





A foreword by Cllr Leggett

The challenge we all face with regard to climate change is recognised across the globe. It is not a problem Broadland District Council can solve on its own. It means taking a lead with new initiatives, ensuring planning applications comply to all environmental regulations, partnership working with others, signposting communities, businesses and individual residents to ways in which we can improve our environment for future generations.

Our plan is a living document and encompasses work which we started some time ago. It builds on our successes. As a council, Broadland has the highest recycling rate in Norfolk and leads on the largest tonnage of green waste. But we must all do better, recycling more and generating less residual waste.

We will be putting our own house in order using greener vehicles, exploiting technology to reduce business travel and eradicating single use plastics.

I invite you all to work with us, on this journey, to protect and enhance our environment.

YEAR ENVIRONMENTAL STRATEGY

Our commitment

Broadland District Councils is committed to continuous environmental improvement; playing our part in tackling environmental damage and improving the quality of the local environment.

We have a corporate responsibility to comply with all environmental legislation and aim to influence suppliers and partners to do likewise and encourage good practice. We will seek to promote the conservative and sustainable use of natural resources, and aspire for Council activities to be carbon neutral well ahead of the Government's 2050 target.

We are ideally placed to lead by example and ensure our own activities and the services we provide protect and enhance the local environment. We will also promote environmental awareness within the community and work with local community groups to achieve environmental change. We will show ambition and engage with stakeholders.

This strategy expands on the objectives set out in the Strategic Plan, showing the Council's approach to addressing environmental concerns within the organisation and within the districts and highlighting where communities and businesses can work with us.

National Strategy & Policy

The Government's 25 Year Environment Plan, published in January 2018, brings together the Clean Growth, Clean Air and Industrial Strategies. It sets out a comprehensive and long-term approach to protecting and enhancing the environment for the next generation.

The goals of the plan focus around achieving cleaner air and water and protecting threatened species and providing richer wildlife habitats whilst using resources more wisely and radically reducing the waste we generate. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first. The document outlines plans to encourage sustainable development and support innovation to achieve clean growth and increase resource efficiency.

The Environment Bill is also currently going through Parliamentary approval. If approved the Bill makes provisions about targets, plans and policies for improving the natural environment, sets out reporting

requirements about environmental protection, sets the scene for the proposed new regulator - the Office for Environmental Protection, gives waste and resource efficiency targets, redesigns air quality regulation, provides powers to recall of products that fail to meet environmental standards and makes provisions to manage water resources sustainably.

Regional Strategy & Policy

In November 2019, Norfolk County Council adopted a new Environmental Policy building on the 25-year Environment Plan and their current business plan. The document sets out key policy aims of conserving and enhancing the local environment whist exploring new ways to make the countryside and coast as accessible as possible to improve health and wellbeing. There is also a focus on increasing resource efficiency and reducing pollution and waste which we can support at a district level.

The Local Environment

The Government produces a National Atmospheric Emissions inventory¹, which assesses the emissions from Local Authority areas broken down by different sectors.

According to this, in 2017 Broadland produced 707.5kilotons of CO₂ which equates to 5.5tonnes of CO₂ per capita, This represents a reduction of 19.7% in Broadland over a five-year period. Looking at the data by sector, the Broadland Council area has experienced an increase in emissions from transport over the previous five years whilst the greatest reductions have been seen in the industry and commercial sector.

The national average for England in 2017 was 5.1 tonnes per capita. Whilst the Norfolk average was 5.7 tonnes per capita. Due to the rural nature of the county there is reliance on cars. There are also large numbers of properties which are of solid wall construction and reliant on heating oil and solid fuel due to limited gas connectivity, however - these are areas where we can support improvement.

Broadland

CO ₂ emissions (kilotons)	2017	2012	Change over 5 years
Industry & Commercial	250.8	370.6	32.3% reduction
Domestic	202.7	278.7	27.3% reduction
Transport	251.8	227.3	10.8% increase
Total emissions	707.5	881.6	19.7% reduction

Norfolk

CO ₂ emissions (kilotons)	2017	2012	Change over 5 years
Industry & Commercial	1,848.9	2,659.1	30.5% reduction
Domestic	1,356.8	1,937.4	30.0% reduction
Transport	1,976.2	1,772.9	11.5% increase
Total emissions	5,139.2	6,350.8	19.1% reduction

YEAR VISION

Broadland District Council has published a new Strategic Plan for 2020-2024, highlighting our commitment to support growth whilst protecting the local environment. The vision for the Council is to work together to create the best place for everyone, now and for future generations.

One of our key priorities is to protect our natural and built environment, whilst maximising quality of life. Our approach to achieving this has been set out in the plan as follows:

- Promote growth in our area, working with key partners to deliver a local plan which protects the best of what we have and shape the area's future, to make it the best possible place to live and work.
- Make sure that our green spaces, streets and public places are clean, attractive and safe.
- Protect our environment and play our part in wider environmental issues.
- Act as a catalyst for homes people can afford, creating sustainable communities for the future.

Key targets for the environment

- A reduction in per capita emissions against 2017 levels
- Implementation of carbon offset measures including solar generation and tree planting
- Engaging with local residents and businesses to support energy generation or carbon sequestration where reduction is not possible.

Working with our communities

We recognise that we have an important part to play in reducing our emissions, but we cannot do this on our own. We will therefore work closely and inclusively with our communities and businesses to support behaviour and lifestyle changes such as through green transport options and recycling facilities.

We will use social media, attendance at events and strategic communications to increase awareness, promote and share good practice and enable informed decisions.



