Climate Risk Assessment and Business Continuity Planning

Climate NI & Business in the Community

14th October 2025

Business in the Community

- Business in the community NI are Northern Ireland's only network for responsible business
- 270+ members
- We provide members with dedicated support and expertise on their responsible business activities

OUR VISION

TO ACHIEVE A WORLD WHERE RESPONSIBLE BUSINESS IS AT THE CORE OF EVERY ORGANISATION

OUR PURPOSE

TO INSPIRE AND SUPPORT BUSINESS TO BE A FORCE FOR GOOD

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Climate Northern Ireland

Climate NI Programme Vision

> *Climate Northern Ireland is a cross-sectoral partnership devoted to understanding and enabling adaptation and mitigation actions in Northern Ireland that can address the climate emergency.*

Climate NI Programme Aims

- **Support development and implementation of climate policy** by enabling the exchange of expertise and advice between Government Departments, public bodies, and civil society.
- **Engage the research community** to help define and address evidence needs for climate policy and action.
- **Increase co-ordination and awareness on climate change** through partnership and clear communication.
- **Enable delivery of climate action in NI** by addressing barriers and building capacity at local, regional and national levels.

Funded via the Carrier Bag Levy by:

Department of Agriculture, Environment and Rural Affairs www.daera-ni.gov.uk | An Roinn Talmhaíochta, Comhshaoil agus Gnóthaí Tuaithe | Depairtment o' Fairmin, Environment an' Kintra Matthers

Climate Northern Ireland is funded by DAERA to raise awareness of and support climate change policy development through stakeholder engagement.

Training Workbook

We have developed a toolkit that accompanies this training session. The workbook contains key terms you need to know and guides you through the main activities you would complete when undertaking a climate risk assessment for your business.

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TOOLKIT

CLIMATE RISK ASSESSMENT AND BUSINESS CONTINUITY PLANNING | WORKSHOP TOOLKIT

This toolkit provides an overview of what is covered in the Climate Risk Assessment and Business Continuity Planning Workshop and the practical activities will help you follow the Climate Risk Assessment methodology we use. This training and toolkit have been developed through a partnership between Business in the Community and Climate Northern Ireland.

Climate risk

Climate risk refers to the potential negative impacts of climate change on the environment, businesses, and society. These impacts are already being observed in Northern Ireland, with an increase in rainfall, extreme weather events, and rising average temperatures (CCRA3, 2021).

Climate change can impact your business in the following ways:

- **Directly** through events like flooding.
- **Indirectly** through disruptions to your supply chain and customer base.

To build resilience, businesses need to:

- **Mitigate** – Take actions to reduce the severity of climate change and limit the amount of warming our planet will experience.
- **Adapt** – Prepare for the impacts of climate change and adjust to the current and future impacts.

Business Continuity Planning

Business Continuity Planning (BCP) refers to the process of creating systems and strategies that ensure a company can continue its operations in the event of a disruptive incident, including climate-related incidents.

Key components of BCP include:

- Risk assessment
- Recovery strategies and contingency plans
- Communication plans

Business in the Community
WWW.BITCNI.ORG.UK
APRIL 2025

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Understanding and Addressing Climate Risk

What is a climate risk assessment?

