

# NET ZERO STRATEGY AND ACTION PLAN

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| <b>Cabinet</b>                  | 22nd September 2022  |
| <b>Report Author</b>            | Dr Hannah Scott, Climate Change Officer  |
| <b>Portfolio Holder</b>         | Cllr Bob Bayford, Cabinet Member for Environmental Services & Special Projects |
| <b>Status</b>                   | For Decision   |
| <b>Classification:</b>          | Unrestricted   |
| <b>Key Decision</b>             | No   |
| <b>Previously Considered by</b> | Climate Change CAG: 14th July<br>CMT: 12th July<br>OSP: 30th August            |
| <b>Ward:</b>                    | All wards  |

## Executive Summary:

Thanet District Council called a Climate Emergency on 11th July 2019. Officer and cross party councillor working groups were formed to create and initiate actions on a first environmental action plan. All of the actions within that action plan were completed and in December 2021, the councillor working group was changed to the Climate Change Cabinet Advisory Group to produce this strategy and action plan, focussed specifically on the reduction of greenhouse gas emissions.

An updated TDC pledge which includes actions to address District wide emissions is recommended to the Cabinet by the Climate Change Cabinet Advisory Group. This net zero pledge is as follows:

To do what is within our powers and resources to:

- make Thanet District Council net zero by 2030 in our core carbon footprint (this includes emissions we have direct control over e.g. the estates and activities that we own and manage)
- address emissions that TDC has partial control over (those outside of the core carbon footprint e.g. projects, procurement and social housing) as soon as possible, and by 2050 at the latest.
- support KCC, the Government, business, industry and the community to make Thanet as a whole net zero by 2050.

In order to make these targets possible we will:

- call on Westminster to provide the powers and resources to make the targets possible;
- continue to work with partners across the county and region to deliver this new goal through all relevant strategies;
- investigate all possible sources of external funding and match funding to support this commitment

The strategy shows how we will meet our net zero pledge and is split into addressing emissions in TDC's core carbon footprint, wider TDC emissions and Thanet wide emissions. The data for TDC's core carbon footprint and Thanet wide emissions has been calculated and 12 priorities to address these emissions have been agreed.

Each of the 12 priorities are described in the strategy document and then specific, immediate actions to 2024 are set out. The actions have been agreed with the relevant TDC directors and officers across the council and the action plan will be monitored monthly by the Cabinet Member for Environmental Services & Special Projects, the Director of Finance and Climate Change Officer, and every two months by the Climate Change Cabinet Advisory Group. It will also be externally audited, the report submitted to the OSP and cabinet on an annual basis.

Members are asked to read the Draft Net Zero Strategy attached and also note the Equality Impact Assessment and detailed Carbon Reduction Plan attached.

## **Recommendations:**

- 1) That the Cabinet approves the proposed amended wording of the TDC pledge;
- 2) That the Cabinet approves the Net Zero Strategy 2022 for public engagement
- 3) That Cabinet notes the additional sentence included in the strategy following the receipt of feedback from OSP and CC CAG (see 2.17);
- 4) That the Cabinet recognises that the strategy cannot be fully implemented without external funding being available and agreed, in accordance with the pledge, to lobby external agencies and government.

## **Corporate Implications**

### **Financial and Value for Money**

The agreed actions to 2024 within the strategy demand the time of officers and directors in TDC rather than direct expenditure currently.

The actions described within the action plan are often the groundwork necessary to understand the work associated with the more significant actions fully e.g. the decarbonisation of the estates and the electrification of the fleet, which are necessary steps to reach net zero by 2030 within our carbon footprint.

One of the agreed actions is to create a business case for an energy efficiency and decarbonisation officer who could be employed on an invest to save basis. Their remit would include:

- The rising cost of energy
- Energy efficiency and decarbonisation projects to reduce emissions as quickly as possible.