SUSTAINABLE COMMUNITIES

Sustainable communities are places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, and offer equality of opportunity and good services for all.

A sustainable community considers the needs of those within the community, ensuring the economy can grow whilst appreciating and protecting the local environment.

Key Considerations

1) Climate Change adaptation

Extreme weather events such as rain, storms, drought and heat waves are becoming more frequent and intense. These have the potential to damage property and infrastructure and have health implications through increased sun exposure, air pollution and insect-borne diseases.

It is therefore important that we take action to increase the resilience and capacity of the Council's services to a changing climate. We will support the communities and businesses of the district to adapt to climate change by helping them to prepare and increase their resilience to the possible impacts of climate change.

It is important for us to consider the vulnerability of individuals and communities to climate change risks, and to focus on building long-term resilience rather than short term disaster responses in collaboration with our partner agencies.

Strategic Approach

To improve the resilience of Council services to the possible impact of climate change.

To support the communities and businesses of the district to prepare and increase their resilience to the possible impacts of extreme weather.

What are we going to do?

- Ensure our local plans take a proactive approach to mitigating and adapting to climate change considering the long-term implications for flood risk, water supply, biodiversity and the risk of overheating from rising temperatures.
- Secure and enforce the use of sustainable drainage systems for new developments, which help to reduce downstream flooding.
- Raise awareness in communities allowing them to consider property level adaptations themselves.
- Work with other agencies through the Norfolk Resilience Forum to assess risk and plan for potential issues.

Opportunities beyond existing resources

 Dedicated resource specialising in climate change adaptation

How can you help us?

- Install water saving devices not only to reduce household water consumption but also save energy and carbon emissions and reduces water and energy bills.
- Conserve water https://www.ofwat. gov.uk/households/conservingwater/ watersavingtips/
- Consider improving ventilation and shading to reduce the risk of overheating whilst avoiding the need to invest in alternative cooling measures.
- Sign up to get flood warnings by phone, email or text message if your home or business is at risk of flooding.

https://www.gov.uk/sign-up-for-flood-warnings

2) Planning Policy

We recognise the contribution the planning system can make to maintaining and enhancing the local environment. This includes consistently applying the principles of sustainable development, maintaining the natural and built heritage we currently enjoy and mitigating and adapting to climate change. Using the principles of sustainable development, we can improve local services at the same time as ensuring the resilience of our, economy and local environment.

Broadland is working with South Norfolk Council and Norwich City Council together with Norfolk County Council to prepare the Greater Norwich Local Plan (GNLP) www.gnlp.org.uk. The GNLP will promote sustainable development by supporting the delivery of the housing and economic requirements. It will ensure that new homes and jobs are delivered, and the environment is protected and enhanced, promoting sustainability and the effective functioning of the area.

Strategic Approach

To deliver high quality, sustainable developments to assist in meeting national carbon targets.

To encourage the installation of measures to new and existing buildings to improve their energy efficiency, sustainability and adaptability to climate change.

Require the use of sustainable drainage systems (SuDS) in new developments to reduce flood risk, improve water quality and biodiversity benefits.

To identify opportunities to support the local environment, reducing flood risk and improving water quality.

What are we going to do?

- Adoption and delivery of the Greater Norwich Local Plan, which includes policies to:
- Ensure safe, convenient and sustainable access to on-site and local services and facilities including schools, health care, shops, leisure/community/faith facilities and libraries:
- Allow for delivery of new and changing technologies (including broadband, fibre optic networks, telecommunications and electric vehicles).
- Contribute to multi-functional green infrastructure links, including through landscaping, to make best use of site characteristics and integrate into the surroundings.
- Integrate the need to reduce car use into the local plan
- Make efficient use of land with densities dependent on-site characteristics, with higher densities and car free housing in the most sustainably accessible locations.

- Provide safe and suitable access for all users, manage travel demand and promote public transport and active travel within the district, whilst also integrating parking and providing a high standard of amenity;
- Create inclusive, resilient and safe communities in which people of all ages have good access to services and local job opportunities, can interact socially, be independent and have the opportunity for healthy and active lifestyles;
- Be resource efficient, support sustainable waste management, reduce overheating, protect air quality, minimise pollution and take account of ground conditions;
- Minimise flood risk, including reducing the causes and impacts of flooding, supporting a catchment approach to water management and using sustainable drainage. Development must also protect water quality and be water efficient.

How can you help us?

 Engage in the local planning process to help us ensure that it meets with the needs and wishes of your community.

3) Green Infrastructure & Biodiversity

Ecosystems like wetlands and woodlands contribute to managing risks to economic and social activity, helping to minimise flood risks, regulating the local climate and maintaining the supply of clean water and other resources.

Healthy biodiversity supports sustainable communities and benefits not only by providing us with clean air, water, food, energy, medicine and building materials but also provides jobs and places for recreation and employment. Biodiversity conservation is not just about protecting those species that are rare or we find especially attractive; it is about enhancing species and bringing benefits to local communities.

Green infrastructure includes natural green spaces colonised by plants and animals and dominated by natural processes and man-made managed green spaces, such as areas used for outdoor sport and recreation including public and private open space, allotments, and urban parks and designed historic landscapes as well as their many interconnections like footpaths, cycle ways and waterways.

Housing growth within the district provides opportunities for green infrastructure enhancements which will cater for informal recreation requirements of new and existing populations and the migratory and habitat requirements of local wildlife. It will also help to mitigate any negative impacts on particularly sensitive environmental assets within the area.

Threats to our biodiversity include habitat loss and fragmentation, pollution, invasive non-native species and climate change.

