Governing Sustainable Cities

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Three questions.....

- Why do we need to take sustainability seriously?
- What is so important about governance?
- How to we get from here to where we want to be?

Why do we need to take sustainability seriously?

- **Because we are <u>altruistic and responsible</u>**

  We care about global warming, our environmental footprint, 'unseen others' and as yet unborn generations

- **Because we are <u>self-interested</u>**

  We need to protect ourselves and our children

We have a rapidly growing global environmental crisis….

- Climate change
- Desertification
- Ozone layer depletion
- Melting of the polar ice caps
- Species loss
- Oceanic current changes
- Sea level rise
- Etc, etc

- We may be reaching a ***'tipping point'***
- These changes may be ***exponential***

Imagine a pond, with a lily in the middle……

……which doubles its size each day…….

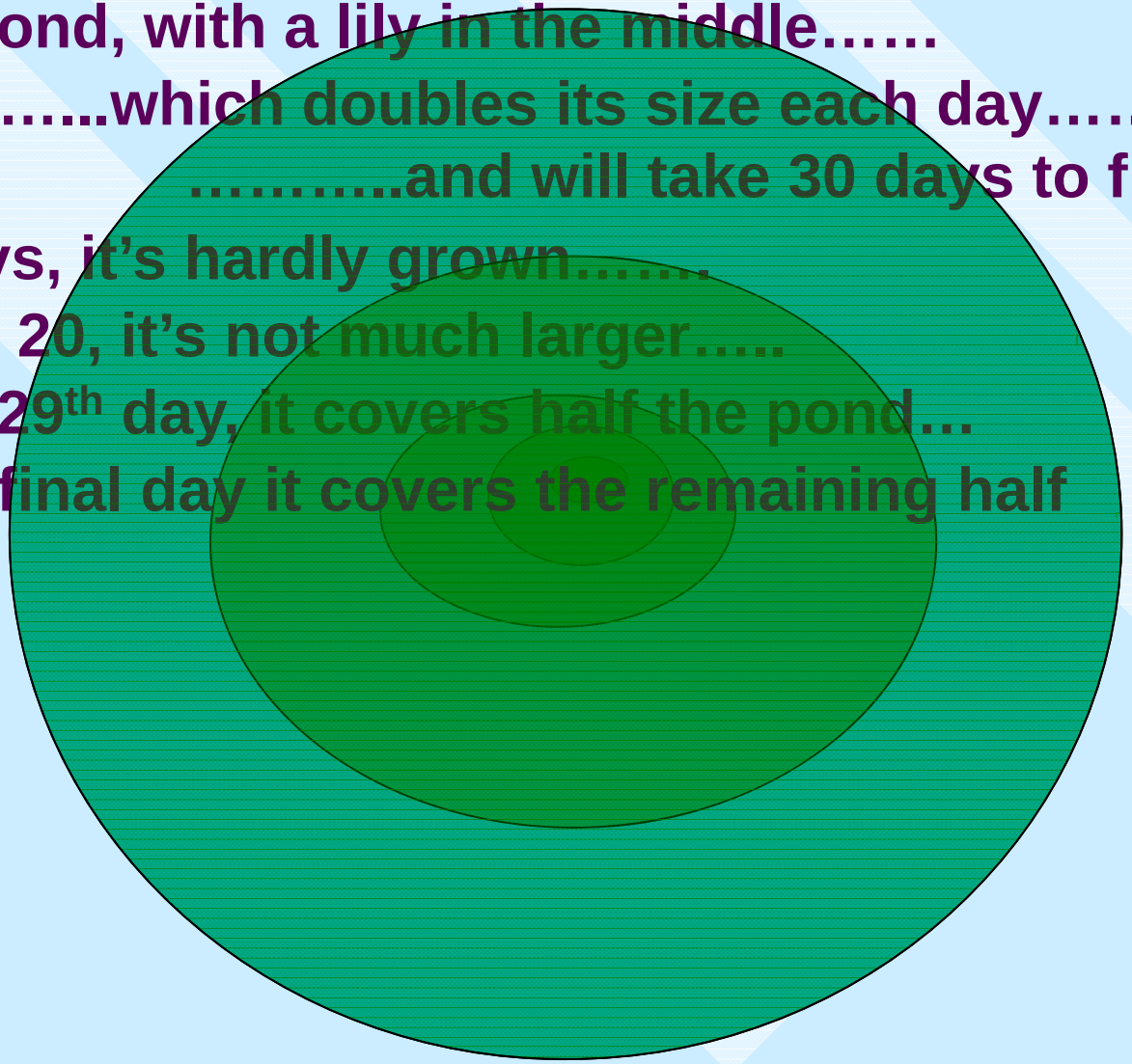
…….and will take 30 days to fill the pond.

After 10 days, it's hardly grown……..

And on Day 20, it's not much larger…..

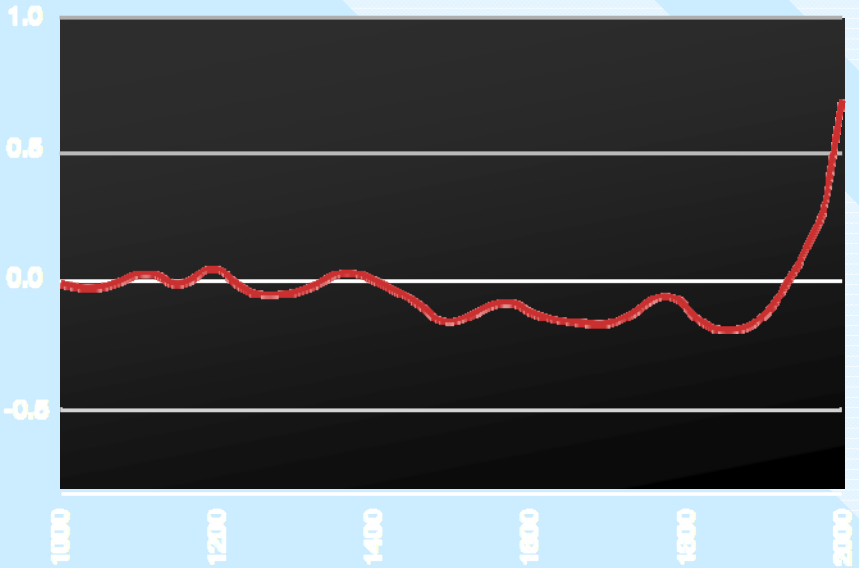
But, on the 29th day, it covers half the pond…

