

Environmental Legislation & Market Update

- Dr. Wendy Buckley
- Client Director
- Carbon Footprint Ltd
- wendy.buckley@carbonfootprint.com
- 01256 592599

Who is it?



Unilever to cut plastic to 'remain relevant'



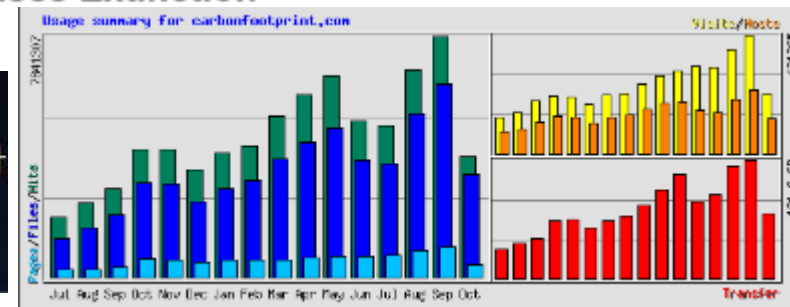
Plastic-stemmed cotton buds now banned in Scotland

SRC ✓



Scottish researchers find climate change is causing birds to breed earlier

Stanley Johnson praises Extinction Rebellion 'crusties'



249 Councils Declare a Climate Emergency

Thursday Night - Brexit



Laura Kuenssberg @bbclaurak · 58m

A big get, a giveaway and a huge gamble ...



Johnson still facing an almighty gamble

The PM reached a deal with the EU, overturning conventional wisdom - but what risks remain?

bbc.co.uk

Environment Bill

- **Office for Environmental Protection**
 - Will be based in Bristol with 120 staff
 - Will not have same power to hold Gov to account
- Deadline for setting legally binding targets **31 October 2022**
- The government will then have **15 years** to meet the goals.
- This means no legal action could be taken against ministers until **2037**



Net Zero

The UK's contribution to stopping global warming

Outlines that the UK should legislate as soon as possible to reach **net zero Greenhouse Gas emissions by 2050**

This would (if legislated) go beyond the current legislated target under the **Climate Change Act 2008** of an 80% reduction in GHG's by 2050 (on 1990 levels). It should be noted that this varies as below:

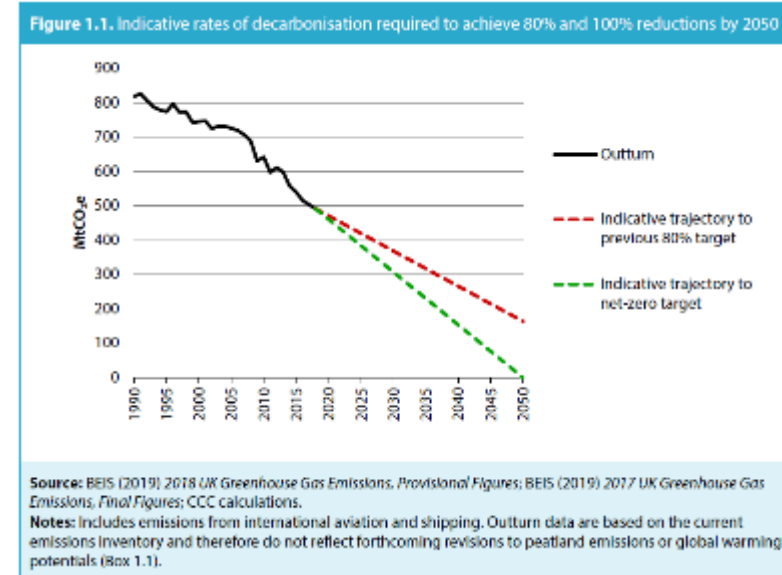
- England – Net zero by 2050
- Scotland – Net zero by 2045
- Wales – 95% reduction by 2050



Reducing UK Emissions - 2019 Progress Report



- UK has achieved a **42% reduction since 1990**
 - mostly due to electricity and reduced manufacturing
- Emissions **from transport has gone up** since 2013
 - Now highest emitting sector
 - 2018 was first year to show reduction (2%)
- **Homes** are another significant area of **unachieved** reductions
 - Unclear as to how Gov will achieve 2035 target for all houses to be EPC band C



Reducing UK Emissions - 2019 Progress Report



Projected progress.

