

From eco to ethical and sustainable bioregional tourism

A speculative futures scenario
as a critical tool for new thinking
and transformative action

Andrew McEwen

Are we too late already?

Mathis Wackernagel Ecological Footprinting



Figure 4.5: The Boiled Frog Syndrome. A frog placed in slowly heating water will not notice the gradual but eventually lethal trend.

We will see it only when we believe it.

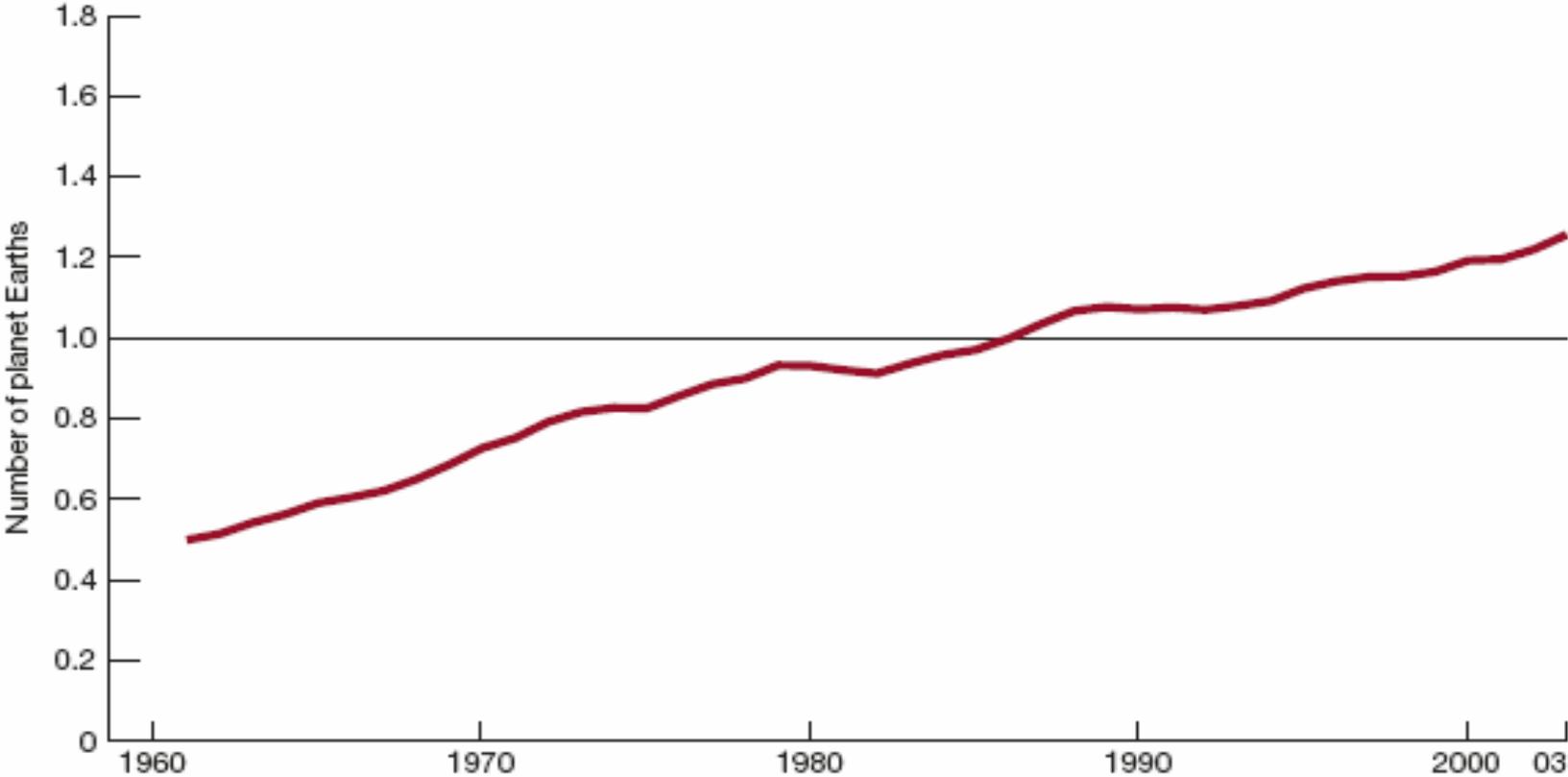
Business and political sea change

- Roy Morgan have been saying for years global warming matters to 85% of people
- Lowry Institute survey 2006 global warming matters to ordinary people
- Branson \$3B commitment to addressing greenhouse challenge September 2006
- Murdock Sky B Carbon neutral September
- Howard linking droughts to climate change
- Sir Nicholas Stern: Stern Report 5% drop global GDP if do nothing. October 2006