And on the final day it covers the remaining half

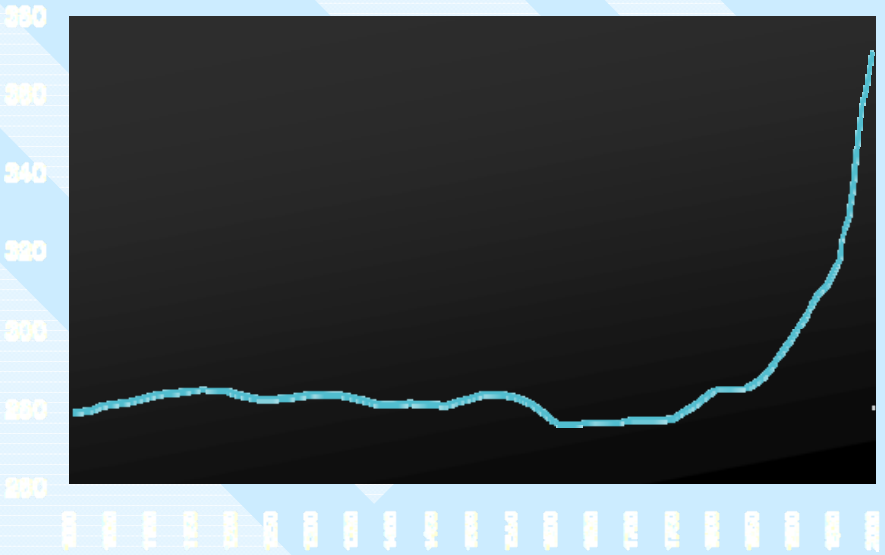


1000 Years of CO_2 and Global Warming

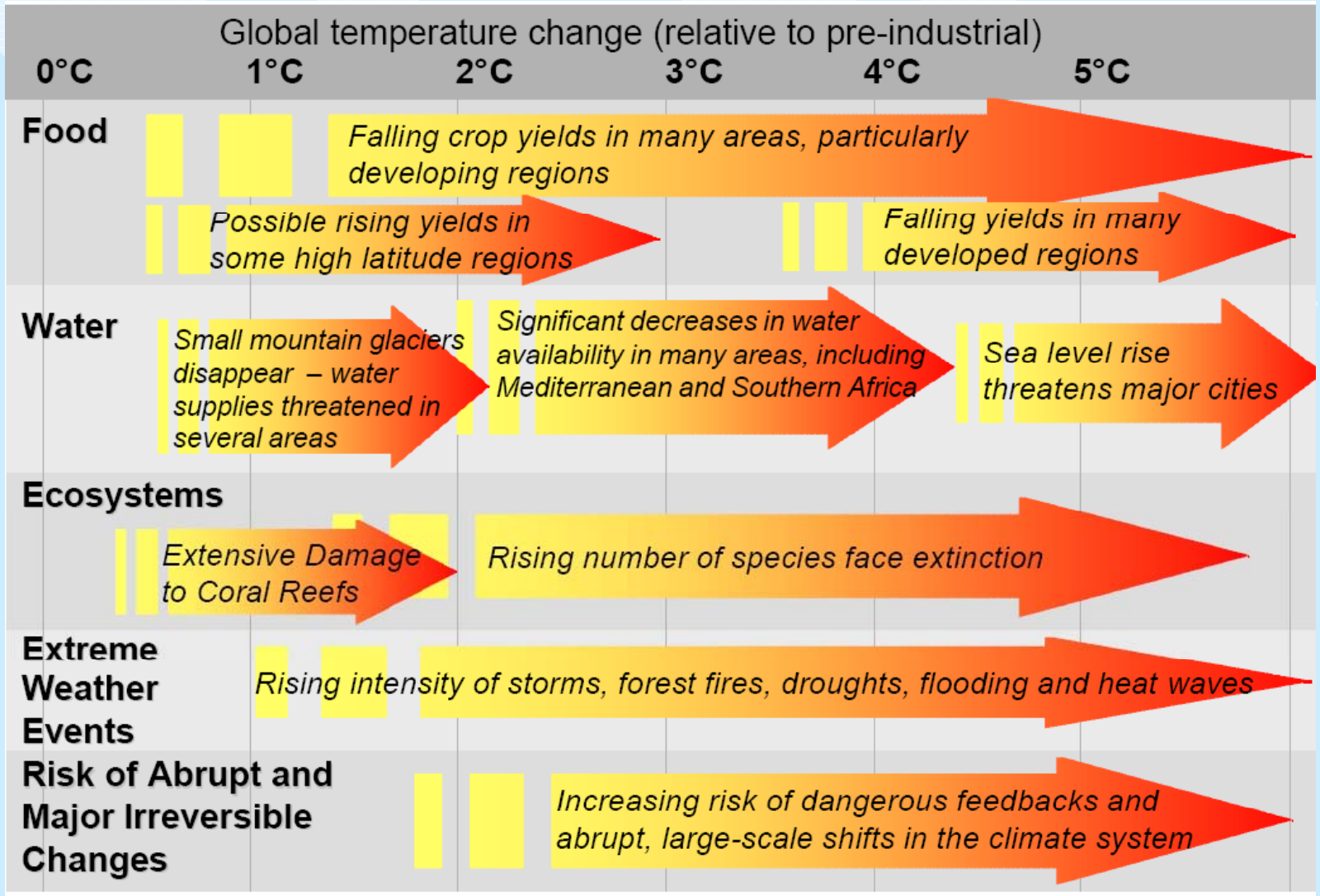
Temperature (Northern Hemisphere)



