



Air Quality Strategy

Our vision to improve our Air Quality 2021

Introduction by the Cabinet Member for the Environment James Mallinder

Difficult to see, but ultimately fundamental to good health, the quality of air around should not be taken for granted and councils need to monitor and make sure minimum statutory standards are achieved and maintained. Councils also play an important role to make sure the burden of any polluting activities remains with the cause and protecting the environment lays a crucial role in holding individuals and institutions to account.

East Suffolk is a mainly rural district with pockets of concentrated urban centres. Both urban and rural provide different challenges. Weaknesses in planning and highway considerations can fail to predict road pollution, causing a detrimental effect to our residents. Landowners can allow fires and spraying of chemicals all which have negative impacts to human and wildlife, on the air we breathe.

The environment is one of the core principles of East Suffolk's strategic business plan. This focus has also been reinforced with the Council declaring a Climate Emergency in 2019.

Thus, a clear clean air strategy becomes an important instrument for the Council to encourage better behaviour through education and campaigns along with communicating statutory requirements.

East Suffolk believes clean air should be a fundamental right to all residents and through threading air quality considerations through policy implementation and development we believe we can maintain the quality of air and make improvements where necessary.

Secondary impacts of policy can improve the air quality and under this document we are able to bring all primary and secondary policies together. Individually policies can be weak but collectively as this Air Quality Strategy clearly illustrates, we have a robust and complete strategy to focus stakeholders.



Councillor James Mallinder

Cabinet Member with
responsibility for The Environment

Foreword

It is important to reduce, where possible, public exposure to certain pollutants, even where levels are below the air quality objectives. This is especially important for fine particulate matter (PM_{2.5}), where there are currently no known safe levels for exposure. By establishing a strategic framework which drives air quality considerations to the heart of Council policies, procedures, and decisions, this will ensure that East Suffolk is well placed to maintain good air quality and secure future improvements across the district.

East Suffolk Council takes air quality seriously. We are fortunate in that the air quality in our district generally exceeds the expectations set out by the Government. We continue to monitor the quality of the air and always work to make further improvements wherever possible.

This strategy will look at bringing all the different pieces of the puzzle together, by looking at the actions and interventions East Suffolk Council currently makes. It aims to celebrate our successes and find new areas which can be explored to make further improvements. It also contributes to our commitment to play a key role as a member of the Suffolk Climate Change Partnership, and other stakeholders, to make Suffolk (as a whole) carbon-neutral by 2030, following this Council's recognition of the existence of the climate emergency declared on 24th July 2019, and reflects our commitment to make the Council's estates and operations carbon neutral by 2030. Furthermore, our air quality strategy contributes to the Council's new business plan which places the Environment as one of its five key themes.

To achieve this, we will work alongside our partner organisations, businesses, education establishments, voluntary sectors, and the public.

The Environmental Protection team of East Suffolk Council are responsible for monitoring air quality, promoting air quality matters, helping to maintain the good air quality in the district by commenting on planning applications and other consultations, and producing reports for DEFRA to fulfil our statutory obligations under the Environment Act 1995.

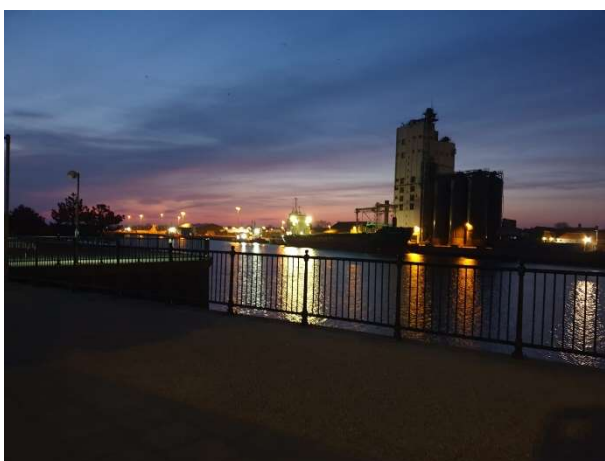


Photo 1: Lowestoft

Contents

Foreword.....	2
List of abbreviations.....	5
Aims of the Air Quality Strategy	6
What does Air Quality mean?	6
Fundamental Principles	8
Management Structure.....	9
Consultation Groups	9
Statutory Obligations	10
Air Quality Management Areas	10
Monitoring Air Quality	11
Provision of Statutory Air Quality Reports.....	12
Local Plan and Air Quality	12
Department for Transport Office for Low Emission Vehicles (OLEV) Consultation	13
Environmental Permitting (PPC functions)	13
Non- Statutory Obligations	14
Anti-Idling Campaigns	14
Biomass burning.....	15
Climate Emergency	16
Climate Change/ Carbon Reduction	16
East Suffolk Greenprint Forum	17
Education in Schools	17
Electric Pool Vehicles	17
Environment Task Group	18
Development of Eco-Stars Fleet Recognition Scheme	19
Installation of Photo-Voltaic arrays on East Suffolk Council’s Estates	19
Reducing ESC fleet emissions.....	19
Planning.....	20
Encouraging offshore energy development	21
Infrastructure improvements through planning gain (SZC, SPR etc).....	22
Planning Policy for Greener Housing Developments.....	23
Sustainable travel plans for larger developments	23
Reducing Staff Emissions Burden.....	23

Social Media	25
Suffolk Air Quality Group	26
Suffolk Climate Change Partnership	26
Taxi Licensing Policy	27
Website Pages- Improving East Suffolk Council's Air Quality.....	28
Air Quality homepage	28
Learning Zone.....	29
Areas for further improvement	30
Active Travel.....	30
Electric Vehicle Charging Network.....	30
Indoor Air Quality.....	30
Work with Local Volunteer and Interest Groups.....	31
Actions and interventions completed.....	32
References	33
Photos	34
Screenshots.....	34

List of abbreviations

AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
ASR	Annual Status Report
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EP	Environmental Protection Team
ESC	East Suffolk Council
LEP	Local Enterprise Partnership
LTP	Local Transport Plan
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
OLEV	(Department for Transport) Office for Low Emission Vehicles
PM ₁₀	Coarse particulate matter of diameter 2.5-10µm
PM _{2.5}	Fine particulate matter of diameter<2.5µm
PPC	Pollution, Prevention Control
SCC	Suffolk County Council
SCCP	Suffolk Climate Change Partnership
SPR	Scottish Power and Renewables
SZC	Sizewell C
ULEV	Ultra-Low Emission Vehicles



Photo 2: Melton Church

Aims of the Air Quality Strategy

The Air Quality strategy aims to do the following:

- Raise public awareness of the importance of air quality
- Reduce emissions of PM_{2.5} within the district
- Encourage and enable active travel to benefit air quality and improve public health
- Document the efforts made to improve air quality across the different areas of the council

What does Air Quality mean?

