



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

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Climate Change

**The Importance of
Adaptation**



Climate Change

- Climate change puts at risk the basic determinants of public health
- All populations are vulnerable, but some are more vulnerable than others
- Protecting human health is the 'bottom line' of climate change strategies



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Summary

- Global Context
- National Issues
- Priorities for Wales



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Climate change puts at risk the basic determinants of health

Each year:-

- 1.2 million people die from causes attributable to urban air pollution
- 2.2 million from diarrhoea, largely from lack of access to clean water supply and sanitation, and from poor hygiene
- 3.5 million from malnutrition
- approximately 60,000 in natural disasters.



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A warmer and more variable climate:-

- threatens to lead to high levels of some air pollutants
- increases transmission of diseases through unclean water and contaminated food
- compromises agricultural production in less developed countries
- increases the hazards of extreme weather.







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Infectious disease

Cholera and diarrhoeal diseases

Highly climate sensitive to temperature and rainfall, as well as malaria, dengue and other infections.

Effects on global public health community – slow, halt or reverse progress.



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Gradual build up of pressure on natural, economic and social systems:-

- availability of fresh water
- regional drops in food production
- rising sea levels

∴ Population displacement and possible civil conflict



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All populations are vulnerable, but some are more vulnerable than others:-

- Initial health risks vary
- Coastal regions, megacities, mountainous and polar regions particularly vulnerable
- Health effects more severe for elderly and people with infirmities



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Protecting human health is the ‘bottom line’ of climate change strategies:-

- Climate change puts at risk the protection and improvement of human health and well-being .
- Strengthening of public health needs to be a central component of adaptation to climate change.
- More sustainable policies on household energy, electricity generation, agriculture, nutrition, transport and built environment could bring significant reductions in managing burdens of risk. Effective response across society; individuals, health sector, planning interests, community and political leads.

Wales can expect:-



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- hotter average temperatures
- increase in number of hot and dry summers
- increase in number of hot days
- milder winters and reduction in frosts and snowfall
- increase in winter rainfall
- rising sea levels
- more extreme weather.



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Possible local advantages



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- longer growing seasons
- less cold weather transport disruption
- reduced demand for winter heating
- enhanced opportunities for tourism in summer, **but** wetter, stormier weather at all times of year
- extreme weather events could increase – loss of life, injury and mass population dislocation.

Responding to climate change in Wales:-



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- emission reduction and adaptation
- mixture of both approaches are necessary
- emission reduction (mitigation) – actions to reduce greenhouse gas emissions
- adaptation - adjustment of behaviours to limit harm, and exploit beneficial opportunities
- linkages between both are recognised, and outcomes to benefit both are pursued.



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Emission reduction is the only strategy that can reduce impact on a global scale

- requires international cooperation
- takes a long time because of inertia of climate system

One Wales



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Our ambition is no less than to transform Wales into a self-confident, prosperous, healthy nation and society, which is fair to all
(One Wales, Chapter 1)

A Healthy Future - we are passionate about delivering significant improvements in the health of all the people of Wales
(One Wales, Chapter 3)



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- **One Wales Commitment** – Welsh Assembly Government – tackling and influencing others to address the causes and effects in Wales.
- Welsh Assembly Government aims to ‘achieve annual carbon reduction-equivalent emissions of 3% per year by 2011 in areas of devolved competence.’

Adaptation



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- Limited to specific climate-related risks
- Awareness to improve resilience

Climate Change Strategy for Wales



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- Adaptation Delivery Plan
- Delivery Plan for Emission reduction

October 2010

Climate Change Strategy for Wales



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- Helping people, communities and organisations make more climate-friendly choices
- Leading by example and building climate change into policies including planning
- Improving energy efficiency in business, housing, public and third sector
- Focusing in areas where Wales can make a contribution through resources, land management or economic structure.
- Ensuring the approach to technology, innovation and green jobs means that Wales benefits from business and research.

Climate Change and Health Working Group



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- Produce a response, setting out the health contributions to Climate Change strategy
- Covers a wide range of weather-related issues – heat, skin cancer, flooding, food, water, air quality etc
- Response from Health and Social services
- Progress on implementation will be subject of quarterly monitoring

Health Impacts of Adaptation Action



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Direct Impacts

- **Rising temperatures**

- Improve urban planning and architecture, energy and transport
- measures to avoid stress and dehydration
- improved building design
- shading through planning mechanisms to green the environment



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• **Flooding and Windstorms**

- Build health protection into planning
- Awareness raising
- Implementation of flood health risk assessments

• **Ultraviolet radiation exposure**

- Campaigns to limit potential exposure to UVR
- Adequate Vitamin D status



Indirect Impacts



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- **Vector-borne diseases**

- development of surveillance system for monitoring, distribution and abundance

- **Food-borne diseases**

- improve microbiological standards of food
- producer and public warnings about risk.

