	<p align="center">Full Council 25 November 2019</p>
	<p align="center">Report from the Strategic Director of Regeneration and Environment</p>
<p>Interim Report on Brent's Response to the Climate and Ecological Emergency</p>	

Wards Affected:	All
Key or Non-Key Decision:	n/a
Open or Part/Fully Exempt: <small>(If exempt, please highlight relevant paragraph of Part 1, Schedule 12A of 1972 Local Government Act)</small>	Open
No. of Appendices:	<p>Appendix A: Brent's Interim Climate & Ecological Emergency Action Plan (Winter 2019/20)</p> <p>Annexes</p> <ol style="list-style-type: none"> 1. Brent Carbon Scenarios 2030 Study: Scenario Carbon Trajectories 2. Council Influence vs Emissions by Sector & Source
Background Papers:	None
Contact Officer(s): <small>(Name, Title, Contact Details)</small>	<p>Oliver Myers Head of Environmental Strategy & Commissioning Regeneration & Environment Oliver.myers@brent.gov.uk 020 8937 5323</p>

1.0 Purpose of the Report

- 1.1 The London Borough of Brent passed a Council Motion to Declare a Climate & Ecological Emergency at the Full Council meeting on 8th July 2019. This Interim Report fulfils the commitment in the Motion to produce a report on this subject within six months. The report highlights the steps the Council has taken since making the declaration and the processes we have put in place to ensure that we follow through on our commitments.
- 1.2 The Council's Declaration of a Climate & Ecological Emergency included commitments to:
- Do all reasonable in the Council's gift to aim for carbon neutrality for 2030 and work with government to achieve the national 2050 target

- Empower a Lead Member to take responsibility for tackling climate change in Brent and produce a report on this subject within 6 months which also promotes the importance of local biodiversity
- Develop a Carbon Offset Fund and Strategy
- Redirect our investments into renewables and carbon free/neutral technologies
- Continue to deliver reductions in emissions through support for district energy & renewables
- Make representations to national government to urge them to provide the power and resources to the Mayor and local authorities
- Explore the viability of there being an annual green summit for interested parties
- Request that the appropriate scrutiny committee review the actions taken to reduce carbon emissions in Brent and the Council at the end of the municipal year

1.3 Since passing the motion, the Council has adopted a holistic, organisation-wide approach to addressing the climate emergency which is focusing on a range of inter-related environmental issues, from carbon reduction, waste and resources, air quality and ecology to climate change adaptation.

1.4 We have commissioned the Brent Carbon Scenarios 2030 Study, an independent assessment of the sources of carbon emissions produced in the borough and the potential pathways to achieve carbon neutrality.

1.5 We have established arrangements for the Brent Climate Assembly, taking place across three sessions in November and December, and we have supported a Youth Climate Summit hosted by the Brent Youth Parliament.

1.6 We have conducted a cross-cutting, internal sustainability review with input from officers from across the entire council, to take stock of what we are already doing to reduce carbon emissions and to consider what more needs to be done. This review has shown that whilst we are meeting good and best practice in some areas, there are some key areas where we need to do more.

1.7 The internal sustainability review, the Brent Carbon Scenarios Study and the Brent Climate Assembly recommendations will be considered together, alongside the report of the standing Air Quality Scrutiny Task Group, prior to the development of a ten-year borough-wide environmental sustainability strategy, that will be issued for public consultation in February and adopted by Cabinet in May 2020.

1.8 Whilst it is right that we allow time for these parallel processes to be concluded so that they can shape our new environmental sustainability strategy, the climate emergency requires immediate action. This is why we have developed an Interim Climate Action Plan (Winter 2019/20) – Appendix 1, so that we can get on with some important initiatives to help us lead by example as a council and to enable us to provide leadership and support to residents, schools, businesses and community groups so that they in turn can make their own contribution.

