

UKERC

UK Energy Research Centre

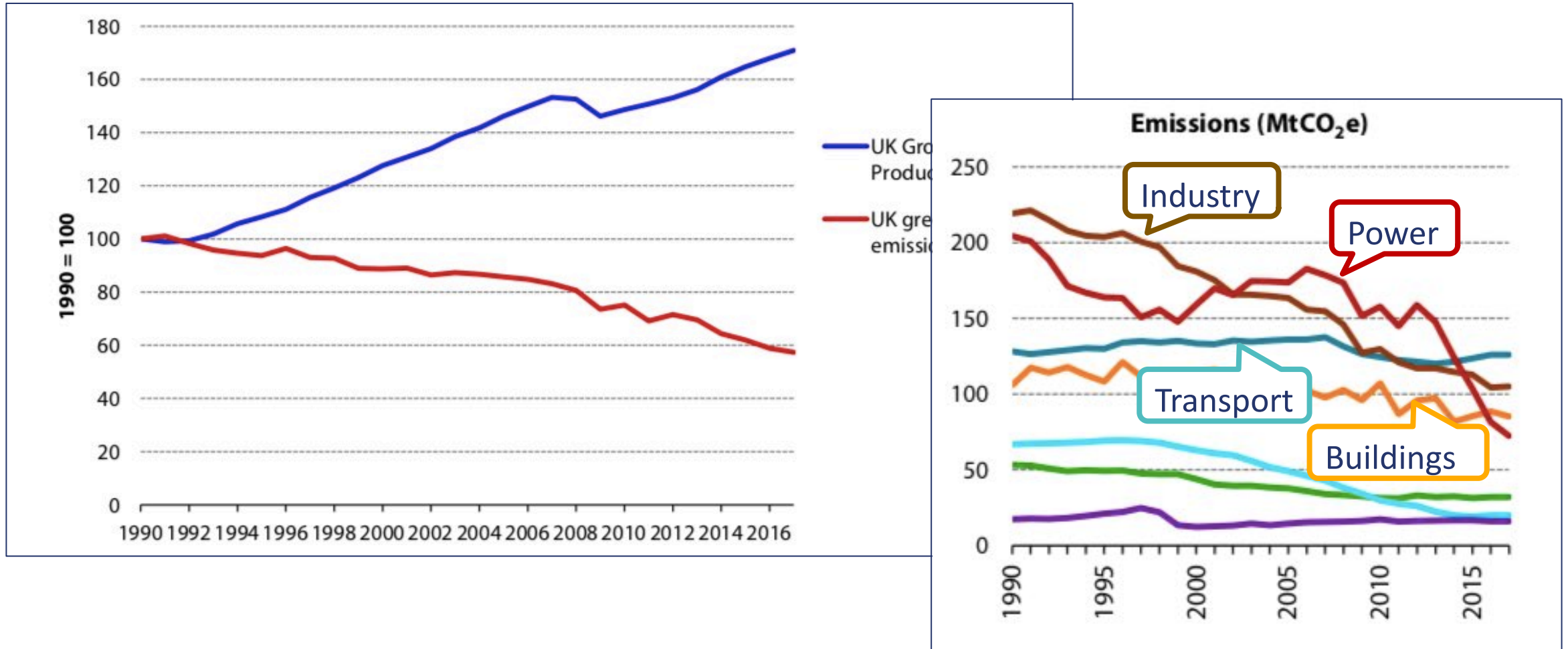
Implementing low carbon strategies: the UK experience

Jim Watson

Director, UK Energy Research Centre

MPDD chair conference: 'Elaboration and evaluation of low carbon strategies; methods and processes' Paris, 18th Dec 2018

The UK's low carbon transition



The UK's policy framework



Climate Change Act 2008

CHAPTER 27

CONTENTS

PART 1

CARBON TARGET AND BUDGETING

The target for 2050

- 1 The target for 2050
- 2 Amendment of 2050 target or baseline year
- 3 Consultation on order amending 2050 target or baseline year

