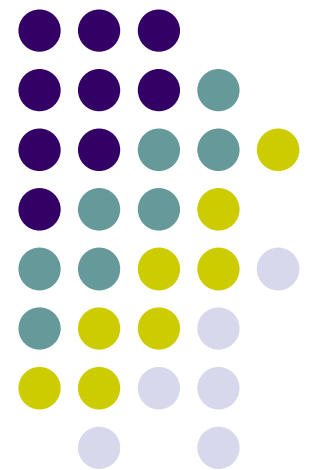


The Evolution of Climate Change Policy

ESRC Seminar 3: Climate change in the Scottish uplands

Vanessa Kind
Research Manager

Scotland and Northern Ireland Forum for Environmental Research



Observed global mean surface temperature (°C) 1860 to 2000

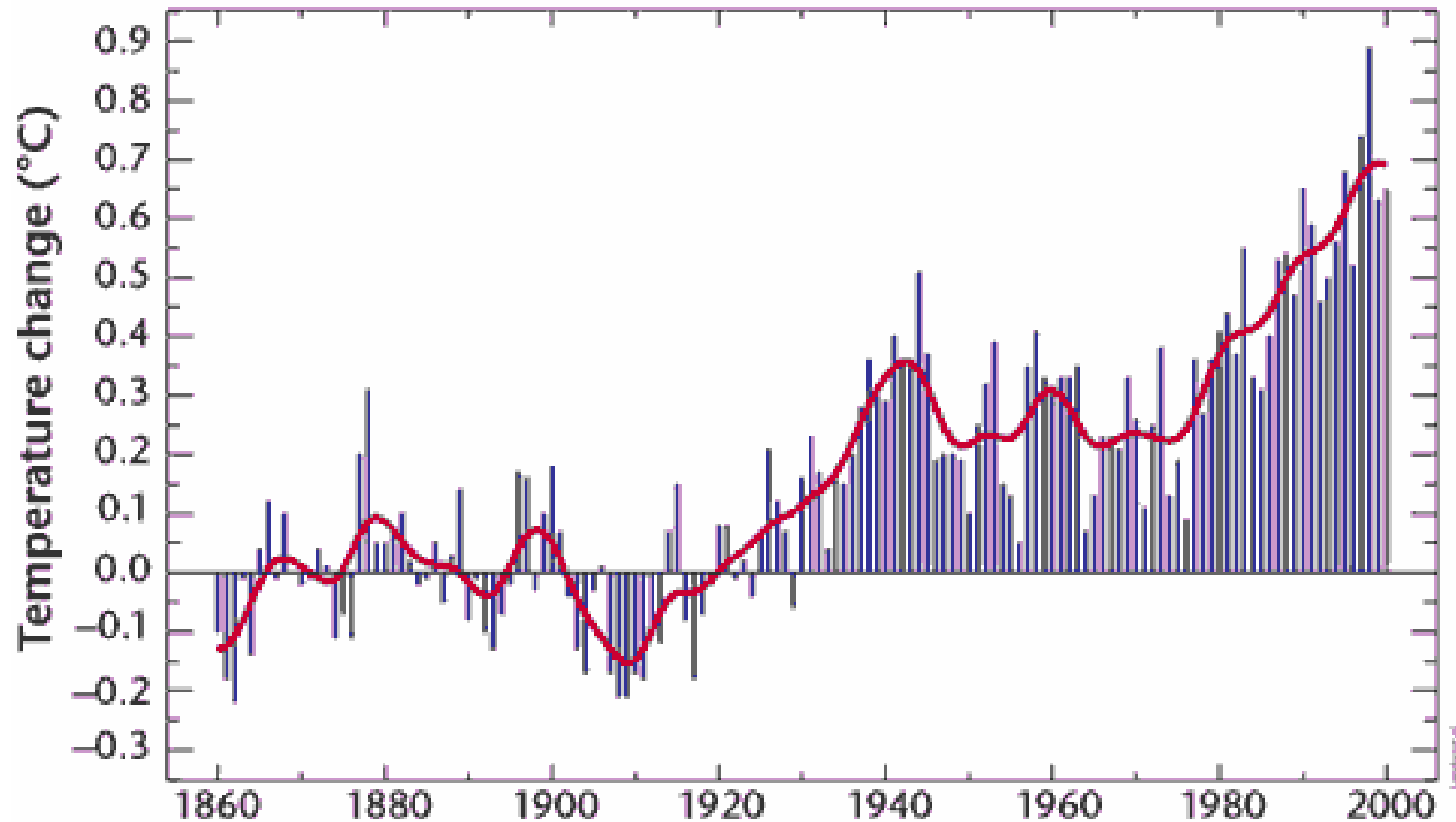
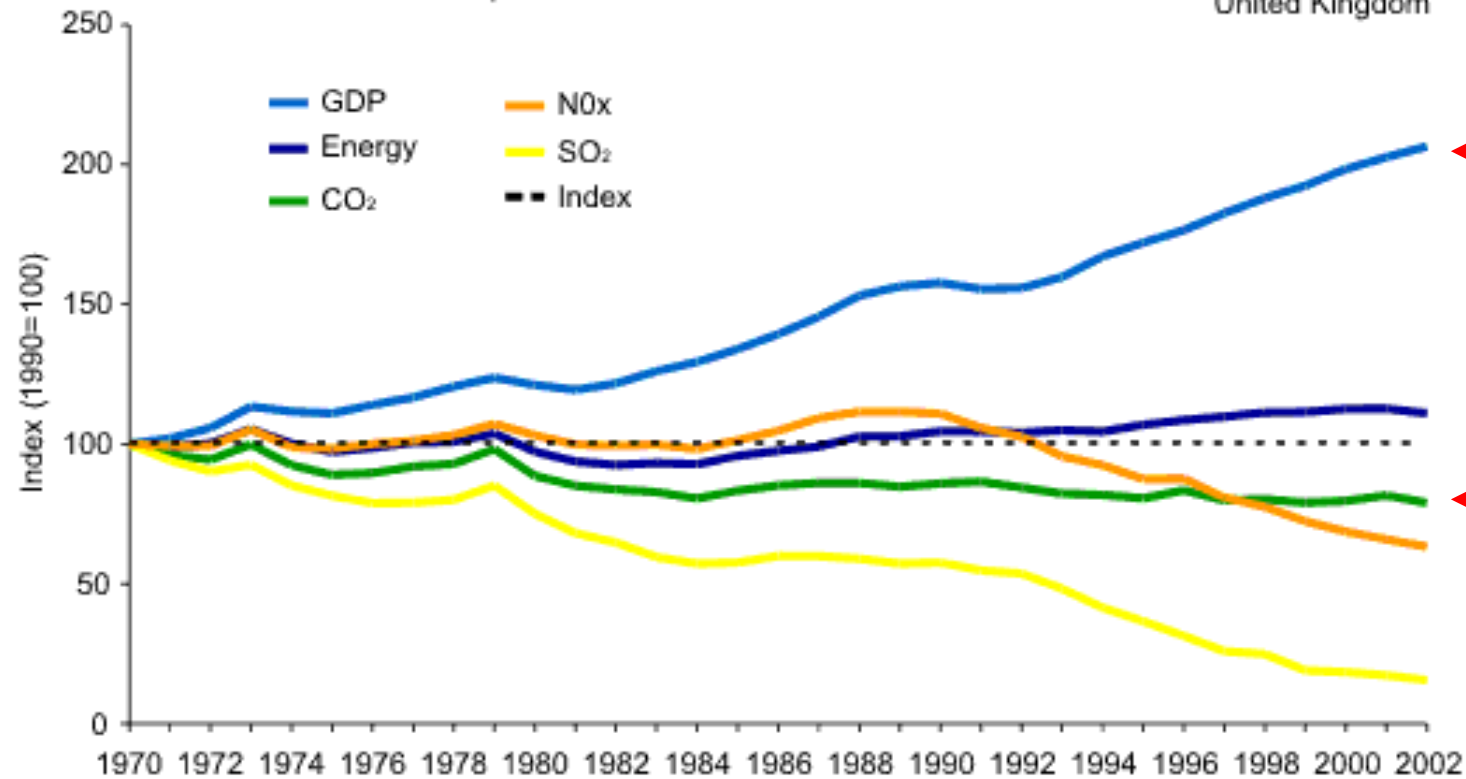
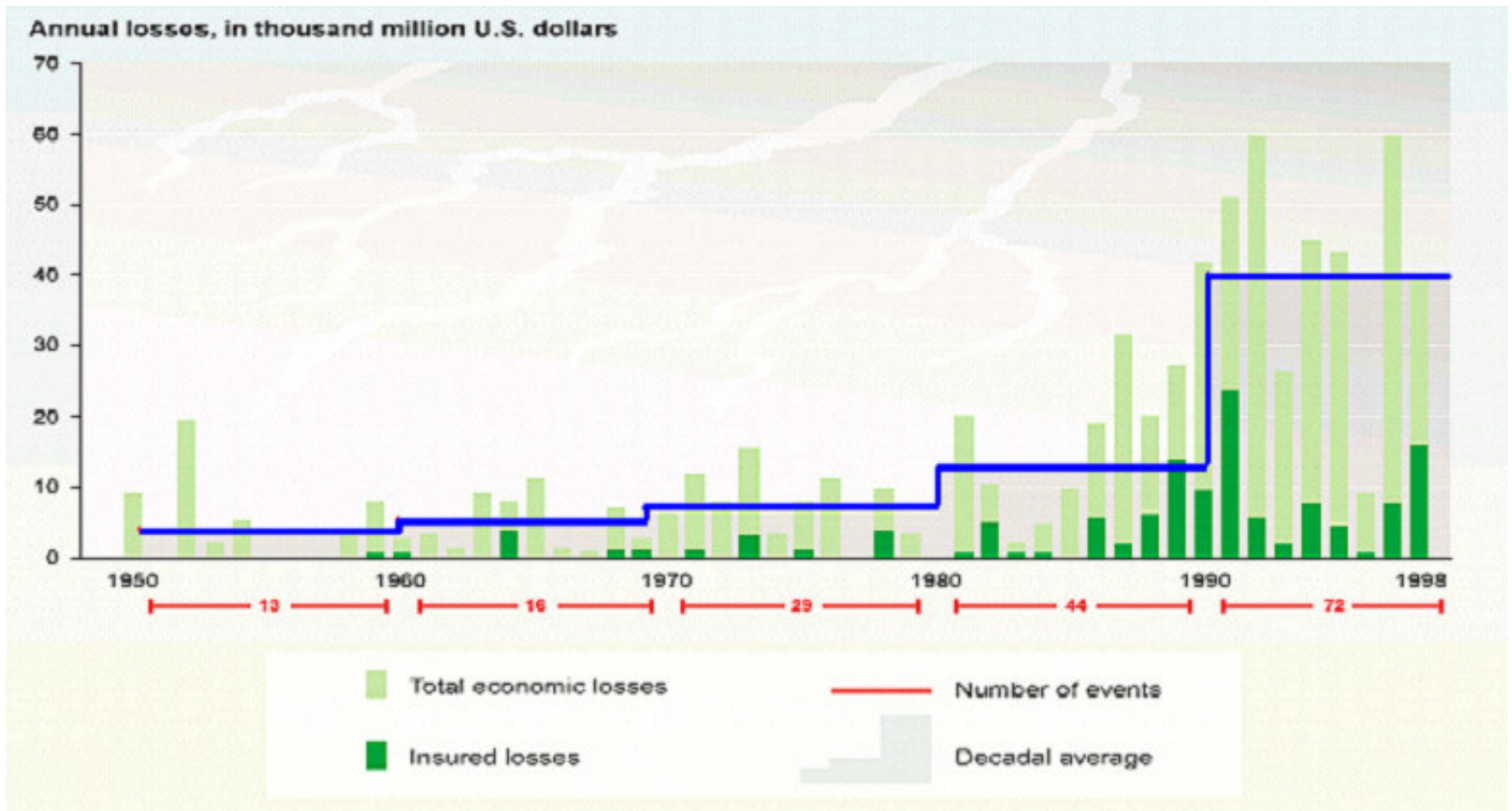




