

**Mr M Durkan MLA  
Northern Ireland Assembly  
Parliament Buildings  
Stormont**

**19 October 2021  
AQT 1595/17-22**

Further to your Topical Question during Question Time on Monday 27 September, concerning the Climate Change Committee's presentation to the Executive (AQT 1595/17-22), we attach a copy of the presentation which was provided by the Committee to the Executive and which formed the basis for its subsequent discussion.

We are copying this letter to the Assembly Library so that the presentation can be accessed by members.

Should you have any further queries over this, please address these to our departmental officials at [ps.ministers@executiveoffice-ni.gov.uk](mailto:ps.ministers@executiveoffice-ni.gov.uk)



**PAUL GIVAN MLA  
FIRST MINISTER**



**MICHELLE O'NEILL MLA  
DEPUTY FIRST MINISTER**

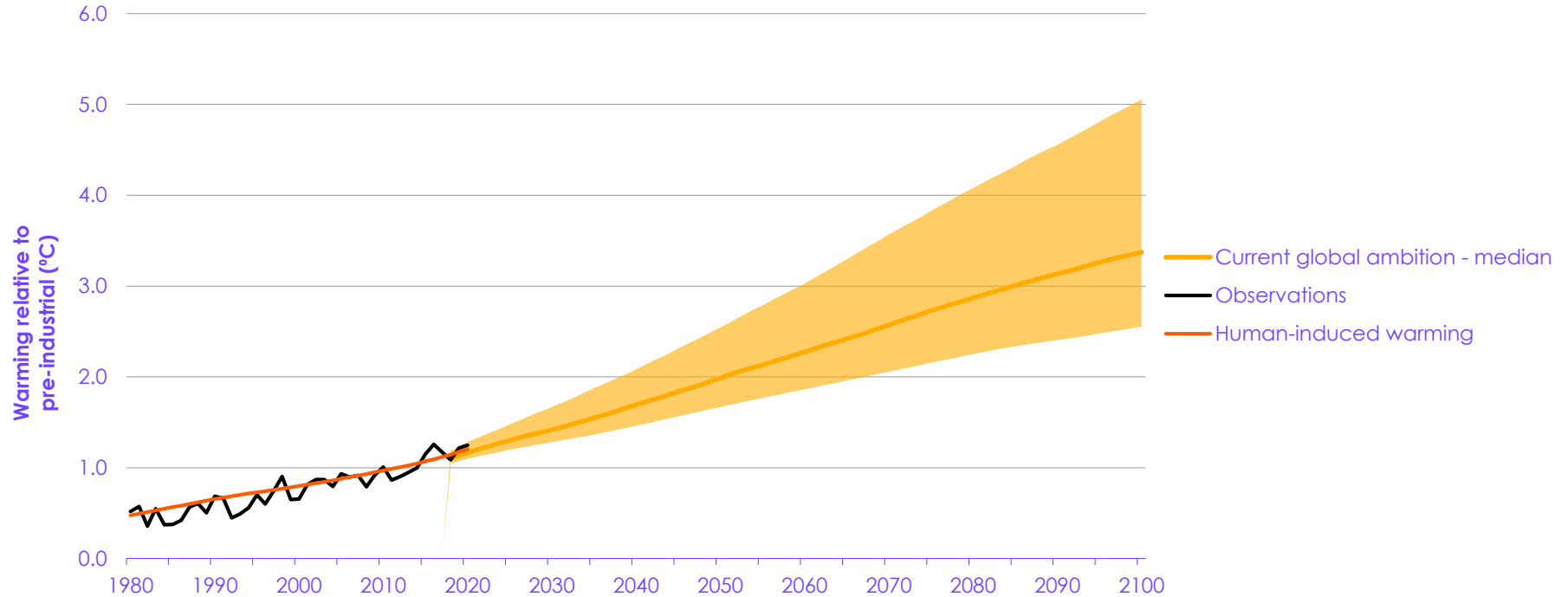
**Cc:** [Neil.Sedgewick@niassembly.gov.uk](mailto:Neil.Sedgewick@niassembly.gov.uk)  
[library@niassembly.gov.uk](mailto:library@niassembly.gov.uk)

