



# Weathering the Storm

Would your business cope if you lost power? Or your area flooded?  
A practical guide for small businesses in Liverpool City Region.

2017





This guide has been adapted and published by CLASP, Liverpool City Council, St Helens Council, Knowsley Council, Sefton Council and Wirral Council.

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# How to use this guide

This guide has been produced for small and medium businesses (SMEs) in Liverpool City Region. It will help you to understand how you could be affected by weather, including extreme events, and how you can improve your chances of a quick recovery. The guide also sets out business opportunities from responding to a changing climate, and provides useful tools and contact information.

## To get the most out of this guide:

- **Read the introductory sections on why climate change is relevant now, what the key impacts can be and what is in it for your business.**
- **Read the section on how to prepare for extreme weather events. This is split into topics such as insurance, your premises and your people. For each topic, the guide asks a series of questions to help you think about how you might be affected and identifies a series of simple and low-cost actions you could take.**
- **Do you need more advice? Refer to the tools and contacts section.**

The information in this guide has been focused on actions that are relatively easy for small businesses to achieve, tackling issues that are within your control or influence. You might not be able to stop flooding or an extreme storm event affecting your business, but you can take a few simple steps to reduce the impact these might have on your business so that you can remain operating. The list of suggested actions is not exhaustive and ticking all the boxes does not guarantee you are resilient. You must consider your specific circumstances.

There may also be opportunities that organisations can take advantage of, including identifying new markets or products through to saving money from effective resource efficiency. Further suggestions on how to identify these are presented later in this guide.



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# What do I need to know?

## What are the effects of a changing climate likely to be?

### More frequent and severe flooding

The majority of flooding is caused by heavy rainfall which can lead to rivers overtopping their banks or drainage systems being unable to cope with the volume of water. In the North West the estimated increase in average winter rainfall is 4% by the 2020s and 16% by 2080.

2012 saw the wettest summer on record, and winter 2015 has been the wettest winter. These times have had great economic impact through flooding, impacts on tourism, events and agriculture.

Do you know if your business (or key employees' homes) are in a flood risk area? If so, would your business survive a serious flood? How would electric and computer systems, stock and machinery be affected? How long would it take to recover?

### Hotter summers and milder winters

In 2003 and 2006 we had extreme summer temperatures in the North West. The heatwave in 2003 killed about 2,000 people in the UK and the frequency of hotter summers is expected to increase. Increasing temperatures have also softened road surfaces and disrupted travel connections.

In the North West, it is estimated that the average summer temperature may increase by 1.5°C by the 2020s and 6°C by the 2080s.

In urban areas hotter summers may lead to the urban heat island effect – where buildings and other developments retain heat, adding several degrees to the temperature in built up areas. For your business, this could affect working conditions for staff and cause equipment to overheat. Increased temperatures could also affect agriculture, changing the growing season and the types of crops that can be grown. It may also change the nature of pests and diseases.

Winter 2015/16 was the warmest UK winter on record. Milder winters may bring some benefits, but cold spells and storms will still occur.

### Drought

A 5% reduction in summer rainfall is estimated by the 2020s and 21% by 2080 which, combined with increased temperatures, could result in more droughts in the North West. Water shortages, particularly in the summer, could become more frequent.

To what extent does your business depend on water? Are there ways that you could use water more efficiently and save money?

### Storms and wind

Storm events can cause severe short term impacts including disruption to services. As well as directly damaging buildings on Merseyside storms and high winds can shut down major transport links such as the Runcorn and Thelwell bridges and the airport.

### Find out more

You can find out more about how our climate is forecast to change and how we could be affected at: [www.climateandus.com](http://www.climateandus.com)

**Note:** The above estimates of how the climate is likely to change are taken from the UK Climate Projections 2009 (UKCP09). The projections are based on emissions scenarios, and show a range of possible outcomes and the probability of each outcome. The figures quoted above are the central estimates based on the high emissions scenario. For more information on UKCP09 see [ukclimateprojections.metoffice.gov.uk/21678](http://ukclimateprojections.metoffice.gov.uk/21678).

# Are the weather and climate relevant to my business?

A review of weather across the North West over the last ten years shows that we have already experienced extreme weather events. Some of these events have had devastating impacts on people's ability to go about their daily activities.

The majority of recent recorded weather events that have had an impact in and around Merseyside have been a result of **heavy rain**, and we may see more of these events, and a wider variety of impacts, as our climate changes.

- The North West has over 150,000 properties at risk of flooding from rivers and the sea and has the second highest amount of potentially uninsurable properties of all the English regions.
- According to the ABI\*, after the flooding in June and July 2007 insurers received 165,000 claims in the UK, estimated to total £3bn in insured damages. Claims from the winter storms and flooding of 2015/16 look set to exceed this. But the economic and social costs can be far higher, as not all costs to businesses can be insured.
- An ABI\* study revealed that 80% of businesses which do not have an emergency plan in place do not recover from a major incident such as a flood, even where insurance is in place to cover financial losses.
- AXA\* research indicates that the average length of business interruption by flooding has increased from 8 months in 1996 to 14 months in 2005 as businesses become more complex and flooding more frequent.
- According to Farming Futures' Climate Change Survey 2011, 43% of respondents saw "unpredictable weather" as the climate change risk most likely to affect their business. 50% of respondents thought climate change would present risks and opportunities in equal measure.

**Snow and storms** also have severe local impacts

- The heavy snow in January 2010 closed dozens of schools across Liverpool City Region. Businesses also suffered when staff who are parents couldn't then come in to work.
- Businesses have also been badly affected by winter weather in recent years, with staff unable to travel in to work and, particularly in the retail sector, customers staying at home.

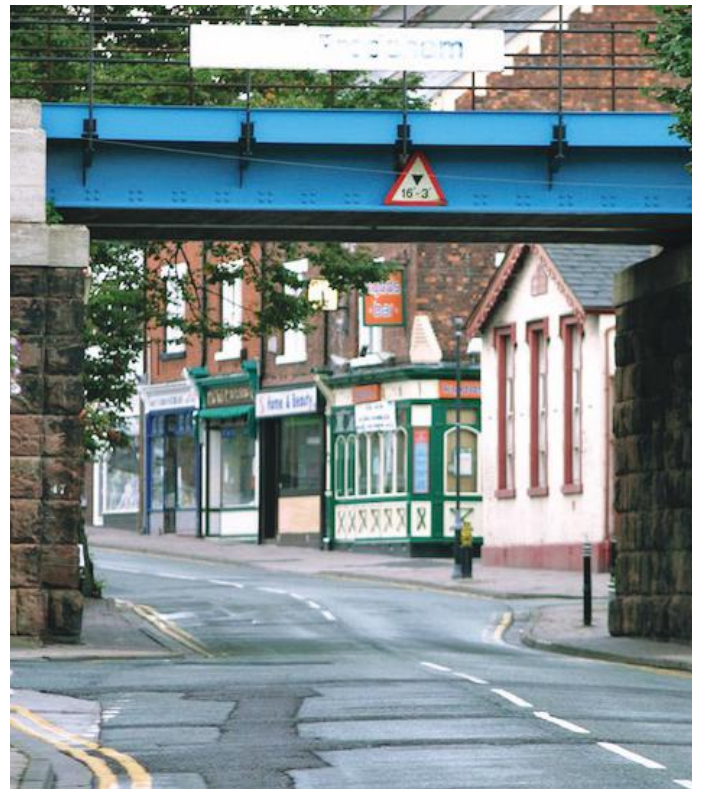
**Heatwaves** in summer have also caused disruption, and significant changes in customer behaviour.

