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Be climate ready. A climate resilience toolkit for independent food and drink retailers.

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Who this toolkit is for.

In October, the Welsh Government published its Climate Adaptation Strategy 2024, which includes a comprehensive plan for food security with actions to ensure resilience across all parts of the supply chain—from production to processing, distribution and retail.

While many large food and drink retailers and suppliers have already implemented climate resilience strategies, it is crucial that this resilience extends across the entire sector – from the biggest multi-store operators to small, local independent stores. **This toolkit is specifically designed to support independent food and drink retailers**, helping them strengthen their operations and adapt to the evolving climate landscape. By independent retailers we mean small to medium-sized business that sell food and beverage products directly to consumers and may have a single location or a limited number of stores. Drawing on best practices and recommendations in the sector, this toolkit offers practical and actionable guidance to help independent retailers become more climate-ready.

What are the climate challenges?

Climate change impacts are felt throughout the supply chain and can broadly be split into three groups:

- Physical risks associated with extreme weather events (acute) or longer-term climate pattern changes (chronic)
- Legislation/market changes arising from the transition to a lower-carbon economy
- Consumer demand changes for products and services

Why is resilience important?

Building business resilience means identifying the relevant risks, planning and taking proactive action. Businesses that adapt quickly to the transition, mitigate the risks and grasp the opportunities, will have the best chance to prosper. The Task Force on Climate-related Financial Disclosures (TCFD) is an international body that has developed a set of recommendations that are changing the way organisations manage climate risks and opportunities. TCFD reporting is designed to provide consistent and forward-looking information on the financial impacts of climate change and to be a useful tool for decision-making. You can find more information on the TCFD and the recommendations at the bottom of this page.

Across the UK, larger organisations including publicly listed companies and financial institutions are required to produce TCFD reports. Whilst this may not be compulsory for your business by taking influence from these widely adopted standards in climate resilience, your business may be able to gain many of the same benefits. Of course, every retailer is unique – supply chains vary significantly and the capacity for long-term planning vs. short-term priorities will differ. Therefore, the purpose of this toolkit is not to provide specific solutions but rather to give straightforward information about a range of key climate resilience considerations for independent retailers in Wales.

What does this toolkit provide?

This toolkit provides a simple introductory framework to:

- Create a climate risk assessment for your business
- Create short and long-term plans (mitigating risks and grasping opportunities)
- Monitor and review your progress

Good to know.

The UK government provides an [overview of the TCFD recommendations*](#).

Common factors for resilience.

This toolkit outlines specific topics for your climate resilience assessment, but it also highlights key common themes that run through each of these topics. These themes are outlined in the following section, and should form the foundation to any climate resilience planning.

Financial shocks.

All climate risks have the potential to cause significant financial impact, for example through loss of sales, increased input costs, stock write-off or increased tax burden.

The most prepared businesses will run financial scenario plans in order to try to understand the potential impacts of climate risks.

Whilst the future financial health of your business will clearly rest on many factors, by having the data and insight to understand possible risks, mitigating against those risks where possible and ensuring that tools such as appropriate insurances are in place, you can ensure that future climate related financial impacts are minimised.

Price volatility.

In one way or another, a changing climate is likely to lead to increased volatility in input costs. A resilient system is one with the ability to navigate such volatility with minimal disruption. Central to that ability is the relationship between customers and retailer

Clear communication of why prices on certain goods are rising can help to engender trust and appreciation that the situation may be temporary. Signposting customers to less affected alternatives can reduce the impact on them as can highlighting where items are decreasing in cost.

*<https://tinyurl.com/5fwe3t3e>

Those retailers that can implement commercial changes or switch to substitute products without disproportionately losing volume will be the most resilient. Your ability to make those changes can be maximised by investing in your customer communication channels, developing the differentiation of your offer, planning for substitutes and creating loyalty in your customers.

Circular economy.

The Welsh Government's *Beyond Recycling* strategy aims to make the circular economy a reality in Wales.

The development of the circular economy is a fundamental route to increasing resilience related to materials used by the retail industry. By keeping materials in use, businesses can insulate themselves from climate-related risks of supply and cost associated with sourcing new materials.

The key circular economy approaches include: removing waste through design, reusing products and components; and recycling and repurposing materials.

In food systems, sustainable agriculture improves the health of soils with benefits that include water retention and absorption, increasing resilience to flooding and drought.