In the 1986 we passed our sustainable global footprint

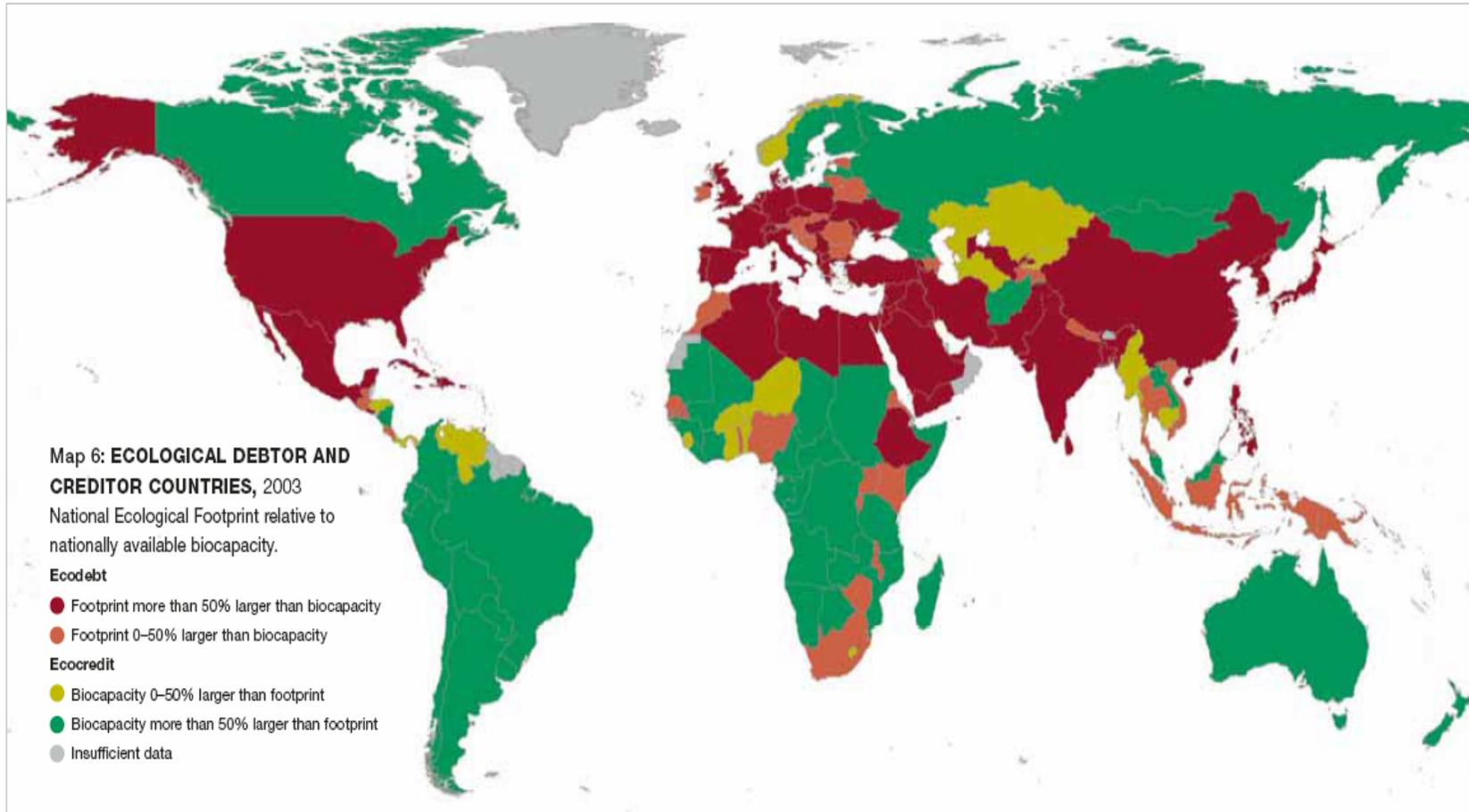
WWF Global Footprint October 2006

Fig. 2: HUMANITY'S ECOLOGICAL FOOTPRINT, 1961-2003



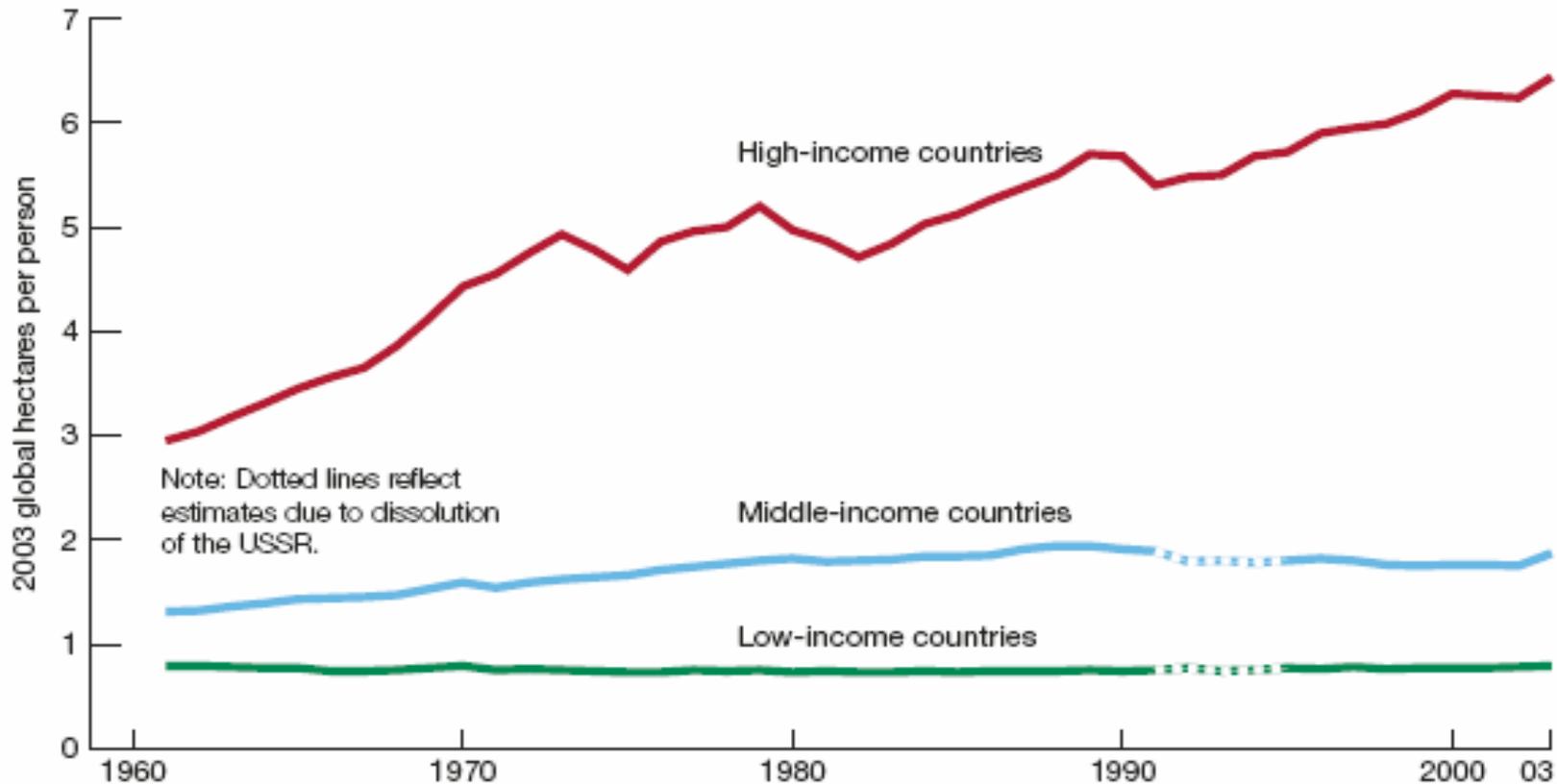
Global footprints red in debt

WWF Global Footprint October 2006



High income countries consume 6 times their share of ecological resources

Fig. 21: FOOTPRINT BY NATIONAL AVERAGE PER PERSON INCOME, 1961–2003



Beyond the point of denial

“The evidence is so strong that we should put an end to the debate about whether humanity is causing global warming”

Science Vol 309 2005 Tim Barnet

A review of 928 papers on local climate change and published by Science indicate that there was no contrary evidence.

Science Vol 306 2004 Naomi Oreskes

Overshoot carrying capacity leads to catastrophe

Mathis Wackernagel Ecological Footprinting

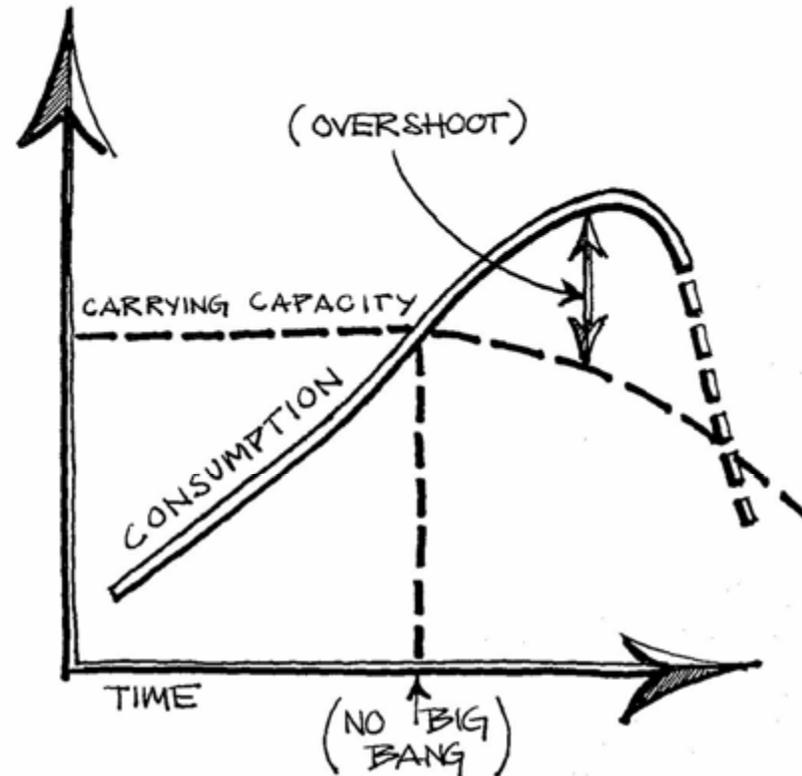
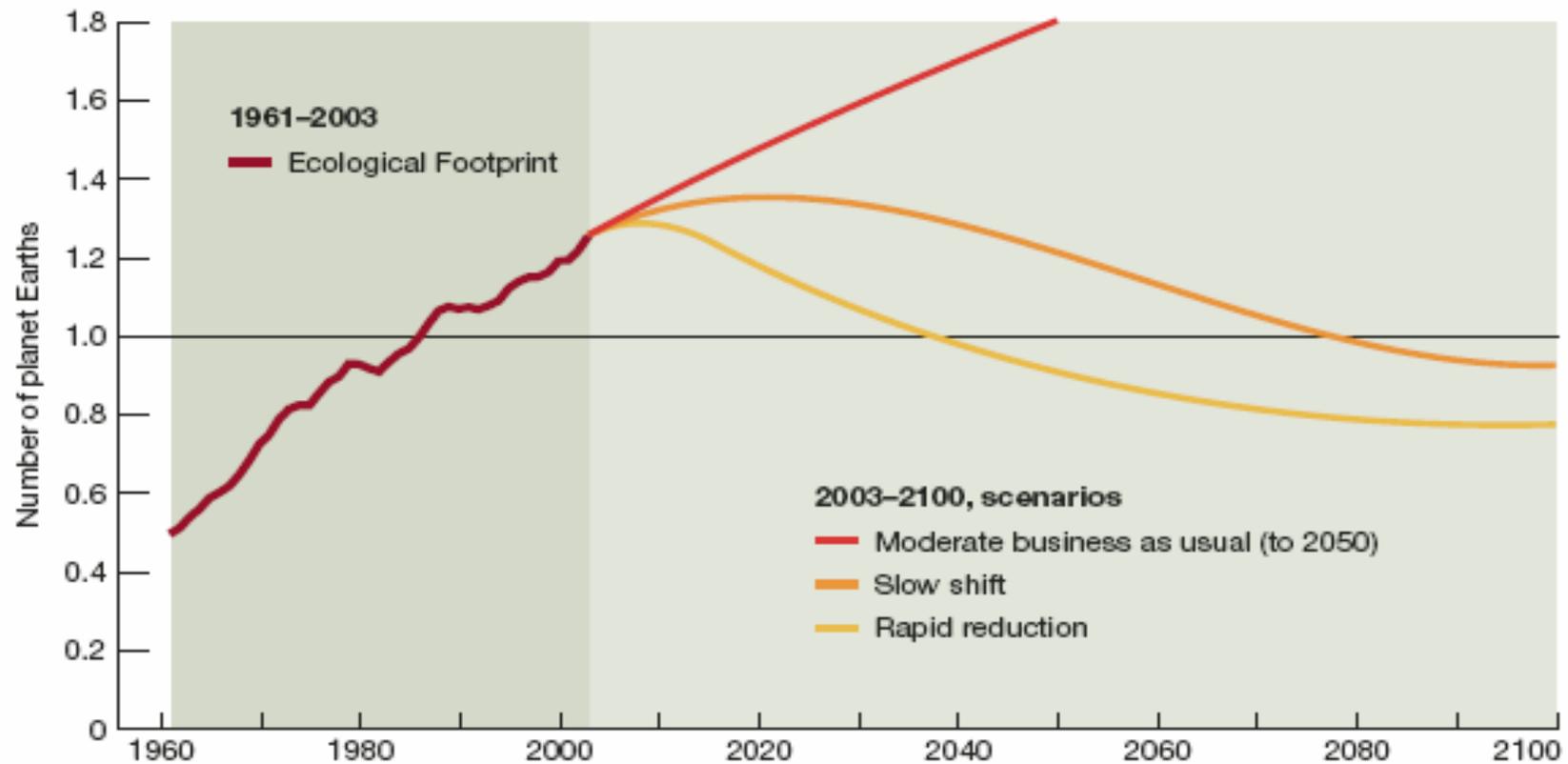