NO_x

Together, NO and NO₂ are known as NO_x. NO_x is released into the atmosphere when fuels are burned (for example, petrol or diesel in a car engine, or natural gas in a domestic central heating boiler or power station). NO₂ can affect our health. There is evidence that high levels of it can inflame the airways in our lungs, and over a long period of time, affect how well our lungs work. People with asthma are particularly affected. NO₂ can also affect vegetation (*Nitrogen Dioxide in the United Kingdom, 2004*). In the United Kingdom, the national annual objective for NO₂ is 40µg/m³. The hourly objective is 200µg/m³ with no more than 18 exceedances in a year.

Particulate Matter

Particulate matter is a term used to describe the mixture of solid particles and liquid droplets in the air. It can be either human-made or naturally occurring. Some examples include dust, ash and sea-spray. Particulate matter (including soot) is emitted during the combustion of solid and liquid fuels, such as for power generation, domestic heating and in vehicle engines. As such, levels of particulate matter are often higher at sources close to roads, compared to background locations.

Particulate matter varies in size (i.e., the diameter or width of the particle). PM_{2.5} means the mass per cubic metre of air of particles with a size generally less than 2.5 micrometres (µm) and is also known as fine particulate matter. PM₁₀ means the mass per cubic metre of air of particles with a diameter generally less than 10 micrometres (µm) (*Sources and Effects of PM_{2.5}, 2020*).

PM_{2.5}

PM_{2.5} penetrates deeply into the human respiratory system. The acute effects of particle exposure include increases in hospital admissions and premature death of the old and sick due to diseases of the respiratory and cardiovascular systems. The evidence is that both PM_{2.5} and PM₁₀ cause additional hospital admissions and deaths on high pollution days. Less severe effects of short-term particulate exposure also occur during pollution episodes, including worsening of asthma symptoms and even a general feeling of being unwell leading to a lower level of activity (*Fine Particulate Matter (PM_{2.5}) in the United Kingdom, 2012*). In the United Kingdom, the national objective for PM_{2.5} is an annual mean of 25µg/m³. There is a three-

year running annual mean of 15% reduction in average urban background concentrations against a 2010 baseline. Both standards are to be achieved by 2020.

PM₁₀

There is less evidence to connect secondary inorganic particulate matter (such as sulphates and nitrates) or larger particles with adverse health effects, although they cannot be ruled out (*Particulate Matter in the United Kingdom, 2005*). In the United Kingdom, the National Objective for PM₁₀ is 24-hour mean of 50µg/m⁻³ (not to be exceeded more than 35 times a year). There is also an annual mean of 40µg/m⁻³. Both standards are to be achieved by 2005.

Fundamental Principles

The Department for Environment, Food and Rural Affairs Local Air Quality Management Policy Guidance (16) states:

“2.12 It is recommended that all local authorities, particularly those that have not had to designate AQMAs or do not expect to designate an AQMA in the future, but who have areas at risk of exceedance, should consider drawing up an Air Quality Strategy.

2.13 As PM_{2.5} is a pollutant for which there is no recognised safe level and for which there is significant public health concern, it would be appropriate for local authorities to set out how they are addressing this pollutant in any Air Quality Strategy including any links with the Public Health Outcome Framework. The ASR provides the opportunity for the authority to report on the development of its strategy, or where the strategy is in place, to report on its progress”.

We recognise that it is not a statutory obligation to produce an Air quality Strategy, however we would like for a document to encompass all the efforts we make to improve air quality in the East Suffolk District, and to outline where improvements can be made.



Photo 3: Trimley

Management Structure

The East Suffolk area is governed by two-tier authorities – a District Council (East Suffolk Council), and a County Council (Suffolk County Council).

Suffolk County Council have a duty to proactively engage with the District Council as soon as an air quality issue is identified and have the responsibility for changes needed to the highways system including transport planning. They are also a statutory consultee for the air quality Annual Status Reports and Action Plans which are produced by East Suffolk Council.

East Suffolk Council are responsible for the periodic review and assessment of air quality within their area. This includes producing annual reports, monitoring of air quality (by way of diffusion tubes and/ or automatic analysers), for declaring Air Quality Management Areas if it appears that any of the air quality objectives are not being achieved, and for producing Action Plans.

The responsibilities of ESC regarding overall management of air quality in its area is sometimes misunderstood and confused with other agencies having responsibilities for air quality matters – in particular, the Environment Agency, especially where their role overlaps ours in relation to “Permitted Processes” (Pollution Prevention & Control Act & The Environmental Permitting (England and Wales) Regulations).

Consultation Groups

Consultation groups for this strategy include:

- Environmental Task Group
- ESC’s relevant departments- Planning, Licensing
- Greenprint forum
- Portfolio Holder for the Environment
- Head of Environmental Services and Port Health

Statutory Obligations

Local authorities play a central role in achieving improvements in air quality. Our local knowledge and interaction with the communities that we serve mean that we are better able to know the issues on the ground in detail and the solutions that may be necessary or appropriate to the locality.

Through the Local Air Quality Management (LAQM) system we are required to assess air quality in our area and designate Air Quality Management Areas (AQMAs) if improvements are necessary. Where an AQMA is designated, we are required to produce an air quality Action Plan describing the pollution reduction measures that will be put in place.

Air Quality Management Areas

Stratford St Andrew

Stratford was declared an Air Quality Management Area (AQMA) in 2014 due to elevated concentrations of nitrogen dioxide. The AQMA covers four residential properties at Long Row, Stratford St Andrew.

We currently monitor this with air quality diffusion tubes which are changed every month and reported in our annual reports.