1.9 This report is structured as follows:

- Section 3: The climate & ecological emergency
- Section 4: Brent's holistic and systemic approach to tackling the climate emergency
- Section 5: The Brent Carbon Scenarios 2030 Study findings
- Section 6: The Brent Climate Assembly
- Section 7: Brent's Interim Climate & Ecological Action Plan (Winter 2019/20)
- Section 8: Overall process and timeline
- Section 9: Alternative options considered
- Section 10: Financial implications
- Section 11: Legal implications
- Section 12: Equality implications
- Section 13: Human resources/property implications
- Section 14: Environmental sustainability implications
- Section 15: Proposed consultation with ward members and stakeholders

Appendix A: Brent's Interim Climate & Ecological Emergency Action Plan (Winter 2019/20)

Annex 1: Brent Carbon Scenarios 2030 Study – Scenario carbon trajectories

Annex 2: Council Influence vs Emissions by Sector & Source

2.0 Recommendations

- 2.1 That the Full Council approves the Interim Climate & Ecological Emergency Action Plan (Winter 2019/20) – Appendix A.
- 2.2 That the Full Council approves the development of a borough-wide climate emergency strategy which will be issued for public consultation in the new year and adopted by Cabinet in May 2020.

3.0 Context - The Climate & Ecological Emergency

- 3.1 In October 2018, a Special Report from the Intergovernmental Panel on Climate Change, as required by the Paris Agreement, called for urgent action to limit global warming to 1.5°C, to avoid the risk of reaching 'tipping points' in our ecological and climatic systems that are likely to lead to runaway climate change.
- 3.2 That Intergovernmental Panel on Climate Change's Special Report, together with the growing grass roots movements such as the school climate strikes inspired by Greta Thunberg, community direct action and the Declare a Climate Emergency campaign, have since created a significant rise in media coverage and public sector commitments on this issue. The Mayor of London declared a climate emergency in December 2018, UK Parliament declared a national climate emergency in May 2019 and in June, the UK Government enshrined in law a net zero carbon reduction target by 2050.
- 3.3 Over half of 1st and 2nd tier local authorities (including most London boroughs) have since declared a Climate Emergency. It is being argued by organisations such as the Association for Public Service Excellence (APSE) that the environmental crisis can provide a positive, radical platform for change for local government for the next decade and beyond. The environmental crisis provides the opportunity for positive social,

economic and environmental transformation through a transition to a net zero carbon economy, a cleaner, greener environment and a fairer and healthier society.

- 3.4 As well as reducing the risks from the warming climate, action to tackle climate change has the potential to bring positive change for the local community on many of the issues that matter most to people, such as cleaner air, greener spaces, warmer homes, healthier travel and a thriving economy.
- 3.5 Improving the health of all through climate action has the potential to bring significant savings to NHS budgets, while it is also widely accepted by economists that the costs of action now to avert the consequences of global heating will be far lower than the costs of inaction in the future.
- 3.6 In taking forward the Interim Climate Action Plan and developing our new borough-wide environmental sustainability strategy, the Council will ensure that no-one is left behind; vulnerable households and people on low incomes in Brent will be provided with opportunities to benefit from low carbon and green technologies without suffering financial hardship.

4.0 Brent's holistic and systemic approach to tackling the climate emergency

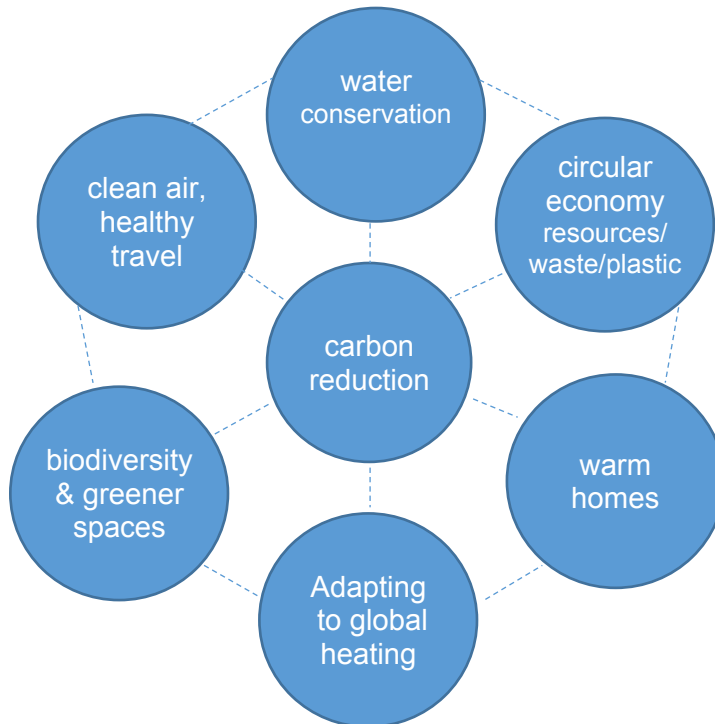
4.1 Since declaring the climate emergency, the Council has adopted a holistic, organisation-wide approach to tackling the following interwoven environmental issues:

- **Carbon emissions reduction:** reducing carbon emissions (the principal greenhouse gas) from the fossil fuels which are used to heat and power our homes and businesses and to fuel road transport in Brent; as well as reducing imported emissions from goods and services produced outside Brent, and outside the UK, that we consume, such as food, clothes and other products.
- **Warm homes:** ensuring that measures to reduce carbon emissions are affordable for vulnerable and low income households.
- **Local resilience to the impacts of global heating:** Minimising the local risks from global heating; improving surface water flood risk management and our resilience to droughts and heatwaves, including adaptations to buildings.
- **Clean air:** reducing emissions of Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀, PM_{2.5}) from transport, buildings and construction.
- **A circular economy:** moving from the throw away, “linear” economy to a circular economy where waste is avoided as far as possible, where waste created is used as a resource, with emissions from our waste collection processes minimised.
- **Greener spaces:** enhancing green spaces, natural habitats and biodiversity and planting more trees.
- **Water conservation:** water is a scarcer resource than people think and is predicted to get scarcer with global heating. Conserving water also saves energy.

4.2 The Council has completed a review of borough-level environmental data and mapped this on our Geographical Information System (GIS), to show the key environmental

impacts across the borough together with the locations of environmental infrastructure and facilities, so that in future solutions can be targeted in the right places. GIS maps have been created for sustainable travel, air quality, energy supply, energy efficiency, waste and recycling, green spaces, trees, ecology and surface water flood risk.

Figure 1: A holistic approach to environmental sustainability



4.3 The Council has also committed to fulfilling the following roles on the climate emergency:

Community leadership: As the democratically accountable body, we will provide the necessary leadership on this issue to bring the community together to address this issue with a positive and collaborative agenda, ensuring that the carbon neutral transition is fair for all.

Leading by example as a council: Reducing emissions from our own estate and operations (corporate properties, vehicle fleet, street lighting/signage), from council housing and from our construction programmes; improving the environmental sustainability of the Council’s procurement of goods and services, reducing our dependence on damaging materials such as single use plastics.

Strategic planning and infrastructure: Ensuring that environmental sustainability goals are fully integrated in strategic plans such as the Borough Plan, Local Plan, Inclusive Growth Strategy, Housing Strategy, Transport Strategy, Parking Strategy, Waste Strategy, Digital Strategy, Joint Strategic Needs Assessment. Creating better recycling, walking and cycling infrastructure; supporting green enterprise and reskilling the workforce; delivering

borough-wide decentralised energy schemes including community owned renewable generation.

Partnership: Developing pan-London and cross-borough initiatives where these can improve our impact. Build on existing and create new partnerships with key sectors in Brent including public sector partners, business and industry, energy suppliers, schools, residents' fora and community groups.

Attracting investment: Ensuring that Brent secures funding from existing and future national and regional programmes for carbon reduction, energy efficiency, waste reduction, air quality, sustainable urban drainage, biodiversity and tree planting.

Enabling: Making it easier for people in Brent to reduce their own impacts, for instance, allocating the Carbon Offset Fund for household, business, school and community carbon reduction initiatives.

Community engagement: Providing direct advice, for instance on recycling, and signposting residents to advice and support from other agencies such as the Energy Saving Trust.

5.0 Brent Carbon Scenarios 2030 findings

5.1 In August, the Council commissioned an independent Brent Carbon Scenarios 2030 Study. The Study has used Department for Business, Energy & Industrial Strategy (BEIS) Local Authority statistics as the baseline for Brent's territorial carbon emissions.