CO_2 Concentrations



Projected Impacts of Climate Change



Source: Stern Review

Shifts in global prosperity and power…

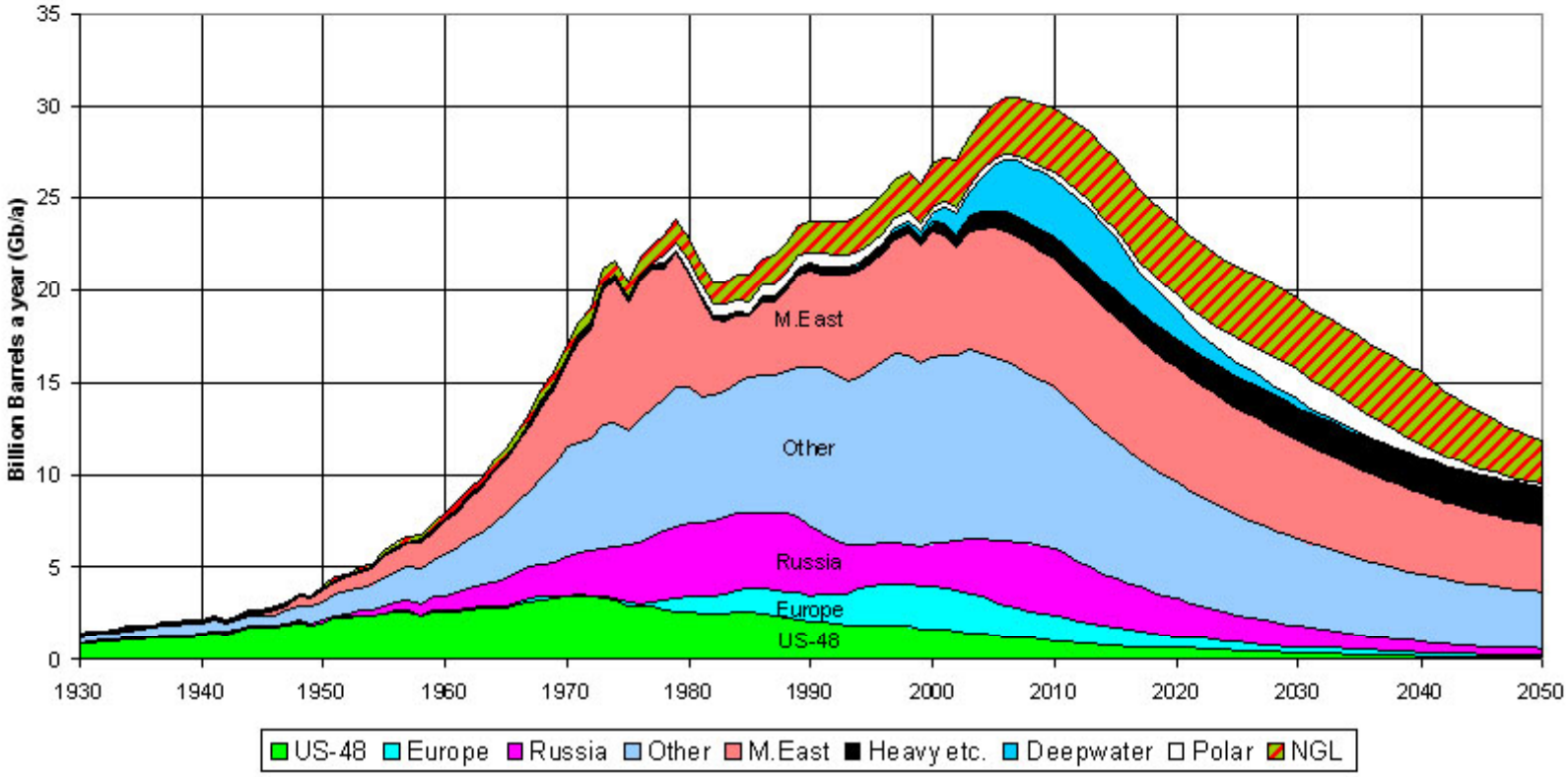
- Currently there are about 1.5 billion people in the global economy
- 65% of the human population has never made a telephone call. 1/3rd has no access to electricity
- All indications are that this is changing rapidly as a consequence of developments in China, India, Brazil and the Pacific rim, and then Africa.

- China is on track to quadruple its economy by 2020
  - If China is to drive cars at the same density as Germany, this will mean 650 million new vehicles
  - Beijing aims to encourage every citizen to eat 200 eggs per year. This = 260 billion eggs = 1.3 billion chickens = a grain crop equal to Australia's annual production
- India is predicted to replace China as the world's most populous country by 2050

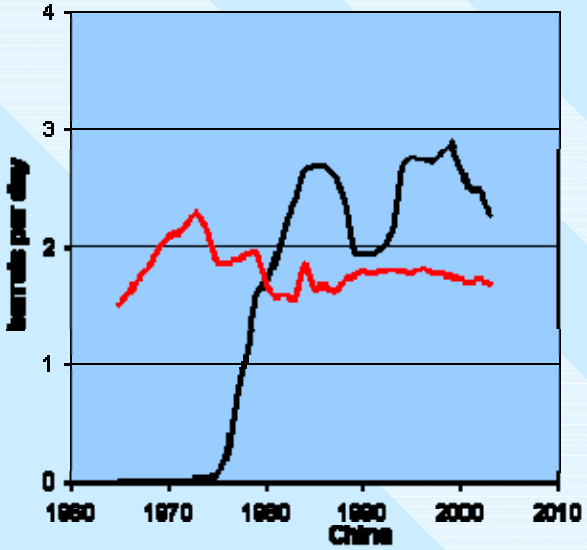
If China's economy continues to expand by 8% p.a.

- Income per capita will equal the US by 2031
- At that point, China's 1.45 billion people will consume 2/3rds of the current world grain harvest
- Paper consumption would be twice world current production
- It would use 99million barrels of oil per day.
- Current world production is 84 million barrels per day

