carbon-budget/](http://www.theccc.org.uk/publication/sixth-carbon-budget/)



The UK's independent adviser on  
tackling climate change

### Insights Briefing Sharing the UK approach to addressing climate change

[www.theccc.org.uk/publication/insights-briefings-sharing-the-uk-approach-to-addressing-climate-change/](http://www.theccc.org.uk/publication/insights-briefings-sharing-the-uk-approach-to-addressing-climate-change/)



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