



TENDRING CLIMATE EMERGENCY ACTION PLAN 2020 - 2023



TENDRING DISTRICT COUNCIL

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The impacts of global warming on our planet cannot be underestimated. The evidence is clear that the current generation must take action to limit the damage and safeguard the planet for future generations.

As a population we have collectively developed and benefitted from a way of living that involves the burning of fossil fuels that we now understand have a very detrimental impact on our environment.

Last year, this Council along with many others made a Climate Emergency Declaration committing ourselves to a number of actions aimed at reducing our greenhouse gas emissions to net zero by 2030.

This action plan sets out the position the Council is in, with respect to greenhouse gas emissions from its day to day operations and provides a pathway to reducing those emissions that are under our control. Whilst we are at the start of a long process that is not without its challenges, I believe we can deliver on our commitment and become a net zero carbon council by 2030. Through ambition and innovation we will lead the way on this and use our influence to bring other organisations and residents on a similar journey.

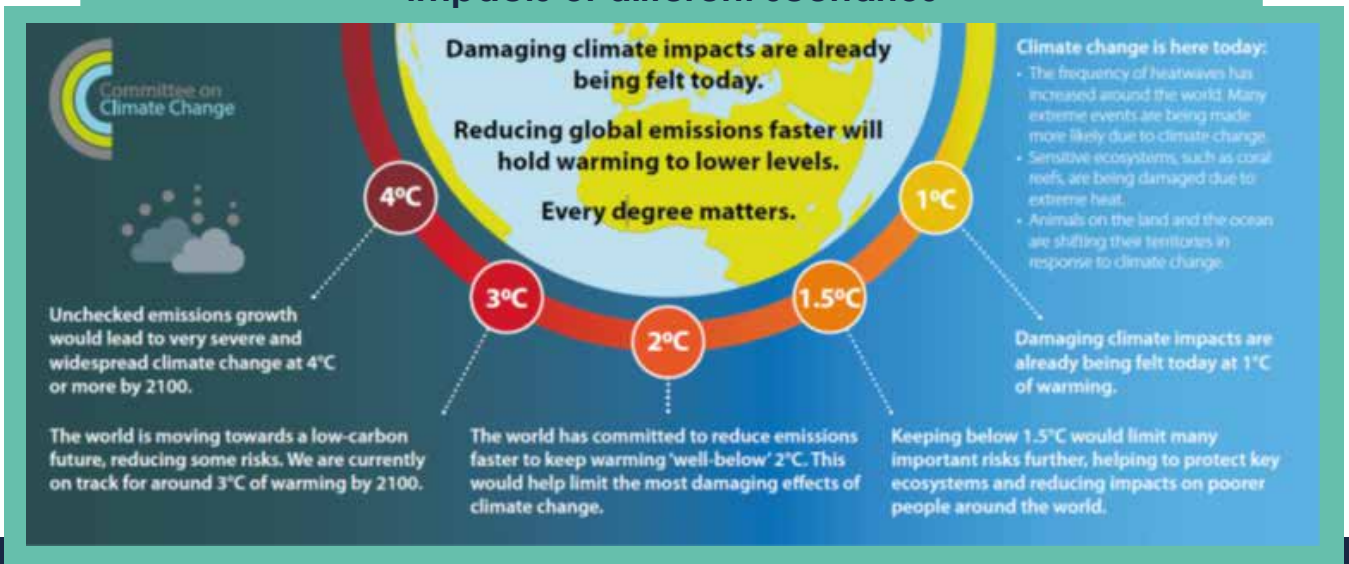
Action of such magnitude does require a collective approach and I call on everyone in our district to back our commitment and together we can make the change that future generations will thank us for.

Councillor Neil Stock OBE
 Leader of the Council

INTRODUCTION

In 2018, the Intergovernmental Panel on Climate Change (IPCC) published a report which advised that we must limit global warming to 1.5°C, as opposed to the previous target of 2°C. Their review of over 6,000 sources of evidence found that, with a rise of 1.5°C, there would be risks to health, livelihoods, food security, water supply, human security and economic growth. A rise to 2°C would be even more catastrophic. It warned that we have only 12 years left within which to take the serious action required to avert this crisis and avoid the worst impacts.

Figure 1 Committee on Climate Change Infographic on the impacts of different scenarios



TENDRING DISTRICT COUNCIL'S MOTION

On 6th August 2019 the Council declared a climate emergency and Full Council passed the following motion:

"That the Council notes

That the impact of climate breakdown is already causing serious damage around the world.

That all Governments (National, Regional and Local) have a moral duty to act, and local Governments should not wait for national Government to change their policies.

That the need for determined action must be set alongside and balanced with the Council's other statutory responsibilities.

That the "Special Report on Global Warming of 1.5 degrees" published by the intergovernmental Panel On Climate Change in October 2018. Describes the enormous harm that a 2 degree C average rise in global temperatures is likely to cause compared with a 1 degree rise, confirms that limiting Global Warming to 1.5 degrees may still be possible with ambitious action from national and sub-national authorities, civil society and the private sector.

That the impact of projected rises in sea levels as a result of global warming places the East Coast of the UK in the front line where impacts will be felt soonest and most severely.

That the challenge of taking action to avoid climate breakdown is of an unprecedented scale and scope which will have very significant additional costs and impacts on the prioritisation of budgets and will require sources of funding beyond the Council, and local Business Rate and Council Tax payers if the goals are to be met.

