

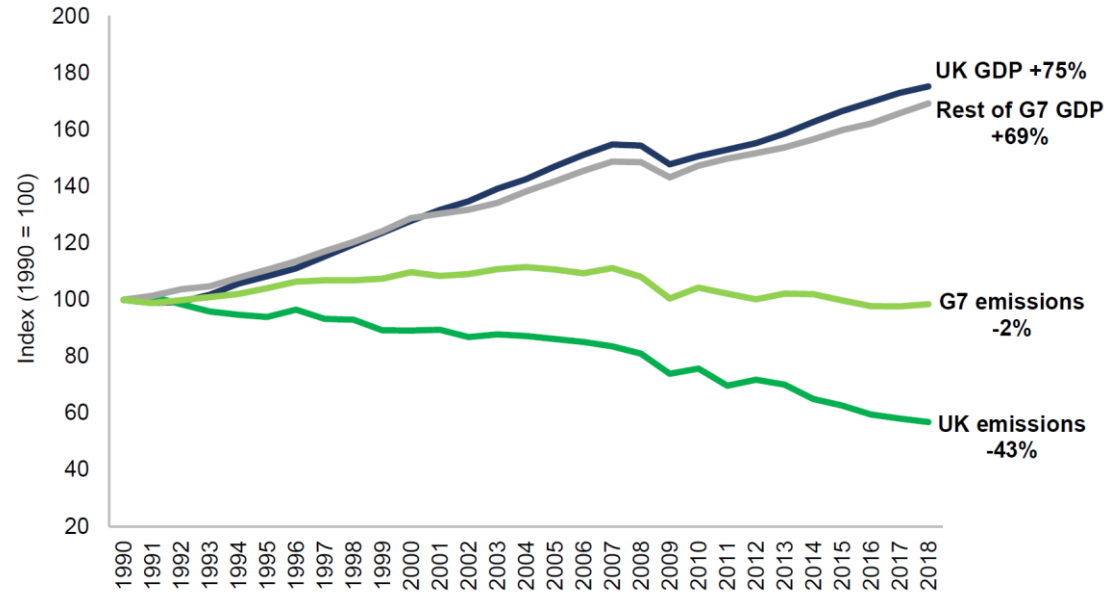
Challenges in Energy Transition – UK approach and Role of Evaluation

Chris Thompson Director, Clean Growth, BEIS



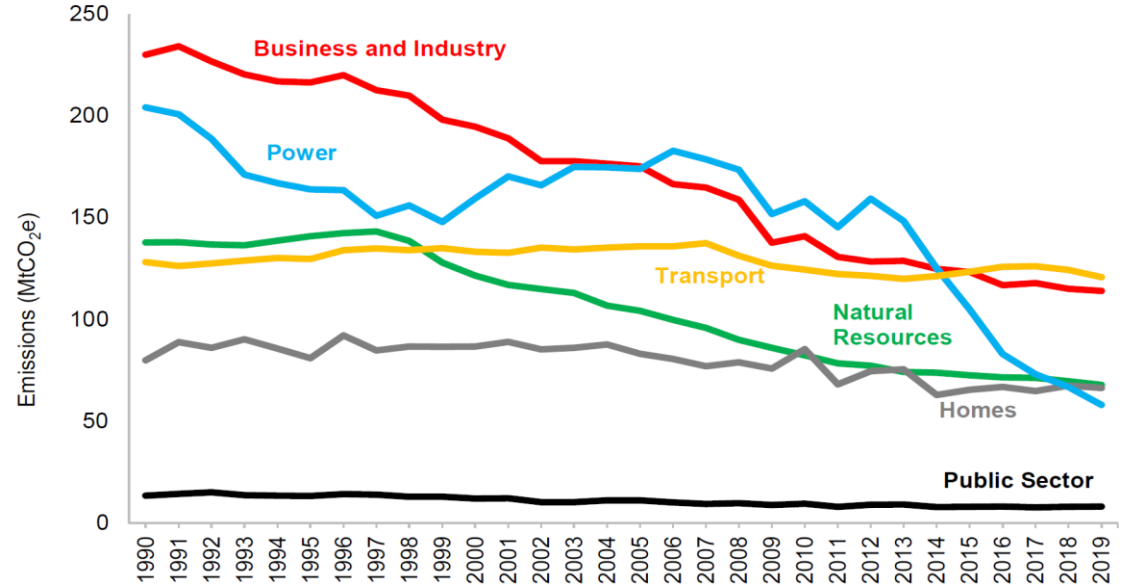
The UK economy has grown while decarbonising

Figure 3: UK vs Rest of G7 GDP and Emissions



Source: World Bank, UNFCCC National Inventory Submissions, ONS, BEIS Greenhouse Gas Inventory 1990-2018.