# Northern Ireland's contribution to Net Zero

Advice on setting an appropriate target for Northern Ireland

## Our changing climate

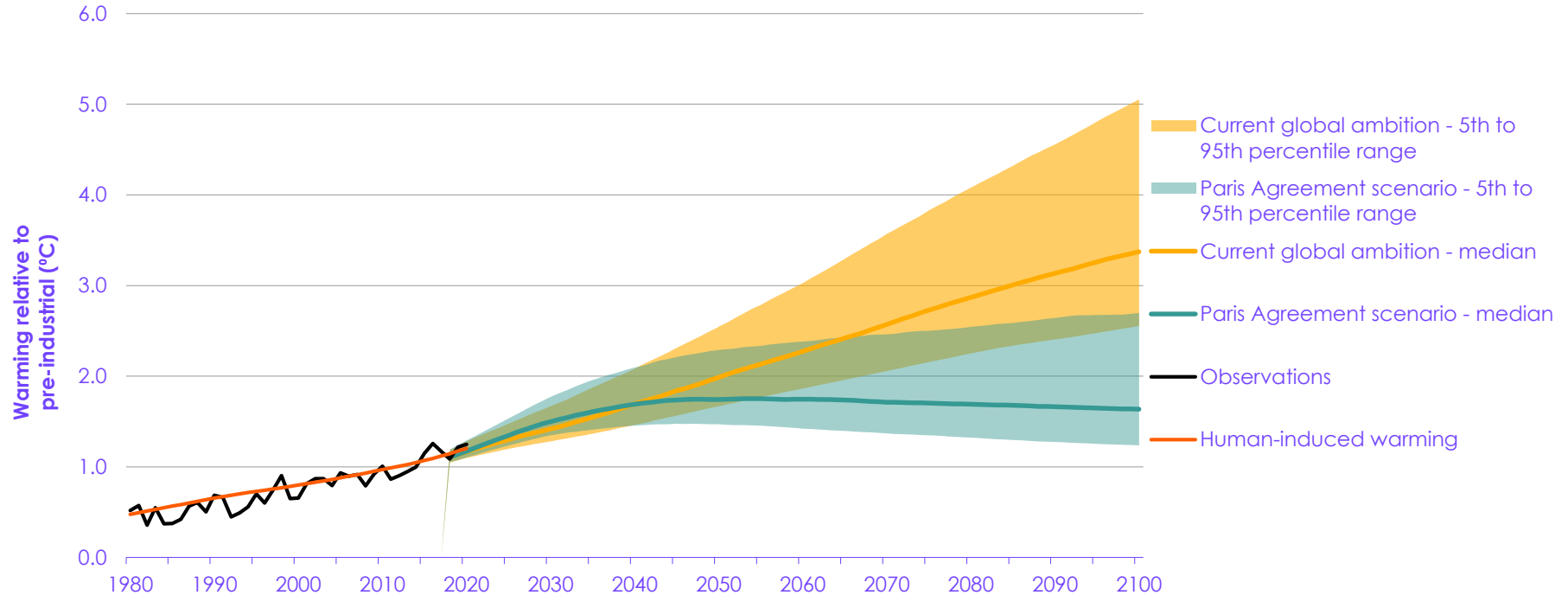
Projected changes in global mean annual surface temperature compared to 1850-1900



Source  
CCC Analysis

## Our changing climate

Projected changes in global mean annual surface temperature compared to 1850-1900