Strategic Approach

Establish new, accessible green spaces, at a local level, for the benefit of local residents and wildlife.

Support actions which connect and strengthen existing habitat and green infrastructure corridors.

Enhance existing local green spaces, in terms of their recreational offer and their biodiversity value.

Support local communities to develop projects to improve local biodiversity through initiatives.

What are we going to do?

- Respect, protect and enhance landscape character, taking account of landscape character assessments or equivalent documents, and maintain strategic gaps and landscape settings, including river valleys, undeveloped approaches and the character and setting of the Broads.
- Enhance existing and establish new local green spaces.
- Encourage more people to spend time in our green spaces to benefit their health and wellbeing.
- Use the best environmental management practices for land use to protect and enhance biodiversity.
- Where appropriate and where we have community buy in, turn some of our short-mown grass sites into wildflower meadows.
- Support Norfolk County Council's pledge to plant one million trees by 2024, by planting a tree for each resident of the district.
- Amend or develop supplementary planning policy guidance so information and expectations are clearly set out.
- Support developer led Green Infrastructure projects such as Thorpe Woods.

Opportunities outside of existing resources

 Awards from the planning authority to encourage developers to be more environmentally or tree aware.

How can you help us?

- Encourage wildlife into your garden

 https://www.rhs.org.uk/science/ conservation-biodiversity/wildlife/ encourage-wildlife-to-your-garden.
- · Volunteer in our parks and open spaces.
- Get involved in local groups who work to protect and enhance biodiversity such as Norwich Fringe Project - https:// norwichfringeproject.wordpress.com.



CLEAN AND SAFE ENVIRONMENT

We all want to live in a neighbourhood in which we feel happy, healthy and safe. Our streets matter. If we look after them well, we can create clean, safe and vibrant districts that people are proud to call home. Well-designed and well-maintained streets can encourage people to be more active, improve health and well-being, reduce pollution, bring neighbours together and discourage crime. They create a better environment in which to run a business and reduce pressures on public services.

Protecting and enhancing the environment for future generations is a key priority for us. This ambition must drive our work to promote growth of the local economy, attract visitors, create jobs and provide opportunities for businesses and communities to develop sustainably and to prosper.

Key Considerations

1) Environmental Protection and Clean Streets

Environmental Crime has a negative impact on our communities as well as costing the taxpayers (both communities and businesses) a lot of money each year to clean up. We have a wide remit and deal reactively and proactively to issues including littering, fly tipping and dog fouling.

Environmental Protection is a wide-ranging discipline seeking to protect the health and wellbeing of our residents and businesses by protecting them from excessive noise, light, dust, odour, insects, dark smoke from commercial activities, pest complaints, private drainage issues, antisocial behaviour etc.

These issues can have a significant detrimental impact on residents, it lowers their quality of life and can adversely impact physical and mental health.

The Government's 25-year plan to improve the environment highlights tackling flytipping and waste crime as a priority.

Strategic Approach

To protect the local environment and public health and wellbeing by implementing a balanced approach of engagement, education and enforcement.

Putting residents at the heart of their streets; we will encourage and support social action to keep streets clean and tidy and work with Parish Councils, Town Councils and businesses to improve our high streets and market towns.

Provide a quality street cleansing service with clear standards.

To achieve legal compliance.

Zero tolerance approach to Environmental Crime.

What are we going to do?

- Increased enforcement and education for fly tipping, waste crimes, littering, graffiti and dog fouling.
- We will use our resources wisely to adopt the best new technology and behavioural change techniques to allow us to design safe and attractive streets, stop littering and fly tipping before it happens, and respond rapidly when it does.
- Undertake a spring clean of the district as part of a national campaign.
- Work with residents, community groups, universities, schools, and businesses to help them to do their bit whether large or small to improve the look and feel of the district.
- Work collaboratively with town and parish councils to understand demand for street cleansing services.
- Review fixed penalty notices charges to ensure people are encouraged to make the right choices.
- Ring fence revenue from fixed penalty notices to fund proactive environmental work.
- Develop an Environmental Crime Strategy promoting a zero-tolerance approach.

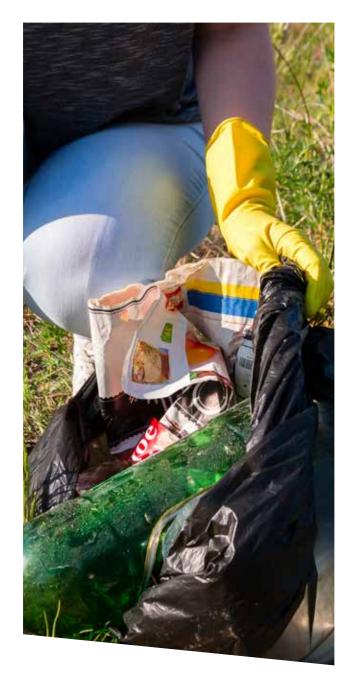
- Increase joint working with other stakeholders to increase intelligence. sharing and tackle Environmental Crime. Police, National Farmers Union, Environment Agency etc.
- Encourage community action.
- Use all available powers to deal with community issues.

Opportunities beyond existing resources

 Dedicated Environmental Crime Officer or patrols.

How can you help us? – We can all work together to keep Broadland clean and tidy. Both businesses and households have a legal duty to dispose of their waste correctly.

- Take part in community litter picks.
- Report environmental crime to us. We will investigate all cases where someone has witnessed an incident or there is evidence to suggest where the waste has come from or who has dumped it.
- Dispose of your waste correctly (and legally).
- · Tell us if we get it wrong.