That strong policies to cut emissions also have associated health, well-being and economic benefits; and

That, recognising the above, over 80 councils across the UK have already passed "Climate Emergency" motions.

It is therefore proposed that this Council:

1) Declares a Climate Emergency and instructs the Chief Executive to prepare an Action Plan for consideration by Cabinet and recommendation to the Full Council to form part of the Policy Framework, as soon as practicable with the aim of activities of the Council being carbon neutral by 2030.

- 2) Instructs the Chief Executive to draw up the Action Plan in two parts,
 - Part 1 setting out clear research and evidence as to what the Council's Carbon footprint is and precisely how it is composed and setting out costed actions and policies together with appropriate milestones to make the Council's activities carbon neutral by 2030
 - Part 2 setting out community leadership actions to influence and encourage partners, businesses, community groups and individuals across Tendring to join the Council in striving to achieve carbon neutrality for the District as a whole.
- 3) Calls on the UK Government to provide the powers, resources and help with funding to achieve carbon neutrality and to call on local MPs to do likewise.
- 4) Authorises the Chief Executive to use the £150,000 allocated by the last Cabinet meeting to a Climate Emergency budget to enable specialist advice to be obtained to complete the essential research to establish the Council's Carbon footprint to be carried out and to provide the capacity to enable a comprehensive and costed Action Plan to be prepared for agreement by full Council as set out above.
- 5) Notes that the Leader will form a Working Party to oversee and work alongside officers to prepare the Action Plan, to be established in accordance with Article 7.7 of the Constitution, which will be broadly politically balanced, and that the Leader of each political Group on the Council will be invited to join the Working Party or to nominate a representative."

OUR CURRENT POSITION

The Council engaged the services of APSE Energy late in 2019 to help understand the position it is in and to calculate its own greenhouse gas emissions for the baseline year of 2018/19 along with collating data for the Tendring district as a whole. APSE Energy supplied the Council with a report in August 2020 that is used to underpin this Action Plan.

One of APSE's recommendations is that the Council adopt the term **net zero carbon** as an aim rather than carbon neutral. Essentially these have the same meaning with carbon neutral being a term often used to describe net zero carbon.

Net zero carbon reflects the fact that operating a Council is an activity that is unlikely to ever be possible without the emission of some greenhouse gases. The emissions that we cannot prevent will have to be offset in some way, be that through the planting of additional trees or the generation of surplus renewable energy.

In 2018/19 the Council, through its business operations, emitted 4,553 tonnes of CO₂e. A summary of the data is shown below and will also be published on the TDC website along with the estimated emissions for the Tendring district as a whole and this will be updated on an annual basis.

Greenhouse gas emissions are categorised into three potential scopes:

Scope 1

These emissions are defined as direct greenhouse gas emissions arising from sources that are owned or controlled by the Council where the combustion of fossil fuels take place at the source. Simple examples are diesel fuel used in its own vehicles or oil and gas for boilers.

These emissions result from activities that the Council can have direct influence upon through its actions.

Scope 2

These emissions are indirect and are associated with the use of electricity imported from the grid or from a third party supplier of energy in the form of heat or electricity.

The Council can influence how much electricity it uses in its buildings, but has little control over the generation of the electricity in the power stations, hence the categorisation as indirect. The Council does have the ability to purchase energy generated from renewable sources and will be looking to do so.

Scope 3

Scope 3 emissions are also indirect and are defined as those arising as an indirect consequence of the use of goods or services provided to the Council.

The Council does have some influence over Scope 3 emissions but unlike Scope 1 and 2, emissions in this category are not under the direct control of the Council. The Council does have some control where emissions were factored in as part of the procurement process and this is something that will be put in place to ensure that more Scope 3 data can be captured and at the same time pressure put on suppliers to reduce emissions.

Scope 3 emissions can account for 70 – 80% of a council's total footprint, given

given the use of contractors for waste collection, construction and other services. Currently the Councils Scope 3 emissions are low but that is largely due to the level of data that is available for collection. The percentage may rise sharply as more data is available and this would mean that further investment and action would be required in order to reach net zero carbon in respect of Scope 3.

The Council could exclude Scope 3 data from collection and reporting at this stage but has chosen not to as some of the data is available, especially that from the waste collection contractor's vehicle fleet which is inevitably a large contributor. As additional Scope 3 data is gathered year on year the Council will provide an explanation of what the new data sources are and how they have affected the overall level of emissions.

The Council is not committing to achieve net zero in respect of Scope 3 emissions at this stage. The bulk of Scope 3 emissions are from third party vehicles and although the Council can have an influence over third parties it cannot directly control their emissions unless contracts allow for it. Scope 3 emissions are far more complex to manage compared to Scopes 1 and 2, and it is not possible to prepare a meaningful action plan for them at this time. The Council will however take action to reduce Scope 3 emissions where it is possible to do so.

Further references to achieving net zero in this Action Plan are in respect of Scope 1 and 2 emissions.