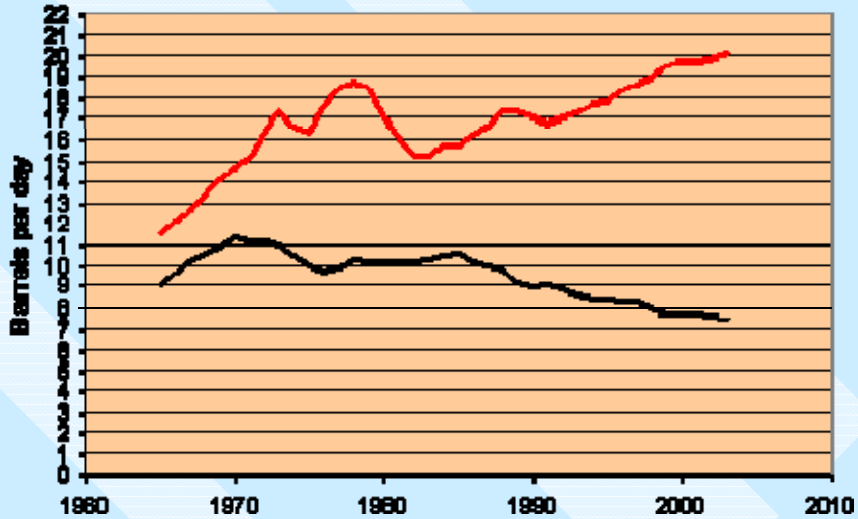
OIL AND GAS LIQUIDS
2004 Scenario



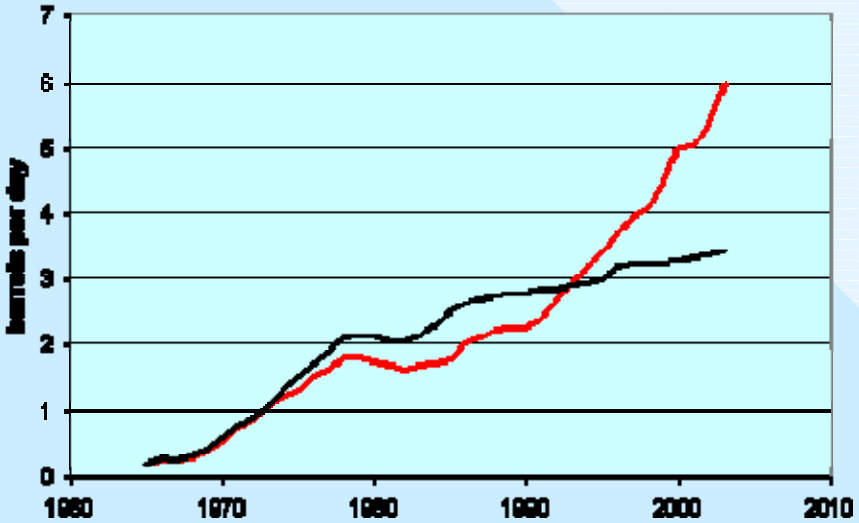
United Kingdom



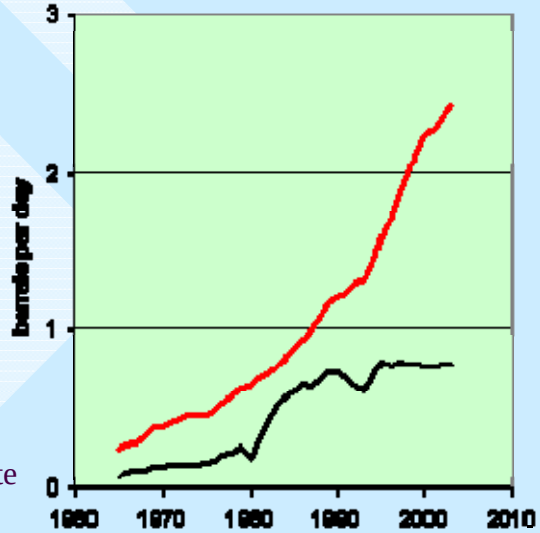
USA



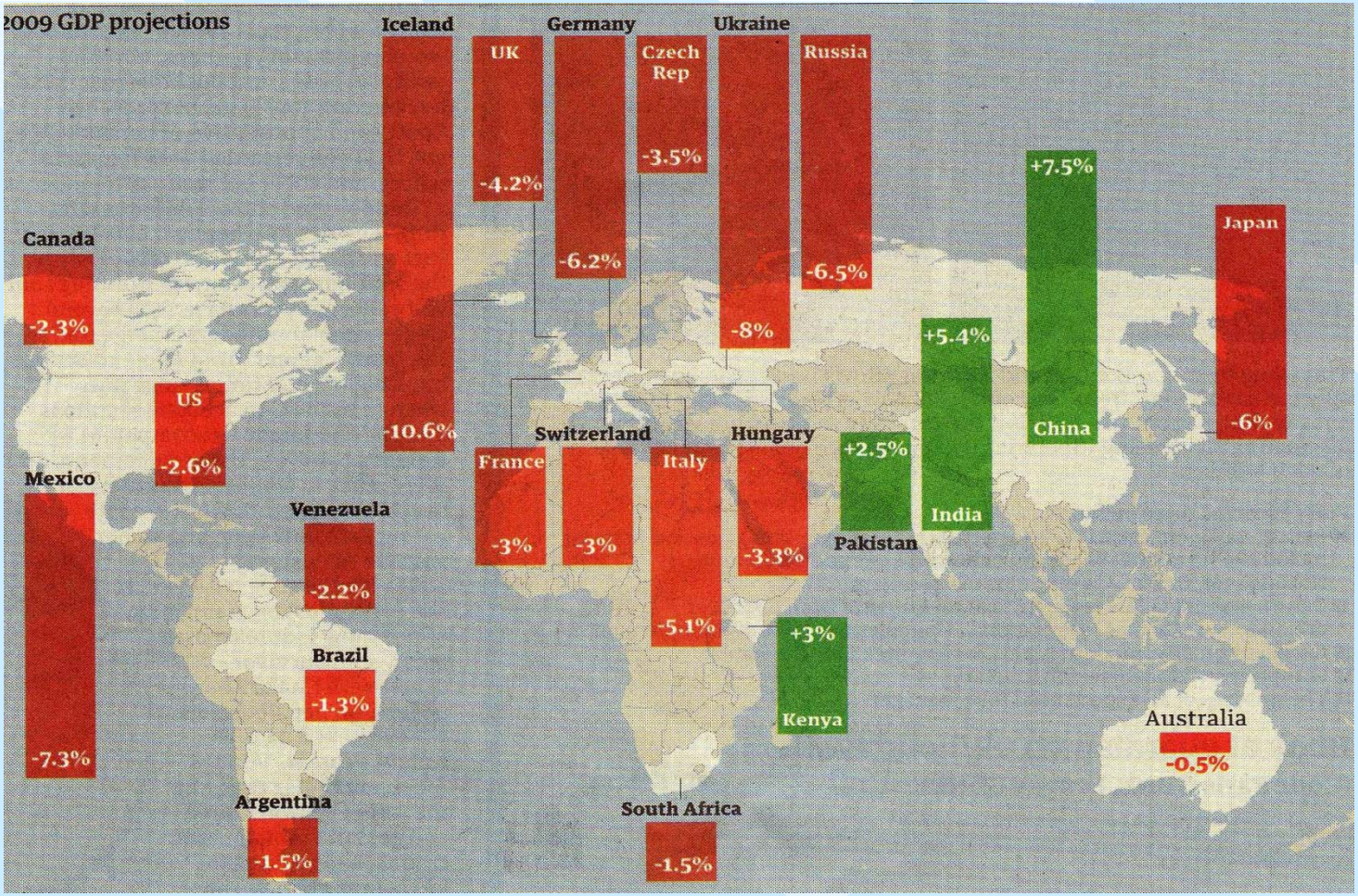
China



India



The world post Lehman.....



Sustainability is not a thing – it's a way of doing things……

- It's a vocabulary for change
- It's an agenda for societal ***resilience***
- Like 'freedom' or 'democracy' it is an overarching societal value
- And so, at its very heart, it is fundamentally ***political*** rather than technical

What is so important about governance.....?

- The challenges implied in sustainable development are so enormous, so complex and so difficult to implement, that they cannot be left to governments alone.
- Civic engagement is the key to sustainability
- 'Government', 'Governance' and 'Governing'

What do we mean by governance?

"a process of open and inclusive public decision-making which actively seeks the commitment and engagement of citizens. stakeholders and interest organisations"

…and 'good governance' is

collaborative, consensual, democratic, and 'bottom-up' rather than 'top-down'

What are the key principles which underpin good governance?