2) Air Quality

Clean air is a basic requirement of a healthy environment for us all to live in. District Councils have a statutory obligation to monitor Air Quality and work with partners where a breach of national standards is identified. Through working with our partners there are no areas that are above the national objectives. However, there are areas where air quality is poorer than is desirable and there is still plenty we can do to improve air quality and enable residents and businesses to make informed choices.

The links between an active lifestyle, good air quality, access to green spaces and health area clear.

The Government's latest Clean Air Strategy sets out the actions required across all parts of government and society to improve air quality. Further legislation will follow giving new local powers to take action in areas with an air pollution problem.

Some industries have the potential to cause pollution. Some of these operations are required to have an Environmental Permit and we along with the Environment Agency regulate these processes through the Environmental Permitting (England & Wales) Regulations 2016 (as amended).

The permit will specify conditions that the operator must comply with in order to operate the process. We have a duty to inspect these processes at regular intervals to ensure that the operator complies with the conditions of their permit.

Joint working is key in delivering improvements as air quality is a transboundary issue. We work closely with other District Councils and the County Council. We have also set up an air quality group for the Greater Norwich Growth Area this includes representatives from Norwich, Broadland and South Norfolk and additionally public health, and transport planning.

We are committed to assessing and identifying the council's own environmental impacts and how they could be mitigated.

The Council's joint Air Quality annual status report can be found here www.broadland.gov.uk

Strategic Approach

Assessing and responding to planning applications to mitigate impact on Air Quality.

Monitoring and reporting in accordance with national requirement.

Working collaboratively with partners.

Baseline:

No. air quality management areas	0
Passive diffusion tube monitoring for nitrogen dioxide (NO ₂)	25 locations

What are we going to do?

- Proactive work with our partners and other stakeholders aiming to achieve a positive change to air quality, this could include, working with universities, bus, coach and taxi companies, haulage companies, schools and car sharing clubs.
- Raise awareness of air quality amongst our local businesses and residents.
- Pre planning application support in more applications.
- Develop supplementary planning documents for air quality.

Opportunities beyond existing resources

 Invest in improved monitoring equipment to allow continuous monitoring for NO₂ and Particulate Matter. **How can you help us?** – To protect yourself and others from the effects or air pollution here are a few tips:

- Don't leave your engine idling, switch it off when stationary.
- Consider alternative fuel types and new technologies where car travel is essential.
- Walk, cycle or take public transport, you will cut down the amount of pollution you make, reduce your exposure and get some exercise too.
- Use energy efficient appliances, insulate your home and service your boiler.
- Avoid unnecessary burning including bonfires. Use 'ready to burn' materials if you rely on wood for heating.



3) Land Quality

There is a legacy of industrial contamination across the country which the contaminated land regime was introduced in 2000 to identify and remediate. In line with the statutory regulations a joint strategy has been written which outlines how Broadland and South Norfolk Councils intend to fulfil their duties in relation to the Contaminated Land Regulations.

The implications of contaminated land on a new development site are a material consideration of the planning process. Officers from Environmental Protection will assist planning colleagues in considering the impact of past land use on future development to ensure the site cannot be determined as Contaminated Land following redevelopment.

Additionally, over the last few years there have been a number of serious domestic heating oil pollution incidents. Incidents of oil pollution can, by their nature, cause serious environmental damage, through the pollution of rivers and groundwater, threatening drinking water supplies, fish and other aquatic life, not to mention potentially harming health and property. The investigation and clean-up costs can also be very expensive

Strategic Approach

Work in accordance with our joint contaminated land strategy.

Assess planning applications and mitigate any land quality issues.

What are we going to do?

- Education for developers and consultants on what they need to submit with their planning applications.
- Pre planning application support in more applications including advice regarding the benefits of land remediation.
- Proactive project to target oil users in vulnerable locations to provide advice on fuel security and spill prevention.
- Encourage the use of low carbon fuel and alternative technologies.

How can you help us?

- Identify and record the route of buried fuel pipes and use this information to avoid damaging the pipework when undertaking excavations, etc.
- Regularly check your oil tank, boiler and pipes for leaks or corrosion. If you notice a sudden increase in the amount of oil you are using, check for leaks. Even a minor leak can add up to a large loss over time.
- Ensure your boiler is regularly serviced by an Oil Firing Technical Association (OFTEC) registered engineer.
- Site new fuel tanks away from property boundaries, building openings, drains, streams and ponds.
- Consider moving to a cheaper low carbon fuel or technology.

4) Water Quality and Management

Drinking water - Local authorities act as the regulators for private water supplies and have a number of statutory duties under the Private Water Supplies Regulations 2018 in order to determine compliance with drinking water standards and ensure private water supplies are wholesome.

Where issues with a private water supply are identified we will work with the relevant parties to ensure that a supply is fit for human consumption. We are under a legal obligation to enforce the Private Water Supply Regulations and will take appropriate action as required.

Local authorities are required to provide certain information, including monitoring data, relating to private water supplies to the Secretary of State annually.

Drainage and flood risk - is a material consideration in the planning process. It is a very important factor particularly in the light of current concerns about climate change and the need for sustainable development – these aspects are covered in more detail in the Sustainable Communities section of this document.

The Lead Local Flood Authority at Norfolk County Council is a statutory consultee for major planning applications. Environmental Protection officers at Broadland can provide advice on minor applications.

Developments in flood risk areas are generally resisted and can only be considered where informed by a site-specific Flood Risk Assessment that identifies all sources of flooding and robustly demonstrates how these will be managed.

The Council's Emergency planners work with other agencies through the Norfolk Resilience Forum to assess risk and produce plans using national planning assumptions and local knowledge.

