Climate Change Strategy Update

- Strategy work is being undertaken by ARUP
- Commenced in early 2020
- Last taskforce presentation in January 2022

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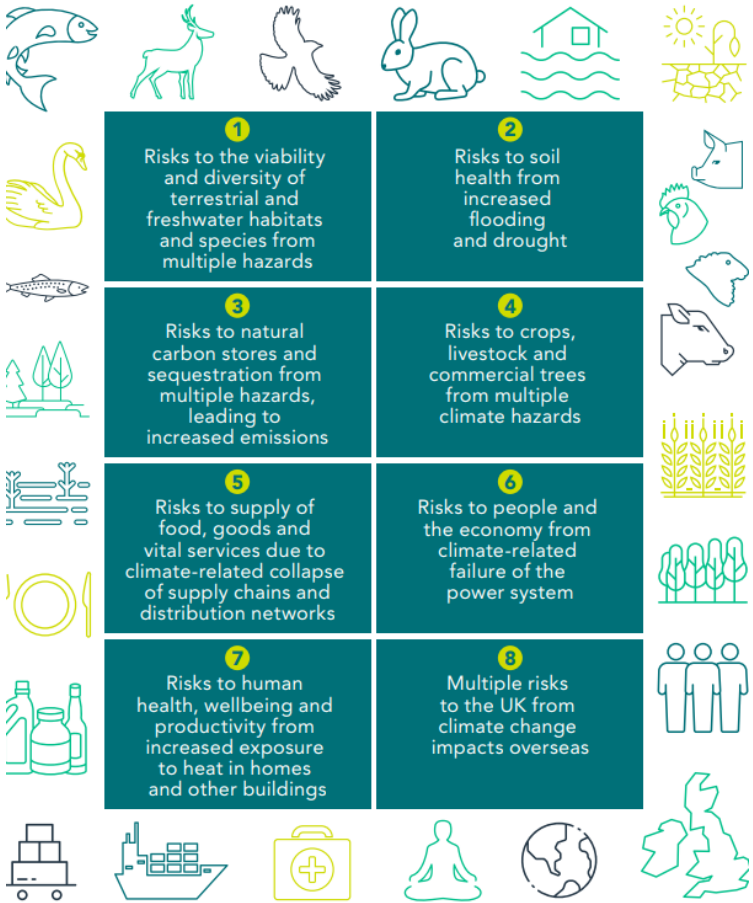
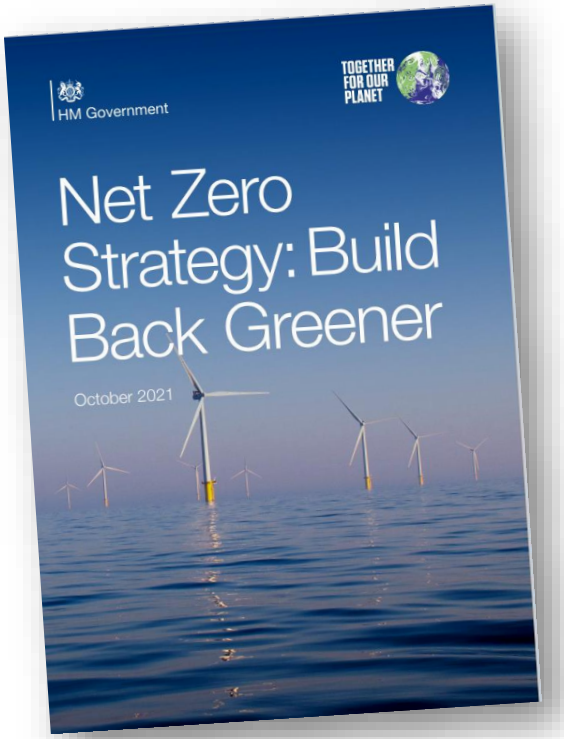


Climate Change Impacts

Under all emission scenarios considered, the global surface temperature will continue to rise until at least the middle of the century. Global warming of 1.5°C and 2°C will be exceeded over the course of the 21st century unless CO2 and other greenhouse gas emissions are greatly reduced in the coming decades.

