# **Thanet District Council**



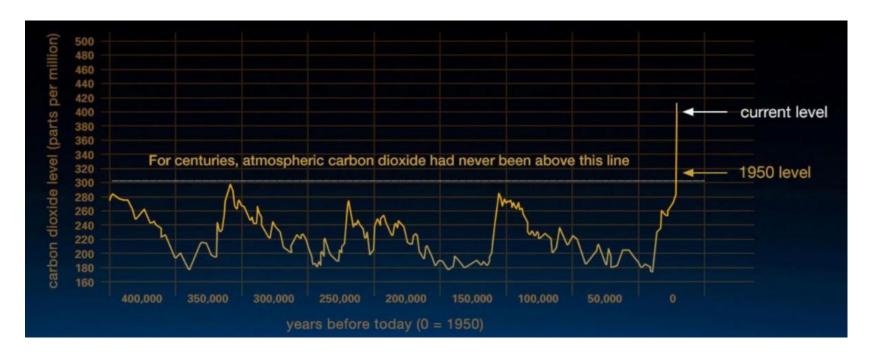
# Climate Change CAG

August 2023 Introduction



thanet

### CO<sub>2</sub> levels







#### Balanced CO<sub>2</sub> cycle

Plants and trees take up CO<sub>2</sub>



Humans and animals eat the plants for energy.
Humans burn the trees for heat and and use the wood for shelter.

#### Unbalanced cycle causing climate change

Fossil fuels are stored CO2 produced millions of years ago.









**Burning Natural Gas:** 

When heating the air or water in our homes.

When cooking on a gas stove.



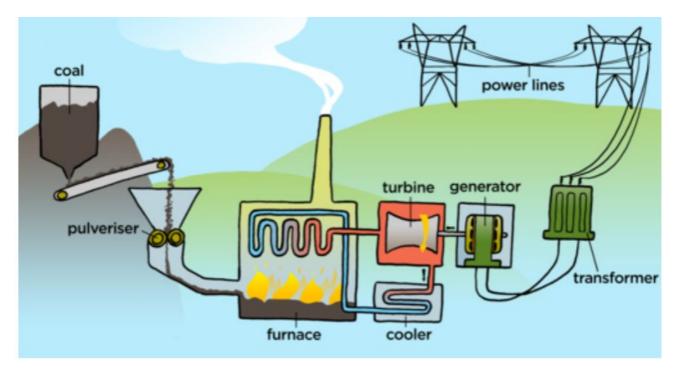


Burning petrol/diesel (from oil) in cars/vans





## Production of electricity using fossil fuels



Now we use natural gas instead of coal, however this still produces CO<sub>2</sub> emissions. We need to stop using fossil fuels and instead create electricity using wind or solar.





#### **Balanced GHG cycle**

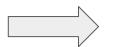
Low levels of meat and dairy consumption





#### Unbalanced cycle causing climate change

High levels of meat and dairy consumption: increased methane production. Increased land clearance to for products, cattle and to produce animal feed







Over consumption of stuff in general is also driving climate change.



# What are the likely impacts of climate change?





- Heat waves and droughts
- Extreme storms and flash flooding
- Food system shortages
- Ecosystem disruption

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.



# KCC Risk and impact assessment

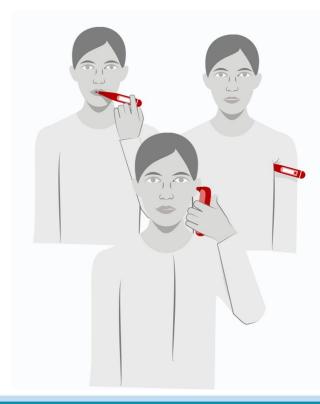
#### Link here

RISK	RATING	RECOMMENDATION
Heat leading to increased mortality.	High	Research priority
Overheating homes and public buildings causing productivity and health issues.	High	Research priority
Overheating of public spaces affecting health.	High	Research priority
Water scarcity and droughts affecting access to water.	High	Research priority
Increase in flood risk impacting people's homes, businesses, health and social care facilities and access.	High	More action needed
Increased rates of coastal change particularly impacting vulnerable communities.	Medium	Research priority
Declining air quality affecting health.	Medium	Research priority

Climate change is a public health emergency







#### **Body Temperature**

37C (98.6F) normal body temperature

38C (100.4F) or above, high temperature/fever

Source: NHS





### **2020** news

Australia: 28 people were killed, over 2,000 homes were lost. An estimated 1 billion animals were lost and one third of the entire koala population perished.