Preparing for a changing climate makes good business sense. Experience in the North West has shown that extreme weather could have some serious consequences for your business operations: not just for your premises and staff, but also by disrupting your suppliers, distribution or customers.

Liverpool City Region has some key transport links that are particularly vulnerable to weather impacts, such as the motorways, west-coast trainline, and bridges crossing the Mersey.

Supply chain disruption from extreme weather events is a significant business risk for many sectors in Liverpool City Region. The ability of many businesses to operate in the retail, manufacturing, chemicals and pharmaceuticals sectors is wholly, or in part, dependent upon access to material resources and their ability to supply their product to their customer base.

However economists have estimated that, across Europe, every £1 spent on increasing resilience now could yield £4 in damages avoided.





# CASE STUDY:

## A Year of Extremes on the Wirral

Wirral

Our changing weather patterns can have great effects on local businesses. In just one average year (2010) on the Wirral there was a range of impacts recorded:

Heavy snowfall followed by freezing conditions in **January** led to reports of major disruption across the area. Initially, workplaces closed early, all bus services were suspended and there were major delays across the road network causing chaos for deliveries and suppliers.

In the aftermath of the snowfall, it was reported that up to four in ten workers failed to report for work and that the majority of local schools and colleges were closed for several days.

Shortages of salt and grit for local roads were reported along with a waste collection backlog arising from the suspension of bin collections due to the adverse conditions.

In **June**, health warnings were issued to people to stay out of the sun and the hot weather will have been felt by many workers, particularly in construction and other outdoors roles.

In **July** excessive rainfall led to flooding causing disruption across the transport network forcing some schools to close early, which results in many staff needing time off work.

In **August**, a storm led to the cancellation of ferry services and traffic delays arising from flooded roads.

During **December**, there was a heavy snowfall which caused widespread disruption across the borough on transport networks, delaying deliveries, supplies and staff travelling to work.

Wirral Council logged these impacts in 2010, investigating how their own services might be impacted by the changing climate. This year was not an exception, and storms, flooding and heatwaves are forecast to become even more common events. Do you know how your business would cope?



## What can I do to prepare?

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# So, what's in it for my business?

Like any other issue facing your business, it is important to understand how extreme weather and climate change impacts could affect you. Planning ahead rather than responding reactively will help you to:

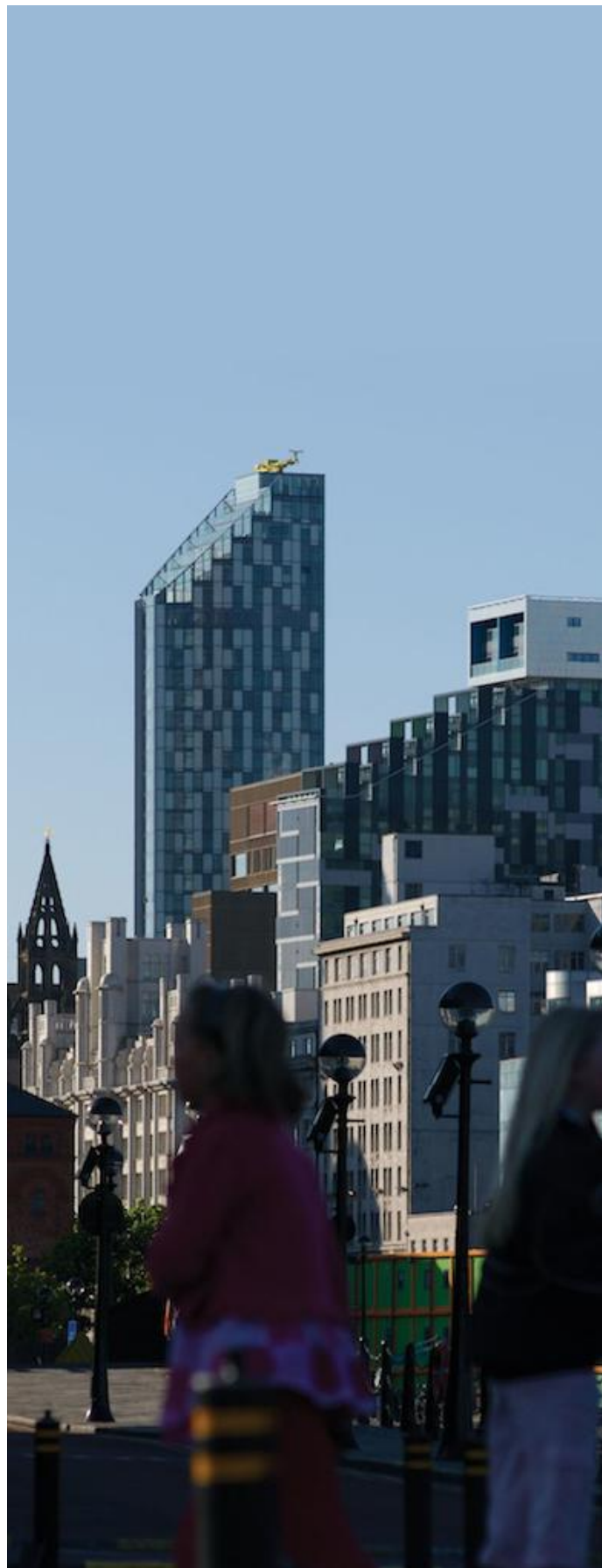
- save your business money in the long term;
- give your business the best chance to continue to operate and meet customer orders, in spite of the weather; and
- identify possible business opportunities e.g. new products or services, reduced costs etc.

## What can I do to prepare?

Understanding how your business will be affected by weather and climate change impacts is a crucial first step, but what should you do next? The following pages cover some common issues, questions to ask yourself and where to go for more information.

A number of these issues are common to all SMEs, regardless of your business sector. However, agriculture, horticulture and other rural businesses may face different challenges to urban businesses and therefore we have provided a separate section on this.

We have focused on actions that are relatively easy for a small business to achieve, tackling issues that are within your control or influence. Whilst some of the actions will have an initial cost they should save you money in the long term.





## What can I do to prepare?

# Insurance

### Ask yourself:

- When did you last check that you have the insurance you need?
- Are you covered for floods and storm events?
- Do you have business continuity cover if your business is interrupted?
- Does your insurance policy replace new for old or have limits for repairs?

### Take action:

- Check your insurance cover at least annually. Confirm that you have a policy that covers the full value of your business and keep documents safe from weather impacts (and store copies off site).
- Check that buildings and content insurance covers flooding and storms.
- Check if you have business continuity insurance that will cover you while you cannot do business.
- Catalogue your assets (could include photographs or video).
- Make sure that the period of time that you are insured for is adequate. In the case of a major flood, for example, there can be long delays while property dries out and affected customers return to do business with you.

