



**Union of
Environmental
Scientists of Greece**

UNEP FI Workshop, 11th October 2007

*E.U. Environmental Regulations – Risk or
Opportunity for the Finance Sector?*

***Climate change and the EU Emissions Trading Scheme
– What does it mean for the finance sector***

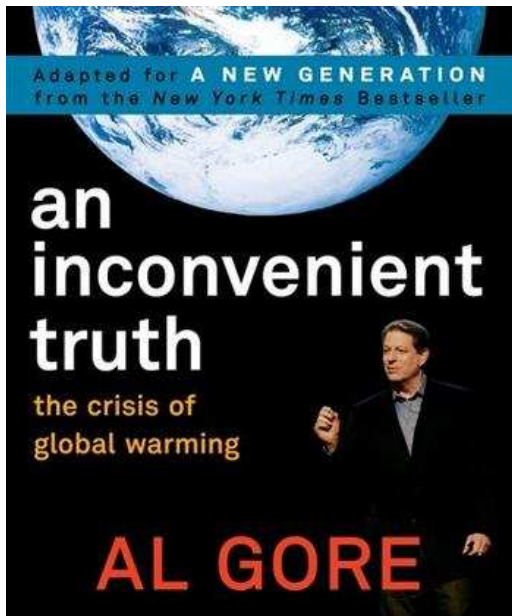
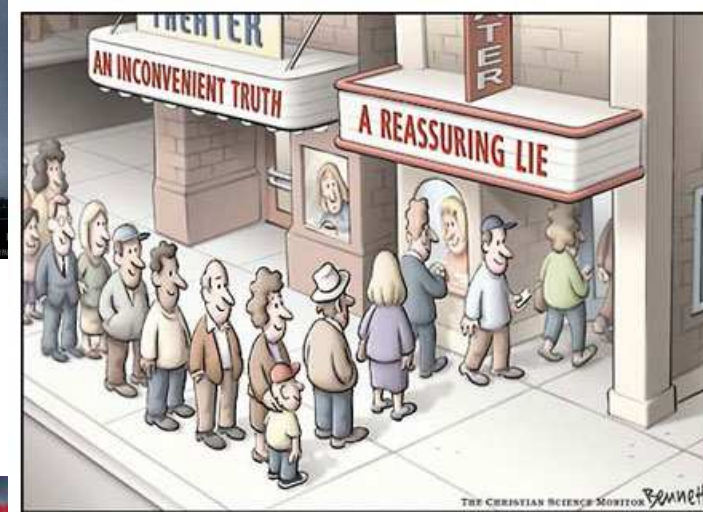
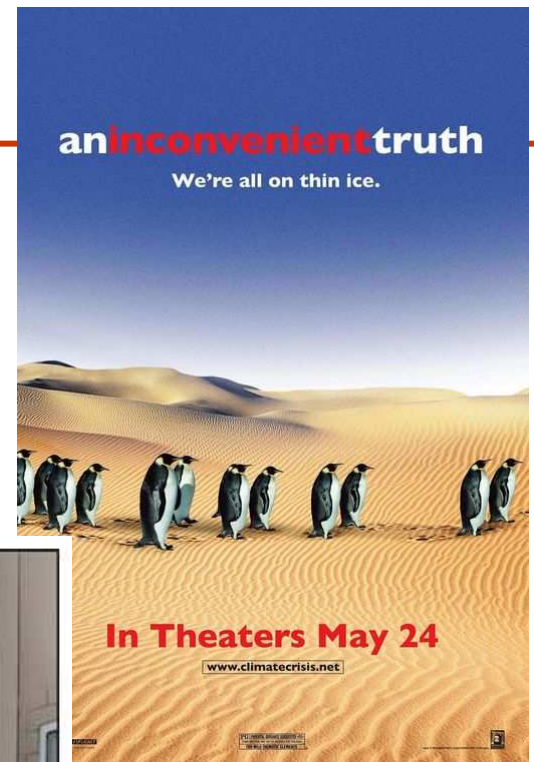
Fotis Kourmousis

