



Department for  
Energy Security  
& Net Zero

# The future of UK energy policy: the net zero challenge

Donna Leong – *Director of Analysis*

Department for Energy Security and Net  
Zero

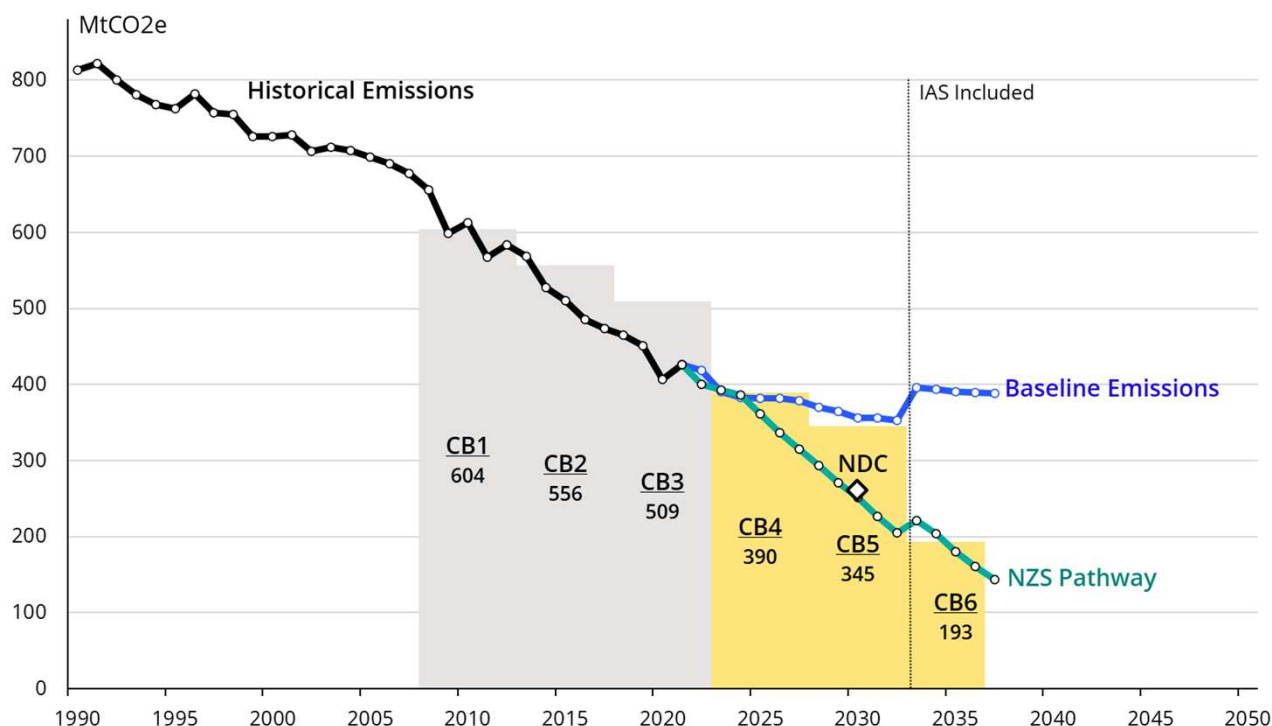
8 December 2023

**\*\*\*Official – Not Government Policy\*\*\***

*Please do not quote without author's  
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# UK's climate change targets are ambitious

1 Decarbonisation: UK has met Carbon Budgets 1, 2 and 3 comfortably but targets will tighten.



## Carbon Budgets

- We have legally binding 5-year Carbon Budget targets.
- The latest target CB6 (2033 - 2037) requires a 77% reduction in emissions from 1990 levels.

## Nationally determined contribution

- The Nationally Determined Contribution (NDC) is a separate target for 2030, as part of the Paris Agreement. Our current NDC represents a 68% reduction from 1990 emission levels.

