

# Adapting to climate change

Prosperity for All: A Climate Conscious Wales 2020-2025



Llywodraeth Cymru  
Welsh Government





# Hello

Climate change is possibly the biggest challenge for Wales, and for the world.

Some climate change is natural, it should happen over very long periods of time. But human activity is speeding it up. Changes that would normally take many thousands of years are happening in decades.

It's this speed of change that's causing things like droughts, wildfires, melting ice sheets, rising sea levels, floods and winter storms.

**i** It's important to understand the difference between the weather and the climate.



**Weather is short term.** It changes from day-to-day.



**Climate is long term.** It's about seasonal temperatures, rainfall averages and wind patterns.

The Welsh Government has declared a climate emergency, and everyone **must take action now**.

We need to prepare and protect our communities across Wales.

**This booklet tells you about our climate change adaptation plan.**

**Climate change adaptation** is about adjusting to the reality of climate change and taking action to manage the risks.



For adaptation we plant trees so their roots bind soil. This helps to slow down flooding and stop landslides.

**Climate change mitigation** is about reducing or stopping the actions and systems that cause climate change.



For mitigation we plant trees to absorb CO2 in the air.

We have a different climate change mitigation plan:  
[gov.wales/low-carbon-delivery-plan-factsheet](http://gov.wales/low-carbon-delivery-plan-factsheet)

This plan is about:

- adjusting to the climate change situation we are in
- understanding the risks climate change is bringing
- making changes so the impact is less.



## Knowing the risks

Climate change reports say we can expect:

- wetter winters
- warmer summers
- more storms
- more extreme weather
- rising sea levels.

Welsh Ministers have to report on what Wales is doing to deal with climate change.

## Our Vision

In 2030, Wales will be a country that:

- is prepared for climate change
- has resources it needs
- understands the risks and challenges ahead
- is able to adapt and reduce the impact of climate change.

We will reach this vision by:

- **increasing our knowledge** of the risks, challenges and the impact from climate change
- **increasing our capacity** by working together so our rural, urban and coastal communities can make the changes they need to make
- **building our resilience** by stepping in early, taking action and helping communities bounce back when there are issues
- **responding to the risks** by starting with the most urgent issues and taking action now.





# We want to protect communities, buildings and infrastructure from flooding

Climate change affects some communities more than others. It's often the poorer ones who are impacted the most. We need to take action to help these communities.

Other communities are more at risk from flooding and erosion because of where they are. There are over **245,000** properties in Wales at risk of flooding.

Natural Resources Wales manages rivers, lakes and the shoreline of Wales and work to help communities. But as sea levels rise the risk to these communities becomes greater.

**i Infrastructure** is about our transport networks, communication networks and power supplies.

## ✓ Actions already taken

We have new laws that mean all new homes have to have better drainage systems.

Our Warm Homes Programme helps people make their homes warmer and use energy better.

We've worked with Natural Resources Wales to set out their Shore Management Plans.

We've invested over £54 million per year in flood and coastal risk management.

## 🕒 Short-term actions

We will:

- have 25,000 more energy efficient homes by 2021
- ask what people think should be included in our new Fuel Poverty Plan to help people afford to heat their homes
- find ways to use nature and 'nature-based solutions' like trees to adapt to flood and other risks.

## ➡🕒 Medium-term actions

We will:

- put in place our new Tackling Fuel Poverty Plan
- manage risks of flooding and coastal erosion with our National Strategy for Flood and Coastal Erosion Risk Management
- have systems so coastal groups can report on this management plan.





# We want to protect public water supplies from drought

We need to keep water supplies safe. This includes:

- in hot weather when water levels reduce
- in freezing weather when pipes can burst
- unblocking drains
- fixing leaks quickly
- helping everyone use less water.

**i** The Office of Water Services (Ofwat) has set a target for water companies to reduce water leaks by 15% by 2025.

Natural Resources Wales plays a big part in this. They manage a lot of our water resources. They make sure there's enough water to meet needs. They also work with water companies to make sure they look after our water and have drought plans in place.

## ✓ Actions already taken

We've published our Water Strategy for Wales. Its aim is to keep water supplies at a good level for the next 25 years.

We support campaigns about what you can and can't flush down toilets. These includes 'Let's Stop the Block' by Dwr Cymru and 'Fine to Flush' by Water UK.