Figure 2.8: Overshoot is growth beyond carrying capacity. Carrying capacity limits can be overshoot without a "big bang" because of the availability of large capital stocks. Harvests can still increase and money incomes rise, and while there may be indications of ecological stress, all else may seem normal. Ultimately, however, the consequences of eroded natural capital may be felt as eco-catastrophe and population crash.

Choice or chance in global ecological footprints

WWF Global Footprint 2006

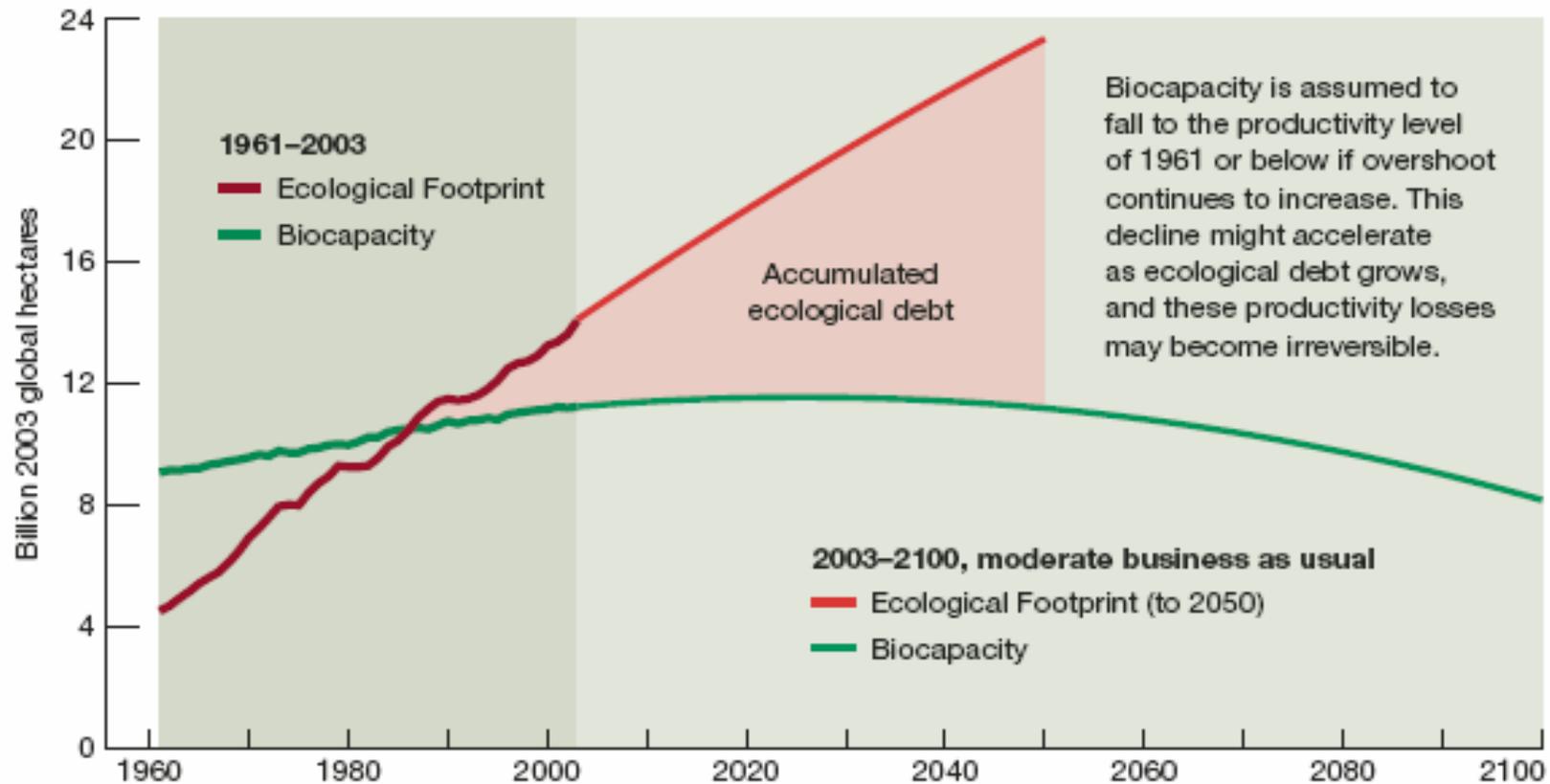
Fig. 3: THREE ECOLOGICAL FOOTPRINT SCENARIOS, 1961–2100



Ecological debt overwhelms Global GDP

WWF Global Footprint 2006

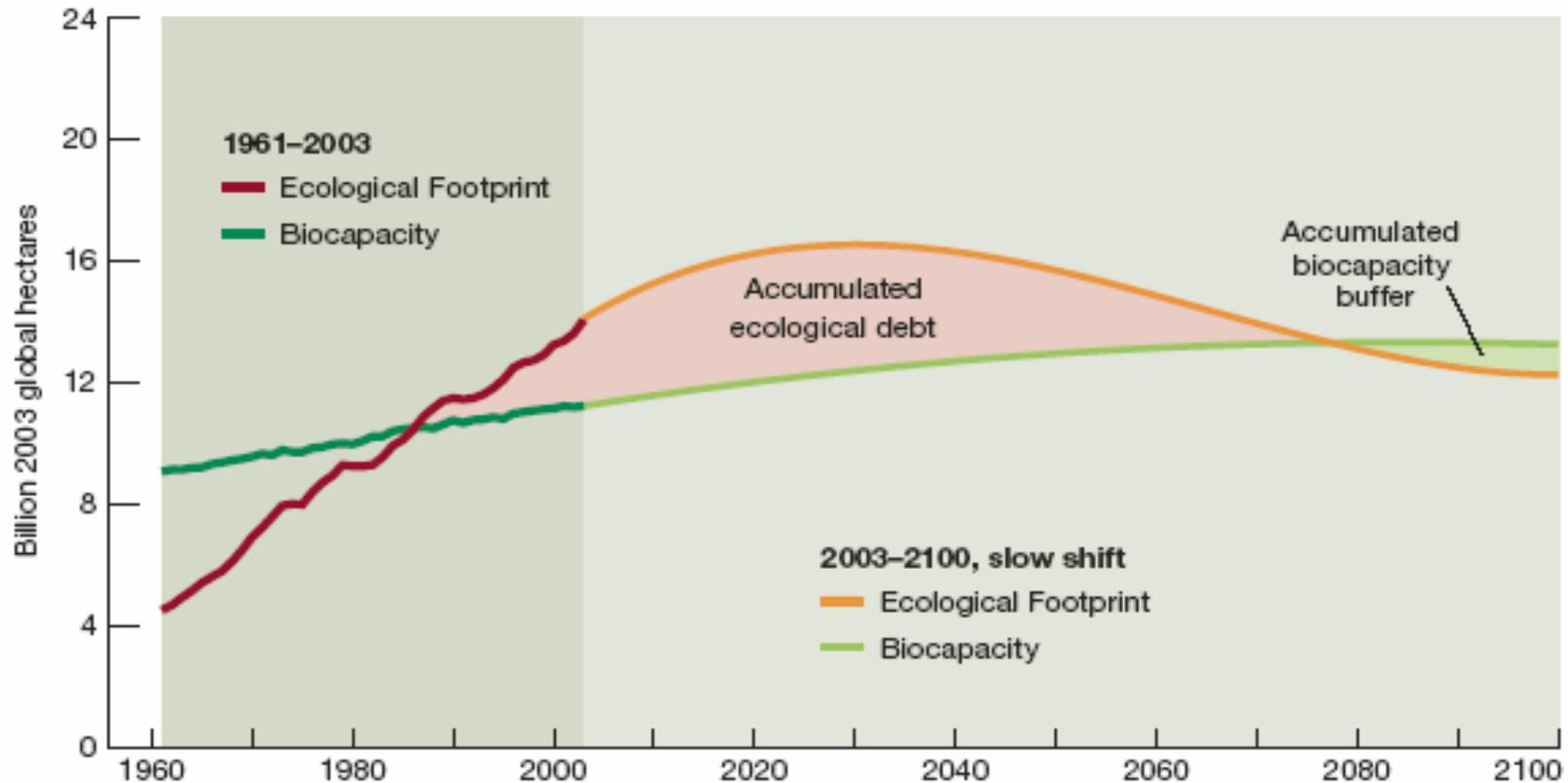
Fig. 25: BUSINESS-AS-USUAL SCENARIO AND ECOLOGICAL DEBT