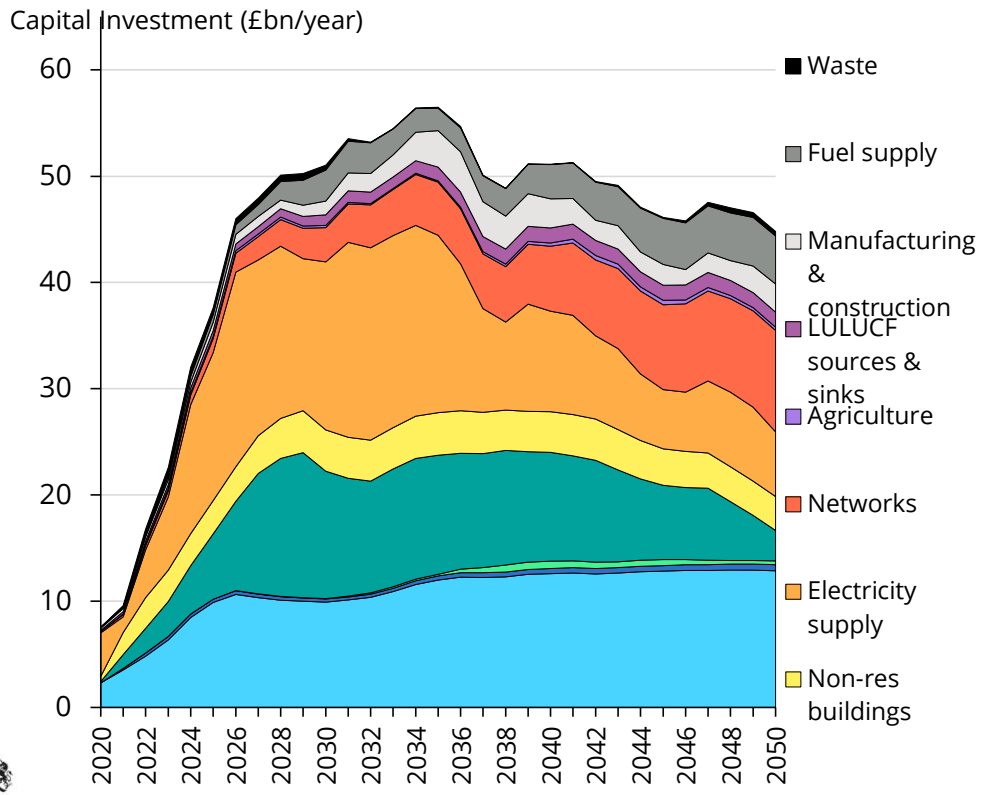
\*\*NZS Pathway was set in 2021 as part of the Net Zero Strategy publication. This has been adjusted to account for the latest EEP and GHG inventory



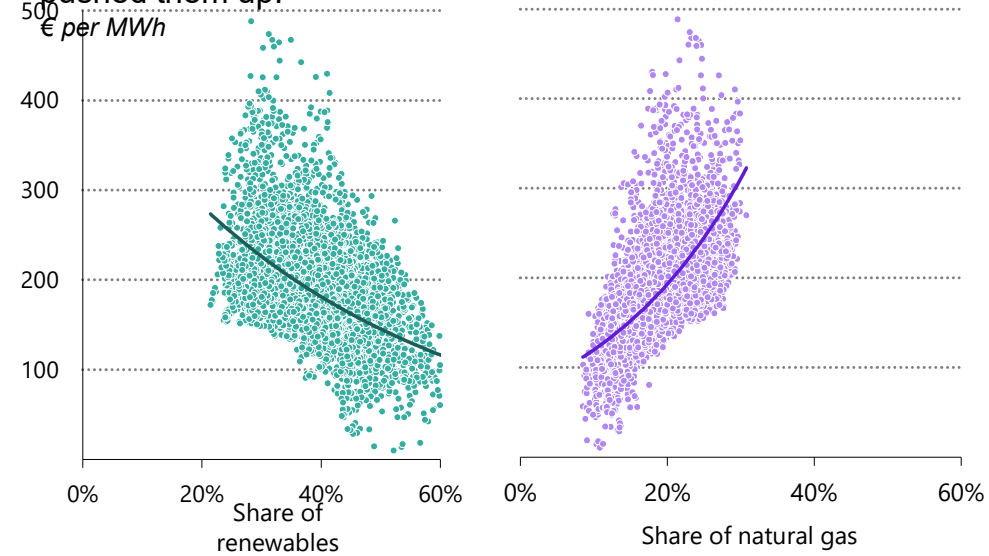
# Energy trilemma adds challenge – but transition will also bring opportunities

2 Cost: CCC estimate that an additional £40-60bn is required per annum for the NZ transition

3 Security: renewables offer energy security and help combat fossil fuel price driven inflation – but require additional flexible supply



**Hourly Wholesale Electricity Prices in the EU in the 1H 2022**  
 High shares of **renewables** in electricity supply drove down wholesale electricity prices, while high shares of **natural gas** pushed them up.



