

# Draft Carbon Reduction Strategy

FOR PUBLIC CONSULTATION JAN-FEB 2018

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## 1. INTRODUCTION AND SCOPE

### Key Points:

- The effects of climate change are being felt in the UK and abroad. The international consensus on tackling climate change is reflected in UK policy which has imposed legally-binding national carbon reduction budgets.
- The council has a corporate responsibility both as a large employer and a community leader to take action to reduce emissions.
- The scope of the carbon reduction strategy is mainly focused on our internal operations where we can have the greatest influence.
- We will also support efforts in the district as a whole to reduce carbon emissions and generate and use energy more cleanly.
- As well as contributing to legal targets to combat climate change, reducing carbon emissions often also results more immediate local benefits such as lower energy bills, cleaner air, better quality housing and economic benefits.
- We will review this strategy in 2020 to ensure that it continues to meet our needs.

Climate change is a long-term threat, which needs to be addressed now because our economy and infrastructure are built around existing or historic climatic conditions.

Climate change is having an effect on our environment and human populations. Globally, 14 of the 15 hottest years on record have occurred since 2000. At the widest scale, climate data is confirming predictions, and the science of climate change is ever more clearly understood.

The aim of international agreement on reducing emissions is to try to prevent a dangerous level of temperature increase. These agreements are reflected in the UK's own Climate Change Act.

Here in the Harrogate District we can expect the most visible impacts of climate change to be an increase in unstable weather conditions. We are seeing an increase in flooding and intense storms because warmer air can hold more water vapour, making rainfall more intense. The other side of the coin is that heatwaves will become more common, putting a strain on vulnerable residents.

These impacts can damage property and crops, disrupt infrastructure and overwhelm existing drainage systems and have a negative impact on health and other local services. Over the long term, this area will not be immune to wider changes such as population movements and changing economic conditions.

The council is directly responsible for around 10,000 tonnes of CO<sub>2</sub> emissions each year and pays around £1.5 million in energy and fuel bills. The district as a whole produces around 1.3 million tonnes of CO<sub>2</sub> per year and has a combined energy bill of over £400 million a year.

We have a corporate responsibility both as a large employer and a community leader to take action to reduce our own emissions. In addition to helping to reduce our energy bills, we recognise that activity carried out to cut carbon emissions has a number of positive impacts, such as improved air quality, providing better working and home environments, encouraging innovation and opening up opportunities for commercialisation.

The scope of this strategy is mainly focused on efforts to reduce energy consumption and carbon emissions within our own operations, but alongside this we will continue to use our influence to promote carbon reduction in the wider district.

## 2. POLICY CONTEXT

### Key points:

- This strategy sits within a framework on national regional and local policies relating to energy, emissions and climate change.
- The government has stated its commitment to reducing carbon emissions, and has adopted the recommended 5<sup>th</sup> Carbon Budget.
- The UK target is now to reduce greenhouse gas emissions by 57% by 2030, relative to 1990 levels.
- Emissions in the district as a whole have decreased in line with the national trend, although we have higher emissions per capita than average.
- The council's corporate plan states that we will work to reduce our impact on the natural environment by reducing carbon emissions and adapting to climate change.
- At the wider scale, a number of external strategies and other activities are in place in order to lead the region towards becoming a zero carbon economy.

Nationally, successive governments have continued to implement the UK Climate Change Act 2008 which sets the legally binding UK-wide carbon budget. It should be noted that this is the settled national policy, a UK Act of Parliament, not a European Union Directive so it will not be affected by the withdrawal of the UK from the EU.

The UK has signed and ratified the United Nations Paris Agreement an international treaty that commits signatories to reduce carbon emissions sufficiently to limit global temperature increases to no more 2°C by the end of the century (considered a “safe level” of temperature increase), and ideally to limit the rise to 1.5°C.

In 2016, the Government approved the fifth carbon budget up to 2032. This means the UK target is now to reduce greenhouse gas emissions by 57% by 2030, relative to 1990 levels.