- **Openness**
- **Participation**
- **Accountability**
- **Effectiveness**
- **Coherence**

(European Governance – A White Paper, 2001)

But, to these we must add…

- ❑ **Principled Leadership**
- ❑ **Dialogue**
- ❑ **Trust**

….and crucially,

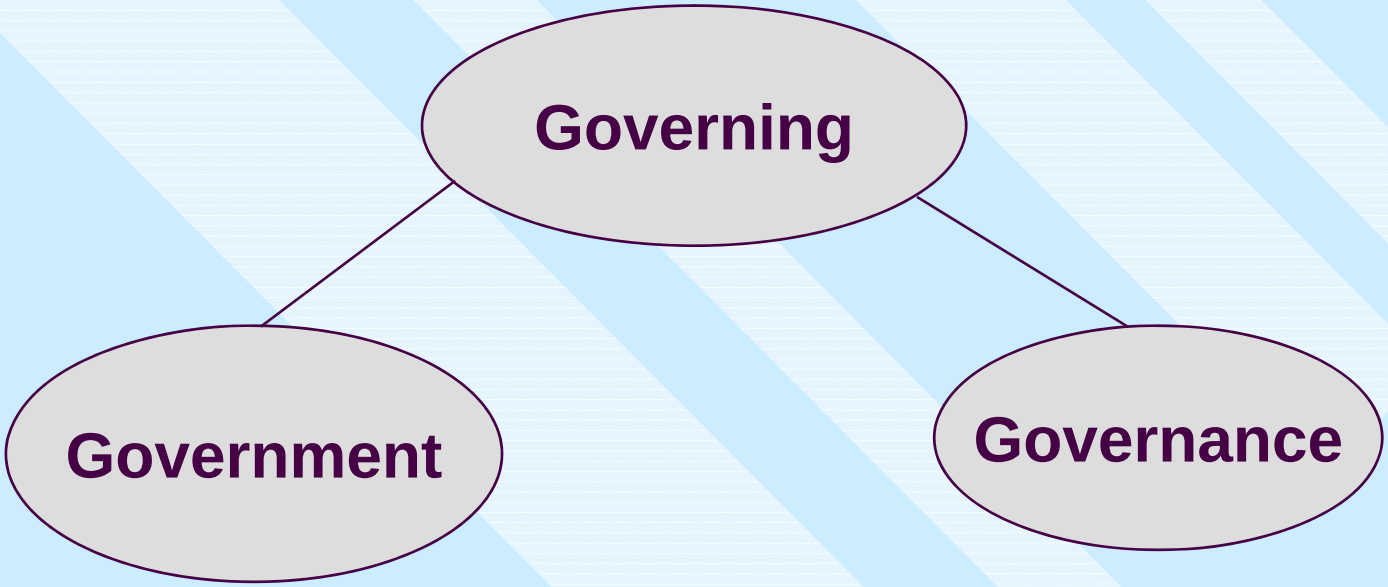
- ❑ **Democracy**
- ❑ **Equity**
- ❑ **Justice**

Is governance……..

- unarguably a 'good thing'?
- and somehow better than 'government?

The traditional/normative model: the government – governance continuum

The DISCUS Model

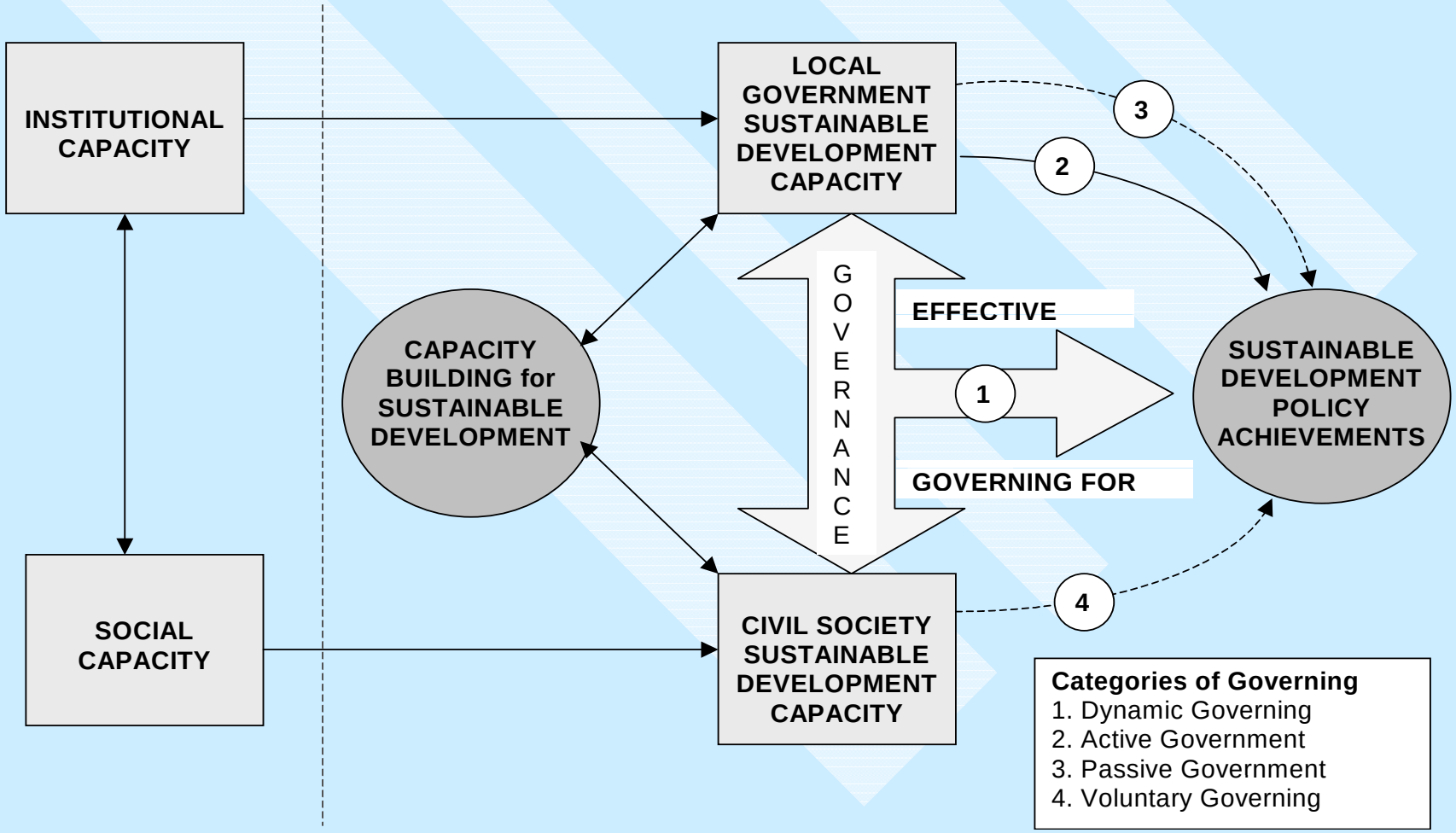


From 'Governing Sustainable Cities' by Evans, Joas, Sundbach & Theobald, Earthscan Press, 2004