The carbon reduction plan, produced by consultants Laser, has estimated that to reach net zero in our core carbon footprint by 2030 an investment of approximately £9.6 million will be needed. In their model there will be approximately £4 million savings to 2030 and therefore the **net cost to the council by 2030 will be approximately £5.6 million.**

The main investments needed to reach net zero by 2030 include:

- 1) Energy efficiency measures throughout the estates
- 2) LED lighting
- 3) A small solar PV array
- 4) Changing the gas boilers to heat pumps at at least the Kent Innovation Centre and Ramsgate Leisure Centre
- 5) Electric car derived vans
- 6) Electric waste carrier vehicles
- 7) Cost of offsetting schemes to absorb the left-over emissions at 2030 (This is currently projected to be 1200 tonnes of CO<sub>2</sub>e)

Financial savings by 2030 will be achieved from:

- 1) Adding energy efficiency measures such as new LED lighting, slower flow tap/shower fittings and insulation to decrease electricity and gas use in the offices, depots and leisure centres.
- 2) Adding rooftop solar
- 3) Estates rationalisation to reduce the energy use in total

The electrification of the car derived vans save money through cheaper fuel and maintenance. Although they do not fully break even over their lifetime, it is a project that will be investigated early.

The other larger actions will likely need external funding as they do not return the initial investment by 2030 or even by 2050 e.g. large heat pump installation and the electrification of the waste carrier vehicles. There are some savings from heat pumps due to their efficiency and there are savings associated with electric waste carrier vehicles e.g. decreased cost of fuel and maintenance, however this does not offset the large initial investment needed.

There are possible external funding streams for the installation of the heat pumps (the Public Sector Decarbonisation Fund) but there is no government funding for the electrification of waste carrier vehicles currently.

By 2050 cumulative investment will have risen to £27 million. The increase in cost is mainly due to the assumed purchase of new electric waste carrier vehicles every 7 years (£15 million) and the cost of offsetting the left-over carbon emissions (£3.7 million). There will

however be continued savings and so the overall **cost to TDC of net zero by 2050 is approximately £9.5 million.**

### **Further details are within the Carbon Reduction Plan**

Cabinet has agreed to consider using the risk management reserve for projects which have been agreed, if external funding from the government cannot be applied for, or match funding is required. It is important that we have sufficient staff resources available to allow the authority to access external funding opportunities for climate change initiatives. As such, use of the risk management reserve will also be considered to employ staff during essential projects (e.g. project managers), if the external funding does not cover this and these positions are necessary for the successful completion of an essential carbon reducing project. Any proposed use of the risk management reserve for these purposes would be subject to the usual budget approval process.

### **Legal**

The Climate Change Act 2008 places national targets on the reduction of emissions by 2050. The Council has powers to do anything an individual could, under the power of general competence in the Localism Act 2011. This includes taking steps to reduce Council emissions, which contribute to the local and national targets.

In 2019, the UK became the first major economy in the world to legislate binding targets to reach net zero emissions by 2050. Following this, TDC called a climate emergency and committed to the pledges as set out above. The TDC Net zero strategy and action plan is the first step in TDC's journey to meeting these pledges.

### **Risk Management**

It is important to address greenhouse gas emissions to avoid the serious risks of climate change e.g. heatwaves, sea level rise, flash floods and societal disruption. This climate disruption will mean that some areas of the world will become uninhabitable and there could be food insecurity worldwide.

The world has already experienced devastating fires in Australia and Greece, heat waves in North America and India, floods in Germany, melting ice caps and dying coral reefs due to ocean warming. The past decade has contained the hottest years on record and this year the UK hit 40°C, showing that we need to act fast to avoid further severe impacts of climate change.

These risks are made clear in the IPCC's most recent report "Climate Change 2022: Impacts, Adaptation and Vulnerability" which assesses the impacts of climate change, looking at ecosystems, biodiversity, and human communities at global and regional levels. It also reviews vulnerabilities and the capacities and limits of the natural world and human societies to adapt to climate change.

The Climate Change Risk and Impact Assessment for Kent and Medway (CCRIA) was produced in 2019 by KCC; it describes the changes Kent might face, and the potential risks to Kent's society, economy and environment.

It explains:

"Understanding the potential future impacts of warmer, wetter winters and hotter, drier summers is crucial for future prosperity, environmental quality, and health and wellbeing of communities.