Woodbridge

Woodbridge was declared an Air Quality Management Area (AQMA) in 2006 due to elevated concentrations of nitrogen dioxide. The AQMA covers six residential properties on the western side of the Thoroughfare/ Melton Hill arm of the Woodbridge junction.

We currently monitor this with air quality diffusion tubes which are changed every month and reported in our annual reports. We also use a continuous NO_x analyser.

Felixstowe – Now revoked

Felixstowe was declared an Air Quality Management Area (AQMA) in 2009 due to elevated concentrations of nitrogen dioxide. The AQMA covered one residential property in Ferry Lane. In 2016 this AQMA was revoked as the concentrations of NO₂ continued to reduce and were below the annual mean objective.

We currently monitor this with air quality diffusion tubes which are changed every month and reported in our annual reports.

Monitoring Air Quality

To enable the annual review of air quality, East Suffolk Council currently deploy ninety-eight “Diffusion tubes” at various sites around the district which monitor for Nitrogen Dioxide. The results are then bias adjusted and included in our Air Quality reports which are available for viewing on our website. We also have one automatic continuous analyser which monitors the Woodbridge junction, in real time for Nitrogen Dioxide.

What this means: Poor air quality can influence our health, particularly our respiratory system.

What we are doing now: We have been monitoring air quality in our district for many years. This is either by way of diffusion tubes, or a continuous automatic analyser. We have been working with others to reduce air pollution. We continue to monitor the district’s air quality and are working on the possibility of revocation of the Woodbridge Air Quality Monitoring area as the current levels of nitrogen dioxide are now below the maximum concentration prescribed by the regulations.

Where we would like to be in the future: To continue to monitor air pollution at low levels, and within the air quality objectives set by the government.



Photo 4: Diffusion tube in metal holder sited on a building’s downpipe.

Provision of Statutory Air Quality Reports

What this means: An Annual Status Report (ASR) is a yearly report submitted to Defra for review. The ASR lists air quality monitoring results and describes the strategies employed by East Suffolk Council to improve air quality along with any progress that has been made.

What we are doing now: We continue to write the reports required by government. The reports can be found on the Council website

<https://www.eastsuffolk.gov.uk/environment/environmental-protection/air-quality/air-quality-reports/>.

Where we would like to be in the future: To continue to fulfil our statutory obligations and submit reports as required by Defra.

Local Plan and Air Quality

What this means: The Local Plans set out how the East Suffolk area should be developed and contain policies which the council will use when making decisions on planning applications.

What we are doing now: The impact on air quality of development has been considered during the production of the Local Plans, through the Sustainability Appraisal.

Where we would like to be in the future: The impact on air quality should continue to be given significant consideration when land is allocated for development, and when policies for decision making are proposed.

Department for Transport Office for Low Emission Vehicles (OLEV) Consultation

What this means: The Office for Low Emission Vehicles (OLEV) is a team working across government to support the early market for ultra-low emission vehicles (ULEV). They are providing over £900 million to position the UK at the global forefront of ULEV development, manufacture and use. This will contribute to economic growth and will help reduce greenhouse gas emissions and air pollution on our roads. (*Office for Low Emission Vehicles, 2020*).

What we are doing now: ESC continues to feed into the Department for Transport's OLEV consultation regarding bringing forward the end to the sale of new petrol, diesel, and hybrid cars from 2040 to 2035.

Where we would like to be in the future: We would like to see an increase in use of sustainable travel options such as walking, cycling, public transport and electric vehicles. We will continue to work with DfT to secure improvements in this area.

Environmental Permitting (PPC functions)

What this means: Environmental permits are issued as a mechanism to regulate certain functions. This includes:

- Installations or mobile plant which carry out listed activities
- Waste operations
- Mining waste operations
- Radioactive substances activity
- Water discharge activity
- Groundwater activity

There are three sections to the permits, Part A (1), Part A (2) and Part B processes. The category determines whether the permit is issued by the Environment Agency or the Local Authority. Local authorities deal with about eighty different types of installation including glassworks and foundries, rendering plant and maggot breeders, petrol stations and concrete crushers, sawmills, and paint manufacturers.

What we are doing now: As part of our ongoing inspection programme, we provide ongoing supervision of activities which could harm the environment. The aim is to protect the environment so that statutory and government policy environmental targets and outcomes are achieved. East Suffolk Council currently has fifty-nine permitted installations.

Where we would like to be in the future: Most of our installations are classed as 'low' risk and therefore do not pose a significant threat to the environment if effectively managed. We would like this to continue and aim to do this by encouraging businesses to regularly review their processes and employ the best available techniques to so do.

Non- Statutory Obligations

Anti-Idling Campaigns

What this means: Vehicle idling contributes to localised air pollution. Often this occurs outside schools or busy shopping areas. It can be especially problematic for children in pushchairs, as they are at the height of the exhaust and therefore on the receiving end of the emissions from vehicles.

What we are doing now: Visits have taken place at Colneis Junior, Heath Primary, Melton Primary, Pakefield Primary, Roman Hill Primary, Sandlings Primary, Woodbridge Primary, St Mary's Church of England Primary, Red Oak Primary, Kyson Primary, Dell Primary, Reydon Primary, Elm Trey Primary, Blundeston Primary and Woodbridge School. We undertake various anti-idling exercises with private motorists and have taken part in a media campaign to promote anti idling around schools. We have undertaken several visits to schools to actively engage in conversations with, and hand information leaflets to, parents and visitors who may leave their car idling while dropping children off at school.

Where we would like to be in the future: To continue to run appropriate campaigns as we feel necessary and respond to the requirements of the community.



Photo 5: Aldeburgh beach

Biomass burning

What this means: Burning of solid fuels on domestic or industrial open fires, wood burners or biomass burners increases exposure to domestic air pollutants and makes a significant contribution to the national emissions of airborne particulates.

What we are doing now: We have updated the councils air quality pages of the website to include provision of information on biomass burning and effective ways to reduce the creation of pollutants. Information was sent out to all parish councils within the East Suffolk area, for dissemination to the public. An article was also included in the Winter 2018 edition of Coastline

Where we would like to be in the future: We would like to have a better understanding of the numbers and types of Biomass burners in the district, and to ensure that they work within statutory rules. We would like to support the Governments campaign to ensure that suitable, low emission, fuels are burnt across the district, and to discourage burning where alternatives are available.