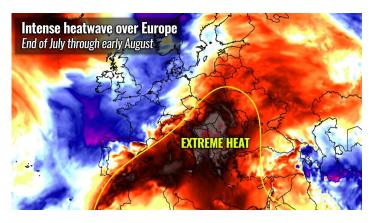


#### **2021 news**

Two months' worth of rain in just two days leading to extreme flooding and approximately 200 deaths

Greece - extreme heat wave. Fires in the country consumed five times as much land as they do in an average year.





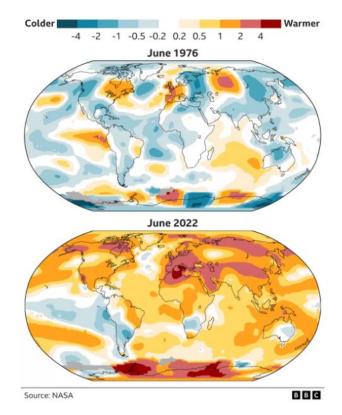


## **Heatwave of 2022**

40.3oC in the UK

Plus a global increase in temperature









## 2023

March - second warmest March on record

June - hottest June on record

Vast wildfires in Canada and parts

Mediterranean including Greece, Italy and Spain.



According to the data released last week, July saw the hottest three-week period ever recorded; the three hottest days on record; and the highest-ever ocean temperatures for this time of year.

World Meteorological Organisation: "Exceptional heat and rain, wildfires and floods mark summer of extremes"



# **UN secretary general**

The era of global warming has ended and "the era of global boiling has arrived"

"Climate change is here. It is terrifying. And it is just the beginning,"

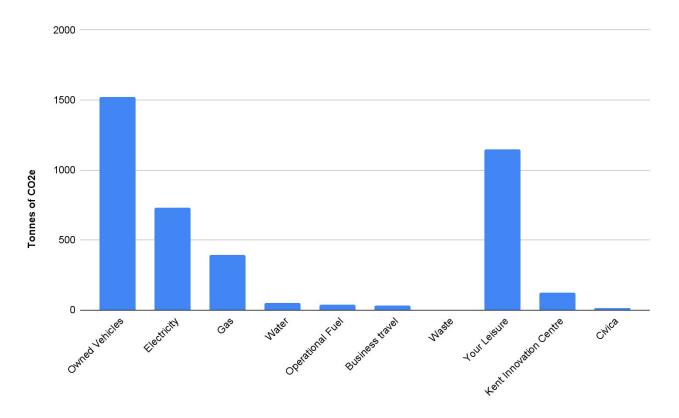
"It is still possible to limit global temperature rise to 1.5C [above pre-industrial levels], and avoid the very worst of climate change. But only with dramatic, immediate climate action."

Full speech here.





# **TDC** core carbon footprint





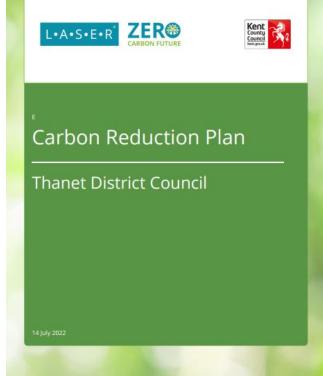
thanet district council

We pledge 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.

TDC carbon reduction plan lays out the route to net zero.

A new Net zero Directors group was set up to specifically address the core emissions and aim for net zero by 2030.





# **Progress and Issues: Fleet**

- Budget: Money to purchase available electric vehicles < 7.5 tonnes over the next three years is in the budget.
- Charging points Moving forwards with installing charging points at the depots

Waste carrier vehicles: The main issue is the mileage the bin lorries need to do.
 Currently there are no electric alternative on the market that can do the mileage. We are investigating all options including hydrogen.