Based on the Met Office's UK Climate Projections (UKCP) for the south east, by 2080

- summers are likely to be hotter by around 5°C to 6°C
- winters are likely to be warmer by around 3°C to 4°C
- summer rainfall is likely to decrease by 30% to 50%
- winter rainfall is likely to increase by 20% to 30%
- sea level rise is likely to increase by 0.8m.

The impacts of climate change are likely to be felt acutely in Kent with its long, strategically important coastline, large number of properties at risk of flooding and warm summers compared with the rest of the United Kingdom. It is imperative that the impacts of climate change are considered alongside other drivers of change including economic fluctuations, population growth and demographic shifts."

The risks of not acting, or delaying acting, on climate change will affect us all, but the poorest in society will suffer the greatest risk, for example, through the rising cost of food and the lack of financial resilience to disasters. If we do not act quickly, the risks of ecological breakdown and extreme heating will get worse. It is important that we address climate change now as a matter of fairness and equality.

The Stern Report demonstrated that the cost of doing nothing to combat climate change far exceeded the cost of tackling climate change. The cost of living crisis will not get better, but worse if we ignore this emergency. The benefits of strong and early action far outweigh the economic costs of not acting and so we will act now.

## **Corporate**

### **Equality Act 2010 & Public Sector Equality Duty**

Members are reminded of the requirement, under the Public Sector Equality Duty (section 149 of the Equality Act 2010) to have due regard to the aims of the Duty at the time the decision is taken. The aims of the Duty are: (i) eliminate unlawful discrimination, harassment, victimisation and other conduct prohibited by the Act, (ii) advance equality of opportunity between people who share a protected characteristic and people who do not share it, and (iii) foster good relations between people who share a protected characteristic and people who do not share it.

Protected characteristics: age, sex, disability, race, sexual orientation, gender reassignment, religion or belief and pregnancy & maternity. Only aim (i) of the Duty applies to Marriage & civil partnership.

This report relates to the following aim of the equality duty: -

- To eliminate unlawful discrimination, harassment, victimisation and other conduct prohibited by the Act.
- To advance equality of opportunity between people who share a protected characteristic and people who do not share it
- To foster good relations *between people who share a protected characteristic and people who do not share it.*

An EIA was completed for the Net Zero Strategy and is attached. It is summarised below.

Climate change will disproportionately affect the poorest in society. These are over represented in certain protected characteristics e.g. young and old, female residents and the disabled.

Those more well off will be able to avoid some impacts of climate change whereas poorer members of the public will not have the financial resilience e.g. to move or to buy items to assist them during heat waves or floods.

The cost of living will increase due to climate change and so will cause further inequalities.

Food prices will increase in an unstable world, as will general day to day products.

Health inequalities already exist in Thanet and this will be tested as climate change causes various public health crises in the future.

Some new low carbon technologies e.g. electric cars and heat pumps are unaffordable for many residents currently. We will promote alternative ways to reduce emissions which do not cost any extra or that can be achieved through grants to ensure a fair transition.

How does the strategy, policy, service, project, activity or decision actively meet the public sector equality duties to:

**Eliminate unlawful discrimination** (including harassment, victimisation and other prohibited conduct)

The strategy does not negatively impact the groups identified in the Act.

As climate change affects resources, it is likely that people will compete for limited resources. This could increase discrimination between different groups in society. The strategy aims to avoid the worst impacts of climate change.

Likely increased migration to the UK and Thanet from countries with disrupted climates - impact on housing and resources.

**Advance equality of opportunity** (between people who share a protected characteristic and people who do not share it)

The mitigation of climate change is essential for the advancement of equal opportunities. Climate change will disproportionately affect the poorest in society, as well as those with disabilities and current ill health

**Foster good relations** (between people who share a protected characteristic and people who do not share it). Could it have an adverse impact on relations between different diverse groups?

A world that avoids the worst of climate change will reduce the chance of social unrest and resource wars that would destabilise society and reduce current standard of living.

The net zero strategy aims to not only avoid the serious impacts of climate change but stimulate the economy and create a healthier society. For example, TDC will work with KCC to increase employment within the housing retrofit sector. This will not only increase job opportunities but also produce warmer, more energy efficient homes. Net zero actions also reduces air pollution and encourages us to be healthier, by eating more fruit and vegetables and walking and cycling more.

