



## **Gravesham Borough Council**

# **Climate Change Annual Report December 2021**



## Foreword from the Leader of the Council

It gives me great pleasure to present to you the second Climate Change Annual Report of the council.

The eyes of the world fell on the UK this year with the hosting of COP26 in Glasgow in November. Minds have also been focussed by extreme climate events around the world, including savage wildfires and flooding.

If anyone was ever in any doubt about the need to act, the evidence to convince them otherwise is right in front of our eyes.

But while COP26 focussed on a global approach to tackling climate change, local councils such as Gravesham have a much more immediate role to play in leading by example and taking their communities along with them in the road to a cleaner, greener future.

We are making great strides in our efforts to become a Net Zero Borough by 2030. Members and officers are working together to ensure our climate change action plan gets us to where we need and want to be.

Achieving that target involves every team within the authority and is a mixture of delivering big ticket, high profile projects and small, every day changes that all contribute to the overall picture.

We are always keen to learn from others and to follow best practice, so this year we have worked alongside private sector partners with expertise in decarbonisation and invested in technology that helps us plot our way step by step to our 2030 goal.

And we aim to take our community with us through a programme of engagement and education, for we all have our part to play.

I am greatly encouraged by the progress we have made over the past 12 months, but am under no illusions as to the scale of the task facing us.

Each new project has the potential to bring with it unexpected hurdles to be cleared, but clear them we will.

Every report that now comes before members for approval now has a section asking what impact on our Net Zero mission the action will have. Climate change and how we combat it locally is at the heart of everything we are doing.

I hope it is for you too.

I would like to thank everyone who has contributed to the delivery of the activity set out in this annual report and, I hope, we can continue to work together for the benefit of the Borough as a whole.

A handwritten signature in black ink that reads "John P. Burden".

Cllr John Burden  
Leader of the Executive



## Introduction

The last 12 months have presented the council with a number of challenges with the continued pressure of COVID-19 but this has also presented a number of opportunities.

The council continues to focus on the complete reduction in carbon dioxide (CO<sub>2</sub>) from its own operations and whilst previously emissions relating to nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>) were not being considered, they do now form part of the action planning for the council, albeit the focus remains strongly on CO<sub>2</sub> emissions, which contribute around 80% of total emissions nationally.

To ensure that the council is directing its resources to the activities that are going to have the biggest impact, the council took the opportunity to engage with Local Partnerships. Local Partnerships is a joint venture between the Local Government Association, HM Treasury and the Welsh

Government, and specifically has worked with the council on sharpening its approach to addressing Climate Change. This has resulted in the development of a Climate Change Strategy for 2022-30, which clearly sets out how the council will be able to meet its operational net zero ambitions by 2030, as well as work with its tenants, borough residents and businesses to reduce emissions in its housing stock and the wider borough.

Financing will be critical to the delivery of the actions set out in the Strategy. The Government launched its Green Finance Strategy in July 2019, which is intended to support the UK's economic policy for strong, sustainable and balanced growth, the delivery of a modern Industrial Strategy and the domestic and international commitments on Climate Change, the environment and sustainable development. Although the council has a specific Climate Change Reserve to provide seed funding for activities relating to the Climate Change agenda, Green Finance will be a key area of focus for both recovery after the COVID-19 pandemic, and for renewal programmes to deliver climate emergency ambitions.