5.2 The BEIS statistics include emissions from domestic buildings (43% of all Brent's territorial emissions), commercial and industrial buildings (34%) and road transport (23%). They exclude emissions from the EU Emissions Trading Scheme industries, diesel rail and motorways. They also exclude emissions from aviation, shipping and agriculture, and emissions from off shored production of food and goods that are consumed in Brent.

5.3 The results of the Study are included in the Annexes to this report. The graph in Annex 1 (Brent Carbon Scenarios 2030 Study – Scenario carbon trajectories) shows:

- A 35% reduction in these carbon emissions in Brent between 2005 and 2017 (the latest available figures).
- Scenario 1 - Governmental and Mayoral projections to 2030, based on Government predictions for decarbonisation of the national grid and ambitious Mayoral projections for the uptake of a range of building and transport related carbon reduction measures in Brent by 2030. This scenario is estimated to achieve a 55% carbon reduction by 2030, at a cost of £681 million.
- Scenario 2 - An All Electric (cars and heating), Medium Insulation & Medium Solar PV Scenario, showing an 83% carbon reduction by 2030, at a cost of £4.2 billion.
- Scenario 3 - An All Electric (cars and heating), High Insulation & High Solar PV Scenario, showing an 87% carbon reduction by 2030, at a cost of £5 billion.

- Scenario 4 - An All Electric (cars and heating), High Insulation & High Solar PV Scenario and Zero Carbon Grid, showing a 100% carbon reduction by 2030, at a cost of £5 billion (the additional costs of a zero carbon national grid in Scenario 4 have not been quantified).

- 5.4 The figure in Annex 2 shows the size of Brent's carbon emissions for different sectors and sources together with an assessment of the Council's influence over these sources. For example, while the carbon emissions from our own estate and fleet are relatively very small, we have absolute control over these emissions, whereas carbon emissions from private sector housing are far more substantial but we have less control over those.
- 5.5 Clearly, the scenarios that have been modelled to achieve net zero carbon – or to at least get very close - are hugely challenging. They require a dramatic scaling up of activity and expenditure (across society) that is way beyond the current level. In the next ten years achieving net zero would require the removal of all the gas boilers in Brent and replacement with heat pumps, and the replacement of gas hobs and ovens with electric equivalents. All vehicles would need to be electrified by 2030. Taken together the electrification of heat, cooking and transport would undoubtedly put strains on Brent's electricity distribution infrastructure.
- 5.6 Other challenges we face are the need to upscale industries quickly from a very low level. Many economists have made the comparison with war time conversion of industries to produce armaments. This is truer of manufacturing than installation as reskilling involved to fit heat pumps instead of boilers is not hugely significant, but it would require an increase in supply – assuming most councils follow a broadly similar route.
- 5.7 All other London boroughs will be faced with these same challenges. Officers are therefore working closely with colleagues from the GLA and other boroughs to explore pan-London approaches to addressing these technical and financial challenges to delivering carbon neutrality.

Offsetting Potential from Tree Planting

- 5.8 The Woodland Carbon Code gives a calculation of carbon absorbed by different tree species at different stages of their life. The best species for sequestration over a 10yr period is given by a combination of sycamore, ash and birch of 1.91tonnes/hectare/yr.
- 5.9 To absorb the residual carbon emissions in 2030 for scenario 3 would therefore require 92,827 hectares. This is an area 21.5 times the area of Brent. However, over a 40yr lifetime the average absorption rate of this species mix increases to 6tonnes/hectare/yr. This emphasises the need to reforest as soon as possible to maximise sequestration rates – the area required then falls to around seven times the area of Brent. Obviously the vast majority of this would need to take place outside of Brent.
- 5.10 The most obvious way to free up land for reforestation is to change our diets to more land efficient diets and a diet with less lamb, beef and dairy achieves that aim whilst having the added benefit of reducing methane from ruminant digestive processes.

