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Mae'r ddogfen hon ar gael yn Gymraeg

This document is available in Welsh



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Our Ambition to be Carbon Neutral by 2030

We support

carbon neutral by 2030, and this plan sets out how we intend to deliver on this ambition over the next ten years.

The plan will also help to ensure that decarbonisation is built into our long-term plans to improve well-being in Blaenau Gwent.

What does carbon neutrality mean?

Carbon neutrality means reducing net emissions by at least 95%, there may be a residual 5% of emissions that is not technically feasible to eliminate by 2030.

The Welsh Government ambition is for carbon neutrality across the entire Welsh public sector, i.e. some public sector organisations may be able to achieve negative emissions, to balance out unavoidable emissions in other

Climate Change and the need for Decarbonisation

The 2015 [Paris Agreement](#) commits governments to keep global temperature rises well below 2°C above pre-industrial levels, with the ambition to limit the rise to 1.5°C.

This target was chosen as an approximate indicator of dangerous levels of climate change. Global average temperatures have already risen by 0.9°C, with further rises inevitable due to carbon already emitted. Therefore, achieving this target requires that global emissions peak as soon as possible and reduce rapidly thereafter.

The [Intergovernmental Panel on Climate Change](#) states that meeting climate

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The Structure of Our Plan

Our approach to decarbonisation is based on:

1. Public Leadership

We are committed to leading decarbonisation across Blaenau Gwent. We believe that this leadership starts with addressing the climate impact of our own operations. We are already taking a number of positive actions, but we recognise the need to increase our efforts through a systematic corporate approach to decarbonising the authority.

2. Collaboration

We will work with our partners to develop joint projects to address common sources of carbon emissions and will be developing a plan for decarbonisation of Blaenau Gwent as a whole, through the Blaenau Gwent Public Services Board. This collaborative approach is informed by the principles of the [Well-being of Future Generations \(Wales\) Act 2015](#).

3. Data Driven

The basis of our plan is a comprehensive assessment of the carbon impact of our operations, including calculating our carbon footprint. Using this data to identify, and target for action, the highest impact areas of our operations.

4. Our Transition Pathways

Decarbonising the council will involve a number of different transitions in each of these high impact areas (e.g. travel, electricity). The plan includes transition summaries which identify key challenges in achieving carbon neutrality in each of these areas.

5. Low Carbon Framework

Although each transition will require its own distinct actions, we will also need a low carbon framework to provide a common strategic direction across these transitions.

6. Next Steps

A Delivery Board will be established to take decarbonisation forward.

1. Public Leadership

We are already taking a range of actions to tackle climate change, but we recognise that to provide public leadership we need to take a more

own carbon impact. The focus of this plan is on **mitigation actions**, aimed at preventing the release of CO₂ and other greenhouse gases that cause climate change (e.g. reducing energy use).

The other major form of climate action is **adaptation actions**, which are

2. Collaboration

Addressing emissions from our own operations (known as organisational emissions) through this plan is only one element of our response to climate change. Decarbonisation of Blaenau Gwent as a whole will require collaboration.

We are working with our partners through the Blaenau Gwent Public Services Board (PSB) to develop a plan to keep carbon emissions for Blaenau Gwent as a whole (known as territorial emissions) within a science based carbon budget in-line with the Paris Agreement 2015. The PSB agreed to establish a steering group to develop this plan in January 2020, and will be seeking to involve the public in this process.

We are also working with our partners at the regional level in Gwent through can collaborate and pool resources. For example, we have already been involved in a Gwent-wide fleet review and been part of a successful bid for funding to install electric vehicle charging points across Gwent, including in Blaenau Gwent. Also, identifying links to regeneration themes and projects

3. Data Driven

The first step in developing a more strategic approach to decarbonising was measuring the relative carbon impact of different areas of our operations, so we can focus on the most impactful areas. A central element of this data collection was calculating our carbon footprint, which is a standardised way of defining and reporting organisational emissions. We are also developing data about avoided emissions, calculating carbon savings generated by delivering services, for example, providing public transport and diverting municipal waste from landfill. Carbon footprint calculations only report emissions, so developing data about

The methodology we used is outlined in detail as part of the supporting documents which are available with this plan to ensure the consistency and accuracy of future reporting.

Our initial footprint covers financial year 2018/19, a full 12-month period to include all seasonal variations in emissions. The extent of our carbon footprint was determined by two reporting boundaries, organisational and operational.

Our organisational boundaries include all emissions from assets, such as buildings and vehicles that we have day-to-day operational control of, whether we own or lease them (Scope 1 and 2 emissions). Assets we own but do not have operational control over are outside this boundary (e.g. buildings leased to businesses and other organisations).