Possible survival strategy

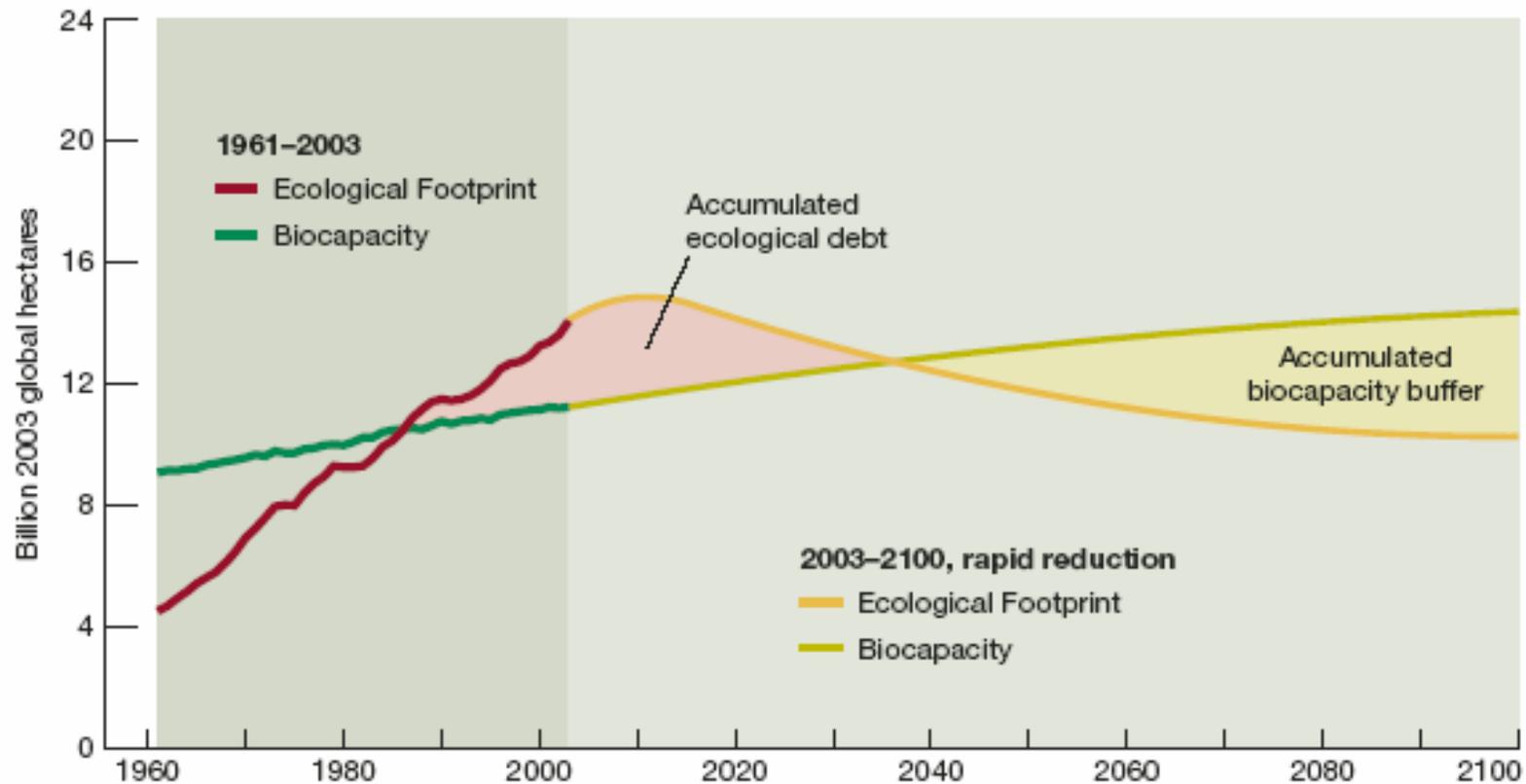
WWF Global Footprint 2006

Fig. 26: SLOW-SHIFT SCENARIO AND ECOLOGICAL DEBT



Prudent *Risk* management strategy

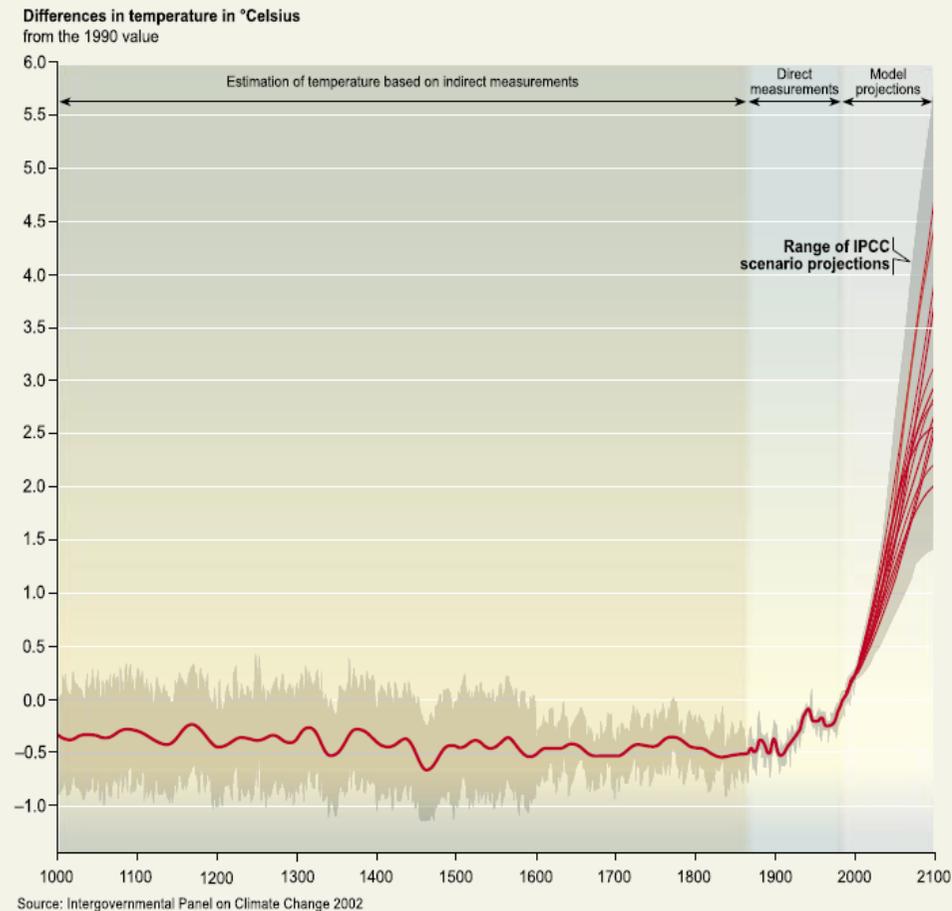
Fig. 27: RAPID-REDUCTION SCENARIO AND ECOLOGICAL DEBT



Climate change is speeding up towards critical thresholds from which we will not easily return