40 participating cities

DISCUS
Developing Institutional and Social Capacities for Urban Sustainability

Figure 6.6
DYNAMIC INSTITUTIONAL CAPACITY AND SUSTAINABLE DEVELOPMENT POLICY ACHIEVEMENT



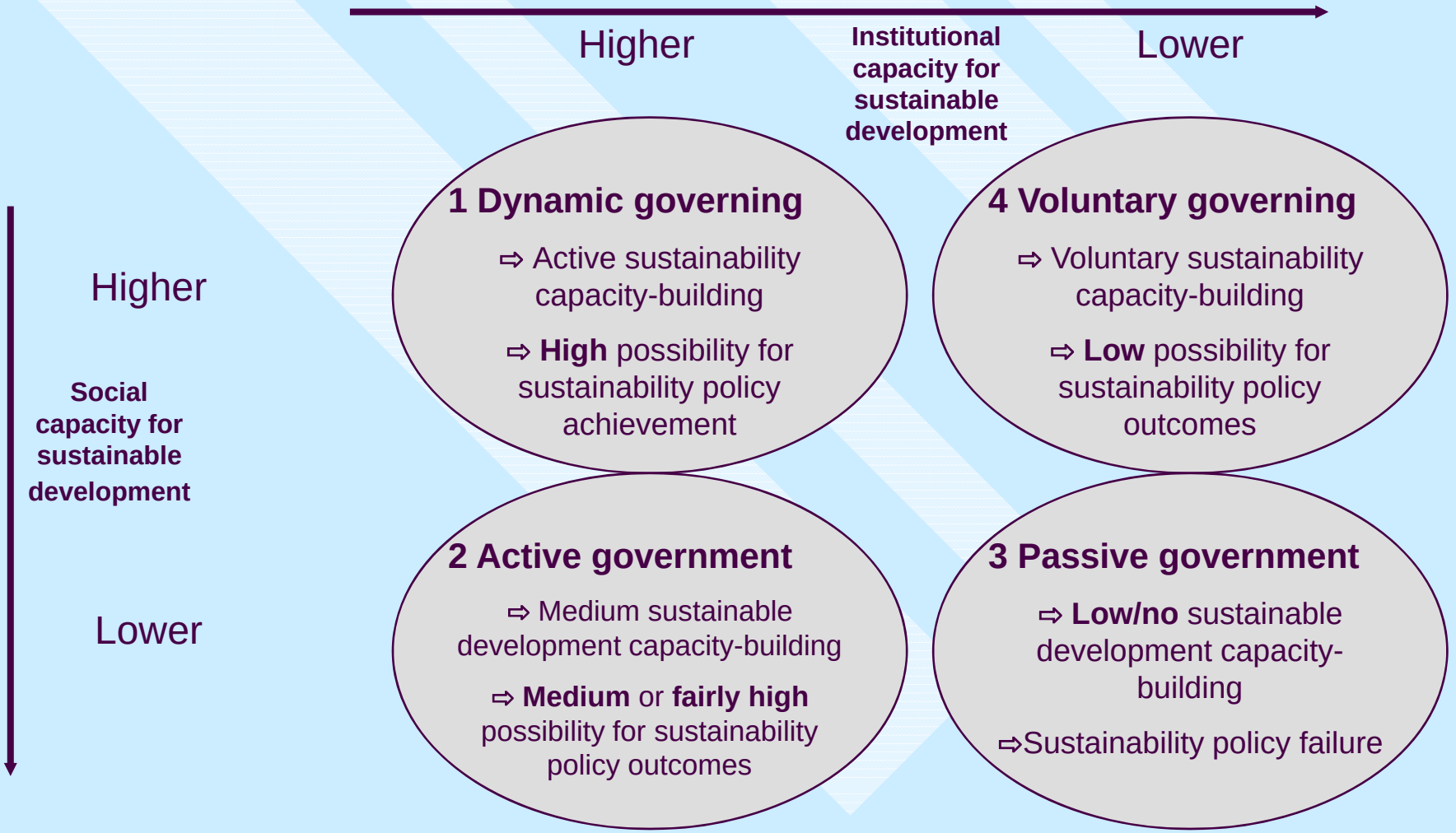
DIMENSIONS OF INSTITUTIONAL CAPACITY

- Administrative Capacity
- Governance Capacity
- Political Capacity
- Intellectual Capacity

Social capacity is…..

- The process of civic engagement
- Resilient social networks
- Trust in local government
- Confident and effective local community organisations
- Social capital……

The relationship between social and institutional capacity, capacity-building measures and sustainable development policy outcomes



DISCUS key themes and findings….

- Local government autonomy
- The role of the individual
- Institutional capacity
- Stakeholder engagement and social capacity
- Trust, consent and informal links

DISCUS key themes and findings….

- Local government as the key driver
- Incremental and pragmatic action
- Outward looking local government
- Interaction with other levels of government
- Capacity building for sustainable development

So governance is…….

- part of the process of governing and it is
- the sphere of public debate, partnership, interaction, dialogue and conflict entered into by local citizens and organisations and by local government

Local government is the key to local governance

- Effective urban governance is nurtured by local government
- The governance process can build institutional capital
- The governance process can build social capital

How to we get from here to where we want to be?