Our wider operational boundaries include emissions both up and downstream, which are the result of our procurement and other organisations delivering services on our behalf (Scope 3 emissions).

Our wider operational boundaries also includes carbon sequestration from Land Use, Land Use Change and Forestry (LULUCF) from land in our operational control. Sequestration represents the annual change in the net amount of carbon stored in different habitat types. In future years we may also be able to calculate the total carbon stored in our land. This carbon stock does not contribute to our ambition of carbon neutrality, but it is important as changes in land use could lead to large one-off releases of stored carbon.

Using our carbon data

We will update our carbon data, including the carbon footprint, on an annual basis, and will seek to make improvements in the quality and range of data included in these calculations.

There are three main purposes that the carbon data in this plan is required for:

- (i) calculating the relative size of the carbon emissions in different ;
- (ii) assessing the effectiveness of different forms of action; and

(iii) monitoring our performance in reducing carbon emissions.

A range of data will need to be reported, because carbon footprint calculations alone cannot fulfil all three of these data functions in every

to appraise options and manage performance will be important.

Data Quality

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4.

Overview of our Transition Pathways

Using the data generated calculating our carbon footprint we have identified nine transition pathways:

1. **Transport Direct** travel by our staff in corporate or their own vehicles, includes fleet, commuting and staff travel within work.
2. **Transport Commissioned** travel and transport by non- council staff delivering goods and services on our behalf, such as school transport, subsidised bus provision and onward transport for waste.
3. **Sequestration** absorption of carbon on land we own and manage, largely associated with woodland, urban trees and peatland.
4. **Procurement: Goods** which covers what we purchase as an organisation and includes key items such as clothing, food, IT, machinery, equipment and furniture.
5. **Procurement: Services** which covers the services we procure to deliver our functions such as schools and social services. This also includes investments such as pension schemes.
6. **Procurement: Works** which includes all construction and maintenance of our buildings and infrastructure.
7. **Electricity** which covers the electricity we purchase to run all our services. It includes key things such as street lighting, running our corporate buildings and schools. It also includes our use of renewable technologies.
8. **Heat** which includes our heating (and cooling) of our buildings.
9. **Waste** which covers the carbon impacts of our treatment of municipal waste, whether recycling,

Relationship of transitions to footprint scopes

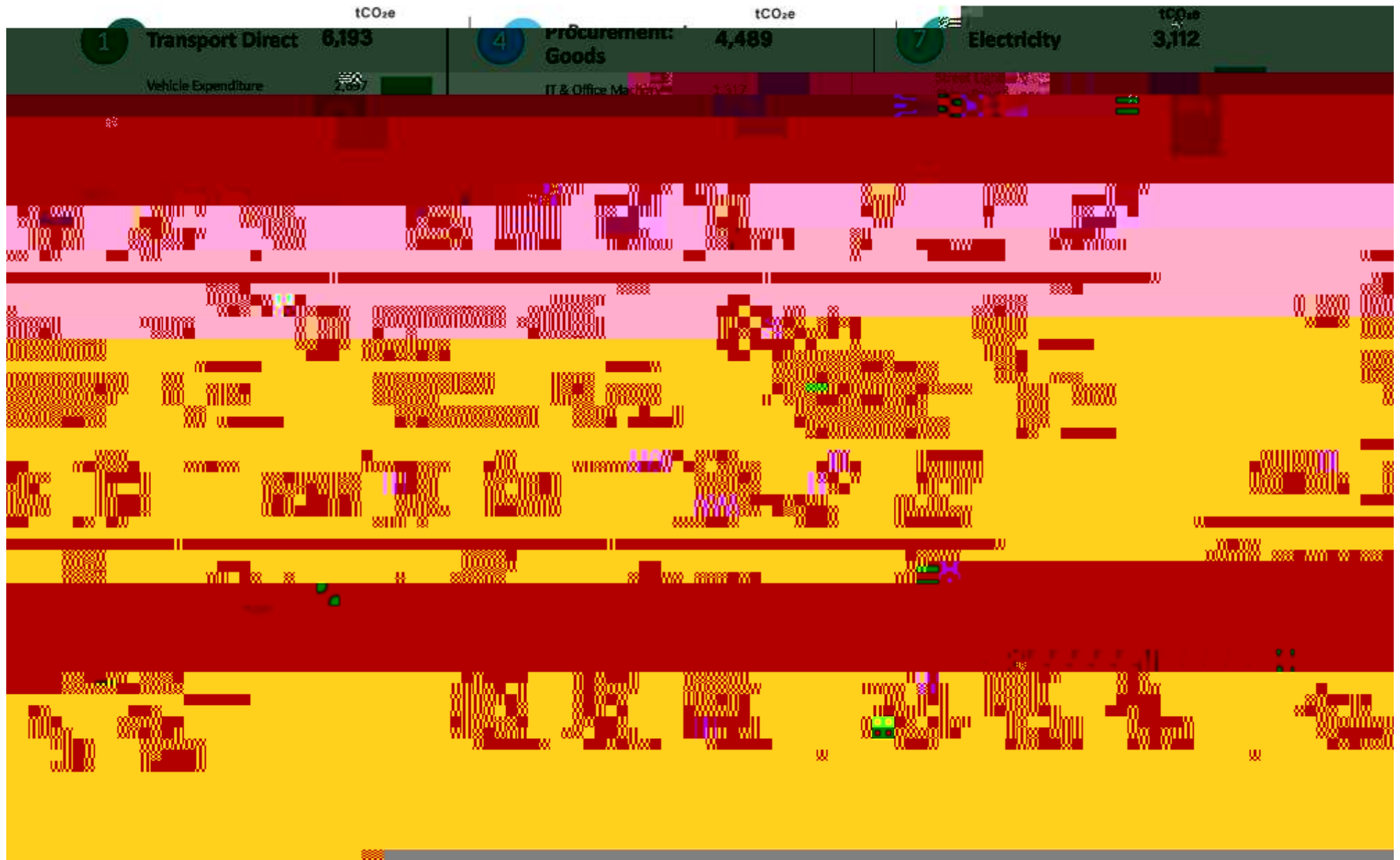
The scopes and categories used in calculating our carbon footprint were developed to provide a standardised way of measuring organisations carbon impact. In contrast, the transitions are organised around the actions needed to reduce these emissions, which leads to different groupings.