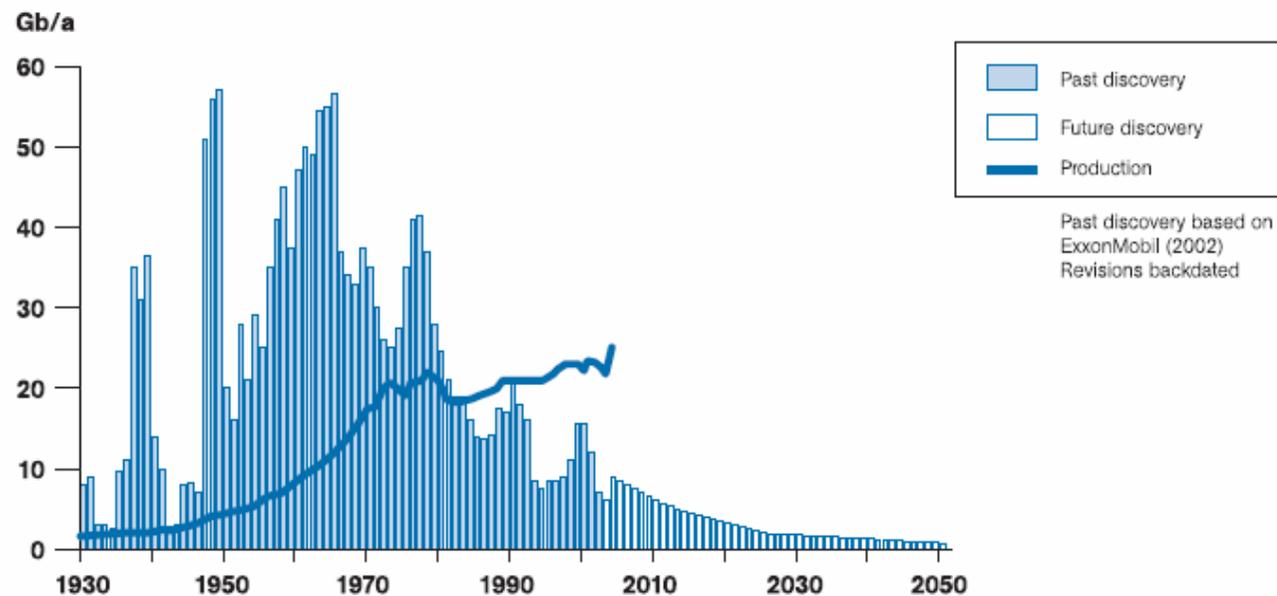
Figure 3.20. HISTORICAL AND PROJECTED VARIATIONS IN EARTH'S SURFACE TEMPERATURE

Estimated global temperature averages for the past 1,000 years, with projections to 2100 depending on various plausible scenarios for future human behavior.



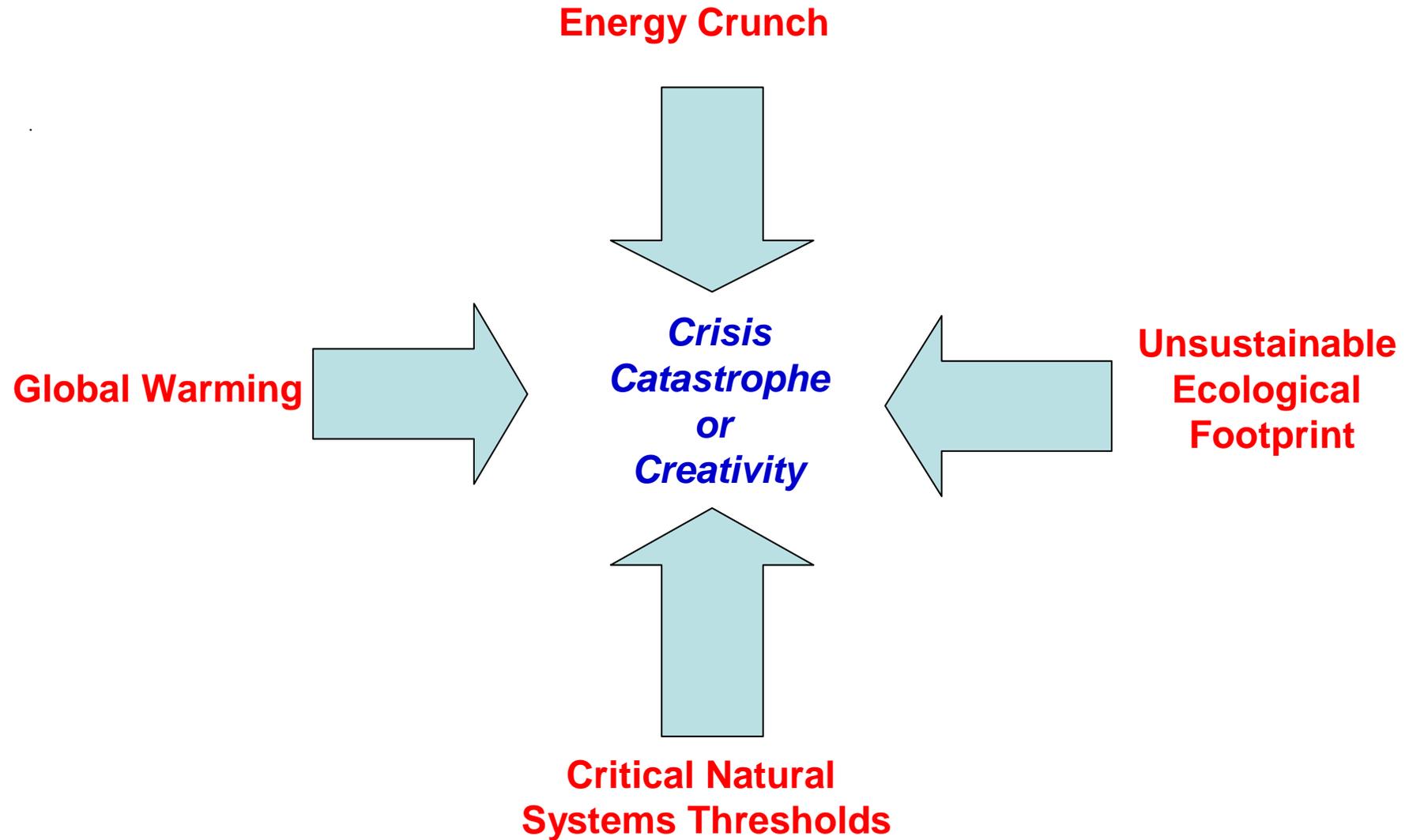
Whether it is Peak or Plateau Oil 2010 or 2035 prices will multiply

Figure 1: Rising demand-driven oil production departs from new discoveries of oil



As production goes up, driven by rising demand, a growing gap emerges between production and new discovery. Recurring price shocks, recessions dampening demand and price is increasingly likely, with "terminal decline setting in and becoming self-evident by about 2010", according to analyst Colin Campbell. Source: Colin Campbell, Association for the Study of Peak Oil, 2005.²⁸

Depending on how resilient our societies and communities are!



We need to change fundamentally by 2015

From To

Globalisation

- Limited economic markets
- Intense energy (oil & gas)
- Low energy costs
- Global markets goods-services
- Long complex logistic value chains
- Highly interdependent regions
- Focus on *Wealth* creation
- Risk management
- Free trade
- Unrestrained consumption
- Carbon economy

Glocalisation

- Full cost *Ecological* markets
- Less intense energy (renewables)
- High energy costs
- Global markets for knowledge and learning
- Short simple logistics value chains
- More self sufficient regions
- Focus on *Resilience* creation
- Harm minimisation
- Fair and free trade
- Measured consumption
- Renewable economy

Decarbonising society

How much? How soon?

“The best evidence indicates that we need to reduce our CO2 emissions by 70% by 2050”

“The Weather Makers” Tim Flannery 2005

To stabilise the planet... *“In rich countries this means an average cut of (CO2) around 90%.”*

“Heat” 2006 George Monboit

“Richer countries should take responsibility for between 60-80% in emission reduction from 1990 -2050.”

Sir Nicholas Stern Review Yesterday

Implications of Jet travel

“On a return flight from London to New York every passenger produces roughly 1.2 tonnes of carbon of carbon dioxide, the very quantity that we will each be entitled to emit in a year once a 90% cut in emission is made”

“Heat” 2006 Monboit

Dis-ecology of jet travel

London to New York 1.2 tonnes CO₂ X 2.7 for other greenhouse affects = 3.24 tonnes