### Further information:

- Check with your own insurance broker for more information, or contact the Association of British Insurers (ABI) at [www.abi.org.uk](http://www.abi.org.uk) or 020 7600 3333, or the Federation of Small Businesses (FSB) on 0808 2020 888.
- The link below provides information on the types of insurance SMEs may need, including property, employees and financial risk (Insurance for Small Businesses: A Guide To Protecting Your Business): [www.abi.org.uk/Information/Business/40507.pdf](http://www.abi.org.uk/Information/Business/40507.pdf)
- There are other types of insurance you can consider such as: engineering insurance to repair/re-instate machinery and computers; goods-in-transit insurance to cover goods while they are being moved; frozen food insurance which covers you if there is a failure of the public electricity supply; others such as glass insurance, cancelled event insurance etc.

Don't forget to take into account the length of time an insurance payment could take and potential cash flow problems. A loss adjuster may need to visit.



## What can I do to prepare?

# Premises

### Ask yourself:

- Do you know if you are in an area at risk from flooding or flash flooding? Remember that climate change means that risks will change.
- If you are currently located in a flood risk area, do you have appropriate flood resistance and resilience measures (for example, sandbags, plywood or metal barriers)?
- If you are moving premises, check whether the location is within a flood risk area.
- Are you about to sign a long-term lease agreement which would make it difficult to relocate? If you are, have you checked if you can afford the relevant insurances, including business continuity insurance?
- Do you have the equipment to clean up after an extreme weather event? Are you able to purchase this now?
- If your premises are damaged by extreme weather, think about re-instating it at a higher standard of resilience to prevent the same damage happening again.
- Have you considered whether you could operate from alternative premises if you had to?
- Are there mutual weather warning systems that you could share with neighbouring businesses? Can you share alternative suppliers, accommodation, etc.?
- How well do your buildings and building services cope with high temperatures?
- Could increased chances of subsidence affect your business?
- Prolonged clean-up operations arising from stormwater contaminated with sewage is a particular problem for restaurants, takeaways, doctors etc.

### Take action:

- Before you sign a lease, make sure you are comfortable with the lease conditions. If you are in a flood risk area, consider the length of the agreement and potential implications.
- When upgrading your premises, for whatever reason, consider ways to make your property more resilient to severe weather. You could, for example, consider relocating to a lower risk area (higher ground, not on a flood plain etc.).

### Further information

- Is your business at risk of flooding? Find out now – call the Environment Agency Floodline on 0845 988 1188 or visit [www.goo.gl/S3hLB](http://www.goo.gl/S3hLB)
- The Environment Agency publication “Would your business stay afloat? A guide to preparing your business for flooding” contains a simple template to use to create a flood plan for your company: [www.gov.uk/government/publications/preparing-your-business-for-flooding](http://www.gov.uk/government/publications/preparing-your-business-for-flooding)
- The Met Office provides weather forecasts – 01392 885680 and [www.metoffice.gov.uk](http://www.metoffice.gov.uk)
- More information is available on the repair and restoration of buildings following extreme weather at CIRIA’s (Construction Industry Research and Information Association) website: [www.ciria.org/flooding](http://www.ciria.org/flooding)

Do not assume that because the Environment Agency does not identify your area to be at risk of flood that you are not. You may still be at risk from flash flooding, surface water or groundwater flooding.





## Other practical measures you can take include:

- Move electrical sockets to above the flood level and separate electrical circuits.
- Lay ceramic tiles on the floor and use rugs instead of fitted carpets.
- Use lime plaster instead of gypsum.
- Fit stainless steel or plastic kitchens instead of chipboard.
- Position main parts of a heating or ventilation system upstairs, above the ground floor.
- Consider replacing vulnerable wooden window frames and doors with synthetic ones, but seek advice for listed buildings or conservation areas.
- Fix floodboards to window and door frames.
- If you are in a high flood risk area, fit one-way valves to drains and toilets.
- You may be able to sign up to the Environment Agency's free 24-hour Floodline Warnings Direct Service. Warnings can be sent by phone, text, email, fax or pager. The more warning you have, the more time you have to prepare and protect your business. 0845 988 1188 (Floodline).  
[fwd.environment-agency.gov.uk](http://fwd.environment-agency.gov.uk)
- Plastic covers can stop flood water coming through air bricks. Equipment such as pumps, driers and dehumidifiers will aid the clean-up after a flood. If you have these prior to a flood it will save you time. Consider sharing the cost of equipment (e.g. a water pump) with your neighbours.
- Sandbags and pre-prepared plywood or metal barriers can reduce flooding around doors. Using a blanket or silicone sealant around the barrier can also help. If sandbags are in short supply you can buy your own sand and bags or use pillowcases/ plastic bags. However, note that a flood may contaminate these items with sewage so they should not be reused. Alternatively, demountable flood defences are also available.
- Check buildings maintenance, gutters, drains and culverts.

## Other practical measures you can take include:



Door Flood Barriers



Self Closing Air Brick



Non-Return Valve for Waste Pipes



Sealant On Utility Entry Points

Images Courtesy of Adler and Allan. For more ideas about changes you can make to your property visit [www.floodresilienceadvice.com](http://www.floodresilienceadvice.com)

# What can I do to prepare?

## People

### Take action:

- Identify individuals with medical conditions and increase awareness of the impact of extreme temperatures amongst staff.
- Ensure that you have identified your legal obligations and understand your liabilities with respect to working conditions in the workplace. The Health and Safety Executive has information on thermal comfort at: [www.hse.gov.uk/temperature/index.htm](http://www.hse.gov.uk/temperature/index.htm).
- Find out which of your staff have homes or travel routes that are likely to be affected by weather, or have children whose schools may be likely to close. Think about what procedures you can put in place to handle this, such as staff working from home if necessary.

### In very high temperatures:

- If the task allows, encourage workers to wear suitable summertime and comfortable clothing to work to minimise discomfort.
- Install thermometers and identify cool areas.
- Insulate high-temperature pipes and plant.

- Ensure there is good ventilation and encourage regular breaks (provide water and ice).
- Moving workstations away from direct heat and fitting external shutters can help reduce glare.
- If you do not have suitable air-conditioning equipment and do not wish to install it, consider other ventilation and working-from-home options.

### In very low temperatures:

- Ensure that you have grit/salt supplies and that adequate gritting of access routes is undertaken in snowy and icy conditions.
- For outside workers, increase breaks to avoid hypothermia and consider other measures such as cold weather clothing.
- Encourage staff to wear appropriate footwear to prevent slipping on ice.

## Case study Keeping Cool in the City

Equinox Care is a charity and company that offers a range of accommodation and community based services for people with alcohol, drug and mental health problems in London and the South East.

In 2009, Equinox worked with the National Council for Voluntary Organisations (NCVO) to understand how climate change would impact upon them. They identified a number of risks that could affect their vulnerable clients, particularly from overheating in summer.