The Government's own projections demonstrate that its policies and plans are insufficient to meet the fourth or fifth carbon budgets (covering 2023-2027 and 2028-2032).

This policy gap has widened in the last year as an increase in the projection of future emissions outweighed the impact of new policies.

Current policies need to be taken forward and future policies needs to be more ambitious.



How are Businesses Setting their Targets?



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



EU Withdrawal Act 2018 Statutory Instruments

The European Union (Withdrawal) Act 2018 gives Ministers wide powers to make Regulations to deal with the deficiencies in retained EU law which will result from the UK's withdrawal from the EU.

- There are over 130 confirmed (EU Exit) Statutory Instruments that will come into force on 'exit day'
- Designed to provide a degree of assurance and certainty to organisations that legislation will continue – particularly important as a lot of these are linked to funding/fees
- These EU Exit SI's are for legislation that is derived from EU Directives (i.e. doesn't include domestic Statutory Instruments)

EU Withdrawal Act 2018 Statutory Instruments



Themes:

- ✓ Vehicles
- ✓ Electricity Production
- ✓ Shipping
- ✓ Planning Controls
- ✓ Energy Efficiency
- ✓ Air Quality
- ✓ Renewables
- ✓ Wildlife Protection
- ✓ GHG Emissions
- ✓ Waste Management
- ✓ Railways
- ✓ Fisheries
- ✓ Chemicals
- ✓ Aviation

UK Air Quality Update



- **Tyneside councils** will miss the government's deadline to finalise plans for cutting illegal levels of air pollution for a third time.
- European Environment Agency's Air Quality in Europe 2019 report shows little progress has been made across Europe
- The government has confirmed that it plans to introduce legally binding targets for air pollution – as part of the long-awaited **Environment Bill targets**



Energy Saving Opportunities Scheme (ESOS) – **Upcoming Deadline!**

- ✓ Applies to 'large undertaking' (>250 employees OR £44.8 million annual turnover and balance sheet of £38.6 million)
- ✓ The deadline for the second compliance period (Phase 2) is **5th December 2019**.
- ✓ To be compliant:
 - ☐ Appoint a registered ESOS Lead Assessor
 - ☐ Calculate Total Energy Consumption (TEC)
 - ☐ Conduct Energy Audits and a Transport Assessment may be required!
 - ☐ Regulator (EA) notification must be submitted by 5th December
- ☐ **Haven't already started complying - contact Environment Agency urgently!**

Streamlined Energy and Carbon Reporting (SECR)



Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations SI 2018/1155

- ✓ Applies to all **UK registered quoted companies** AND applies to **'large' UK unquoted companies** which are defined as meeting at least two of the following criteria (>250 employees, £36 million turnover and balance sheet of £18 million)
- ✓ Finished ESOS? – recommend you go straight to SECR
- ✓ Applies for reporting years starting on or after **1st April 2019**
- ✓ What do you need to do?
 - ☐ Disclose an 'Energy and Carbon Report'
 - ☐ Scope 1 and Scope 2 Greenhouse Gas Emissions
 - ☐ Annual energy consumption (kWh)
 - ☐ Energy efficiency measures taken in the last year

Streamlined Energy and Carbon Reporting (SECR) – new guidance available

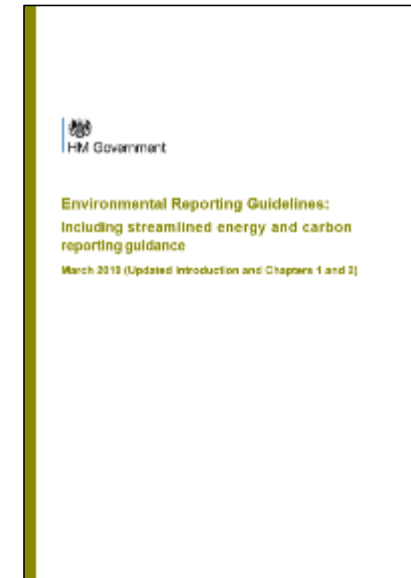
Environmental reporting guidelines: including Streamlined Energy and Carbon Reporting requirements

Updated: 31 March 2019

Available from BEIS (Gov.UK)

Updates include:

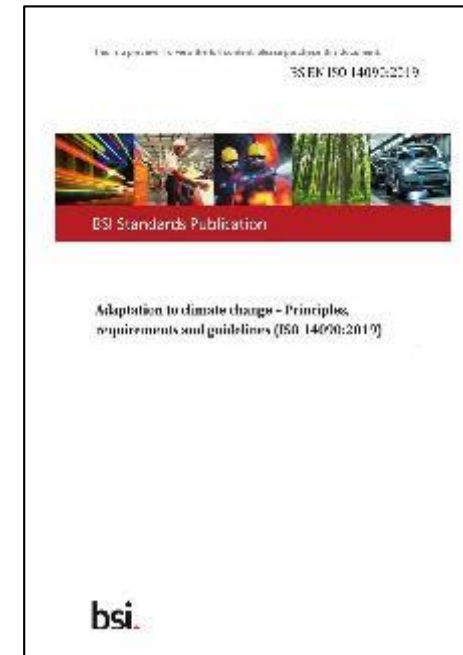
- ✓ Group reporting legislation;
- ✓ Public sector reporting requirements;
- ✓ Mandatory GHG reporting requirement;
- ✓ Confirmation that for those organisations choosing not to dual report (still our preferred approach), we encourage use of location-based reporting method.



ISO 14090:2019 - Published

Adaptation to Climate Change. Principles, requirements and guidelines

- ✓ Sets out how organisations can prioritise and develop effective, efficient, specific and deliverable adaptations which will increase resilience and demonstrate robust and credible risk management
- ✓ It is relevant to all sizes and types of organizations whose activities, products and services might be at risk from, or in some cases able to take advantage of, climate change.



Biffa fined £350,000 for attempting to export unsorted waste to China



- Follow an Environment Agency investigation Biffa were fined for attempting to **export unsorted waste** to China
 - Containers were intercepted at Felixstowe and contained food packaging, items of clothing, wood, tin cans, plastic bottles and electric cables
 - The **waste documents** described the waste as 'waste paper'
- Biffa are also facing further charges of illegally exporting 42 containers of waste to India and Indonesia

*The Court fined Biffa £350,000, ordered them to pay costs of £240,000, and a further £9,912 under the Proceeds of Crime Act 2002 (POCA).

Biowood Recycling Ltd fined £314,000 for an illegal waste site



- The illegal storage of **5,300 tonnes** of mixed waste has resulted in a **custodial sentence** for the person who set the site up
- **Biowood Recycling Ltd.** were ordered to pay more than £314k to the landowner in compensation and fined £12,690, for **knowingly supplying waste to site without an environmental permit**
- The site owner registered for a waste exemption but was in breach of the exemption's limits (specifically failing to comply with their Statutory Duty of Care under the Environmental Protection Act)

Enforcement Undertakings (EUs)

- Environment Agency issued £3.7m in enforcement undertakings (8) as at June 2019
- **Northumbrian Water** – 5 separate charges totally >**£1million**
- **United Utilities - £500,000**
 - Water leak polluted river and killed fish
- **Yorkshire Water - £200,000**
 - Sewage pollution



Unilever to cut plastic to 'remain relevant'



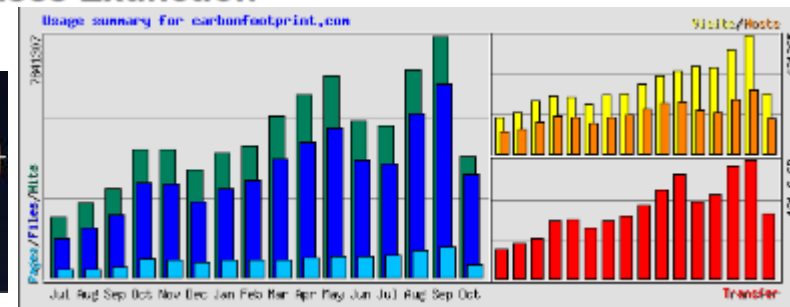
Plastic-stemmed cotton buds now banned in Scotland

SRC ✓



Scottish researchers find climate change is causing birds to breed earlier

Stanley Johnson praises Extinction Rebellion 'crusties'



249 Councils Declare a Climate Emergency

Useful links

- <https://www.theccc.org.uk/publication/reducing-uk-emissions-2019-progress-report-to-parliament/>
- [European Environment Agency's Air Quality in Europe 2019](#)
- https://www.carbonfootprint.com/esos_energy_savings_opportunity_scheme.html
- <https://www.carbonfootprint.com/secr.html>
- <https://www.bbc.co.uk/news/uk-politics-50076582>
- <https://www.climateemergency.uk/blog/list-of-councils/>



Setting and Achieving Ambitious Net Zero Carbon Targets

John Buckley
Managing Director
Carbon Footprint Ltd



We know we need to act faster...