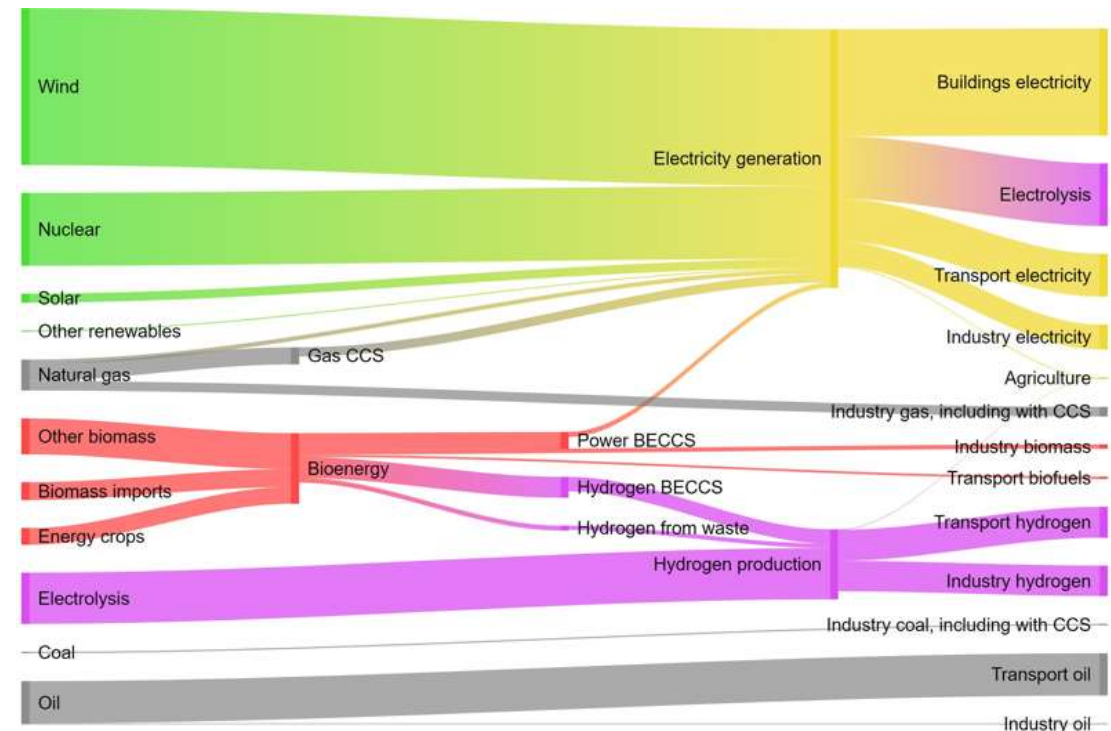
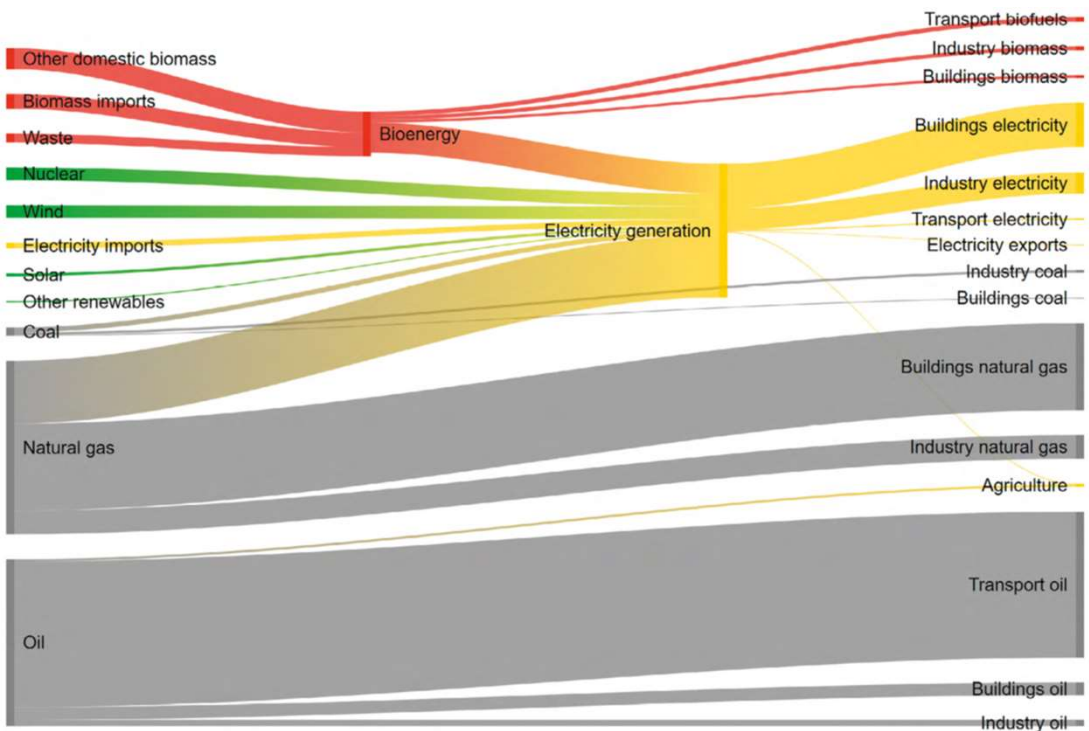
IEA analysis based on data from the ENTSO-E Transparency Platform, 2022.