Equinox Care realised that in summer there is an increased risk of significant health problems, such as sunstroke, infection to wounds and food poisoning. The dependant drinkers they care for may also not be able to hydrate easily. It was also thought that hot weather could cause increased conflict within day

centres and residential projects with communal spaces as heat can cause stress.

In response to these issues, Equinox has taken a number of steps. These have included the installation of water coolers and stocking of water for emergencies; assessing cooling of buildings; health awareness work as part of life skills training for users; and developing Business Continuity Plans which take account of the need for day centres to open at different times during hot weather episodes.

For more information about Equinox see: [www.equinoxcare.org.uk](http://www.equinoxcare.org.uk)





## Ask yourself:

- Are your staff vulnerable to extreme temperatures (heat and cold) and have you considered risks such as fainting, injury and reductions in efficiency?
- Do your staff have any medical conditions (such as high or low blood pressure, heart disease, epilepsy or diabetes) which might be made worse by extreme temperatures (hot or cold)?
- Have you considered other people that could be at risk, such as nursing or expectant mothers, outside workers, manual workers who are physically active, kitchen staff or staff operating equipment or machinery?
- Are there any areas where slips and falls could occur during extreme cold or rainfall?
- Are any of your staff unable to get to work in extreme weather? Are their homes or travel routes or children's schools likely to be affected?

## Further information

- The NHS provides advice on the risks of heatwaves and how to prepare: [www.nhs.uk/Livewell/Summerhealth/Pages/Heatwave.aspx](http://www.nhs.uk/Livewell/Summerhealth/Pages/Heatwave.aspx)
- The HSE provides information on workplace temperature requirements: [www.hse.gov.uk/temperature/index.htm](http://www.hse.gov.uk/temperature/index.htm)
- The Institution of Occupational Safety and Health (IOSH) provides a free information line to the public with staff that can advise on business risk management and environmental issues. Call the IOSH helpline on 0116 257 3199 or email [techinfo@iosh.co.uk](mailto:techinfo@iosh.co.uk). More info can be found on their website: [www.iosh.co.uk](http://www.iosh.co.uk)



## What can I do to prepare?

### Utilities

“Outdated and overloaded sewage and drainage systems will not be able to cope with sudden intense rain falls, adding to flooding costs in urban areas...”

(Source: Climate Change and the Effects on Small Businesses in the UK, AXA, 2006)

#### Further information:

- United Utilities website for water and wastewater in the North West of England: [www.unitedutilities.com](http://www.unitedutilities.com)
- Electricity North West owns, operates and maintains the North West's electricity distribution network, connecting 2.4 million properties, and more than 5 million people in the region to the National Grid: [www.enwl.co.uk](http://www.enwl.co.uk)

#### Ask yourself:

- If your pipes freeze, are they vulnerable to bursting?
- What would you do if your business was cut off from the mains power supply?
- Do you know how to turn off the gas, electricity and water supplies to your business?
- Does your business depend on water? If there was a drought and a resulting hosepipe ban or other restrictions, would you be able to continue to do business? Water companies have a legal duty to supply households, but not businesses.
- How will your business be disrupted if your phones don't work?

#### Take action:

- Talk to your plumber on ways to avoid burst pipes or reduce the damage.
- If electricity is critical to your business consider back-up generators or battery storage.
- Talk to your suppliers to find out how to turn off the water, gas and electricity to your business. By turning them off before a flood or storm, you may reduce the amount of damage.
- Consider alternative water supplies, such as installing water tanks to store rainwater. This can also save you money and help reduce your carbon footprint.





## What can I do to prepare?

# Information technology and security of data

### Ask yourself:

- Flooding, storms or power surges could damage computers and electronic files could be lost. Do you have a back-up and is it saved in a safe, separate location?
- If your computers were unavailable, what processes would be affected (e.g. orders, payroll, contacts etc.) and would your business still function?
- What alternative arrangements do you have to access vital data?
- If your staff are unable to get to work, because homes or working premises are affected by snow, floods or storm damage, can you continue to do business? Can they work from home, with access to IT?
- Is your server room vulnerable to extreme temperatures? Do you rely on air conditioning to keep cool, which can be vulnerable to power cuts?
- Can you cope with lost orders and enquiries?

### Take action:

- Regularly back-up your computer files to disk or other saving device and store this in a safe place, separate from your computer's hard drive, ideally in a separate location.
- Check if your employees have broadband and other equipment at home to enable them to work from home if necessary.
- Consider getting a server with remote access so that key staff can access your computer files from any computer.
- Review the location of your key IT equipment to identify whether it is at risk from increased temperatures and/or flooding.

### Further information:

- Seek advice from your hardware and software provider on how to back up your files, how to access your computer systems if they are damaged at your premises and how to access your computer files remotely.

**"If office temperatures reach 32°C, productivity decreases by 29%."**

(Source: Climate Change and the Effects on Small Businesses in the UK, AXA, 2006)

## Case study Taking Precautions Temples Lettings



Temples Lettings office, with all equipment kept off the floor. (Photo credit: Temples Lettings)

Three days of persistent rainfall had caused the River Weaver and River Dane to rise to dangerous levels, and business owners Gary and Natalie Williams of Temples Lettings were on Flood Alert. They'd been receiving updates from the Environment Agency, and watching the waters creep up to and around neighbouring businesses in Northwich.

Natalie Williams, Director of Temples Lettings, said, "It got to the point where I couldn't look out of the window any more as it was scaring me too much. We had done what we could by lifting all electrics, computers and files onto desks and tables, and the Council had delivered sandbags outside the exits."

Gary and Natalie were particularly concerned as they had recently spent a "huge amount of money" extending their office and now it looked set to be ruined.

Gary and Natalie had taken many precautions, regularly backing up databases and communications and were able to relocate the business if needed. But luck was on Temples' side, as the water levels diminished overnight, leaving the office unharmed.

Natalie said, "I am very relieved that we escaped the floods, but it was such a close call. It has brought home how the riverside town centres in which Temples have set up their offices – Northwich, Nantwich and Chester – can change so quickly from picturesque to flooded areas, putting businesses and homes at risk."

### What if this happened to you?

- Flooding, storms or power surges could damage computers and electronic files could be lost. Do you have a back-up and is it saved in a safe, separate location?
- Have you considered whether you could operate from alternative premises if you had to?

### Are you signed up for flood warnings?

The Environment Agency runs a free warning service for homes and businesses. Sign up at:

<https://fwd.environment-agency.gov.uk>

## What can I do to prepare?

# Suppliers, logistics and delivery

### Ask yourself:

- What happens if your suppliers cannot get to you because of weather-related disruptions?
- What would happen if you could not get your products or services to your customers because of weather-related disruptions to road, rail or air services? Or if your customers could not get to you?
- Do you lease equipment or plant which could be damaged at a customer's property? Would production come to a halt?
- What happens if your staff cannot get to work?

### Take action:

- Consider alternative suppliers and/or increasing storage capacity to increase your ability to operate without deliveries.
- Consider sharing suppliers with similar businesses in your area.
- Think about how you get your products to your customers or how your customers get to you. Consider how the routes could be disrupted by extreme weather.
- Make sure the drivers of vehicles transporting your products are experienced and are aware of the risks of driving in extreme weather (i.e. through floodwaters, on icy roads or during high winds).
- If your staff drive for business, make sure they are aware of procedures for driving in severe weather.
- Alternatively, consider using teleconferences for meetings when you cannot deliver your service in person.