A summary of emissions from Council operations, across all three scopes, is shown in the tables below:

Table 1 – Emissions from TDC’s business operations

Emissions	Scope	% Split	TonnesCO2e
Gas	1	26.3%	1,198
Fuel Oil	1	6.9%	314
Vehicles - Council Owned	1	4.4%	202
Electricity	2	20.8%	948
Water Supply	3	0.3%	14
Wastewater	3	0.4%	17
Transmission & Distribution	3	1.7%	78
Vehicle - Third Party	3	30.5%	1,387
Vehicle - Employee	3	1.8%	84
Leased Assets	3	6.8%	310
Total	23	100%	4,553

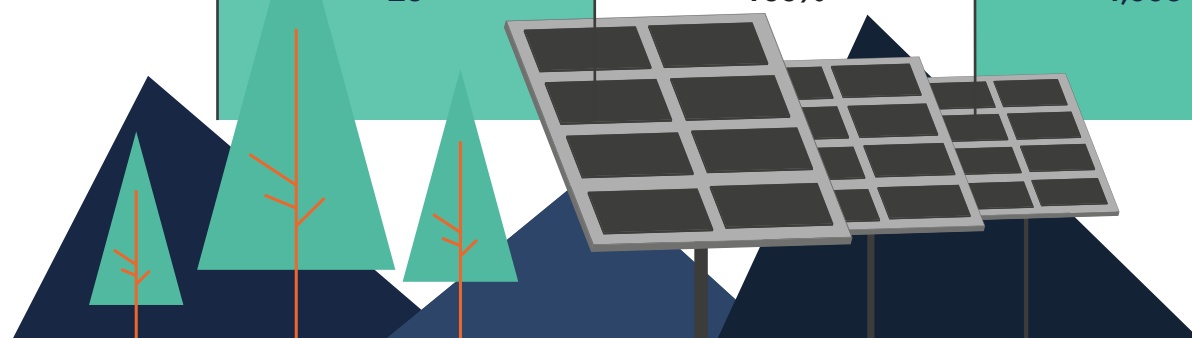
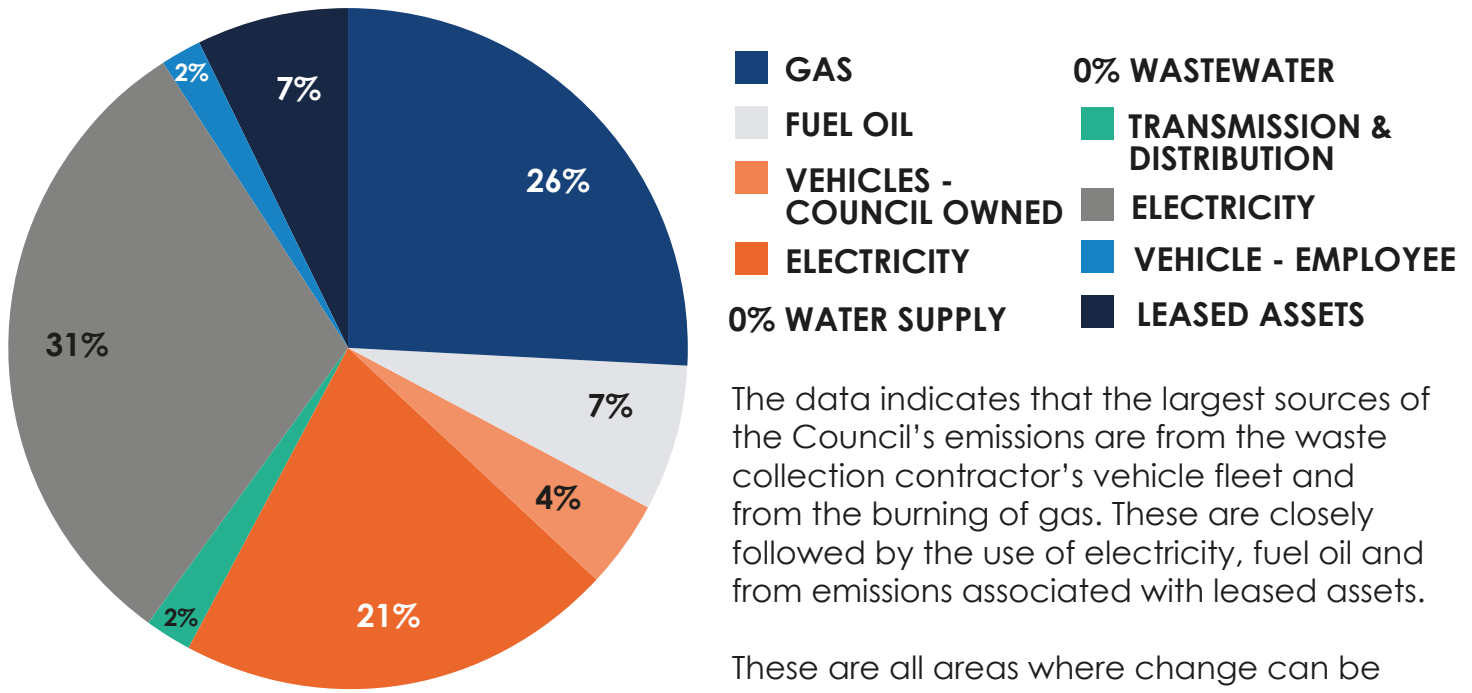


Table 2 – Summary of TDC's emissions by source



The data indicates that the largest sources of the Council's emissions are from the waste collection contractor's vehicle fleet and from the burning of gas. These are closely followed by the use of electricity, fuel oil and from emissions associated with leased assets.

These are all areas where change can be made either through introducing renewable energy sources or from advances in technology and building improvement programmes between now and 2030.