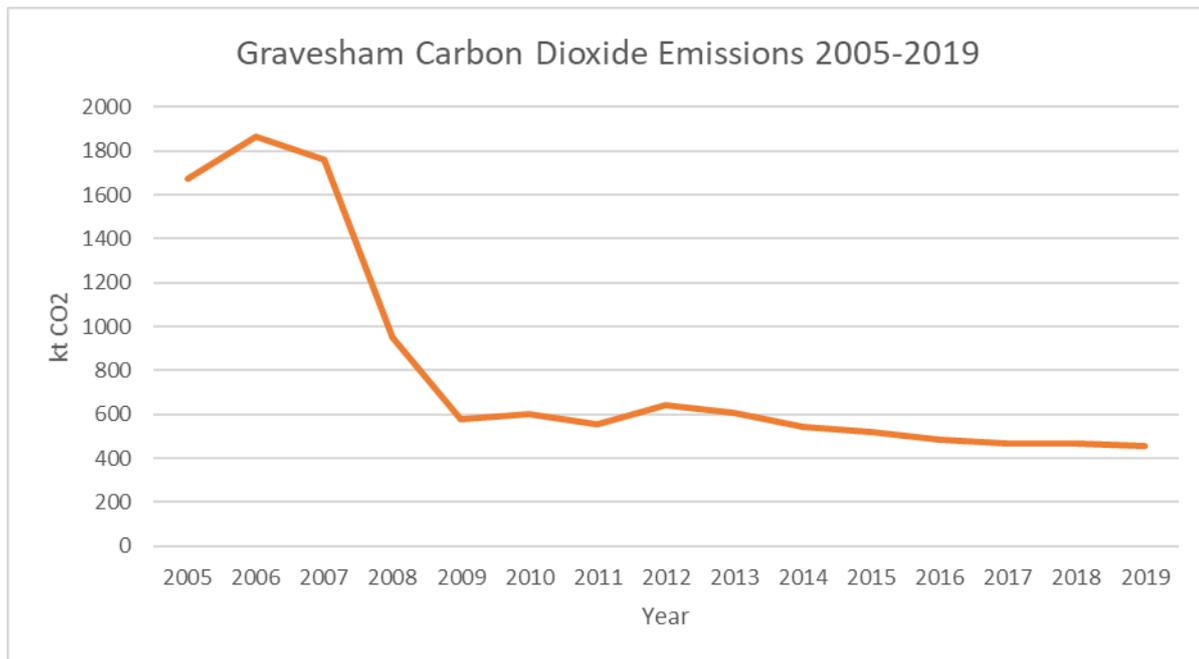
There are a number of potential Green Finance funding streams and in order to exploit these as much as possible, the council has recently employed a Funding Officer, whose role is to ensure that the council has early awareness of potential grant funding which are becoming available. This will enable projects for funding to be appropriately prioritised and applications made where the funding aligns with the council's corporate priorities. The Funding Officer will also be able to raise awareness of grant funding that is available for community groups and partners of GBC; there will be a specific focus on grants and funding opportunities relating to the council's Climate Change ambitions.



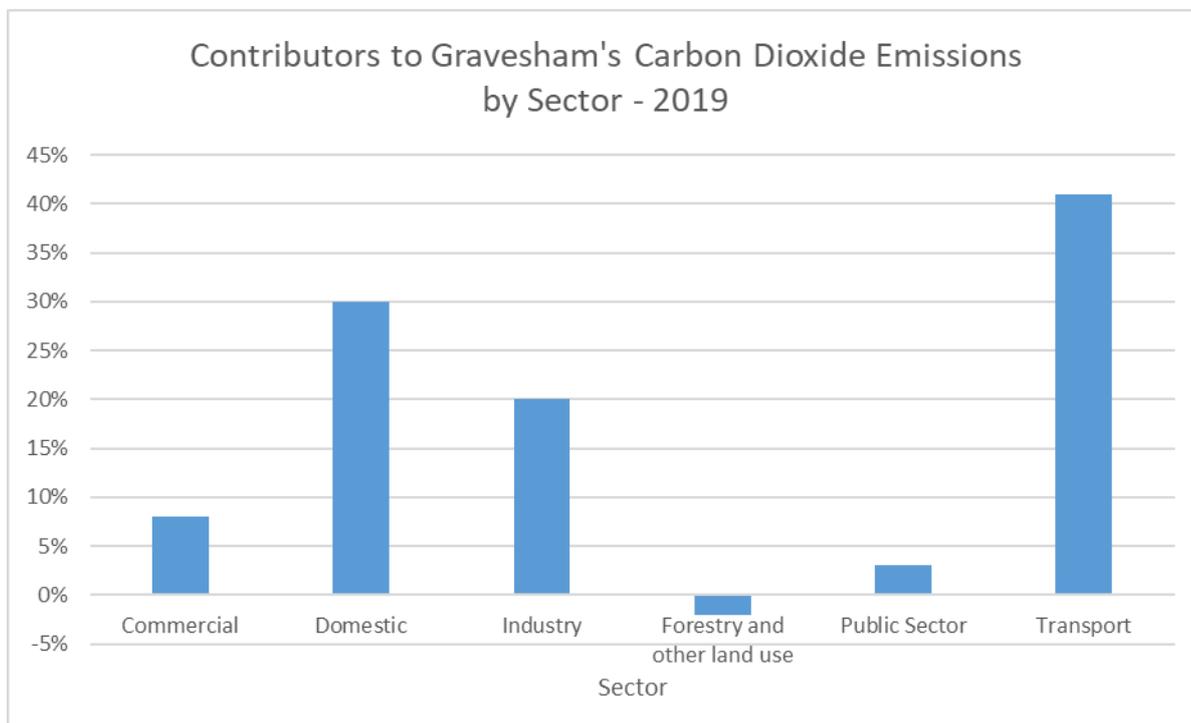
## Update on Borough and Council Emissions