Ready to burn?

Open fires and wood-burning stoves have risen in popularity in recent years, and as the colder months are now upon us many households will be using theirs for warmth.

Whilst these are both a source of heat and an attractive feature, some people are unaware that using them in the home increases domestic exposure to air pollutants and makes a significant contribution to our national emissions of airborne particulates.

While we will never be able to eliminate all airborne particulates, there are some simple steps that households can

take that will make a big difference to limit emissions both indoor and outdoor.

So what can you do?

- Consider burning less
- Only burn dry (seasoned) wood, including certified 'Ready to Burn' (see www.readytoburn.org for more information)
- Burn seasoned (dry) clean wood rather than treated waste wood (such as old furniture and treated pallets)
- Consider using an approved smokeless fuel
- Operate your appliance efficiently by controlling air supply etc.
- Regularly maintain and service your appliance

- Get your chimney swept regularly
- If you're buying a new appliance, check it is Defra approved and installed by a qualified person (see www.hetas.co.uk)

For more information, go to www.eastsuffolk.gov.uk/environment/environmental-protection/air-quality/biomass-and-wood-burning/

If you need financial help making your home cheaper to heat, for example with first time central heating, there are a number of schemes you may be eligible for. For more details, go to www.eastsuffolk.gov.uk/housing/energy-efficiency/ and www.eastsuffolk.gov.uk/housing/grants/renovation-grants/ or contact our Private Sector Housing Team on 01502 523 119 or ps.housing@eastsuffolk.gov



Screenshot 1: Article in Winter 2018 Coastline Magazine.

Climate Emergency

What this means: East Suffolk Council recognised the existence of the Climate Emergency on 24 July 2019. This committed ESC to form a cross-party Environment Task Group to investigate ways to make the council's own operations and estates carbon neutral by 2030, to continue to play a key role as a member of the Suffolk Climate Change Partnership to work with stakeholders across Suffolk to make the county as whole carbon neutral by 2030, and 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.

What we are doing now: We are in the course of collating our climate action plan through engagement with service areas across the council. We are reviewing our operations and estates of the council to identify opportunities to reduce our consumption of energy and fuel and reduce our resultant emissions.

Where we would like to be in the future: East Suffolk Council has an ambition to become a carbon neutral council (including its estates and services) by 2030 and to work with Suffolk County Council and other partners across the county and region including the Local Enterprise Partnership (LEP) and the Public Sector Leaders with an ambition to make the county of Suffolk carbon neutral by 2030.

Climate Change/ Carbon Reduction

What this means: ESC is working closely with the Suffolk Climate Change Partnership (SCCP) in the development of a Climate Emergency Plan to deliver carbon neutrality by 2030. Whilst this is primarily focused on carbon reduction, we recognise there are significant co-benefits and shared objectives with our aspirations regarding Air Quality. Part of this work entails an analysis of policies across a range of stakeholders in Suffolk which have the potential to influence emissions reductions, along with an assessment of ways in which the SCCP can influence those policies and actions more widely.

What we are doing now: Consultants have been engaged to update baseline carbon data with district level analysis to help focus plans for further CO₂ reductions at the district level. This work will analyse emission sources from buildings and transport routes to a level of detail resolvable to 1-kilometre squares.

Where we would like to be in the future: This analysis will provide a good overview of the level and sources of emissions across the County and how these contribute to pollution concentration levels. The results will enable us to collate NO_x and PM levels across the county and further correlate these with the likely impacts of the measures proposed to be implemented by climate emergency/carbon reduction plans and their aspirations for carbon neutrality by 2030.

East Suffolk Greenprint Forum

What this means: The Greenprint Forum is a voluntary network, facilitated by the district council, to help deliver their business plan; specifically enabling community environmental action to improve lives and strengthen our economy.

What we are doing now: Its vision is to enable the people of East Suffolk to work together to improve our quality of life and living standards whilst improving our environment. Its goals include to aim for a Pollution Free Environment where everyone takes responsibility to reduce their impact on the environment, and to promote Active Travel and for low-emission travel to dominate, directly complementing this strategy.

The quarterly newsletter, and the social media channels of the Greenprint Forum, have supported, and will continue to support, the promotion of these ESC's initiatives to improve air quality.

Where we would like to be in the future: By 2030, we would like to see significant progress in East Suffolk: active travel; eco-friendly development; energy generating homes; environmentally beneficial employment; pollution free environment; healthy humanity; quality food; nature first and upcycling culture.

Education in Schools

What this means: Providing resources to schools means that children can be taught about air quality and how to contribute towards improving it, from a young age.

What we are doing now: The Environmental Protection team have been running lessons in local schools regarding air quality, and anti-idling. We have also produced some lesson plans which are available on our website- <https://www.eastsuffolk.gov.uk/environment/environmental-protection/air-quality/air-pollution-lesson-resources> which are freely available to download and can be used by teachers independently in the school, or as a home education tool.

This includes improving links to classroom resources.

Where we would like to be in the future: To continue to run appropriate campaigns as we feel necessary and respond to the requirements of the community.

Electric Pool Vehicles

What this means: Traditional petrol/diesel engine vehicle use contributes greatly to the air pollution of the district particularly along busy roads. Plug in vehicles do not have any exhaust emissions therefore greatly reducing the amount of pollution created.

What we are doing: East Suffolk Council currently has one electric pool vehicle and two charging points at East Suffolk House, Melton. There are also several electric charging points at the Riverside office, Lowestoft. These are for staff and visitors to the buildings to charge their vehicles, in addition to charging the electric pool car.

Where we would like to be in the future: We will review this alongside the needs of the Council.

Environment Task Group

What this means: Chaired by Councillor James Mallinder, it is a cross (political) party group and is working towards a Climate Action Plan to deliver on the Council's commitment to make its estates and operations carbon neutral by 2030.

What we are doing now: The Task Group's primary purpose is to reduce the Council's own carbon footprint and will include interventions which the council has direct control over, such as "greening" our refuse collection vehicles through the trialling of biomethane fuels, increased use of electric cars and vans, improving Council owned buildings for energy efficiency, and investigating potential for expanding the use of renewable energy systems such as solar photovoltaics on our estates.