https://www.theccc.org.uk/publication/independent-assessment-of-uk-climate-risk/



National context

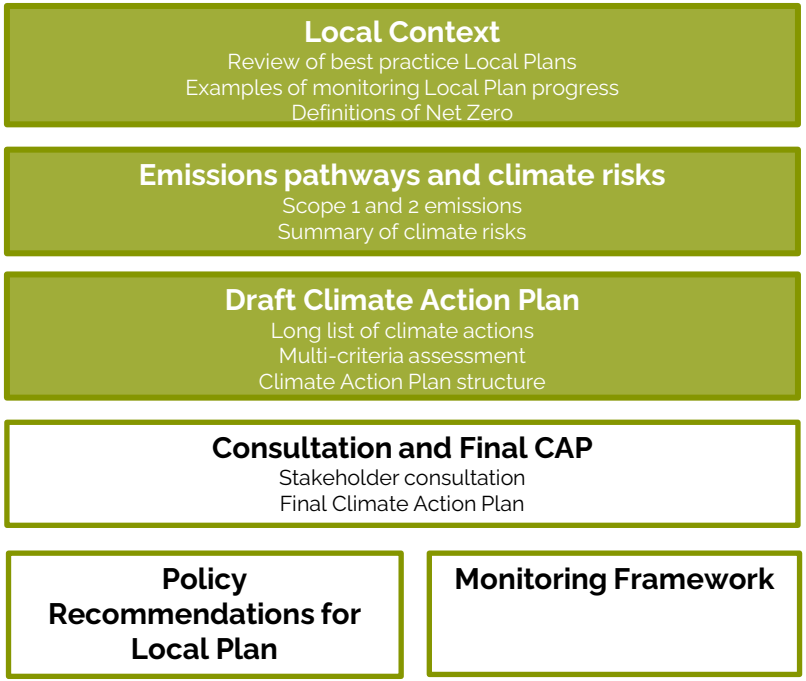
- The UK has a legally binding requirement to achieve net zero carbon by 2050
- Section 182 of the Planning Act places a legal duty on local planning authorities to ensure that their development plan documents include policy to secure the contribution of development and the use of land in the mitigation and adaptation of climate change. Risks of water
- NPPF – Section 14 Meeting the challenge of climate change, flooding and coastal change

Focus on Thurrock

- Thurrock and the surrounding areas are home to one of the largest development programmes in the UK. How and where this investment is spent will shape the future of these places for decades to come
- In October 2019 the Council passed a motion to declare a climate emergency and to take urgent action to reduce its carbon emissions to net-zero by 2030.
- Thurrock Net Zero Strategy – focus on assets within our control – corporate response (Draft)
- **Thurrock Climate Change Strategy – boroughwide** (Draft)
- Green Economic Growth Plan (at an early stage)

Climate Change Strategy

- ❑ Build on Climate Change Scoping Study
- ❑ Provide evidence to inform the development of the Local Plan
- ❑ Break-down of emissions sources
- ❑ Outlines climate risks for the area
- ❑ Identifies routes to action to mitigate risks
- ❑ Identifies mechanisms and funding for overcoming barriers
- ❑ Establish clear timescales and accountability



Transport

In Thurrock, the transport sector makes up 43% of total emissions, and is the largest emitting sector by a significant margin. We recognise that tackling car travel is at the centre of the transformation of Thurrock's transport sector. To incentivise a shift away from cars, we must create attractive, convenient, safe and inclusive alternative means of travel for our residents.

11 Actions:

Deliver safe and attractive streetscapes that encourage the use of active, low carbon travel methods...

Work with freight operators and the Freight Quality Partnership to reduce emissions from HGVs...

Continue with planned efforts to replace Thurrock Council's fleet of vehicles with electric vehicles and trial alternative sources and fuels....

Energy

Thurrock is well placed to meet the needs of a changing energy system. The draft strategy promotes diversification and decentralisation of energy generation, recognising the need to take advantage of local opportunities and constraints in energy supply decisions and generate heating and cooling from a range of sources. A greater reliance on local renewable energy supply will also protect our residents from rising energy prices. However, this shift in supply must be accompanied by increased building retrofit and refurbishment, in order to reduce energy demand and build in smart, responsive demand management systems. We will need to work closely with key partners in the energy sector, as well as receive support from national government, to transition our energy system at pace and scale.

