

# National Strategic Brief: Climate Change

Summary of twenty strategic climate change documents outlining the UK's climate change risk, impacts and action.



Flood alleviation. Wichelstowe, Swindon © Arup





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			Prepared by	Checked by	Approved by
		Name	Esme Stallard	Ben Smith	Ben Smith / Wendy Cheung

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# **EXECUTIVE SUMMARY**

# The purpose of this document is to support towns in the preparation of their TIP to ensure that there is a consideration of climate change – both its potential impacts and the actions that can be taken to reduce local emissions.

Infrastructure investment and development has a crucial role to play in ensuring that towns pursue a low carbon and resilient development pathway that can ensure the long-term wealth and importantly health of their people and local natural environment.

We present a series of documents which summarise the existing evidence base for the climate change risks in the UK as well as the current level of emissions and the key sources.

For both climate change and mitigation, we list the key strategy documents which outline the UK government's response to climate change. For climate change mitigation this includes the whole economy action as well as key sectoral initiatives to tackle emissions e.g. transport, housing etc. For adaptation we present the key frameworks to support the consideration of climate change risks in infrastructure planning and development.

In light of the UK government's 2050 'Net Zero' commitment in 2019, there are significant regulatory and policy changes in the pipeline which are anticipated to be announced in the coming year. Towns should develop their TIPs taking due regard of these commitments as they will likely impact upon all areas of local development such as building regulation, local infrastructure requirements e.g. electric vehicle charging and resident behaviour.

Links are provided for each of the documents; Towns should explore each of these documents considering how they will impact their TIP vision as well as how they can support the delivery of the UK-wide ambition to be net zero by 2050.

# INTRODUCTION

This strategic briefing note on climate change is intended to support Towns in the preparation of their TIPs to ensure that there is a consideration of climate change – both its potential impacts and actions to reduce emissions.

It provides an overview of the existing evidence base on climate change risks and opportunities in the UK, and against this backdrop the current and expected future policy and regulatory context within the UK on this subject matter.

The structure of this document is split into two main sections: Climate Change Mitigation; and Climate Change Adaptation.

Each section follows the same structure as listed:

- Section Title
  - Evidence base:
    - Existing report: headline statements, expected updates and when to be used
  - Existing policy and commitments:
    - Policy/regulation: headline statements, requirements or relevance to Town
  - Future commitments and publications
    - Expected policy/regulation change: headline statements, consultation period, and expected publication date

The final section will focus on next steps for Towns and how this information may be integrated into their TIP as well as future work to identify their own context regarding emissions reductions and climate change risk and resilience.

" More than half of the emissions cuts needed rely on people and businesses taking up low-carbon solutions – decisions that are made at a local and individual level. Many of these decisions depend on having supporting infrastructure and systems in place. Local authorities have powers or influence over roughly a third of emissions in their local areas."

UK Committee on Climate Change. Local Authorities and the Sixth Carbon Budget, Key Recommendations. 2020

# **Climate Change Mitigation**

# **CLIMATE CHANGE MITIGATION**

Climate change mitigation is the action taken to reduce emissions, and often refers to Scope 1 and 2 emissions i.e. those emissions which are produced directly or indirectly (e.g. through electricity consumption) within the boundary of your town.

The UK currently emits 351.5MtCO2e tonnes of emissions annually (2019), having seen a 45.2% reduction since 1990<sup>1</sup>. The current emissions per capita in the UK is 5.3tCO2e, but this will vary depending upon location, demographic size and distribution, as well as infrastructure provision.

The UK has made a legally binding commitment to reduce its territorial-based emissions to 'Net Zero'<sup>2</sup> by 2050, an update to the existing 2008 Climate Change Act. This chapter examines the evidence base for this target and the existing and expected policy and

regulations to help the UK achieve this ambition.

<sup>&</sup>lt;sup>1</sup> BEIS, 2020. 2019 UK greenhouse gas emissions, provisional figures. Available.