Table 3 – Emissions from the Tendring district overall

Subsector inventory summary for Tendring with Total

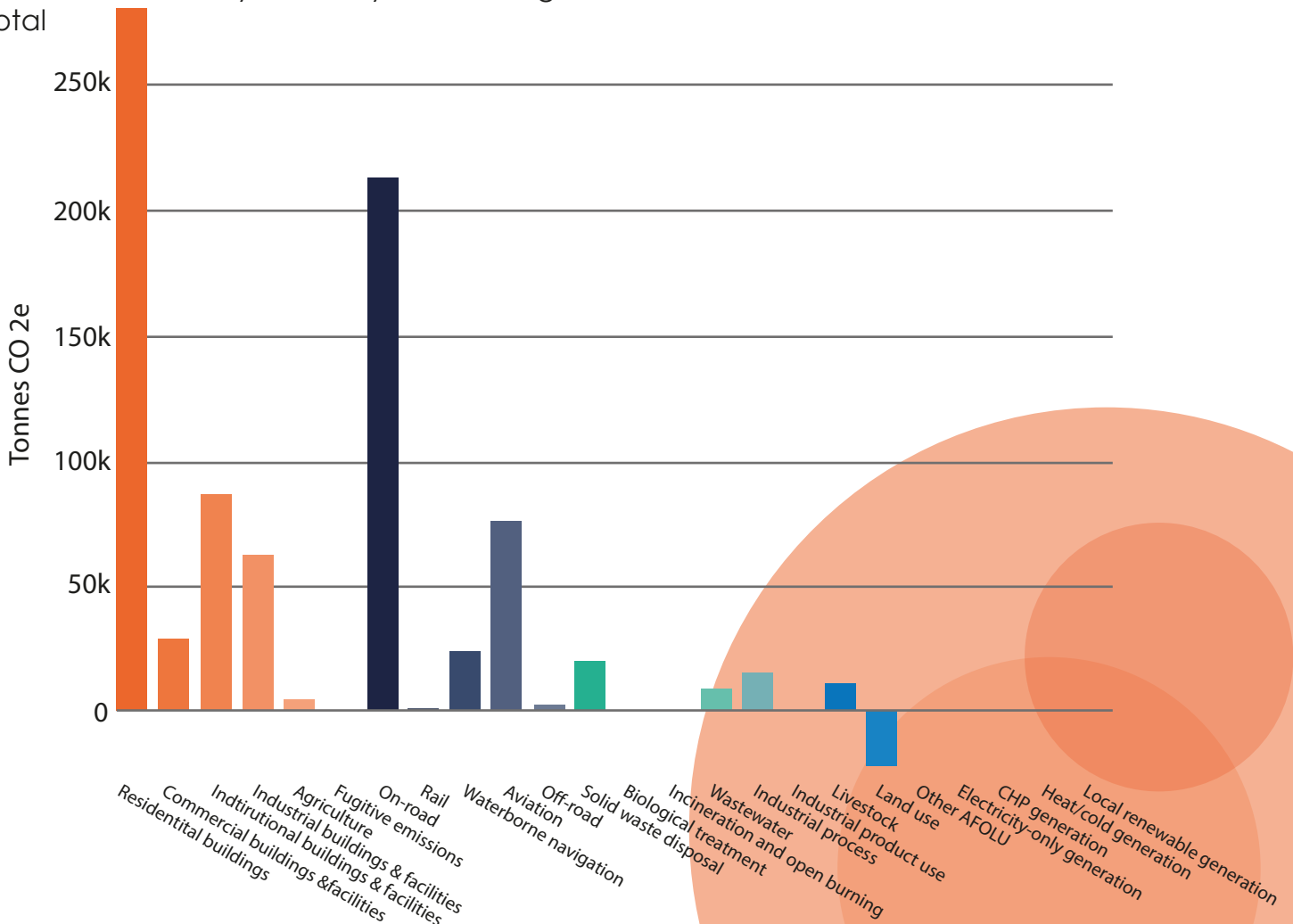
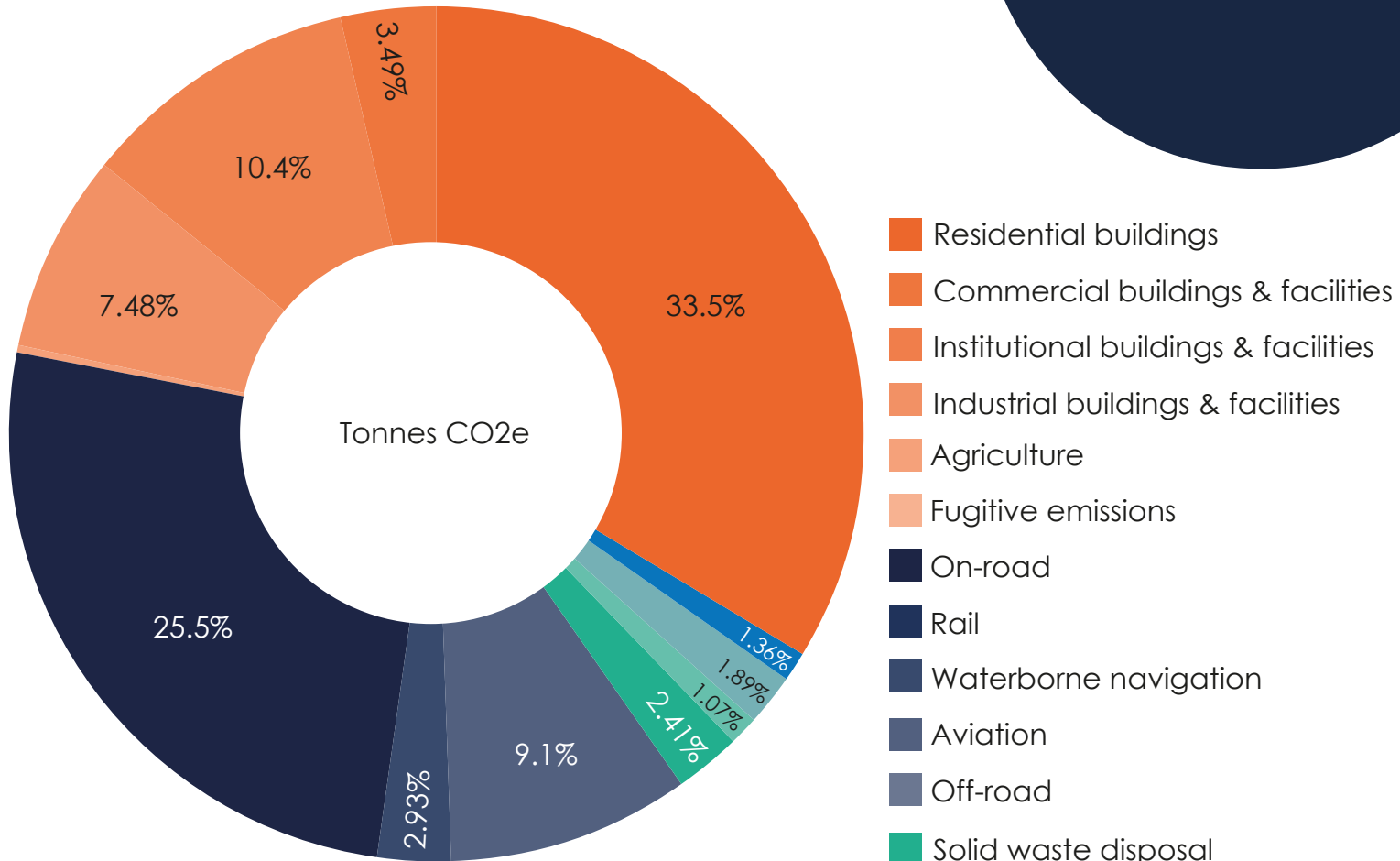