### Further information

- Seek advice from your suppliers and other similar businesses to identify alternative options.



“Understanding and responding to climate change must become ‘business as usual’ for insurers and those they work with. Failure to take climate change into account will put companies at risk from future legal actions from their own shareholders, their investors and clients.”

(Source: Lloyds of London. 360 Risk Insight Project “The debate on climate change”)



## What can I do to prepare?

# Products, processes, stock and raw materials

### Ask yourself:

- Have you thought about where you store your products, stock and raw materials?
- Do you know how to contact your employees out of hours to get assistance in moving or protecting stock?
- Do you have any processes or products that are temperature- or climate-sensitive?

### Take action:

- Raise your stock off the floor to reduce its vulnerability to a flood. Do not store stock in the basement if possible.
- Think about expensive stock such as plant and vehicles and whether they can be relocated rapidly.
- Know where your drains are and keep them unblocked.
- Empty oil traps regularly to minimise pollution in the event of floods.

## Case study

### Learning From A Flood To Build Resilience

Plantool Ltd is a tool hire company supplying equipment to industrial, commercial and domestic customers, with 28 staff across 6 depots in the Midlands.

Heavy rain occurred one afternoon in June 2007 causing the Slade Brook near the building to rise 2m, and water was soon waist-high throughout the building. The water was littered with empty gas canisters and wooden scaffold boards were floating around. The police evacuated the area, and the next day the staff arrived to find the water gone but the building in total disarray. Sludge and silt were left everywhere the water had been.

The business was badly affected. Turnover fell by 70% overnight. It took over 13 months before the depot was back up and running fully, and over 2 years after that before trade was back to where it had been before the flood.

Plantool Ltd now has a companywide Business Continuity Plan in place to cover most problems that could occur, including those related to severe weather events. The depot is now signed up to receive Flood Warnings from the Environment Agency and staff are trained in 'what to do next'.

Some physical changes have been made to the depot, to help keep losses and costs to a minimum by avoiding water damage if another flood does occur: As much equipment/ stock as possible has been raised up off the floor. Some electric sockets have been raised. Gas canisters are locked away in a gas cage, and ladders are kept tied up.

Depending on the nature of the business, a flood could provide an opportunity to increase sales, if a business is well placed to help others recover from a flood. For example, a resilient tool hire centre would be able to hire out pumps, dehumidifiers and carpet cleaners, to others affected by the floods.

Mark Issitt, the current manager of the Kettering depot said:

*"This should have been a time for us to shine and offer our service to other businesses that were affected, but it was us that was severely affected and not ready for the hidden challenges to our business. Since then we have taken steps to make sure we are better prepared."*

For more information about Plantool see:  
[www.hirecentres.com](http://www.hirecentres.com)



## What can I do to prepare?

# Emergency contacts and important documents

### Ask yourself:

- Do you have a list of contacts that you can reach in an emergency? Do your employees have access to this list?
- Have you got a copy of your important documents saved in a separate location, for example insurance policies, accounts documents, product specifications, client details etc.?
- Do you archive paper records off site?

### Further information

- Is your business at risk of flooding? Find out now, call the Environment Agency Floodline on 0845 988 1188 or visit [www.environment-agency.gov.uk/homeandleisure/floods/default.aspx](http://www.environment-agency.gov.uk/homeandleisure/floods/default.aspx)
- The Environment Agency publication "Would your business stay afloat? A guide to preparing your business for flooding" has a simple template to use to create a flood plan for your company: [www.gov.uk/prepare-for-a-flood/make-a-flood-plan](http://www.gov.uk/prepare-for-a-flood/make-a-flood-plan)

### Take action:

- Make sure you have out-of-hours details of your staff so they can be contacted in an emergency.
- Keep your important documents in a safe place. This will help to make an insurance claim move more quickly.
- Complete this simple template to make yourself a 10-minute Emergency Plan. Then keep copies onsite, off-site and in key business vehicles.  
[www.bitc.org.uk/sites/default/files/7936\\_berg\\_10\\_minute\\_plan\\_0.pdf](http://www.bitc.org.uk/sites/default/files/7936_berg_10_minute_plan_0.pdf)





## What can I do to prepare?

# Special considerations for agricultural businesses

### Take action:

- Think about current trends and potential climate changes and seek further advice see below.

### Ask yourself:

In addition to the potential impacts that are common to all businesses, the agricultural and horticultural sector faces a different, and additional, set of issues. These businesses are directly affected by climate, and extreme weather events can have a significant impact. Ask yourself how your business may be affected both negatively and positively by:

- Increased rain and increased flood risks.
- A reduction in the quality and quantity of grass caused by lower rainfall and higher temperatures during summer (which may require feed for livestock to be supplemented).
- Reduced water availability (may affect yields of fruit, vegetables and cereals and ability to irrigate).
- Higher temperatures and increased carbon dioxide in the atmosphere (some crops may flourish).
- Changing climate conditions (could make it possible to grow alternative crops, including crops for energy).
- Heavy rainfall events which could provide opportunities for increased water storage for use during water shortages.
- Higher summer temperatures and reduced cloud cover (could increase the risk of heatstroke and sunburn for livestock in open pasture).
- Higher average winter temperatures (could reduce problems for livestock in freezing weather).
- Higher winter temperatures and fewer days of freezing weather (affects vernalisation of winter cereals and formation of flower buds on some fruit trees).
- Higher temperatures (could increase the risk of pests and diseases in arable and horticultural crops).
- Higher summer temperatures and reduced cloud cover (could increase the demand for outdoor leisure and tourism, which could create opportunities for diversification).

### Further information:

- Farming Futures factsheets:  
[www.farmingfutures.org.uk/resources/factsheets](http://www.farmingfutures.org.uk/resources/factsheets)
- You can carry out a free online Resilience Healthcheck for agricultural businesses at:  
[www.farmbusinessresilience.co.uk](http://www.farmbusinessresilience.co.uk)



## What can I do to prepare?

# Making a business continuity plan

If you would like to make your own business continuity plan take a look at the checklist on the inside back cover of this document. It will guide you through some key questions to think about.

### You might also find these websites helpful:

#### Emergency Plan

A simple template to make yourself a 10-minute Emergency Plan.

[www.bitc.org.uk/sites/default/files/7936\\_berg\\_10\\_minute\\_plan\\_vs2\\_0.pdf](http://www.bitc.org.uk/sites/default/files/7936_berg_10_minute_plan_vs2_0.pdf)

#### Business Resilience Healthcheck

Free online “healthcheck” for your business that generates an Action Plan for you to follow

[www.businessresilience.org](http://www.businessresilience.org)

#### Continuity Planning

An in depth guide for creating a continuity plan for medium-large sized businesses

[www.bitc.org.uk/sites/default/files/7936\\_berg\\_10\\_minute\\_plan\\_vs2\\_0.pdf](http://www.bitc.org.uk/sites/default/files/7936_berg_10_minute_plan_vs2_0.pdf)

## Case study Resilience Planning Pays Off



Cleone Foods Ltd is a Birmingham-based SME, owned and run by Wade Lyn, that manufactures “Island Delight” Jamaican patties. It won its first major contract with a supermarket as a result of carrying out an analysis of risks affecting its operation and making thorough resilience plans.