<sup>&</sup>lt;sup>2</sup> Net Zero is a term used to denote a condition whereby the emissions emitted are equal or lower than the emissions absorbed or sequestered.

## **EVIDENCE BASE**

## Report 1: Net Zero – The UK's contribution to stopping global warming. UKCCC, 2019.

Link: https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/

### Headline Statements

- Report by the UK Committee on Climate Change at the request of the UK Government to reassess the UK's emissions targets, which at the time was an 80% emissions reduction target against 1990 levels by 2050.
- The report recommends, the now adopted, new emissions target for the UK of net zero by 2050.
- The IPCC Special Report on Global Warming of 1.5 deg was reviewed in order to understand the action the UK must take.

The report includes several policy recommendations:

- Phase out of petrol and diesel vehicles before 2040
- Low carbon electricity supply to be quadrupled by 2050
- Long term strategy for decarbonising UK heating systems
- Afforestation targets for 20,000 hectares/year across the UK nations
- To reach the net zero target costs of 1-2% of GDP are expected and must be distributed fairly

## Expected updates

- The UK government has now updated the emissions target for the UK in line with the UKCCC recommendations
- The UK government announced in November 2020 that the phase out for petrol and diesel vehicles would be brought forward to 2030.
- The UKCCC will publish in early December its annual progress report, identifying the action and/or inaction the UK government has taken to achieve its net zero ambition

### When to be used

- Setting the UK climate change mitigation scene within the TIP
- Presenting the evidence for a net zero target and the expected socio-economic costs and opportunities for a net zero target

## Net Zero The UK's contribution to stopping global warming

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## Report 2: Net Zero – Technical Report. UKCCC, 2019. [Accompanying Report 1].

Link: https://www.theccc.org.uk/publication/net-zero-technical-report/

- Technical report accompanying report 1, "Net Zero The UK's contribution to stopping global warming" containing detailed sectoral analysis and examination of the removal of greenhouse gases.
- For each sector the report examines the current emissions level, how that profile has changed over the years and the impact of low carbon technologies. The report then considers options to reduce emissions in line with a net zero target: 'Core' options, 'Further ambition' options, and 'Speculative' options – which has significant barriers; considering delivery, timings, costs, cobenefits, challenges and priorities.

## Headline Statements

- **Power:** Renewables are cheaper than alternative forms of power generation in the UK and can be deployed at scale to meet increased electricity demand in 2050. Hydrogen and CCS will have to be deployed to help decarbonise residual emissions from heat.
- **Buildings:** Direct emissions from buildings were 17% of UK GHG emissions in 2017. Decarbonising buildings are likely to be achieved through low carbon heating and district heating networks, and energy efficiency measures (insulation, smart controls etc.). This will be easiest is new buildings, buildings with no space constraints, and those not connected to the gas grid.
- **Industry:** emissions reductions will be achieved through ongoing measures including resource efficiency, reduction of methane leakage and some Carbon Capture and Storage. Further investment is required in CCS and development of low carbon off road machinery.
- **Transport:** GHG emissions from the transport sector are 23% of UK GHG emissions as of 2017, with the largest contributions from cars, vans and HGVs. Almost 100% of emissions will be reduced through the end of sales of non-zero emissions vehicles by 2035, rail electrification, reducing car mileage by 10% and switching HGVs over to zero emissions alternatives throughout the 2030s.
- Aviation and shipping: emissions from this sector have grown considerably over recent years, with aviation GHG emissions doubling since 1990. Efforts to reduce aviation and shipping emissions will be challenging and require growth to be reduced by between 20-50% against 2005 levels, and a switching to synthetic fuels.
- Agriculture, land use, land use change and forestry: Emissions from the agriculture sector account for 9% of UK emissions, 2017. Emissions in this sector should be reduced in the first instance by nitrogen use efficiency, livestock measures such as approving the feed digestibility, and manure management; and by considering switches to healthier diets.
- **Waste:** Waste emissions are just 4% of total UK emissions, 2017. They can be reduced by significant reduction in waste produced, diversion in all biodegradable waste away from landfill, and increase in recycling and re-recycling rates. The speed at which this is achieved is crucial.

