

Developing Net Zero Policy

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UK context

2020 announcements

What to expect in 2021

The future outlook



We're facing challenging economic times in the UK...

GDP fell 25% between February and April 2020 as the economy entered the largest recession on record.

Government has spent over £280 billion on a huge support package for people and businesses.

Government gross debt was £1,877 billion at the end of 2020, equivalent to 84.6% of gross domestic product (GDP).

Economic outlook remains "highly uncertain" and is very much dependent on the pandemic recovery.

Upside scenario - GDP returns to its pre-virus level by the end of 2021 and there is no enduring economic scarring.







But we are making real progress in reducing our carbon footprint

Net Zero emissions by 2050 was legislated in 2019

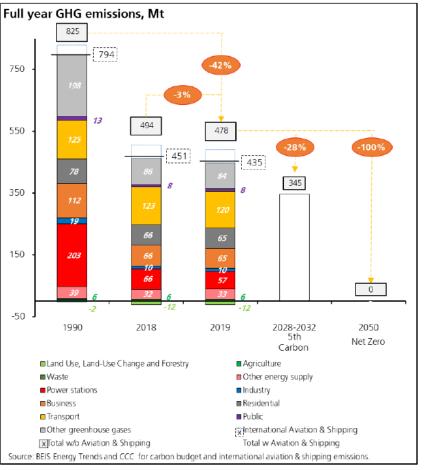
Between 1990 and 2019, UK emissions fell by 42%, from 825Mt to 478Mt.

Emissions have fallen by 72% in power sector

In 2021, there is the opportunity for the UK to make further commitments to progress greenhouse gas reductions, particularly given we are hosting COP26

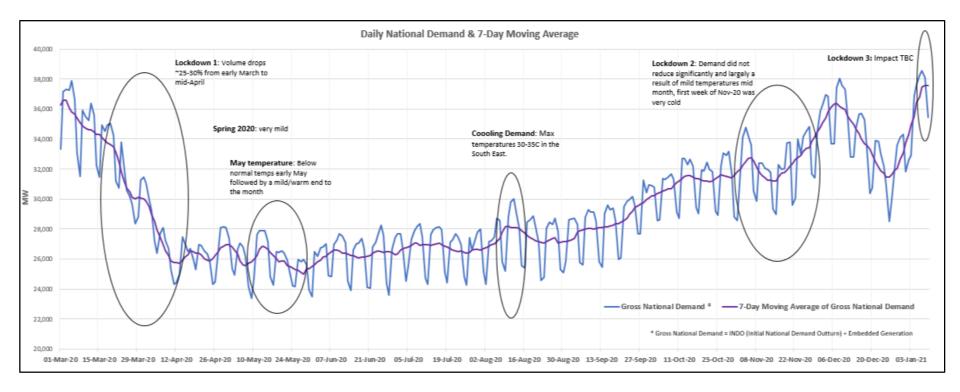
COVID-19 lockdown between 24 March – 12 May led to a 36% reduction in daily CO2 emissions

• Was there a change in attitude following national lockdowns?



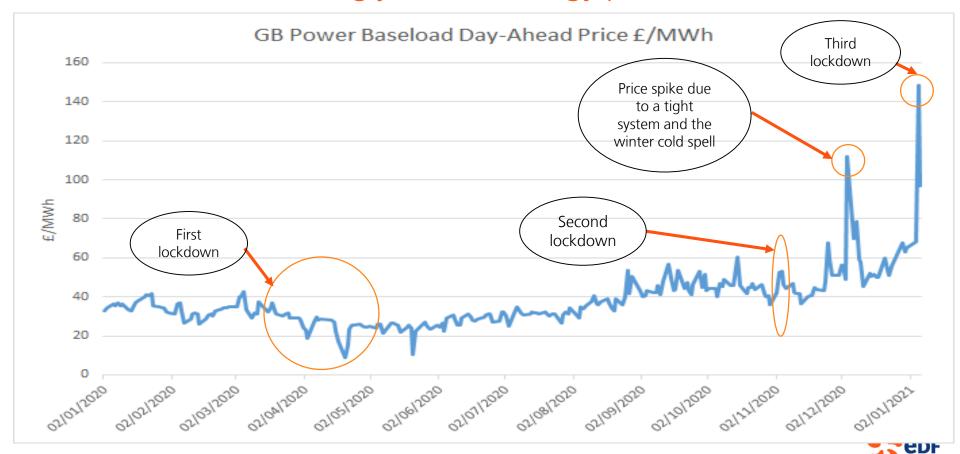
Note: CCC Further Ambition scenario assumes 35Mt CO2e in 2050 incl. 53Mt carbon removals.