Environmental Scientist

Special Secretary of the Board

Union of Environmental Scientists of Greece

An inconvenient truth... about global warming



Global environmental problems

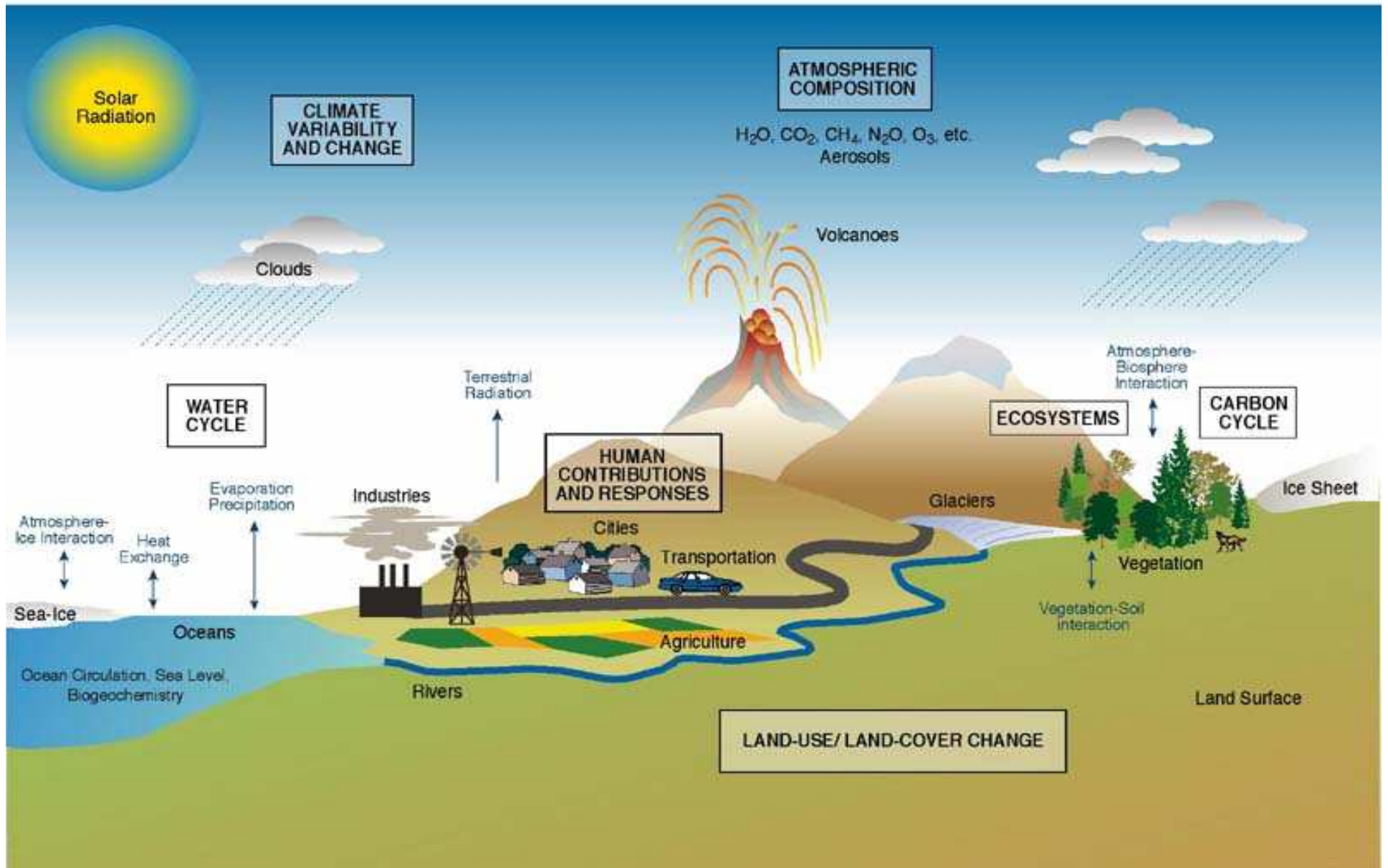
- **Global warming – greenhouse effect – climate change**
- Ozone layer depletion – ozone hole phenomenon
- Acid rain
- Biodiversity – species extinction
- Tropical deforestation
- Pole-ice melting
- Desertification
- Ground pollution
- Eutrophication
- Natural resources depletion
- Waste management
- Radiation
- Energy sources depletion
- Genetic Modified Food – GMOs
- Drinking water scarcity