For example, emissions from our fleet sit in scope 1 of our footprint alongside gas because both of these emissions are released directly by the council. However, decarbonising our fleet will require completely different actions to decarbonising our gas heating, therefore, fleet sits within the part of scope 3 in our footprint, but require similar decarbonisation actions.

The infographic below gives a summary of each transition, including both total CO₂ equivalent tonnes per year and the major sources of emissions within each transition, identified from our carbon footprint calculation. As well as what percentage of our total emissions each transition represents.

Additional information on three major challenges in reaching carbon neutrality for each transition pathway are outlined in the supporting documents to this plan.

Blaenau Gwent County Borough Council: Transitions Summary 2018/19

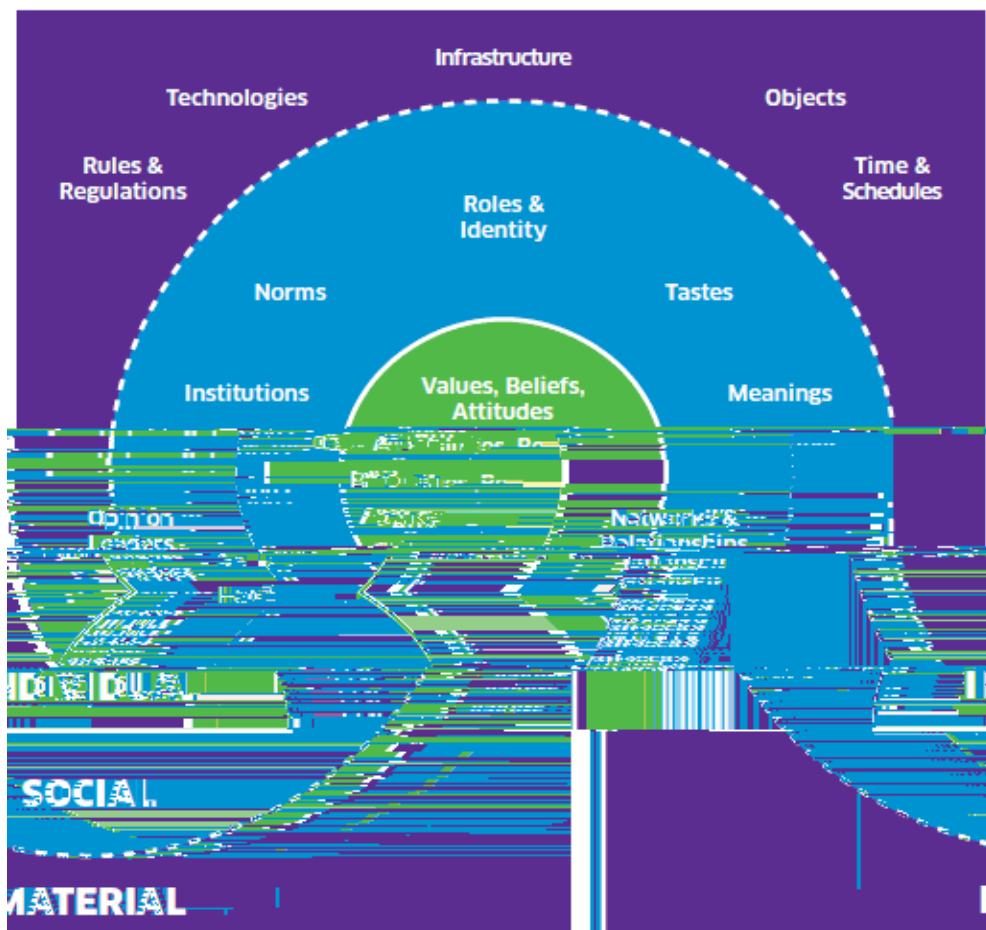


5. Low Carbon Framework

The Low Carbon Framework covers common elements that will be inform the delivery of all nine transitions, including:

Behaviour Change

Everyone at the council, including staff and elected members, will have a role to play in decarbonisation. This behaviour change programme will have to go beyond awareness raising and common generic actions. We will target specific behaviours, placing them in their wider context to support systemic change. This approach will be based on the Individual, Social and Material (ISM) Tool developed for local authorities to use in their climate change planning, as shown below. Further information on this tool is provided in the supporting documents to this plan.



Evidence shows successful behaviour change programmes for decarbonisation are the result of meaningful staff involvement combined with senior management commitment.

Just Transition

Decarbonisation is not only a technological transition but also a social transition. A just transition means ensuring that the benefits of decarbonisation are fairly distributed and supporting those who may lose out. A just transition is not only desirable but may be the only way decarbonisation can be achieved.

Changes within the council may create new working patterns and job roles, so it is important to involve staff in ensuring these are positive changes. Changes in service delivery will have different impacts on different groups,

6. Next Steps

We will set up a Delivery Board who will provide strategic overview and be supported by reporting and accountability mechanisms. The board will oversee the next steps, including:

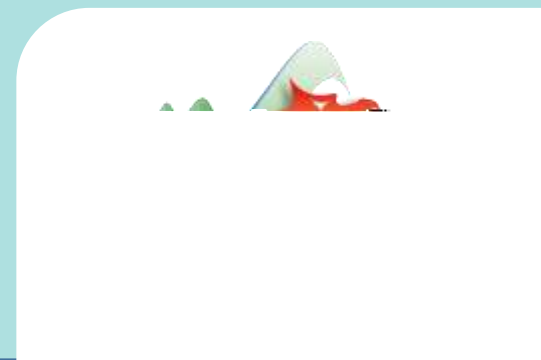
Developing the nine transitions in detail and identifying priorities for action and areas which need further investigation.

Further development of carbon data and integration into decision making and corporate performance management.

Prioritising the need for investment and additional skills and capacities across different transitions (Including creating a central record of existing projects and staff delivering decarbonisation).

Identify and begin delivery of demonstration projects, which will inform wider transitions. Including ensuring that learning from actions that are already underway is shared widely.