## Expected updates

• The UKCCC will publish in early December its annual progress report, identifying the action and/or inaction the UK government has taken to achieve its net zero ambition.

## When to be used

- Setting the UK climate change mitigation context at a sectoral level within the TIP.
- Identifying the high-level action required to achieved significant emissions reductions and to be embedded across wider investment plans.

## Report 3: UK Fifth Carbon Budget dataset. UKCCC, 2016.

Link: https://www.theccc.org.uk/publication/fifth-carbon-budget-dataset/

## Headline Statements

- The UK's carbon budgets provide a total amount of GHG emissions that can be emitted over a five-year period by the UK. The fifth carbon budget runs from 2028 – 2032 and is set at 1,725 MtCO2e.
- To remain within the carbon budget limit the UKCCC examines two future UK scenarios: a "baseline" (i.e. no climate action after 2008, the start of the carbon budget system) and the "central" scenario. The central scenario and its assumptions underpin the CCC's advice on the fifth carbon budget (the limit to domestic emissions during the period 2028-32).
- The central scenario is an assessment of the technologies and behaviours that would prepare for the 2050 target cost-effectively, while meeting the other criteria in the Climate Change Act (2008), based on central views of technology costs, fuel prices, carbon prices and feasibility across the seven sectors.
- Examples of technologies include heating controls, housing loft insulation, renewable energy generation levels, uptake rates of electric vehicles.

## **Expected updates**

• UK Sixth Carbon Budget was published in early December

## When to be used

When presenting potential policy solutions and setting the scene for expected technological developments

## Report 4: UK Sixth Carbon Budget – The Path to Net Zero. UKCCC

Link: https://www.theccc.org.uk/comingup/advice-on-the-sixth-carbon-budget/

## Headline Statements

- The sixth carbon budget was published by the UKCCC and advises the UK Government Ministers on the volume of GHG emissions that can be emitted for the period 2033 2037.
- It is the first carbon budget aligned with the legally binding net zero 2050 target, and therefore recommends the UK will now need to deliver a 78% reduction by 2035 if it is to meet its long-term net-zero commitment.
- The UKCCC recommends that the Sixth Carbon Budget can be met through four key steps:
  - **Take up of low-carbon solutions**. Businesses and people will need to adopt low carbon solutions as high carbon options are phased out, this includes all new cars and vans to be zero emissions from early 2030s and all boiler replacements in homes.
  - Expansion of low-carbon energy supplies. UK electricity production will need to be zero carbon by 2035. Offshore wind will be the main source of renewable energy, with a total capacity of 100GW or more by 2050. As more sectors are electrified, the electricity demand will increase by 50% over the next 15 years, and doubling or even trebling demand by 2050. Low-carbon hydrogen scales-up to be almost as large, in 2050, as electricity production is today.
  - Reducing demand for carbon-intensive activities. The UK will become more efficient with less wastage, building insulation will need to be improved across the UK, and meat and dairy consumption decrease by 20% by 2030.
  - Land and greenhouse gas removals. Agriculture is expected to produce the same levels of food per capita by 2035, and 460,000 hectares of new mixed woodland will be planted to remove CO2. Woodland coverage expands from 13% of UK land today to 15% by 2035, and 18% by 2050. Peatlands will be widely restored and sustainably managed.
- Local authorities and sixth carbon budget advisory document expected to be published.