The resilience measures include a partnering arrangement with another similar food facility run by another company nearby. If Cleone’s own site is affected by severe weather or other disruption, production can be quickly moved to the other company’s site.

Cleone have also purchased a snow plough and grit spreader as snow was identified as the most significant and persistent risk for their site.

Diesel powered generators have also been put on site, to take over in any powercut. Otherwise such an event could have major impacts, as much finished product is stored on site in chillers and freezers.

For more information about Cleone see:

[www.cleone.co.uk](http://www.cleone.co.uk)

# Opportunities for small businesses

The following table provides some examples of opportunities that small and medium businesses could consider, arising from a changing climate:

Markets	Finance	Logistics	Premises	People	Process
New products or modifications to existing products to respond to a changing market	Good risk management will appeal to financiers and insurers and other stakeholders, leading to reduced insurance premiums	Competitive advantage for companies with redundancy or flexibility built into delivery systems and supply chains or those undertaking business continuity planning	Keeping warm in winter months is less of a challenge	Greater comfort and lower fuel bills in winter	<b>Agriculture:</b> Longer growing season and new species and varieties of plants can be grown
Advantages for early movers in response to changed markets and lifestyles	Potential risks reduced and liabilities diminished through pro-active risk assessment and implementation	Supplying local markets creates an opportunity for a marketing approach based on regional distinctiveness or reduced product miles	Opportunities for high thermal mass building solutions, which can reduce air-conditioning requirements	Responding effectively as a good employer increases recruitment and retention of high quality staff	<b>Manufacturing:</b> Developing expertise in managing industrial processes and technologies in response to climate change
Increased passing trade in some sectors during long hot summers	Clients and customers attracted to businesses that can show they are resilient to climate change	Using local suppliers, with less far to travel, can make it easier for you to get supplies in bad weather, increasing your business' resilience	Opportunities for those in built environment industries to develop expertise and reputation in climate-related building services	Opportunity to improve work/life balance by responding to climate change risks with flexible working hours and increased home working	<b>Finance:</b> New insurance products and services that spread the risk of climate change and incorporate underwriting that takes account of climate change
Increased demand for some products and services			Opportunity to exploit external spaces to accommodate outdoor living	Generally more outdoor activity creates opportunities in some industries	<b>Construction:</b> Fewer delays on site through frosts
More extreme events mean opportunities (i.e. maintenance services, repair, al fresco eating facilities)					

(Adapted from: UKCIP, A Changing Climate for Business: business planning for the impacts of climate change, revised edition January 2009.)



# Cut carbon and reduce costs

Every company, no matter what its size, can save money on its energy bills by following some simple steps. Cutting energy use and saving carbon now will help to reduce further climate change in the future.

You don't have to invest lots of money or make big changes to your business to save on your energy bills. The right combination of small changes, many costing nothing, can reduce your energy bill by £1,000s.

Here are some simple, no-cost, energy-saving tips for small businesses:

Issue	What can you do to save money and cut carbon at no cost?
Heating	Don't turn up the heating unless you really need to. Try to keep your thermostat at 19°C as your heating costs could increase by 8% each time you turn the temperature up by just one degree.
Heating	Set controls. Programme your heating system controllers to allow for varying building occupancy throughout the week.
Lighting	Switch lights off in empty rooms. You could cut your lighting costs by as much as 15% just by making sure you turn off lights in areas that aren't being used.
Ventilation	As simple as it sounds, making the most of natural ventilation through correct use of doors, windows and vents is a cost-effective way of achieving big savings on your ventilation.
Office equipment	Switch computers off. A single computer and monitor left on 24 hours a day could cost over £50 a year. Switching it off out of hours and enabling standby features could reduce this to £15 a year.
Refrigeration	Ensure your system is set at the right temperature. Even if it's 1°C lower than needed, your costs could rise by 2–4%.
Motors and drives	Switch off motors and other power equipment when they aren't being used.
Boilers	Service boilers every year – a regularly serviced boiler can save up to 10% on heating costs.
Compressed air	Find and fix leaks – a 3 mm hole in your compressed air system could cost more than £700 per year in wasted energy.
Good maintenance	Equipment which is poorly maintained will not operate efficiently and will need more energy.
Knowledge	Make sure everyone knows that saving energy will help the company. Ask your colleagues for their ideas on how you could all save energy.

## Help and ideas for cutting carbon

You can find more information and tips for resource efficiency online at: [www.wrap.org.uk/content/business-resource-efficiency-hub](http://www.wrap.org.uk/content/business-resource-efficiency-hub).

Many companies across the North West have begun to make changes and have made significant cost savings on their utilities, raw materials and carbon emissions. You can read some examples at: [www.enworks.com/case-studies](http://www.enworks.com/case-studies).

# Low carbon opportunities

The Low Carbon Economic Goods and Services sector (LCEGS) is a new sector rapidly growing in Liverpool City Region. There are over 1,200 LCEGS companies now in Liverpool City Region, employing nearly 22,000 people and making sales of more than £2.7 billion per year. Key areas are energy efficiency (building technologies and energy management), alternative fuels, renewable energy (particularly wind & biomass) and also waste management. There are also a number of professional technical services companies based within this area (such consultancy support).



## Useful tools and further information

### Local Guides

#### **Liverpool**

Let's get ready Liverpool - Steps in case of an emergency  
City Centre Zone Maps

[www.liverpool.gov.uk/crime-prevention-and-emergencies/emergency-planning](http://www.liverpool.gov.uk/crime-prevention-and-emergencies/emergency-planning)

#### **Knowsley**

Free general advice on business continuity planning

[www.knowsley.gov.uk/business/business-continuity-planning](http://www.knowsley.gov.uk/business/business-continuity-planning)



### Local Contacts

#### **Liverpool City Council**

Jamie Riley, Emergency Planning Lead, 0151 233 8637  
[emergency.planning@liverpool.gov.uk](mailto:emergency.planning@liverpool.gov.uk)

#### **Knowsley Council**

[emergencyplanning@knowsley.gov.uk](mailto:emergencyplanning@knowsley.gov.uk)

#### **Sefton Council**

investSEFTON: 0151 934 3452

#### **St Helens Council**

01744 676789

#### **Wirral Council**

Ruth Jones, Business Continuity Lead

0151 606 2290

[emergencyplanning@wirral.gov.uk](mailto:emergencyplanning@wirral.gov.uk)