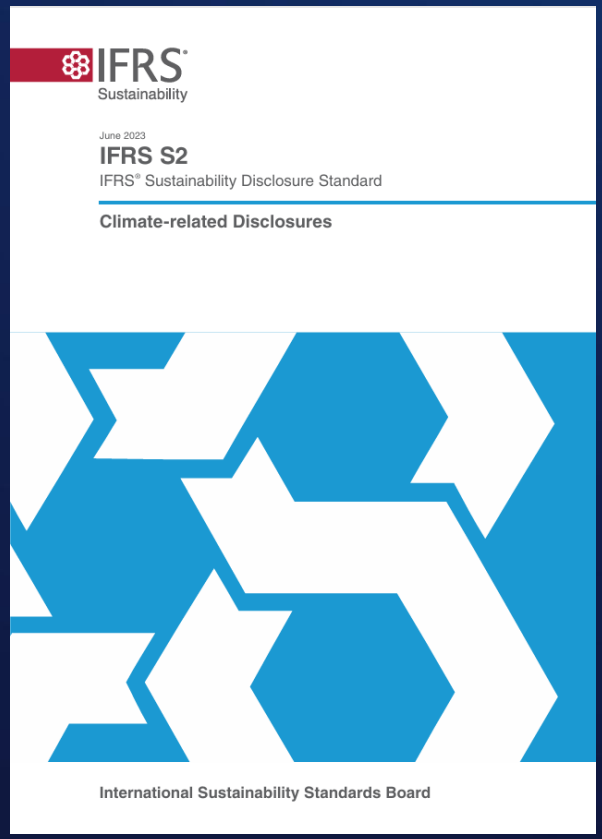
- A Climate Risk Assessment is a qualitative process used to evaluate how your business site and operations might be affected by climate change. It also helps identify necessary mitigation and adaptation measures.

1 **Step 1:** Identify Climate Risks

2 **Step 2:** Assess their Impact on Your Business

3 **Step 3:** Develop Risk Management Strategies

Why it's important? CSRD & IFRS S2



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Step 1:
Identify Climate Risks

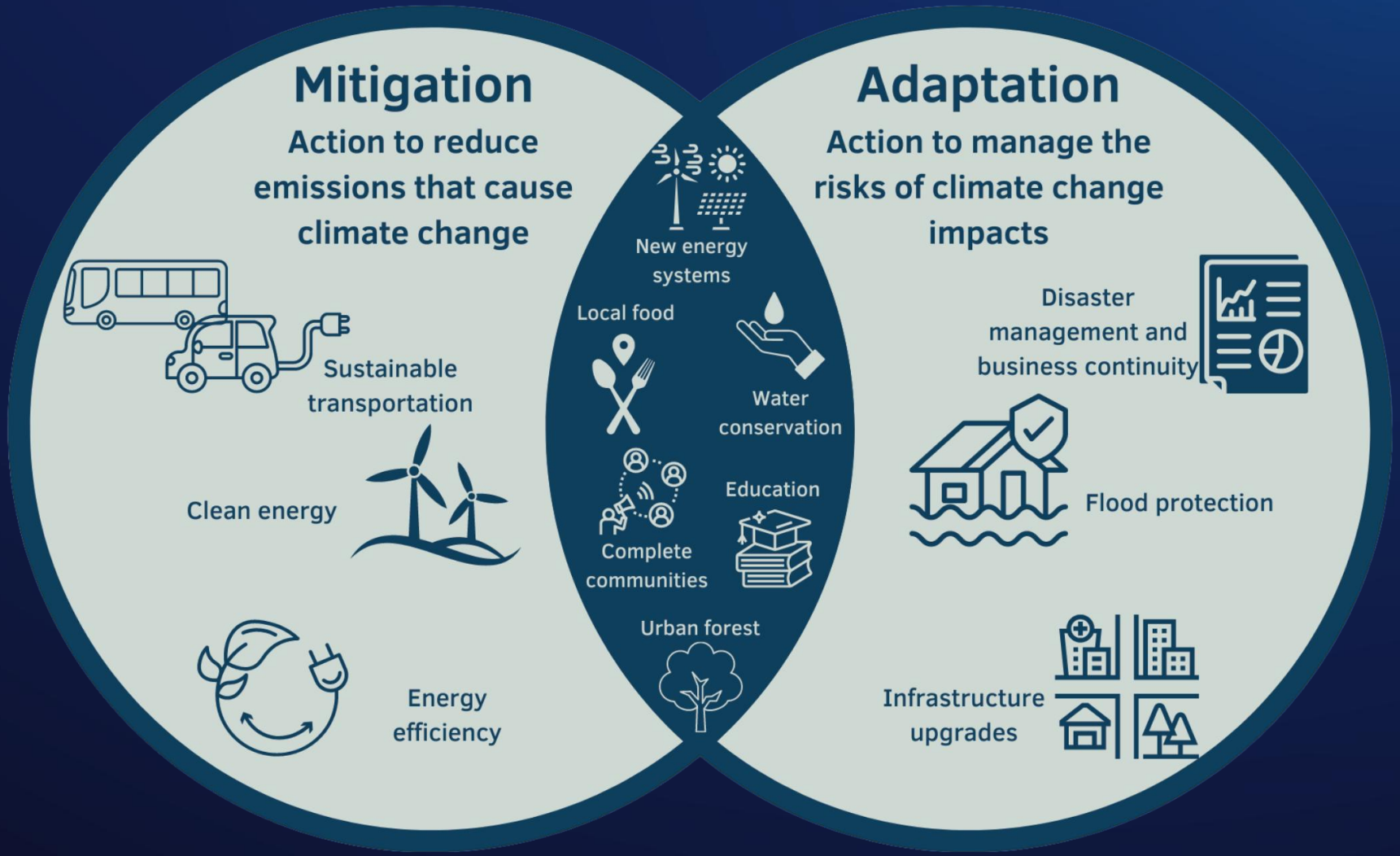
How has your organisation been impacted by climate change to date?