### **Requirements for local councils**

- Identification of how these scenarios will impact existing infrastructure systems and current lifestyles of residents
- Identify opportunities for growth for your local area e.g. renewable energy installation or increase in home insulation
- Identify potential land changes in your region on the basis of the need for increased land sequestration

## **EXISTING POLICIES AND COMMITMENTS**

## Report 5: Reducing UK emissions: 2020 Progress Report to Parliament. UKCCC, 2020.

Link: https://www.theccc.org.uk/publication/reducing-uk-emissions-2020-progress-report-to-parliament/

## Headline Statements

- UKCCC's assessment of UK government's current progress in reducing the UK's GHG emissions, 2019 – 2020.
- The report highlights five priority investment areas for the UK government in the coming months:
  - Low-carbon retrofits of homes and non-domestic buildings
  - Increased tree planting, peat restoration and green infrastructure to increase carbon sequestration, increase resilience to climate change by reducing flood risk and overheating
  - Strengthening and increased capacity of energy networks
  - Improved active transport infrastructure
  - Promoting circular economy solutions

### Requirements for local councils

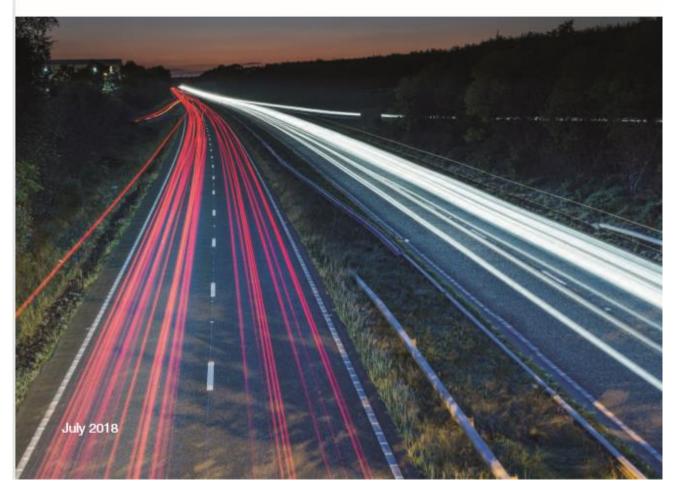
• Consideration of how local infrastructure investment can support these recommendations, including support the transition through increased access to education, training and upskilling of the local workforce





# The Road to Zero

Next steps towards cleaner road transport and delivering our Industrial Strategy



The Road to Net Zero Office for Low Emissions Vehicles, 2018 © Enter copyright credit here Footer title to go here

## Report 6: Road to Net Zero Strategy. Office for Low Emission Vehicles, 2018.

Link: <u>https://www.gov.uk/government/publications/reducing-emissions-from-road-transport-road-to-zero-</u> strategy

## Headline Statements

- UK government strategy to reduce emissions towards net zero across the transport sector
- Headline policies:
  - Increase the availability and use of low carbon fuels in the UK by 100% over the next 15 years, to represent 7% of total fuel use by 2032 [legally-binding]
  - Ensuring 25% of the central Government car fleet is ultra-low emission by 2022 and that all new car purchases are ultra-low emission by default. Committing to 100% of the central Government car fleet being ultra-low emission by 2030.
  - Introducing a new voluntary industry-supported commitment to reduce HGV greenhouse gas emissions by 15% by 2025, from 2015 levels.
  - Pursuing regulation that is as ambitious as the EU for vehicle emission regulation.

### Requirements for towns/local authorities

• Consideration of how local infrastructure investment can support these recommendations, including support the transition through increased access to education, training and upskilling of the local workforce

## Report 7: Clean Growth Strategy. BEIS, 2018.

#### Link:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/70049 6/clean-growth-strategy-correction-april-2018.pdf

## Headline Statements

- The strategy sets out the UK Government's approach for delivering increased economic growth whilst continuing to reduce emissions.
- Key policies and proposals: [50 in total]
  - Establish a Green Finance Taskforce to help deliver green public and private investment to meet the UK's Carbon Budgets
  - £20 million fund to invest in early stage clean technology development
  - Develop green mortgage products
  - Review and consultant Building Regulations to increase energy efficiency standards on new and existing buildings
  - Support around £3.6 billion of investment to upgrade around a million homes through the Energy Company Obligation (ECO)
  - All fuel poor homes to be upgraded to EPC Band C by 2030
  - End the sale of new conventional petrol and diesel cars and vans by 2040
  - Invest £1.2 billion and £1 billion to support active travel and the take up of ultra-low emission vehicles respectively
  - Provide £255 million of funding for energy efficiency improvements in England and help public bodies access sources of funding

### Requirements for local councils

- Identify opportunities to access funding for clean investment.
- Identify potential legally binding targets that public infrastructure will be required to align with.