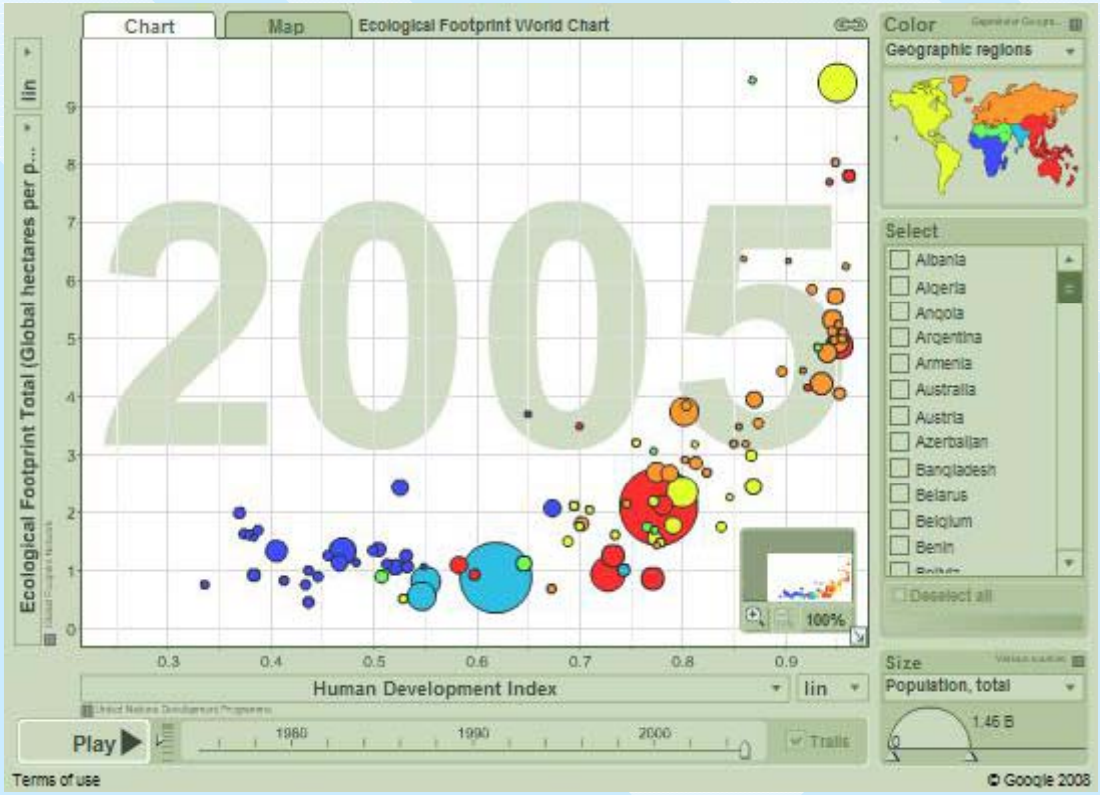
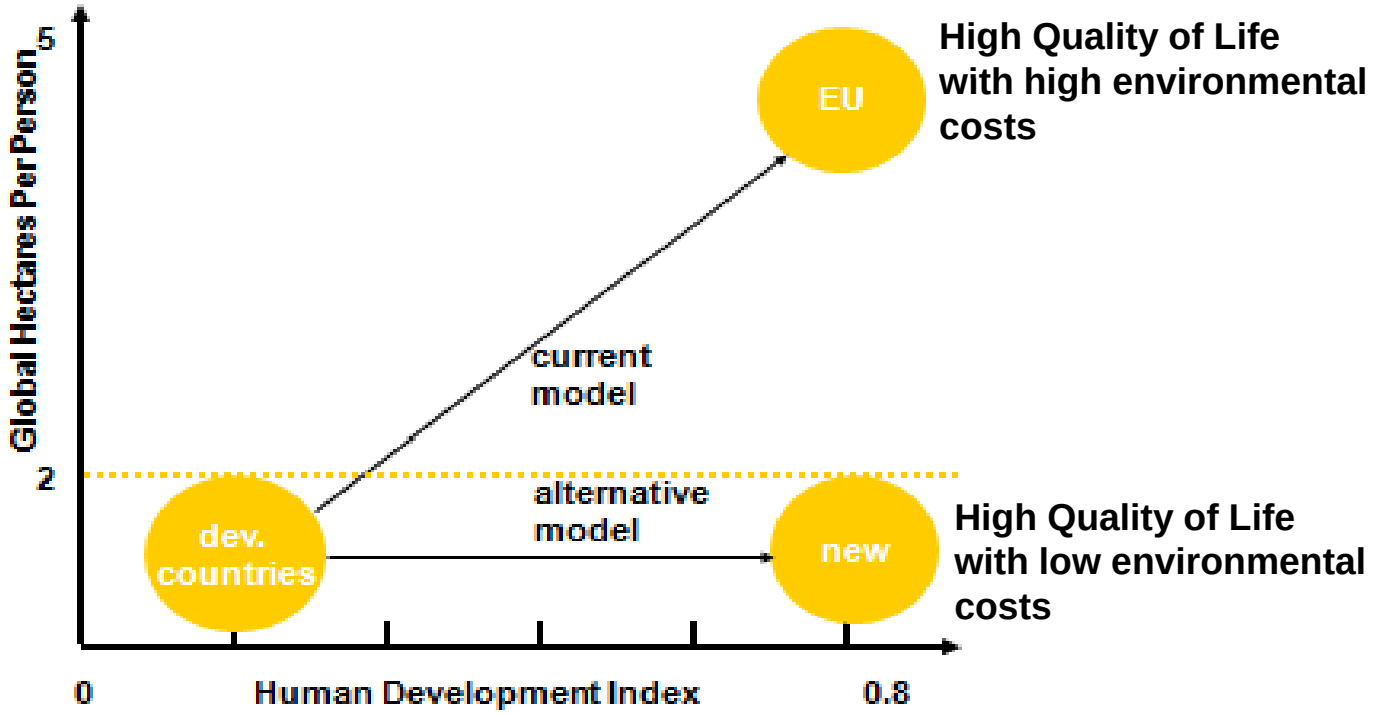


Figure 3: Sustainability Trajectories



Percentage reductions in consumption required in Europe to secure sustainable resource use…….

❑ Energy use	50%
❑ Fossil fuels	75%
❑ CO_2 emissions	77%
❑ Agricultural land	57%
❑ Wood	55%
❑ Aluminium	90%
❑ Cement	85%
❑ Chlorine	100%

Different perspectives.....

"It's a myth that the world's oil is running out"

Irwin Steizer, Page 4 The Sunday Times Business 27 April, 2008

"The end of the age of cheap food and energy"

David Smith, 'Economic Outlook', Page 4 The Sunday Times Business 27 April, 2008

Crunch time A story in data

Environmental phrases making the news in The Times, 1985-2008

Scientists have been worrying about the environment for years, but what they believed would doom the planet has changed over time. The graph below shows how many stories containing particular environmental phrases have been printed in *The Times* in a given year. Each coloured section represents a particular phrase; the thicker the section of the graph, the greater the frequency of the phrase.

We have developed a program that can scour through the web-based version of *The Times* database and pick out the number of articles featuring key words. We then normalised the results to account for the overall rise in the number of articles written in the paper over the past quarter-century.

Back in the Eighties, it seems that, when we did worry about the environment, it was acid rain that concerned us most. But with the decline of coal-fired power stations, acid rain stopped making headlines. Genetically modified crops became a hot topic in 1999, the year after an influential paper was published in *The Lancet* explaining how rats showed unusual changes to their gut tissue when fed genetically modified potatoes. Strict laws requiring the labelling of GM foods were put in place, and the issue slowly fell away from public consciousness.