Carbon budgeting

- 4 Carbon budgets
- 5 Level of carbon budgets
- 6 Amendment of target percentages
- 7 Consultation on order setting or amending target percentages
- 8 Setting of carbon budgets for budgetary periods
- 9 Consultation on carbon budgets
- 10 Matters to be taken into account in connection with carbon budgets

Climate Change Act (2008)

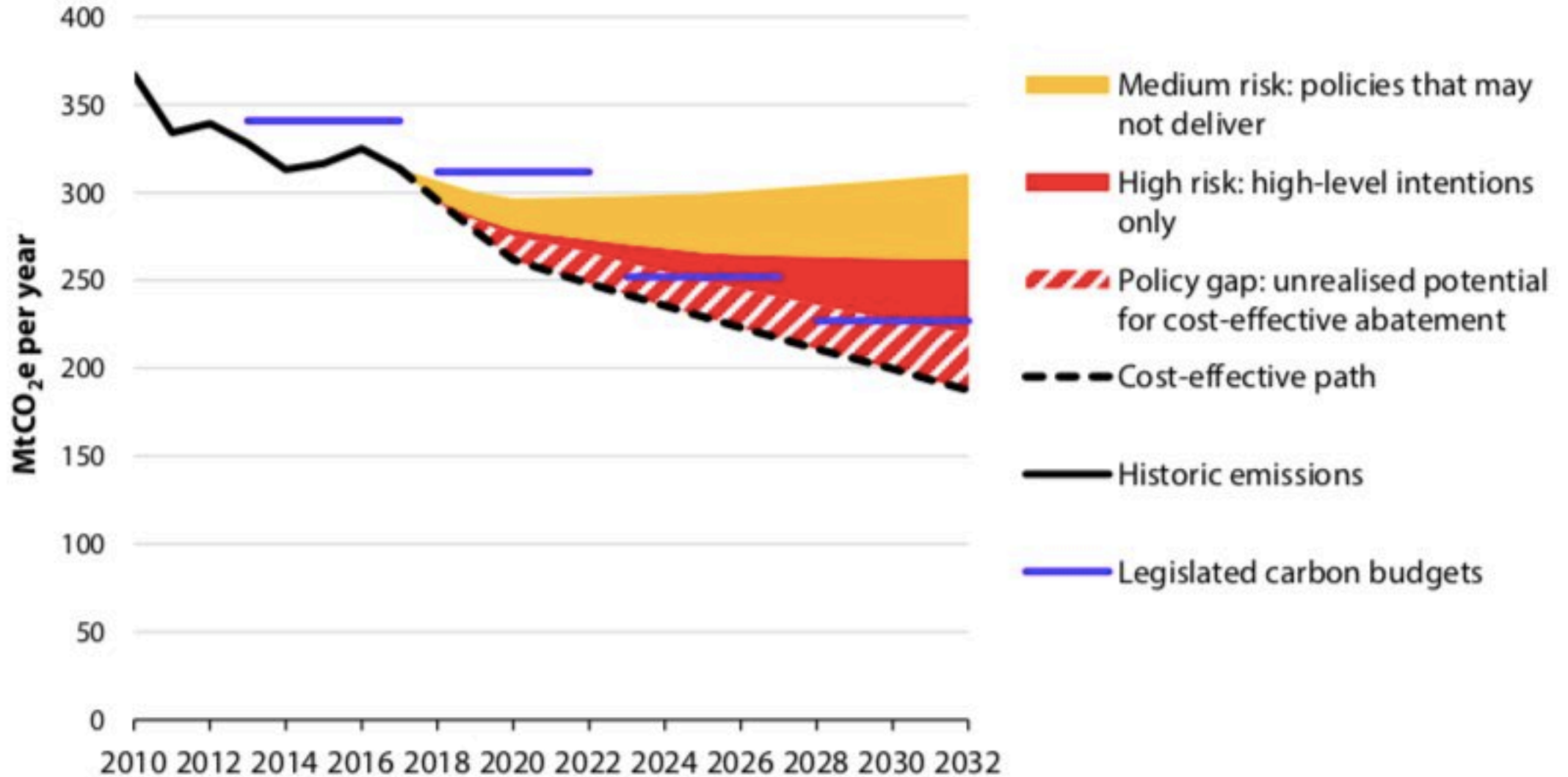
- Long-term target for 2050 (80% reduction in GHG emissions compared to 1990)
- Five-year carbon budgets, plus government plans or strategies
- Scrutiny and advice by independent Committee on Climate Change
- Annual CCC progress reports to Parliament & specialist reports (e.g. on hydrogen)