# What does the decarbonisation pathway look like?

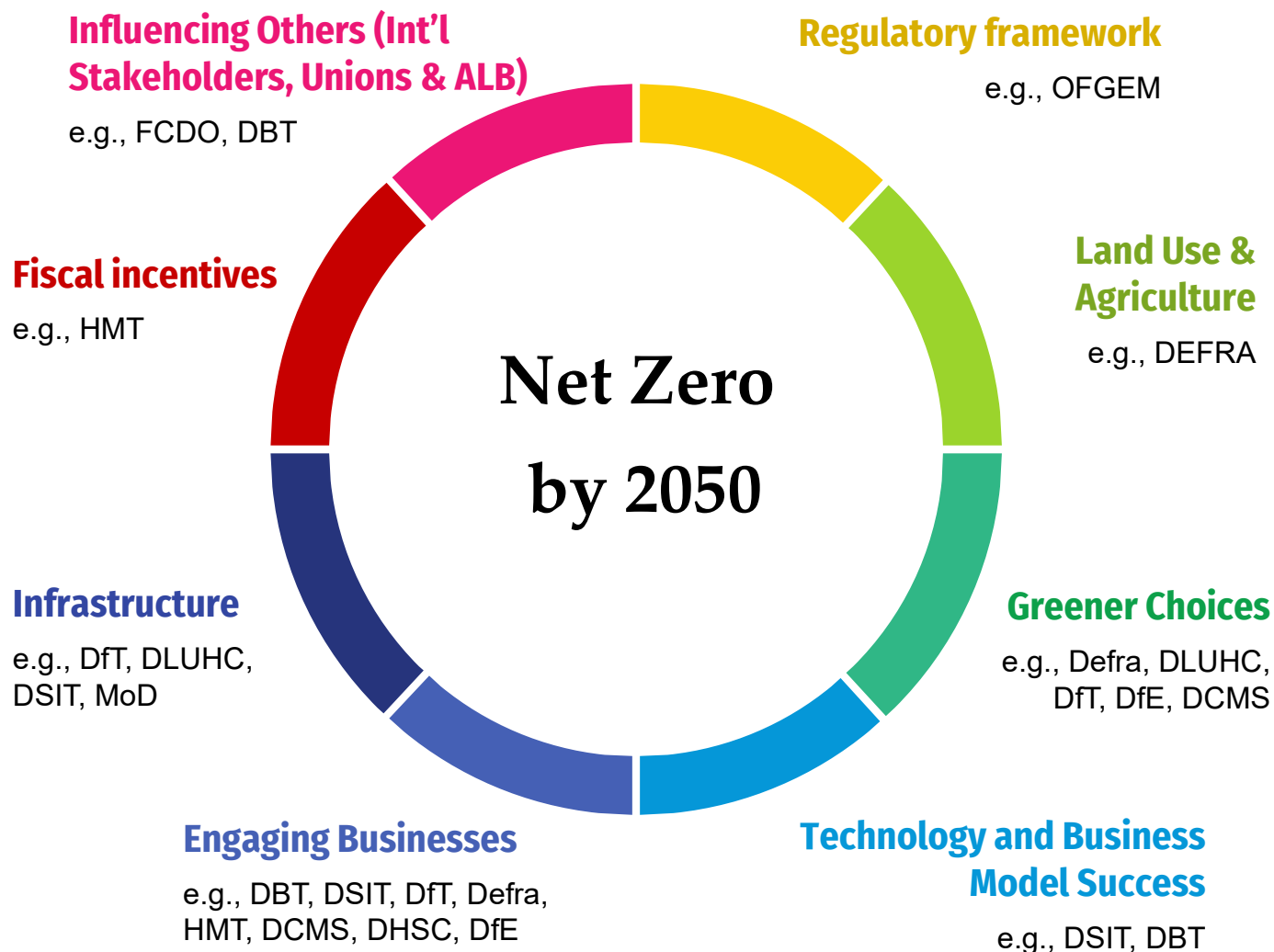
1 Energy generation and end uses in 2019 – still largely fossil fuels