It wasn't until 2006, however, that interest in – and public understanding of – climate change and global warming shot up. What caused the surge illustrated by our snowy peak? That was also the year Al Gore released his Oscar-winning documentary, *An Inconvenient Truth*. MURAD AHMED AND JULIAN BURGESS

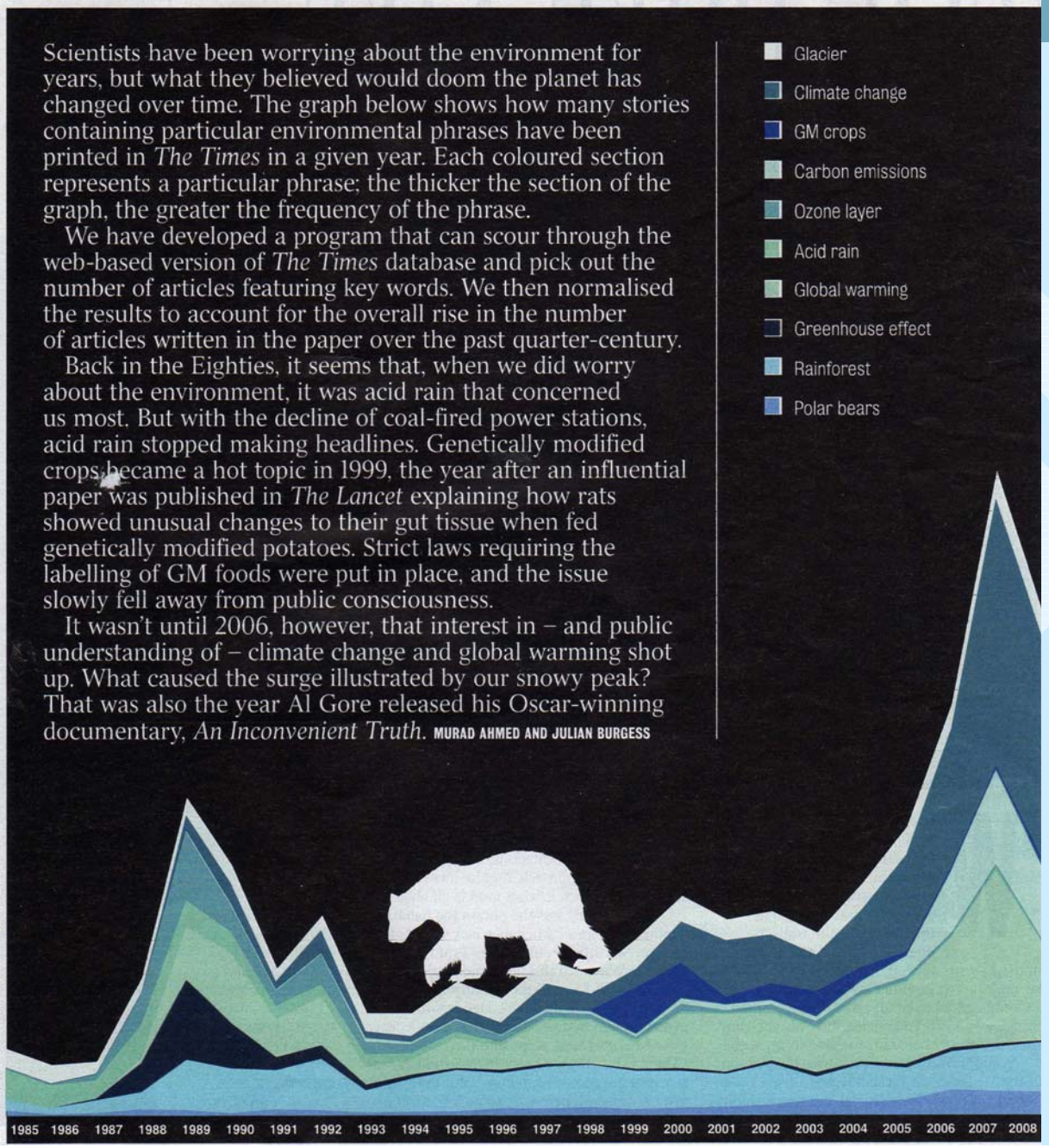


ILLUSTRATION: NATHALIE LEES. SOURCE: THE TIMES DATABASE

Table 3E.1 Knowledge of major factors contributing to climate change

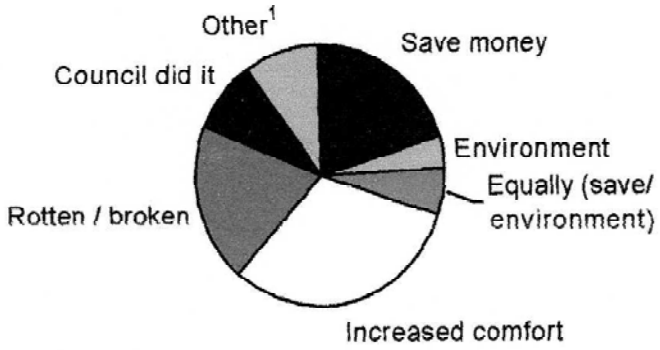
Which, if any, of the things listed do you think are major contributors to climate change?

Statement	Percentages 1993	1996/7	2001
Destruction of forests	52	56	74
Carbon dioxide emissions	62	53	71
Emissions from transport	41	42	65
Emissions from power stations	49	45	56
Use of gas, electricity by industry	22	19	28
Use of gas, electricity in homes	16	12	20

Source: DEFRA

Pro-environmental behaviour is more likely to occur when it is coupled with self interest.....

Chart 3E.2 Main reasons for taking energy saving steps



1. Includes 'don't like waste, low maintenance, noise reduction, security, already there, appearance'.

Source: Powergen Energy Monitor 2003

Because we can……..

- ❑ We own cars
- ❑ We drive more and more
- ❑ We take cheap flights
- ❑ We own holiday homes abroad
- ❑ We buy more consumer goods
- ❑ We commute long distances to work
- ❑ We work in air conditioned environments
- ❑ We use more electrical appliances
- ❑ We create more waste

We do all this because we can. Why should we stop?

For example, in the UK.....

- We buy a flat screen television every 15 seconds
- Consumer electronics use 18 terawatt hours which equals 30% of the country's electricity consumption

Wind Energy.....

Over 60 surveys show consistently high levels of public support for wind farms – on average 60-70% are in favour.....

But.....

What are the options?

- Private actions – 'environmental citizenship'
- Market pressure
- Regulation and state intervention

Regulation and Intervention….

- **Environmental taxation**
  - **Cars – fuel, parking, usage, engine size**
  - **Air travel**
- **Building regulations**
- **Planning Policy**
- **Technological subsidy**
- **Fiscal measures - tax breaks, energy pricing**

Changing public attitudes…..

- Social and economic change can be more rapid than technological change
- Market price change will 'soften up' public opinion
- Substantial government investment and regulation will be required (1% of UK GDP = £11bn p.a)

To get European governments and citizens to take sustainability seriously….

- **we cannot simply see sustainability as altruism**
- **we must also understand that our own future will be endangered if we do not change our present patterns of consumption and behaviour**

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www.sustainable-cities.org.uk