National lockdowns had a notable impact on UK energy demand





We have seen increasingly volatile energy prices



And we can't forget about Brexit

UK exited the European Union as of 1st January 2021 with the Free Trade and Cooperation Agreement agreed on 24th December 2020

Prior to this, the Energy White Paper had announced the UK Emissions Trading Scheme (rather than a carbon tax)

UK and EU shall give "serious consideration" to linking their respective carbon pricing systems (but probably not going to happen soon)

Brexit sovereignty – VAT treatment can promote growth



The UK public's concern for the planet is growing and cuts across all social segments

According to a 2020 YouGov poll, a majority in all age groups, regions, genders and political party voters want to see the British Government leading the world on climate action.

Nearly two thirds (65%) of the UK population also want to see UK Government shifting subsidies from domestic oil and gas companies to instead support the expansion of renewable energy and increasing the energy efficiency of people's homes



2020 saw a plethora of high-profile government announcements

Glasgow climate talks on hold over corona revolution

Climate: Boris Johnson outlines 10-point plan for 'green industrial

Postponement of COP26 sum

Ban on new petrol and diesel cars in UK from 2030 under D'I's green plan

Climate change: Low-carboi Rishi Sunak sets out £100bn investment revolution 'cheaper than the Is this finally a watershed moment for Britain's Icture

'net zero' ambition? The Government, industry and the regulator need to work toge

Sale of new petrol and diesel cars to Lik anned from 2030

Coal power to be phased out by 2024 as Boris lear plant

Johnson says UK has duty to fight climate change as first industrialised nation

The Prime Minister intends to bring forward the deadline for ending the use of coal-fire power stations that do not offset emissions



The pledges and targets are positive, but there's a lot of detail to be worked through...

PM's 10 Point Plan

HMT Spending Review

HMT National Infrastructure Strategy

CCC 6th Carbon Budget

BEIS' Energy White Paper

HMT Net Zero Interim Report



New Nuclear has government support and is a recognised part of the future generation mix

The Energy White Paper has set a goal of bringing one large scale nuclear project to FID by the end of this parliament

Government confirmed their decision to enter into negotiations with EDF regarding Sizewell C

Additionally, the government published their response to the Regulated Asset Base financial model consultation

The Climate Change Committee's Balanced Pathway Scenario for electricity generation holds 10GW of nuclear by 2035 (SZB/ HPC/ SZC roughly accounts for 75%, leaving space for another large scale or some SMRs.)

£525m announced for funding nuclear development



What will 2021 bring for Nuclear?

Updated National Policy Statement on new build sites

Negotiations on Sizewell C

Detail on new build funding model

Further announcements on UK SMRs



The UK may become the Saudi Arabia of Offshore Wind, but will we also see Floating and more Onshore?

40GW target by 2030, including 1GW floating wind

Onshore wind and solar will be included in future CfD auctions

Review of offshore wind transmission arrangements launched

New rounds for offshore wind seabed leases were announced

Government reiterated support for more real-time markets in ancillary services and wider market participation

Government published call for evidence on enabling a high renewable, net zero electricity system via new market designs



What will 2021 bring for Renewables?

CfD Auction Round 4 will be held in Q4 for up to 12GW total capacity

Detailed proposals for coordination of offshore transmission

New government and industry actions to develop UK offshore wind supply chain

Government will publish new Smart Systems Plan in Spring

Bidding rounds for new leases will be held in Q1

Review of CfD, role of ancillary services, wider market design – implications for investment



Strong pathway for EVs, but some questions to answer on charging infrastructure

2030: phase out date for petrol/diesel only cars and vans

2035: phase out for hybrid cars and vans

£1.3b for re-charging infrastructure

Grants for electrical vehicle purchase extended to March 2022

£120m for 4,000 zero emission buses

CCC recommend phase out of diesel HGVs by 2040

CMA announced study into EV charging market



What will 2021 bring for EVs?

