

The End of Tourism? Climate Change & Societal Challenges

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Backdrop

- “ In 2006, prior to the Stern Report, the IPPR* published *Warm Words: how are we telling the climate change story?*”
- “ Major finding? *Climate Change discourses were confusing, contradictory and chaotic*”
- “ Their overarching message? *Nobody really knows what to do*”



**Institute for Public Policy Research*

Image from greenpeace

Tipping Point or Turning Point?

- “ UK based survey: 88% believe that climate is changing
- “ 82% are very concerned about it
- “ 70% believe that ~~no~~ change means major environmental crisis
- “ 78% of are willing to change their behaviour
 - . *but people remain confused*

guardian.co.uk | TheObserver

News | Sport | Comment | Culture | Business | Money | Life & style

Environment > Climate change

Poll: most Britons doubt cause of climate change

Juliette Jowit, environment editor
The Observer, Sunday June 22, 2008
[Article history](#)

The majority of the British public is still not convinced that climate change is caused by humans - and many others believe scientists are exaggerating the problem, according to an exclusive poll for The Observer.

The results have shocked campaigners who hoped that doubts would have been silenced by a report last year by more than 2,500 scientists for the UN Intergovernmental Panel on Climate Change (IPCC), which found a 90 per cent chance that humans were the main cause of climate change and warned that drastic action was needed to cut greenhouse gas emissions.

www.ipsos-mori.com

Which one of these
contributes more to
Global Warming?