- Our businesses need to be responsible and play a bigger role in the solution to climate change
- We have only a very short amount of time remaining if we are going to stop climate change



The Solution to climate change needs to be a global solution...

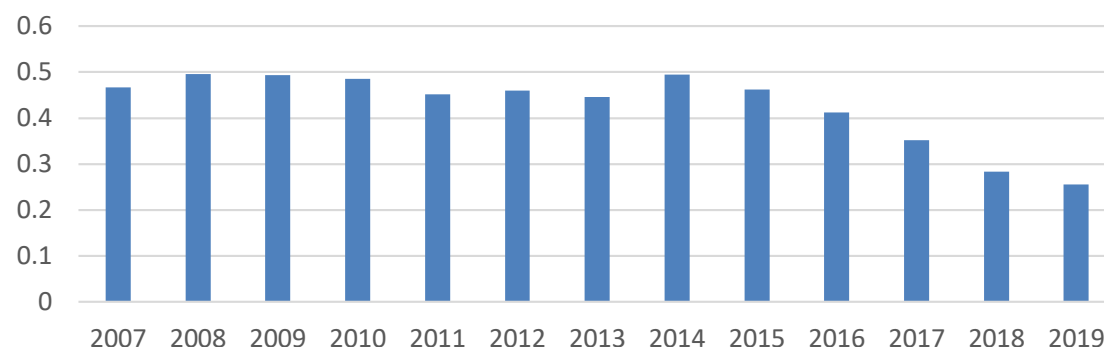


1. Decarbonise the Electricity Grids Worldwide
2. Decarbonise transportation (Cars, Vans, Buses, Lorries, Trains, Planes, Ships etc.)
3. Stop deforestation (the cause of 10% of global emissions)
4. Reduce emissions from food supply (agriculture, soils, meat production)
5. Sequester / capture CO₂ (e.g. plant billions of trees)
6. Become much more efficient with Energy



Decarbonisation is starting to happen

UK Electricity Generation
kgCO₂e / kWh



The new all-electric Corsa-e
Switch it up.



RESERVE NOW

SIGN UP FOR NEWS

Norway aims for all short-haul flights to be 100% electric by 2040

It already has more electric cars than any other country in the world and also has shipping projects underway



▲ A Norwegian Airlines Boeing 737. The country's short-haul airliners are set to be entirely electric by 2040.
Photograph: Alamy

All of Norway's short-haul airliners should be entirely electric by 2040, the country's airport operator said on Wednesday, cementing the Nordic nation's role as a pioneer in the field of electric transport.

You need to set targets to decarbonise your business



- Set your own reduction targets
e.g.
 - Reduce emissions by 60% by 2030
 - Reduce CO₂ emissions per £million Turnover by 50% by 2025
- Science Based Targets
- CDP
- ISO 14001 and ISO 50001
- **Net Zero / Carbon Neutral Target**

[Get ready for Brexit on 31 October 2019](#)

[Home](#)

News story

UK becomes first major economy to pass net zero emissions law

New target will require the UK to bring all greenhouse gas emissions to net zero by 2050.

Published 27 June 2019

From: [Department for Business, Energy & Industrial Strategy](#) and [Chris Skidmore MP](#)



Chris Skidmore signs legislation to commit the UK to a legally binding target of net zero emissions by 2050

The UK today became the first major economy in the world to pass laws to end its contribution to global warming by 2050.

The target will require the UK to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels.

Councils declaring a Climate Change Emergency



“... on 18 July, councillors unanimously called for a climate emergency to be declared, recognising the urgent need to take action to tackle this important issue through the council’s own work, that of our partners and in our communities.

....

Make **Basingstoke and Deane Borough Council operations carbon neutral by December 2025** by ensuring that 100% of its heating and electrical needs are met from renewable sources and cease the purchase and/or lease of any vehicle that is not low carbon;

Pledge to work toward **making Basingstoke and Deane net zero carbon by 2030**, ahead of the current 2050 target, ensuring that reducing carbon emissions is embedded in all relevant council decision making...”



Europe aiming to become the first Carbon Neutral Continent...