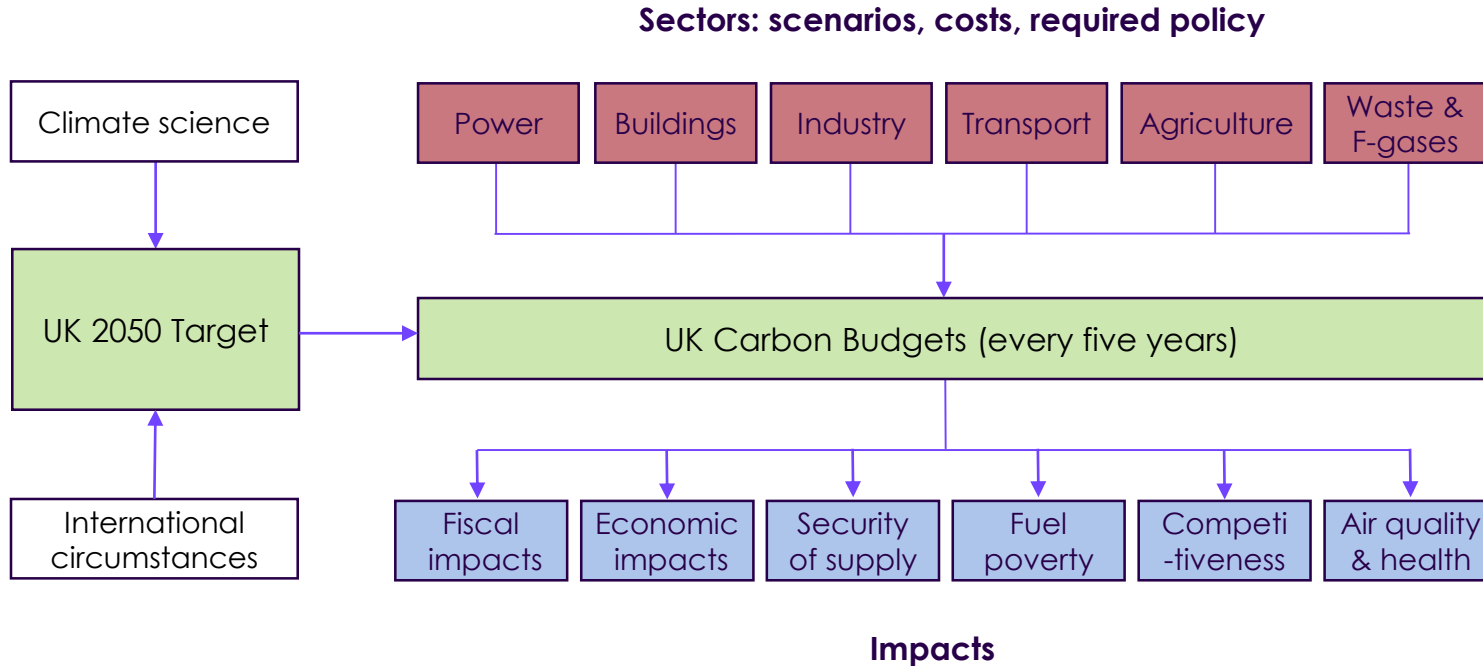


Source  
CCC Analysis

# Determining the UK's contribution

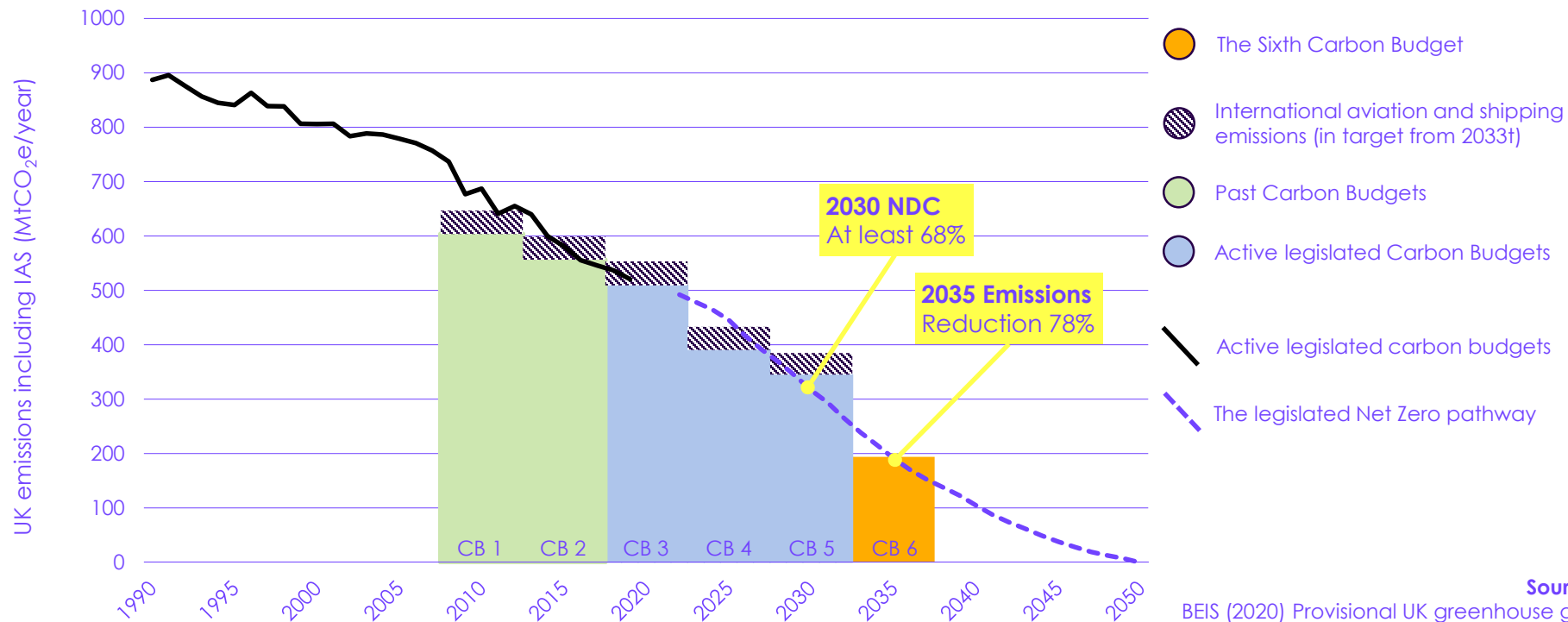
## Our approach

# Carbon budgeting under the Climate Change Act



# The UK's emissions path to Net Zero 2050

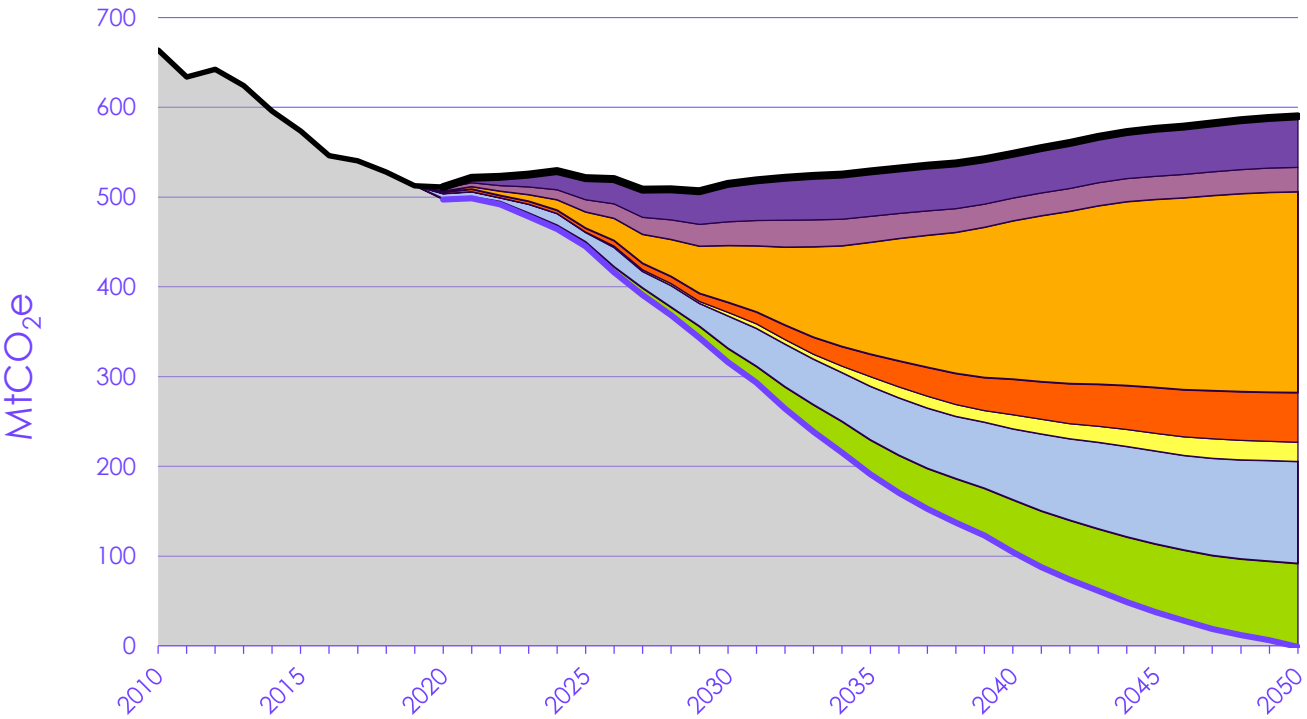
## The UK Sixth Carbon Budget and 2030 NDC



**Source**  
BEIS (2020) Provisional UK greenhouse gas emissions National Statistics 2019; CCC analysis

# Emissions abatement on the legislated path

## Meeting Net Zero UK requires actions across four key areas



### 1. Demand reduction and efficiency

- Reduced demand for carbon-intensive activities
- Greater efficiency in use of energy and resources

### 2. Take-up of low-carbon solutions

- Electrification
- Hydrogen and other low-carbon technologies
- CO<sub>2</sub> capture from fossil-fuels and industry