A changing climate is likely to produce more frequent severe weather events and with this in mind both the Council's Emergency Response and Business Continuity Plans will be regularly reviewed to reflect this increased risk – these aspects are covered in more detail in the Sustainable Communities section of this document.

Strategic Approach

Assess planning to ensure that flood risk is properly managed to ensure the sustainability of the development, the safety of its occupants and that flood risk is not increased elsewhere.

Protect the users of Private Water Supplies in accordance with statutory requirements.

What are we going to do?

- Education for developers and consultants on what they need to submit with their planning applications.
- Pre planning application support in more applications.
- Raise awareness of drought and water security with Private Water Supply users.
- Proactive work with our partners and other stakeholders aiming to achieve a positive change. Such as creating wildlife corridors between green infrastructure.
- Promotion of rainwater reuse and water conservation.
- Develop supplementary planning documents.

How can you help us?

- Avoid blockages, flooding and potential pollution of the environment from foul drain by following this advice².
- · Conserve and re-use water.
- Periodically inspect and maintain any watercourses, ditches and culverts you are responsible for.
- For gardens, consider the use of permeable surfaces and drought resistant plants.

ENERGY EFFICIENCY

Energy is an essential part of our way of life; used to heat homes, power appliances and run industry. The cost of electricity, gas and oil are rising faster than the rate of inflation; taking an increasing share of household income. This affects the health, welfare and prosperity of our residents and tends to be worse for low-income families.

UK plans to reduce carbon emissions are reliant on producing our electricity and heat from low or zero carbon sources. Local authorities have been recognised as playing a key role in contributing to the UK's national carbon reduction targets, reducing fuel poverty and improving energy efficiency of residential accommodation in their areas.

Improving energy efficiency can have multiple benefits for the local area; environmentally, socially and economically.

In-house emissions from Council owned buildings

kg of CO₂e	Broadland
Emissions from gas	57,177
Emissions from electricity	105,568

Key Considerations

1. In-House Emissions

In recent years, considerable work has been done to reduce the emissions from Council owned buildings. Using Greenhouse Gas Protocols³ the Council's emissions, for Thorpe Logde and the training centre, have been calculated for 2018/19.

What are we going to do?

- · Minimise energy use in our own estate.
- Assess the potential for renewable energy production.
- Move to green energy suppliers.

2. Supporting our residents and communities

Broadland is a rural district, and this brings its own particular challenges and opportunities when considering the impact of the district's existing energy consumption and the potential for renewable energy. The National Atmospheric Emissions Inventory shows that in 2017, 28.6% of Broadland's emissions were from the domestic sector. The overall emissions from domestic properties have reduced significantly over the last five years.

A large proportion of the district's existing homes are reliant on liquid fuels and have no cost-efficient way of connecting to the local gas grid, a less carbon intensive method of heating homes. Additionally, a substantial number of properties are of solid wall construction which struggle to retain heat and are harder to insulate.

Energy Performance Certificate data⁴ can be used to assess the number of properties which are considered as well insulated; i.e. with an EPC rating of C or above. Please note this is only able to include properties which have an EPC, meaning those which

^{4.} https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates

have not been sold or rented since 2006 when it became a requirement would not be included. As at 31st March 2019, 33% of properties in Broadland with an EPC were rated as C or above.

Fuel poverty is a growing issue in the UK and is closely linked to a number of health and housing problems. The Council's role in tackling fuel poverty focusses on assisting residents on low incomes who cannot heat their homes at reasonable cost. There is a growing body of evidence that certain vulnerable groups, such as households with older people and children, are at the most at risk of health detriments associated with cold homes, such as respiratory and cardiovascular illnesses.

Strategic Approach

To minimise the impact of energy price rises.

To reduce the number of households in or at risk of fuel poverty.

To reduce the overall carbon emissions per capita from the domestic sector.

Capitalise on external funding sources to support residents and businesses to install energy efficiency measures.

What are we going to do?

- Proactive enforcement of Private Rental Sector Minimum Energy Efficiency Standards.
- Enable residents to maximise incomes, accessing all eligible benefits and ensuring they are on the most appropriate energy tariff for their use or can access affordable heating oil solutions.
- Support and encourage residents to install energy efficiency improvements, with a particular focus on those unable to access mains gas for heating and of solid wall construction, drawing down national funding where available.
- Encourage new developments to minimise the energy demand through

- their design and orientation and maximise sustainable energy, local energy networks and battery storage.
- Support free standing decentralised, renewable and/or low carbon energy networks, subject to the acceptability of wider impacts.
- Help energy companies to target fuel poor and vulnerable households for energy efficiency measures.

How can you help us?

- Save energy at home. https:// energysavingtrust.org.uk/home-energyefficiency
- Seek financial support for energy efficiency measures - if anyone in your household is receiving benefits, then the first place to start is by asking your energy supplier (Npower, SSE, Scottish Power etc.) if they can help. They should be able to tell you what help is available through the Energy Company Obligation (ECO).
- Give us a call we may be able to tell you about any local initiatives that can provide help.
- Check if you are eligible for the winter fuel payment and/or the warm home discount.

WASTE MINIMISATION

Often the most environmentally resourceful, economically efficient and cost-effective way to manage waste is to reduce the amount produced. Food production, goods manufacturing, transportation and processing of waste contribute to greenhouse gas emissions.

The Government's Our Waste, Our Resources: A Strategy for England sets out proposals to preserve material resources by minimising waste, promoting resource efficiency and moving towards a circular economy. The aim is to minimise the damage caused to the natural environment by reducing and managing waste safely and carefully, and by tackling waste crime.