## Corporate Priorities

This report relates to the following corporate priorities: -

- *Growth*
- *Environment*
- *Communities*

## 1.0 Introduction and Background

1.1 Please read the Net Zero Strategy attached. A summary of the document is set out below:

The Intergovernmental Panel on Climate Change (IPCC, 2021) published its most detailed report on climate change in 2021 showing that the warming of the planet is due to human activity. The world is heating up due to the extraction and burning of fossil fuels (coal, oil and natural gas) to power our homes, transport and industry. The production of emissions (mainly methane) from the agricultural industry also plays a part. Worldwide agricultural practices are also responsible for over 90% of worldwide deforestation, as forests are cleared for food (mainly meat) production<sup>1</sup>.

These emissions will cause extreme heat waves, drought and floods which will affect people's health, infrastructure and food production, and the Isle of Thanet will not be immune from these effects. Heatwaves, fires and floods have already been seen around the world, including the UK this summer. We are on the brink of world wide disruption.

1.2 To reduce emissions the UK needs to stop using fossil fuels, and instead produce renewable electricity by solar, wind and nuclear. Everything that can be run on electricity needs to be run on electricity e.g. transport, heating and some industrial processes.

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<https://www.fao.org/newsroom/detail/cop26-agricultural-expansion-drives-almost-90-percent-of-global-deforestation/en>

- 1.3 In 2019, the UK became the first major economy in the world to legislate a binding target to reach net zero emissions by 2050.
- 1.4 Reaching net zero is a matter of equality. Climate change will disproportionately affect the poorest, youngest/oldest and disabled. For example, these groups will be affected by heatwaves more than others in society.  
The cost of living crisis will also get worse due to climate change as the price of food and other items increase in a disrupted world. It is therefore important that we address climate change now.
- 1.5 Thanet District Council called a climate emergency on 11th July 2019.  
This included the following pledge:
- Pledge to do what is within our powers and resources to make Thanet District Council carbon neutral by 2030, taking into account both production and consumption emissions;
  - Call on Westminster to provide the powers and resources to make the 2030 target possible;
  - Continue to work with partners across the County and region to deliver this new goal through all relevant strategies;
  - Investigate all possible sources of external funding and match funding to support this commitment;
- 1.6 As the meaning behind the specific terms in the initial pledge became more explicit, it became necessary to update the pledge. This includes using the words “net zero” instead of “carbon neutral” as net zero is a stronger commitment. Carbon neutral means that you can offset emissions by supporting projects such as solar farms. However, these projects do not directly remove/absorb emissions from the atmosphere. Net zero means that any leftover (residual) emissions must be absorbed by carbon sequestration projects and directly removed from the atmosphere e.g. woodland creation projects. This is why net zero is a more robust term.
- 1.7 It also separates the core carbon footprint emissions and consumption emissions, to make it clear what we have full and partial control over. We do not have full control over our consumption emissions. Most companies in the UK have not set 2030 targets and therefore reaching net zero by 2030 within our consumption is out of our control and unachievable. Many companies have however set 2050 targets. We will instead work with companies to encourage them to reduce their emissions as quickly as possible and only buy products/services from companies that are serious about reducing their emissions in the future. We will aim to reduce emissions from procurement as quickly as possible, however it is simply not possible to reach net zero by 2030 for consumption as it is not within our control.
- 1.8 In summary, the updated pledge includes the term “net zero” to make it a stronger pledge and clarifies that our 2030 pledge is for emissions we have direct control over. It adds a new sentence which addresses emissions that we have only partial control



over e.g. consumption. Emissions from projects, procurement and social housing have been included here to ensure all emissions are addressed. Furthermore, in December 2021, Cabinet approved the addition of a pledge around Thanet wide emissions.

1.9 The updated net zero pledge which is being recommended by the cross part Climate Change Cabinet Advisory Group is as follows:

- make Thanet District Council net zero by 2030 in our core carbon footprint (this includes emissions we have direct control over e.g. the estates and activities that we own and manage)
- address emissions that TDC has partial control over (those outside of the core carbon footprint e.g. projects, procurement and social housing) as soon as possible, and by 2050 at the latest.
- support KCC, the Government, business, industry and the community to make Thanet as a whole net zero by 2050.

