Climate Change: 
*Business Risk and Reward*

*Sue Christie*

[www.climate northernireland.org.uk](http://www.climate northernireland.org.uk)
• Intersectoral network
• Increase understanding of the impacts of climate change in Northern Ireland and promote action to address climate change across all sectors of society.
• Providing Information
• Supporting Forums
• Promoting Action
Mitigation – reducing greenhouse gas emissions to limit atmospheric changes

Adaptation – dealing with the impacts of changing climate and weather
Adaptation

- **Physical impacts** – flooding, temperature, sea level rise
- **Economic impacts** – prices of resources and energy
- **Social impacts** – starvation, refugees, wars, immigration
- **Availability and security** of supplies/support/energy
- **Policy and legal** requirements (purchasing, insurance, risk)
Mitigation AND Adaptation

- Conserving natural habitat stores/absorbs carbon and helps prevent flooding
- Good building design reduces energy use and risks from storms
- Reducing water use saves energy & money and prepares for droughts/ price rises
- Sourcing products locally saves energy, costs and reduces risks from transport disruption
• Critical infrastructure
  • Called critical for a reason...
  • Inter-related and interdependent
  • Possible cascading failures
• Building now for 50 – 100 years; real ‘lifetime’ costings/preparation
• Pay to prevent/insure or pay far more to repair and reinstate; damages
‘2°C represents the threshold between dangerous and extremely dangerous, rather than between acceptable and dangerous climate change.’ (Smith et al, 2009).
Potential tipping elements
(based on Lenton, 2008)
To avoid 4° increase

K. Anderson 2013

- Peak ~2010
- Reduction ∝ % p.a.

- Non-annex 1
- Annex 1
$30 Billion
2012 West African Drought Threatening 18 Million People
Recent Challenging Extremes

Flooding Nov 2009

Drying June 2010

Freezing Dec 2010

Burning May 2011

7 mths

5 mths
Risks

- Erratic weather – direct impacts
- Infrastructural failure
- Supply chain interruption
- Unpredictability
- Insurance and financial costs/availability
- Health and Safety of employees/clients
2010 ‘Freeze-Thaw’

- Businesses without water for several days due to burst mains
- Severe snow had impact upon transport and resulted in lost work days
- Many shops had to close for a number of days prior around key Christmas shopping
- Burst pipes in NI accounted for 6,400 insurance claims amounting to £40 million
Rewards

• ‘Be Prepared’ – it costs less!
• Early adopters’ benefits accrue from day 1
• Meet legal and tendering requirements ‘in advance’ – new markets
• Avoid costs of damage/failure
• Avoid human costs
• Decreased insurance and financial costs
• New technology and market opportunities