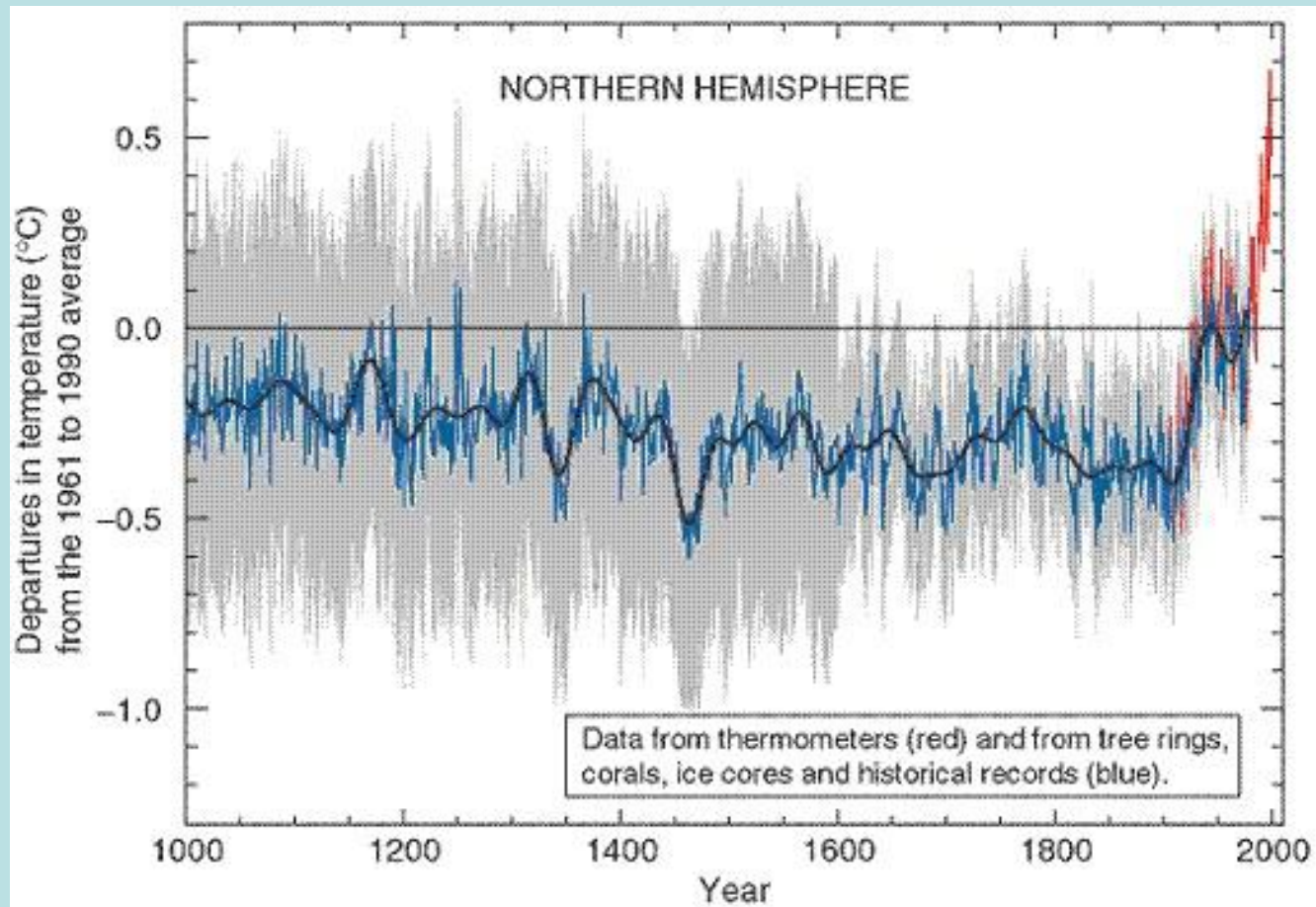


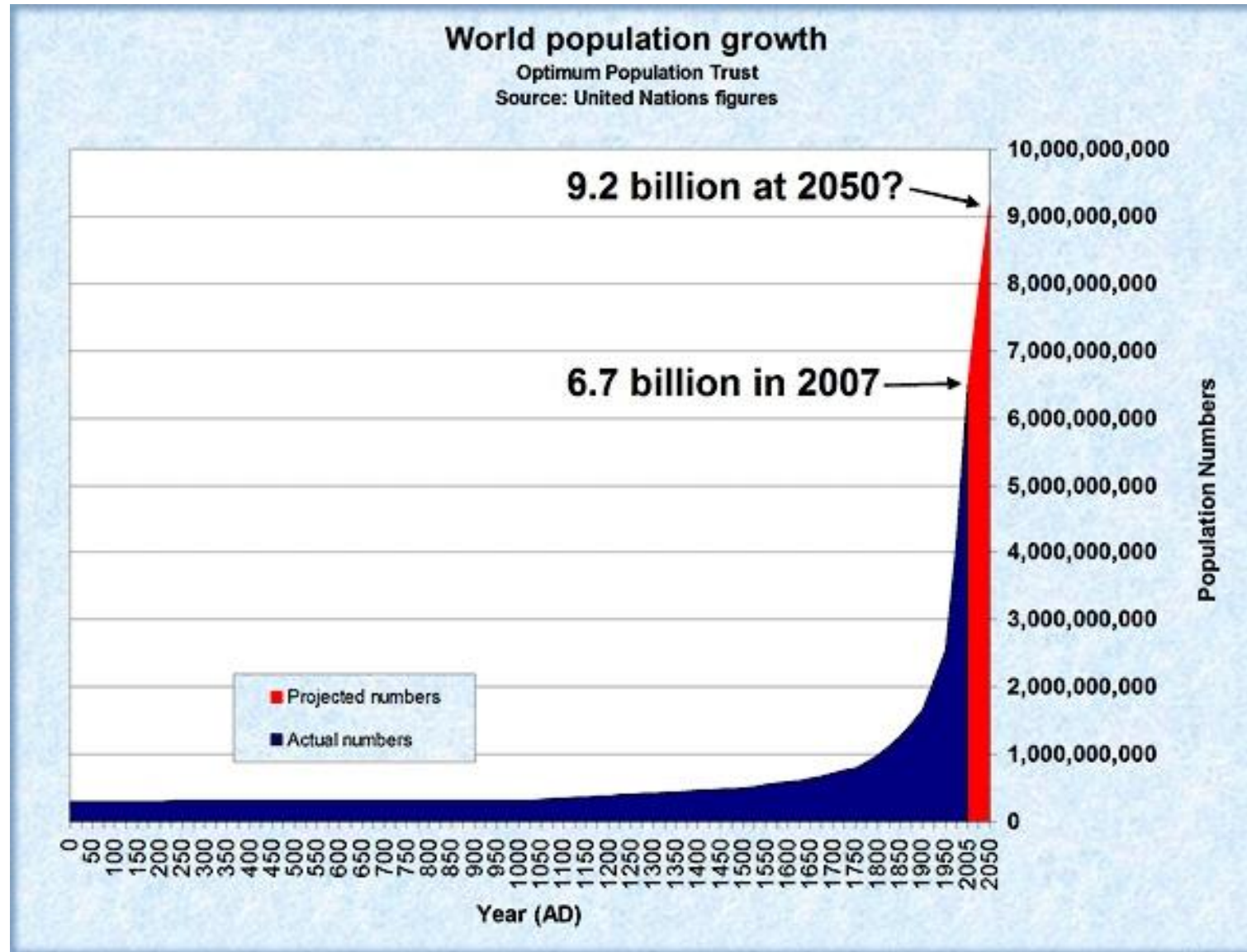
Soõ