The government published the UK Industrial Strategy in November 27<sup>th</sup>. One of the “Grand Challenges” in this new national strategy is to maximise the advantages for UK industry of the global shift to clean growth.

As a requirement of the Climate Change Act, the government published the Clean Growth Strategy in 2017 as part of the wider UK Industrial Strategy. The strategy has two key aims: To meet domestic emissions reduction commitments at the lowest possible net cost to UK taxpayers, consumers and businesses; and to maximise the social and economic benefits for the UK of doing so. The Clean Growth Strategy includes a voluntary target for all the public sector to achieve a 30% greenhouse gas reduction by 2020 from 2009 levels.

Other relevant legislation includes the Home Energy Conservation Act 1995, which requires the council to submit biennial reports setting out the practical, cost-effective measures, which are likely to significantly improve the energy efficiency of residential accommodation in our area

Within this picture, the Leeds City Region Enterprise Partnership Strategic Economic Plan contains the aim to become a resilient zero carbon energy economy underpinned by high quality green infrastructure.

The council's own Corporate Plan states that we will work to reduce our impact on the natural environment by reducing carbon emissions and adapting to climate change.

Our Economic Growth Strategy stresses the importance of 'good growth' within the district, which seeks to achieve a sustainable and resilient economy by 2035.

Priority 6 of the York, North Yorkshire and East Riding Housing Strategy states that we will ensure all homes have a positive impact on health and wellbeing and are affordable to run, with a specific action to continue to deliver investment in Energy Efficiency works.

The council's emerging Local Plan encourages all developments to reduce climate impacts and meet high standards of energy efficiency, by addressing the energy consumption and generation in new developments.

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### 3. STRATEGY AIMS AND TARGETS

#### Key points:

The proposed aims of this strategy are to:

**Achieve an average annual carbon reduction of 2.5% from our own operations for the duration of the strategy.**

And:

**Promote and support activity within the district as a whole to help achieve emissions reductions in line with UK carbon budgets (a 57% reduction by 2030, relative to 1990 levels).**

- Our aims are linked directly to the national legally-binding carbon reduction targets.
- Achieving a 2.5% year-on-year carbon reduction from our own operations will keep us keep our own operations in line with the national target.
- We will continue to monitor carbon emissions from our own operations and publish these figures annually, and report on actions that contribute towards our aim to support carbon-reduction activity within the district as a whole.

#### 3.1 EMISSIONS FROM OUR OWN OPERATIONS

For our own operations, our aim is to mirror the national targets as closely as possible.