The waste hierarchy ranks options for waste management, with priority given to preventing the creation of waste in the first place, followed by preparing waste for reuse; to recycling, and then recovery. Disposal is regarded as the worst option. Instead we aim to increase our rates of recovery and recycling. We want to shift away from waste towards resource efficiency and will do this by focusing not just on managing waste, but on managing the resources which become waste.

Baseline – 2018/19	Norfolk	Broadland
Recycling rate %	43.4	48.2
Residual waste per household (kg)	426.0	442.01
Number of brown bins	-	28,499
Garden waste (tonnes)	-	11,044
Food waste (tonnes)	-	2,165
Number on food waste scheme	-	25,780

Key Considerations

1. Waste collection service

We are committed to providing residents with a good quality waste collection and recycling service. We also have to ensure that our collection scheme and approach to recycling are compliant with emerging government requirements.

As our baseline figures above show, we already have some strong examples of good practice in our waste operations. Our recycling rates put us among the better performing local authorities in England, however, we are determined to recycle even more in the lifetime of this strategy.

The Council's 2020/21 Delivery Plan confirms a target to increase recycling rates by 2% by the end of the year. We are also committed to ensuring that materials for which proven markets exist are collected for recycling and that wherever practicable, waste is sent to facilities within the UK for treatment or disposal.

Strategic Approach

Value for money sustainable kerbside collection scheme which is fully compliant with the minimum service standards required by UK Government by 2025.

Reduction in the amount of waste generated through council activities.

High quantity of waste recycled and reduce the amount of residual waste by delivering efficient and high-quality recycling, refuse and garden waste collection service.

Engaging with residents to minimise contamination and ensuring waste is disposed of appropriately.

Support businesses to recycle by providing a value for money and effective commercial waste services.

Enable the reuse of unwanted items by hosting local community reuse and recycle events.

What are we going to do?

- Provide a viable, cost effective and compliant service which generates income for the Council.
- Provide the right information, incentives and infrastructure for people and businesses to increase the amount of recycling and reduce the amount of waste produced.
- Encourage residents to engage with food waste collections, where available.
- Investigate opportunities to expand the food waste collection service.

How can you help us?

- Reduce unnecessary waste, for example look for products with less packaging and buy reusable rather than disposable items.
- Don't contaminate your bin. Recycle more, recycle right – you can find out what goes in which bin at: https://www.broadland.gov.uk/recycling
- Put your bin out by 06:30am on the day of collection to avoid missing your collection.
- Help your neighbour or relative who may struggle to put out their bin – if you can you may wish to assist them yourself.
 Alternatively, you can signpost them to our assisted collection scheme.
- Consider home composting.

2. Reducing single use plastics

We know that plastic waste is something our residents feel very strongly about, and we intend to look at how we can tackle this locally.

The average UK household uses around 500 plastic bottles per year, but only recycles just over half of them. Bottles make up 67% of household plastic packaging collections, including soft drinks, cosmetics and household and cleaning products. Recycling decreases the need for raw materials, which helps save energy and carbon emissions; It takes 75% less energy to make a plastic bottle from recycled plastic compared with using 'virgin' materials.

What are we going to do?

- Within our Strategic Plan we have committed to becoming a single use plastic-free council by 2024.
- Raise awareness and support the extension of Refill scheme
- Encourage the district's institutions, businesses and residents to work towards reducing the use of single use plastics.

How can you help us?

- Invest in canvas or cotton bags for your shopping and keep them handy.
- Carry your own drink container with you and refill instead of purchasing new bottles of water. https://refill.org.uk/.
- Swap conventional wet wipes and sponges for plastic free biodegradable ones or washable cloths.
- Recycle any plastic bottles you use.
- · Buy loose produce.



TRANSPORT

Good transport networks play a vital role in our communities, providing access to employment opportunities, healthcare and education, as well as unlocking economic opportunities in tourism and leisure. Transport is responsible for 80% of harmful roadside emissions. Typical measures to reduce emissions from local sources include traffic management, encouraging the uptake of cleaner vehicles and increased use of public transport, along with more sustainable transport methods such as walking and cycling.

Vehicles in the UK are predominantly petrol or diesel powered, producing 331,000 tonnes of NOx pollutants nationwide (DEFRA, 2016). Switching to a zero-emission capable vehicle can save money on fuel costs, reduce harmful vehicle emissions and improve local air quality. For this reason, we support a move from combustion engine vehicles to more sustainable ones such as hydrogen or electric.

The uptake of electric vehicles has surged over the last four years. Almost 60,000 sold in 2018 and there are now nearly quarter of a million electric vehicles on the UK's

roads. There are almost 20,000 public charging points across the UK supporting the switchover to electric vehicles. Local authorities have a key role to play in expanding the electric vehicle infrastructure network, supporting local groups to install and manage public charging points.

Strategic Approach

Work with partners to support the implementation of the Transport for Norwich Strategy including significant improvements to the bus, cycling and walking network to promote modal shift.

Work with Norfolk County Council to support more sustainable and healthier transport systems, enabling and encouraging active travel, with a specific focus on rural transport networks.

Promote and encourage the use of alternative fuel types and new technologies including commercial vehicles.

What are we going to do?

- New developments will be required to be designed to manage travel demand, promote active and sustainable transport.
- Integrate the need to reduce car use into the local plan.
- Encourage the use of greener vehicles for private hire vehicles through taxi licensing.
- Promote the use of ECO Stars Fleet Recognition Scheme locally.
- Review our own vehicle policy.
- Promote car sharing in the community.
- Investigate opportunities to increase the number of electric vehicle charging points across the district.