### 3. Expansion of low-carbon energy

- Low-carbon hydrogen and electricity production

### 4. Offsetting emissions

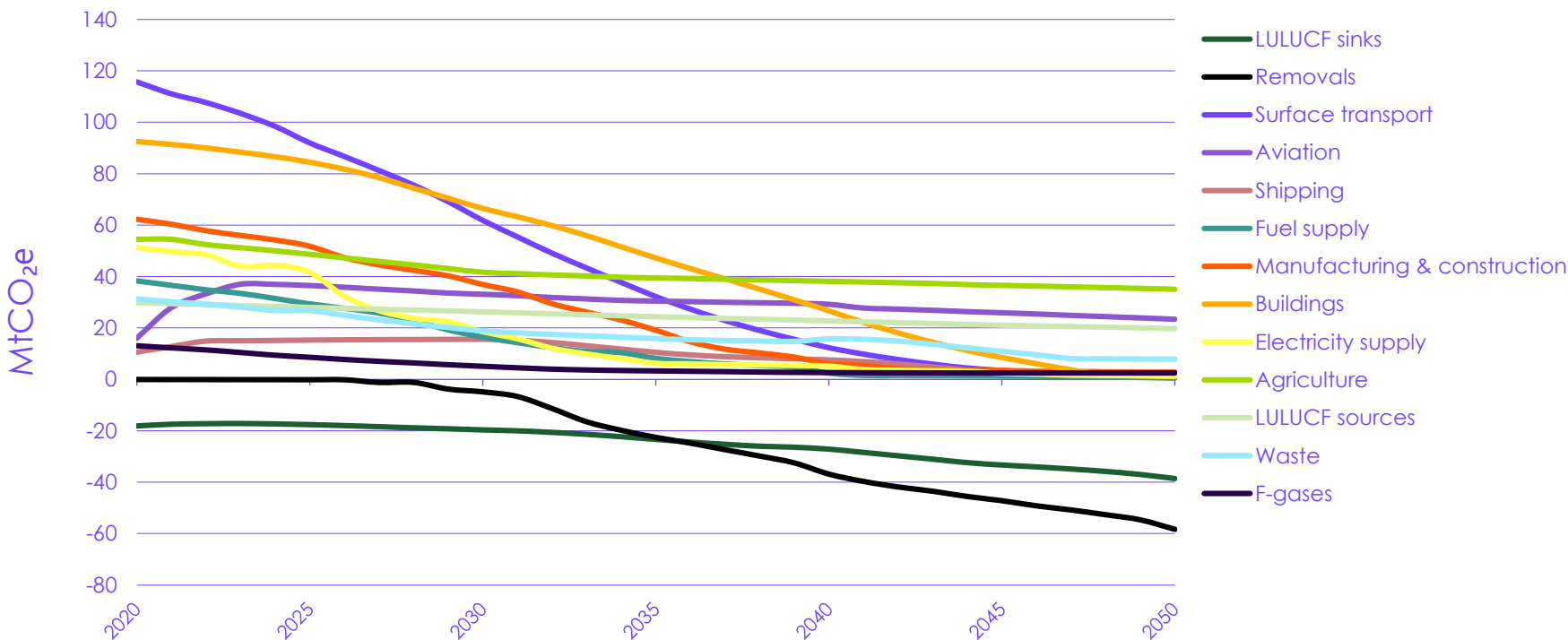
- Natural carbon storage and greenhouse gas removals