## Report 8: Accounting for the Effects of Climate Change – Supplementary Green Book. HM Treasury, 2020

## Link:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/93433 9/Accounting\_for\_the\_Effects\_Of\_Climate\_Change - Supplementary\_Green\_Book .....pdf

## Headline Statements

- Supplementary guidance to the HM Treasury's Green Book, providing guidance to policymakers on assessing whether policies and programmes are resilient to the effects of climate change
- Climate change must be considered when designing policies particularly where assets or infrastructure may be affected by climate change, there is interdependencies with other infrastructure forms, the project has a long lifetime, or the policy decision may result in lock into a high carbon pathway
- There are three key steps for effective evaluation: identifying climate risk and adaptation options, incorporating these into the risks and impacts of the appraisal process, decision making based on flexibility

## Requirements for local councils

- Assessment to identify whether these practices are being considered within existing policy design and commissioning process
- Consider embedded this accounting approach into future policy design

## **Report 9: UK Government's Nationally Determined Contribution<sup>3</sup>, DEFRA.**

## Link:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/94361 8/uk-2030-ndc.pdf

## Headline Statements

- The UK's NDC sets out the ambitions and actions of the UK Government to reduce the country's emission in line with the Paris Agreement, ahead of COP 26
- The NDC commits the UK to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels.
- As well as the NDC, the UK has published an Adaptation Communication and a Biennial Finance Communication
- The UK government, in support of the NDC, intends to publish ambitious individual plans across key sectors of the economy, including an Energy White Paper, Transport Decarbonisation Plan, England Peat Strategy and Heat and Buildings Strategy ahead of COP26.
- By reducing emissions by at least 68% on reference year levels (1990/1995), UK emissions per person will fall from around 14 tCO2e in 1990 to fewer than 4 tCO2e in 2030

## Requirements for local councils

- As part of the national effort to meet the NDC commitment all climate change targets at a local level should meet or exceed the national level target.
- Respond to consultation on subsequent policies and proposals to meet the NDC

<sup>&</sup>lt;sup>3</sup> The Paris Agreement, the globally ratified climate change agreement, requires signatory countries to prepare and communicate their post-2020 climate actions that will ensure global warming is kept "well-below" 2°C and adapt sufficiently to climate change.



# The Ten Point Plan for a Green Industrial Revolution

Building back better, supporting green jobs, and accelerating our path to net zero



The Ten Point Plan for a Green Industrial Revolution BEIS, 2020 © Enter copyright credit here

## FUTURE/NEAR TERM POLICIES AND COMMITMENTS

## Report 10: The ten-point plan for a green industrial revolution. BEIS, 2020.

## Link:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/93433 9/Accounting\_for\_the\_Effects\_Of\_Climate\_Change - Supplementary\_Green\_Book\_..\_.pdf

## Headline Statements

- Advancing offshore wind
- Driving the growth of low carbon hydrogen
- Delivering new nuclear power capacity
- Accelerating the shift to low carbon emission vehicles
- Green public transport and active transport
- Net zero shipping and aviation
- Greener buildings
- Investing in Carbon Capture, Usage and Storage
- Protecting our natural environment
- Green finance

## **Consultation period**

Specific policies or programmes within the plan have consultation periods e.g. Hydrogen Strategy

## Expected publication date

November 2020 [Published]

## Report 11: A Plan for Jobs. HM Treasury

Link: https://www.gov.uk/government/publications/a-plan-for-jobs-documents/a-plan-for-jobs-2020

## Headline Statements

- Government's recovery response to COVID-19 to create jobs and sustained growth
- Specific focus on creating jobs that support the long-term pathway to reduce emissions to net zero the proposed funding could support 10,000 green jobs
- Green Homes Grant which will provide £2 billion funding up to £5000 (£2 for every £1 spent by the homeowner) which has since been extended beyond March 2021
- Green Jobs Challenge Fund The government will invest up to £40 million in environmental charities and public authorities to create and protect 5,000 jobs in England.