Consumption Emissions

- 5.11 There are no official statistics for consumption-based emissions broken down by local authority area. We only have national consumption emissions published by the Department for Environment, Food and Rural Affairs.
- 5.12 The emissions used in Brent's Carbon Reduction Scenarios 2030 Study modelling for Brent's homes, industry and commerce and road transport are produced by BEIS and are available up to 2017. DEFRA has only published 2016 UK consumption emissions. Based on either an equal population share of UK consumption emissions, or a share based on typical household expenditure in Brent, we have estimated that Brent's consumption emissions are around 4 to 5 times the size of the BEIS emissions (between 4,140 and 4,984 kilotonnes, compared to 951 emissions, for the year 2016). The reason for this huge disparity is due to the following reasons:
- UK consumption emissions are for all greenhouse gases whereas BEIS's LA statistics are just carbon dioxide emissions
 - BEIS LA statistics do not cover all the territorial sectors (leaving out agriculture, large industrial, waste etc)
 - BEIS LA statistics omit air and sea travel
 - Imported emissions from abroad
 - Imported emissions from within the UK
- 5.13 The scale of emissions from consumption highlights the importance of ensuring that everyone is 'climate literate' and able to make informed choices about their own lifestyles and purchasing decisions.

6.0 The Brent Climate Assembly

- 6.1 The scale of the climate emergency challenge requires us to build consensus with all sections of the community on the radical changes that will be needed in the way we heat and power our homes, move about and make choices about what we eat and buy. A citizen's assembly is an innovative and proven way of bringing together a random, representative body of people to learn about, deliberate upon, and make recommendations on a complex issue.
- 6.2 A Brent Climate Assembly is therefore being held to explore with local residents the question, "How can we work together to limit climate change and its impact while protecting our environment, our health and our wellbeing? Consider the role of the council, businesses and organisations, and individuals". Three assembly sessions are being held on Saturday 9th November, 23rd November and 7th December in the Conference Hall at the Brent Civic Centre.
- 6.3 Assembly members will be representative of the borough in terms of age (16 and over), gender, ethnicity, socio-economic grade and where they live and are therefore likely to reflect a range of views and attitudes towards the environment. They will hear evidence from a number of academics and experts on topics such as climate science, transport, housing, energy and ecology.

- 6.4 The Brent Climate Assembly is being designed and run by an independent public engagement organisation called Traverse, while an independent, expert Advisory Board is overseeing the Assembly process to ensure that it meets best practice in terms of its design and the robustness of the science and information presented. The Advisory Board members are:
- Dr Joanne Wade OBE (Deputy Chief Executive of the Association for Decentralised Energy)
 - Richard Jackson (UCL Estates Director of Sustainability)
 - Keith Garrett from The Sortition Foundation, an organisation that helps ensure that Citizens' Assemblies are run to the highest possible standards
- 6.5 In addition to the Assembly proceedings, we want to hear from everyone. A Brent Climate Assembly website is now live and provides information on the Brent Climate Assembly and a platform for the general public in Brent to submit their ideas for consideration as part of the Assembly process. The council has promoted the Assembly website to a wide range of groups in Brent to seek as many ideas as possible.
- 6.6 The **Brent Youth Climate Summit**, hosted by the Brent Youth Parliament, took place on 24th October, attended by 20 young people. In addition, we have written to all schools to obtain further ideas, with all recommendations being presented to the middle Brent Climate Assembly session.
- 6.7 The Brent Climate Assembly final report and recommendations will be available before the end of this year. The report will be prepared by Traverse following the final Brent Climate Assembly session and will be a note of the proceedings and the recommendations, which will be forged from a consensus of views.
- 6.8 The Brent Climate Assembly recommendations will be advisory and therefore non-binding. It will inform the development of a draft borough-wide climate emergency strategy in the new year. The draft strategy will be issued for public consultation which will include a Green Summit open to everyone in Brent to come and share their ideas.