Figure 4: Emissions per sector

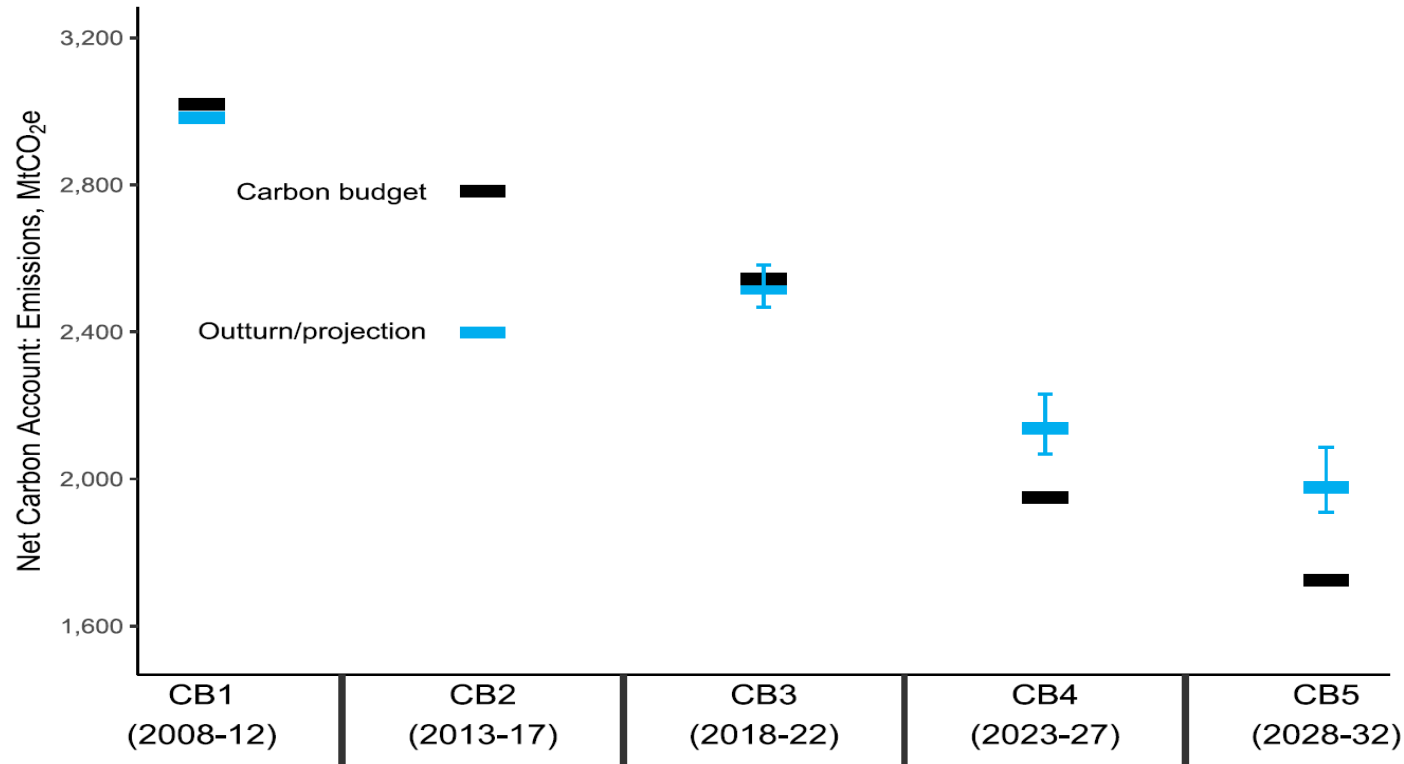


Source: BEIS Provisional Greenhouse Gas Inventory 1990-2019.