Current focus: CCC advice on revising long-term target, after IPCC 1.5 degrees report

The UK's policy framework

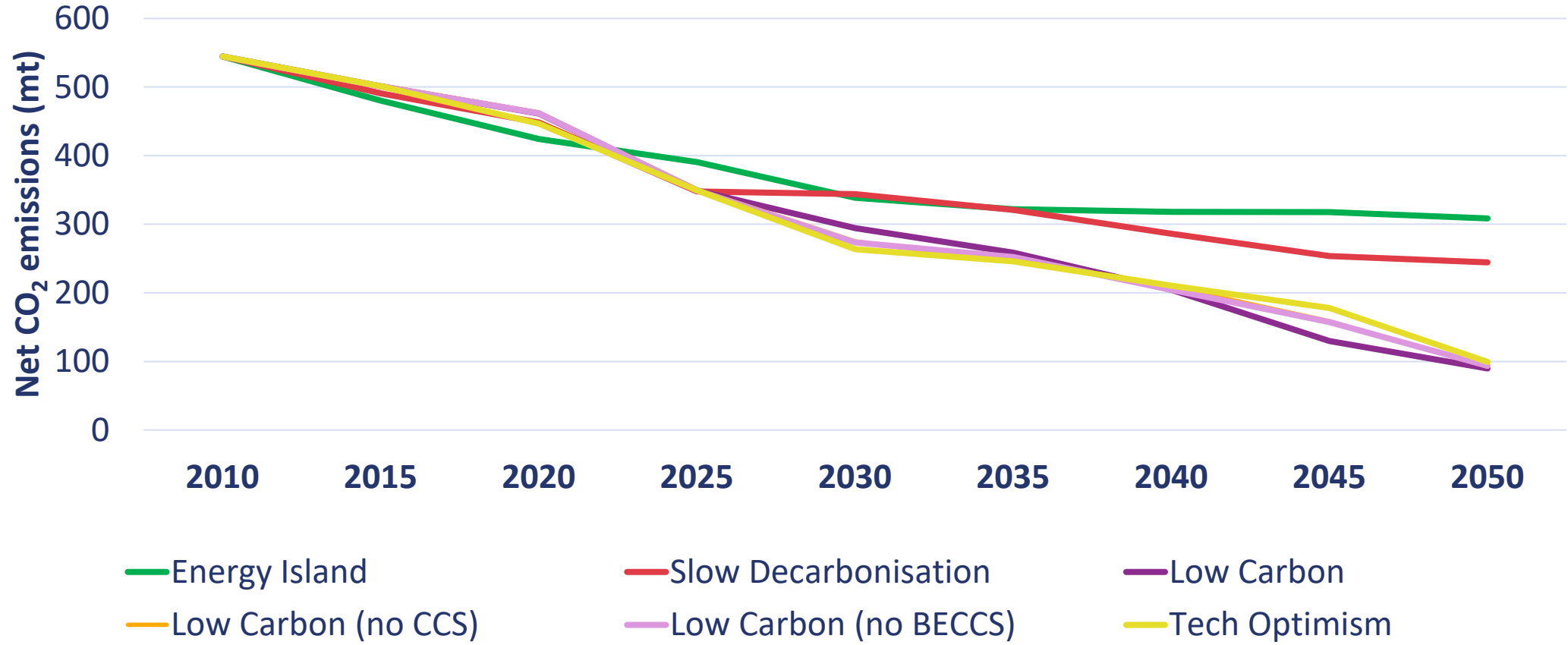


Will progress continue?