2 High electrification Net Zero scenario: energy generation and end uses in 2050

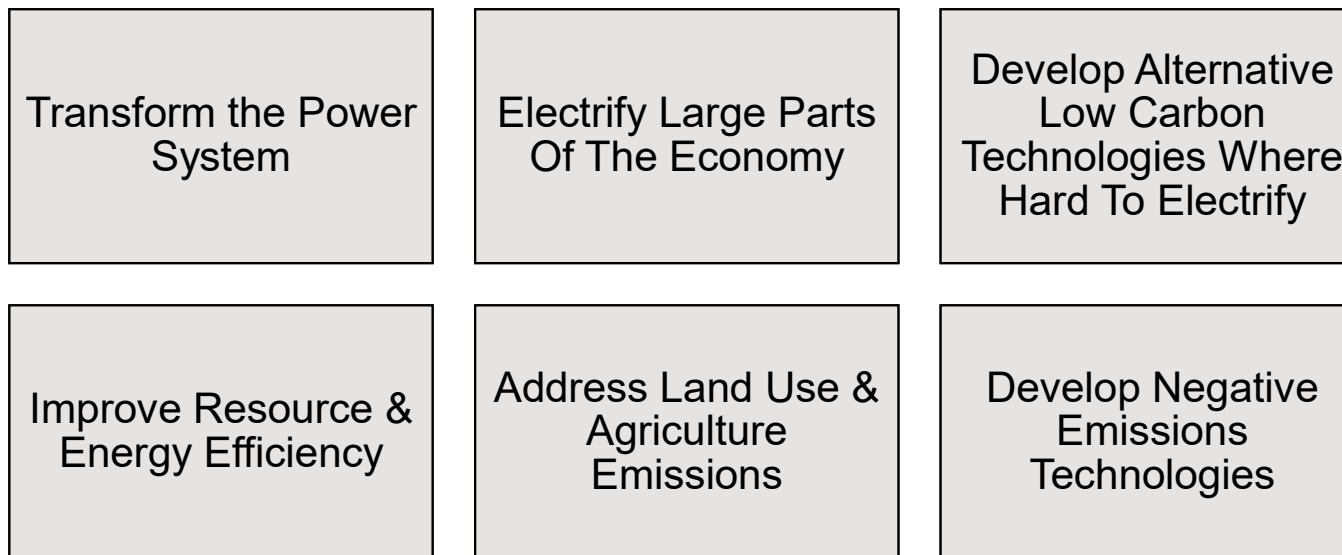


# Delivering Net Zero is a x-government systems challenge

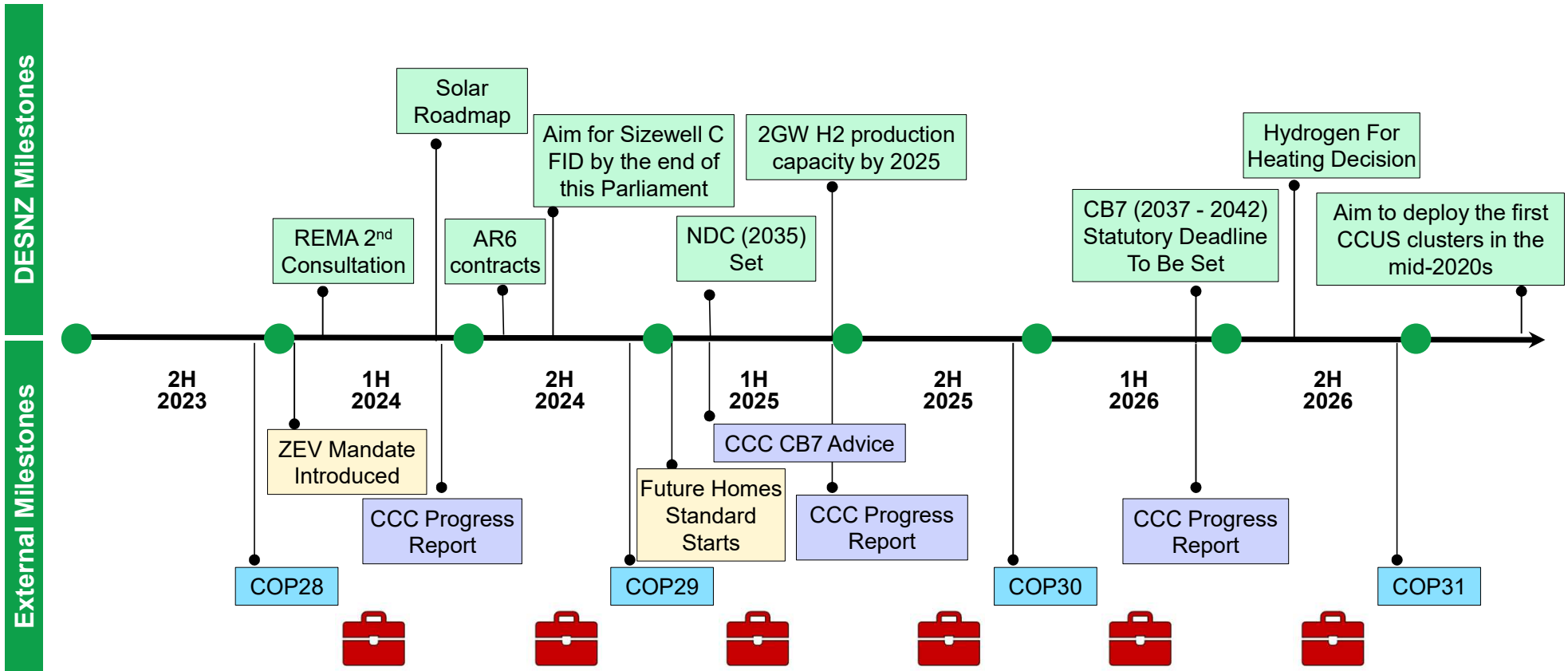


## The Net Zero Strategy and Carbon Budget Delivery Plan provide a Road Map to meet these targets

- 190 policies across all sectors can be mapped into **6 key priorities**:



# What are we focusing on over the next few years – *an illustrative timeline*



## What are we focusing on over the next few years – REMA

First announced in April 2022 in the British Energy Security Strategy, the Review of Electricity Market Arrangements (REMA) is a major review into the design of Britain's electricity market.

- **Objective:** To identify and implement the reforms needed to electricity market arrangements, to drive the necessary **investment** in, and efficient **operation** of, a secure, **low carbon electricity** system by 2035 whilst ensuring **affordability** for consumers and attractiveness for **investors**.
- **Scope:** REMA considers options for long lasting **reforms to all electricity (non-retail) markets** and covers policies including investment and market operation.





# What are we focusing on over the next few years – *Strategic Spatial Plan*

## Summary

A consultation on our proposals to make local plans (and minerals and waste plans) simpler, faster to prepare, and more accessible.