think globally

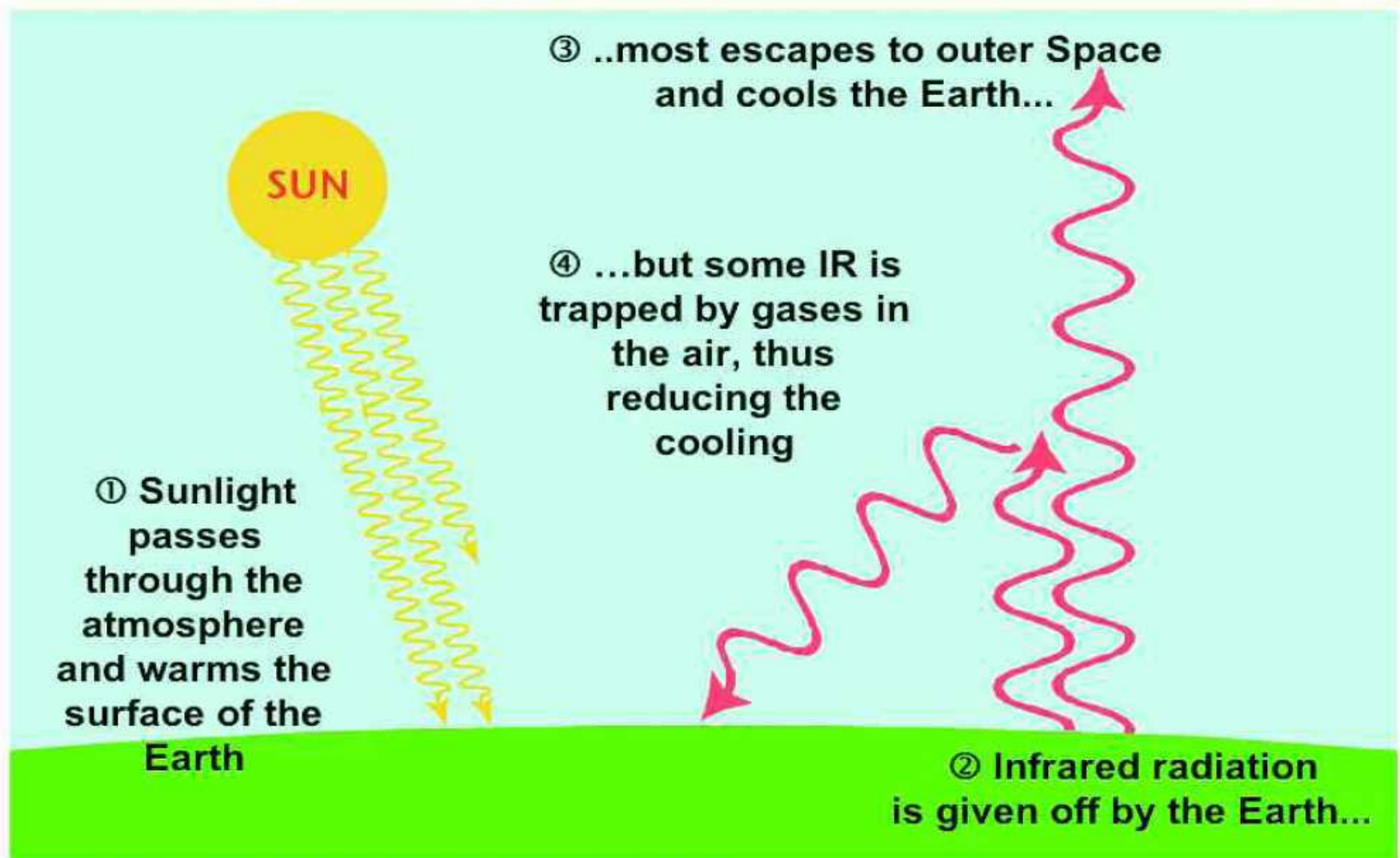
act locally



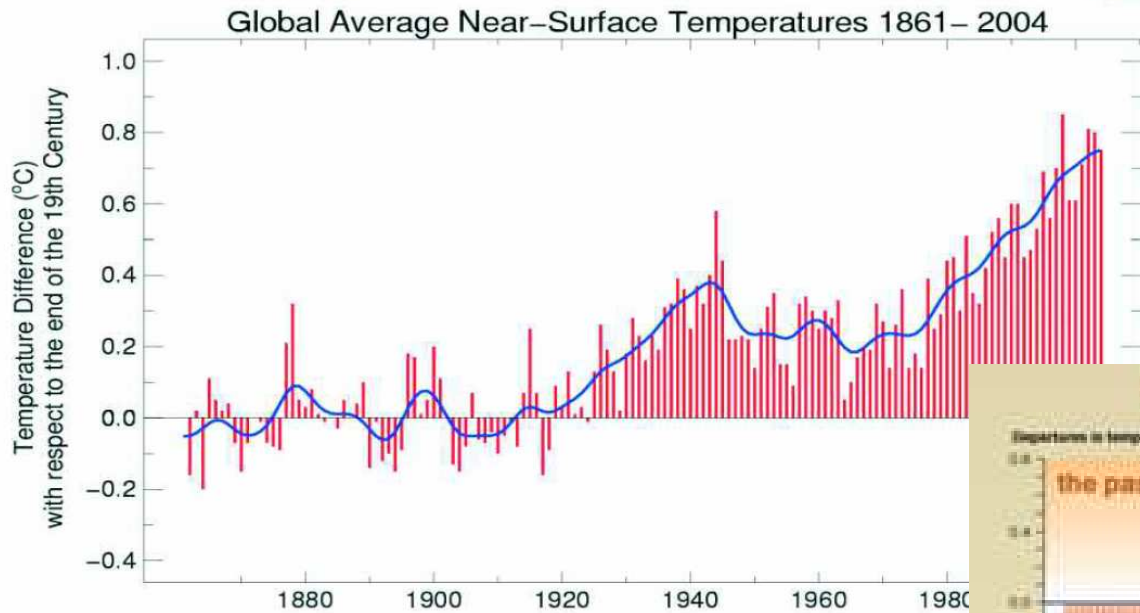