Will progress continue?

UKERC energy scenarios



Will progress continue?

UKERC energy scenarios

Energy Island

Low Carbon

Tech Optimism



Climate Change Act 2008



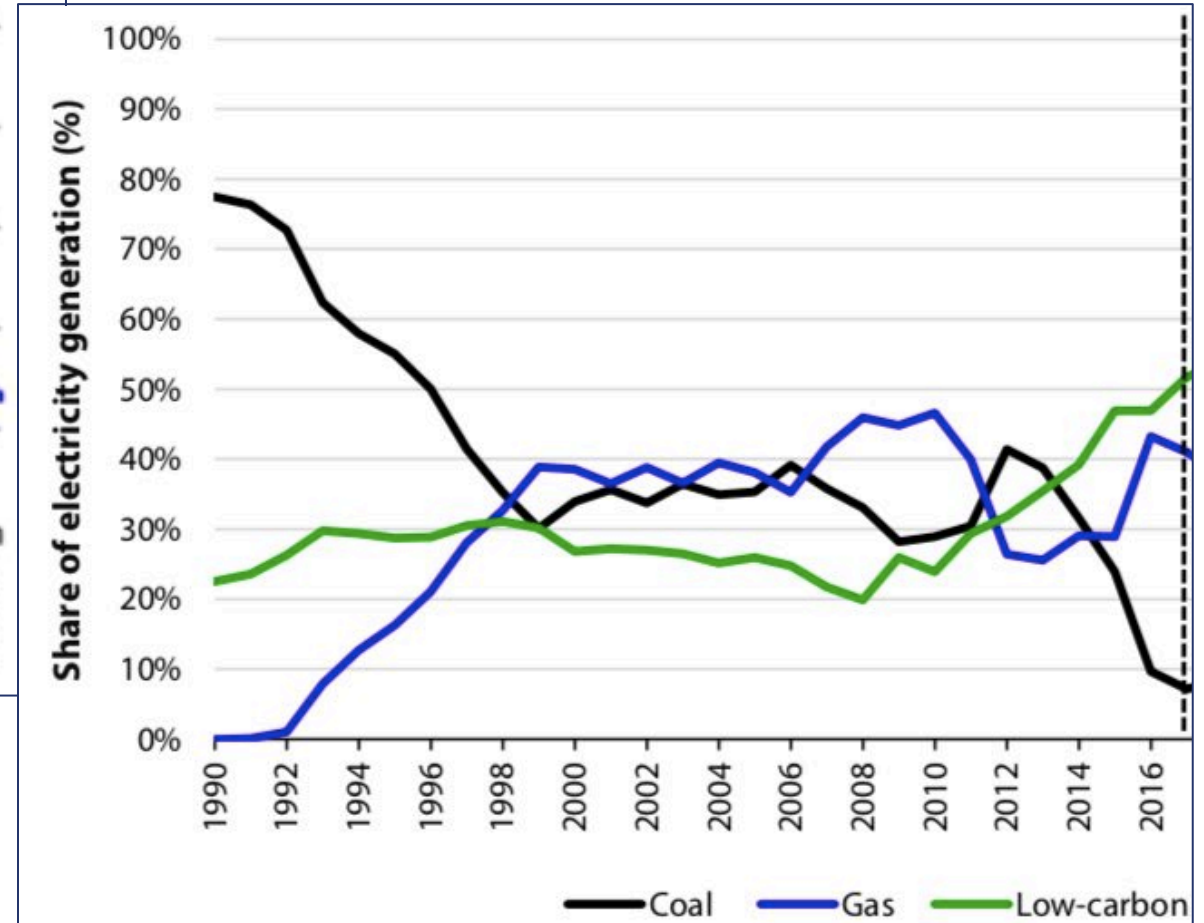
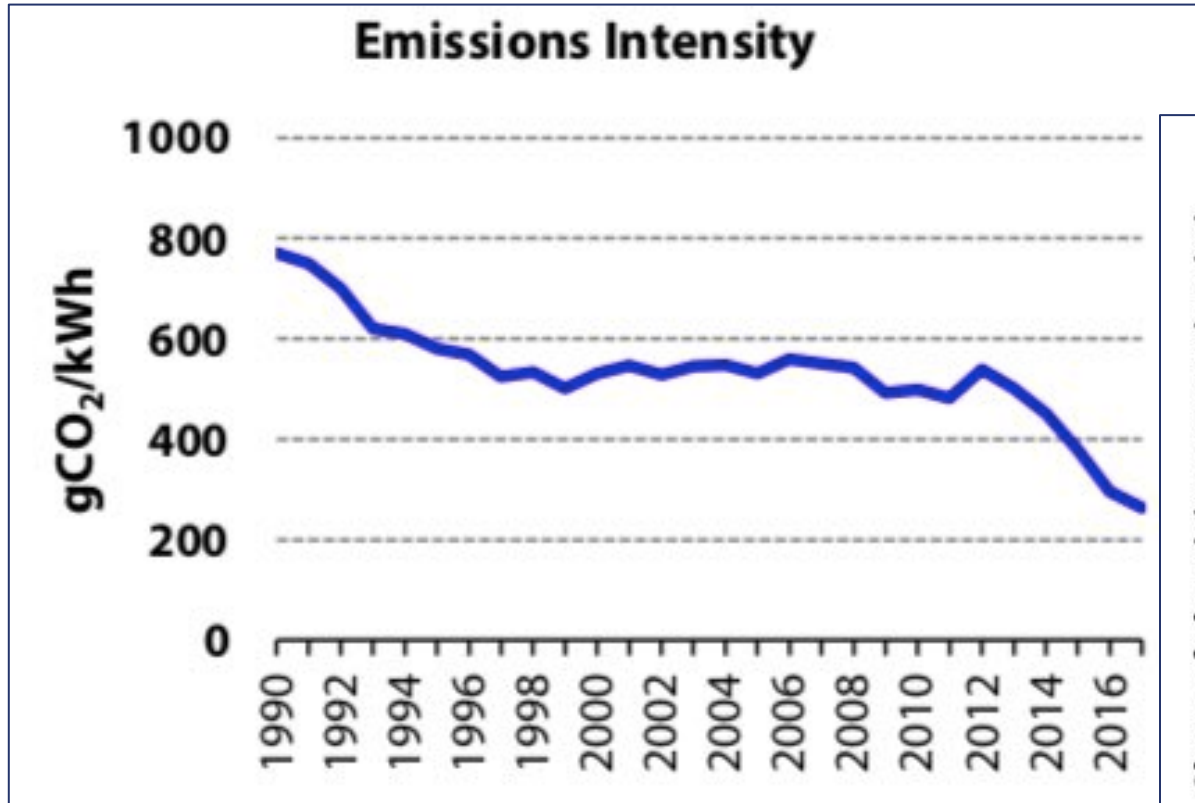
Future policy priorities