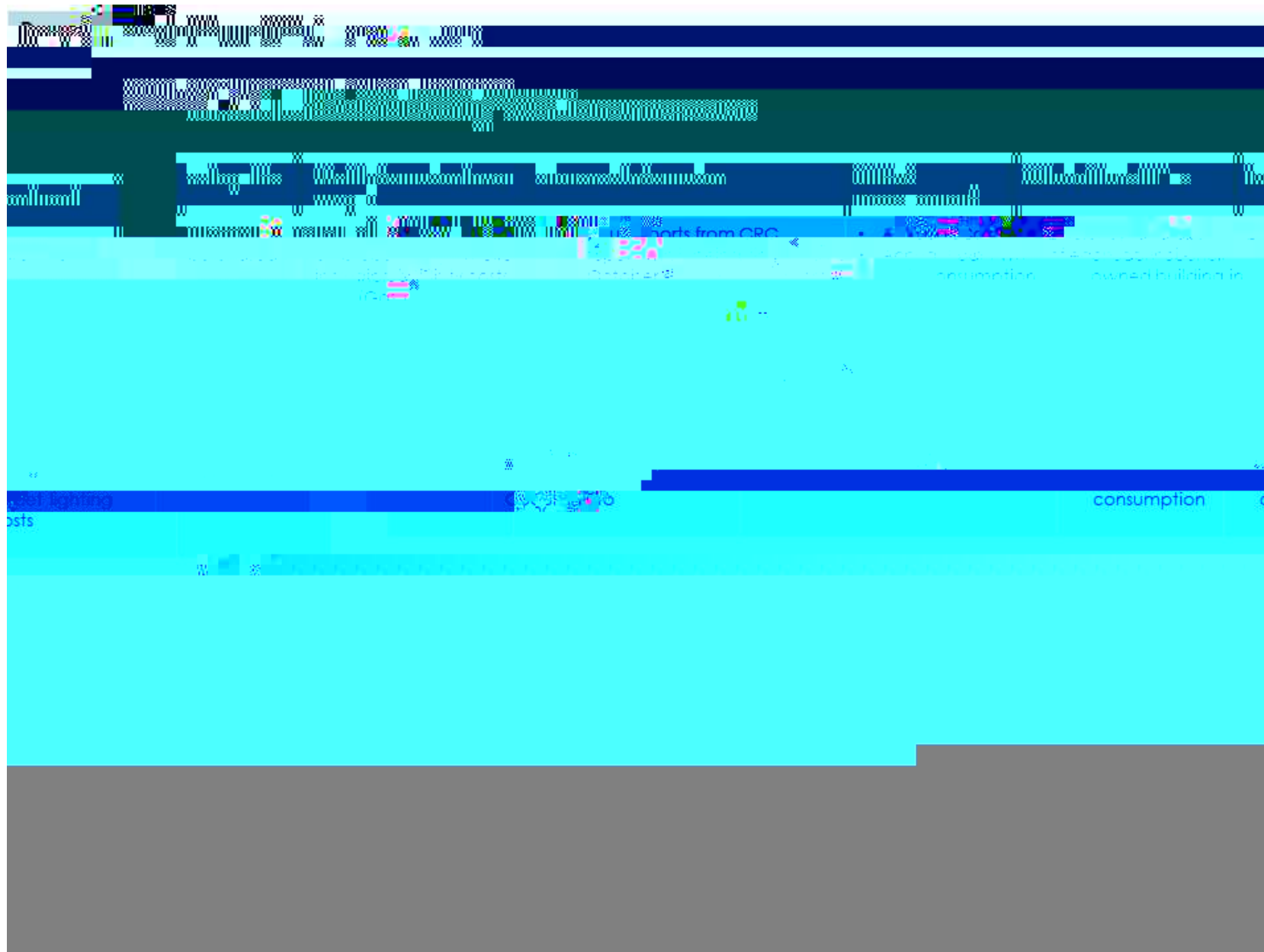
Mainstreaming decarbonisation, by ensuring that all service areas have the resources needed to take ownership of delivering transitions and that consideration of decarbonisation is taking into account in policy development and changes in service delivery.