In order to make these targets possible we will:

- call on Westminster to provide the powers and resources to make the targets possible;
- continue to work with partners across the county and region to deliver this new goal through all relevant strategies;
- investigate all possible sources of external funding and match funding to support this commitment

## **2.0 The Strategy and Action Plan**

2.1 The strategy sets out how we will meet our pledges by setting out 12 priorities and detailing a summary of the initial actions to March 2024 for each priority.

2.2 We recognise that the route to net zero must be fair and that currently some new technologies e.g. electric cars and heat pumps, are not affordable for the majority of residents. The actions within this plan will not add to the inequalities in society. It however calls on residents to help in the fight against climate change in whatever way they can and encourages individuals to take action. It encourages residents to look up websites such as Giki Zero and Take the Jump Campaign to see fun ways to reduce their carbon footprint.

2.3 The net zero strategy aims to not only avoid the serious impacts of climate change but stimulate a greener economy and create a healthier society. For example, TDC will work with KCC to increase employment within the housing retrofit sector. This will not only increase job opportunities but also produce warmer, more energy efficient homes. Net zero actions also reduces air pollution and encourages us to be healthier, by eating more fruit and vegetables and walking and cycling more.

### **2.4. TDC emissions**

The core carbon footprint of TDC was calculated. This included the buildings TDC owns and manages as well as the two leisure centres which are leased to Your Leisure. The total carbon footprint was 4054 tonnes and was dominated by:

- The heating of the estates and leisure centres
- The diesel used in our fleet, especially in the waste carrier vehicles

There were also some emissions from business transport, water use and the equipment used in open spaces. Emissions from the waste produced from the offices and buildings were negligible.

- 2.5. The 2030 target will therefore concentrate on reducing emissions in our estates by:
- 1) Reducing energy use through behaviour change, adding LED lighting and insulation and fitting reduced flow tap and shower heads as the first steps.
  - 2) Swapping the gas boilers for low emissions alternatives. Currently the most efficient option is air or ground source heat pumps.
  - 3) Adding solar pv to reduce the cost of electricity use and produce our own renewable electricity.

Some actions will be able to take place on an invest to save basis but the air source heat pumps will likely require external funding e.g the public sector decarbonisation fund.

- 2.6 It will also concentrate on a plan to purchase electric vehicles for our fleet. We will first look at a plan to purchase electric car derived vans as they are more affordable than the larger vehicles. With regards to the waste carrier vehicles, this plan will require much more consideration as the cost of electric waste carrier vehicles is more than double the diesel version and the charging infrastructure at the depot will be very expensive.

- 2.7 Other emissions outside the core carbon footprint that we want to address are emissions from 1) projects 2) procurement and 3) social housing. These are outside the 2030 target because the emissions are not fully within our control e.g. many companies that we procure from are not working to a 2030 target.

We will estimate the emissions within these sources and set ambitious targets. The emissions from our social housing have already been estimated (9215 tonnes of CO<sub>2</sub>e) and a Social Housing Decarbonisation Strategy has been produced as a matter of priority and will be published alongside this strategy.

- 2.8 The first six priorities in the strategy are therefore:

**TDC Emissions**

**Core carbon footprint: 2030 aim:**

1. Addressing the emissions from TDC owned and managed offices and buildings plus leisure centres
2. Addressing the emissions from TDC fleet and equipment
3. Sequestering/offsetting left over emissions e.g. Woodland Creation

**Reducing emissions TDC has partial control over:**

4. Addressing the emissions in decisions and projects
5. Addressing the emissions within TDC purchases (Procurement)

6. Addressing the emissions within our social housing and other buildings we own

In the strategy each priority is described and the agreed actions to March 2024 are laid out.