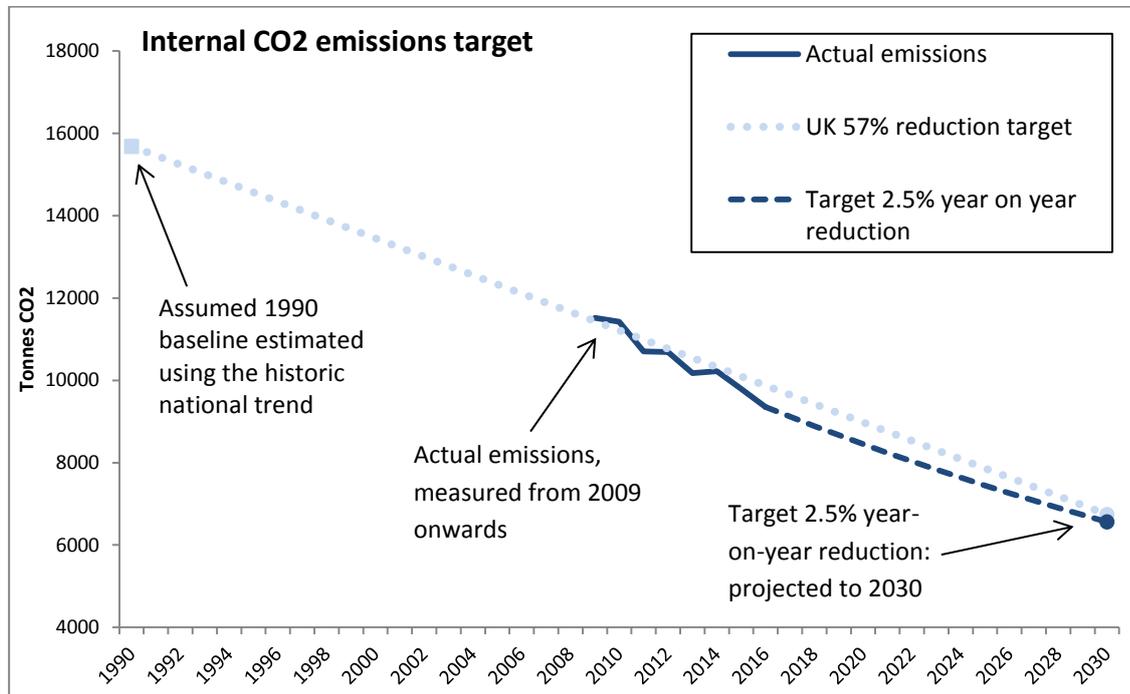
UK targets are based on a 1990 baseline. Since our internal data does not go back that far, we have to extend backwards using the past national trend from our own more recent data, to set an assumed 1990 starting point. We know that in recent years our internal emissions have decreased in line or faster than the national trend, so this is a reasonable method for calculating a notional baseline.

Using this method, we can calculate that we need to make approximately a 19% reduction between 2015 and 2030 to stay in line with the national 57% reduction target.

**To meet this aim, our proposed internal target is to:  
Achieve an average annual carbon reduction of 2.5% from our own operations for the duration of the strategy.**

This is equivalent to about 220 tonnes of CO<sub>2</sub> per year.

The government’s Clean Growth Strategy (2017) includes a voluntary target for all the public sector to achieve a 30% greenhouse gas reduction by 2020 from 2009. This carbon reduction strategy should achieve a 27% reduction by 2020.



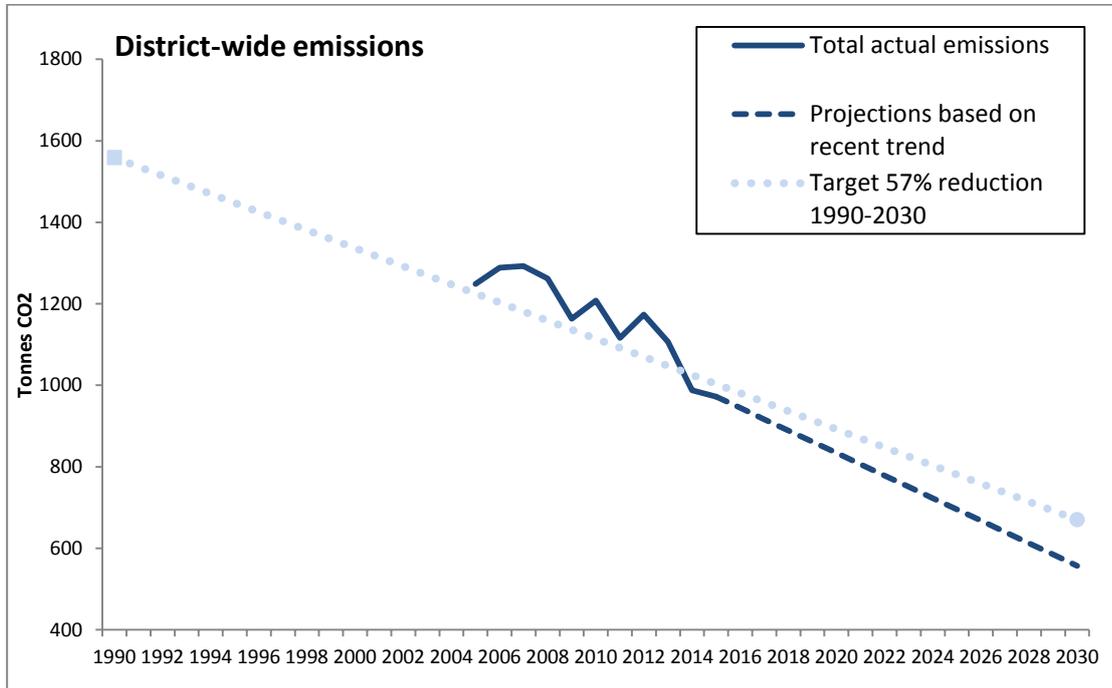
Our target carbon budget for each of the next five years will therefore be:

Year	Tonnes CO <sub>2</sub>
2017/18	9,118
2018/19	8,890
2019/20	8,668
2020/21	8,451
2021/22	8,240

As part of our community role, we will communicate our internal carbon reduction activities to a wider audience, to lead by example.

### 3.2 EMISSIONS IN THE WIDER DISTRICT

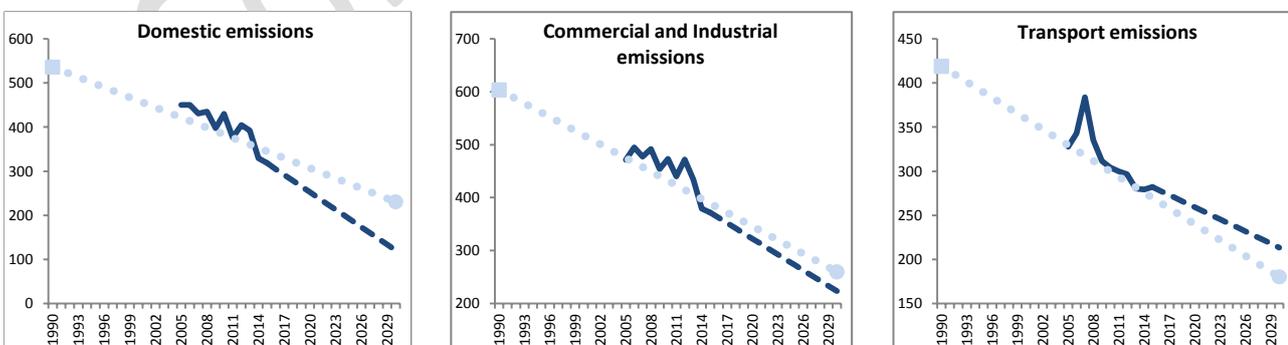
Analysis of the recent trend shows that district-wide emissions are decreasing in line with the national target, although our per capita emissions are higher than average.



Emissions from the domestic and commercial and industrial sectors have decreased significantly and both may well meet the national 57% target if the past trend continues.

However, the Committee on Climate Change has warned that the national rate of reduction has slowed or stalled in recent years so that the UK as a whole will miss the target without positive intervention.

As with the national picture, our local transport emissions show a particularly variable trend in three key ways: a sharp spike in 2007, indicating a degree of volatility in the sector; an emissions increase from 2014 to 2015; and a projection that is unlikely to meet the UK-wide target.



District-wide emissions by sector: graphs showing actual emissions and projection to 2030 and the UK target

There are many variables that can affect year-on-year emissions trends, and in reality a local authority of our size has a fairly limited impact on the wider picture. However, we have an important community leadership role and can influence developments within the district.

We will use this influence to encourage the implementation of low carbon measures, and we will continue to implement and monitor schemes and activities to reduce emissions as described in the action plan.

**For district-wide emissions, the aim of this strategy is to:  
Promote and support activity within the district as a whole to help achieve emissions reductions in line with the UK carbon budgets (a 57% reduction by 2030, relative to 1990 levels).**

This is approximately equivalent to achieving a 35% emissions reduction in the district between 2015 to 2030.