The Climate System



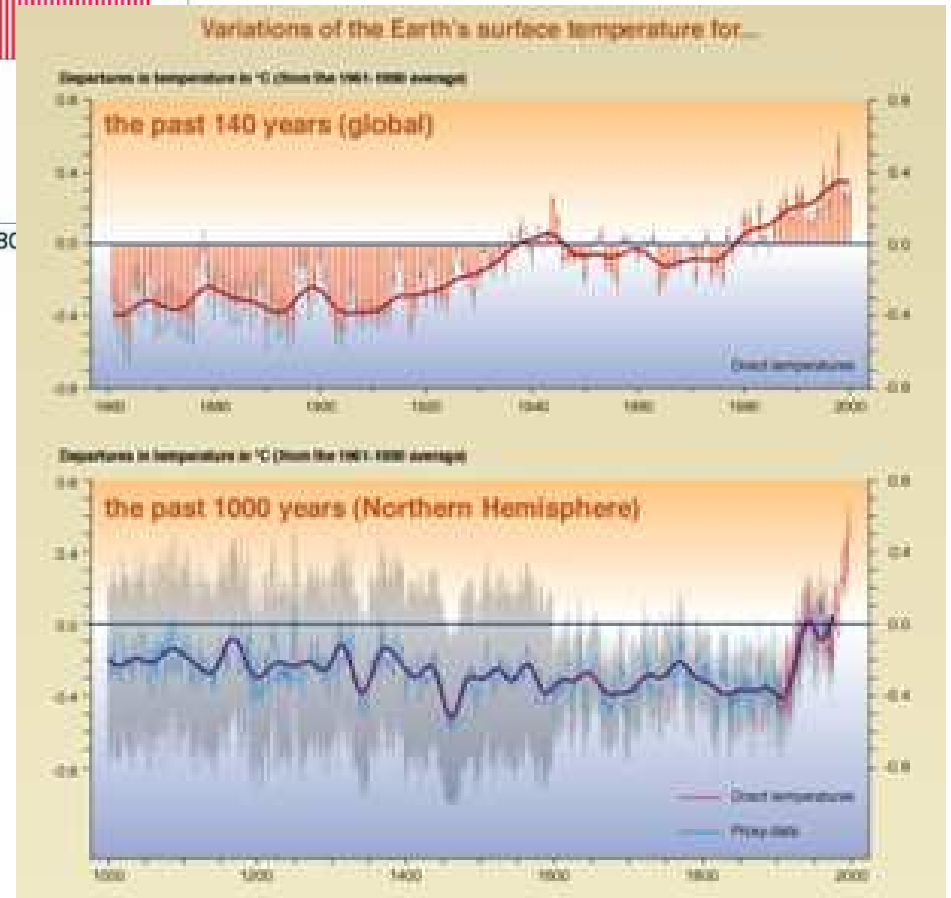
Green-house effect in the atmosphere