Realise the benefits of energy efficiency



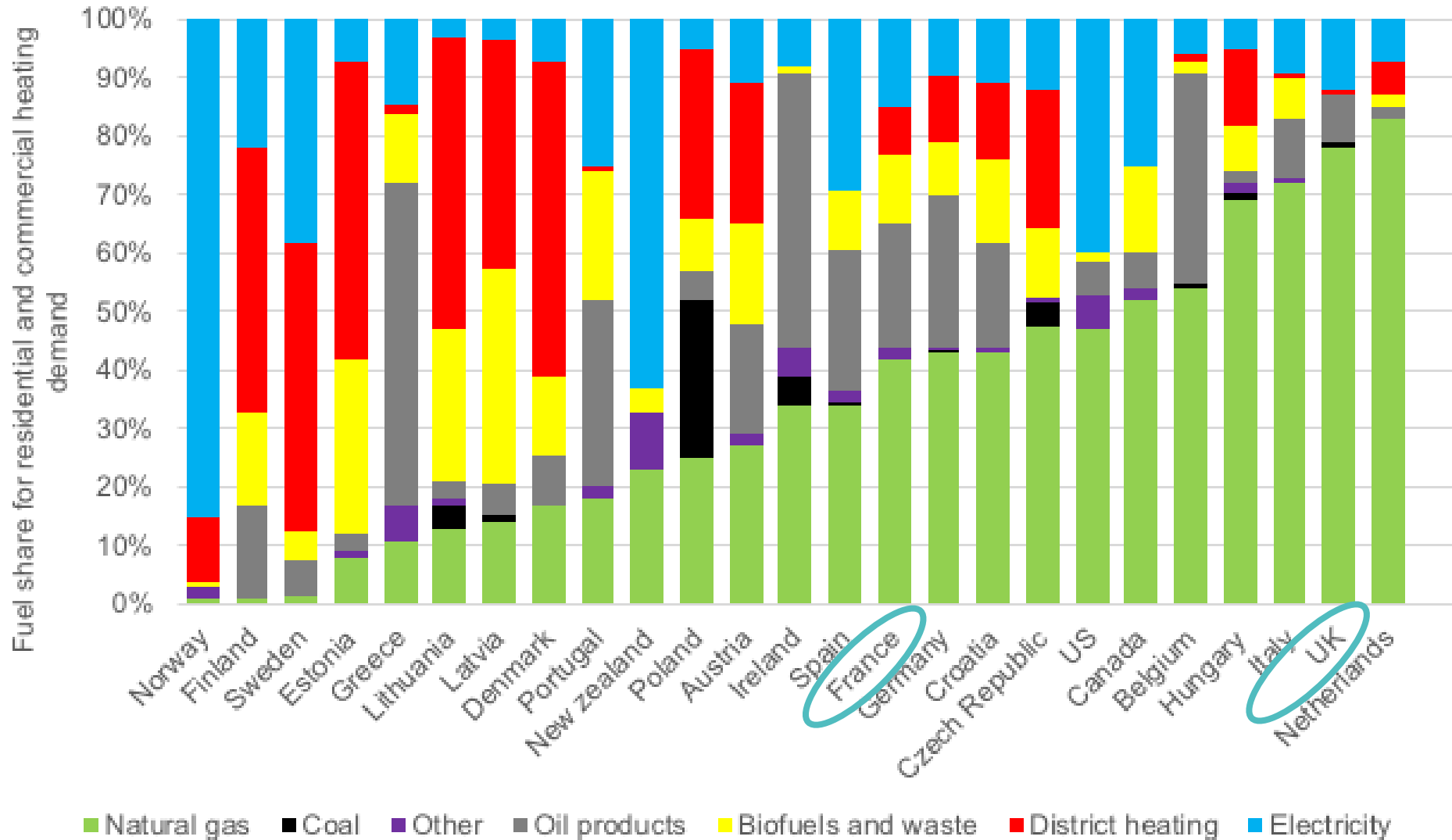
Future policy priorities

Keep decarbonising the power sector at lowest cost



Future policy priorities

Demonstrating & deploying low carbon heat



Source: Vivid Economics and Imperial College/UKERC

Future policy priorities

Demonstrating & deploying low carbon heat



SMART SYSTEMS AND HEAT

Creating future-proof and economic local heating solutions for the UK.

Delivered by
CATAPULT
Energy Systems

[Play Video](#)

Future policy priorities

Creating a market for Carbon Capture and Storage?