Adaptation and Mitigation

- **Climate change** is the long-term shift in average weather patterns across the world.

- **Global climate change impacts** include rising sea levels, biodiversity loss, ocean acidification and extreme weather events.

- There are two main ways to approach climate change
  - **Mitigation** is action taken to reduce the severity of climate change and limit the amount of warming our planet will experience
  - **Adaptation** involves preparing for the impacts of climate change and adjusting to the current and future effects climate change will have



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Climate Change impacts

- Climate change in Northern Ireland will mean warmer, wetter winters and hotter, drier summers

- The primary climate change risks across the UK and Ireland are storms, flooding and heatwaves
  - Summer heatwaves, with daily temperatures of over 30°C, have a 50% chance of happening every year by 2050 and 90% by 2100
  - According to the Northern Ireland Flood Risk Assessment, approximately 45,000 properties in Northern Ireland are currently at flood risk
  - The 2023-24 storm season was very active across the UK and Ireland, with 11 named storms

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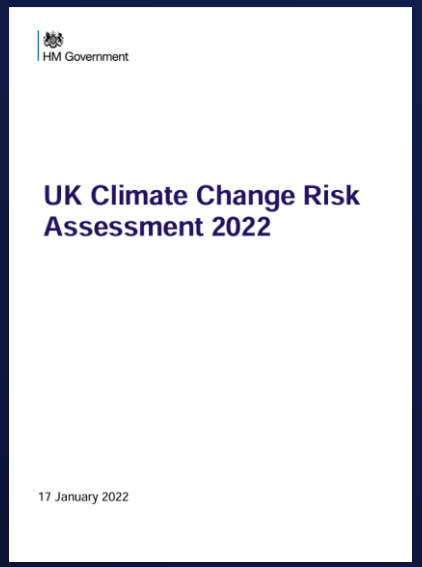
Climate risk refers to the potential negative effects of climate change on the environment, businesses and society

Climate Change Risk Assessment



2. Climate change in Northern Ireland

Observed changes that show how the climate is already changing

Variable	Change in Northern Ireland
Average annual temperature	Increase of 0.7°C from mid-1970s to mid-2010s
Annual mean rainfall	Increase of 6.4% from mid-1970s to mid-2010s
Weather extremes	UK-wide increase in extreme heat events Little evidence yet on changes in extreme rainfall
Sea level rise	UK-wide increase of ~1.4mm per year since 1901 (16cm to date)

Temperature

Across Northern Ireland, average annual land temperature in the decade 2010-2019 was 0.7°C warmer that the period from mid-1970s to mid-2010s. The 21st century has so far been warmer overall than any of the previous three centuries, reinforcing the attribution of UK warming to increasing greenhouse gases. Winter 2019 was the third warmest winter for Northern Ireland since 1884.