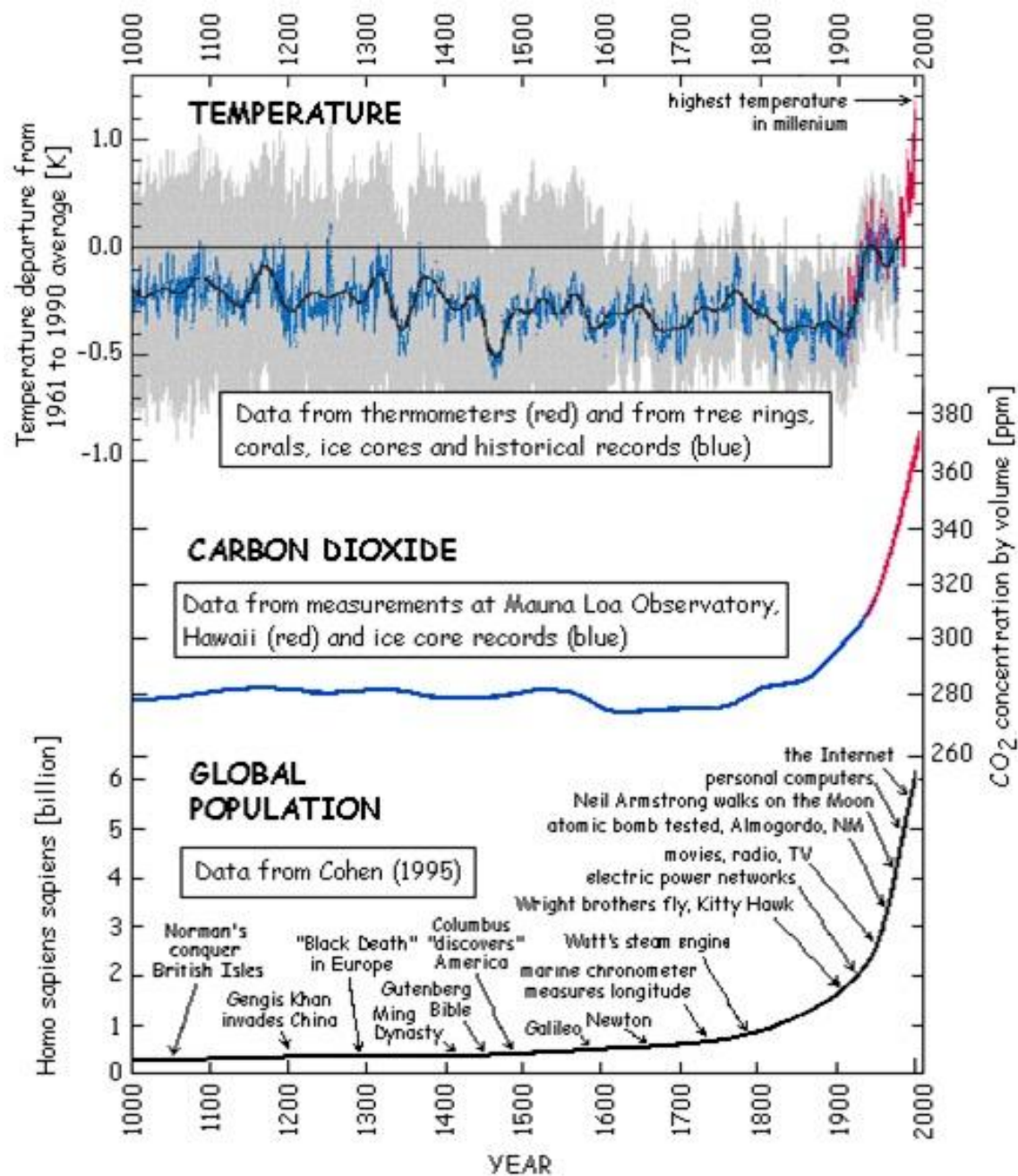
We know there is a discrepancy between *knowledge* and *action*.



