North Tyneside **Climate Adaptation Toolkit**

For North Tyneside businesses and third sector organisations

ACTION ON CLIMATE CHANGE NORTH TYNESIDE

Sterling

GREGGS

Cobalt

P&G

North Tyneside Council

NORTHUMBRIAN WATER *living water*

Quorum Park

EIFFAGE SMULDERS

The North Tyneside Climate Adaptation Toolkit

The consequences of a changing global climate have been felt across society and the environment, through a range of extreme weather events. In the UK we have had record-breaking heat in 2022, severe storms in 2021 and sudden cold snaps impacting on transport networks and business continuity. With the rate of change set to intensify over the coming decade, we need to plan for adaptation now.

The North Tyneside Climate Emergency Board was set up by North Tyneside Council in 2022 to address the urgent need for action in the fight against climate change. The Board is made up of public sector organisations and commercial and industrial businesses, working together to combat the climate crisis.

The Board has played an integral role in developing North Tyneside Council's Net Zero 2030 Action Plan. That plan includes a wide range of practical measures, including development of this toolkit guide, which are aimed at delivering short-term benefits towards long-term goals.

For further information on the Board, or any aspect of this toolkit, please email carbon@northtyneside.gov.uk

Who is this toolkit for?

This toolkit has been developed for businesses and the third sector to assess, evaluate, plan and monitor risks to their day-to-day operations related to extreme weather. By following this approach and using knowledge of services and operational processes, any organisation can transition towards better climate resilience.

What are extreme climate events and what's the evidence?

The UKs average surface temperature has increased by 1.2 degrees Celsius since pre-industrial levels already and evidence suggests this will continue to rise. Both the hottest and wettest years since records began have been within the last 10 years. Indications suggested that extreme weather is likely to cost the UK billions of pounds and wipe at least one per cent off GDP growth every year by 2045.

If average surface temperatures continue to rise, we will see wetter winters, hotter and dryer summers, and a further increase in the frequency of extreme climate events.

There is a clear need for businesses and other organisations to act now to ensure service continuity in their sectors.

Extreme weather events and potential business impacts

High temperatures
- Insufficient process cooling, particularly where using ambient air as a coolant
- Process equipment / instrumentation overheating and malfunctioning
- Increased fire risk / material decomposition / material auto-ignition
- Impact on workforce / reduced performance
- Increased wildfire risk (either direct impact to premises, or indirect impacts to utilities or emergency response)

Prolonged dry weather
- Impact on cooling water or fire water availability
- Subsidence / ground movement

Flooding
- Floating items causing damage to equipment or premises
- Loss of utilities, impacting on control and communications systems

High winds and storms
- Structural damage, either directly or due to wind-blown debris
- Access restrictions hampering emergency response
- Power loss across a wide area

Heavy snowfall

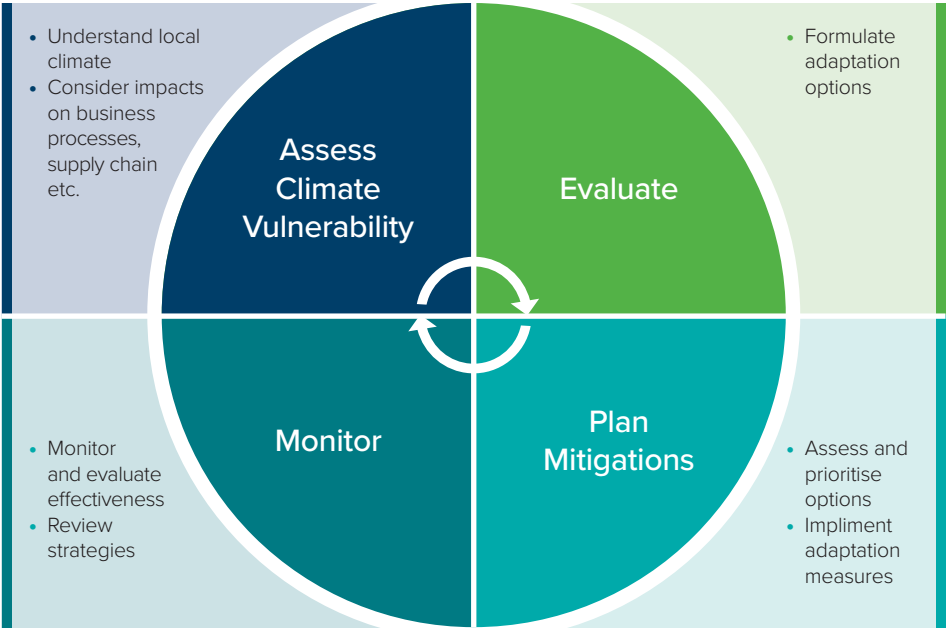
- Access restrictions hampering process operation / maintenance
- Weight on structures causing structural collapse
- Loss of utilities, impacting on control and communications systems
- Localised flooding impacts following thaw
- Access issues hampering emergency response

Ice / prolonged cold temperatures

- Freezing pipework causing no/low flow of running water
- Instrumentation faults and malfunctions, leading to loss of process control
- Metal fatigue / other equipment damage, causing failures and malfunctions
- Access issues or freezing of fire systems, impacting emergency response

Transitioning to a resilient business

This diagram demonstrates how you can transition your operations to become climate resilient.



The North Tyneside Climate Adaptation Toolkit

The Adaptation ToolKit is made up of three separate stages:

Stage 1: Climate Risk Identification Tool

This tool enables your organisation to identify potential climate risks for risk management planning, so you can delegate ownership of risks to individual employees. It also aids evaluation of current climate risk controls, so that a decision can be made on any additional controls required.

Stage 2: Operational Risk Scorecard

Use this to grade the probability and impact of climate-related risks. Your organisation can grade a variety of risk impacts, including financial, reputational, and service provision. The scorecard also enables the grading of probability of climate risks, so your organisation can take a proactive approach.

Stage 3: Climate Risk Register

This allows you to improve the resilience of your organisation by implementing a database and tracking climate-related risks, so you can identify actions which will ensure service continuity within your organisation.

If you would like these toolkit resources,
please email carbon@northtyneside.gov.uk

Further resources

National resources

- Adaptation is embedded into the UK government's 25 Year Environment Plan, which sets out what the government will do to improve the environment within a generation.

- The UK Climate Change Risk Assessment sets out the risks and opportunities facing the UK from climate change and is updated every five years.

- The National Adaptation Programme sets out the actions that government and others will take to adapt to the challenges of climate change in England over a five-year period.

You can find these online. Go to www.gov.uk and search using the resource title highlighted above in bold.

Regional resources

- The Northumbria Community Risk Register is produced by Northumbria Local Resilience Forum. It summarises the top risks in the region, how your organisation can be prepared and what to do in emergency. This is hosted on the Gateshead Council website, visit www.gateshead.gov.uk and search 'Northumbria Community Risk Register'.

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