Rainfall

There has been a small observed increase in annual mean rainfall in recent decades. In Northern Ireland between the period of the mid-1970s to mid-2010s and 2010-2019 there was an increase of 6.4%, from an average of 1099mm per year to 1169mm per year.

Weather extremes

The latest climate science suggests that the effects of climate change on daily extreme rainfall events are only just beginning to emerge. However, the evidence of extreme maximum summer temperatures is becoming clearer, as reflected by how many of the UK's record extreme monthly temperatures have been set in the most recent decade along with a tendency for more heatwaves in recent years.

Sea level rise

Observed sea level rise is also difficult to determine for each country. A UK-wide sea level index suggests that sea level has risen by between 1.2 and 1.6mm per year since 1901. National variations are predicted in future as outlined in the following section.

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89% of organisations have identified the potential climate risks for their organisation

93% of those organisations are including those climate related risks on their risk register

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Business Continuity Planning

- Business Continuity Planning (BCP) refers to the process of creating systems and strategies that ensure a company can continue its operations in the event of a **disruptive** incident

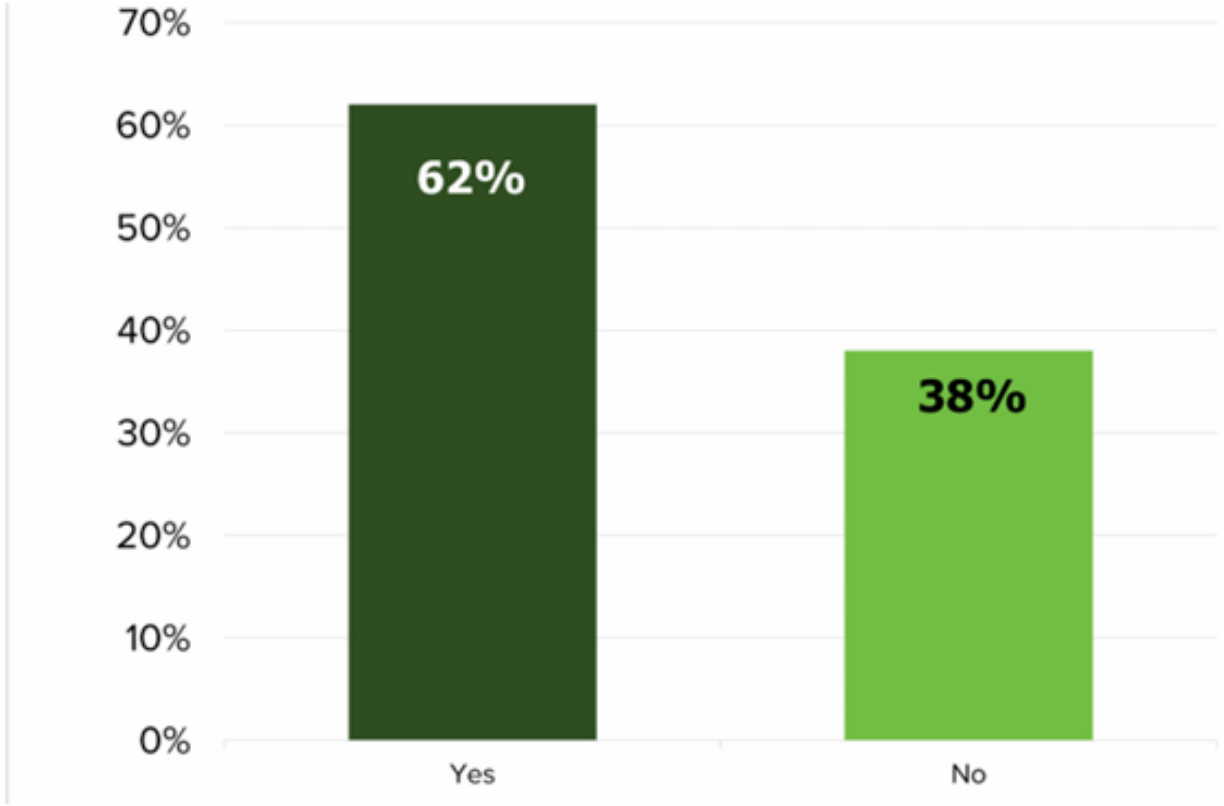
- BCP can include:
  - Risk assessment
  - Recovery strategies/contingency plans in place
  - Communications plan

- **Why?**

- Integrating BCP into an organisation's overall strategy is essential for ensuring long-term resilience, including climate resilience.

