

BTC Environmental and Climate Policy Statement

1.0 Introduction

The Climate Change Act 2008 (2050 Target Amendment) Order 2019, approved by the government in June 2019 establishes a 2050 net-zero carbon target for the UK, making the UK the first of the G7 countries to adopt a legally binding commitment to end the UK's contribution to global warming. The 2019 Act builds on the preceding target of an 80% reduction in emissions relative to 1990 levels and reflects the UK's current achievement of a 42% carbon reduction relative to the same 1990 baseline.

To place these figures in context CO₂ is the principal greenhouse gas accounting for 81% of GHG emissions. In 2016, 38% of end-user emissions assigned to Local Authority areas (excluding emissions from Land Use, Land Use Change and Forestry (LULUCF)) were attributed to the industry and commercial sector, 28% to the domestic sector, and 35% to transport. Within the domestic sector approximately 60% of emissions arose from gas usage, and 31% from electricity (BEIS 2018).

The underpinning work to develop the legislative framework is the output of the independent UK Climate Change Committee (CCC) that draws on a wide range of public, private sector and academic expertise including the important international work of the UEA Climate Research Group. The work of the CCC supports the UK contributions to the Paris Accord and as a major voice in the climate change debate, the UK will host the COP26 UN Climate Change conference in 2020.

The more recent public focus on climate emergency and increasing public awareness of the need to adopt measures at a local level to assist in achieving these targets, means there is now a drive for a more sustainable approach to energy consumption, emissions reduction, flood risk/coastal protection, and the related management and utilisation of natural resources. This has been reflected in a rush by local authorities to declare a climate emergency and to highlight their green credentials, although, in practice, practical measures to mitigate impacts have been constrained by inadequate investment, limited institutional capacity and poor physical and strategic planning. Our declaration is to commit to mitigating our negative impacts on the environment, whilst simultaneously understanding external limitations and focusing on high impact solutions within budget.

2.0 Regional and District Climate Actions

In East Anglia, the major urban centres (Ipswich/Norwich/Lowestoft), as well as District and County Councils, have all issued policy statements on climate change and environment and there have been some advances in energy efficiency, public transport, waste reduction, and physical planning. In the case of ESC, the proposed timeline is for carbon neutral status to be achieved by 2030, although there must clearly be some uncertainty regarding the capacity to achieve this target date. The majority of public sector institutions are still at a very early stage in developing a climate strategy and action plan.

The East Suffolk Council Climate Emergency declaration dated 25 July 2019 states:

“This Council pledges to:

- 1. Declare a Climate Emergency.*
- 2. Set up a Cross Party Task Group, commencing by October 2019, to investigate ways to cut East Suffolk Council's carbon and harmful emissions on a spend to*

save basis, with ambition to make East Suffolk Council (including all buildings and services) carbon neutral by 2030. The Cross Party Task Group will report on their progress on a quarterly basis.

3. *To work with Suffolk County Council and other partners across the county and region, including the LEP and the Public Sector Leaders, towards the aspiration of making the county of Suffolk carbon neutral by 2030.*
4. *To work with Government to a) deliver its 25 year Environmental Plan and b) increase the powers and resources available to local authorities in order to make the 2030 target easier to achieve.”*

A similar schedule applies to SCC and Ipswich, although specific targets and budgets have been set for 2020-2021 to address these matters.

At the lower levels of local government, there is no statutory requirement to implement climate measures under the Act because of potential conflict with the Localism Act (2011); however, this provides some latitude in that it enables town and parish councils to develop policy proposals consistent with local objectives and environmental priorities. In this respect, such policy objectives need to mesh closely with future land-use development allocations and initiatives proposed under the emerging Neighbourhood Development Plan.

3.0 Bungay and the Waveney Valley

Bungay Town Council are aware of the need to develop a specific climate policy and to put in place policy statements that will guide decision making and (a) set out proposals for mitigation of potential climate change impacts for the period to 2030 and 2050, and (b) promote the incorporation of climate change adaptation measures at an early stage.