Source  
CCC Analysis



# Emissions abatement on the recommended path

## Sectoral contributions to meeting Net Zero

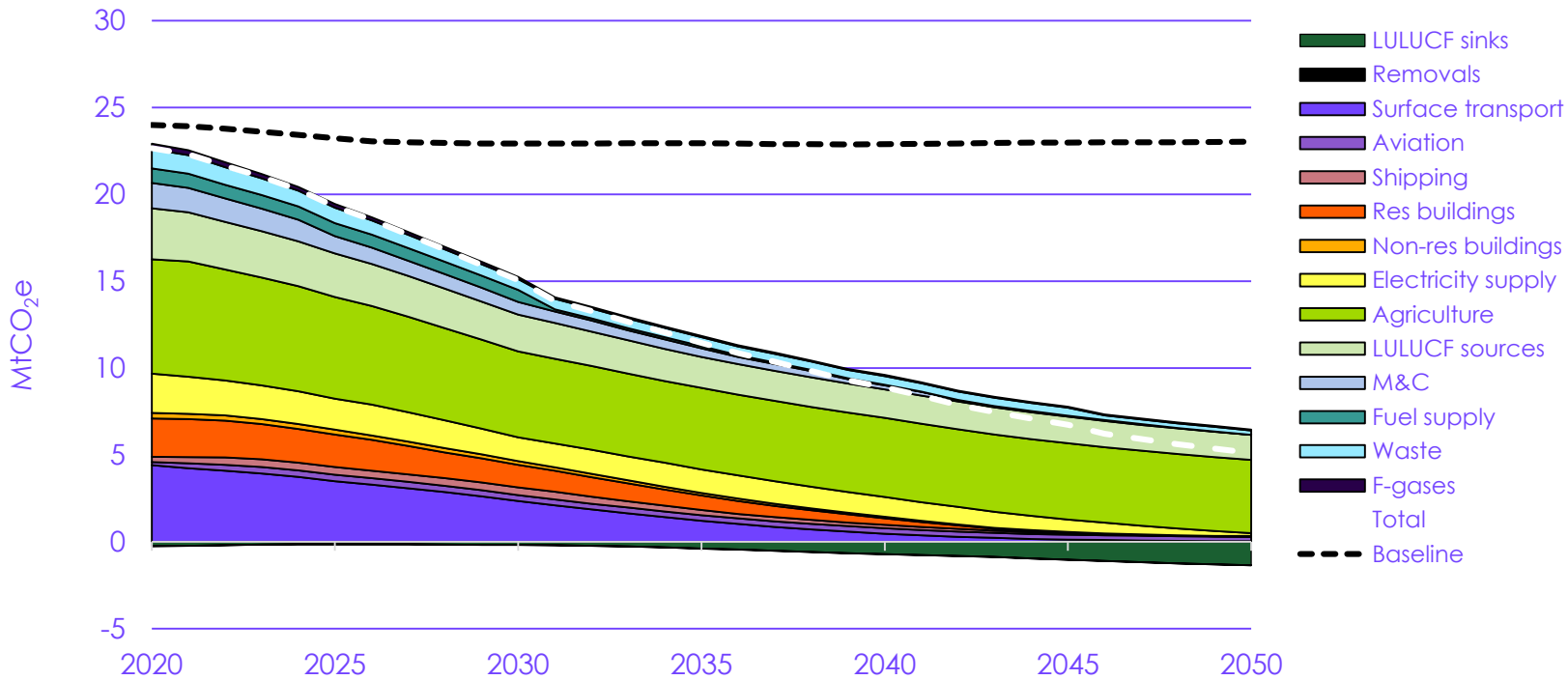


Source  
CCC Analysis

# Determining Northern Ireland's contribution

# Pathway for Northern Ireland emissions

## Change in northern Ireland emissions - agricultural methane dominates emissions by 2050



Source  
CCC Analysis

# Targets in a Northern Ireland Climate Change Act

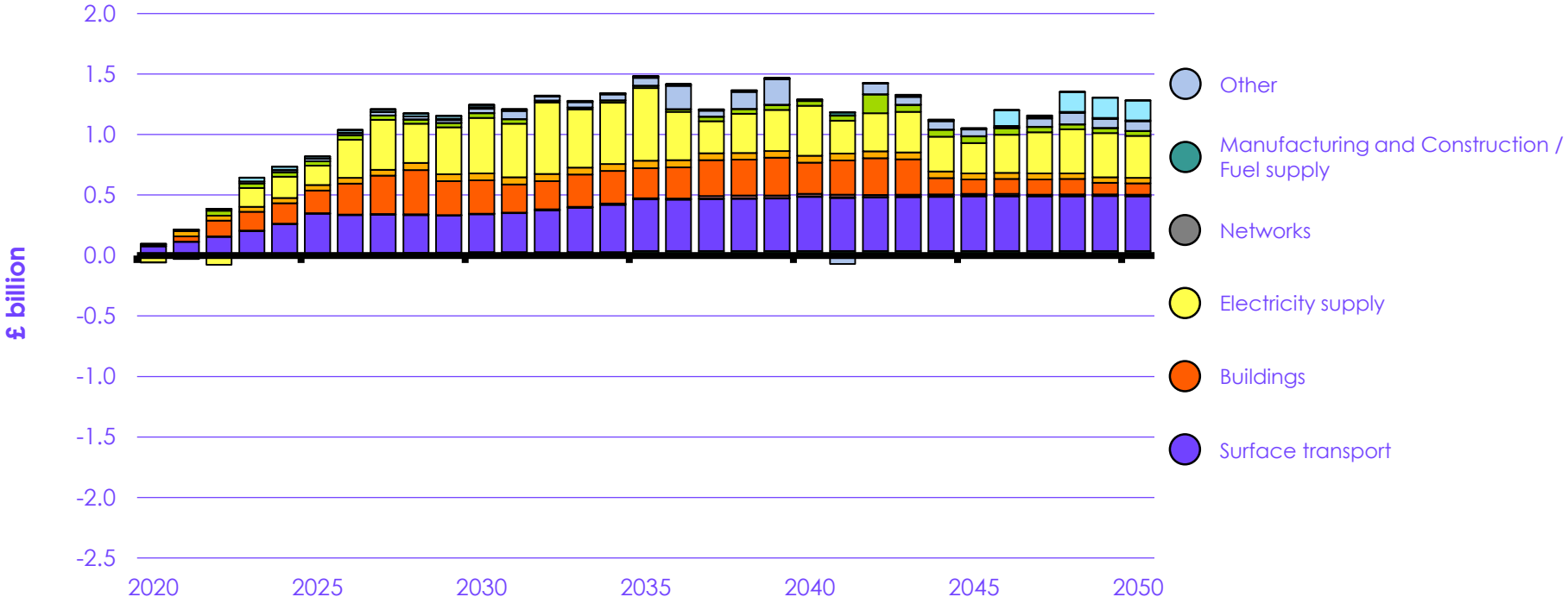
## Options by target methodology

Possible targets in a Northern Ireland Climate Change Act			