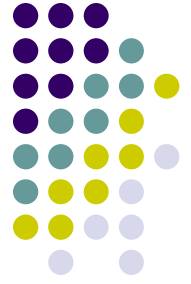
Figure 6: Decoupling economic growth from energy consumption and environmental impacts: 1970-2002



IPCC - Global Costs of Extreme Weather Events (Inflation Adjusted)



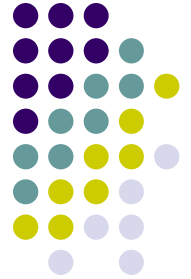
So,



- We know that climate change is happening and we have something to do with it
- We are quite sure that climate change is bad for business
- We are just beginning to scratch the surface of how climate change will impact us

Climate Change Policy

Two Responses



- **Mitigation**

- Involves actions to prevent future changes to climate



- **Adaptation**

- Involves adjustments by society to minimise the adverse impacts of climate change and to take advantage of opportunities that may arise



UK Climate Change Policy



- UK and Scottish Climate Change Programmes launched in 2000
- Kyoto Protocol (141 countries, 5.2%↓ by 2012)
 - UK commitment is 12% by 2008-12
 - UK government domestic goal is 20% by 2010

UK Mitigation Policy Measures



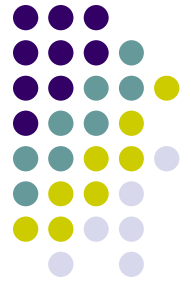
Policy Name	Type	Sector	Year
Bio-energy Infrastructure Scheme	Fiscal	Energy Production	2004
Clear Skies - Household and Small Community Renewable Energy Fund	Fiscal	Energy Production	2003
Energy White Paper	Policy and Outreach	Framework Policy	2003
Bio-energy Capital Grants Scheme	Fiscal	Energy Production	2002
		Industry	
Company Car Tax Reform	Fiscal	Transport	2002
Demonstration and Testing of Wave and Tidal Technologies	Fiscal	Energy Production	2002
Large-scale Field Trial: Building Integrated PV for Public Buildings	Fiscal	Buildings	2002
		Energy Production	
Major PV Demonstration Programme	Fiscal	Energy Production	2002
New and Renewable Research and Development Energy Programme	R&D	Energy Production	2002
Offshore Wind Capital Grants Scheme	Fiscal	Energy Production	2002
Renewables Obligation Order	Regulatory Instruments	Energy Production	2002
	Tradable Permits		
UK Emissions Trading Scheme	Tradable Permits	Framework Policy	2002
The Carbon Trust	Fiscal	Framework Policy	2001
	Policy and Outreach		
Climate Change Agreements	Fiscal	Industry	2001
	Voluntary Agreements		

UK Mitigation Policies cont'd



Policy Name	Type	Sector	Year
Climate Change Levy	Fiscal	Energy Production	2001
	Regulatory Instruments	Industry	
Climate Change Project Office	Policy and Outreach	Framework Policy	2001
	Tradable Permits		
Community Energy Programme	Fiscal	Buildings	2001
Domestic Photovoltaic (PV) System Field Trial	Fiscal	Buildings	2001
		Energy Production	
Energy Efficiency Commitment	Fiscal	Buildings	2001
	Regulatory Instruments	Energy Production	
Enhanced Capital Allowances (ECA) - Energy Technology List	Fiscal	Framework Policy	2001
Vehicle Excise Duty (VED)	Fiscal	Transport	2001
10 Year Transport Plan	Policy and Outreach	Transport	2000
Energy Labelling for new Buildings	Regulatory Instruments	Buildings	2000
		Industry	
UK Climate Change Programme	Policy and Outreach	Framework Policy	2000
	Regulatory Instruments		

UK Adaptation Policy



- Development of adaptation strategies, including amended policies and measures
- Advice and guidance for public and private sector through UK Climate Impacts Programme
- Research: assessment of global and regional impacts, including work with developing countries



Examples of Adaptation across UK Government

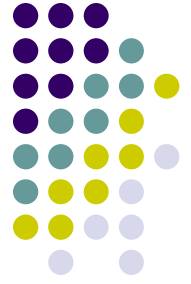


- Development of Adaptation Policy Framework
- Departmental Audits
- Coastal Defences and Flood Management
- Water resources: 25-year plans taking account of climate change
- Awareness-raising of summer health problems



	Mitigation	Adaptation
Temporal	Measures today, evidence in several decades	Measures today, benefits short term
Spatial	Global Benefits	Local to Regional Benefits
Equity	Most Developed Countries are main GHG producers	Least Developed Countries are considered most vulnerable
Policy Responsibility	Mainly Energy, Transport	Variety

Adaptation Responses



- Tolerate the loss
- Spread / Share the loss
- **Change the activity**
- **Prevent the loss**



Precaution
Sustainable Development

What is the best policy response?



The question is no longer about mitigation **or** adaptation, but how to develop a simultaneous sustainable response to climate change.

- Sustainable Responses

- e.g. planting trees in urban areas

carbon sink

summer heat stress reduction

Research From Policy to Implementation



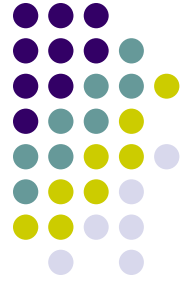
- Climate Change Policy is based largely on scientific research
- Implementation of Policy is scientific, economic and social

SNIFFER Climate Change Work



- Initiated August 2004
- Current Focus on Adaptation
 - Business Risks of Climate Change to Public Sector Organisations in Scotland
 - Climate Change Patterns across Scotland
 - Partnership Development
 - Survey of Climate Change activities at Local Government Level
 - Update of Climate Change Impacts upon Northern Ireland

Opportunities for Policy / Research Collaboration



- Socio-economic research to aid implementation
- Better understanding of impacts at the local level
- Best practice in the context of precaution and sustainable development