Table 4 – Summary of emissions across Tendring by source

Subsector inventory summary for Tendring with Total



The Tendring wide data shows a clear pattern around emissions from residential buildings and road travel being the predominant sources. These will be consistent with other districts and are very much a shared national issue. Advances in electric vehicle technology will be key to reducing emissions associated with road travel and the Government is initiating projects that explore the technologies around deep retrofits in order to improve the energy efficiency of homes. The Council will support and promote these initiatives where possible.

It should be made clear that the Council is not committing to the whole district becoming net zero carbon by 2030; that is way beyond its ability. The commitment is around community engagement, influence and forming an alliance with partners and business to move them in the same direction as the Council.

TAKING ACTION - THE CLIMATE EMERGENCY ACTION PLAN

Tackling climate change requires action by every part of society – this includes all tiers of government, businesses and residents. Individuals can influence the size of their carbon footprint by how much and what they buy and how they travel and the homes they live in. Those on higher incomes generally have larger carbon footprints and are therefore able to make the greatest contribution to reducing emissions.

Action is also needed by the companies and organisations which supply goods and services to reduce their carbon footprint. As an example, we all rely on information technology for everyday life and this sector now accounts for a significant amount of energy consumption in the production of the equipment and the transmission and storage of data. We need those companies to invest in renewable energy to supply their services, and this is happening – for example, Google now supplies all its electricity needs from renewable energy – but much more action is needed across the whole of business.

The Council is committed to playing its part despite its emissions making less than 1% of the district's emissions as a whole. As a community leader it must lead by example in accelerating its own activities towards a net zero carbon position whilst encouraging and influencing action by others in the district.

LEADING BY EXAMPLE - A NET ZERO CARBON COUNCIL

The motion asked that a number of actions be undertaken, including seeking specialist advice and setting up climate change working party. These actions have been undertaken resulting in the engagement of APSE Energy and the calculation of the Council's greenhouse gas emissions as a basis from which to prepare this Action Plan.

The following infographic shows the keys areas where the Council's emissions are generated:
Figure 2 – TDC Carbon emissions breakdown by Council office and buildings