- **Water-borne diseases**

- improve risk management processes
- improve monitoring eg algal blooms and legionella.



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Allergic Disease

- Further clarification and research
- pollen forecasting

Air Pollution

- Air quality standards
- Heat wave and pollen monitoring
- Warnings to vulnerable population

Wider public health issues



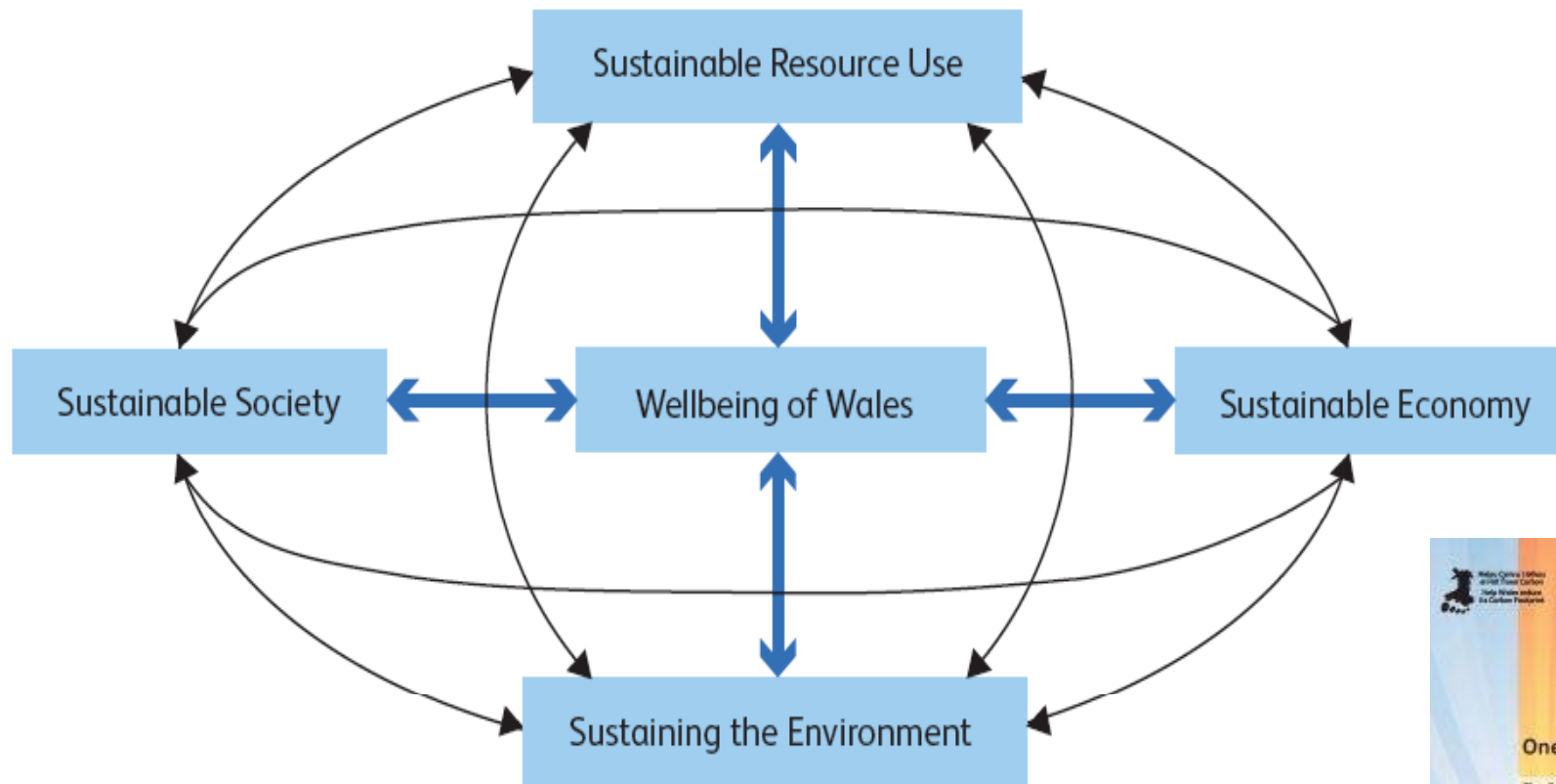
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- Built environment and planning
- Vulnerable population groups
- Environmental and Health Inequalities
- Energy and Transport
- Ancillary public health benefits
- Food and agriculture
- Insurance