	All greenhouse gases	CO <sub>2</sub> only	Excluding agricultural, land and waste methane
2030	<b>48% reduction</b>	56% reduction	52% reduction (53% reduction)
6CB period (2033-2037)	<b>60% reduction</b>	70% reduction	67% reduction (67% reduction)
2040	<b>69% reduction</b>	83% reduction	79% reduction (78% reduction)
2050	<b>82% reduction</b>	<b>Net Zero</b>	<b>96% reduction</b> (93% reduction)

Source  
CCC Analysis

# Green growth

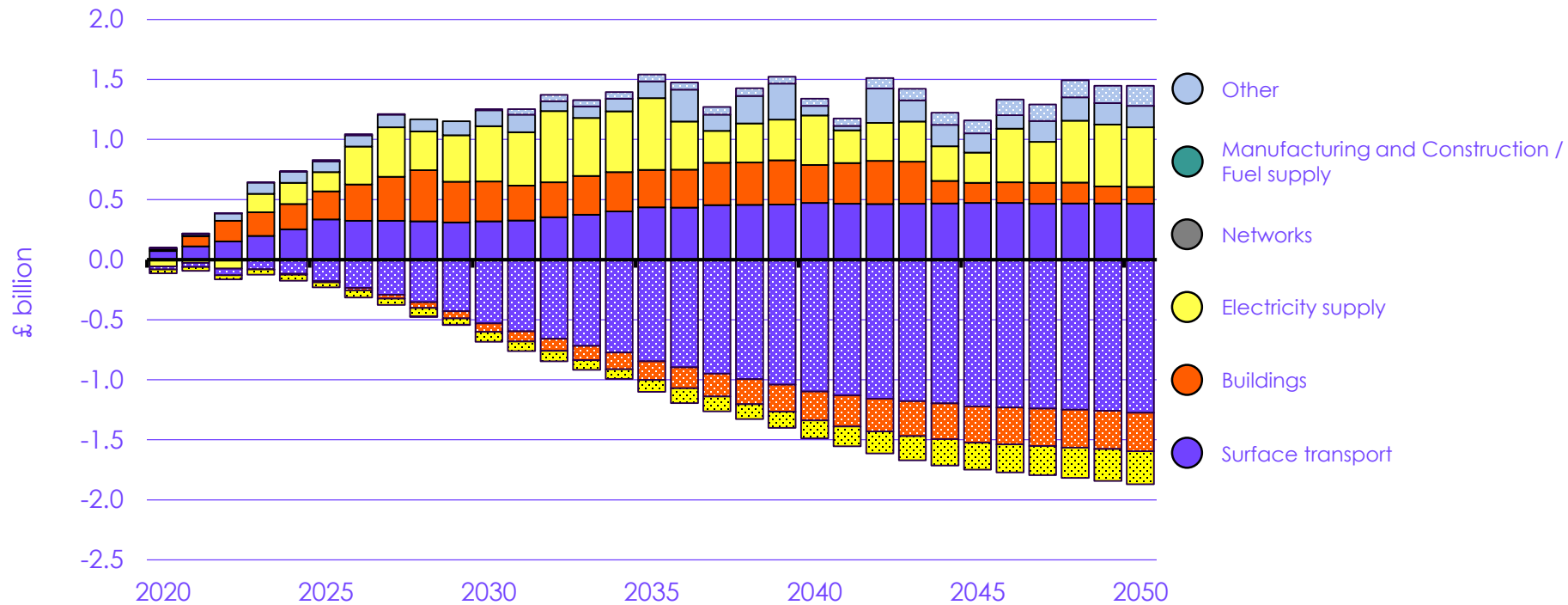
## Major investment programme in Northern Ireland