Where we would like to be in the future: East Suffolk Council has an ambition to become a carbon neutral council (including its estates and services) by 2030 and to work with Suffolk County Council and other partners across the county and region including the Local Enterprise Partnership (LEP) and the Public Sector Leaders with an ambition to make the county of Suffolk carbon neutral by 2030.

Development of Eco-Stars Fleet Recognition Scheme

What this means: This project aims to work with local hauliers that transport goods to and from the Port of Felixstowe. East Suffolk Council, in partnership with other Suffolk local authorities, is looking to establish membership of the scheme ECO Stars, to provide these companies with expert advice on reducing emissions. The proposed timescale for delivering this project is two years. The first five companies to join ECO Stars would take place in the first six months and would then be given a further six months in which to implement suggested changes. This would be repeated in the second year for a further five companies recruited to join ECO Stars.

What we are doing now: We undertook a survey of Felixstowe hauliers in February 2020, which received nine responses and a confirmed several companies interested in ECO Stars.

We then applied for Highways England Air Quality fund in conjunction with this scheme to see if we could get help to implement the scheme and any suggested technology for each company involved. The technologies we are looking to fund are physical technologies, such as low rolling-resistance tyres, telematics, or improved aerodynamics.

We are still waiting to hear back from Highways England.

Where we would like to be in the future: We would like to implement this scheme, and encourage further hauliers to join, to celebrate their success in becoming “Eco-Stars” and promote good air quality by using eco-friendly vehicles.

Installation of Photo-Voltaic arrays on East Suffolk Council's Estates

What this means: The provision of Photo-Voltaic arrays on our buildings mean we can work towards our effort to become carbon neutral by 2030. It provides a way of harvesting energy from the sun to provide electric to our buildings.

What we are doing now: We currently have PV arrays on ten sheltered and communal housing schemes, our Riverside office (shared with Suffolk County Council), Ufford Depot, and Deben, Leiston, and Waveney Valley Leisure Centres. The combined generating capacity is 263.92kWp with a total estimated annual output of 138832kWh (capacity and estimated output for Waveney Valley Leisure Centre is unknown at this stage).

Where we would like to be in the future: A review of the Council's estates are underway which will include investigations to identify opportunities to expand existing solar arrays where they already exist and retrofit solar arrays to other buildings where appropriate and feasible. In addition, the integration of solar PV arrays will be examined at the planning stages of future new asset developments, to ensure that our estates are as green as possible.

Reducing ESC fleet emissions

What this means: Traditional petrol/diesel engine vehicle use contributes greatly to the air pollution of the district particularly along busy roads. Plug-in vehicles do not have any exhaust emissions therefore greatly reducing the amount of pollution created.

What we are doing now: In 2020 the Council's operational partner East Suffolk Norse acquired six new electric cars and vans (replacing diesel fuelled vehicles) for use in the course of discharging duties on behalf of the Council, which is in addition to the existing single EV pool car provided for staff business use based at East Suffolk House.

Electric vehicle charging points have recently been installed at the Council's Norse depots at Ufford and Lowestoft and at its Port Health offices in Felixstowe, in addition to the existing charging points at East Suffolk House in Melton.

The council is working with Norse to develop a business case to change our diesel-fuelled fleet of refuse collection vehicles to a fleet of vehicles that will run on of biomethane-derived fuels.

Where we would like to be in the future: We will review fleet alongside the needs of the Council, with an ambition to make the emissions of our fleet as low as possible.



Photo 6: East Suffolk Norse Electric Van outside East Suffolk House, Melton.

Planning

What this means: The Environmental Protection team contribute to the consideration of applications for planning consent as a consultee. The EP team are afforded the opportunity to advise the planning team and encourage the use of cleaner technologies. This process also enables the EP team to spot development with potential air quality impacts and assimilate the effects into their monitoring and assessment of air quality across the district, e.g., road construction, combustion/incineration processes, industrial development, and major housing developments.

What we are doing now: Where appropriate, (such as for larger developments) we will request an air quality assessment to enable us to advise the planners on the air quality implications of the decisions they make.

We may also request that conditions are included such as the provision of Electric Vehicle charging points. Applications involving the introduction of new combustion processes (for

example, large conventional heating appliances or biomass boilers) will be scrutinised and additional information requested from the applicant to enable us to assess the impacts properly.

Where we would like to be in the future: The consideration of the air quality impacts of an application for development is one of many factors which the planners must consider when determining whether consent should be granted. These include government policy, local ESC policy, economic impact, environmental impact, and collateral benefits.

Given the rising awareness of the threat posed by climate change and poor air quality, we aim to raise the profile of the air quality impacts of development and provide advice commensurate with public expectation, with developing local, national, and international policy, and the urgent need to ensure new development is truly sustainable.

We will seek to achieve this by contributing to local policy, liaising with central government (where opportunities arise) to influence national policy and by advising the planning process in pursuance of these aims, for example, by developing advice on sustainability for applicants on matters such as the provision of electric vehicle charging points as standard in new developments by the inclusion of this within planning policy.

Encouraging offshore energy development

What this means: It is the Council's aim to maximise the positive benefits arising from the development of nationally significant offshore wind energy infrastructure installations whilst minimising the negative impacts.

What we are doing now. The provision of offshore energy is currently focussed on several offshore wind turbine developments. The energy they will produce needs to be brought ashore and connected to the national grid. This requires significant engineering and construction works which we are actively assessing from the point of view of their environmental impacts including air quality.

Such impacts are potentially significant, arising from transport sources (principally NO_x and PM_{2.5} and PM₁₀) and construction activities (Particulate Matter) during the construction phase.

These are being assessed to ensure the most appropriate mitigation methods are in place to minimise the adverse effects on air quality.

Where we would like to be in the future: The Council is calling for stronger national coordination of nationally significant energy infrastructure projects including East Anglia One, Two and Three and Sizewell C.

These works are scheduled to continue for several years to come. It is likely that other projects will be conceived and planned in detail soon. We hope to be able to apply learning from the developments currently under way to apply the most appropriate mitigation methods for those future developments.