For this purpose, we have considered a range of existing district and regional initiatives and assessments. In establishing the baseline conditions against which achievements may be measured the most valuable resources include statistics from the Department for Business, Energy and Industrial Strategy (*Local Authority CO₂emissions estimate BEIS June 2018*) and the recent climate scoping study prepared by UEA Consulting on behalf of the New Anglia Local Economic partnership (*UEA Consulting Ltd: Scoping Report for the New Anglia LEP - Climate Change Adaptation and Carbon Reduction Action Plan July 2019*). The former document includes data on per capita emissions for Waveney District, and the latter document sets out projected temperature, precipitation, and sea-level changes in Norfolk and Suffolk for the period to 2050, the economic implications for sectoral economic activity, and actions to mitigate and plan for the projected environmental conditions arising from climate change.

In the context of Bungay and the Waveney valley, the following summarises some of the existing conditions and critical issues arising from CC predictions.

1. **General:** Climate predictions indicate an increase in mean summer temperatures of 1.2°C to 1.6°C by 2040 and a decrease in summer precipitation of 1-13%.
2. **Flooding:** Sea level rise at Great Yarmouth under the most extreme projections suggest an increase of 0.2-0.4 metres. Subject to mitigation and adaptation measures this would have implications for the tidal reaches of the Broads system

that extend to Ellingham sluice. Development proposals outlined in the Waveney Local Plan (ESC March 2019) without appropriate flood mitigation may adversely effect flooding in the lower reaches of the Tin River catchment and this will be the subject of future discussion by BTC with SCC as the lead flood agency, the Environment Agency, and ESC.

3. **Agriculture:** The primary source of commercial GHG emissions in Bungay is derived from the agricultural and food-producing/processing sectors. On the basis of 2016 data, this constitutes up to 1999 tonnes/year of CO₂ (see Fig. 1 for the main regional point sources). It is acknowledged that agriculture is also the sector that is most vulnerable to climate change and this has wider implications for food security. Changes in food production methods, technological advances, and improved understanding of plant genetics suggest that climate change may offer a wide range of new business opportunities in agriculture and horticulture - eg. In 2019 Suffolk produced the first commercial UK crops of chickpeas and lentils - viniculture, hydroponics, and pulse production will all offer farmers in the region new opportunities albeit potentially at the expense of a reduction in livestock and biofuel production.
4. **Transport:** Per capita, CO₂ emissions in 2016 from transport for the region are estimated as 5.6-5.7 tonnes CO₂ i.e. somewhat higher than the national average of 5.4 tonnes. Major changes in the transport sector will be required to meet the target of 1.7 tonnes/capita by 2050 if we are to meet the objectives of the Paris accord. Current emission levels can be attributed in part to a large number of rural communities un-serviced by public transport and to the limited take up of electric vehicles and vehicle share schemes.

In relation to vehicle emissions, current roadside NO₂ concentrations intermittently exceed national air quality standards at monitoring locations in Bungay town centre. Current monitoring by ESDC demonstrates mean annual values for nitrogen dioxide (NO₂) arising from vehicle emissions in the range 28 to 38 micrograms against an annual mean guideline value of 40 micrograms, however discontinuous monitoring using diffusion tubes is not a reliable measure for peak traffic flow conditions, and particulate concentrations (PM_{2.5}) that are a pollutant of significant public health concern are not currently monitored although there are targets for their reduction. It is anticipated that by 2030 a significant reduction in pollutant concentrations and specifically NO_x and PM_{2.5} particulates will have been achieved through the removal of diesel vehicles and a reduction in vehicle numbers (current monitoring by BTC indicates circa 17,000-18,000 vehicles/day enter the town and one-way system).

5. **Housing and Domestic energy sectors:** Gas connectivity in the District is limited and oil-fired heating widespread. From a planning perspective, the distribution of renewable domestic energy remains limited although regionally East Anglia is one of the most important renewable energy producers. Based on recommendations from the CCC announced in February 2019 government policy proposes that gas boiler installation will be banned in new build residential development from 2025 and will be progressively replaced by hydrogen boilers and fuel cell technology, in addition to existing renewable sources (heat pumps and solar energy). This has major implications for current planning and housing design and development, and particularly so in the case of land allocated under the 2018 – 2030 Waveney Local Plan (*ESC March 2019*) and the proposed construction of around 500 new build homes on land to the east and west of St. Johns Road. It will be essential that

these residential units are designed and built to accommodate these future sustainable energy requirements.