Source  
CCC Analysis

## Green growth

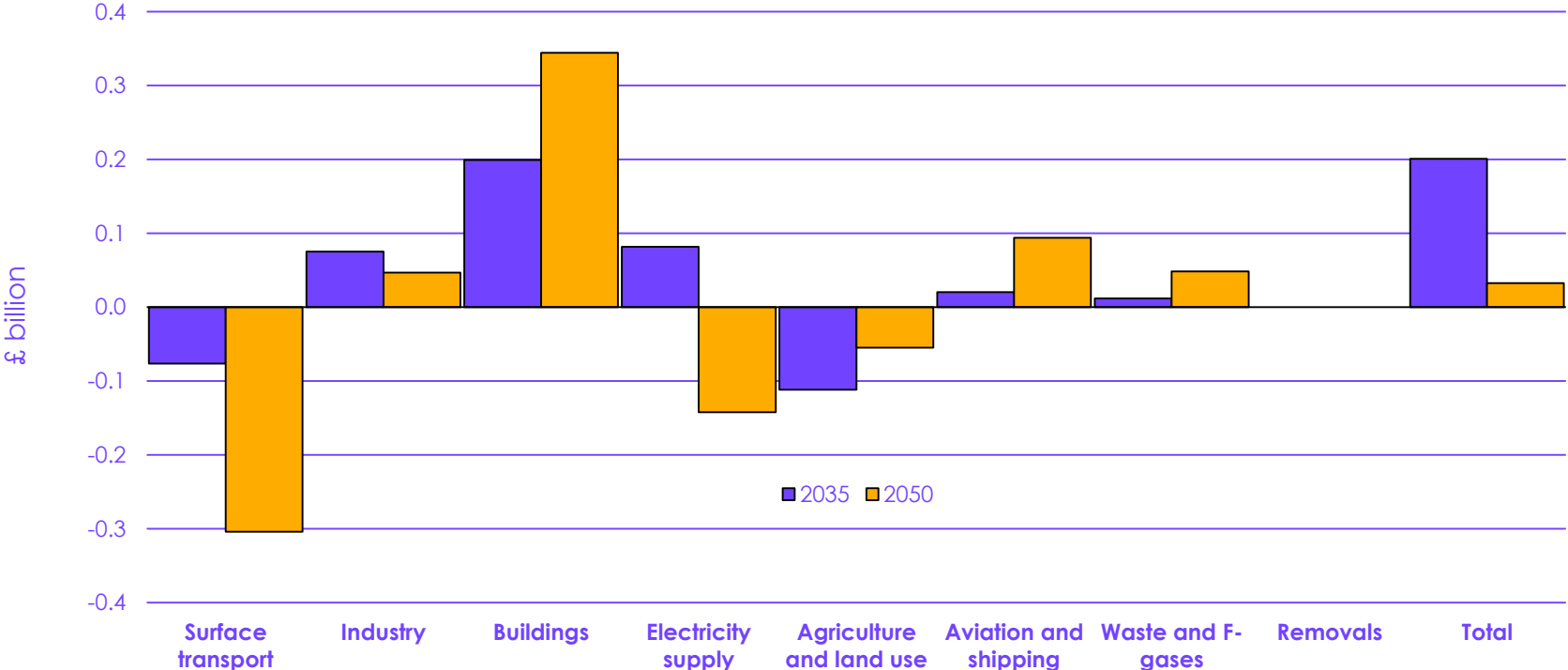
Major investment programme in Northern Ireland, delivering offsetting operating cost savings



Source  
CCC Analysis

# Economic impact

## Sectoral resource costs of decarbonisation, in 2035 and 2050



Source  
CCC Analysis