### Borough Emissions

Data on local and regional end-user carbon dioxide (CO<sub>2</sub>) emissions is collated annually by the Department for Business, Energy and Industrial Strategy (BEIS) in order to provide a nationally consistent evidence base for greenhouse gas emissions. The latest data for 2019 was published in June 2021 and shows a continuing decrease in CO<sub>2</sub> emissions within Gravesham.



The Transport and Domestic sectors account for more than 70% of CO<sub>2</sub> emissions in the borough.



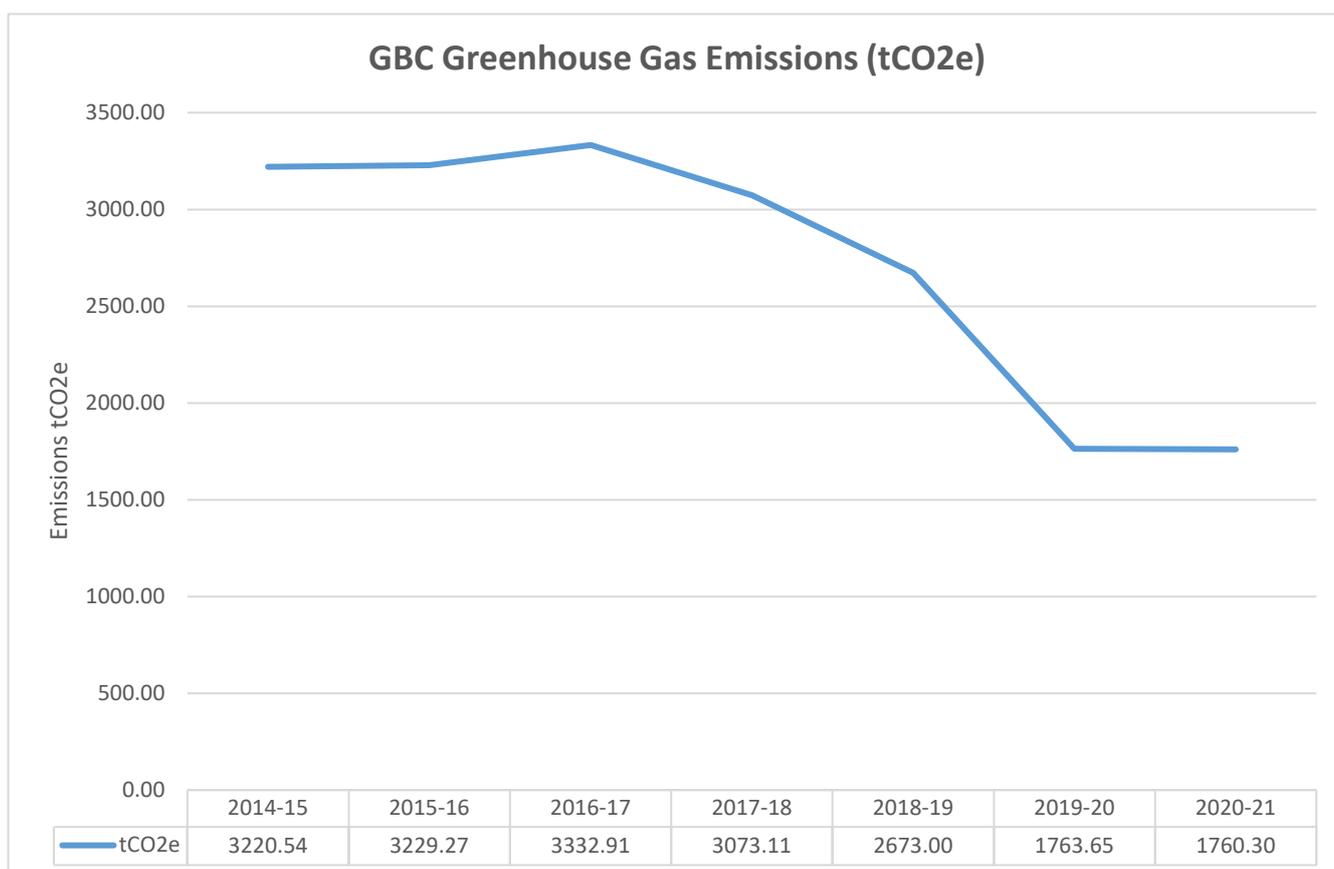


## Council Emissions

During 2021 the council has continued to proactively taken actions to reduce emissions across its own estate and the wider borough.

Working with Local Partnerships, the council undertook a full audit of the data that had previously been reported in relation to the Greenhouse Gas Emissions generated from its own operations. This audit identified that there had been some errors in the previous year reporting which have now been addressed.

The graph below provides an updated summary of the level of Greenhouse Gas Emissions from GBC operations since 2014-15, using the Local Partnerships Accounting Tool:



The Council's total gross greenhouse gas emissions continue to be recorded against the three specific 'scopes' for categorising the emissions:

- **Scope 1** – All Direct Emissions from the activities of an organisation or under their control. Including fuel combustion on site such as gas boilers, fleet vehicles and air-conditioning leaks.
- **Scope 2** – Indirect Emissions from electricity purchased and used by the organisation. Emissions are created during the production of the energy and eventually used by the organisation.
- **Scope 3** – All Other Indirect Emissions from activities of the organisation, occurring from sources that they do not own or control.

Total gross greenhouse gas emissions for Scope 1, 2 and 3 for the last financial year (2020-21) was 1,760.3 tCO<sub>2</sub>e (tons of carbon dioxide equivalent – taking account of methane and nitrous oxide as well as carbon dioxide emissions). The graph above shows that there has been a clear reduction in Greenhouse Gas Emissions since 2016-17.



## Carbon Reduction Actions during 2021

In December 2019, the council put in place an action plan detailing a suite of progressive interventions for it to deliver in order to prepare the Borough to be carbon neutral by 2030, and to do what is within its power and resources to make Gravesham Borough Council carbon neutral by 2030.