2021 Transport Decarbonisation Plan

Consultation on definition of hybrid cars eligible to sold between 2030 and 2035

Consultation and launch of rapid charging fund

Consultation on new policies to achieve petrol/diesel phase out

Legislation requiring home and workplace chargers to be smart

Consultation on consumer experience of public EV charging

CMA will publish findings – target mid 2021



The most intrusive area to decarbonise, Heating, is now in the spotlight

New target of 600,000 p/a heat pumps by 2028

Extend Green Homes Grant scheme by 1 year

Government proposed replacing the Renewable Heat Incentive with a clean heat grant scheme from April 2022

CCC proposed no new fossil fuel boilers installed from 2033

Government targets existing homes to hit EPC Band C by 2035 & all rented non-domestic buildings Band B by 2030



What will 2021 bring for Heat and Buildings?

2021 Heat and Buildings Strategy

Detail on implementing Future Homes Standard

Proposals on how to grow the heat pump market to achieve 600k target by 2028

Consultation on next phase of ECO

Proposals on phasing out fossil fuel heating from the off-gas grid

Discussion on more permanent schemes for energy efficiency

Debate - how to pay for heat decarbonisation and policy cost imbalances?



Hydrogen will play a key role in the UK's future energy system, but how much and how soon?

Large increase in interest in role of hydrogen in Net Zero, although Government appetite to invest not matching other countries (Germany)

Target of 5GW low carbon H2 production by 2030, 1GW low carbon H2 production by 2025

£500m of funding for hydrogen – £240m of which is for hydrogen production

Aim for first UK hydrogen town before end of decade



What will 2021 bring for Hydrogen?

Hydrogen strategy Q2 2021

Proposals on hydrogen business models

Possible launch of grant schemes for early low carbon H2 demonstration projects

Continuation of hydrogen trials

Discussion of incentives on end users to switch to hydrogen

Exploration of regulatory changes needed for wider hydrogen



There are many other important topics

Carbon Capture Usage and Storage (CCUS)

Retail Competition

Smart Metering

Digital and Data

Demand Flexibility

Storage



There are also many other sector specific policies being launched

Department for Environment, Food and Rural Affairs (DEFRA) to publish National Food Strategy (Pt.2) & White Paper 6 months later

Ministry of Housing, Communities & Local Government (MHCLG) to respond to Future Homes Standard consultation as soon as possible

Department of Health and Social Care (DHSC) to make a series of commitments towards delivering a 'Net Zero NHS'

DEFRA to pilot new Environmental Land Management system

DEFRA to publish a Nature Strategy for England





Policy impacts on business customers

Microbusiness Strategic Review introduces possibility for TPI regulation on microbusiness customers

Creation of a UK ETS to replace the UK's participation in the EU ETS and the further developments of this

Performance-based rating scheme proposed for large commercial and industrial buildings to help businesses reduce energy and lower bills

Potential for strengthening ESOS as per the Post Implementation Review in February 2020

Continued refinement of network charges and policy costs



Hot topics in 2021

Determining the UK Carbon Trading Scheme and the future of carbon pricing

Determining role for negative emissions technologies (and trading)

Government to review the long term role of National Grid

Increased focus on how to pay for UK decarbonisation

Shift of Net Zero focus towards decarbonising transport and heat

Customer role in grid – flexibility future?

COP26!!!!!!!

EDF in the UK has firm plans to help save the equivalent of 5% of UK emissions and further aspiration to 2050



Some dates for your diary...



TNUoS and DUoS
changes
UK ETS guidance
TPI regulation on
microbusinesses
Performance-based
rating scheme
consultation
2021 HMT budget
CfD review
Future Homes
Standard



Provisional conclusions of Ofgem's TCR review Hydrogen Strategy TCR charging changes Ofgem review of Smart Meter rollout Consultation on hybrid sales in 2030-35 Transport Decarbonisation plan



COP26
CfD AR4 begins
Early phase out of coal
generation



Thank you

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