Step 2:
Assess the impact on your business

IN THE PAST FIVE YEARS, HAVE YOU OBSERVED ANY DIRECT OR INDIRECT IMPACTS OF EXTREME WEATHER OR CLIMATE CHANGE ON YOUR BUSINESS?



Examples of direct or indirect impacts reported:

- Customer demand for sustainability is driving changes, such as reducing plastic packaging
- Extreme weather (storms, flooding) has directly impacted the supply chain, leading to delays, road closures, and suspension of production for several days
- Insurance premiums are increasing due to climate-related risks, prompting more focus on climate impacts in insurance assessments

In the past 5 years have you identified any direct or indirect impacts of extreme weather or climate change on your business?

"Financers are asking for climate risk analysis and if we have adequate cover in place for climate related business disruption"

"Flooding in Newry resulted in delays in materials from local suppliers"

"Supply chain disruptions, rise in insurance costs"

"Our supply chain has encountered several disruptions stemming from natural disasters and unforeseen incidents that have been impacted by climate change"

"Stronger winds have delayed projects due to no crane use plus heavy rain has damaged new walls on several projects"

"increase in costs that are being felt by the customer due to the increased cost of energy and materials supply, and in some cases lack of supply"

"Travel disruption for our employees"

Business Impacts - direct and indirect

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How will your organisation be impacted by climate change in the future?

Business Impacts: case study Encirc

- Potential business impacts include:
  - Disruptions to main operations and supply chains due to extreme weather events
  - Damage to infrastructure from rising sea, river, and groundwater levels.

- In addition to these tangible challenges, shifts in consumer preferences towards sustainable products require innovation and investment to pursue decarbonisation (Zero Emissions 2030 - **ZE30** mission).

Encirc's three sites in Derrylin, NI and Elton and Bristol, England.

Encirc is one of the leading wine, beer and spirits bottle fillers in the UK

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Climate Risk Assessment

What is a climate risk assessment/risk register?

- A qualitative risk assessment of how your site and processes will be affected by climate change and usually includes plans for proposed mitigation and adaptation measures.

How do you complete a climate risk assessment?

1. **Hazard**: identify overarching climate risks (flood, sea level rise, storms, extreme heat)
2. **Risk statement**: develop specific risk statements under each hazard
3. **Inherent risk**: likelihood x impact scoring matrix
4. **Strategy**: Link to policy and action plans
5. **Timeline**: sort into short, medium, long-term risks

Risk statement

- A risk statement is a way to define the key elements of a potential risk by breaking it down into:
  - Hazard e.g. more frequent storms
  - Impact/direct result of hazard e.g. higher wind speeds and rainfall
  - Consequences – direct & indirect impacts e.g. building damaged, production halted

- Important to clearly set out the risk statement as the next steps depend on it

- Following a structured format can help produce more effective risk statements and avoid confusion

Example: Defining risk statement

PHYSICAL CLIMATE HAZARD: FLOODING
(increased precipitation and sea level rise)

RISK STATEMENT (Hazard, Impact and Consequence) **AND RISK CODE (F)**

E.g. (F1) **Increasing frequency and intensity of precipitation** resulting in **greater flood risk**, leading to **damage to property, equipment and infrastructure**. This will result in **reduced accessibility to premises for staff and increased financial costs for repairs**. Damage to equipment may result in **loss of business continuity, impacting reputation and finances**. There is also a risk posed to personnel who are in the office at the time of flooding.