At 90% cut that equals 2.8 years carbon allocation per person

At 70% that equals 2.2 years carbon allocation per person

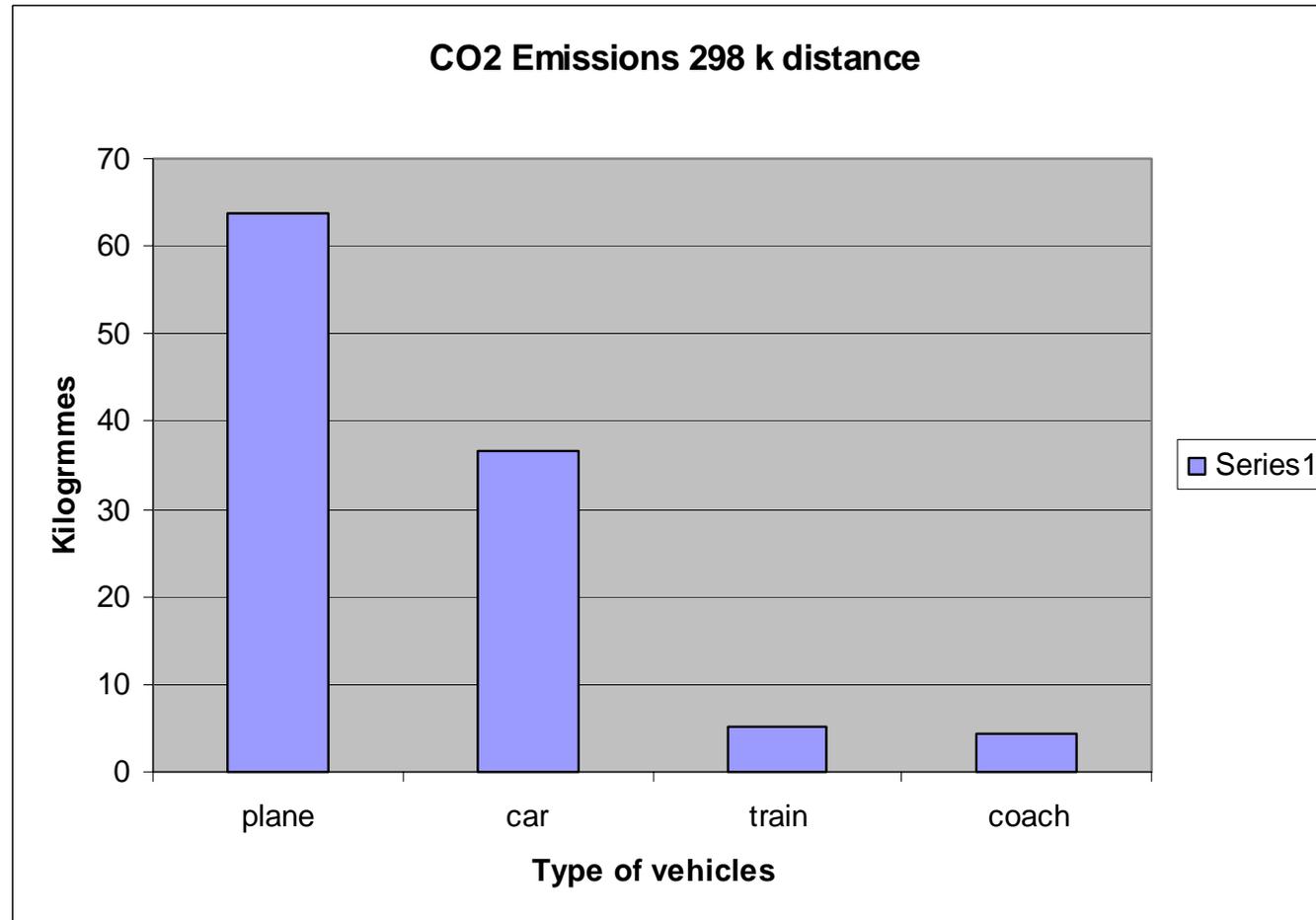
“Estimated that by 2050 50% carbon emissions in UK will come from aviation. If the target of government is at 550 part per million 101% if target is 450 ppm.”

“If you include other greenhouse gas produced it is respectively 134% and 272% respectively.”

UK Tyndall Climate Centre

CO2 emissions short haul flight

UK DOT



Critical Uncertainties and the Big Questions

- When (or if) will climate change accelerate?
- When is the peak-plateau for oil and gas?
- How fast can renewable energies be introduced?
- What will be the level of eco disruption and negative feedback?
- What is the supply and demand of ingenuity required?
- What is the level and capability to reduce carbon load (particularly for jet travel)?
- Will we find an energy source with the energy intensity of oil-gas?
- When and how large will carbon taxes and trading be?
- Are we approaching or past some critical thresholds?

From eco to ethical tourism parameters of the debate



- Fast tourism
- High energy
- Experiences
- Un-costed carbon load
- Regular adventure
- What I take
- Dependency on trade
- Affluence & wealth
- Pleasure & indulgence
- Low cost mass tourism
- Slow tourism
- Low energy
- Learning
- Carbon neutrality
- Irregular project
- What I leave behind
- Bioregional production
- Equity and justice
- Ingenuity & Innovation
- High cost elitist or?

New ecological economics

Return = Numbers x Yield x Days x Multiplier

Modified return: = traditional return and

- + or – opportunity costs alternate strategic investment
- ecological costs and damage
- reduced self sufficiency of bioregion
- + resilience and sustainable learning for bioregion
- + ingenuity and innovation unleashed for planet

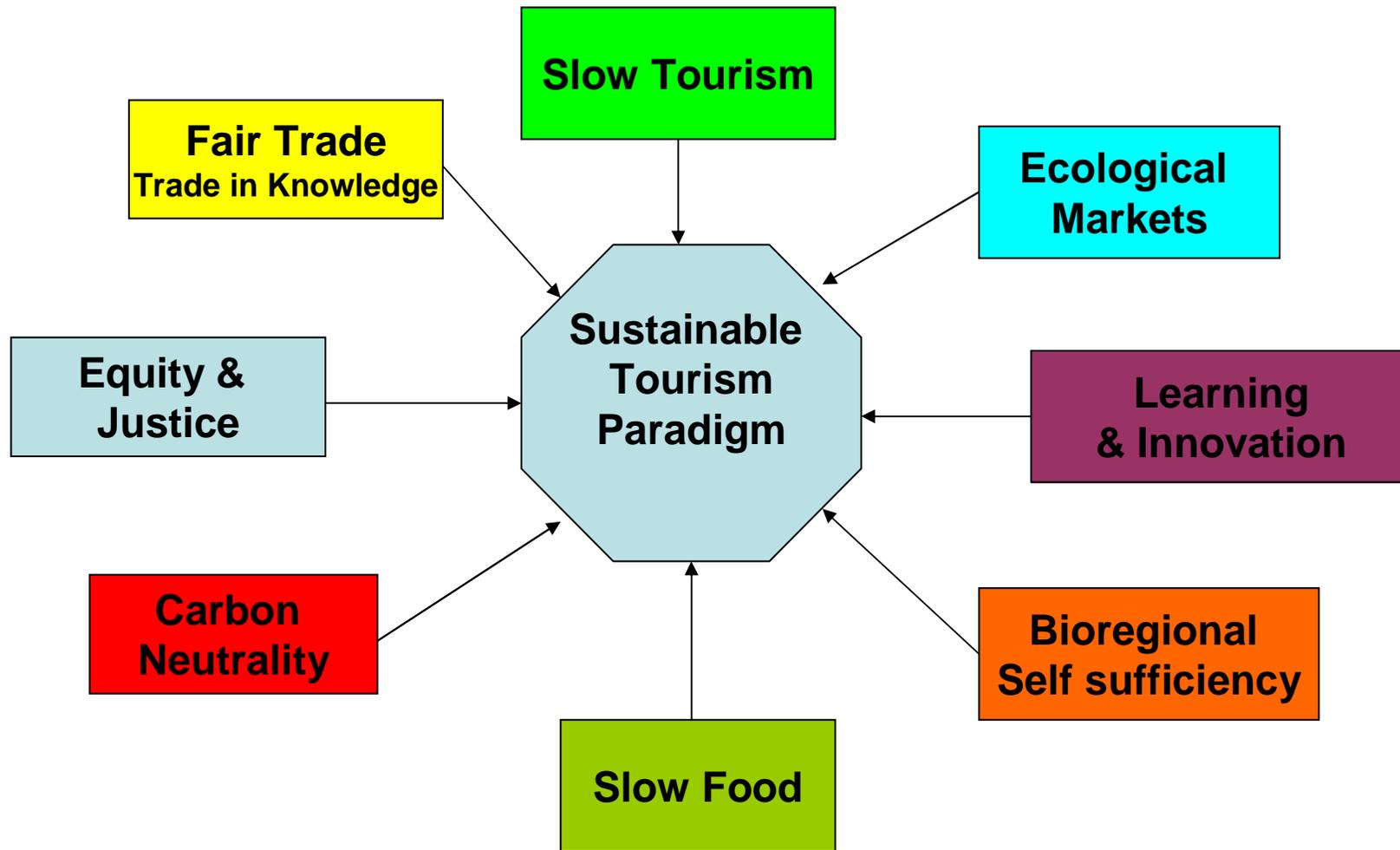
sustainable tourism some thoughts

- Efficiency measures to reduce greenhouse
- Slow and longer tourism
- Bioregional tourism (neutral carbon load)
- Medium pace train to bioregion (slow-medium fast train)
- Equity tourism voucher
- Sustainability corps
- Learning tourism
- Pressure to reduce levels of inequality

From speculation to action

- We have at best ten years possible as little as 5
- There is no choice:- No change is no strategy.
- We will need an ethical position and a strategy to address the carbon load and to maintain relevant market image and market share.
- We will need to build more resilience within the tourist bioregion operators.
- A learning region strategy is prudent and makes sense.