- Updated figures now show that UK emissions have fallen 44% between 1990 and 2019
- Energy supply has delivered the largest reductions in UK GHG emissions since 1990, falling by two thirds.

Net zero means deeper, faster decarbonisation in all sectors

Actual and Projected Performance against Carbon Budgets, MtCO₂e



- While we have made strong progress to date, UK emissions are currently projected to exceed our legal emissions caps for Carbon Budgets 4 and 5.
- The UK has announced a **new Nationally Determined Contribution (NDC)** which commits to reducing greenhouse gas emissions by at least 68% by 2030 on 1990 levels

Source: BEIS Updated Energy Emissions Projections, 2020.

Vertical bars show likely uncertainty in the projections based on the 95% confidence intervals vs the reference scenario of EEP 2018.

Delivering the Prime Minister's 10 Point Plan



Point 1
Advancing Offshore Wind



Point 2
Driving the Growth of Low Carbon Hydrogen



Point 3
Delivering New and Advanced Nuclear Power



Point 4
Accelerating the Shift to Zero Emission Vehicles



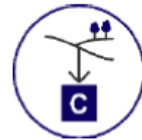
Point 5
Green Public Transport, Cycling and Walking



Point 6
Jet Zero and Green Ships



Point 7
Greener Buildings



Point 8
Investing in Carbon Capture, Usage and Storage



Point 9
Protecting Our Natural Environment



Point 10
Green Finance and Innovation

Energy White Paper



The Energy White Paper sets out a **strategy for the wider energy** system as it transforms into a holistic single integrated system of systems, driven by the use of electricity for heat and transport and enabled by the increasing decentralisation of energy and increased use of data. It:

1. **Transforms energy**, building a cleaner, greener future for our country, our people and our planet
2. **Supports a green recovery**, growing our economy, supporting thousands of green jobs across the country in new green industries and leveraging new green export opportunities
3. **Creates a fair deal for consumers**, protecting the fuel poor, providing opportunities to save money on bills, giving us warmer, more comfortable homes and balancing investment against bill impacts

Where next? The year ahead to COP26

**Heat & Buildings
Strategy**

**Transport Decarbonisation
Plan**

**HM Treasury
Net Zero Review**

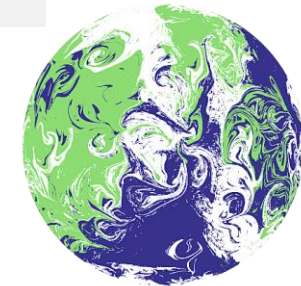
**England Tree
Strategy**

**Hydrogen
Strategy**

**Industrial
Decarbonisation Strategy**

**Nature
Strategy**

Net Zero Strategy



**UN CLIMATE
CHANGE
CONFERENCE
UK 2021**

IN PARTNERSHIP WITH ITALY

Role of Evaluation in Meeting Net Zero Challenges

Evaluation seen as increasingly vital to:

- Understanding how to design policy and target it effectively;
- Win the case for public investment and understand impact / likelihood of attracting private investment;
- Accountability for decisions taken and public investment.

Challenges for policy-makers are mounting but also **reinforcing the value of evaluation**:

- Complexity – increasing need to take a ‘systems approach’ across sectors and take into account more factors and consider more evidence in design;
- Meeting net zero alongside wider demands on Government resourcing;
- Demonstrating benefits to wider stakeholders – Net zero touches on whole economy.
- Growing interest in multiple objectives of net zero projects – levelling up, jobs, investment.

Embedding Evaluation

Formal Guidance and Rules

- HMT Magenta book. Central Government guidance on evaluation.
- BEIS Monitoring and Evaluation Framework
- Post-Implementation Reviews
- Project Investment Appraisals also role of Spending Review
- Scrutiny by National Audit Office

Less Formal Support and Incentives

- Integrated / close working between policy makers and analysts
- Growing emphasis on monitoring cross-government approach to delivering net zero
- Close working with partner organisations, sharing modelling and data transparency