Example: Defining risk statement

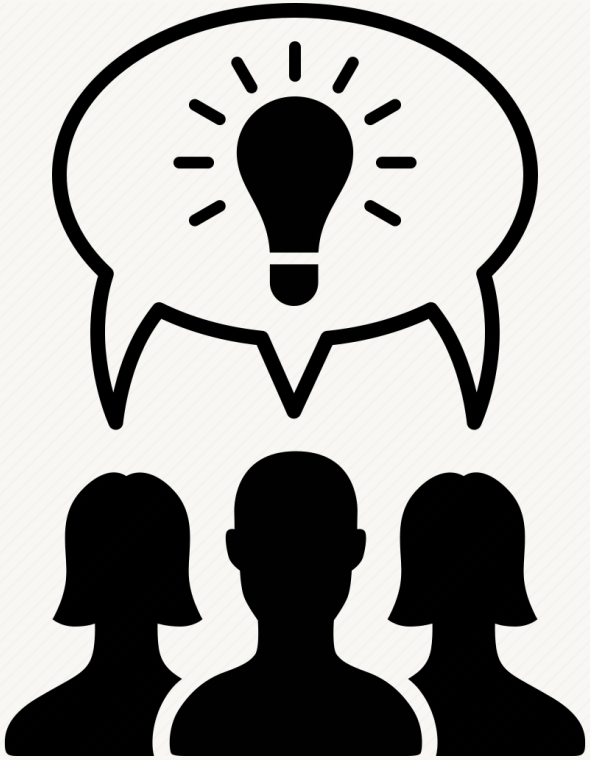
- **(F1)** Increasing frequency and intensity of precipitation resulting in greater flood risk. This will lead to damage to equipment and infrastructure, which will lead to project delays and financial costs for repairs.

- **(F2)** Increasing frequency and intensity of precipitation resulting in greater flood risk. This could result in travel disruption for suppliers and supply chain disruption causes delays across the business. This could impact reputation if customers are not satisfied.

- **(F3)** Increased frequency and intensity of precipitation resulting in greater flood risk. This could lead to flood damages to ground floor of main office buildings, meaning staff cannot access the premises. Disruption to employees' commute can cause project delays and impact workplace satisfaction.