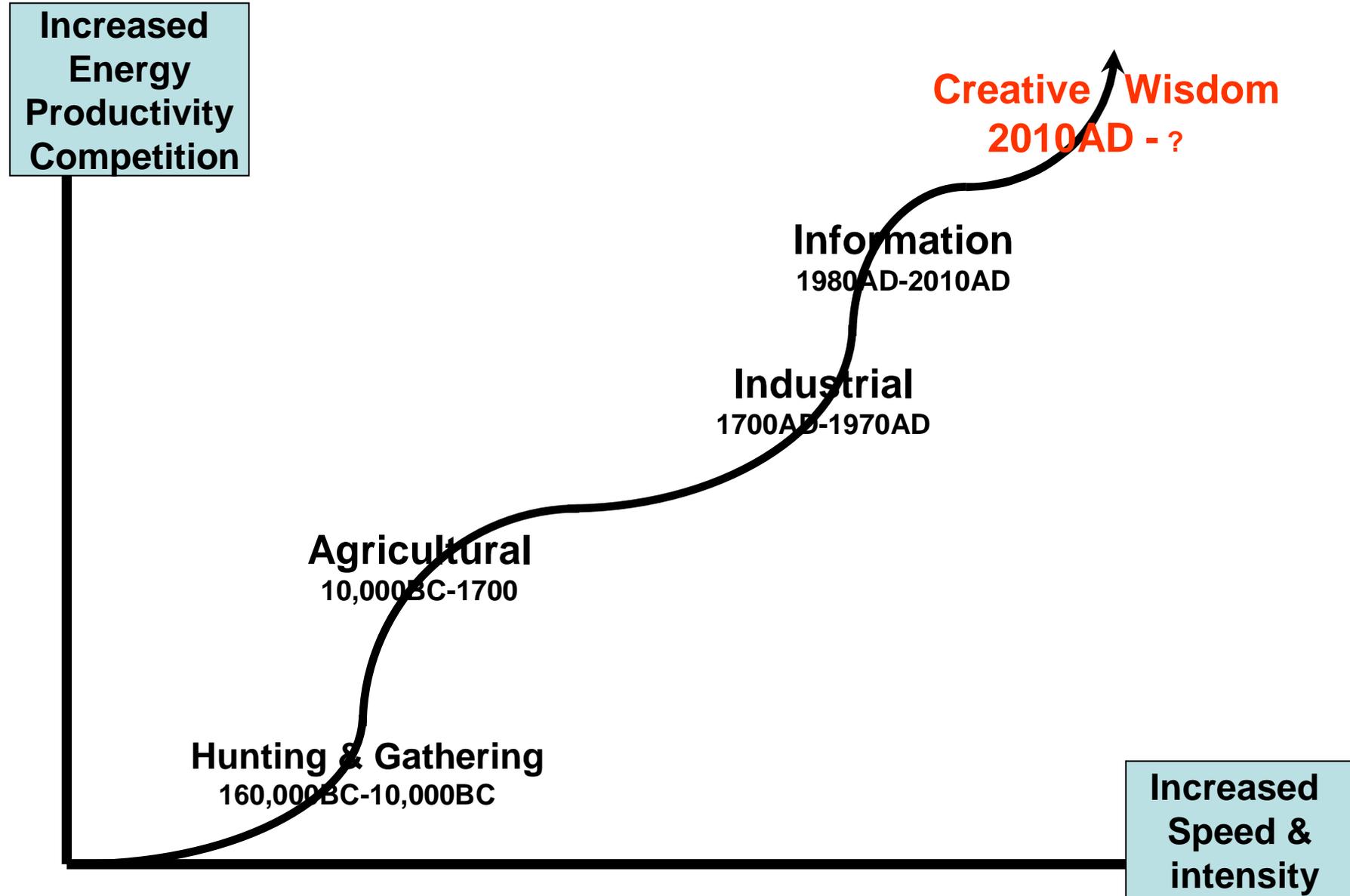
Market features of a Sustainable Tourism



*“The future is always present, as a promise, a
lure and a temptation.”*

—Karl Popper

Where are we heading?



Where are we heading?

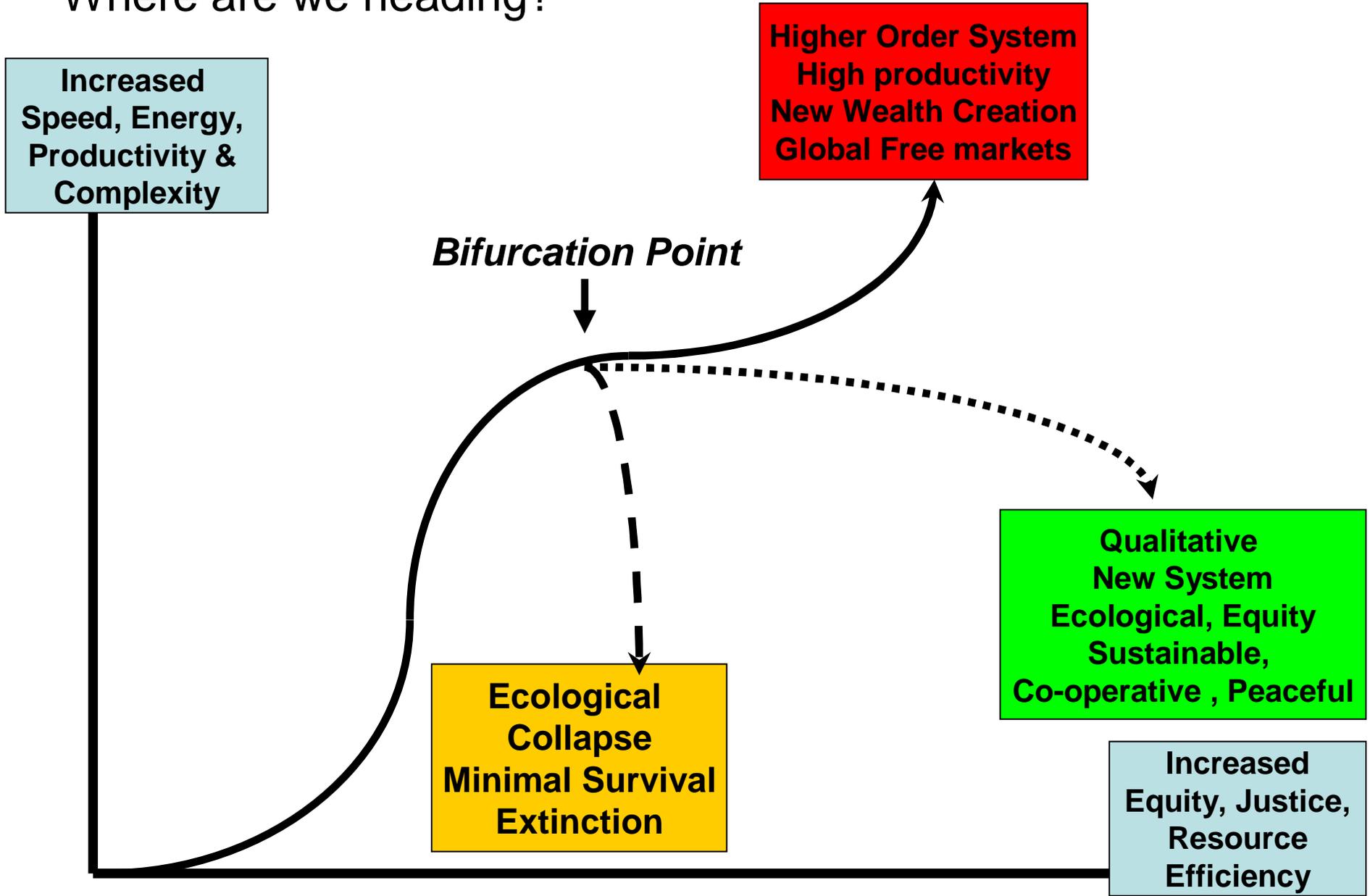
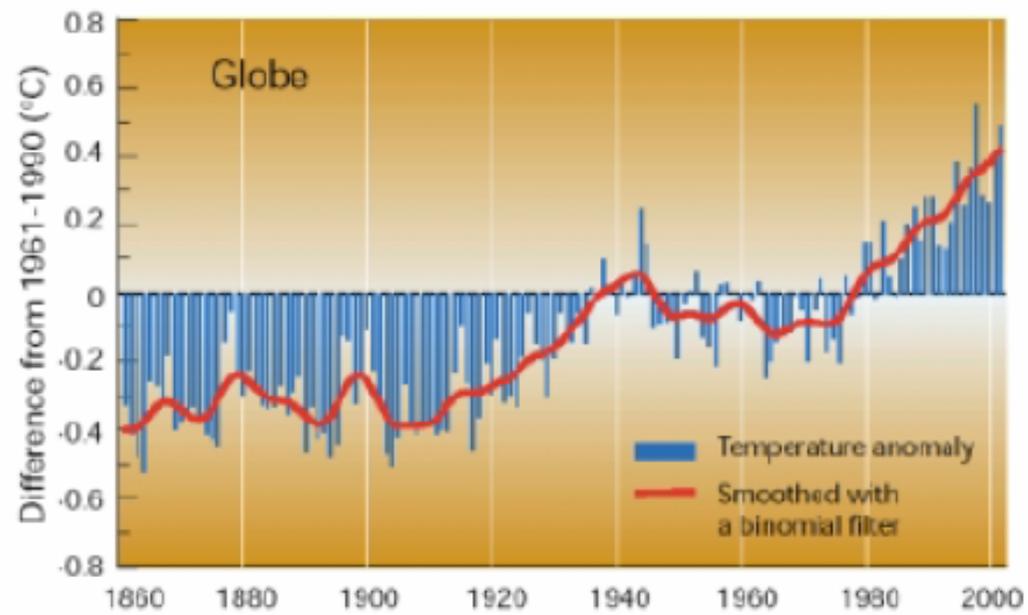