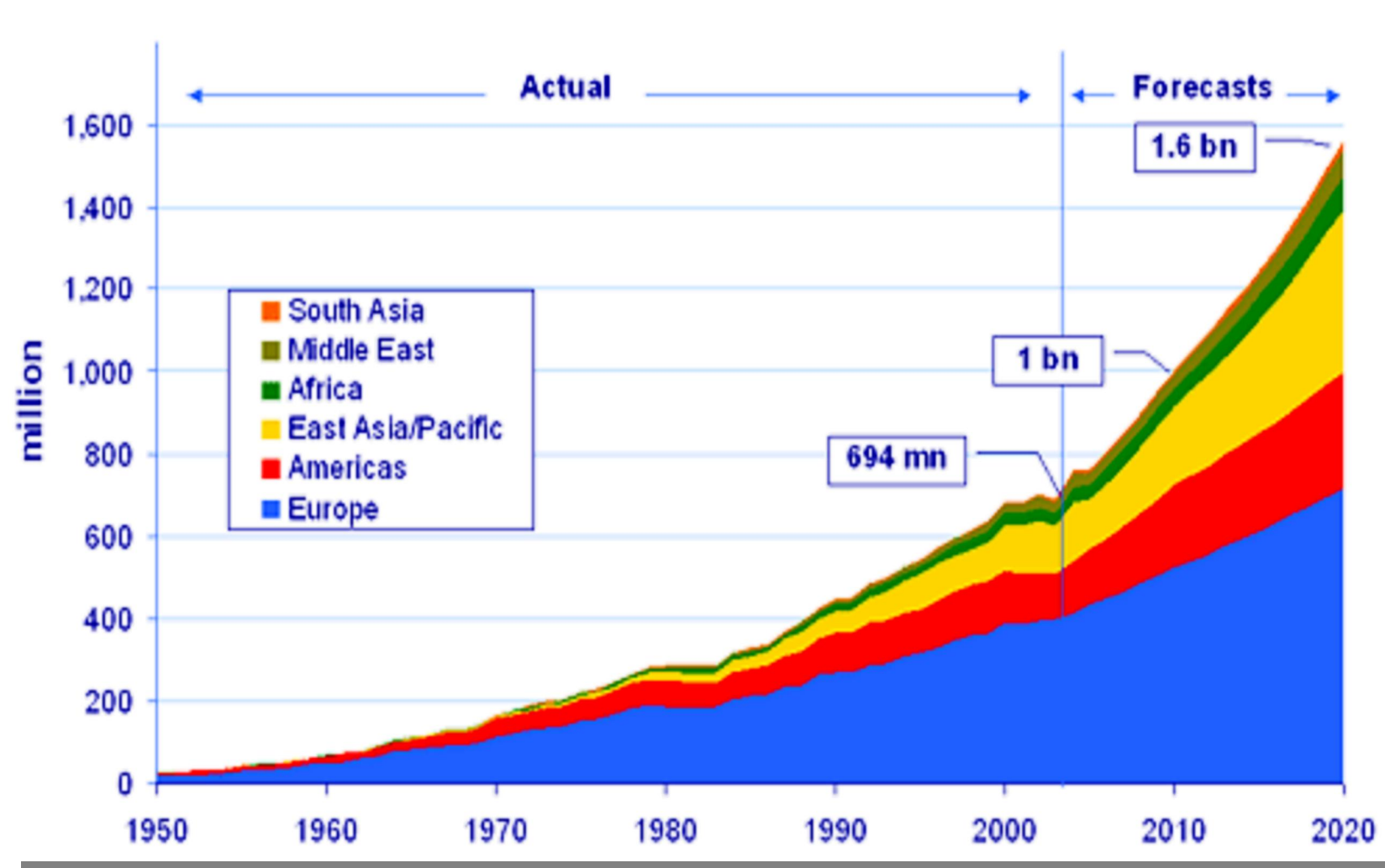
Michael Mann et al., 1998 global warming - Hockey Stick







International Tourist arrivals 1950-2020 (UNWTO)



The End of Tourism?