Circular economy thinking can also generate additional service and product opportunities, for example through refurbishment, repair and resale, or by selling refillable containers and the product to fill them repeatedly.

Further information can be found in the BRC-produced [Climate Action Roadmap*](#) and the Ellen MacArthur Foundation paper [Completing the picture: How the circular economy tackles climate change \(2019\)**](#).

Relationships and collaboration.

Climate change impacts are obviously very large scale and it can often feel like they are too big to address.

By identifying risks and opportunities in the areas touched on in this toolkit, the resilience of your business can be improved but for the biggest improvements, all retailers will need to collaborate with relevant actors around them. Suppliers, supply chain partners, local communities and other stakeholders will all have a role to play. The most resilient businesses are part of a resilient system.

Really engaging with your key stakeholders is also likely to mean that you are aware of potential climate shocks sooner and give you the opportunity to build collaborative solutions to overcome them.

*<https://tinyurl.com/38y7tysx> **<https://tinyurl.com/5xwucvad>

Preparedness.

An extreme weather event can be a sudden, stressful and a frantic period for any business owner. Being prepared with contacts and procedures that have been tested can make the difference in the speed and effectiveness of your response.

Have a list of essential contacts in hard copy or remotely accessible to ensure that relevant staff have access to those details at all times in case of an extreme weather event impacting the business.

Ensure that procedures related to extreme weather events are easily accessible and well understood by the decision-makers on the ground.

Good to know.

Grantham Research Institute and LSE have [researched](#)* the importance of community awareness in bolstering flood resilience and stress that purely building physical infrastructure is often not enough.



*<https://tinyurl.com/3jc458ds>

Risk assessment and planning.

By following a simple three-step plan, you can greatly increase the resilience of your business in the face of climate challenges.

STEP 1: CLIMATE RISK ASSESSMENT

List the climate risks that are likely to apply to your business, using the areas covered in this toolkit to guide you.

Rank them according to urgency and importance, specifically as they relate to the survival and success of your business.

STEP 2: SHORT AND LONG-TERM PLANNING

Create a short and long-term plan to address the highest priority risks you have identified and consequently to improve the resilience of your business. Remember to look for opportunities as well as mitigation.

STEP 3: EXECUTE, MONITOR AND REVIEW

As you implement your plan, put a programme of monitoring and review in place to ensure that you are making a positive impact that will benefit your business.

There follows a list of climate-related risk areas to consider. For each section it is good practice to make a list of short-term and long-term risks, realistic mitigation actions and potential opportunities. This will make it easy to pull your overall climate resilience plan together. Simple examples from real businesses are included to help prompt your thoughts.

Good to know.

The Business Continuity Institute (BCI) – a global membership association of choice for business continuity and resilience professionals – have published a [downloadable Extreme Weather and Climate Change report](#)* that examines the impact of severe weather events and climate risks on organisations, as well as the drivers and barriers towards responding to these risks.

Facilities and infrastructure.

A core consideration is that of your own physical sites and the actions you can take to mitigate risk from primary effects such as floods or extreme high/low temperatures, or secondary effects such as power interruptions. Increasing online sales is one way to reduce the risk inherent with physical premises, although clearly warehousing and delivery may still be vulnerable to extreme weather events. If you are a retailer reliant on physical stores, it is also worth considering how your customers will travel to you. The most resilient sites will have multiple transport connections or be close to large population centres.

During periods of extreme weather, computer systems and electrical equipment can be compromised. Consider how critical systems necessary to keep the business running can be backed up and/or securely accessed remotely. Similarly, the risk of more extreme heat creates challenges to temperature control, with refrigeration becoming less effective in the environment. The addition of fridge doors in stores, particularly on refrigerated displays, are an important consideration in the context of rising temperatures due to climate change. With closed refrigerators, it's easier to maintain a consistent temperature, which extends the shelf life of perishable products, reducing food spoilage and waste. Installing doors also has the benefit of reducing energy usage and lowering store's carbon emissions.

Please consider that in the event that heat thresholds start exceeding those of refrigeration equipment, insurance may not be valid. When replacing equipment consider threshold temperature specifications significantly higher than have been experienced to date. This can help retain insurability.

If your premises or infrastructure were to be damaged or inaccessible, could your business and stock be moved to an alternative premises or function from an unaffected part of the property?