How can you help us?

- Consider greener transport options.
- · Walk more.
- Get cycling to work to school, to pop to the shops or for a bit of exercise.
- Use public transport.
- Don't leave engine running when you are stationary.

2. Staff travel

Staff required to travel as part of their roles are reimbursed at HMRC mileage rates, this incentivises the use of low carbon modes of transport by funding not only car usage, but also motorcycle and bicycle miles. Additionally, staff are encouraged to car share as an additional 5p per mile is paid for each additional passenger carried. The new flexible working policy adopted in January 2020 encourages working at alternative locations such as home working to increase staff efficiencies and support green principles.

Emissions from staff and member travel

	Baseline⁵ – 2018/19		
	Total mileage	Emissions	
		(kg of CO ₂ e)	
Staff (Diesel)	67936	18954.82	
Staff (Petrol)	78608	22877.29	
Staff Total	146544	41832.11	
Members	14801	4218.58	
Total		46050.69	

Strategic Approach

Encourage more sustainable car travel options for example car sharing and car club membership where the use of public transport is not practicable.

Minimise unnecessary travel between sites.

What are we going to do?

- Introduction of new car leasing scheme from April 2020, including options for electric and hybrid vehicles.
- Investigate the infrastructure and installation required for the delivery of electric vehicle charging points at all council owned buildings.
- Encourage the use of telephone/video conferencing and continue to invest to home working.
- Encourage all forms of greener transport options.

Opportunities beyond existing resources

 Investigate/implement a staff travel plan – encouraging remote working, car sharing etc.

^{5.} Member's mileage not broken down by fuel type, "unknown" conversion factor has been used. Average conversion factor has been used for staff mileage for appropriate fuel type.

SUSTAINABLE PROCUREMENT

The Council has a procurement strategy relating directly to the business/corporate plan and the Council's vision and ambitions.

Buying products or contracting for services can have significant environmental impacts. Sustainable procurement can ensure that these impacts are lessened, and associated carbon emissions reduced. Additionally, it increases environmental awareness and sets an example.

Sustainable Procurement is a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment.

Strategic Approach

Ensure that all the services we commission and procure, improve the economic, social and environmental wellbeing of the area.

What are we going to do?

Develop a new Corporate Procurement Strategy to ensure procurement of services:

- Take into account the need to minimise emissions and reduce the negative impacts of transportation when purchasing goods and services.
- Takes steps to minimise carbon dioxide and other greenhouse gas emissions through the detailed consideration of products and services procured.
- Considers the environmental performance of all suppliers and contractors, and encourage them to conduct their operations in an environmentally sensitive manner.

- Maximises the use of recycled products and products derived from reclaimed materials
- Select products / services that have minimal effect on the depletion of natural resources and biodiversity.
- Ensure that local enterprises are encouraged to bid for the Council's business
- Conduct a review of existing product areas and their associated environmental impacts
- Look to move to green energy supplies for the Council's estate
- Minimise the environmental impact of our canteen through new contracts.
- Investing in sustainable funds where appropriate

Opportunities beyond existing resources

 Investigate implementing an Environmental Management System, a structured framework for managing an organisation's significant environmental impacts.

Summary of actions – to	Summary of actions – to be reviewed and updated regularly				
Theme		Delivery	Targets/Measures of Success – extract from corporate delivery plan		
Sustainable Communities	Climate Change adaption	Local plans take a proactive approach to mitigating and adapting to climate change considering the long-term implications for flood risk, water supply, biodiversity and the risk of overheating. Promote the use of sustainable drainage systems in new developments, which help to reduce downstream flooding. Rainwater conservation and re use promoted through the planning process. Raise awareness for residents and businesses allowing them to consider property level adaptations.	Number of community plans developed by parish and town councils, considering the impacts of climate change and mitigation.		
	Planning Policy	Local plans take a proactive approach to mitigating and adapting to climate change considering the long-term implications for flood risk, water supply, biodiversity and the risk of overheating. Adoption and delivery of the Greater Norwich Local Plan. Support local plan policies which seek to improve the energy efficiency of new build homes and commercial premises.	Number of new homes achieving 20% reduction against Part L of the 2013 Building Regulations (amended 2016). Number of new homes meeting the Building Regulations Part G (amended 2016) water efficiency higher optional standard. Number of non-housing developments over 500 m² achieving BREEAM "very good" energy efficiency and water efficiency standards or any equivalent successor.		

Green
Infrastructure and
biodiversity

Develop an action plan to establish a new Country Park at Houghen Plantation.

Enhance existing and establish new local green spaces.

Use the best environmental management practices for land use to protect and enhance biodiversity.

Where appropriate and where we have community buy in, turn some short-mown grass sites to wildflower meadows.

Engage local communities and businesses to support volunteers and expand links with local schools.

Increase tree canopy cover across the districts -Support Norfolk County Council's aim of planting one million trees by 2024.

Value of external funding secured to increase delivery of green infrastructure projects across the districts and specifically at Houghen Plantation.

Number of new developments delivering a net biodiversity gain.

Monitor canopy cover on new development sites to aim to achieve 25% canopy cover over 10 years.

Capture numbers of trees planted through development.

Total number of trees planted through council supported schemes. Target of planting one tree for every resident of Broadland by 2024.

Number of green infrastructure projects supported.