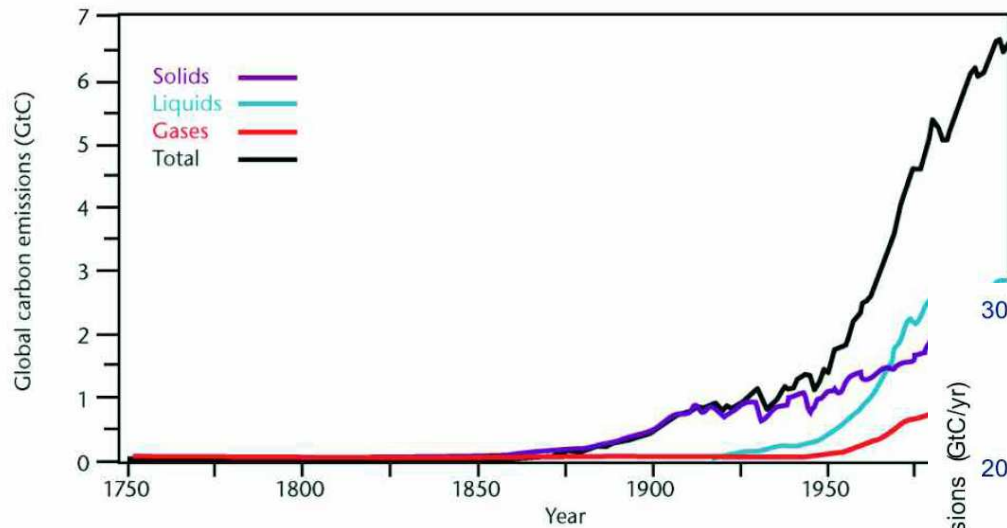
Global warming since 1975



Hadley Centre for Climate Prediction and Research