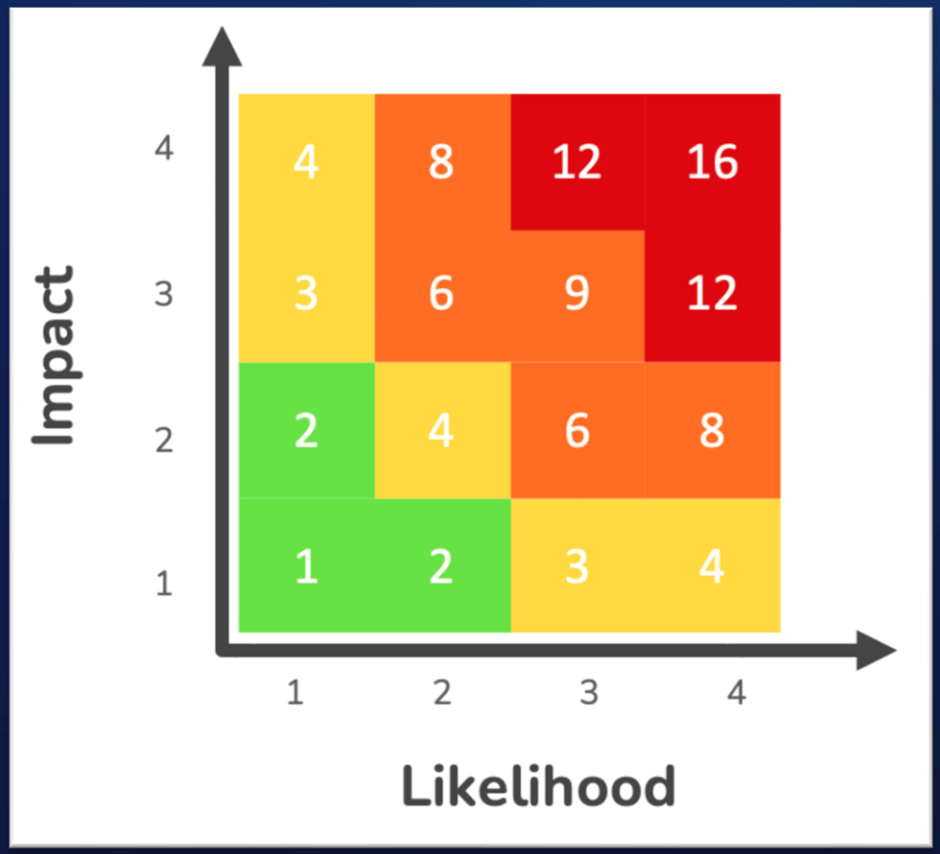
Activity 1: Defining risk statement

- Take 5 minutes to discuss the potential risks to your business as a result of a climate hazard (e.g. flood, storms, sea level rise)
- Use the next 5 minutes to choose **one** risk and formulate it into a risk statement, based on the structure we have discussed
- Refer to your workbook page 3 & 4



Inherent risk

- Inherent risk refers to the level of risk that exists before any efforts are made to mitigate or control it.
- Using a scoring matrix, we can assess the impact and likelihood of each risk
- This method will result in a traffic light system of ranking risks
  - **Likelihood** = the probability of a risk event occurring
  - **Impact** = the potential consequences of the risk



Inherent risk = likelihood x impact

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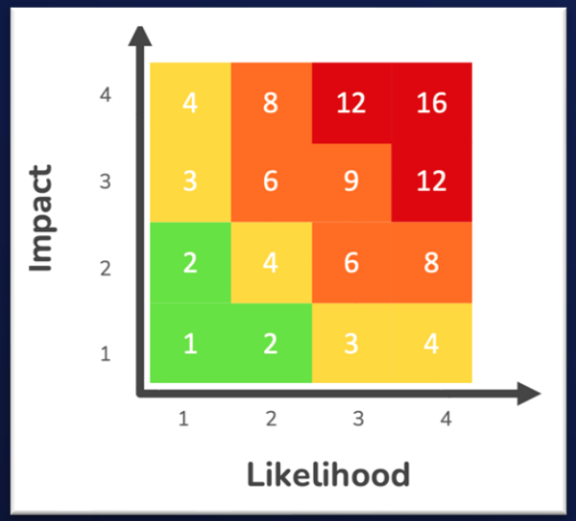
Simple scoring matrix



Likelihood:

1. Low: Extremely unlikely, very low chance that the risk will occur.
2. Medium: Normally possible.
3. High: Highly likely, the risk is likely to occur.
4. Almost Certain: Bordering on certainty, the risk will almost certainly occur.

Impact:

1. Negligible: Minimal or no impact.
2. Minor: Small impact that can be easily handled.
3. Significant: Significant impact that requires management.
4. Critical: Severe impact that can be catastrophic.

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Climate Risk Assessment: Worked Example

LGCAN-Climate-Adaptation-Plan-Risk-Register-Template.xlsx

Physical Climate Hazard: Flooding (Increased Precipitation and Sea Level Rise)

Risk Statement (Hazard, Impact and Consequence) and Risk Code (F)	Relevant Department	Inherent Risk			Current Policies/ Procedures	Short (<5yr) Medium (5-10yr) or Long (>10yr) Term Risk?
		Likelihood	Impact	Risk Score		
(F1) Increasing frequency and intensity of precipitation resulting in greater flood risk, affecting operations and new and existing Council assets, leading to financial costs, losses, increased insurance costs and additional resource, including third party contractors.	Community Services - Waste/Fleet/ Management/ Cleansing/Parks, Capital Programmes, Emergency Management, Communications, Finance.	4	3	**12 Critical**	• Emergency Plan • Departmental and Service policies and operational procedures • Relevant multi agency plans.	Short, Medium and Long