### **3.3 ACHIEVING OUR AIMS**

Our carbon reduction action plan will separately set out how we aim to achieve the strategy aims in the short and medium term.

For each aim, we will focus on priority areas where we know we can have the greatest impact:

**Aim: Achieve an average annual carbon reduction of 2.5% from our own operations for the duration of the strategy.**

Priority areas:

- Buildings
- Transport
- Working practices

**Aim: Promote and support activity within the district as a whole to help achieve emissions reductions in line with the UK carbon budgets (a 57% reduction by 2030, relative to 1990 levels).**

Priority areas:

- Domestic energy efficiency
- Sustainable transport
- Influencing new development
- Working with businesses and public sector partners

### **3.4 MONITORING AND REPORTING**

We will provide an annual progress report to Management Board and the relevant cabinet member.

Internal emissions:

For internal emissions we will continue to measure and publish our annual carbon footprint, the scope of which is defined as:

- Energy and fuel consumption in our public buildings and offices (where the council is the bill-payer) i.e. electricity, natural gas and other heating fuels. Monitored via automatic meter data and utility bills.
- Fuel consumption by the council's own vehicle fleet and machinery. Monitored via internal fuel records.
- Emissions from business travel carried out in employee's and councillor's own vehicles (the "grey fleet"). Monitored via payroll mileage claims.
- Fuel used in the council's pool cars. Monitored using fuel card data.

District-wide emissions:

We will continue to use government statistics to monitor district-wide emissions trends and we will report on emissions when data is released

Staying in line with the UK target is approximately equivalent to the Harrogate District achieving a 35% emissions reduction in the district between 2015 to 2030.

The government data used for CO<sub>2</sub> monitoring is published at least 18 months after the year in question, so reporting on district-wide emissions always has at least this time-lag.

Targets in the action plan will generally be performance based, on a project-by-project basis.

### **3.5 REVIEW DATE**

The national policy context for addressing climate change is continually evolving, so we will review this strategy every two years to ensure that it continues to meet wider aims and our local priorities.

The first review date will be March 2020.

## 4. CONCLUSIONS

This strategy is in response to the need to reduce CO<sub>2</sub> emissions in the coming years. The strategy shows how we will fulfil our corporate responsibility to reduce emissions, and contribute towards wider carbon reduction aims.

Our internal target is to reduce emissions by 2.5% each year from our own operations. This will allow us to achieve a carbon saving equivalent to the national target set under the Climate Change Act.

We will promote and support activity within the district as a whole to help achieve an emissions reduction in line with the UK carbon budgets – a 57% reduction by 2030, relative to 1990 levels.

To achieve these aims, we will focus on seven priority areas:

- Council buildings
- Staff transport
- Working practices
- Domestic energy efficiency
- Sustainable transport in the wider district
- Influencing new developments
- Working with businesses and other public sector organisations

The strategy fits into and supports a framework of national, regional and local policies on carbon reductions, and other council strategies and plans.

Reducing carbon results in other benefits, such as reduced energy bills, better air quality, reduced traffic congestion and better quality housing, and good economic growth.

Our action plan shows how we will make on-going improvements to achieve our internal target.

We will monitor progress and provide an annual progress report using a mixture of our own emissions data and government statistics, and we will review the strategy every two years to ensure it continues to meet our needs.

## DRAFT ACTION PLAN 2017-20

### 1. Achieve an average annual carbon reduction of 2.5% from our own operations.

#### Priority area 1a: Buildings

Action	Planned Outcome/Impact	Timescale	Service Area
Internal building projects to consider renewable energy and energy efficiency products/investment via the Capital Strategy	Ensuring sustainable energy opportunities are fully exploited	Ongoing	P&D
Upgrade transformers at HCC	New transformers to deliver energy and carbon savings	2018	P&D
Install new Combined Heat and Power unit at the Hydro	Energy savings achieved through system upgrade	2018	P&D
Investigate opportunities for solar PV in council buildings	Understanding of feasibility	Ongoing	P&D
Upgrade cremators at Stonefall Crematorium	Energy savings achieved through equipment upgrade	2018	P&D