Net Zero Carbon needs to be the standard for businesses too...



The great thing is this is a relatively easy target to set and achieve

But please, please, please...
don't wait for 2025 or 2050
We need to Act Now!

Be bold and ambitious

Set a target to be Net Zero Carbon within 12 months



You can do this...

Step 1 : Calculate your emissions
(from over the last 12 months)

**Step 2 : Offset the emissions you have already made
(i.e. those calculated in Step 1)**

Step 3 : Start reducing your emissions – so you don't need to
offset so much next year

- Switching to a Green Energy Supplier
- Finding ways to cut energy consumption in your business
- Cut transport emissions
- Set targets to reduce your Gross Emissions

Step 4 : Repeat



What is carbon offsetting...

Help to finance projects around the world that provide the solution...

1. **Decarbonise the Electricity Grids World Wide**
2. Decarbonise transportation (Cars, Vans, Buses, Lorries, Trains, Planes, Ships etc.)
3. **Stop deforestation (cause of 10% of global emissions –we are loosing the lungs of the planet)**
4. Reduce emissions from food supply (agriculture, soils, meat production)
5. **Sequester / capture CO₂ (e.g. plant billions of trees)**
6. **Become more efficient with Energy**



1. NO
POVERTY



3. GOOD
HEALTH



5. GENDER
EQUALITY



8. WORK +
ECONOMIC
GROWTH



13. CLIMATE
ACTION

A world of projects that need support....

100's of projects to choose from. For example:

- renewable energy projects (China, India, Indonesia)
- reducing deforestation (Brazil & Kenya)
- clean drinking water (Uganda)
- improved household cookstoves (Kenya, India etc.)



International Standards

- Projects are verified and audited independently
- Look out for the main internationally recognised carbon offsetting standards



Is your business Funding Climate Change or Funding Climate Change Solutions?

- Setting a carbon reduction budget based on your emissions
- “An Internal Carbon Tax” or “Climate Change Investment Fund”
- e.g. £20 per tonne of CO₂ (represents 1 - 9% of the energy cost)
- Define a budget for internal and external spending e.g.
 - 75% on internal energy reduction initiatives
 - 25% on external carbon offsetting initiatives
- Select Internal Carbon Reduction initiatives based on return on investment

Emissions Source	Electricity	Natural Gas	Car Miles	Flights
1 tonne CO₂e is equivalent to	2400 kWh	5500 kWh	3300 miles	5200 km
Cost to produce 1 tonne CO₂e	£335	£220	£1485*	£400
£20 carbon price represents	6%	9%	1%	5%

*assumes a rate of 45p per mile



Climate Change needs a Rapid Global Solution

- You can be part of the solution
- Reducing your energy use and carbon emission is a good thing to do
- However, reducing by a few % a year is not fast enough
- More and more businesses are becoming Carbon Neutral / Net Zero Carbon
- Councils, Countries and Continents are setting Net Zero Carbon Targets

Your business can do this too
And you need to do it Now!

Thank you



John Buckley

Carbon Footprint Ltd

john.buckley@carbonfootprint.com

01256 592599



Do the Right Thing

Portals Climate Change Goals

October 2019

PUBLIC



portalspaper.com

Agenda

We're very pleased to present to you today a case study on our Climate Change Goals. We'll be discussing

- Our energy needs as a papermaker
- Our goals and the role of KPIs in achieving them

Our locations

Proud to be an independent paper business, entirely dedicated to supplying the highest quality paper and service to the world's leading security printers

Bathford

- High security paper
- Wood pulp operation
- One paper machine
- 2500 tonne capacity

Overton

- Banknote paper
- Cotton based operation
- Three highly flexible paper machines
- 14,000 tonne cap

Using best practices and industry standards and accredited by the banknote ethics initiative