11 Actions:

Explore the launch of a community energy investment fund that brings together investors and local energy projects to leverage private sector financing into energy and climate projects

Develop a Local Area Energy Plan (LAEP) to map heat and cooling demand and supply across Thurrock and facilitate the integration of low carbon infrastructure such as district heating

Industry

In Thurrock, industry makes up 23% of our total emissions. Half of these emissions arise from the use of natural gas, 30% from electricity, and approximately 20% from the combustion of other fuels onsite. Therefore, we need to focus our efforts on helping our local industry to find alternatives for natural gas, such as switching to alternative fuels and using low carbon heat sources, as well as maximising opportunities for energy efficiency.

We know that in order to enable decarbonisation across Thurrock's industry and local businesses, we must build capacity in our supply chains and labour force through promoting green training and skill development, as well as growing the market for key technologies such as heat pumps. This will help to create good quality green job opportunities for people in Thurrock.

7 Actions:

Engage with major industrial partners to encourage the utilisation of industrial rooftop space for biodiversity, water harvesting, solar thermal…

Collaborate to provide support to re-skill and up-skill the local supply chain (focusing on supporting SMEs) in the building and installer sectors.

Waste

The Climate Change Committee's (CCC) lays out the following changes that would enable waste sector emissions to be reduced by 75% by 2050:

- ❑ Reduce edible food waste by 50% by 2030
- ❑ Introduce carbon capture and storage (CCS) within EfW plants, reaching 100% of plants from 2040
- ❑ Make improvements to wastewater treatment plants, including improved monitoring, enhanced operational measures and implementation of advanced anaerobic digestion
- ❑ Roll out methane capture facilities in landfills; and
- ❑ Composting improvements

Typically waste represents approximately 2-3% of a local authority's total emissions.

7 Actions:

Support community-based / grassroots circular economy organisations through grants or in-kind contributions, such as affordable or peppercorn rent workspace.

Publish design codes that encourage the provision of composting spaces within new developments to reduce and re-use food waste

Land Use and Food Systems

In Thurrock, we must protect our rich natural assets to safeguard and improve local biodiversity, and protect our residents from increasing risks of flooding, water scarcity and urban heat that are set to intensify in the coming decades with climate change. Increasing the quality and extent of green infrastructure across Thurrock will provide opportunities to sequester carbon to partially offset our emissions, whilst also creating more spaces for our residents to enjoy nature. We must also make changes to our food supply in order to promote local, low carbon food consumption that maximises benefits to Thurrock's communities and farmers.

12 Actions:

Foster improved relationships and programmes between primary and secondary schools and the agricultural/food sector. Possible interventions include requiring the provision of food growing space within schools…

Support voluntary planting/ restoration schemes and engage volunteer landscape wardens, promoting the benefits of woodlands, wetlands, rivers wildlife and nature

Buildings and Public Estate

In Thurrock, our buildings account for 20% of our total emissions, 70% of which arises from natural gas used for heating and cooking. Making energy efficiency improvements to Thurrock's buildings will help to shelter our residents and businesses from rising energy bills. Our public sector estate is responsible for 3% of total emissions. Our buildings and public estate actions centre on delivering deep retrofit, leading by example by tackling emissions in our council owned building stock, as laid out in the Thurrock Council Net Zero Strategy: Own Estate (2022 – 2025).

12 Actions:

Work with ASELA and South East LEP to lobby Government for greater financial support to retrofit the existing housing stock

Adopt policy planning framework that sets out expectations around sustainable standards and the masterplan and design phase…

Adopt planning policy framework that supports the assessment and benchmarking of whole-life carbon in buildings

Next steps

- ❑ Finalise the draft Strategy and list of suggested actions
- ❑ Undertake wider stakeholder engagement on the strategy – communities, anchor institutes, developers
- ❑ Work with partners to develop an implementation plan
- ❑ Embed Local Plan recommendations into the Regulation 18 Draft Plan

The potential adverse effects of climate change would be experienced unevenly across different sections of the UK population, deepening the existing health inequalities. The risks are greatest for those already most vulnerable to poor health, particularly those that rely on others for care such as children, the elderly, and those with disabilities and pre-existing conditions.

Dame Karen Dunnell
Chair of the Longevity Science Panel