- Water Resources:** Projected reduction in rainfall and increasing demand/abstraction coupled with a decline in water quality in the river Waveney will impact water availability and require measures to conserve supplies both quantitatively and qualitatively. Currently, the abstraction of surface water from the Waveney at Barsham is supplemented by groundwater abstraction from a series of wells between Outney Common and Shipmeadow in order to service water demand from Bungay, Beccles, Reydon, and Southwold. The marshes between Bungay and Shipmeadow have legal protection under the EU Water Framework Directive (2012) and are classified as a source protection zone. A core element of water conservation will be to ensure that current effluent discharge licences are fully complied with by both public institutions and the private sector, and the adoption of rainwater harvesting in domestic residences becomes mandatory.

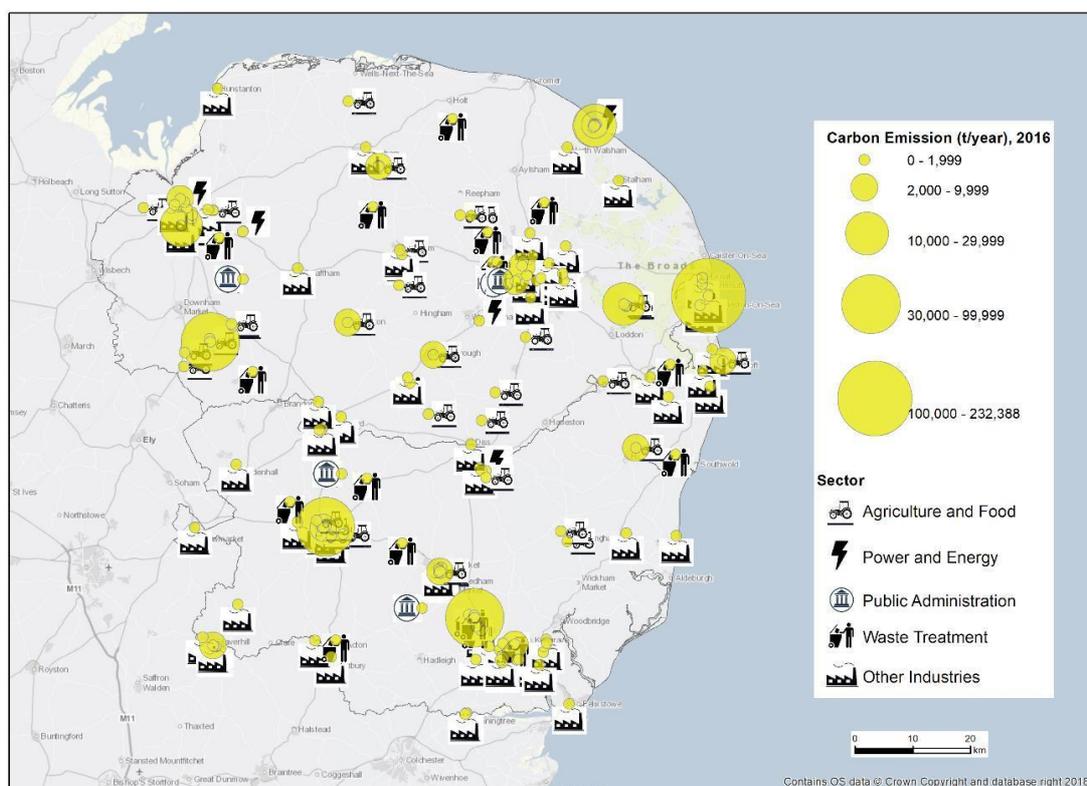


Fig. 01 Major point source CO₂ emissions in Norfolk and Suffolk 2016 (Source: UEA Consulting Ltd: Final scoping study for LEP July 2019)

4.0 Bungay – proposed measures.

A central concern in addressing climate policy for Bungay is the need to ensure that it is affordable, achievable, addresses the issues that are pertinent to the local economy and community interests, and is readily translatable to practical actions.