During 2021, key areas of activity against the three identified objectives have included:

### Objective 1 – Cleaner Environment

- **Increase in home composting**  
Home composting was promoted by the Council through a social media campaign in the Spring. The campaign ran for four weeks to raise awareness of the ease and convenience of composting at home, alongside the waste minimisation, carbon reduction and financial savings benefits.
- **Introduction of recycling in flats**  
A total of 70% of council-owned and 31% of private flats in the borough now have recycling facilities following an audit that took place in 2020-21. The council has also commenced a programme to roll-out recycling facilities to all of its supported housing units, with 38% now able to access a full recycling service, including food waste.
- **Installation of ‘On the Go’ recycling facilities**  
Following a successful trial at St Andrew’s Gardens during 2020, ‘On the Go’ recycling facilities have been installed at a number of strategic locations across the borough, including parks, open spaces and areas of high footfall, such as local shopping centres. 68% of the materials collected through these facilities has been able to be accepted for recycling which would have otherwise ended up in the waste stream. To boost recycling levels further, action will be taken to identify bins that are regularly contaminated and using targeted signage, bin stickers or social media campaigns to encourage separation and proper disposal of waste.
- **Bin sensor trials**  
A trial of bin sensors commenced in November 2021 which measure how full litter bins are and alerts the council when the bins requires emptying. Once established, this technology will be used to produce revised and more efficient emptying schedules, anticipated to reduce the number of bin emptying visits, waste vehicle mileage and therefore carbon emissions.
- **Progression of Street Champions Project**  
The council’s *Adopt a Street – The Street Champions* litter picking initiative has gone from strength to strength, with a 288% increase in the number of volunteers taking part since January 2020. Moving forward, it is intended to extend recycling capabilities to these volunteers to further boost recycling in the borough and provide an opportunity for participants to understand more about the importance of separation of waste and recycling. Data collected to identify bins that are regularly contaminated and using targeted signage, bin stickers or social media campaigns to highlight the issue of contamination.
- **Biodiversity improvements**  
Wildflower meadows provide vital feeding and nesting habitats for wildlife, and in 2021 the Council has created more patches of wildflower meadows than ever before, including increasing urban green spaces in the Painter Ash Estate and Riverside area. Certain grassed areas of the Borough were also cut less frequently to improve grassland habitat for pollinating insects. Kent Wildlife Trust and volunteers from the Windmill Hill Association have been working with Gravesham Borough Council gardeners to build a buzz garden by turning the old unused grass tennis court into a mixed garden, intended to safeguard and readdress the decline of rare bee populations by creating and restoring habitat and linking isolated populations together through the creation of flower-rich ‘stepping stones’.
- **Review of GBC fleet vehicles**



Working with the Energy Saving Trust and Cenex, the council is undertaking a review to determine how best to decarbonise its operational vehicle fleet, with this project expected to commence in 2022. In terms of fuel usage during 2020-21, there has been a further reduction in the amount of fuel used per employee of 266 litres per employee compared to the previous financial year. The council is also working with the Energy Savings Trust to review business mileage by council officers in privately owned vehicles to assess how best to support staff in reducing their impact on the environment.

- **Revised Hackney Carriage and Private Hire Licensing Policy**

The council updated its Hackney Carriage and Private Hire Licensing Policy to ensure that all vehicles used must now meet or exceed Euro 6 standards, therefore ensuring emissions from taxi and hackney carriage vehicles in the borough are reduced.

## Objective 2 – Strategic Environment

- **Installation of Electric vehicle charging points**

There has been significant progress in the installation of electric vehicle charging points:

- A total of eight electric vehicle charging points have been installed in Parrock Street and Milton Place car parks to facilitate the use of electric vehicles by residents and visitors to Gravesend Town Centre.
- The council has secured over £130,000 of external funding to install 10 dual chargers in Parrock Street car park in early 2022, aimed at providing charge points to residents in the surrounding area who will find it difficult to consider moving to an electric vehicle as they do not benefit from private driveways.
- The council has signposted parish council and other organisations to opportunities for funding of electric vehicle charging facilities in parished areas.
- In partnership with other local authorities in Kent, the council has secured arrangements to bring the largest networks of consistent charging points for electric vehicles to the borough and the wider county through the Kent 600 project with Connected Kerb.