- “ Worst case scenario: *oil prices and global warming may produce such catastrophic changes to society that tourism becomes irrelevant to society*
- “ Best case scenario: *adaptation, mitigation, and technological innovation reduce tourism's carbon footprint to zero*
- “ Can interactive technology offer carbon-neutral virtual tourist experiences through shared virtual environments (a shift from corporeal to digital copresence)?

Acceptable futures for tourism?



Do we expect existing tourist behaviour paradigms to last forever?

Image: <http://mutiny.in/2007/07/13/save-the-tiger/>



[See full-size image.](#)

www.news.com.au/.../imagdata/0,,5544115,00.jpg

350 x 240 - 34k

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Below is the image in its original context on the page: www.news.com.au/travel/story/0,23483,21982063...

Virtual tourism takes off in Second Life

BY KATJA GASKELL | June 28, 2007 12:00am

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CYBERSPACE could be the next big holiday destination. No more worrying about excess baggage, tan lines or what you look like in a bikini. Now to get away from it all, all you need is a broadband connection.



Have your say!

Comments are open on this article - add yours

Dream holidays are now within the reach of millions more people – at least in the virtual online world of [Second Life](#), where a burgeoning tourism sector has sprung up.



Always a holiday ... residents of the virtual world Second Life are offering tours, opening virtual travel agencies and publishing guidebooks.

Second Life is one of the most famous virtual worlds on offer. It has attracted 7.5 million members since first developed by San Francisco-based developers [Linden Lab](#) in 2003. A cross between a computer game and a chat room, these digital worlds let visitors explore 3D virtual environments and interact with one another in cyberspace.

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From Departing 05/1

To Returning 05/1

Adults Children

Three big questions about climate change

1. How can global climate change be brought into the psychological sphere of the individual?
2. What type of information is necessary to trigger behavioural change; how can it best be communicated?
3. How can local action be co-ordinated so as to acquire global significance and impact?

But then we have Ryanair



%6 we would welcome a good, deep, bloody recession for 12 to 18 months. We need one if we are going to see off some of this environmental nonsense +

Three big questions for tourism & climate change

1. What are the constraints embedded in political systems, civil society, and global institutions that militate against public understanding of tourism and climate change?
2. How can we model tourism so as to better understand human dimensions (including sustainable livelihoods) as it flows along various supply and value chains?
3. What is most essential for consumers, society, firms and policy-makers to know about tourism and climate change and what are the best methods for communicating science that gains trust and positive behavioural change including sustainable business practice?

But then we have Ski Dubai



(http://www.theage.com.au/ffximage/2006/05/24/ski_pg8.jpg)

Three introspective questions for tourism & society

1. Could individuals travel less; have life-mobility strategies instead of annual vacation plans (i.e. the holiday of a lifetime becomes just that)?
2. Could the internet become a pay-per-view media where consumers have new experiences via virtual environments?
3. Could the need for tourist mobility developed over the last 60 years be replaced by contentment and appreciation of home-life space - ~~stay-cations~~?

But then we have space tourismõ



<http://abcnews.go.com/Technology/TenWays/popup?id=3603721&contentIndex=1&page=3>)

Climate change and society

- “ *We must learn the regulatory lessons from the present banking/ financial crisis!!!*
- “ Climate change is the paradigm, the tools are ~~to~~ best effort by people and industry
- “ Climate change is about rights
- “ Climate change is leading to a new industrial revolution
- “ Combination of regulation, best efforts, and market pressure will drive CC responses

What we know about change in society

- “ Demographics
 - . *developed vs. developing worlds*
 - . *aging population/ baby boomers*
 - . *Fragmented and single family units*
 - . *Shift to urban living (2007 crossed the 50% threshold)*
- “ Information flows
- “ Tourism mobility as a social desire
- “ Consumptive lifestyles (but ~~new~~ puritans?)
- “ Search for ~~a~~ authenticity, inspiration, rejuvenation
- “ This is a mainly middle class debate: social exclusion/ elitism

THE SUNDAY REVIEW

THE
INDEPENDENT
ON SUNDAY
4 FEBRUARY
2007

**Time is
running out...**

**Ski resorts
are melting...**

**Paradise islands
are vanishing...**

**So what are
you waiting for?**



**30 places you need to
visit while you still can**

A 64-page **Travel Special** also featuring explorers in suburbia, Richard Benson's Grand Day Out and the worst destination in the world if you've just broken up with your boyfriend