Examples

- **Short-term risks:** your retail site access is experiencing increasingly frequent flooding events
- **Long-term risks:** flooding events impact the reputation of the site/town and reduce longer term footfall
- **Mitigation actions:** install raised walkways so that customers can easily and safely access the premises from the car park. Collaboration with neighbouring retailers to create flood resilient parking and/or access routes. Increased focus on online sales
- **Opportunities:** your customers may be experiencing the same flood issues as you, are there products or services you can provide to help them address the situation in their own homes?

Good to know.

The Organisation for Economic Co-operation and Development (OECD) has published a [paper on infrastructure climate resilience](https://rb.gy/q5jc7u)* that contains examples of combined public and private investment on resilience and a systems approach that links multiple projects together.

*<https://rb.gy/q5jc7u>

Supply chain vulnerability.

Climate-related vulnerabilities will exist throughout your supply chain.

Many businesses are already experiencing disruption from extreme weather events hitting farms, manufacturing sites, warehouses, transport routes or local distribution centres.

Long-term climate changes are reducing supply and increasing the cost of some commodities. This effect is often compounded by suppliers choosing to re-allocate capacity in favour of more resilient products.

The complex nature of food product supply chains will mean mitigation against all eventualities is not practical. However, by understanding where the weak spots are and having sufficient short-term contingency plans and longer term diversification strategies, you can ensure your business limits its exposure to supply chain disruptions.

Regularly engaging key suppliers in a collaborative manner can help provide visibility of issues further down your supply chain before they reach a point of disruption.

Industry trend data and research reports will also provide insight into climate related issues such as poor seasonal yields in key ingredients across Wales, the UK and internationally.

Examples

- **Short-term risks:** winter flooding is impacting current carrot harvest leading to shortages and price increases
- **Long-term risks:** existing farm suppliers do not plant carrots at all in future years
- **Mitigation actions example:** investigate alternative suppliers of carrots in different geographies or reduce reliance on carrot sales by building up sales of alternative produce
- **Opportunity examples:** build sales of alternative produce that is benefiting from climatic changes. Close and collaborative relationships with your carrot supplier mean that you are supplied ahead of competitors and become a destination in times of shortage

Good to know.

Cervest have produced an [infographic showing how climate is impacting your supply chain](https://rb.gy/4nnpeo)*.

Legislation.

Globally, there is a transition to a lower carbon economy, and Wales will play a part in that important drive.

Whilst the guide is not designed to be a commentary on future policy, most observers believe it is likely that globally there will be changes in carbon taxes, carbon limits and labelling/reporting requirements. It is possible that some particularly high climate impact activities will be prevented altogether.

Reduction in your climate impact – although not the subject of this toolkit – is likely to reduce the risk of legislation change for your business.

It is important to note that businesses will increasingly be held accountable for the climate impact of their entire supply chain and not merely their own direct operations. This is significant because Scope 3 emissions – i.e. those emissions from a business's value chain excluding purchased energy – often account for 90%* or more of total emissions.

The ability to access recognised data will play a key role in that accountability and ensuring your business has the tools to adhere to any legislative changes. There are a number of platforms and initiatives designed to approach and standardise these needs, including one from the British Retail Consortium.

Examples (taken here from a different sector to not provide commentary on specific retail legislation)

- **Short-term risks:** carbon tax coming in to play in UK energy sector (2012)
- **Long-term risks:** prohibition of certain energy generation methods (e.g. planned phase-out of German coal power generation)
- **Mitigation actions:** reactivation of idle gas plants to replace coal plants
- **Opportunities:** higher prices for green energy suppliers

**GHG Protocol statement based in part on Kraft Foods audit*

Good to know.

For more information on how to reduce your climate impact and improve your bottom line, Food & Drink Wales has developed a toolkit that is available to [download for free](#)*.

There is a useful [FAQ document relating to Scope 3 emissions](#)** , from Greenhouse Gas Protocol

*<https://rb.gy/bgt32j> ** <https://tinyurl.com/bdznat58>

Consumer demand.

Changing climate patterns are already impacting the consumer demand for many businesses by shifting or altering seasonal demand peaks.

Where weather patterns are more volatile than in the past you may need to ensure that your supply chain is more responsive so you can react more quickly to demand changes.

Some categories will grow or shrink significantly over time, driven by climate pattern changes and this may represent a longer-term risk or opportunity for your business.