- **Appointment of sustainability consultant**

A Sustainability Consultant has been appointed on the St Columbas Close proposals to work alongside the architects from inception to ensure that the project considers all sustainability and efficiency aspects in the build. The properties will be built to PassiveHaus principles and if the scheme progresses as per the current proposals, it will reduce carbon emissions by 30,000 tonnes per year, and deliver net zero homes that will be cost effective for residents.

- **Improvements for council-owned housing stock**

The Housing Service have been working hard to improve the energy efficiency and carbon emissions of the housing stock and have progressed a number of initiatives:

- Formation of a dedicated Energy Project Team to lead on the decarbonisation of the housing stock. Members of the team have undertaken the Domestic Energy Assessor's course as well as the City & Guilds Level 2 Fuel Debt Advice in the Community.
- Funding of £297,000 has been secured from the Local Authority Delivery Scheme (Phase 2) which is being used to implement measures to reduce heat loss and improve the insulation in 285 council homes with some of the lowest energy ratings. The homes will see an improvement in the current EPC ratings, reduced energy costs to the resident as well as a reduction in carbon emissions. Early estimations are that the project will result in a carbon saving in the region of 265 tonnes.
- A funding bid has been submitted to the Social Housing Decarbonisation Fund which, if



successful, will improve the Energy Performance Certificate (EPC) rating of 364 council homes from D-G to ratings of C and above. It is estimated that this will project will deliver carbon emissions reductions of 308 tonnes and an average saving on energy costs of £183 per home.

- An Air Source Heat Pump (ASHP) trial is in progress at a property previously on solid-fuel heating. Carbon emissions have been reduced by 5 tonnes, a reduction of 77%. The ASHP will provide a modern thermostatic control heating system replacing an outdated inefficient system which can produce high levels of carbon monoxide. Estimated fuel saving is £656 per annum.
- LED lighting replacements has taken place in communal areas of two council-owned flatted blocks. Each light fitting has reduced carbon emissions from 202kg to 38kg per year, a reduction of 164kg. Total reduction for each block is 82 tonnes of CO<sub>2</sub> per year and 80% of previous emissions.

- **Facilitating sustainable development**

The Council has been actively working with developers to encourage sustainable development within the borough:

- Discussions between the developer of Albion Waterside and the Environment Agency have been facilitated to develop flood mitigation solutions for the local area
- Working with Rosherville Limited, the council has secured sustainability benefits from The Charter development, including control of waste and pollutants from construction and the use of local labour, efficient building performance through thermal envelope heating and cooling systems and onsite renewable energy, biodiversity gains, an onsite cycle hire scheme & electrical vehicle charging points.

- **Supporting our Residents**

The council has continued to run a number of initiatives to support its residents in making their homes more energy efficient and securing savings in the supply of energy. Specifically, these include:

- Warm Homes Grant and ECO/LA Flex – 23 Private Sector households have been assisted with heating measures.
- Energy Deal – one auction took place this year in May resulting in 48 registrations; the auction scheduled for October did not take place due to the changes to the energy market. Since February 2020 a total of 306 residents have switched their energy provider, resulting in financial savings of £47,182 and carbon savings of 34 tonnes.

- **Planning considerations**

The Local Plan is currently under review and will look to incorporate specific planning policy on climate change and actions to mitigate this. Specifically, a number of policies are being consulted on in respect of activities such as EV Charging Points, the use of renewable and low carbon energy and biodiversity with a view to ensuring considerations of such point are a fundamental part of Planning Policy for the borough.

- **Conversion of street lighting to LED.**

Gravesham Borough Council own 508 street lights across the borough located mainly on Housing Land, in car parks and parks and open spaces. All of these assets have old energy consuming lanterns and as such a project commenced working with Kent County Council Street Lighting Team and their contractors to upgrade all of our assets to LED lanterns. There are two drivers to changing to LED:

1. LED lanterns offer a 70-80% energy saving on each lantern compared to the current lantern. LED are also much brighter and more reliable.
2. As part of the project, once the assets have been upgraded to LED and as long as they



meet the KCC criteria, then KCC will adopt the street lights and take full ownership of the asset and the ongoing energy and maintenance costs.