## 🕒 Short-term actions

We will:

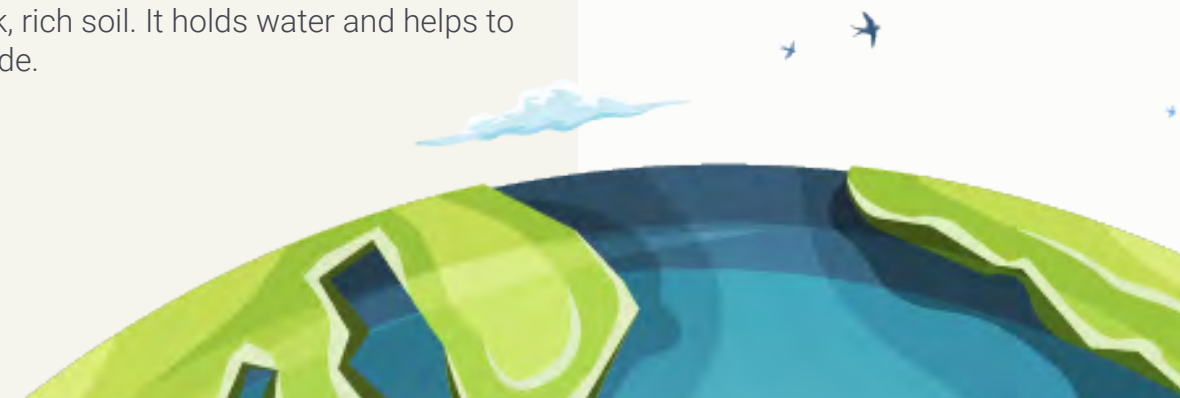
- launch our New Water Resource Management Plan to make sure water supplies are safe and at the levels we need
- research the impacts of climate change on water supplies
- use this research to support the UK Committee on Climate Change's next risk assessment for Wales
- work with Natural Resources Wales to produce a five-year action plan to restore our peatlands.

**i** Peat is a heavy, dark, rich soil. It holds water and helps to reduce carbon dioxide.

## ➤🕒 Medium-term actions

We will:

- publish new guidelines to go with our next Water Resource Management Plan 2025
- use nature-based solutions to stop drought. This includes restoring grass flood plains.





## We want to manage land better and reduce risks

Farming and forestry are part of community life across Wales. The way we prepare and use soil for crops and rearing animals is important.

There are many good changes happening in farming and forestry to prepare for climate change. But there are also issues. This includes using too many pesticides.

**i** Pesticides are chemicals used to kill weeds, insects and other pests.

Pesticides can harm our environment. When there are floods, harmful pesticides can be washed into the water.

When pesticides are used too often, they can harm the soil. This can lead to soil erosion.

**We want to reduce the use of pesticides.**

### ✓ Actions already taken

We've given funding to Dwr Cymru to run the PestSmart Project. It works with farmers, landowners and communities across Wales. They raise awareness and give advice to reduce the use of pesticides.

### 🕒 Short-term actions

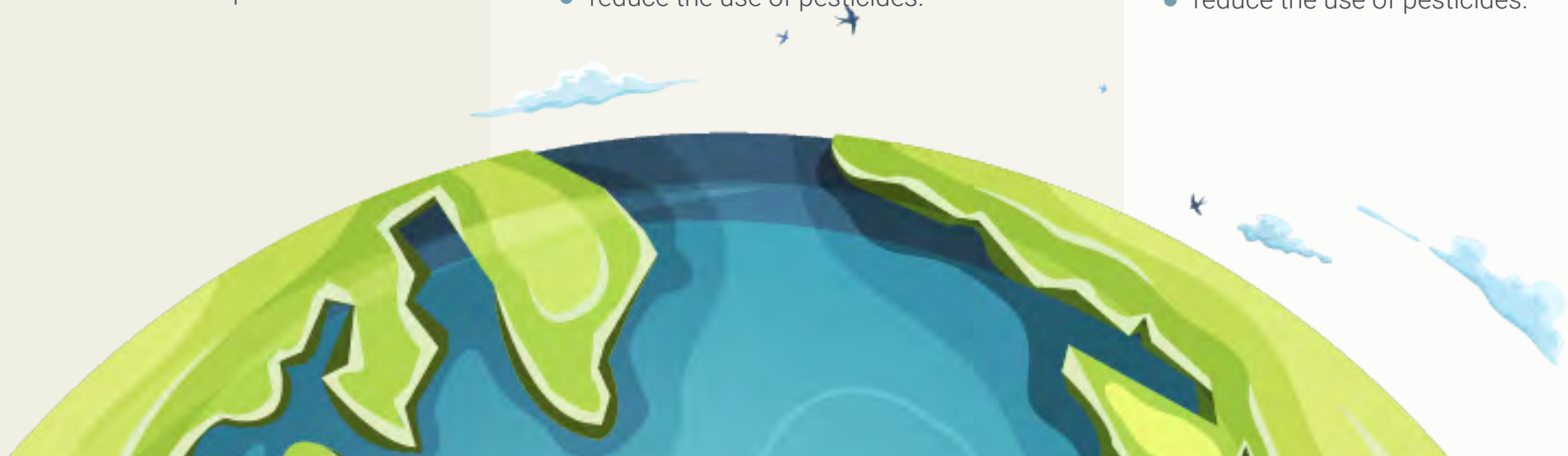
We will:

- continue to work with communities to raise awareness on the harmful effects of pesticides
- reduce the use of pesticides.

### ➡🕒 Medium-term actions

We will:

- promote better environmental ways to look after the land
- work to increase soil and water quality
- reduce the use of pesticides.





# We want to protect our ecosystems and agriculture businesses

We want to help our cities, towns and villages adapt to the changing climate. An important part of this is our plans to increase tree cover and woodlands. Planting trees:

- give people shade to sit in when temperatures rise
- improve air quality
- reduce erosion and protect soils
- can slow down floods
- support our ecosystems.

There are lots of opportunities to plant more trees across Wales. This includes encouraging farmers and other landowners to plant new areas of woodland.

**i** An ecosystem is about the plants, animals, insects and other living things in an area.

Climate change is a real risk to communities that depend on farming and forestry businesses. It brings a risk to our food supply and other goods they produce.

We're looking at:

- the types of crops we grow in Wales
- the number of crops we grow
- how these might need to change.

## ✓ Actions already taken

We've launched our Woodlands for Wales plan. This encourages farmers and landowners to plant more trees.

We're supporting the development of more woodlands and improving how land is managed through our Glastir Programme.

## 🕒 Short-term actions

We will:

- keep talking with communities about climate change adaptation and other issues through our Sustainable Farming and Land consultation
- keep exploring how climate change affects crops and what we produce through the Capability, Suitability and Climate Programme.

## ➤🕒 Medium-term actions

We will:

- continue our plan for a new National Forest in Wales
- make the most of the climate adaptation benefits of having more trees
- increase woodlands in Wales by at least 2000 hectares every year from 2020 to 2030.





# We want all our plans to connect and support climate change adaptation

A lot of our work as Welsh Government also has positive effects on the environment. Together our plans and policies help Wales adapt to climate change. This includes changes we've made to the planning system so there is more green infrastructure in our cities and towns.

**i** Green infrastructure includes open spaces. Places like parks, playing fields, allotments, private gardens, grasslands, ponds, woodland and more. It also includes street and garden trees. It's good for people's wellbeing as well as the climate.

## ✓ Actions already taken

We've developed more urban green spaces through our Natural Resources Policy.

We have working groups across different government departments that are increasing urban green infrastructure.

We published our Planning Policy for Wales 10 that sets out our planning policies and aims for more green infrastructure.

## 🕒 Short-term actions

We will:

- focus on the 'small things' that help create more local, easy to use green spaces
- make sure trees are planted in the cities and town areas that need it the most
- involve people in our plans to stop building houses in flood risk areas.

## ➡🕒 Medium-term actions

We will:

- look at the Natural Resources Wales area statements to see what else we need to do
- check Natural Resources Wales are restoring peatlands
- publish The National Development Framework to increase economic growth while dealing with climate change
- develop advice on how buildings can adapt to deal with climate change.







## We want to protect our history and heritage.

There are lots of historic towns, buildings, castles, monuments, parks, gardens and other things that are part of our history and heritage. These must be protected.

Welsh Ministers have set up a Historic Environment Group. Later this year they will publish their Historic Environment and Climate Change Sector Adaptation Plan.

## Next steps

Climate change affects us all. As new data and research on climate change comes in, the actions we take might need to change.

We will set up a national group to check how well this plan is working to protect communities across Wales.

## Thanks for reading our plan

If you want to read more about this plan:

[gov.wales/prosperity-all-climate-conscious-wales](https://gov.wales/prosperity-all-climate-conscious-wales)