As a small market town with limited financial resources and where legislation regulating resource use is determined at District and County level, an important task will be to assist consumers and businesses in accessing information and advice and to extend the participation of business and expertise from within the community in the BTC working groups. BTC should similarly aim to engage more closely with potential funding bodies and regional economic development services in order to support new energy efficiency initiatives and to provide for CC impact mitigation and adaptation. BTC will also continuously work with other councils, experts and individuals to share knowledge and skills.

For immediate purposes, the following represent proposed policy objectives based on the current understanding of CC. The aim will be to translate these policy objectives into practical measures that will be budgeted for and implemented between 2020 and 2030.

- Planning and Housing

In relation to the planning of new development, and planning approvals for new build properties, we should be aware that planning decisions made now have significant implications for compliance with the 2030 and 2050 carbon reduction targets and future energy efficiency requirements. BTC will be supportive of new development that incorporates rainwater harvesting, recycling (grey water), high levels of energy efficiency in construction and design, and incorporates renewable energy technology (eg. solar/heat pumps /hydrogen /fuel cell technology). BTC proposes that the council should actively promote Passivhaus construction as exemplified in the award-winning Goldsmith street council house development in Norwich (2019 Stirling prize) or alternative criteria as set out in (a) the AECB building standards , or (b) the Build for Life 12 standards, that both offer greater flexibility in the incorporation of environmentally efficient design and construction.

- Transport

The council will aim to actively promote local electric public service vehicles through dialogue with the existing bus service contractors, SCC, BACT, and potential investors. The current initiative to install electric charging points will be extended and further potential sites identified. The council will similarly explore opportunities for a car share scheme. The current traffic monitoring scheme using SID's will be reviewed in 2020 along with other monitoring systems to establish options for the improved management of traffic flows, parking, and emissions reduction.

- Agriculture and Food production

As the core economic sector and a significant contributor to the local economy but also a primary contributor to CO₂ emissions, the council should engage more closely with the farming sector and be supportive of new initiatives aimed at carbon reduction and diversification along with land management that takes full account of the need for net gains in biodiversity and flood mitigation.

- Water resources

BTC should aim to open dialogue with ESW on projected water availability from the current abstracted sources in the Waveney at Barsham and Shipmeadow and lend support to current initiatives by ESW and the Broads Authority aimed at pollution reduction from upstream sources and diffuse pollution. The council should similarly consult with Anglian Water and the Environment Agency on the upgrading of the existing Bungay STW and their proposals to address combined effluent and surface water flows discharging to the river Waveney via the Tin River in addition to other unregulated sources. The dispersion of effluent flows from the existing STW during high rainfall events creates completely unacceptable public health conditions for residents and discharges untreated effluent to the River Waveney 2 miles upstream from the current abstraction point for domestic water supply for the District. This is attributable to the combined surface water and sewage flows

that enter the drainage network, and it is imperative that all new development is designed to segregate these sources and maximise the efficiency of wastewater treatment.

- Waste management

BTC will review existing waste disposal and recycling practices undertaken through the ESC contractors to identify opportunities for improved recycling as well as clarification of existing disposal routes. The council will further explore options for plastics recycling including deposit return schemes and is currently engaging in exploratory dialogue with other market towns (Beccles and Halesworth) to identify opportunities for collaborative recycling.

In addition to the work of the Groundskeeper and the monthly litter picks organised by Pride in Bungay and BTC, consideration will be given to opportunities for further reductions in littering in the town.

- Greenspace

BTC will actively promote the expansion of green amenity space that currently falls below per capita guidelines for the District (*Open Space Needs Assessment and Green Infrastructure strategy WDC 2017*). This matter is currently being addressed under the Bungay Neighbourhood Development Plan that will aim to be incorporated into legislation in 2020.