## Consultation period

None

## Expected publication date

July 2020 [Published]

## Report 12: Treasury Net Zero Review. HM Treasury

Link: https://www.gov.uk/government/publications/a-plan-for-jobs-documents/a-plan-for-jobs-2020

## Headline Statements

- The review is intended to assess the economic growth opportunities from the transition to net zero.
- The review will also consider how carbon leakage can be prevented i.e. policies that result in the transfer of emissions elsewhere

## Consultation period

"Will consult widely"

## Expected publication date

November 2020 / Before COP 26 (postponed till November 2021)

# **Climate Change Adaptation**

# **CLIMATE CHANGE ADAPTATION**

With global emissions worldwide continuing to increase, and a global increase in temperature of 0.85°C since 1880 the UK, as with other countries, will face increasing risks, and opportunities from climate change.

The UKCCC has identified that there are six key areas from which the UK, its people and infrastructure are most at risk. The extent of their impact will vary depending upon the RCP<sup>4</sup> scenario considered and efforts to adapt. They include:

- Flooding and coastal change risk
- Risks from extreme temperature and hot days to health and wellbeing
- Public water supply shortage
- Risks to natural capital including biodiversity and soils
- · Risks to domestic and international food production and trade
- New and emerging diseases

This chapter examines the evidence base for these identified risks and the existing and expected policy and regulations to help the UK build its resilience to climate change.

<sup>&</sup>lt;sup>4</sup> Representative Concentration Pathway – differing scenarios of GHG emissions concentrations in the atmosphere Footer title to go here

## **EVIDENCE BASE**

## Report 13: UK Climate Change Risk Assessment. UKCCC, 2017.

Link: https://www.theccc.org.uk/uk-climate-change-risk-assessment-2017/synthesis-report/

## Headline Statements

- The Climate Change Act (2008) requires the UK Government to produce a climate change risk and opportunities assessment every five years. This is the second assessment produced in 2017.
- This is the synthesis report for policymakers, the full report contains eight detailed chapters looking at the different risk and opportunities.
- The greatest direct climate change-related risk for the UK is the potential significant increase in flooding and exposure to extreme heat and heatwaves, and the resulting shortages in water and risks to biodiversity and food production (both nationally and internationally).
- It is important that action taken to address these risks is cross-cutting and works across different sectors and services rather than in isolation.
- The impact of these future hazards will be determined by the vulnerability of populations and infrastructure, which will shift with changing demographic structures
- There are potential opportunities presented by future climatic change including milder winters which will reduce the cost to heat homes and subsequent fuel poverty
- UK agriculture and forestry may be able to increase crop production of certain foodstuffs however, others could be worse off
- There may be an increased demand for adaptation-related goods and services such as business risk management.

## Expected updates

• The next CCRA report will be issued in 2022, in line with the five-yearly reporting cycle

## When to be used

- Setting the UK climate change risks and adaptation context within the TIP
- Presenting the evidence for a taking action to adapt to climate change
- Presenting the expected socio-economic costs and opportunities of climate change

## Report 14: Progress in preparing for climate change – 2019 Progress Report to Parliament. UKCCC, 2019.

Link: <u>https://www.theccc.org.uk/publication/progress-in-preparing-for-climate-change-2019-progress-report-to-parliament/</u>