Temperature is rising – and humans are to blame

ed to a rise of use of the time item takes to offers a series future temper- based on six riors of global particular, in- and consequent O₂ from cars ns. ate for the low as B1, is a 1.8C of 1.1C to 2.9C) ate for the high as A1FI) is 4C, ge limit of 2.4C, age limit of 6.4C from the worst- C given in the sment Report, R, published in rt elsewhere, a ld represent a or the world.

ned these new e increase over s in knowledge back" mecha- a warming ess able to abh further in- ing, which fur- O₂ uptake, and says: "The new e likely ranges rger number of of increasing ealism, as well ion regarding backs from the

a level rise, yest- port (known as is a more opti- nge prediction in the TAR in a worst case of 100, compared rlier report. Don't breathe E. mits that the e currently

Main points of the IPCC report

■ "Best guesses" are that the global temperature will rise by 1.8C to 4C over the next century, depending on the level of the world's population and industrial activity. These are global averages and the local figures would be higher in high latitudes, such as Britain.

■ Worst-case scenario is that with high fossil fuel use and strong economic growth, rise could be 6.4C, again, with higher rises nearer the poles.

■ Stabilising CO₂ levels in the atmosphere at 550ppm – which some experts think the world should aim at – would itself probably mean a rise of 3C, and possibly 4.5C.

■ Temperatures in the next two decades are likely to rise by 0.2C per decade.

■ Sea-level rise worst case scenario is 59cm by 2100, less than predicted in 2001, but this might be much higher when climate system feedbacks are factored in, and ice discharge from Greenland and Antarctica rises.

■ That global climate change is occurring is "unequivocal."

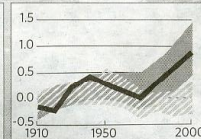
■ That human beings are responsible for it is "at least a nine out of 10 chance".

The century that saw global warming on every continent

How actual temperature increases around the world were explained by computer models of man-made

NORTH AMERICA

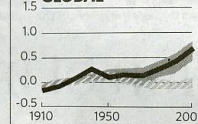
Increases in lowest winter temperatures will be greater than increases in average winter temperatures. More rainfall in northern parts of North America, with decreases in snow season.



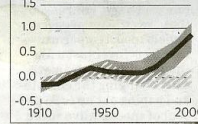
KEY

— Observed temperature rises
- - - Man-made temperature changes
... Natural temperature changes

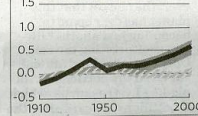
GLOBAL



GLOBAL LAND

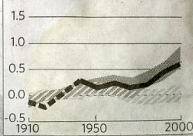


GLOBAL OCEAN



CENTRAL AND SOUTH AMERICA

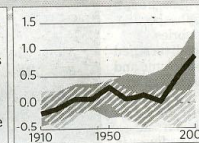
Most parts will experience greater warming than the global average, except for southern parts of South America. Rainfall decreases along southern Andes, while increases are expected in south eastern South America



pollution rather than natural climate variations

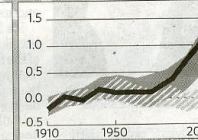
MEDITERRANEAN AND EUROPE

Winter minimum temperatures increase by more than winter average temperatures in northern Europe. More rainfall in the north, and less rain in the south



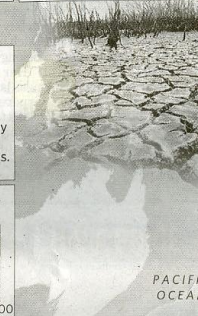
ASIA

Warming is well above the global average in central Asia. Longer, intense summer heatwaves in east Asia. More winter rainfall in northern and east Asia, and more intense downpours in southern Asia



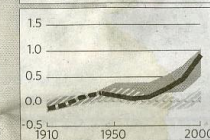
AUSTRALIA AND NEW ZEALAND

Increases in the frequency of droughts in southern areas of Australia. Higher extreme daily temperatures and decrease in the frequency of cold extremes. More rainfall in New Zealand



AFRICA

Decreases in annual rainfall in parts of north Africa and northern Sahara and in winter rainfall for regions of south western Africa. Droughts will become more intense and more frequent



being used to simulate future sea levels do not yet take account of feedback mechanisms. Furthermore, although the predictions include a contribution due to increased ice flow from the Greenland and Antarctic ice sheets for the period 1993-2003, they do not take account of the fact that these flow rates could

increase as the world warms. If this contribution were to grow linearly with global average temperatures, the report says, the worst-case upper limit could increase by another 10cm to 20cm – and so back up to 79cm. Sea-level rise approaching a metre would vastly increase the

risk of catastrophic storm damage to low-lying regions such as Bangladesh or Egypt's Nile Delta.