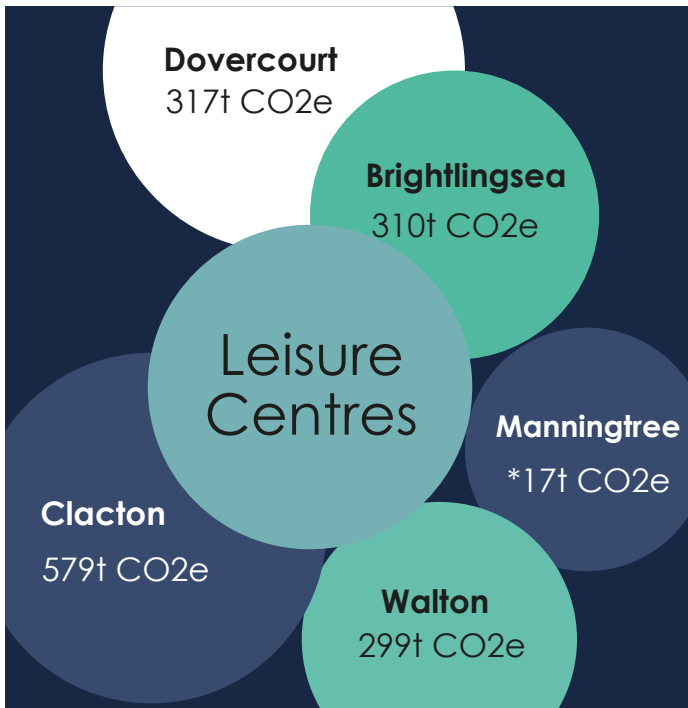
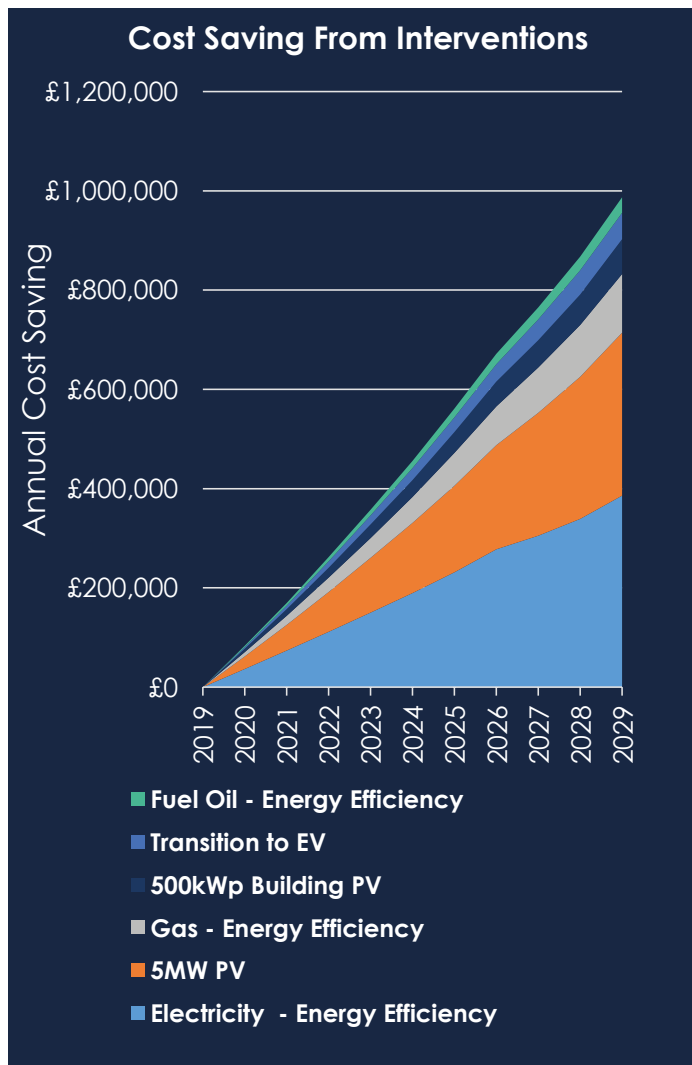


Figure 4 – estimated cost savings from the interventions



Based on the current baseline it is possible to achieve net zero carbon emissions in respect of Scope 1 and 2 emissions by 2030. The following infographics show where these reductions can be achieved and the estimated associated costs, both in terms of investment and savings derived:

Figure 3 – estimated cost of interventions to achieve net zero in respect of Scope 1 and 2 emissions

Intervention	Cost of all Intervention
Electricity - Energy Efficiency	£744,068
5MW PV	£3,000,000
Gas - Energy Efficiency	£597,946
500kWp Building PV	£300,000
Transition to EV	£2,565,000
Fuel Oil - Energy Efficiency	£105,997
Tree Planting	£1,152
Total	£7,314,164



Scope 1 & 2 CO2e Trajectory

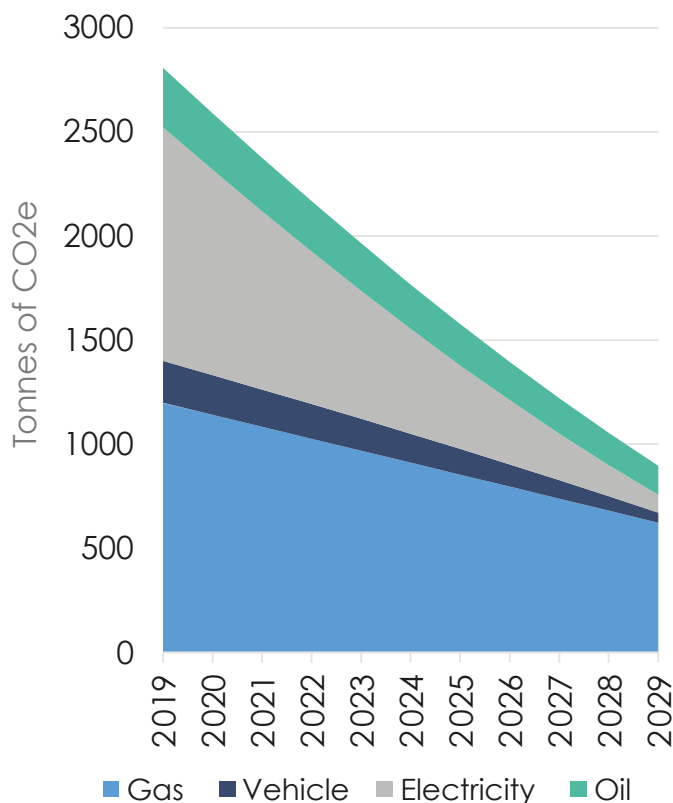


Figure 5 –potential greenhouse gas emission reductions as a consequence of the interventions

Figure 5 demonstrates a possible emissions reduction trajectory to 2029. What is clear though is that the emissions do not reduce to zero. The Council's target is net zero meaning that some carbon offsetting will be necessary.