Infrastructure improvements through planning gain (SZC, SPR etc)

What this means: It is the Council's aim to maximise the positive benefits arising from the development of nationally significant low carbon and renewable energy infrastructure developments whilst minimising the negative impacts.

What we are doing now: The EP team are providing expert comments on the local environmental impacts of these developments.

Where we would like to be in the future: The Council is calling for stronger national coordination of nationally significant energy infrastructure projects including East Anglia One, Two and Three and Sizewell C.



Photo 7: Lichen – an indicator of air quality – on an apple tree in Lowestoft.

Planning Policy for Greener Housing Developments

What this means: The sustainable development guidance for developers and those improving their properties is progressing and a Supplementary Planning Document on sustainable construction is expected to follow. The Planning department are leading on this document.

What we are doing now: We are working on advice for developers which seeks to provide information them about the benefits of sustainable features of their proposals.

Where we would like to be in the future: Advice is currently just that – ‘advice’. It is non-compulsory and we are constrained by planning law and national policy and guidance on the extent to which we can insist on adjustments to development proposals to make them meet more demanding environmentally sustainable criteria.

In more general terms, we are also constrained by economic factors, since the adoption of environmentally sustainable technologies is likely to impose additional burdens on the costs of development; hence we need to take a careful view on the way our aspirations are promoted.

As national policies develop, we would like to be able to apply local sustainable development policies more rigorously.

Sustainable travel plans for larger developments

What this means: A Travel Plan is a long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that contains a suitable action plan and is annually reviewed and monitored.

What we are doing now: The Council requires the submission of a Travel Plan with planning applications where the proposed development is likely to generate significant traffic movements and have significant transport implications.

Where we would like to be in the future: To continue to request travel plans as appropriate, and to support the use of travel plans where they could promote sustainable travel and reduce traffic movements to a minimum.

Reducing Staff Emissions Burden

What this means: Reducing staff emissions by permitting working from home and encouraging the use of cleaner, greener travel is an additional way that we can lead by example and improve our air quality by reducing unnecessary vehicle journeys.

What we are doing now: East Suffolk Council enables and encourages staff to work from/at home. This reduces commutes which often take place in cars, thus reducing emissions. In addition, staff are encouraged to make use of remote meeting facilities such as Skype to reduce mileage between offices.

There is also a cycle scheme available to staff where they can purchase a bike to ride to and from work and for personal use and offset the cost via a salary sacrifice scheme. This scheme

has been run at ESC since 2013 and runs every quarter. With the current provider who has been used since 2017, approximately 40 bikes have been issued across the authority.

In addition, there are a couple of pool bikes which staff can use to travel to local visits, or to use at lunchtime, to reduce the number of car trips into town.

Other things ESC does are:

- Free bus travel on the 101-bus route in Lowestoft
- Discounted travel on Greater Anglia trains with season passes
- Discounted travel with the travel club on First East busses
- Ability to purchase electric and hybrid vehicles through the car scheme (Tusker) with a big reduction on the benefit in kind (BiK) tax element, making them much more affordable.

Where we would like to be in the future: To continue to encourage staff to reduce their emissions eliminating unnecessary travel and using sustainable travel options where travel is required.

Social Media

What this means: We currently have 7.6 thousand followers on our East Suffolk Council Facebook page, that means that information we share is seen by many people. It is a quick and easy way to get information to the public and is managed by the communications team.

What we are doing now: We have used social media pages such as Facebook and Twitter to promote air quality information and guidance. We have endorsed several topics including Clean Air Day, reminding the public to be a “good neighbour” and refrain from having bonfires during the Covid-19 pandemic, advertised our Air pollution lessons, and promoted the anti-idling campaign. We intend to continue to use these channels for promoting other national days too, such as National Walking Month, and National Bike Day, all of which could contribute to fewer car journeys and a reduction in air pollution.

Where we would like to be in the future: To continue to make use of Social Media platforms to encourage greener options and promote actions to improve air quality.



Screenshot 2: East Suffolk Council's Facebook post promoting anti-idling at Roman Hill Primary School.

Suffolk Air Quality Group

What this means: A Suffolk wide group of Local Authority Officers who work in the field of Local Air Quality Management. All Suffolk Local Authorities are represented, along with Suffolk County Council Highways and Public Health.

What we are doing now: The Suffolk Air Quality group currently meets twice a year to discuss air quality matters affecting the county of Suffolk. Resource constraints necessitate a minimal approach to cross-district working, but the group has managed to collaborate on some Suffolk-wide issues such as the anti-idling campaign which ran in early 2019.

Where we would like to be in the future: The Suffolk Air Quality Group offers the opportunity to pool expertise to address air quality issues affecting Suffolk – feeding advice on specific difficulties & innovations upwards to central government; pooling resources on local campaigns and developing air quality policies across the county in a coherent way (benefits for developers).

Suffolk Climate Change Partnership

What this means: East Suffolk Council is a key member of the Suffolk Climate Change Partnership (SCCP) which consists of Suffolk's Local Authorities and the Environment Agency, working with other organisations locally including Groundwork Suffolk and the University of Suffolk.

What we are doing now: We have a shared interest in supporting Suffolk's communities, businesses and residents to reduce carbon emissions, realise the economic benefits of reducing energy consumption and adapt to the future impacts of climate change.

The vision of the SCCP is that "Suffolk wants to be an exemplar in tackling climate change and protecting and enhancing its natural environment to be the county with the greatest reduction in carbon emissions".

See- <http://www.greensuffolk.org/about/suffolk-climate-change-partnership/>

The Suffolk Climate Change partnership undertake free energy audits for businesses and community buildings; offers free energy advice for householders; and provides grants for energy efficiency and renewable energy upgrades.

It runs the scheme Solar Together Suffolk, which is a collective purchasing scheme to enable householders to benefit from lower prices for installations of domestic solar PV arrays. Since 2018, over 800 households across Suffolk have had solar PV installed on their homes through the scheme.

Where we would like to be in the future: By 2030, we have an ambition to make the County of Suffolk carbon neutral and ESC will actively play its part to help achieve this through partnerships including the SCCP.