Increase in number of community tree wardens. Baseline 2018/19: 34

Clean & Safe Environment	Environmental Protection and Crime prevention	Number of litter picks/clean up initiatives supported. Number of confirmed incidents of fly tipping. Increased enforcement and education for fly tipping, waste crimes, littering, graffiti and dog fouling. Review of fixed penalty notice charges. Environmental Crime Strategy promoting a zero- tolerance approach. Increase joint working with other stakeholders to increase intelligence sharing and tackle Environmental Crime. Use all available powers to deal with community issues. Encourage community action.	Increase in number of litter picks/clean up initiatives. Decrease in number of fly tips identified against baseline figure Baseline in 2018/19: 515. Increase in appropriate enforcement. Number of Fixed Penalty notices served in 2018/19: 1
	Air Quality	Proactive work with our partners and other stakeholders aiming to achieve a positive change to air quality. Raise awareness. Pre planning application advice for more applications. Develop planning guidance for air quality.	Maintain level of air quality management areas in the district. Current – 0 AQMAs

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Land Quality	Education for developers and consultants on what they need to submit with their planning applications. Pre planning application support in more applications. Proactive project to target oil users in vulnerable locations to provide advice on fuel security and spill prevention.	All developments meeting planning policy requirement: major developments to submit a sustainability statement and developments of 100+ to submit delivery statement.
Water Quality and Management	Education for developers and consultants on what they need to submit with their planning applications. Pre planning application support in more applications. Raise awareness of drought and water security with Private Water Supply users. Proactive work with our partners and other stakeholders aiming to achieve a positive change. Promotion of rainwater reuse and water conservation. Develop supplementary planning documents.	Number of new homes meeting the Building Regulations Part G (amended 2016) water efficiency higher optional standard. Number of non-housing developments over 500 m² achieving BREEAM "very good" water efficiency standards or any equivalent successor.

Energy Efficiency	In-House Emissions	Minimise Energy use for our own estate. Assess potential for renewable energy production. Move to green energy suppliers.	Overall reduction in gas/electricity emissions when compared to baseline. Baseline 2018/19 Kg of CO ₂ e BDC – Gas 57,177, Elec 105,568 Number/percentage of rented homes meeting standards
	Supporting our Residents and Communities	Proactive enforcement of Private Rental Sector Minimum Energy Efficiency Standards. Enable residents to maximise incomes, accessing all eligible benefits and ensuring they are on the most appropriate energy tariff for their use or can access affordable heating oil solutions. Support and encourage residents to install energy efficiency improvements, drawing down national funding where available. Encourage new developments to minimise the energy demand through their design and orientation and maximise sustainable energy, local energy networks and battery storage. Support free standing decentralised, renewable and/or low carbon energy networks, subject to the acceptability of wider impacts. Help energy companies to target fuel poor and vulnerable households for energy efficiency measures.	Number of residents supported and homes improved through council organised/promoted schemes. Number of new homes achieving 20% reduction against Part L of the 2013 Building Regulations (amended 2016) Increase in the total energy production across the districts. 2019 Baseline: 52MW

Waste Minimisation	Waste Collection Service	Provide a viable, cost effective and compliant service which generates income for the Councils. Provide the right information, incentives and infrastructure for people and businesses to increase the amount of recycling and reduce the amount of waste produced. Initiatives to encourage recycling and reduce contamination. Support and encourage the uptake of schemes and services which increase food and garden waste composting. Encourage residents to engage with food waste collections, where available.	Gross tonnage increase - food waste. Increase on 2018/19 baseline of 2,165 tonnes. Recycling - % of household waste recycled. 2% increase by Q4 2020/2021 compared to 2018/19 baseline of 48.2%. Target of 60% recycling rate by 2025 Tonnage of Garden Waste being recycled - Increase in tonnage Baseline 2018/19: 11,044.
	Reducing Single use Plastics	Raise awareness and support the extension of the Refill Scheme. Encourage the districts institutions, businesses and residents to work towards reducing the use of single use plastics.	Becoming a single use plastic-free council by 2024.

Transport	Sustainable Transport	New developments will be required to be designed to manage travel demand, promote active and sustainable transport.	Increase in the percentage of green commuter journeys. Baseline 2011 census data 18%.
		Integrate the need to reduce car use into the local plan. Work with Norfolk County Council to support more sustainable and healthier transport systems, enabling and encouraging active travel. Encourage the use of greener vehicles for private hire vehicles through taxi licensing.	Increase in number of hybrid and electric private hire vehicles licenced.
		Promote the use of ECO Stars Fleet Recognition Scheme locally. Review our vehicle policy.	
	Staff Travel	Introduction of new car leasing scheme from April 2020, including options for electric and hybrid vehicles. Investigate the infrastructure and installation required for the delivery of electric vehicle charging points at all council owned buildings. Investigate/implement a staff travel plan — encouraging remote working, car sharing etc.	Number of staff utilising leasing scheme for electric/hybrid vehicles. Installation of charging points at Council owned locations. Overall reduction in staff/member mileage against baseline 2018/19.

Develop a new Corporate Procurement Strategy Sustainable Procurement to ensure procurement of services: Consider the need to minimise emissions and reduce the negative impacts of transportation when purchasing goods and services. Take steps to minimise carbon dioxide and other greenhouse gas emissions through the detailed consideration of products and services procured. Consider the environmental performance of all suppliers and contractors, and encouraging them to conduct their operations in an environmentally sensitive manner. Maximise the use of recycled products and products derived from reclaimed materials. Select products / services that have minimal effect on the depletion of natural resources and biodiversity. Ensure that local enterprises are encouraged to bid for Council business. Conduct a review of existing product areas and their associated environmental impacts. Look to move to green energy supplies for the Council's estate. Minimise the environmental impact of our canteen through new contracts.