# Progress and issues: Decarbonisation of offices

Boilers are coming to the end of life at Cecil and KIC and we will not reach net zero if we replace like for like.

A New Estates Decarbonisation Officer will be in post by September who will investigate all funding streams to move forward with this work.





# Full TDC pledge

We pledge 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.







Thanet District Council

# NET ZERO STRATEGY

2023

thanet.gov.uk/climate-emergency

**FEBRUARY 2023** 



# **Principles**

"We aim to ensure that this will be a fair transition to net zero which will not financially impact those already disadvantaged in Thanet. Some new low carbon technologies e.g. electric cars and heat pumps are unaffordable for many residents currently. The actions in the plan will not add to the inequalities in society."

It is important that we address climate change now as a matter of fairness and equality.

"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.

The benefits of strong and early action far outweigh the economic costs of not acting and so we will act now.



#### **Benefits of action**

"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 which will be cheaper to run. Net zero actions also reduces air pollution and encourages us to be healthier, by eating more fruit and vegetables and walking and cycling more."



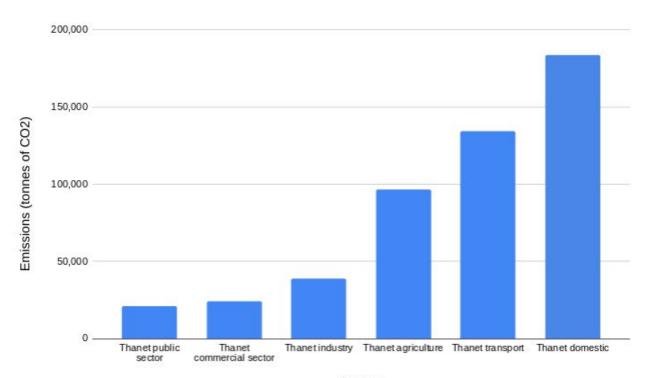
#### Wider TDC emissions

- Emissions within our spending 3.5k tonnes of CO2e. **Progress**: Added 5% climate change weighting to all procurement.
- Emissions produced from social housing tenants: 9k tonnes (4.9% of all housing in Thanet). Progress: The Housing team has published an excellent Social housing net zero strategy called Journey to Net Zero including the aim of reaching EPC C in all social housing by 2030.

**Progress**: Currently adding climate change as a consideration in all cabinet reports.



#### Thanet wide emissions



Greatest emissions from transport and residential

Updates on the work with residents and transport will be in following agenda items

Category



# **Emission reduction needed in 7 years**

Housing emissions need to reduce by 50% from 2018 baseline within 7 years to 2030

Transport emissions need to reduce by 65% from a 2020 baseline within 7 years

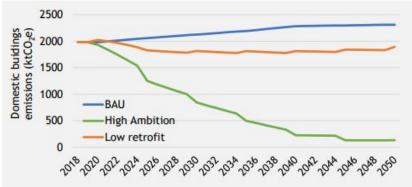


Figure 14: SCATTER Pathways for domestic buildings. Emissions increase slightly in the BAU and low retrofit cases due to the overall increase in demand for housing.

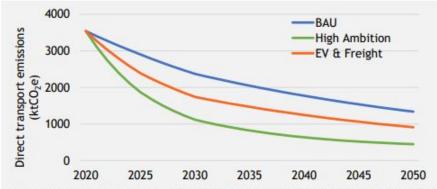


Figure 25: SCATTER Pathways for domestic buildings. Emissions increase slightly in the BAU and low retrofit cases due to the overall increase in demand for housing.



# Take away message

- Climate change is a public health emergency and we need to act now
- Renewable energy in buildings/homes and the way we travel is key
- Consumption is also important

TDC has a strategy and action plan and is employing new officers to move forwards with this work.

An update on the action plan and gaps in resources and finances will be brought to the next CC CAG.

# Six actions that will significantly reduce your carbon footprint





Link to <u>Take</u>
the jump
campaign