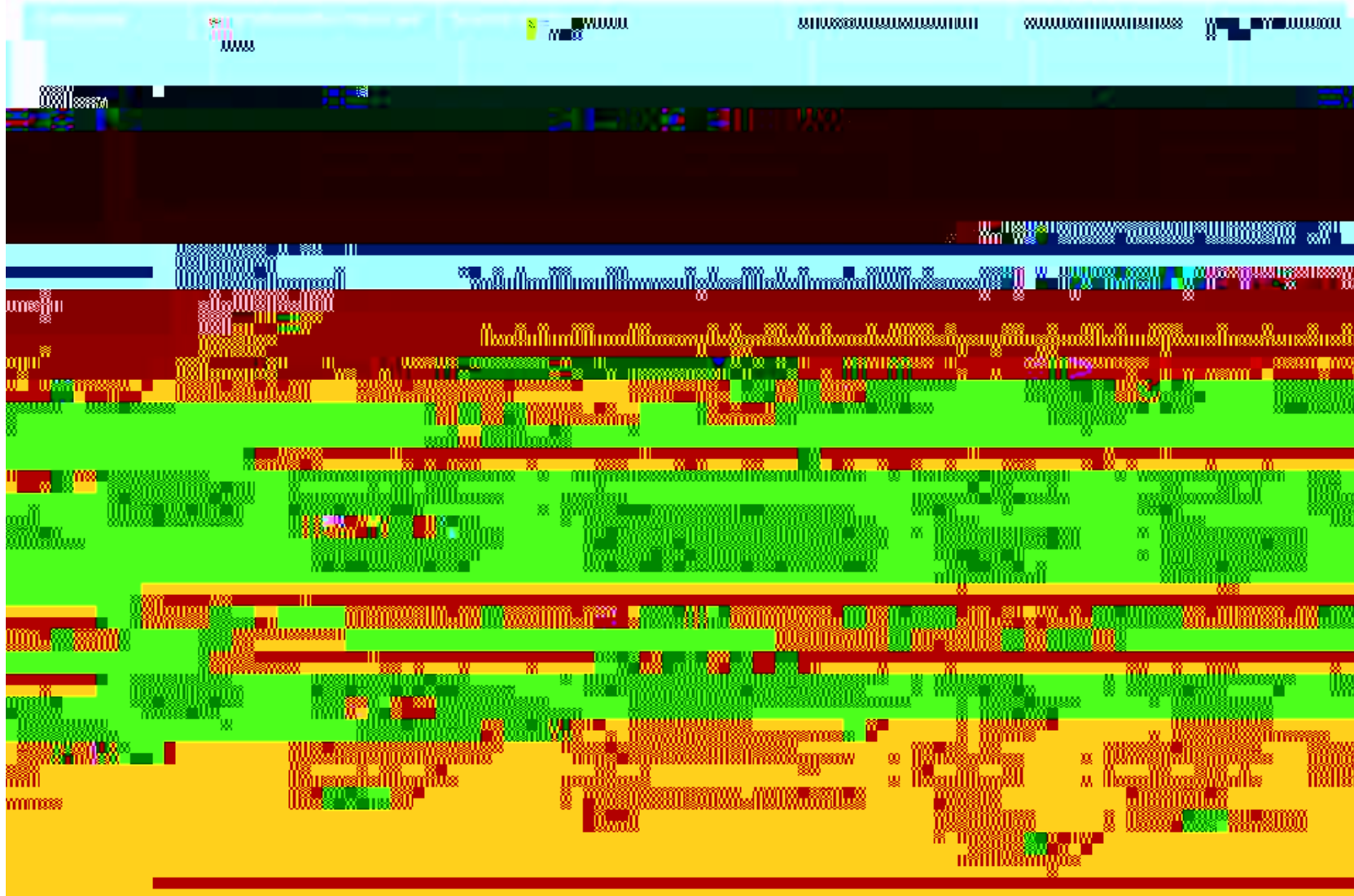


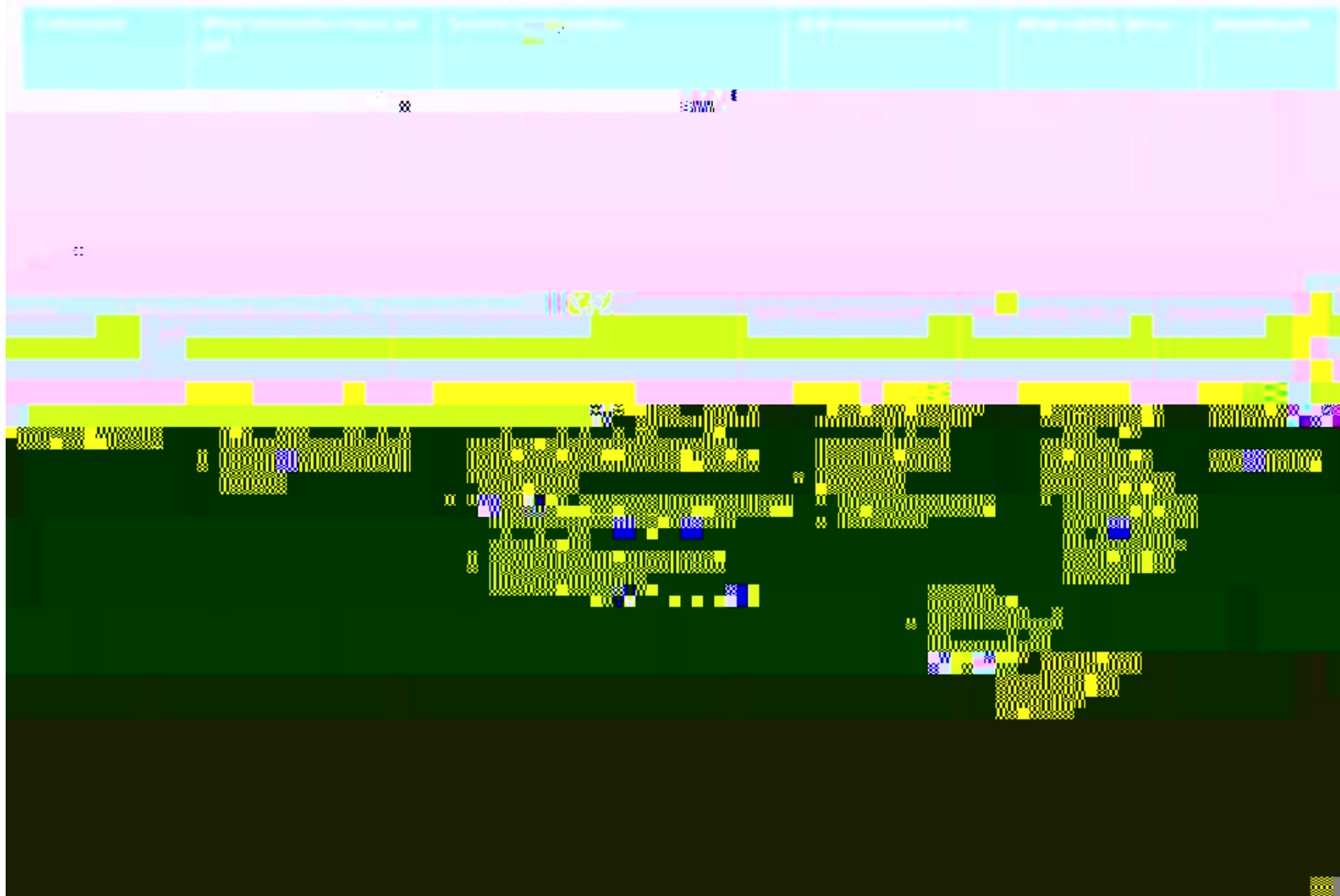
Blaenau Gwent County Borough Council Carbon Footprint 2018/19	tonnes CO2e/year
Scope 1 (Direct Emissions)	5,159
Heating	4,143
Diesel and Petrol	1,016
Scope 2 (Electricity Indirect Emissions)	2,891
Scope 3 (Other Indirect Emissions)	64,043
Categories 1 and 2 -purchased goods and services	60,295
Category 3 -extraction, production & transportation of fuel & energy	771
Category 4 -upstream transportation & distribution (included in categories 1 & 2)	-
Category 5 -waste generated in operations (included in categories 1 & 2)	-
Category 6 -business travel	293
Category 7 -employee commuting & homeworking	2,200
Category 8 -upstream leased assets (None)	-
Category 9 -downstream transportation & distribution	484
Total Scopes 1, 2 and 3	72,093