BTC has a duty to consider biodiversity in decisions we make however going forward the objective will be to achieve net gains in biodiversity with all decisions made in accordance with provisions under the new Environment Bill (*Policy Statement – The Environment Bill DEFRA January 2020*). The Bill introduces a mandatory requirement for biodiversity net gain in the planning system, to ensure that new developments enhance biodiversity and create new green spaces for local communities. Integrating biodiversity net gain into the planning system will provide a step change in how planning and development is delivered and BTC will aim to see that such measures are incorporated in all new planning applications.

Tree cover is frequently perceived as a solution to climate change due to the capacity of trees to remove CO₂ from the atmosphere through processes such as photosynthesis and to store carbon as biomass. Tree cover provides additional benefits through its capacity to capture particulates and restrict aerial pollutant dispersion within 30-50 metres of highways and/or point sources. Economically, trees bring clear benefits to housing markets and may increase values by 10-30%.

Recent proposals submitted to BTC propose the planting of trees by all members of the community of the town and follow a national campaign by the Woodland Trust. While this may be perceived as a laudable effort to address climate change, the following factors should be taken into consideration.

Planting and locations – Available free planting stock from the Woodland Trust and other institutions is usually 6-12 inches tall and plants are vulnerable to damage during and after planting. The average location in urban environments will be replanted on average 4 times and the growth rate will be dependent on the planting method and soil compaction. Trees planted as individuals in urban environments have a much higher mortality rate than those planted in groups and it is, therefore, important to identify appropriate locations – at conventional planting rates Bungay would need to provide a minimum of 5-6 Ha to accommodate the proposed stock.

Maintenance costs – Annual maintenance costs per hectare for mixed woodland is quoted as between £1100 and £2750 (*Woodland Trust 2019*) indicating an annual maintenance

cost of circa £16k. This would be beyond the capacity of the BTC annual budget unless grant funding became available.

It is proposed that tree planting in the areas of new development to the east and west of St. Johns Road provides greater opportunity than the existing streetscape because it can be planned at an early stage as part of the overall masterplan. If the overall objective is simply to expand tree cover, Outney Common has large areas where self-seeded oaks and silver birch have been mown and regrown. Many hundreds of native trees could be permitted to mature in this area and provide existing habitat for a wide range of wildlife. Maintenance costs of this form of woodland would reduce to around £200/Ha per year. Other owners and managers of the common have proposed that the land be used as heathland to encourage native birds and amphibians to inhabit the area.

- Properties management

Properties management. Regarding properties that BTC either own or operate, the council shall undertake audits of energy consumption and shall where feasible identify opportunities for sustainable energy generation, in order to maximise energy efficiency in council activities.

- BTC procurement and due diligence

In its own operations and services, BTC will verify compliance and/or accreditation of all suppliers with appropriate environmental and ISO standards, and through the adoption of a routine due diligence procedure.

For office products, usage and procurement ensure that environmental aspects are considered alongside cost. For paper usage “reduce, reuse and recycle” where possible whilst preferably sourcing recycled products.

- Education

BTC is in a position with facilities to host events in which residents can access information on products, services and resources aimed at environmental improvements. This opportunity should be considered to help those within the town with an interest in mitigating the environmental impact of their own activities or those of wider community interest.

5.0 Translating policies to actions

It is proposed that the present document is reviewed by councillors and actions/tasks necessary to support the implementation of the above proposals are scheduled over a 5-10 year programme and appropriate budgets allocated. An appropriate first stage will be to identify grant-funding sources.

To put this policy into practice actions will be decided by the Planning, Environment and Highways Committee and reviewed quarterly with a consultation with appropriate committees where required and escalation to the full council when deemed necessary.

Glossary

AECB - Association for Environment Conscious Building

BTC - Bungay Town Council

BEIS - Department for Business, Energy and Industrial Sector

CC - Climate Change

CCC - UK Climate Change Committee
ESC - East Suffolk Council
ESW - Essex & Suffolk Water
GHG - Greenhouse Gas
SCC - Suffolk County Council
SID - Speed Indicator Device
STW - Sewage Treatment Works