## Headline Statements

- The report presents the UKCCC Adaptation Sub-Committee's assessment of the UK Government's progress in adapting to climate change and gives an assessment of the Government's Second National Adaptation Programme.
- The report has concluded that at the time of publication England remained unprepared for 2°C of warming, let alone further warming scenarios that may occur under RCP 4.5, 6.0 and 8.5
- Currently only a few infrastructure sectors have adaptation plans considering future 2-degrees warming: water supply, road and rail and flood defences
- National plans and strategies need to work harder to integrate long term climate change adaptation planning regarding agriculture, business and health; as well as strengthening the governance systems to support this process

## Expected updates

• Progress report update published annually

## When to be used

• Consideration of how local strategy development and infrastructure investment can support these recommendations, including assessing the current governance structures that deliver climate change adaptation programmes moving beyond a typical hazard risk approach to embedding resilience.

## Report 15: UK Climate Projections. UK Met Office, 2018.

Link: https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/index

## Headline Statements

- The UK Climate Projections (UKCP) is a climate analysis tool that forms part of the Met Office Hadley Centre Climate Programme. The most recent climate change projections were published in 2018.
- The climate projections produce land and marine scenarios for different climate variables over varying scales from 2.2. km to global coverage at 60km grid scale. The 2.2 km scale can provide national climate change information at a local level at the same granularity as present day weather forecast models out to the end of the 21<sup>st</sup> Century.
- By the end of the 21<sup>st</sup> Century all areas of the UK are expected to be warmer and across all seasons – by 2070 this could be up to 5.4°C in summer and 4.2°C in winter.
- Warmer summers are expected to be increasingly common, with hot summers a chance of occurring 50% of the time by 2050s. Extreme hot days are also expected to be a more frequent occurrence under a high emissions scenario (RCP 8.5) for all areas of the UK.
- Rainfall projections are more varied across the UK and seasons. By 2070, under a high emission scenario, rainfall will range from -47% to +2% in summer, and -1% to +35% in winter.
- Rainfall events that do occur in summer are expected to be more intense with significant increases in hourly precipitation extremes in the future.

## **Expected updates**

• No upcoming updates to UKCP18

### When to be used

• When conducting climate change risk assessments for the region and its infrastructure. This should be conducted regularly and with any new significant investment or construction project.

## **Other reports:**

- Sectoral specific reports e.g. UK Housing: Fit for the future? UKCCC, 2019
- Regional specific reports e.g. Managing the coast in a changing climate. UKCCC, 2019.

## **EXISTING POLICIES AND COMMITMENTS**

## Report 16: A Green Future: Our 25 Year Plan to Improve the Environment. DEFRA, 2019.

Link: https://www.gov.uk/government/publications/25-year-environment-plan

## Headline Statements

- The 25-Year Plan to Improve the Environment sets out the UK Government's ambition to support the natural environment over the next quarter century to achieve natural and human wellbeing.
- The plan has 10 key goals focused across six areas of action: *clean air; clean and plentiful water; thriving plants and wildlife; a reduced risk of harm from environmental hazards such as flooding and drought; using resources from nature more sustainably and efficiently; enhanced beauty, heritage and engagement with the natural environment; mitigating and adapting to climate change; minimising waste; managing exposure to chemicals; enhancing biosecurity.*
- The strategy explores nearly 50 supporting policies and programmes that will enable the vision to be achieved. There are several partner national strategies that this document should be considered alongside including: UK Industrial Strategy, UK Clean Growth Strategy, and Environmental Land Management Scheme.

## Requirements for local councils

• Identify how this strategy can be supported and the opportunities for implementing parallel or sub-initiatives

## Report 17: Flood risk assessments: climate change allowances. DEFRA, 2020.

Link: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

### Headline Statements

- Guidance to support local authorities in the preparation of strategic flood risk assessments, allowing for the potential increased risk from climate change and building long term resilience
- Climate change allowances includes predictions of potential change in:
  - Peak river flows
  - Peak rainfall intensity
  - Sea level rise
  - Offshore wind speed and extreme wave height
- The allowances will vary depending upon the different time periods and emissions scenarios that are used.