Taxi Licensing Policy

What this means: Traditional petrol/diesel engine vehicle use contributes greatly to the air pollution of the district particularly along busy roads. Plug in vehicles do not have any exhaust emissions therefore greatly reducing the amount of local air pollution created.

What we are doing now: ESC were due to carry out a review in 2020 in line with leaders recommending a “greener future” for the taxi trade but unfortunately due to current Covid-19 pandemic this has been postponed. It is hoped that the review will be undertaken in 2021. Flyers were sent out which were provided by Environmental Protection RE: greener vehicle choices but the trade still has a strong preference for diesel/petrol. ESC Licensing team have received enquiries from a few large operators enquiring about going electric, but the cost implications are very high, and with the current climate very difficult to achieve.

Where we would like to be in the future: Once a review has been undertaken it is hoped that ESC will have a better record of the percentage of electric/ hybrid vehicles compared to traditional petrol/ diesel. Currently there are fewer than twenty hybrid vehicles in use as taxis registered with ESC, and none of the vehicles registered are fully electric.

The Licensing team will continue to encourage the use of electric/ hybrid vehicles.

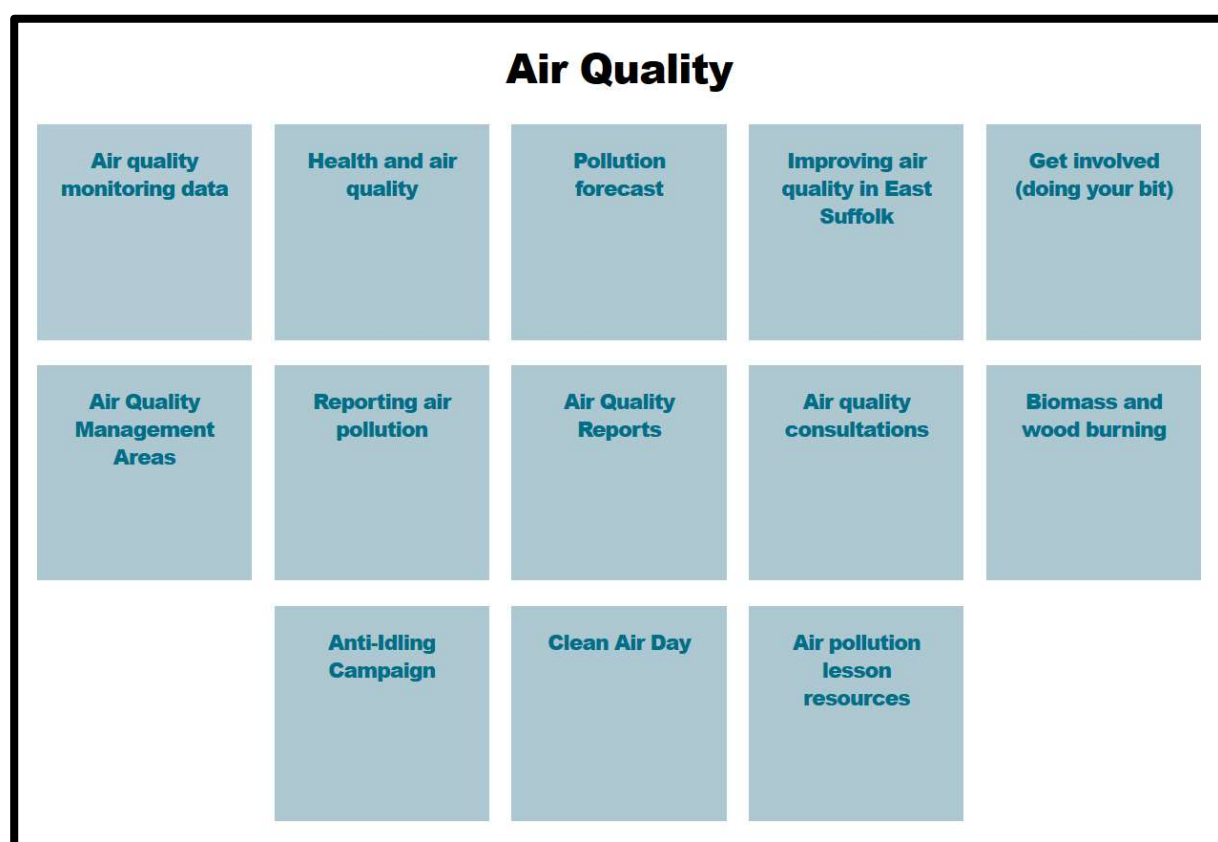
Website Pages- Improving East Suffolk Council's Air Quality

Air Quality homepage

What this means: We can utilise our website to promote air quality, provide valuable resources to schools and community groups to encourage the use of greener travel, and to inform the community regarding our current air quality. The website provides a hub for our air quality reports to be found, meaning we no longer need to keep paper versions in the office for public viewing, saving valuable resources.

What we are doing now: Our website has an extensive range of information relating to air quality. Which we continue to populate with more information as it becomes available.

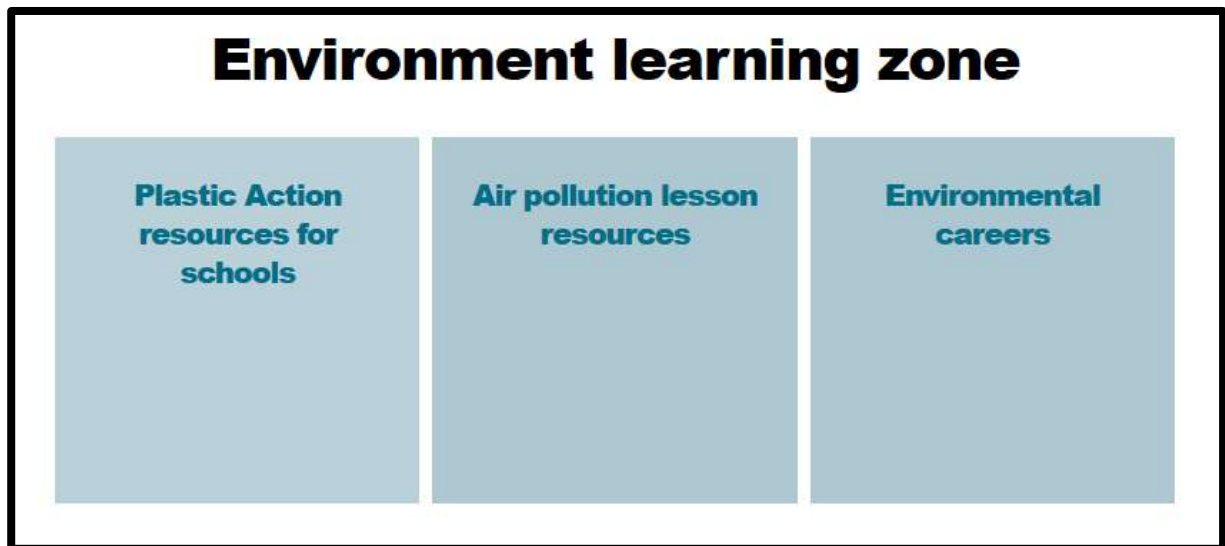
Where we would like to be in the future: To continue to provide comprehensive information through our website and to adapt to the needs of the community.