#### Priority area 1b: Transport

Action	Planned Outcome	Timescale	Service Area
Improve fleet vehicle efficiency	100% of the vehicle fleet purchases to meet the highest EURO engine emission standards.  Refuse fleet routes to undergo route optimisation to maximise fleet utilisation.	2019	P&ES, CTO
Provide driver training	100% of vocational Light Goods Vehicle drivers to receive periodic training as part of their Certificate of Professional Competence qualification in the ability to optimise fuel consumption when driving a HBC vehicle.	2018-19	P&ES, CTO
Investigate options for EV within the council fleet	Options for EV's will be Investigated and cost benefit analysis exercises conducted during the vehicle procurement processes.	2018-19	P&ES, CTO
Improve pool car efficiency	Procuring the most cost effective efficient vehicles and reviewing the pool car usage after the move to the new civic centre to establish if the pool car fleet can be increased to meet user demands.	2019	P&ES, CTO
Improve cycling facilities for staff	Facilities are and fit for purpose, to make cycling an attractive option for staff.	2018	P&D
Provide personal travel plans for staff	Modal shift away from single occupancy vehicles to sustainable transport. Staff moving to new offices to be offered PTPs New Starters to be offered PTPs before first day.	Ongoing	P&D

<b>Priority area 1c: Working practices</b>			
<b>Action</b>	<b>Planned Outcome</b>	<b>Timescale</b>	<b>Service Area</b>
Provide staff training and information on energy efficiency practices	Staff aware of personal responsibilities. Updated induction training module.	Ongoing	P&D

## 2. Promote and support activity within the district as a whole to help meet the UK carbon budgets.

<b>Priority area 2a: Domestic energy efficiency</b>			
<b>Action</b>	<b>Planned Outcome</b>	<b>Timescale</b>	<b>Service Area</b>
Promote home energy efficiency in domestic properties	Review call-off contract with Better Homes scheme for continued participation in city region projects.	2018	P&D H&P
Provide grants or other support to improve home energy efficiency and reduce the risk of fuel poverty	Delivery of energy efficiency grant in target areas and potentially vulnerable residents.	2018	P&D H&P
<b>Priority area 2b: Sustainable transport in the wider district</b>			
<b>Action</b>	<b>Planned Outcome</b>	<b>Timescale</b>	<b>Service Area</b>
Increase membership of Harrogate Car Share scheme Develop new private groups within Harrogate Car Share	Greater take up and successful journey matches to reduce single occupied vehicle trips.	Ongoing	P&D
Support the take-up of electric vehicles via a separate Electric Vehicle Strategy	Understanding of needs and opportunities.	Ongoing	P&D
<b>Priority area 2c: Influencing new developments</b>			
<b>Action</b>	<b>Planned Outcome</b>	<b>Timescale</b>	<b>Service Area</b>
Encourage the best possible standards of energy efficiency in new developments via the Local Plan.	Maximising opportunities for energy efficiency measures	Ongoing	P&D
Use the council's influence to encourage renewable energy and/or other sustainable technology at landmark developments	Maximising opportunities for energy efficiency	Ongoing	P7D
<b>Priority area 2d: Working with businesses and public sector partners</b>			
<b>Action</b>	<b>Planned Outcome</b>	<b>Timescale</b>	<b>Service Area</b>
Encouraging the creation of private employer car share schemes	Increased take of car sharing, reduction in single occupancy vehicles	Ongoing	P&D
Promoting the take-up of Resource Efficiency activities	Businesses engaged in LCR Resources Efficiency Fund project	2017-19	P&D
Working with the Public Services Leadership Board	Opportunities for efficiency within the sector and identified and exploited	Ongoing	P&D
Communicate our internal carbon reduction activity to partners and the wider public	Wider partners aware of council's activities	Ongoing	P7D