## National information & contacts

### Business Resilience Healthcheck

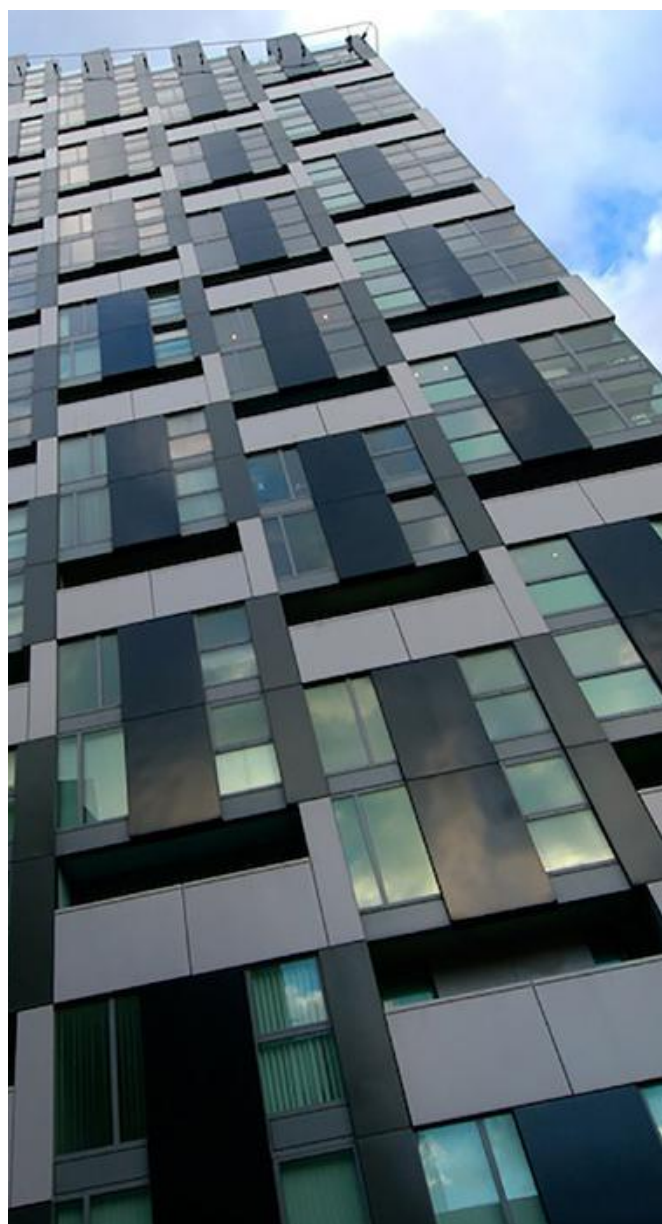
The free Business Resilience Healthcheck online tool identifies areas where business operations could be affected by severe weather and climate change. It produces a bespoke Action Plan report outlining the actions you can take to make your business more resilient.

[www.businessresilience.org](http://www.businessresilience.org)

### Business in the Community

Business in the Community (BitC) is a business-led charity providing practical support to promote responsible business practice. Its members work together to transform communities by tackling issues where business can make a real difference. BitC convenes The Prince's Mayday Network as part of its Environment programme.

[www.bitc.org.uk/north-west](http://www.bitc.org.uk/north-west)



### Climate Change North West

The North West Climate Change Partnership is a group of organisations that work together to enhance the delivery of a shared vision of a low-carbon and well-adapting North West. Their website resource library contains key documents and links relating to climate change and energy issues in the North West of England.

[www.claspinfo.org](http://www.claspinfo.org)

### Climate UK

Climate UK is a not-for-profit Community Interest Company working with Climate Change Partnerships across England, Wales, Scotland and Northern Ireland to promote action on climate change. They aim to investigate, inform and advise on risks and opportunities presented by climate change, and coordinate and support integrated, sustainable and effective responses. Through their network of trusted and independent Climate Change Partnerships, they uniquely offer both local and national coverage by bringing together local knowledge and technical expertise from a range of sectors.

[www.climate.uk.net](http://www.climate.uk.net)

### National Adaptation Programme

The National Adaptation Programme sets out what government, businesses and society are doing to become more climate ready.

[www.gov.uk/government/publications/adapting-to-climate-change-national-adaptation-programme](http://www.gov.uk/government/publications/adapting-to-climate-change-national-adaptation-programme)

### Association of British Insurers (ABI)

ABI provide advice on insurance issues and have a range of insurance publications for SMEs.

[www.abi.org.uk](http://www.abi.org.uk)

Tel: 020 7600 3333

### British Chambers of Commerce (BCC)

Your Chamber of Commerce can provide advice, support and guidance on climate change adaptation issues. Find your local Chamber of Commerce on the website provided.

[www.britishchambers.org.uk](http://www.britishchambers.org.uk)

Tel: 020 7654 5800

### British Insurance Brokers' Association (BIBA)

Contact your own insurance broker for advice; alternatively, contact BIBA who can help you find a member broker.

[www.biba.org.uk](http://www.biba.org.uk)

Tel: 0870 950 1790

### Blue Pages Directory

A directory of property flood products and services which can help reduce the risk of and impacts from flooding.

[www.bluepages.org.uk](http://www.bluepages.org.uk)



### **Carbon Trust**

Provides specialist support to business and the public sector to help cut carbon emissions, save energy and commercialise low-carbon technologies.

[www.carbontrust.com](http://www.carbontrust.com)

Tel: 020 7170 7000

### **Committee on Climate Change**

An independent, statutory body advising the UK Government on climate change. They have a sub-group focusing on adaptation.

[www.theccc.org.uk/about/structure-and-governance/asc-members](http://www.theccc.org.uk/about/structure-and-governance/asc-members)

### **Confederation of British Industry (CBI)**

The CBI helps create and sustain conditions in which business in the UK can compete and prosper. CBI provides advice on how to reduce your carbon footprint, case studies and information on climate change events.

[news.cbi.org.uk/business-issues/energy-and-climate-change/](http://news.cbi.org.uk/business-issues/energy-and-climate-change/)

Tel: 0207 379 7400

### **Construction Industry Research and Information Association (CIRIA)**

CIRIA provide useful information on the repair and restoration of buildings following floods.

[www.ciria.org/flooding](http://www.ciria.org/flooding)

### **Department for Environment Food and Rural Affairs (Defra)**

Defra is the lead central government department on climate change adaptation. Defra led on the UK's first Climate Change Risk Assessment published in January 2012, and on the development of the National Adaptation Programme, published in 2013.

[www.defra.gov.uk/environment/climate](http://www.defra.gov.uk/environment/climate)

Tel: 08459 335577

### **Energy Saving Trust**

The Energy Saving Trust Foundation gives impartial advice to communities and households on how to reduce carbon emissions, how to use water more sustainably, and how to save money on energy bills.

[www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)

Tel: 0300 123 1234

### **Environment Agency**

The Environment Agency is the lead Government agency in England and Wales on flooding and broader environmental management and is the Government's delivery body in England for climate change adaptation.

[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

The Environment Agency is able to offer businesses support on setting up of flood groups and the creation business flood plans.

General Enquiries Tel: 03708 506 506

Floodline Tel: 0845 988 1188

### **Farming Futures**

Farming Futures provides farmers and land managers with inspiration and information to ensure their business is profitable and sustainable in a changing economic and environmental climate.