### Objective 3 – Progressive Council

- **Active travel plans**

The council has continued to explore alternative travel arrangement to support officers in the reduction of emissions relating to travel:

- The council has signed up to the Employer Travel Club with Arriva which seeks to encourage people to utilise public transport and offers staff savings on local Arriva bus travel.
- The council is also currently researching and considering a number of different cycle to work and cycle hire scheme options as well as looking into developing potential car sharing arrangements.

- **Introduction of a hybrid-working policy**

From November 2021 the council has implemented a hybrid-working policy for council employees which allows for work to be undertaken from home or council buildings. This is intended to reduce the number of journeys undertaken by council officers and reduce carbon emissions from such journeys. The use of video conferencing for officer meetings has also been adopted and is encouraged.

- **IT Infrastructure**

The council has continued to adopt a “cloud first” policy for new system procurements in order to reduce its own data centre power consumption. Power monitoring which will be used to measure the impact of this approach moving forwards.

- **Efficient Civic buildings**

The council has commenced a review of its administrative buildings, seeking to ensure that new buildings target net-zero and, where appropriate, retrofitting is considered for existing buildings. The ongoing project to retrofit lighting in the council’s administrative buildings is expected to be completed by the end of 2021. It is estimated that this will achieve an estimated annual carbon reduction of 200 tonnes per annum across the council estate, with 97 tonnes being delivered in phase one and 103 tonnes in phase two.

- **Reducing reliance on single-use plastics**

The council has implemented a policy to purchase only Vegware disposable Cups and compostable spoons across the Civic Centre and The Woodville; all of these items are compostable. The Woodville are also actively seeking to source individual products that are wrapped in non-plastic packaging.

- **Working with partners**

The council has continued to work with partners such as the Ebbsfleet Development Corporation, Kent County Council and Kent District Councils on countywide climate change initiatives, such as the Kent 600 project and actions to support the Kent and Medway Low Emissions Strategy.

- **Working with schools**

The council has agreed a partnership with Tymberwood Academy to develop and promote climate change action across schools in the borough, which will involve council officers attending school assemblies to discuss specific climate change issues. Through publicity, the partnership will present Tymberwood Academy as an exemplar and will encourage other schools in the Borough to follow its lead.

- **Youth Climate Change Conference**



In partnership with the Gr@nd and the Gravesham Youth Council, the first Youth Climate Conference was held at the Civic Centre in November 2021 with the purpose of promoting climate change across the borough and giving young people the opportunity to discuss their concerns and what they can do to mitigate climate impacts in Gravesham. Pupils attended from St Botolphs, Gravesend Grammar, Mayfield Grammar, Northfleet School for Girls, St George's, North Kent College, Walk Tall and GYC and GYG and identified a number of specific focus areas for young people in Gravesham.



## Future Carbon Pressure

The borough of Gravesham and the surrounding areas continue to go through a significant amount of redevelopment both from a local perspective but also in terms of the global impact of Climate Change.

### Global Future Pressures

The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 and is the United Nations body for assessing the science relating to climate change. The IPCC is currently preparing its Sixth Assessment Report specifically looking at three key areas:

- The Physical Science Basis
- Impacts, Adaptation and Vulnerability
- Mitigation of Climate Change

At the time of writing this report, the findings of the first workstream – The Physical Science Basis – has been completed. This found that:

- Global surface temperatures were 1.09°C higher in the decade between 2011-2020 than between 1850-1900.
- The past five years have been the hottest on record since 1850.
- The recent rate of sea level rise has nearly tripled compared with 1901-1971.
- Human influence is "very likely" (90%) the main driver of the global retreat of glaciers since the 1990s and the decrease in Arctic sea-ice.
- It is "virtually certain" that hot extremes including heatwaves have become more frequent and more intense since the 1950s, while cold events have become less frequent and less severe.