One Wales, One Planet



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What it means



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In Wales, sustainable development means enhancing the economic, social and environmental wellbeing of people and communities, achieving a better quality of life for our own and future generations:

One Wales: One Planet, a new Sustainable Development Scheme for Wales, 22 May 2009

Stakeholder Adaptation Action



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1. Public Health Stakeholders
2. NHS organisations
3. Local Authorities

Public Health Stakeholders



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- Lead in mainstreaming climate change
- Co-ordinating policy
- Promoting collaborative working
- Assessing health impacts

Local Authorities (1)



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- Important role in both mitigation and adaptation – direct activities and ability to influence
- Partners in Health, Social Care and Wellbeing
- Working with communities
- Raising of awareness at corporate level
- Ensuring climate change features in sustainable development strategies

Local Authorities (2)



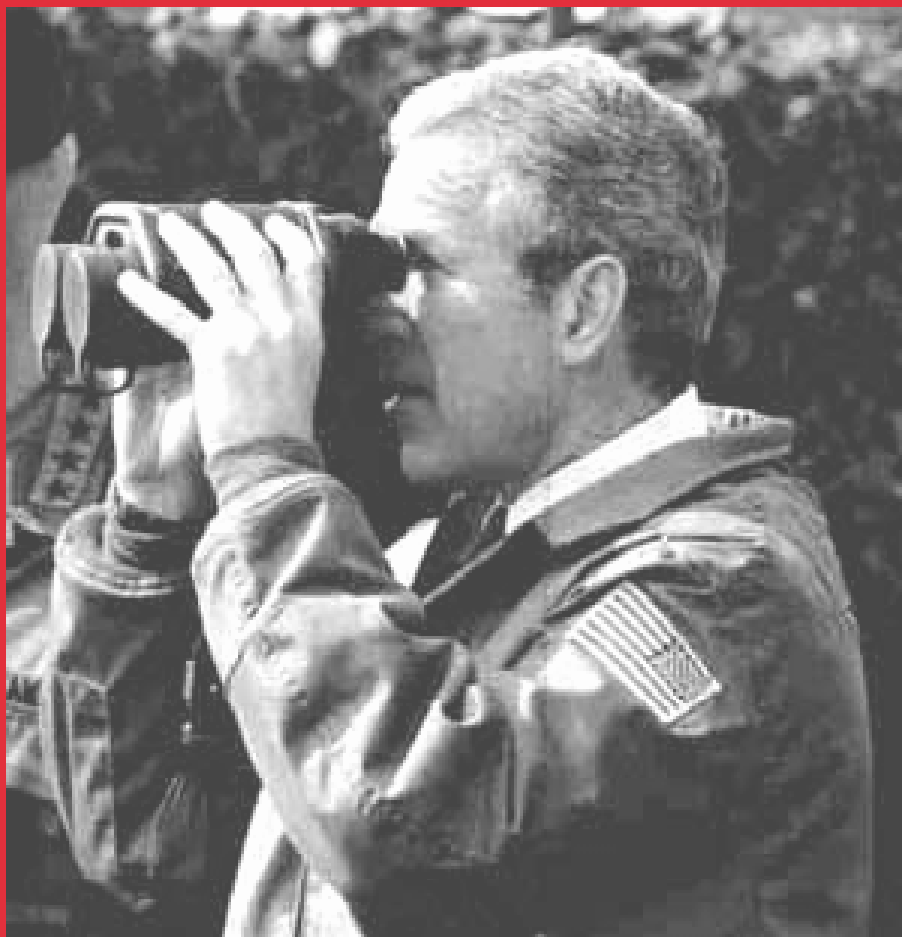
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- Community strategies include climate change
- Mainstreaming into other LA strategies
- Linking with Carbon Trust
- Councils for Climate Protection guidance
- Seek help and advice from Climate Change Programmes
- Inclusion in planning of development decisions.

Need to Walk the Walk as well as Talk the Talk



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Link to Heatwave Plan

- <http://wales.gov.uk/topics/health/protection/environmental/publications/heatwave/?lang=en>



Diolch yn fawr



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Thank you very much



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