This consultation ran from  
**25 July 2023 to 11:59pm on 18 October 2023**

## Consultation description

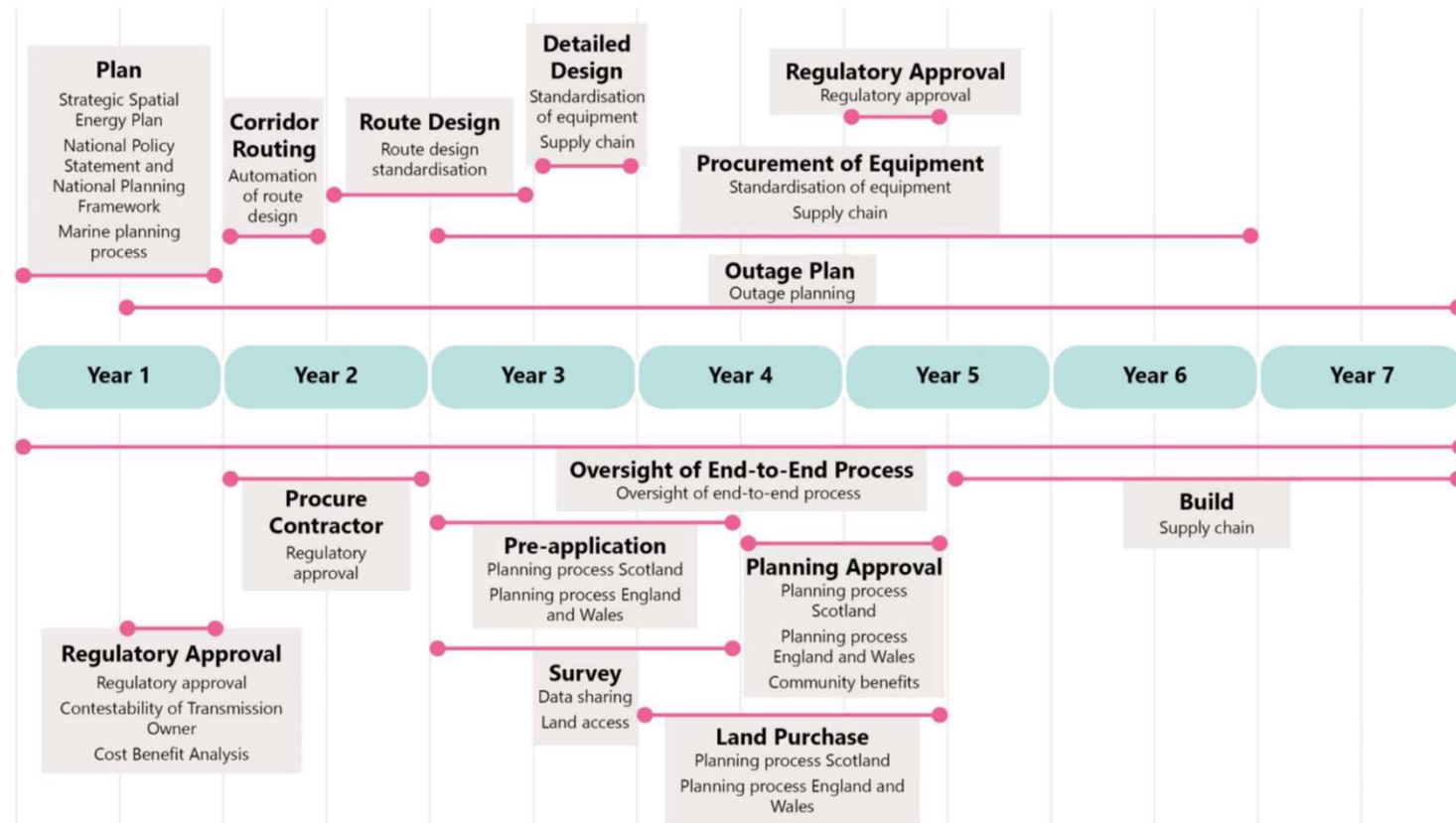
Our vision is for local plans (and minerals and waste plans) to be simpler to understand and use, and positively shaped by the views of communities about how their area should evolve.

We want them to clearly show what is planned in a local area – so that communities and other users of the plan can engage with them more easily.

## Summary

We're seeking views on a recommended approach to community benefits for electricity transmission network infrastructure.

This consultation ran from  
**7am on 30 March 2023 to 11:45pm on 15 June 2023**



## Future collaboration

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### Discussion:

- How can our analysis be bolstered by the work of the wider community?
- Can we collaborate in a more structured way?

# The end

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