7.0 Interim Climate Action Plan (Winter 2019/20)

- 7.1 The Council has carried out a comprehensive, cross-cutting review of our activities that contribute to the climate emergency agenda, to assess areas where we are good at and areas where we need to go further. This review has helped the Council to develop a set of short term priorities which are included in the Interim Climate & Ecological Emergency Action Plan (Winter 2019/20), in Appendix 1. These actions are organised under the thematic headings listed below and are accompanied by an explanation of the key facts and a summary of what we are already doing for each theme.
- Leading by example
 - Strategic planning and infrastructure
 - Businesses and other institutions
 - Schools & young people
 - Homes & vulnerable residents
 - Supporting communities

8.0 Overall process and timeline

8.1 The table overleaf details the key events and stages taking place during Winter 2019/20, culminating in the adoption of a ten-year borough-wide climate change strategy by Cabinet in May 2020.

Table: Full process and timeline to May 2020

Date	Stage	Board/Audience
9 Nov – 7 Dec	Brent Climate Assembly (three sessions)	BCA
25 Nov	Interim Climate Emergency Report	Full Council
End Dec	Brent Climate Assembly final report produced	Assembly
10 Feb	Consideration of Brent Climate Assembly report and Draft Brent Climate Strategy for Public Consultation	Cabinet
Feb/Mar	Public consultation on Draft Brent Climate Strategy, including a Green Summit	General public
21 April	Resources and Public Realm Scrutiny Committee	Scrutiny
28 May	Adoption of a Brent Climate Strategy	Cabinet

9.0 Alternative Options Considered

9.1 A business as usual approach to Council action on environmental sustainability would not be sufficient to address the climate emergency and risks criticism of the Council, should it be considered by others to have fallen short of the commitments it has made in the Declaration.

9.2 An approach which solely focuses on the Council's own estate and operations is not supported, in view of the above but moreover, because the Council's own emissions only account for 1% of Brent's total territorial carbon emissions, with there being no other body in Brent that can play a leadership role for the borough.

9.3 Taking firmer action on the necessary environmental change without first building consensus on that change with the community carries the risk of alienating the community on this issue.

10.0 Financial Implications

10.1 There are currently no confirmed costs or savings identified at this stage, but it should be noted that any emerging costs, financial benefits or opportunities to access external funding arising from the progress with the actions in the Interim Climate Action Plan (Winter 2019/20) would be highlighted in subsequent reports.

11.0 Legal Implications

11.1 Under section 1(1) of the Climate Change Act 2008 (“the 2008 Act”), as amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019, it is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is 100% lower than the 1990 baseline. The “net UK carbon account” is the amount of net UK emissions of targeted greenhouse gases for a period adjusted by the amount of carbon units credited or debited to the account. The “1990 baseline” is the baseline of net UK emissions of targeted greenhouse gases against which the percentage amount in subsection 1(1) of the 2008 Act is applied. The percentage amount in section 1(1) of the 2008 Act was amended from 80% to 100% in June 2019.

11.2 The council is not under any legal obligations to set carbon reduction targets.

12.0 Equality Implications

12.1 The Brent Climate Assembly will be representative of the borough in terms of age, gender, ethnicity and socio-economic grade. Arrangements are being made so that people with disabilities are able to participate fully and translators will also be provided where required.

12.2 A full Equalities Impact Assessment will accompany the development of a borough-wide environmental sustainability strategy.

13.0 Human Resources/Property Implications (if appropriate)

13.1 There are no immediate staffing implications. If new arrangements need to be put in place to deliver the Council’s commitments on sustainability, some staff may be affected and the Council’s Managing Change process would then need to be instigated.

14.0 Environmental Sustainability Implications (where relevant)

14.1 Environmental sustainability considerations are integral to the purpose, content and recommendations in this report.

15.0 Proposed Consultation with Ward Members and Stakeholders

15.1 The Brent Climate Assembly takes place in November and December and the Brent Youth Parliament-led Youth Climate Summit and ideas posted on the Brent Climate Assembly microsite will be collated and submitted to the Brent Climate Assembly proceedings.

15.2 We are exploring convening the Brent Citizen’s Panel in January to consider the report of the Brent Climate Assembly.

15.3 The draft borough-wide environmental sustainability plan will be issued for public consultation in the new year, including a Green Summit open to everyone in Brent to share their ideas, with a report to Scrutiny Committee during its development.

Report sign off:

Amar Dave
Strategic Director of Regeneration & Environment