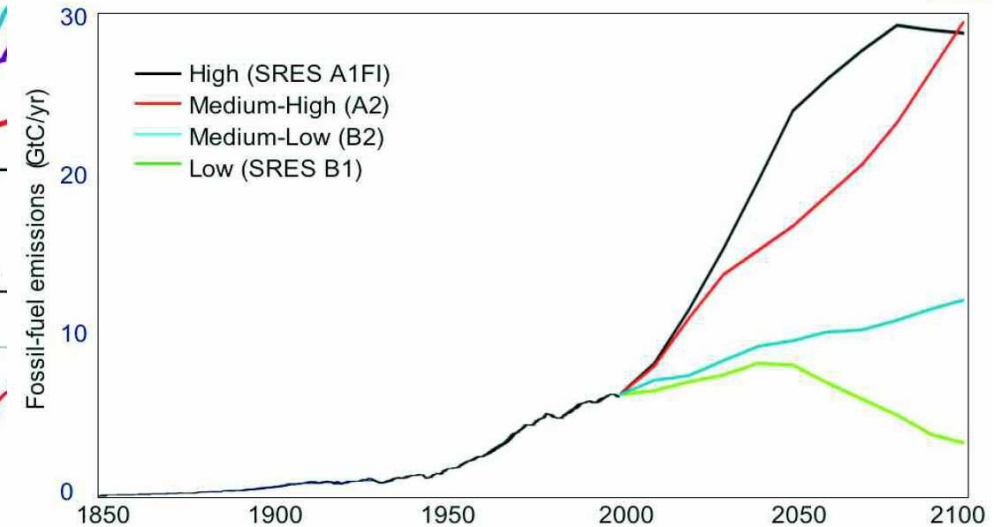
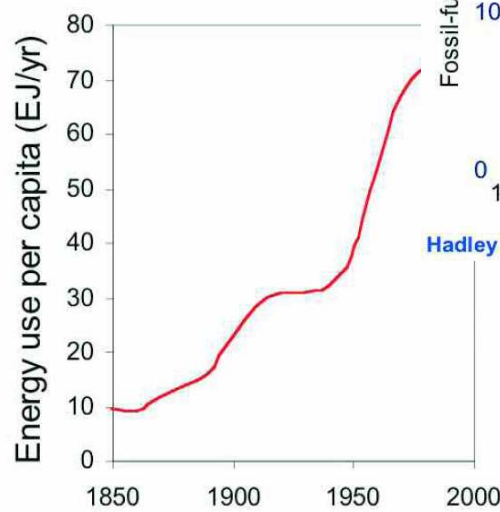
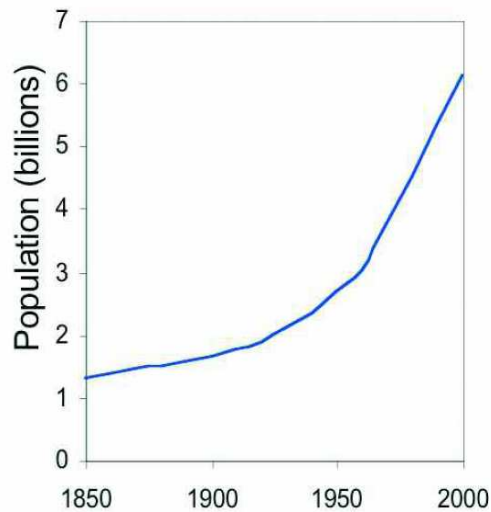