Carbon Data Sources 2018/19









Transition Pathway - Three major challenges in reaching carbon neutrality

Transport

The number of ULEV (Ultra Low Emission Vehicles) on the road is beginning to take off and government has repeatedly brought forward deadlines for the end of sales of new petrol/diesel cars (including hybrids). Welsh government has made ambitious proposals for all new public sector vehicles to be ULEV by 2025 or 2030 for HGVs. Reflecting that ULEV options in the HGV market are currently very limited and high cost. Transport has been divided into two transitions:

1 Transport Direct		9%
Direct transport includes all work related travel by BGCBC employees (including travel to work), whether in their own, or in BGCBC fleet, vehicles.		
Challenge 1	Challenge 2	Challenge 3
ULEV Infrastructure. Replacing our entire fleet with ULEVs will require substantial capital investment. Particularly as even when ULEVs whole life cycle costs are lower, savings are the result of lower running costs, while up-front costs are higher. In addition, investment is also required to provide charging infrastructure for this fleet, in particular for a Central Depot replacement. The recent Gwent Fleet Review highlights the potential for collaborative public sector procurement.	Agile Working. In addition to reducing travel, both too and in work, changes such as home working and virtual meetings can also improve workplace efficiency, but technical support and cultural change are required to realise the full benefits. This plan has begun the process of using data to understand our staff travel patterns and requirements.	Commuting. Commuting miles are likely to remain substantial, particularly as many jobs have to be done in person. Charging infrastructure for staff vehicles is part of meeting this challenge, although home charging is likely to play a far larger role. However, the council will also have to support employees with the issues around upfront costs of ULEVs, as well as promoting and improving public and active transport options.

Transport Commissioned		1%
<p>Commissioned transport covers transport services we pay for (e.g. bus), deliveries to and from the council, and travel by non-BGCBC employees delivering services on our behalf. Public and school transport supported by the council produces overall carbon savings by avoiding car use.</p>		
Challenge 1	Challenge 2	Challenge 3
<p>ULEV Infrastructure. This transition will rely on a local charging network. Suppliers who provide significant levels of transport services will have to upgrade their fleet. Currently contracts for some bus services struggle to attract bids, given the high cost and limited availability of electric buses there are concerns about the capacity of the local market to respond.</p>	<p>Shortening supply chains. Using suppliers with local bases has the potential to significantly</p>	

