



Climate Change

Climate change is the single biggest threat to human habitation on planet Earth, causing changes to weather patterns and rises in sea levels. Low lying and coastal areas are particularly vulnerable to such changes. The Isles of Scilly must be prepared for the challenges it will face.

Causes of climate change

Climate change is caused by excess greenhouse gases in the Earth's atmosphere, created from human activities. The causes of climate change and the evidence of its occurrence are now widely accepted.

All human activities create greenhouse gases to some extent, whether its producing food, heating homes, manufacturing goods, or driving a car. But there are huge differences in the amount of greenhouse gases caused by different parts of the world population. People in industrialised countries, such as the UK, create vastly higher emissions than those in unindustrialised countries, for example Uganda.

[Find out more](#) →

[BBC Guide to climate change](#)

[Big Picture TV: Denial is no longer an option](#)

[WWF climate change explained](#)

Effects of a changing climate

With increasing greenhouse gases, the effect on the climate is a warming across the planet, hence the term global warming. This creates two critical processes.

Earth's glaciers and polar ice caps contain around 2% of the world's water. This sounds small, but if it were all to melt it would increase sea levels by many metres across the world. Both ice caps and glaciers are already starting to melt significantly.

350ppm
Concentration of carbon dioxide (CO₂) in the Earth's atmosphere needed to avoid irreversible climate change

The other major impact is changing weather patterns, which will be unique to every place on Earth – and possibly unpredictable. Places could be drier, hotter, cooler or wetter; more stormy, more settled...the effects are largely unknown as yet. This will have big consequences for food, and water availability, human settlements and ecological systems.

[Find out more](#) →

[Impacts of climate change: polar regions](#)

[Big Picture TV: Facing Consequences of climate change](#)

Global...

387ppm

Current concentration of CO₂ in the Earth's atmosphere

The causes of climate change are clearly global, and require every person and every country on the planet to be responsible for keeping their emissions below a set level. If every person and country took this approach, we would be able to keep global greenhouse gas emissions to a level that prevents runaway climate change.

The effects of climate change are global – sea level rise is universal, but weather patterns are unique to every location. Food and water shortages could create millions of environmental refugees, which will have an enormous social and financial impact on other countries. A global agreement to reducing carbon emissions is being sought at Copenhagen in December 2009.

[Find out more](#) →

[James Hansen: "the perfect storm"](#)

[Stabilising emissions: 350.org](#)

[Climate change impacts map: BBC](#)

Local...

All solutions must commence on a personal level, embraced by the community, then regional and national levels. If every person takes this approach then we have a global solution.

On Scilly sea level rises are likely to impact on coastal erosion, housing, water supplies, farmland and infrastructure. Changing weather patterns are unpredictable, but are likely to lead to more regular storms and more prolonged periods of drought at times.

450 ppm

Level at which runaway warming starts. Predicted to be as soon as 2025 if emissions stay at current levels.

[Find out more](#) →

[Guide to a low carbon lifestyle](#)

The wider picture

Whilst our individual – even our collective emissions seem insignificant on a world scale, think about looking at it through the eyes of every individual in the world. Every person on the planet *could* take the attitude of “why should I make any changes, if no-one else does?”. But everyone *could* take the opposite approach, of taking personal responsibility to reduce their carbon emissions to a sustainable level. If there's a chance that something could be done to avert irreversible climate change, surely we should do something rather than nothing?

At a community level, by reducing our dependence on fossil fuels we increase our resilience against external forces and reduce our impact on climate change; and these measures often increase quality of life. It's this “win, win” that makes Transition so unique and brings about feelings of hope.

[Find out more](#) →

[Transition Scilly](#)

Don't forget that in a democratic society we all have elected MP's to represent our views in Parliament to the Government. To quote one MP, “sustained campaign pressure *does* have an impact on Government ministers.” Use the process!