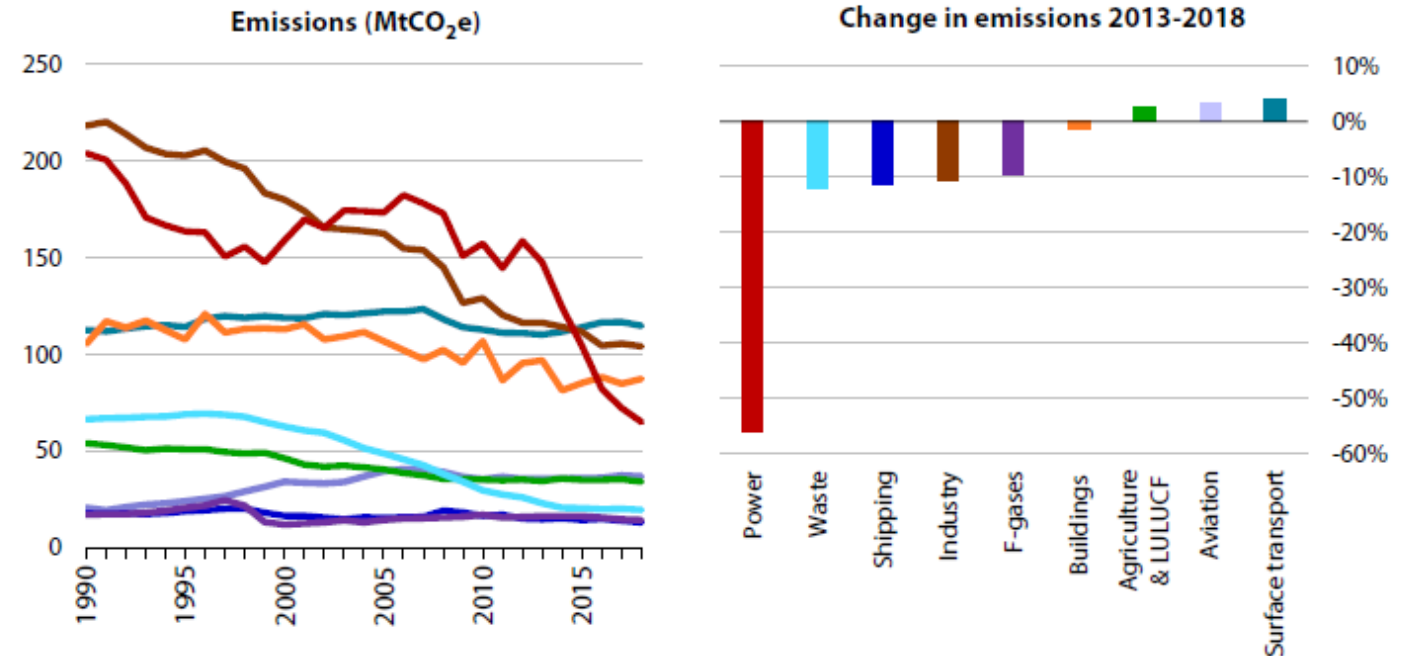
- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ISO 45001 (Health & Safety)
- Intergraf CWA 15374 (Security)
- PEFC Chain of Custody (Forestry Sustainability)



Committee on Climate Change, 2019 Progress Report

- The biggest reduction in emissions is in power generation – important context for an energy intensive energy user such as a paper mill because...

Figure 1.5. Trends in UK sectoral GHG emissions



Source: BEIS (2019) 2018 UK Greenhouse Gas Emissions, Provisional Figures; BEIS (2019) 2017 UK Greenhouse Gas Emissions, Final Figures; CCC calculations.

Notes: The chart on the right-hand side shows changes in sectoral emissions between 2013 and 2018 for all sectors except for Agriculture, LULUCF, Waste and F-Gases which cover the period 2013-2017; buildings emissions in this chart are temperature-adjusted.