3 Sequestration		-1%
<p>Carbon sequestration removes emissions from the atmosphere, these negative emissions are crucial to achieving carbon neutrality. In addition, as land owner the council is responsible for substantial carbon stocks already captured, trees and peatland are the main two natural carbon stores. Both these land types in Wales have been badly degraded (abandoned). Deindustrialisation in Blaenau Gwent has resulted in another wave of landscape change, we now have the highest proportion of woodland coverage of all Welsh local authorities.</p>		
Challenge 1	Challenge 2	Challenge 3
<p>Improve digital mapping and data availability. Trees rate of carbon sequestration varies significantly with species type, management and age. The initial figure in this plan is a very rough estimate for a small number of landholdings (LNRs). A complete picture of current tree stock is key to understanding the carbon impacts of our current landholdings.</p>	<p>Right tree, in the right place. Current national rates of tree planting are falling well short of ambitious government targets, which reflect that Welsh (and Blaenau Gwent) tree coverage is still well below the European average. However, it is vital that tree planting efforts not only consider the number of trees planted but also the most suitable trees and locations. In order to maximise not just carbon capture but co-benefits to air quality, biodiversity and climate adaptation.</p>	<p>Peatland. Even less data is currently available about the size and condition of our peatland holdings. Peat soils are a major carbon sink, but those which have been used for agriculture or forestry may well be releasing carbon. It is important we understand our potential for peatland restoration.</p>

Procurement: Works	10%
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Heat

7%

wider transition away from
a national heating system based on a standardised gas grid. It is very early in this transition but it seems clear that the

Waste

-11%

Behaviour and the ISM Tool in the Climate Change Plan

Transformational change across all sectors of society is necessary for the achievement of climate change targets and associated objectives, such as the reduction of fuel poverty. Infrastructural and technological measures are crucial for our transition to a low carbon Scotland, but the impact of many of these measures depends heavily on the extent to which people adopt and use them. It is therefore vital that policy makers understand how and why people behave the way that they do in order to design cost-effective interventions. Incorporating behaviour into policies requires particular insights and understanding. Officials and analysts developed the ISM (Individual, Social, Material) tool to make these insights and understandings more accessible for policy makers.

Why use ISM?

- In order to successfully change the values and attitudes that underpin our day-to-day lives, a package of interventions will be more successful in influencing behaviour than one element alone. The ISM tool is used to assess if interventions need to be targeted.

How to use ISM?

1. Identify the target behaviour
2. Assess the ISM factors



and regulations, and the times and frequency of use, influencing behaviour through financial level investment in the development of technology and infrastructure, considering regulation where appropriate and influencing softer factors such as people's schedules.

Our ISM approach

- We are embedding the ISM approach across policy public bodies. We held two launch events in June

to raise awareness of the ISM tool in the Scottish Government and external audiences.

Workshops have already taken place, and more detailed work will be reported to the Scottish Parliament when the Draft Climate Change Plan is laid in January 2017.

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Electrification Powering a system by electricity, in many cases switching from a previous power source. This carbon reduction benefits of electrification are dependent on electricity being generated from low carbon sources.

Greenhouse Gasses Natural and industrial gases that trap heat from the Earth and warm the surface. The Kyoto Protocol restricts emissions of six greenhouse gases: natural (carbon dioxide, nitrous oxide, and methane) and industrial (perfluorocarbons, hydrofluorocarbons, and sulphur hexafluoride).

Mitigation - Action that will reduce man-made climate change. This includes action to reduce greenhouse gas emissions or absorb greenhouse gases in the atmosphere.

Offsetting - A particular form of sequestration used to compensate for emissions of CO₂ by participating in, or funding, efforts to take CO₂ out of the atmosphere. Offsetting often involves paying another party, somewhere else, to save emissions equivalent to those produced by your activity. The UK Committee on Climate Change recommends that offsetting should not be used as part of achieving carbon targets, except as an emergency last resort, due to significant doubts about its effectiveness and fairness.

Paris Agreement - Is a 2015 agreement setting out how countries will meet their obligations under the international treaty on climate change, the United Nations Framework Convention on Climate Change (UNFCCC). Its central aim is to keep global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. All countries must set out their contributions to this target, called nationally determined contributions (NDCs)

Sequestration Long term removal of CO₂ from the atmosphere, for example, in organic material, particular

Scope 2 - Emissions from the generation of electricity that is purchased or otherwise brought in from outside the organizational boundary.

Scope 3 - Emissions that are a consequence of the activities of the organisation, but occur from sources not owned or controlled by the organisation. These can be both upstream, e.g. the procurement of goods and downstream, the delivery of serviceW*nBT/F3 14.04 Tfisct(re)9(i 92 rsrf)-3(go)]TJET