Dept for BEIS @beisgovuk · Jan 29

Energy & Clean Growth Minister @claireperrymp chaired the first meeting of the **Council on Carbon Capture Utilization and Storage (CCUS)**. The council will offer specialist advice to government, review progress of our new approach to **CCUS** and commitments made for #CleanGrowth



5 51 55

Press release

World-first carbon 'net-zero' hub of heavy industry to help UK seize global economic opportunities of clean growth

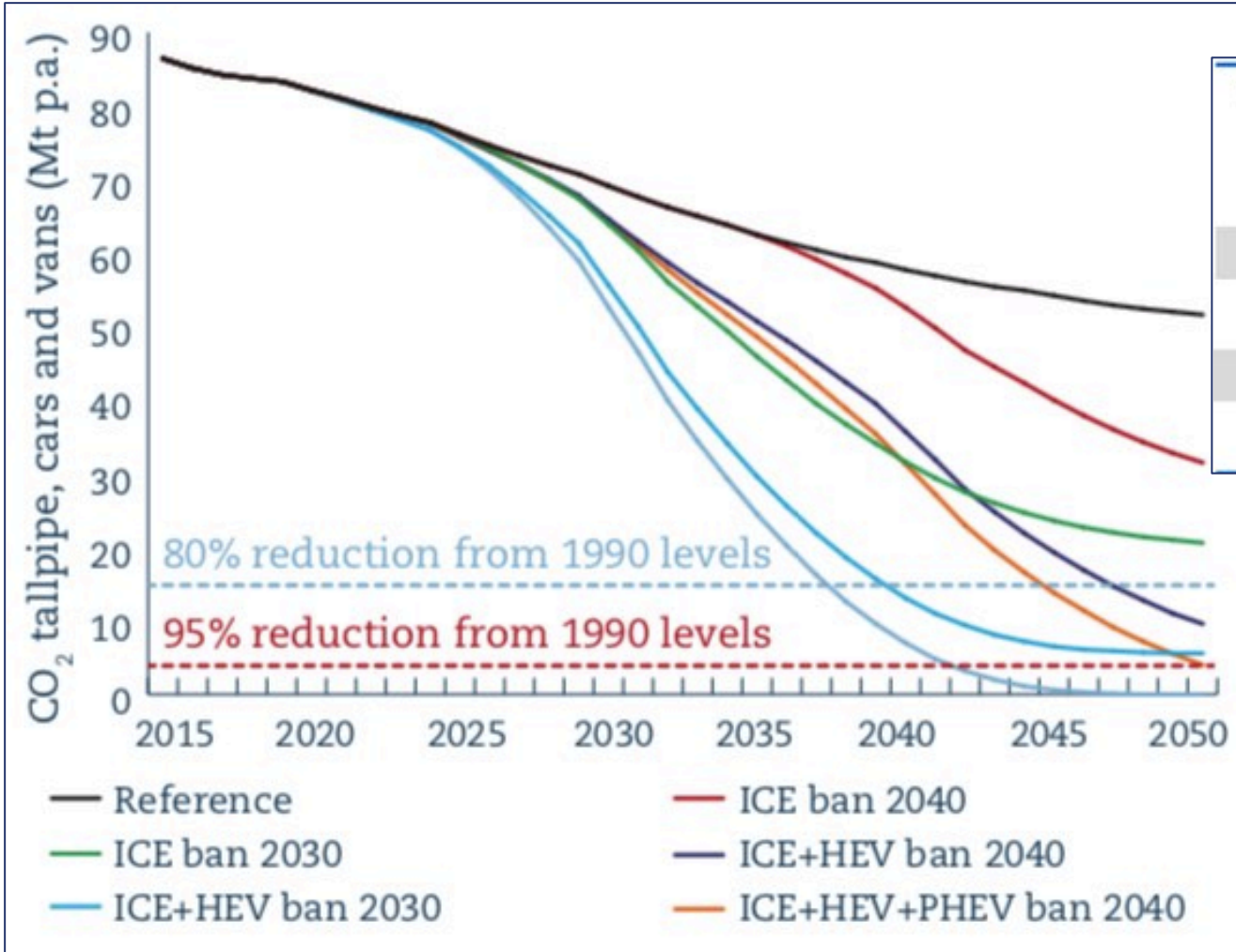
At COP24 climate talks in Poland, UK government sets world-leading ambition for first 'net-zero carbon' cluster by 2040 to cut emissions, backed by up to £170 million funding.