Farming Futures is supported, amongst others, by Defra and the National Farmers Union (NFU). It provides a series of fact sheets and case studies on its website, prepared for each farming sector:

[www.farmingfutures.org.uk/resources/factsheets](http://www.farmingfutures.org.uk/resources/factsheets)

Tel: 01223 342 313

### **Federation of Small Businesses (FSB)**

The FSB is the UK's largest campaigning pressure group promoting and protecting the interests of the self-employed and owners of small firms.

[www.fsb.org.uk](http://www.fsb.org.uk)

Tel: 0808 2020 888

### **Flood Warnings Direct**

A free service run by the Environment Agency that will send alerts to your phone if you are at risk of flooding.

[fwd.environment-agency.gov.uk](http://fwd.environment-agency.gov.uk)

### **Gov.uk**

Gov.uk has replaced the Business Link website as the source of Government services and information for businesses.

At the time of going to print, the Business Link helpline is still available on 0845 600 9006.

[www.gov.uk/business-support-helpline](http://www.gov.uk/business-support-helpline)

### **Institution of Occupational Safety and Health (IOSH)**

As the biggest health and safety membership organisation in the world, IOSH is committed to creating a world of work which is safe, healthy and sustainable. IOSH provides a range of free guidance and online tools aimed at both the operational and strategic level.

[www.iosh.co.uk](http://www.iosh.co.uk)

Tel: 0116 257 3100

### **Kitemark**

Tested and approved flood protection products.

[www.kitemark.com](http://www.kitemark.com)

Tel: 0845 0809 000

### **Local Enterprise Partnership**

The Liverpool City Region LEP is Liverpool City Region's primary economic development company.  
[www.liverpoollep.org](http://www.liverpoollep.org)

### **Met Office**

The UK's national weather service, with forecasts available from its website. Forecasts are for anything from the next few hours to the coming season.  
[www.metoffice.gov.uk](http://www.metoffice.gov.uk)  
Tel: 01392 885680

### **National Farmers Union (NFU)**

The NFU champions British farming and provides professional representation and services to its members.  
[www.nfuonline.com](http://www.nfuonline.com)  
Tel: 024 76858500

### **National Flood Forum**

A charity providing support and advice to communities and individuals that have been flooded or are at risk of flooding.  
[www.nationalfloodforum.org.uk](http://www.nationalfloodforum.org.uk)  
Tel: 01299 403055

### **Natural England**

An independent public body that works to protect and improve England's natural environment.  
[www.naturalengland.org.uk](http://www.naturalengland.org.uk)  
Tel: 0845 6003078

### **The Prince's Mayday Network**

The Mayday Network is a collaboration of businesses taking action on climate change and resource depletion. Mayday businesses work together and with partners to seek out and promote the best solutions to the major environmental challenges we face.  
[www.maydaynetwork.com](http://www.maydaynetwork.com)

### **UK Climate Change Risk Assessment (UK CCRA)**

The Government published the UK Climate Change Risk Assessment in January 2012, the first assessment of its kind for the UK, and the first in a 5 year cycle. Outputs include a summary report of the key findings, and a summary report for the business, industry and services sector.  
[www.defra.gov.uk/environment/climate/government/risk-assessment](http://www.defra.gov.uk/environment/climate/government/risk-assessment)

### **UK Climate Impacts Programme (UKCIP)**

UKCIP helps organisations assess how they might be affected by climate change, so they can prepare for its impacts. Tools that UKCIP have prepared include BACLIAT and CLARA for businesses and business advisors respectively.  
[www.ukcip.org.uk](http://www.ukcip.org.uk)  
Tel: 01865 285717

### **BACLIAT**

BACLIAT is a good starting point for exploring the implications of climate change for your particular business or sector. It comprises a simple checklist for assessing the potential impacts of climate change.  
[www.ukcip.org.uk/bacliat](http://www.ukcip.org.uk/bacliat)



# Checklist

Thinking about potential disruption and putting simple preparations in place can save you time and money when something untoward happens. Making a simple plan using the checklist below could suggest ways to make your organisation better able to withstand disruption and may also help identify areas of your business that require additional resilience.

## Insurance

- When did you last check that you have the insurance you need? Are you covered for floods and storm events, and business interruption?

Notes .....

## Flooding risk

- Do you know if you are in an area at risk from flooding or flash flooding? Find out now, call the Environment Agency Floodline on 0845 988 1188 or visit <http://goo.gl/S3hLB> You can also sign up to their Flood Warning Service at <https://fwd.environment-agency.gov.uk>

Notes .....

## Premises

- Do you check drainage systems (guttering, downpipes and drains) to ensure they are not blocked?
- Have you considered if there are any simple changes you could make to your buildings to help them cope better with storms, flooding and heat?
- Have you considered whether you could operate from alternative premises if you had to?

Notes .....

## People

- Do you know how to contact your employees out of hours to get assistance in moving or protecting stock?
- Do your staff have any medical conditions (such as high or low blood pressure, heart disease, epilepsy or diabetes) which might be made worse by extreme temperatures (hot or cold)?
- If your staff drive for business, make sure they are aware of procedures for driving in severe weather.





- Find out which of your staff may be unable to get to work in extreme weather. Are their homes or travel routes likely to be affected? Are their children's schools likely to close? Do you have procedures in place to handle this? Can staff work from home if necessary?

Notes .....

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## Utilities

- Have you thought about what would you do if your business was cut off from the mains power supply, or water supply?

Notes .....

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## IT and back-ups

- Flooding, storms or power surges could damage computers and electronic files could be lost. Do you have a back-up and is it saved in a safe, separate location?
- If your staff are unable to get to work, either because homes or working premises are affected by snow, floods or storm damage, can you continue to do business? Can they work from home, with access to IT?
- Do you hold a list (off site) of important contacts such as insurance, landlord details, suppliers, customers and other key contacts?

Notes .....

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## Products and suppliers

- Think about how you get your products to your customers or how your customers get to you. Consider how the routes could be disrupted by extreme weather.
- Do you have accounts in place for alternative suppliers, in the event of transportation delays or main supplier problems?
- Do you experience seasonal variances in demand for your product or service? Have you investigated the potential opportunities that may exist for your products and services from severe weather?
- Once you've worked through this checklist you could tell your customers and suppliers that you are starting to get 'climate ready' and have adopted the principles in this guide.

Notes .....

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If you would like to give your business a free Business Resilience Healthcheck you can do so online at:

[www.businessresilience.org](http://www.businessresilience.org)



# Contact Details

**Officers at your local authority will be happy to help with further information**

## **Liverpool City Council**

Jamie Riley, Emergency Planning Lead,  
0151 233 8637 [emergency.planning@liverpool.gov.uk](mailto:emergency.planning@liverpool.gov.uk)

## **Knowsley Council**

[emergencyplanning@knowsley.gov.uk](mailto:emergencyplanning@knowsley.gov.uk)

## **Sefton Council**

investSEFTON: 0151 934 3452

## **St Helens Council**

01744 676789

## **Wirral Council**

Ruth Jones, Business Continuity Lead  
0151 606 2290 [emergencyplanning@wirral.gov.uk](mailto:emergencyplanning@wirral.gov.uk)

This document is available online from  
[www.claspinfo.org/LCRadapt](http://www.claspinfo.org/LCRadapt)