A **carbon offset** is a reduction in emissions made in order to compensate for emissions made elsewhere. There are several ways of offsetting carbon emissions such as carbon capture and storage however this is not deemed financially or technically feasible to the Council. More typical options available to the Council to directly offset emissions include energy generation projects and tree planting. However, the effectiveness of tree planting to quickly offset emissions can be questioned as it can take many decades for trees to reach maturity.

APSE Energy have calculated that a solar PV system (solar farm) with a generation capacity of approximately 5MW generating 4,800,000kWh of electricity that feeds directly into the electricity grid would offset 710 CO2e if installed by 2030. Such a project would have a capital cost of approximately £3,000,000.

The installation of 5MW of solar PV would leave approximately 46 tonnes of unavoidable emissions that will need to be offset. The Woodland Trust states that it costs £25 to offset 1 tonne of CO2 in British woodlands which would result in a cost of £1,152 to offset the remaining emissions.

The Council recognises the need to explore solar PV or similar alternatives as a means of offsetting and will not commit to a particular method until further feasibility work has been undertaken.

Carbon offsetting will be a significant option when exploring how large scale tourism and sporting events organised by the Council can be run in a net zero carbon way.

It is possible to achieve net zero carbon by combining a number of approaches including improving the energy efficiency of our buildings, electrifying our vehicle fleet, generating more renewable energy on our own land and supporting staff to work in more efficient ways. The emissions generated by the people we buy goods and services from can also be reduced and this is an area we will be looking at both where we have existing contracts in place and when we are undertaking procurement and this will help to reduce Scope 3 emissions.

in 2019 the Leader of Council made a commitment to become single use plastic free by the end of 2020. Whilst an internal campaign was commenced this target is likely to be delayed due to the impact of COVID-19 and the resultant and necessary purchase of cleaning and hand sanitising products, all of which are in plastic bottles. Nonetheless efforts towards meeting this target will continue.

Whilst the Council's commitment to achieving net zero carbon by 2030 will reduce Tendring's emissions by only a small percentage it will send clear community leadership message. The Council will engage with the wider district and partners will be invited to also declare climate emergencies, perhaps as part of an alliance, and to set out a timetable for their own organisations to become carbon neutral and climate resilient. This may be in tune with the Council's 2030 target or the Government's 2050 target.

Achieving these targets will be a challenge and the Council will need to be able to quantify its greenhouse gas emissions and understand the impacts of all new major plans, policies and projects on the Council's and the district's emissions and climate resilience whilst also reviewing key existing plans.

Tracking the progress of the Council and the district towards net zero carbon is complex but necessary to ensure that we are making progress quickly enough.

INVOLVING RESIDENTS OF THE DISTRICT

In every part of the district, residents of every age, race and gender are concerned about climate change. They are concerned about how it will affect their families, their livelihoods, their neighbourhoods and the interconnected world they are a part of. The Council wants to engage residents and help them to have the opportunity to be a part of creating a safe and secure climate for them and their families. Turning their concerns and fear for the future into hope and successful action.

The Council is a member of the Essex County Council Climate Commission and as such will work in partnership with ECC around public engagement and strategic thinking in respect of the climate change agenda across the county.

Some young people have very clearly shown their concern about climate change. The Council will work to involve young people in creating future plans for the district, providing opportunity to contribute their concerns, ideas and enthusiasm. A key challenge is

engaging a wider demographic of young people, from all schools and colleges across the district, particularly recognising the urgent need to listen to the voices of the lowest income families.

Emergencies need careful management and governance structures. For emergencies like fires or floods the country and the Council has an established model for multi-agency action. A similar approach must be applied to managing the climate emergency and as such the Council is putting in place the necessary internal management arrangements to ensure the actions identified to reach the 2030 target are achieved. It is anticipated that action by partners across the district as a whole will be led by a Climate Alliance that will be facilitated by the Council. This will however be dependent on the levels of commitment that are felt following on from engagement with those in the wider district. An alternative approach or combination of approaches may be necessary.

SPECIFIC ACTIONS

At the time of writing it is over nine years to 2030. Planning for such a long period of time is difficult and any plan put in place now will need several reviews in the period to 2030. It is proposed to review this Action Plan annually and publish a progress report. The Action Plan will be updated at least every 3 years or earlier if necessary and this will very much be an iterative process.

The trajectory towards the Council's own emissions reaching net zero will not be linear and nor will it be linear for the reduction in emissions from the district as a whole. The target is net zero for the Council's own emissions by 2030 and within each year there will be a different level of reduction achieved, dependent upon budget available and completion of a particular project. It may be that more expensive interventions that have a greater impact will be undertaken closer to 2030 rather than in earlier years.