Climate Risk Assessment: Template

LGCAN-Climate-Adaptation-Plan-Risk-Register-Template.xlsx

Physical Climate Hazard: _____

Risk Statement (Hazard, Impact and Consequence) and Risk Code (_)	Relevant Department	Inherent Risk			Current Policies/ Procedures	Short (<5yr) Medium (5-10yr) or Long (>10yr) Term Risk?
		Likelihood	Impact	Risk Score		

Activity 2: Complete climate risk assessment

- Take 5 minutes and consider your risk statement from earlier, and complete the remaining sections in the table:
  - Assign risk to a department(s)
  - Assign a level of likelihood
  - Assign a level of impact
  - Calculate your risk score
  - Consider the policies this will align with
  - Is it short, medium, long-term risk?
- Refer to your workbook pages 5-7

Climate risk assessment methodology: Encirc

- Encirc's Climate Risk Assessment considers all plant assets and their activities
  - Site visits were performed to understand how each site will be affected by the latest climate predictions (**hazard and risk statement**)

- They assessed the severity of each risk depending on its potential to halt business operations (**inherent risk**)

- Glass furnaces are constantly in operation, so their priority is to ensure this isn't disrupted to continue the manufacture of their products

Encirc's three sites in Derrylin, NI and Elton and Bristol, England.

Encirc is one of the leading wine, beer and spirits bottle fillers in the UK

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Climate risk assessment methodology: Encirc

- The assessment considers both the near and distant future, anticipating that the effects of climate change will increase in severity over time (**timeline**).

- They intend to utilise the risk assessment as an active working document and planning tool in the context of business continuity. This way, the risks can also be reviewed on a regular basis (**strategy**)

- Specific risks identified:
  - The slowing down of manufacturing processes caused by fluctuations in ambient temperatures
  - Condensation on our bottles preventing proper labelling of products during bottling.

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Step 3: Develop Risk Management Strategies

Business Strategy for Climate Risk

- When developing climate risk management strategies and actions, it is best to integrate these into your overall business strategy.

- Adaptation Strategies: Develop plans to protect and reduce risk to your business while also taking advantage of new opportunities. Strategies could include investing in more resilient infrastructure, diversifying supply chains, or implementing emergency response plans.

- What planning will this involve?
  - Financial planning/budgets
  - Policy development
  - Action planning
  - Monitoring progress and reporting in annual reports

Business continuity planning: Encirc

- This process helped Encirc produce climate change vulnerability and risk assessments and establish how the risks are linked and may evolve over time.
- The assessment, currently in its final stages, provides a holistic view of the potential risks at each site which can help support our operational and legals team to make informed decisions at executive level
- Data can be used in support of suitable CAPEX-funded mitigation projects for the near and far future.
- The identification of climate change-related risks allows for actional adaptation measures to be identified, and for the forecasting of effective 'hard' and 'soft' solutions to be made.
- Ultimately, the assessment allows for strategies and action plans for implementation to be rolled out as part of overall business continuity planning and future-proof our business operations.

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Wrap up

- Why is this all important?
  - Business continuity planning & resilience
  - Climate risk management in overall business strategy
  - Adaptation and mitigation

- Climate Risk Assessments:
  1. Hazard
  2. Risk statement
  3. Scoring matrix/inherent risk
  4. Strategy
  5. Timeline

What's next?

Session 2: Supply Chain Sustainability Training

Thank you!

Contact BITC:
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Contact Climate NI:

info@climatenorthernireland.org.uk

Climate Risk Assessment and Business Continuity Planning Feedback

Additional Resources

- DfI Flood Maps – to assess if your business is located in a flood risk area
- Climate NI – NI Adapts Adaptation Planning Toolkit: https://www.niadapts.org.uk/ (currently being updated)
- UK Climate Change Risk Assessment – Business Sector Briefing
- NI Business Info – guide 'How to report on climate risk in my business'