Against this backdrop, there will be significant future pressures on the UK and on Gravesham in term of both carbon production and carbon reduction.

### Local Future Pressures

Within the borough, the Lower Thames crossing development is moving forward, despite various delays with the development consent order. The development will increase carbon emissions by 5.7 MtCO<sub>2</sub> over its 60-year life. Whilst it is currently unclear how much of this impact will be on the borough of Gravesham and its residents, the council is working with colleagues from Thurrock Council and Highways England to identify mitigating activities to reduce the increase in emissions as much as possible.

Whilst the London Resort project is principally based on the Swanscombe Peninsula, there will undoubtedly be an impact on the surrounding area, including Gravesham. The project is still going through its initial proposal stage and it is understood that the application for the development consent order is due to be submitted to Government early 2022. The council has provided comments on the proposals to date and will continue to monitor the project as it progresses.



## Areas of Focus for 2022

The council has developed a Climate Change Strategy for 2022-30 which has prioritised the actions that the council needs to take, in order to have the biggest overall impact on emissions across the borough.

The council will focus on the following three key areas:

- **Gravesham Borough Council – the organisation**  
Focusing on how the council can change its own operations, and those of its employees, wherever possible to reduce the level of carbon emissions its produces.
- **Gravesham Borough Council – the housing provider**  
Exploring opportunities to bring the council's current housing stock up to a better level of energy efficiency standard where it is possible to do so; ensuring new council housing is built to a high level of sustainability and ensuring local planning policy reflects the need for the borough to consider energy efficiency in all developments moving forward.
- **Gravesham Borough Council – the community leader**  
It is clear that the council cannot directly affect all of the changes that are needed across the borough. However, in its role as a community leader, it can work with residents, community groups and partners to educate and support them in making changes which will have a positive impact on the level of carbon emissions in the borough.

## Key deliverables in 2022

The council's Climate Change Strategy for 2022-30 sets out a number of high-level actions against each of the three areas above, focusing on those areas that will have the greatest impact on reducing the level of emissions across the borough. The high-level delivery plan is supported by a detailed management action plan.

For 2022, the council will be focusing on:

- Implementing a Carbon Literacy Training programme across the council – for both officers and Members to ensure everyone has an awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis.
- Completing the review of the council fleet vehicles, in partnership with the Energy Saving Trust (EST) to identify opportunities to reduce the impact on the environment. This will include a review of the current layout of the Brookvale Depot in order to develop an action plan for delivering fleet vehicle charging infrastructure.
- Continuing to progress plans to replace the existing Civic Centre, The Woodville, Cascades Leisure Centre and Cygnet Leisure Centre (the largest energy-using operational assets of the council), targeting 2026 for delivery of new, net-zero buildings.
- Carrying out a review of the planned works programmes for the council housing stock to see if any improvements and changes can be made such as triple glazing, use of recycled materials, installation of green roofs.
- Exploring of energy saving initiatives for the council's housing stock including the potential retrofit installation of Flue Gas Heat Recovery Systems (FGHRS) to existing gas boilers as a short term measure, water saving initiatives such as installing water efficient shower heads, tap aerators, dual flush toilets, waste water heat recovery and providing water butts and a review of the heating system installation programme.
- Continuing to explore opportunities for the installation of electric vehicle charging points both in council car parks, off-street parking opportunities and within the council's own housing



developments.

- Exploring opportunities for the implementation of green infrastructure on the council's property estate including pilot programmes in key areas and working with Trees for Cities to identify suitable locations on Council owned land to deliver a carbon offsetting programme to support the delivery of net zero carbon targets on our estates.
- Implementing an overarching Communications Strategy to clearly articulate how the council will seek to engage with residents, businesses, partners and communities to encourage and support climate change action across the borough. This will include an element of education to enable all of those who live, work and got to school in the borough to make informed decisions regarding their energy usage.

The actions set out will continue to be progressed and monitored both through the council's internal officer working group and the newly established Climate Change Advisory Panel which will report directly to Cabinet.