Entirely new markets may also be created. As an example, products and services that help consumers to navigate changing climatic conditions are often highly valued. Or, as demand drops for the traditional use of a product, new uses which were potentially not economically viable may come to the fore.

Predicting consumer demand behaviour is clearly a difficult and complex matter that has many more influences beyond climate patterns. However, by staying abreast of wider trends and research data, you can give your business the best opportunity to mitigate risk and maximise future opportunities.

Examples

- **Short-term risks:** cool, wet summer impacts sales of ice creams
- **Long-term risks:** repeatedly mild winters impact long term soup demand
- **Mitigation actions:** diversify offer to cover various weather conditions. Stock soups that market themselves on health grounds and are less reliant on weather cues.
- **Opportunities examples:** react quicker to short term weather volatility than larger businesses, e.g. creating front of store displays or deploying signage during hot or cold weather events

Good to know.

The Meteorological (MET) office has an [overview of climate change in the UK*](https://tinyurl.com/57dszy74) and you can [enter your postcode**](https://tinyurl.com/ycxhwzed) to see how the climate may change in your area.

*<https://tinyurl.com/57dszy74> **<https://tinyurl.com/ycxhwzed>

Employee training and safety.

Extreme weather events can result in staff absence or unsafe working conditions and can affect your workforce whilst they are travelling or at their place of work.

In addition, where staff aren't trained and prepared to act when such extreme events occur, operations can often break down and customers may not be able to access the services your business provides safely.

Longer-term climatic changes may mean that your infrastructure needs to change in order to keep staff safe and able to perform their duties.

You may need to consider emergency plans in the event of extreme weather events such as floods, similarly to those already in place for fire. You also need to consider ambient temperature during more extreme heat for the comfort of your staff and customers.

Investing in the correct equipment to provide resilient climate control and facilities to address any extreme weather events will also ensure your business mitigates risk to disruption.

Examples

- **Short-term risks:** extreme weather event prevents staff from getting to work or puts them in danger in trying to do so
- **Long-term risks:** infrastructure not suitable in face of climatic changes to provide suitable working environment (e.g. storeroom frequently gets unacceptably cold)
- **Mitigation actions:** clear guidelines for travel in extreme weather, training so that more employees can cover key functions and impact of absences is reduced, ability to perform some functions remotely, insulation improvement to keep staff safe and comfortable at work
- **Opportunities:** higher retention and reduced hiring costs

Monitoring and review.

The climate context will evolve, as will the context of your own business. There will be a need to review your planning, preparedness and the effectiveness of your climate resilience measures. This may be enforced in the aftermath of an event, but ideally it will be proactively revisited.

After the creation and execution of a climate resilience plan, here are some review questions it may help you to ask:

Is the risk assessment up-to-date?

- Is new information available as to the nature of the climate changes you and your supply chain are likely to face?
- Have new risks arisen or can any risks previously identified now be removed?
- What are the updated impacts of climate change on your categories?

How has your plan performed so far?

- Which actions have you already taken to mitigate the most relevant risks?
- Which actions in your supply chain have improved your resilience and could these be replicated in other areas?
- Have you managed incidents of price volatility successfully? If not, what actions can be taken now to put you in a better position next time?
- Has the business been able to absorb climate-related financial impacts?
- Have your staff felt safe and supported during extreme weather events? If not, engage with them to see what improvements could be made.

Looking forward

- Which actions from your plan remain to be taken?
- What are the renewal dates of your insurance covers and has a budget been put aside to cover these?
- Are you comfortable with the levels of engagement you have with suppliers, other local businesses and your customer base?
- Are your sites physically prepared for realistic extreme weather events and has this consideration been built into any planned future site changes?
- Is your contact list and procedural information up-to-date?

Appendices.

Resilience table.

	Short term risks	Long term risks	Mitigation actions	Opportunities
Facilities & infrastructure				
Supply chain				
Legislation				
Consumer demand				
Employee training & safety				

Key question check list.

	Y	N
Do you understand the key climate risks for your business?		
Have you run financial scenarios related to your key climate risks?		
Do you have a plan to handle price volatility?		
Are your key business relationships robust?		
Do you have supply chain contingencies in place for foreseeable climate disruptions?		
Do you have a plan to address any short-term risks to your infrastructure?		
Do you have an emergency contact list in the event of extreme weather business disruption?		
Are your teams aware of what they need to do in an extreme weather event?		
Do you have a plan to monitor your progress and review your risks periodically?		

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