Global warming cause: CO2



Hadley Centre for Climate Prediction and Research

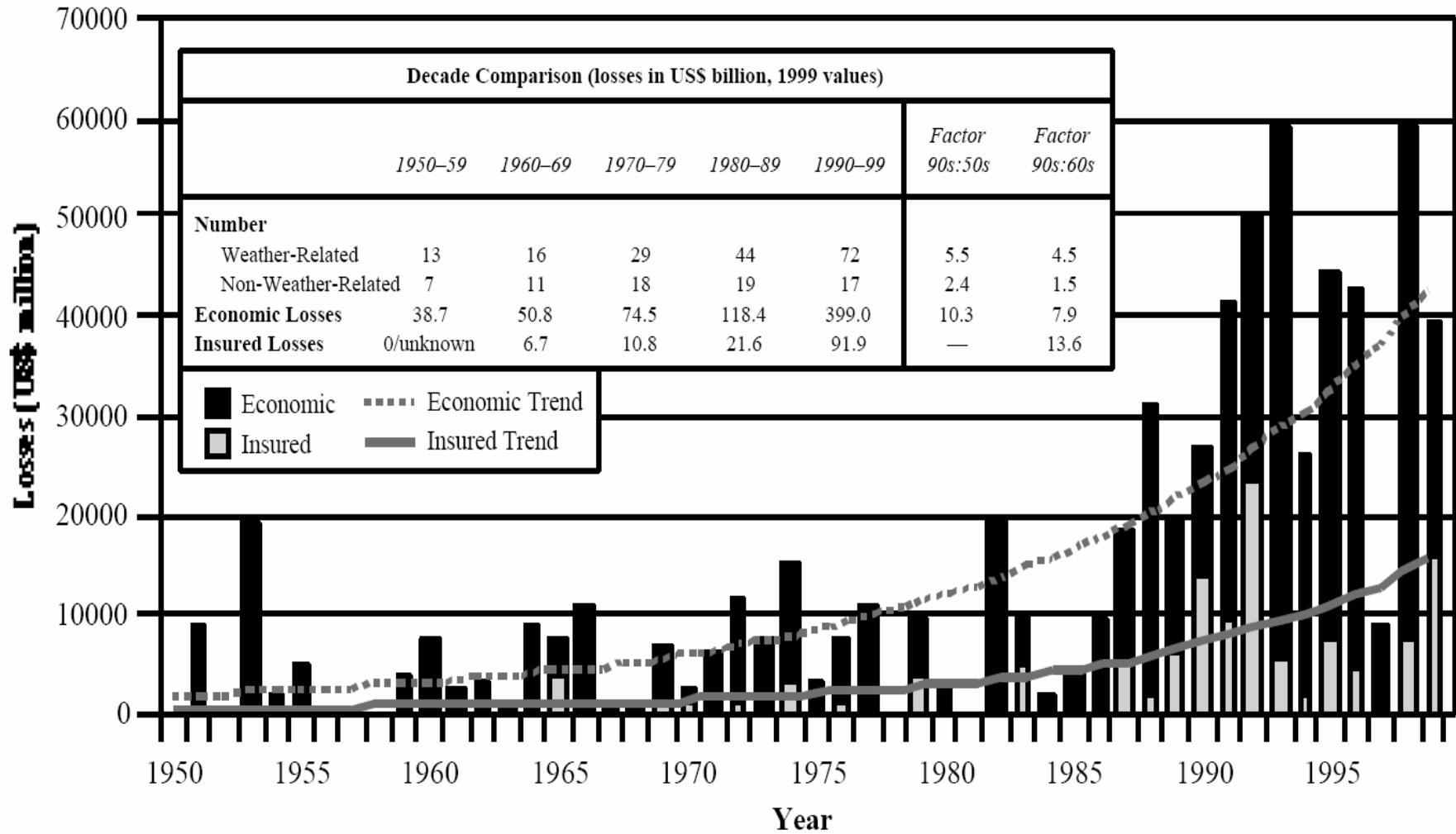
Source: CDIAC, ORNL



Hadley Centre for Climate Prediction and Research

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Global warming costs: weather catastrophes



Global warming impacts to the financial sector

Direct

- Own activities
- Global economic environment:
 - Exposure to commodities markets
 - Private/Corporate loans secured by property
 - Investments in sensitive sectors

Indirect

- Clients exposure:
 - Operations/Consumption
 - Financial circumstances



Climate change environmental legislation

Framework

- Kyoto Protocol
- Overall goal:
 - To decrease by 5,2% the greenhouse gas emissions until 2012, in relation to the 1990 levels
- Specific targets for 175 countries:
 - excluding USA and Australia (*have not ratified*)
 - some countries are allowed to stabilise or even increase their emissions