Screenshot 3: East Suffolk Council's Website showing Air Quality tiles

Learning Zone

We have introduced a “Learning Zone” tile to our Environment pages of our website. This includes a variety of resources including Plastic Action, Air Pollution and some information about careers in Environment- related positions.



Screenshot 4: East Suffolk Council's Website showing Environment Learning Zone tiles

Areas for further improvement

Active Travel

Vehicle use contributes greatly to pollutant levels in the environment. Even electric plug-in vehicles are significant contributors to particulate emissions through tyre and brake use and contribute to congestion which increases pollution. Busy roads also make walking and cycling less attractive. The council will find ways to promote, enable and encourage active travel to not only reduce pollution but to contribute to the health agenda. Both the Greenprint Forum, and the eight new Community Partnerships, will have a role to play in developing and delivering some actions to promote active travel. The Covid-19 pandemic has seen the government put funds into making more areas cycling friendly. Suffolk County Council has made a Transport Recovery Plan, which details plans for emergency changes to cycle lane provision in Felixstowe High Road and Lowestoft Road in Beccles as well as other towns in Suffolk. See <https://www.suffolk.gov.uk/assets/coronavirus/SCC-TransportRecovery-plan2020.pdf>

Suffolk County Council are also in the process of bidding for government funding for more schemes which have been identified as beneficial in Hollesley, Kesgrave, Chillesford, Bungay, Leiston, Saxmundham, Woodbridge, Stratford and Snape (in addition to other areas in Suffolk which are out of ESC's district).

Electric Vehicle Charging Network

Through the Suffolk Climate Change Partnership, we are scoping the requirement for a regional electric vehicle charging network strategy. We will continue to encourage the provision of facilities or low emission vehicles at council estates.

Indoor Air Quality

Indoor air pollution is also an important source of exposure. The average person spends around 80% of their time indoors and therefore, exposure to indoor air pollution is important to consider.

Pollutants and sources include:

- CO, NO₂ and particulates from domestic appliances (boilers, heaters, fires, stoves and ovens), which burn carbon-containing fuels (coal, coke, gas, kerosene and wood)
- Organic compounds (OCs) from cleaning and personal care products, building materials and household consumer products (paints, carpets, laminate furniture, cleaning products, air fresheners, polishing)
- environmental tobacco smoke (ETS) and second-hand smoke (SHS) (*Air pollution: applying All Our Health, 2020*).

The council will find ways to promote and advise on improving indoor air quality to reduce pollution and improve health.

Work with Local Volunteer and Interest Groups

We will pass information to local volunteer and interest groups to cascade to their members.

Actions and interventions completed

As this is the first East Suffolk Council Air Quality Strategy, it is anticipated that this area of the report will be revisited in 2023 to review the actions completed in 2021 and to assess opportunities for inclusion of further measures, commensurate with the evolving political, economic, social, and technological environment.

References

1. GOV.UK. 2020. *Air Pollution: Applying All Our Health*. [online] Available at: <<https://www.gov.uk/government/publications/air-pollution-applying-all-our-health/air-pollution-applying-all-our-health>> [Accessed 7 August 2020].
2. GOV.UK. 2020. Office for Low Emission Vehicles. [online] Available at: <<https://www.gov.uk/government/organisations/office-for-low-emission-vehicles>> [Accessed 24 July 2020].
3. Laqm.defra.gov.uk. 2020. Sources and Effects of PM2.5. [online] Available at: <<https://laqm.defra.gov.uk/public-health/pm25.html>> [Accessed 25 September 2020].
4. The Department for Environment, Food and Rural Affairs Local Air Quality Management Policy Guidance (16)
5. Uk-air.defra.gov.uk. 2004. Nitrogen Dioxide in The United Kingdom. [online] Available at: <<https://uk-air.defra.gov.uk/assets/documents/reports/aqeg/nd-summary.pdf>> [Accessed 17 July 2020].
6. Uk-air.defra.gov.uk. 2005. <https://Uk-Air.Defra.Gov.Uk/Assets/Documents/Reports/Aqeg/Pm-Summary.Pdf>. [online] Available at: <<https://uk-air.defra.gov.uk/assets/documents/reports/aqeg/pm-summary.pdf>> [Accessed 17 July 2020].

Photos

All photos courtesy of the Environmental Protection team (except for the photo of James Mallinder).

Front cover: Butley Ferry

Photo 1: Lowestoft (Page 1)

Photo 2: Melton Church (Page 5)

Photo 3: Trimley (Page 8)

Photo 4: Diffusion tube in metal holder (Page 11)

Photo 5: Aldeburgh Beach (Page 14)

Photo 6: Electric East Suffolk Norse van (Page 20)

Photo 7: Lichen on an apple tree in Lowestoft (Page 22)

Screenshots

Screenshot 1: Article in Winter 2018 Coastline Magazine (Page 15)

Screenshot 2: East Suffolk Council's Facebook post promoting anti-idling at Roman Hill Primary School (Page 25)

Screenshot 3: Screenshot of East Suffolk Council's Website showing Air Quality tiles (page 28)

Screenshot 4: Screenshot of East Suffolk Council's Website showing Environment Learning Zone tiles (Page 29)