ACIDIFICATION OF THE OCEANS

For the first time, the IPCC scientists address another issue which has emerged since the last

report: the acidification of the oceans. Much of the CO₂ we are pumping out is absorbed by the sea, but there has been so much of it that it is starting to react chemically with the water to produce carbonic acid. The pH value of the sea – the way in which its acid/alkaline balance is measured

– has already decreased by 0.1 units since pre-industrial times, and could decrease by a further 0.14 to 0.35 units during the 21st century, the report says.

This steadily acidifying ocean will pose a severe threat to many of the small marine organisms which need an alkaline environ-

ment, to build their calcium carbonate shells, and could threaten the whole marine food chain of which they are the base.

The fourth IPCC report is most noteworthy for its greatly increased confidence levels. It says that the fact that global warming is taking place is now "un-

equivocal", saying this is evident "from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global mean sea level". The IPCC scientists believe there is "at least a nine out of 10 chance" that this has been caused by human acti-

ties. In practice the report will end the debate about the fact and causes of climate change for all but the most perverse sceptics, and will serve as a forceful spur to unified action for a world community still divided over how to combat the greatest threat the Earth has ever faced.

Carbon dioxide is at highest for 650,000

By Steve Connor
Science Editor

Concentrations of carbon dioxide in the atmosphere are at their highest levels for at least 650,000 years and this rise began with the birth of the Industrial Revolution 250 years ago, according to the Intergovernmental Panel on Climate Change (IPCC).

Carbon dioxide is the principal greenhouse gas responsible for global warming and, in 2005, concentrations stood at 379 parts per million (ppm). This compares to a pre-industrial level of 278 ppm, and a range over the previous 650,000 years of between 180 and 300 ppm, the report says.

Present levels of carbon dioxide – which continue to rise inexorably each year – are unprecedented for the long period of geological history that scientists are able to analyse from gas samples trapped in the frozen bubbles of deep ice cores.

However, the IPCC points to a potentially more sinister development: the rate of increase of carbon dioxide in the atmosphere is beginning to accelerate. Between 1960 and 2005 the average rate at which carbon dioxide concentrations increased was 1.4 ppm per year. But when the figures are analysed more closely, it becomes apparent that there has been a recent rise in this rate of increase to 1.9 ppm per year between 1995 and 2005.

It is too early to explain this accelerating increase but one fear is that it may indicate a change in the way the Earth is responding to global warming.

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Political, social, business contradictions

Multidirectional pressure for change	Muddled evidence & policy conflict
Urgent need for consumption changes	Vacillation, lazy tax policies
Growing consumer ethical awareness	Lack of trust and knowledge
Consumer choice and freedom	Green policies that limit choice
Growth of experience economy	Energy intensive peak experiences
Responsibility for stewardship?	Fragmented, conflicting interests
Think global	Act local

Tourism contradictions

Anguished discussions on tourism

Incessant demand for travel modes

Continued business growth

Ecotourism in remote destinations

Need to reduce aircraft GHG

Lifestyle pressure to consume

Pro-poor tourism initiatives

Reducing demand through price hikes

Tourism not homogenous

Roads & airports unpleasant

Pressure to reduce travel

Ecotourism a problem not a solution

Airport owners seeking expansion

Need to reduce consumption

Pressure to reduce long haul travel

Societal need for social inclusion

Literature tells us:

*“If we want things to
stay as they are, things
will have to change” +*

Giuseppe Tomasi di Lampedusa, *Il
Gattopardo* (The Leopard) 1958

What we need to do

- “ Define new, radical, coherent policies, and business practices
- “ Influence consumer attitudes
- “ Create environment for innovative ways of meeting desires for peak experiences within a low carbon economy
- “ Facilitate re-emergence of slow tourism where the journey once again becomes an enjoyable part of the product?
- “ Undertake responsible demand and consumer expectation management
- “ Think laterally about resolution of contradictions

Finallyõ

If you wonderõ who
will?