European environmental legislation

Principles

- Sustainable development
- Precautionary principle: damage must be rectified at source
- Preventive action: prevention than restoration
- Principle of integration with other policies, e.g. transport
- Integrated approach (direct and **indirect** impacts)
- Information to the public
- Participation of stakeholders via public consultation
- **Polluter pays**
- Producer responsibility
- Principle of utilization (scientific & technical data)
- Best Available Techniques (BAT), BATNEEC



European environmental legislation

Framework

- 6th Environmental Action Programme 2002-2012
- Specific targets for EU Member countries
- Aim on Financial institutions:

- 3rd goal - Working with the market:

“We aim to work with the market in order to protect the environment. The financial sector can also encourage green activities through its lending and investment policies and can encourage greener financial reporting. To do this we will work with the financial sector to develop criteria for green investment.”



Emissions Trading Scheme

- Directive 87/2003 establishing a scheme for greenhouse gas emission allowance trading within the European Community

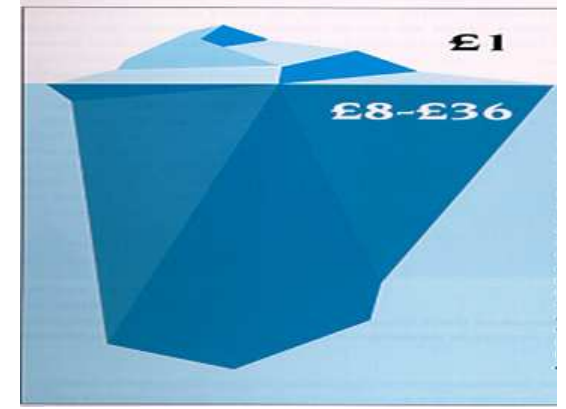
Country	Change	Country	Change	Country	Change
Austria	-13%	Greece	+25%	Luxemburg	-28%
Belgium	-7.5%	UK	-12.5%	Holland	-6%
France	0%	Ireland	+14%	Portugal	+28%
Germany	-21.5%	Spain	+15%	Sweden	+5%
Denmark	-21.5%	Italy	-6.5%	Finland	0%

- Every Member State sets emission limits (allowances) to certain polluting industries (e.g. power generation, cement production, etc)
- **Environmental stock exchange**

Environmental legislation and financial institutions

Risk...

- compliance through management of:
 - direct impacts (waste, energy, etc)
 - indirect impacts (environmental liability, environmental due diligence, etc)



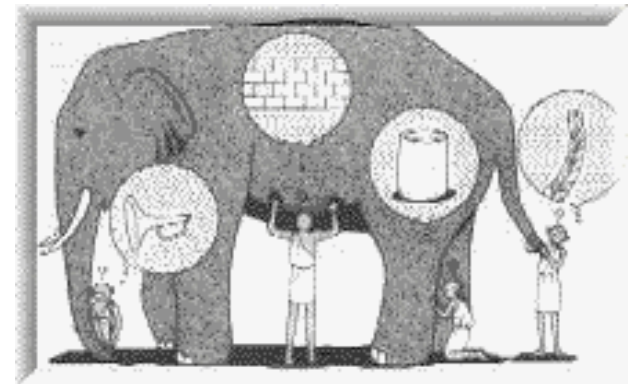
... and opportunity

- sustainable / green financing
- environmental performance and Corporate Social Responsibility (CSR)
- positive assessment by Socially Responsible Investment equity market indices (e.g. FTSE4Good, DJSI)



Opportunities

- EU subsidies:
 - financing renewable energy projects
 - financing polluting industries to integrate environmental technologies (clean tech market)
- Cost saving:
 - energy efficiency
- Attract socially responsible investments:
 - 1 trillion € for 2006, which amounts to 10-15% of all investment capitals in Europe (increase by 36% since 2002)
- Image benefits: Carbon-free certification



Environment and man

Indian wisdom

Only after the last tree is cut,

Only after the last river is poisoned,

Only after the last fish is killed,

Only then...

you will realize that you cannot eat gold



Q&A

Thank you very much for your attention!

Questions & answers

For further information:

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