A list of all potential actions that can be taken has been compiled, including likely carbon impact, cost and timescale. Different departments within the Council will lead on projects that are within their area of expertise. It is not proposed to publish the list of actions in detail, but instead, provide in this document a summary of actions proposed for the next three years. These actions cover Scopes 1, 2 and 3 emissions and are:

Part 1 Buildings & Energy

a) Undertake energy audits of all council owned buildings and compile a carbon reduction plan for each one. Continue work to improve the performance of our buildings towards achieving net zero emissions by 2030 and maximise funding opportunities such as SALIX.

b) Move to the purchase of 100% renewable electricity

c) Ensure all newly constructed council-controlled buildings, extensions and refurbishments are designed to achieve net zero emissions by 2030 where possible.

d) Focus on the switch away from oil, natural gas use by 2030.

e) Ongoing delivery of "invest to save" energy efficiency projects to reduce overall emissions and reduce running costs.

f) Maximise onsite renewable energy generation opportunities.

g) Explore carbon offsetting options and develop an implementation plan.

Transport

a) Implement a replacement programme for all Council owned vehicles to be fully electric by 2030,

b) Develop and implement a plan for increasing the electric vehicle charging infrastructure at Council owned car parks and buildings.

Waste

a) Explore and implement opportunities to further reduce waste related emissions, support a circular economy, and reduce plastic pollution.

Procurement

a) Update procurement guidance and standard contractual terms to include climate change impacts and mandatory carbon reporting, with the aim of delivering net zero emissions in procurement (Scope 3) by 2030.

b) Develop and deliver training for staff and suppliers on climate change, carbon footprinting, carbon reduction and the important role of procurement in supporting change.

c) Develop a recording and monitoring process to identify embedded emissions within the procurement of goods and services.

Corporate strategy/policy

a) Annual data collection, calculation and publication of greenhouse gas emissions. Annual reporting of progress towards a net zero target and associated costs alongside the financial budget.

b) Minimum three-yearly updates to this Action Plan

c) The development of all new Council strategies and policies will identify contributions to both the organisational and wider Tendring emissions targets, so that these can be considered as part of the relevant approval process for each new strategy and policy.

d) All future committee, portfolio holder and officer decisions to consider and evaluate the impact on the net zero emissions target to help inform decision making. A specific section for each report to be developed to consider the impact in a consistent manner – 2021 onwards.

e) Council led, large scale tourism and sporting events to include a plan around achieving net zero carbon

a) Deliver carbon literacy training courses and workshops, open to all staff and councillors, on climate change mitigation and other key environmental policies - for delivery in 2021.

Supporting staff and Councillors

b) Develop new home working and travel for work guidance by the end of 2021, learning from the COVID-19 lockdown, which aims to dramatically reduce the requirement to commute to offices and travel for meetings and visits.

Part 2

Tendring-wide emissions

a) Engage with parish and town councils, businesses, residents, Essex County Council and other partners across Tendring to raise awareness and develop shared objectives.

b) Develop and publish a collaborative action plan and/or form an alliance with all partners that seeks to use our combined powers, duties, influence and leadership to work with others towards the net zero ambition for emissions from all of Tendring.

c) Lobby partners and government to champion a net zero approach in their plans and policies that impact on Tendring's emissions.

e) Promote, support and facilitate energy efficiency improvements to homes

d) Increasing our understanding of the number and type of trees in the district and maximise opportunities for tree planting on both Council owned and other land and estate.

RESOURCING THE ACTION PLAN

Figure 3 above sets out the estimated cost of some of the actions necessary to achieve net zero by 2030. The cost of those interventions is estimated at £7.3 million with a potential annual saving of £987,000. It should be emphasised that these are estimated costs and more detailed business cases will need to be drawn up for each proposal. Decisions on whether to proceed with individual actions will be taken on a case by case basis, subject to normal decision making protocols and will be dependent on the budget available and net cost and savings generated.

The Council has to take a pragmatic and realistic view on what it can achieve each year taking into account other financial pressures and priorities.

Staffing resource will need to be reviewed as many of the proposed actions have significant implications in terms of officer time. Where necessary, budget will be made available to allow additional specialist resource or consultancy support to be brought in.

ACTIONS ALREADY UNDERTAKEN

The Council has not waited for the publication of this Action Plan before taking any specific actions. Below is a list of things that have been done in the past year or so that contribute towards the 2030 target:

- Ongoing promotion and support of the Government ECO scheme for energy efficiency improvement to homes
- Commission of a contractor to undertake energy audits of all council owned non domestic buildings
- Planting of over 5,000 trees at Rush Green in Clacton and the award of over £40,000 from Network Rail towards planting over 30,000 hedgerow trees in the district working with private landowners
- Exploration of submitting a bid to the Public Sector Buildings Decarbonisation Fund
- Consortium bid with ECC to Government Green Homes Grant Scheme - will see 11 homes in the district benefit from energy efficiency improvements
- Promotion of flexible working for staff, with reduction in staff attending the offices. This is been enforced to an extent by the COVID situation.
- Exploration of submitting a bid to Social Housing Decarbonisation Fund
- All member briefing session by APSE Energy
- Ongoing refurbishment of office buildings as part of the office transformation project, including LED lighting and insulation improvements.
- Briefing by APSE Energy to all staff
- Ongoing dialogue with Assistant Directors and Management Team around the development of this Action Plan.
- Planned closure of Weeley offices – inefficient oil fuelled heating site
- Additions to the Local Plan approved that seek sustainability / renewable energy schemes on new housing developments