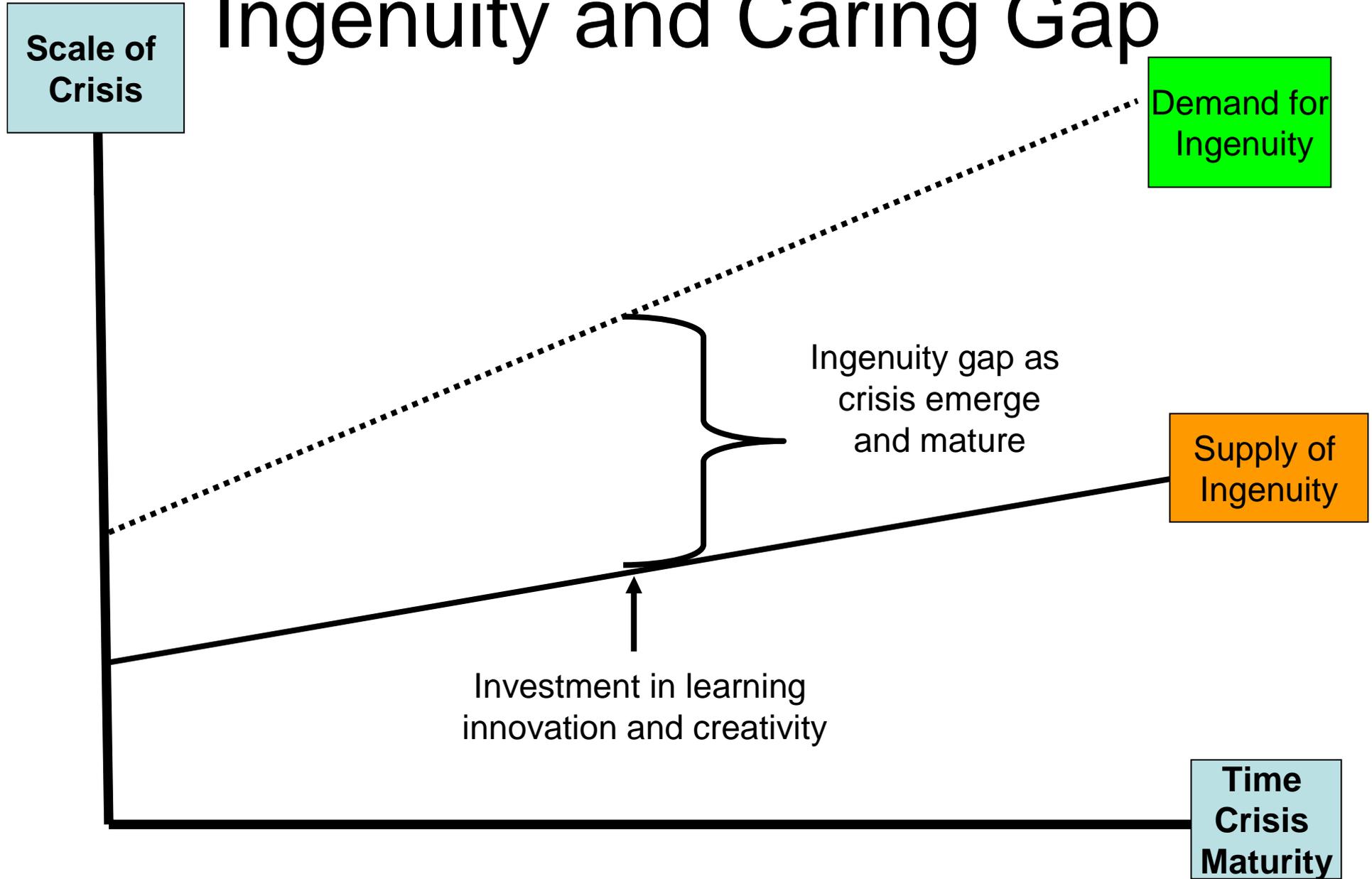
Figure 2.1

GLOBAL TEMPERATURES, 1860 — 2000

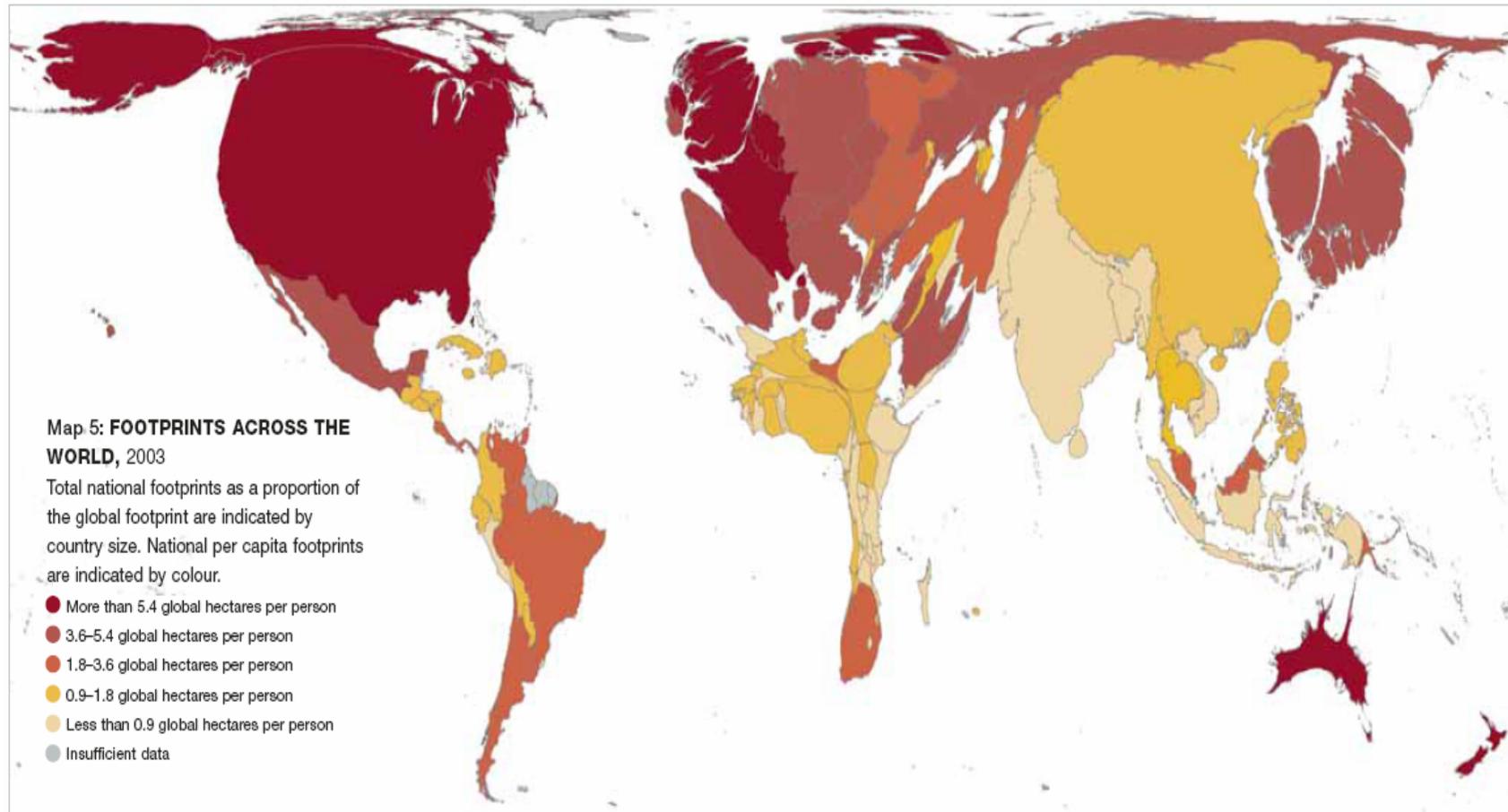


Source: Hadley Centre for Climate Prediction and Research.

Ingenuity and Caring Gap



Global footprints



“As more people and businesses place greater strain on living systems, limits to prosperity are to be determined by natural capitalism rather than industrial prowess”

“Natural Capitalism: The Next Industrial Revolution.”

Paul Hawken and Amory and Hunter Lovins (Earthscan, London 1999)

Equality in growth and consumption will take
4-5 planets to provide the resources required