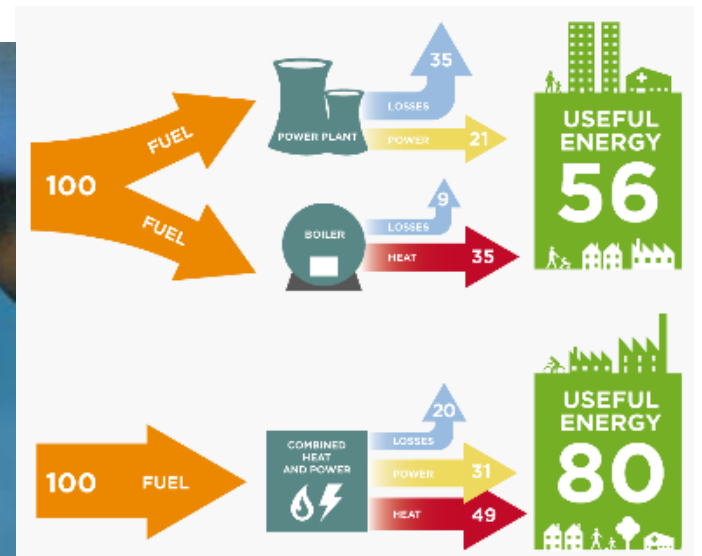
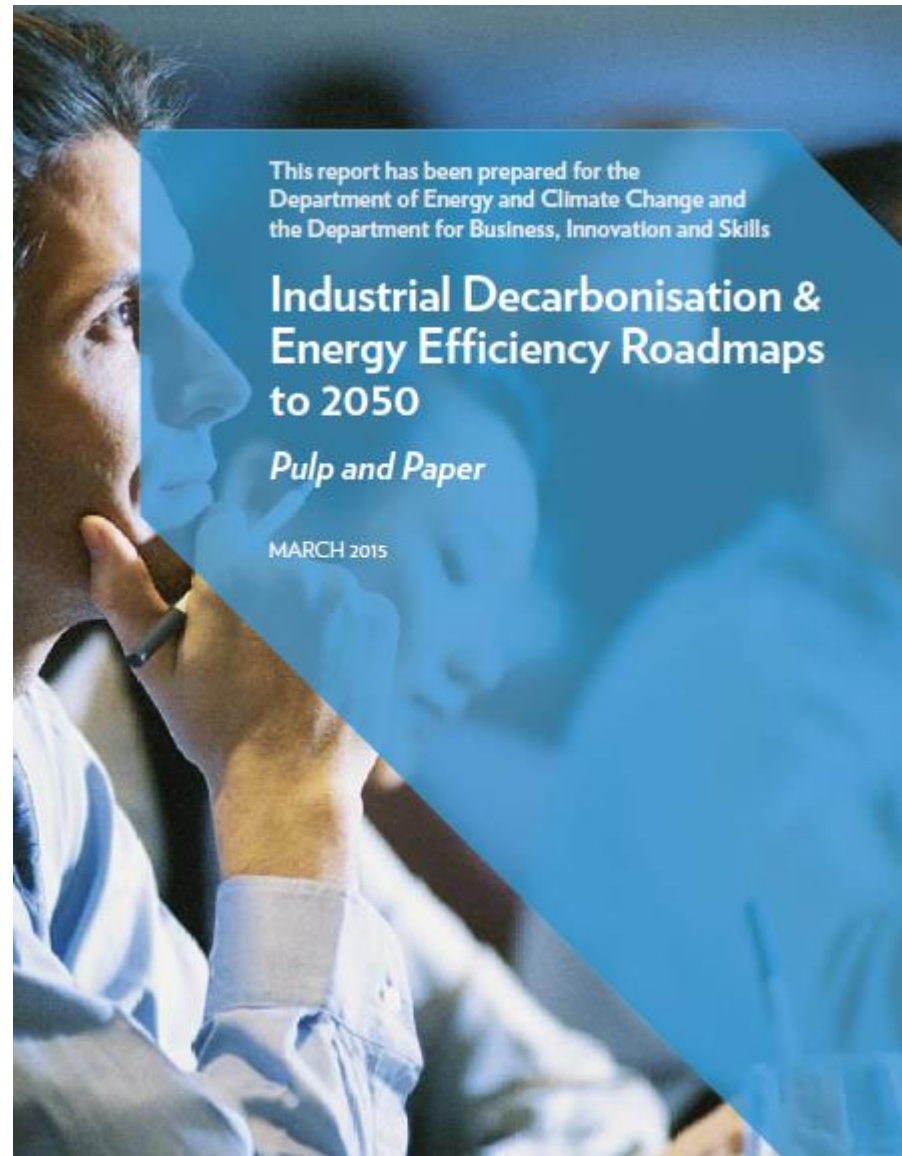
In context

The 2050 Roadmap

The single biggest proposed action is to decarbonise power generation by moving gas fired heating to electrical power.