- 2.9 **District Wide Emissions:** The district wide emission data is separated into emissions from the energy people in Thanet use, the emissions from the land and the emissions from consumption of everything else by the people of Thanet.
- 2.10 The emissions from energy production in Thanet is 515000 tonnes. This is more than 100 times the emissions of the basic TDC carbon footprint (4054) and shows why it is important that TDC supports KCC and others to reduce the district wide emissions from energy use as far as possible. The emissions produced by and absorbed by the land is very small compared to the overall emissions.
- 2.11 The emissions from consumption which includes all the services used (NHS, education), everything eaten and everything purchased adds another estimated 971,068 tonnes to the overall emissions. This is the largest part of Thanet's carbon footprint. This is why it is important to reduce our meat consumption and consider our purchases. The total carbon footprint for Thanet is estimated at 1,486,068 tonnes of CO<sub>2</sub>e. The general over consumption of things is not only causing excess greenhouse gas emissions, but is also destroying the natural world and causing biodiversity collapse.
- 2.12 The last six priorities in the strategy deal with Thanet wide emissions:
- District Wide Emissions:**
- 7. Addressing emissions in the current housing stock: Thanet housing retrofit action
  - 8. Addressing emissions produced by Thanet's transport
  - 9. Addressing emissions produced by Thanet's businesses (commercial and industry)
  - 10. Addressing emissions from new housing and development: Local planning
  - 11. Stimulating renewable energy production and Thanetwide carbon sequestration
  - 12. Addressing Thanet wide consumption emissions including emissions from food and purchases: Climate Change Education and Communication.
- 2.13 The strategy describes each of these six priorities and sets out agreed actions within them. Thanet District Council does not have control over the emissions from general housing, transport and businesses but we will assist KCC and others, who do have more control, to reduce them. For example, the Home Energy Officer will work with KCC on a Thanet Retrofitting Action Plan, Planning officers will work with KCC on transport emissions and will address the emissions in the local plan. The communications team will assist with climate change education and advice. The Climate Change Officer will oversee many of the actions.
- 2.14 **Funding and monitoring**  
The agreed actions within the strategy demand the time of officers and directors in TDC. The actions currently do not include the most expensive actions but instead are

the groundwork needed to understand and plan these more expensive actions fully e.g. the decarbonisation of the estates and the electrification of the fleet. Funding for many of the larger actions will need to be sourced from external funding streams e.g the public sector decarbonisation fund. There are no funding streams for electric vehicles currently, and so we will need to lobby the government with regards to this.

- 2.15 The progress on the strategy will be monitored by the Director of Finance, the Cabinet Member for Environmental Services and Special Projects and the Climate Change Officer on a monthly basis and by the Climate Change CAG group every two months. A full report will go to cabinet each year. Furthermore, the action plan will be audited by an external auditor and a report will go to the Overview and Scrutiny Committee annually.
- 2.16 The Full Net Zero Strategy is linked below and the Carbon Reduction Plan is attached.
- 2.17 The Draft Net Zero Strategy was taken to OSP and CC CAG and a sentence (in bold) has been added following their feedback. This states: “The UK Government is responsible for the reduction of emissions from airports, ports and military transport. For example, the Government’s approach for achieving net zero aviation by 2050 is set out in their Jet Zero Strategy. **TDC has no powers with regards to these emissions however we will keep a watching brief on Manston Airport’s adherence to their low emission plan**”.

### 3.0 Options:

- 3.1 Approve the recommendations 1-4. This is the recommended option so that the strategy can progress to public engagement
- 3.2. Do not approve the recommendations and offer an alternative approach. This is not recommended because we need to act swiftly.

Contact Officer: *Dr Hannah Scott. Climate Change Officer*

Reporting to: *Chris Blundell (Director of Finance)*

#### **Annex List**

*Annex 1: Draft Net Zero Strategy 2022 - attached as a PDF*

*Annex 2: Carbon Reduction Plan - Laser consultants - attached.*

*Annex 3: [Equality Impact Assessment](#)*

#### **Background Papers**

*Title: [Kent’s changing climate - KCC Climate Change risk and impact assessment](#)*

*Title: [Climate Change Committee: the sixth carbon budget](#)*

*Title: [Climate Change 2022: Impacts, Adaptation and Vulnerability](#)*

Title: [The Stern review](#)

**Corporate Consultation**

**Finance: *Chris Blundell, Acting Deputy Chief Executive & S151 Officer***

**Legal: *Sameera Khan (Interim Head of Legal & Monitoring Officer)***