### **Requirements for local councils**

• Utilise the guidance in conjunction with the UKCP18 to ensure that existing and future infrastructure plans take account of climate change heightened flood risk.

## Report 18: The National Adaptation Programme and the third strategy for climate adaptation reporting. DEFRA, 2018.

## Link:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/72725 2/national-adaptation-programme-2018.pdf

## Headline Statements

- The UK Government's national strategy setting out the country's approach for adapting to existing and future climatic changes, responding to the second Climate Change Risk Assessment.
- Building on the first National Adaptation Programme, which had over 370 actions, this strategy intends to be more focused with specific programmes of investment and measurable outcomes.
- The strategy focuses on:
  - Increase resilience to high flood risk through the government's £2.6 billion six-year capital programme to reduce flood and costal erosion risk, greater natural flood management solutions, and increasing cross-organisation collaboration.
  - Reducing risk to wellbeing and productivity from high temperatures, by delivering more high-quality green infrastructure, working with infrastructure operators to integrate climate change impacts in their strategic planning, adapt our health systems to protect people.
  - Tackling risks for water shortage through restoring natural process with river systems, and setting ambitious goals for water leakage reduction
  - Reducing risks to natural ecosystems through the introduction of a new Environmental Land Management scheme, incentivising good soil management practices, and building ecological resilience.
  - Building resilience in the food supply chain.

## Requirements for local councils

• Assess the proposed policies and programmes identifying areas for cross over, collaborative working and support required to implement at a local level.



# The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting

## Making the country resilient to a changing climate

**July 2018** 



The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting DEFRA, 2018

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## FUTURE/NEAR TERM POLICIES AND COMMITMENTS

## Report 19: Third UK Climate Change Risk Assessment 2022

## Headline Statements

- The third UK Climate Change Risk Assessment evidence report will be a new independent assessment of the UK's climate risks and opportunities following input from 130 organisations.
- Following the publication of the evidence the UK Government will be required to respond through the update and publication of the third Climate Change Risk Assessment.
- The evidence report will be supported by six technical research chapters:
  - Socioeconomic dimensions
  - Water availability projections
  - Flooding projections
  - o Interacting risks
  - o Thresholds in the natural environment

## Consultation period

None

## Expected publication date

Announcements can be found here: https://www.ukclimaterisk.org/

## **Report 20: Environmental Land Management Scheme**

Link:

https://consult.defra.gov.uk/elm/elmpolicyconsultation/supporting\_documents/ELM%20Policy%20Discus\_sion%20Document%20230620.pdf

## Headline Statements

- The Environmental Land Management Scheme will determine the approach for payment support for the UK's Agricultural sector.
- The ELM core principle is 'public money for public goods' but will by legally supported by the Agriculture Bill
- The ELM will support the delivery of:
  - o Clean and plentiful water
  - o Clean air
  - Protection from and mitigation of environmental hazards
  - o Mitigation and adaptation to climate change
  - Thriving plants and wildlife; and
  - Beauty, heritage and engagement
- The UK government wants to ensure that the agricultural sector remains supported, whilst also delivers wider environmental benefits, notably improved climate change resilience through reduced flooding, improve soil quality to increase carbon sequestration and increased diversity of biodiversity.

## **Consultation period**

Closed, test and trials ongoing

## Expected publication date

Fully rolled out by 2024

# WHAT'S NEXT?

This document provides a baseline evidence and policy base for climate change impacts and action to mitigate its effect in the UK.

These documents and their headline statements can be used to provide the policy and environmental context for your town within your TIP.

It is important to reference expected policy changes or introductions and how these may affect your delivery plans.

The next step for building your evidence base is to replicate the national level approach at the local level – identifying the local risks from climate change under different emissions scenarios, and identifying the potential opportunities economically, socially and environmentally.