However,

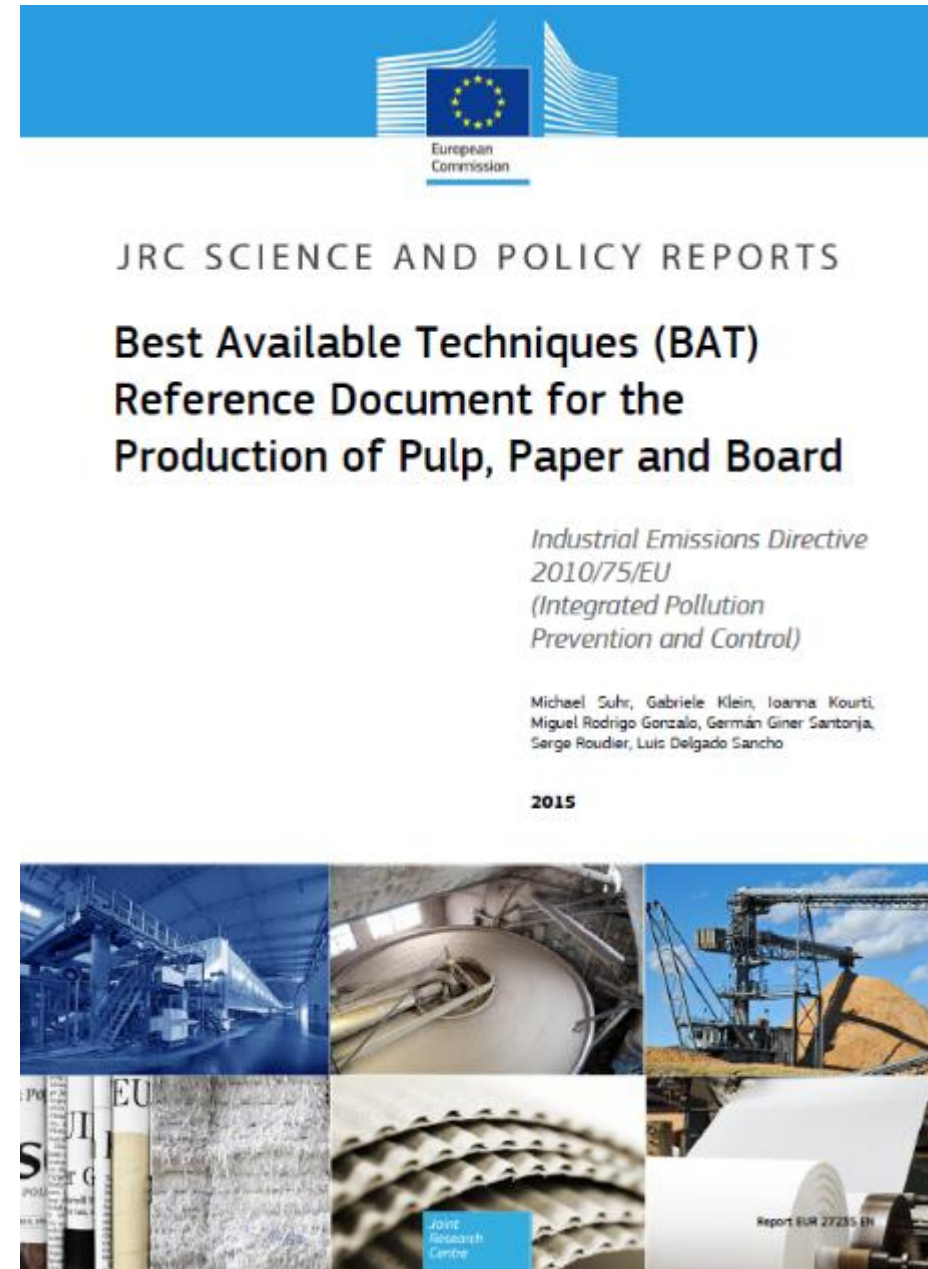
Installations such as Overton need heat and the current economic case supports the use of gas fired Combined Heat and Power



Source: Northern Utilities

European Union Best Available Techniques

- The use of CHP remains best practice, and industry is held to account for:
- ***Its efficiency*** via the Climate Change Agreement and through the use of other energy efficiency related obligations (ESOS, SECR)
- ***Its emissions*** via the EU Emissions Trading System's cap and trade method and through legislative requirements of the Large and Medium Combustion Plant Directives



Our goals

Portals Climate Change Goals

1. Safeguard the optimum level of energy consumption by sustaining the gas fired CHP,
2. Have a programme to drive short and long term improvements in Energy Efficiency (Energy Management System),
3. Give purchasing preference to energy efficient equipment (pumps, motors, agitators etc),
4. Have a programme of replacement of inefficient equipment,
5. Sustain our Climate Change Adaptation plans.