Published 13 December 2018

From: [Department for Business, Energy & Industrial Strategy](#) and [The Rt Hon Claire Perry MP](#)

Future policy priorities

Accelerating low carbon vehicles

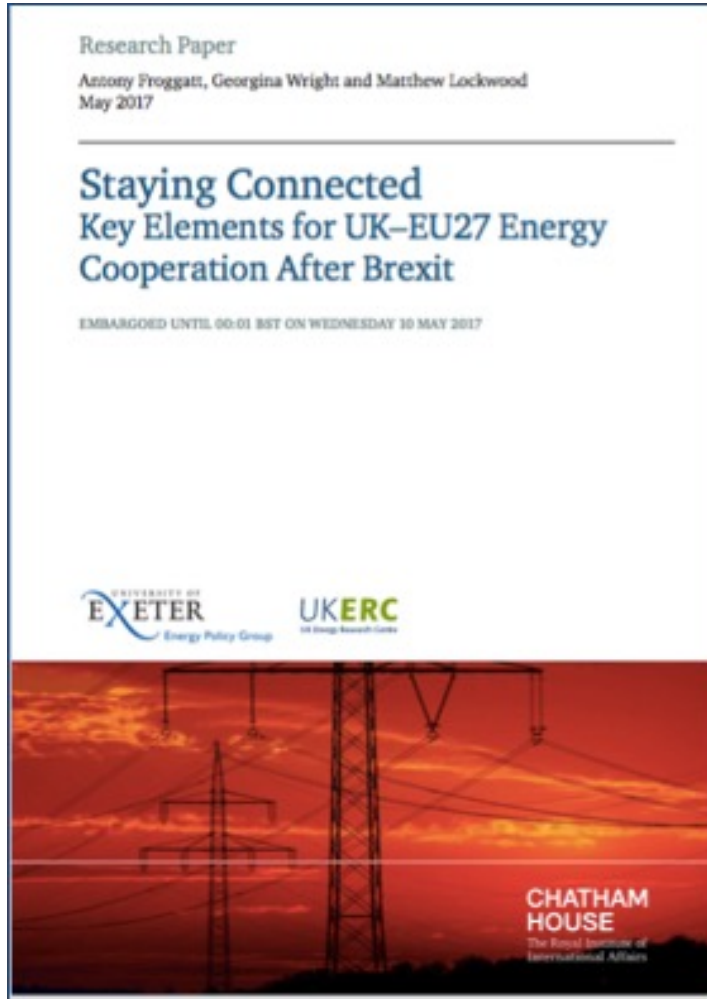


Year-to-date	Total	Diesel	Petrol	AFV
2018	2,223,058	707,702	1,382,981	132,375
2017	2,388,144	1,008,323	1,271,312	108,509
% change	-6.9%	-29.8%	8.8%	22.0%
Mkt share '18		31.8%	62.2%	6.0%
Mkt share '17		42.2%	53.2%	4.5%



Future policy priorities

Manage the risks of Brexit



- Decoupling UK from EU electricity market could cost UK consumers up to £270m/year (UKERC analysis)
- Risks to Single Electricity Market on the island of Ireland
- Mitigating potential impacts of exit from Euratom nuclear treaty (e.g. safety regulation, non-proliferation)
- Potential new UK carbon trading scheme mentioned in Political Declaration, which could be linked to EU ETS
- New national funding to ensure access to European R&D programmes; compensate for loss of investment

Thanks