

Wise Response: Strategy workshop: How does N.Z. move forward from COP21?

Alan Mark and Dugald MacTavish.
Wellington. 27 January, 2016.



“Follow the Leaders” – Isaac Cordal

WR Mission Statement:

“As demand for growth exceeds earth’s physical limits causing unprecedented risks, what knowledge and changes do we need to secure New Zealand’s future wellbeing?”

W.R. activities to date:

- National tour to raise support for the Appeal
- Appearing before the Finance and Expenditure Select Committee
- Proposing Royal Society Climate Change Impacts, Mitigation and Adaptation Studies
- Presenting submission to Otago Regional Policy Statement Review under “precautionary principle”
- Opposing Fonterra R.C. application for coal-fired boilers at its new Studholm Plant.

Possible levels for action identified:

- Global –
- National -
- Provincial/Local -
- Cities/business -
- Community/Family -
- Depletion and warming protocols
- Fuel efficiency, research, infrastructure
- Landuse, transport, consents
- Goals, culture, capitalisation, tax
- Where we live, what we drive, what we eat, where we invest

Key to political progress:

- Develop a framework and strategy for economic, environmental and social sustainability.
- Establish a Climate or Futures Forum/Commission.
- Establish a network between like-minded organisations.

Infinite growth is possible on a finite planet

1. Addressing this myth is the core objective of Wise Response
2. Achieving sustainability requires us to adjust our living arrangements to function within self-evident biophysical limits

Limits to growth: current trends

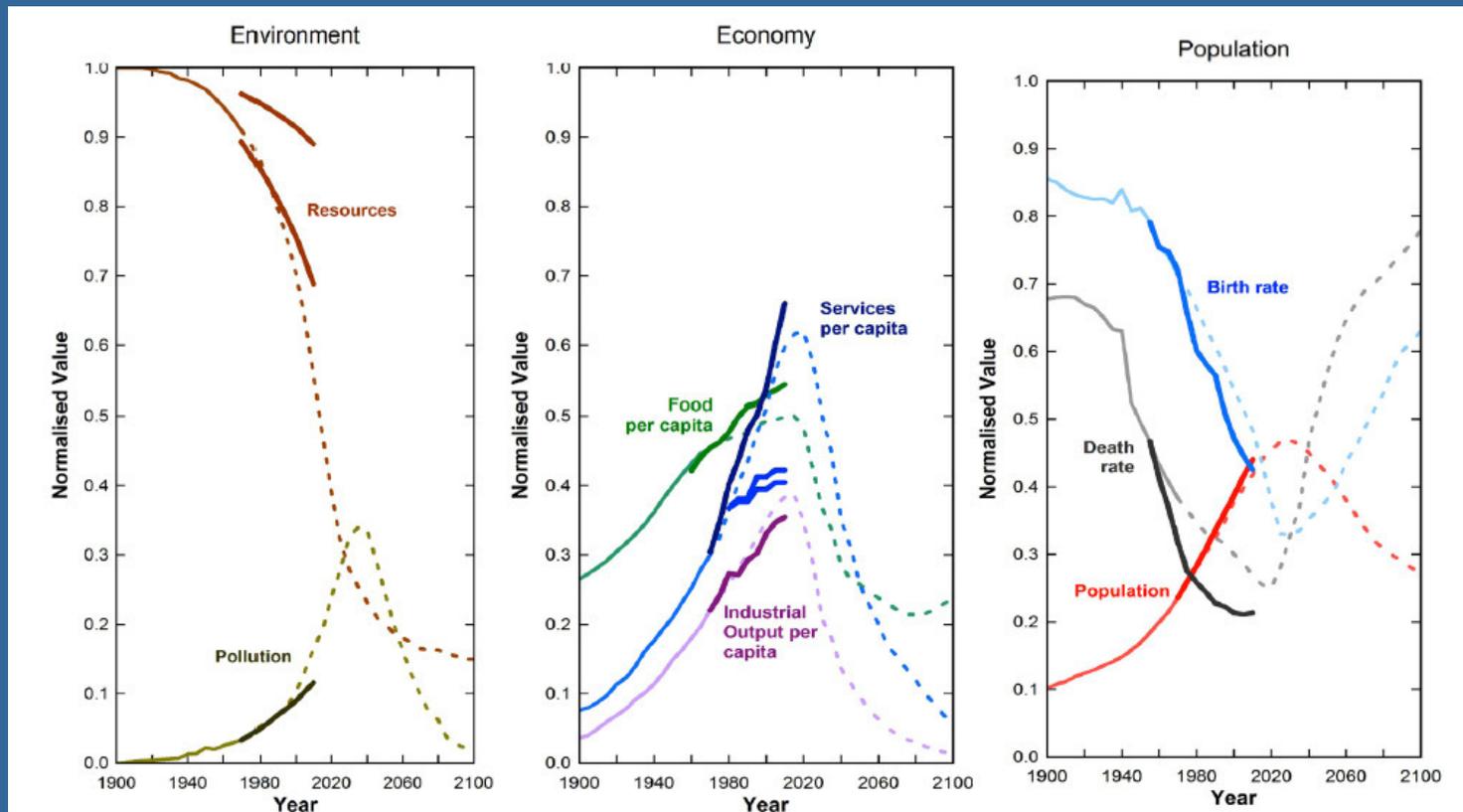
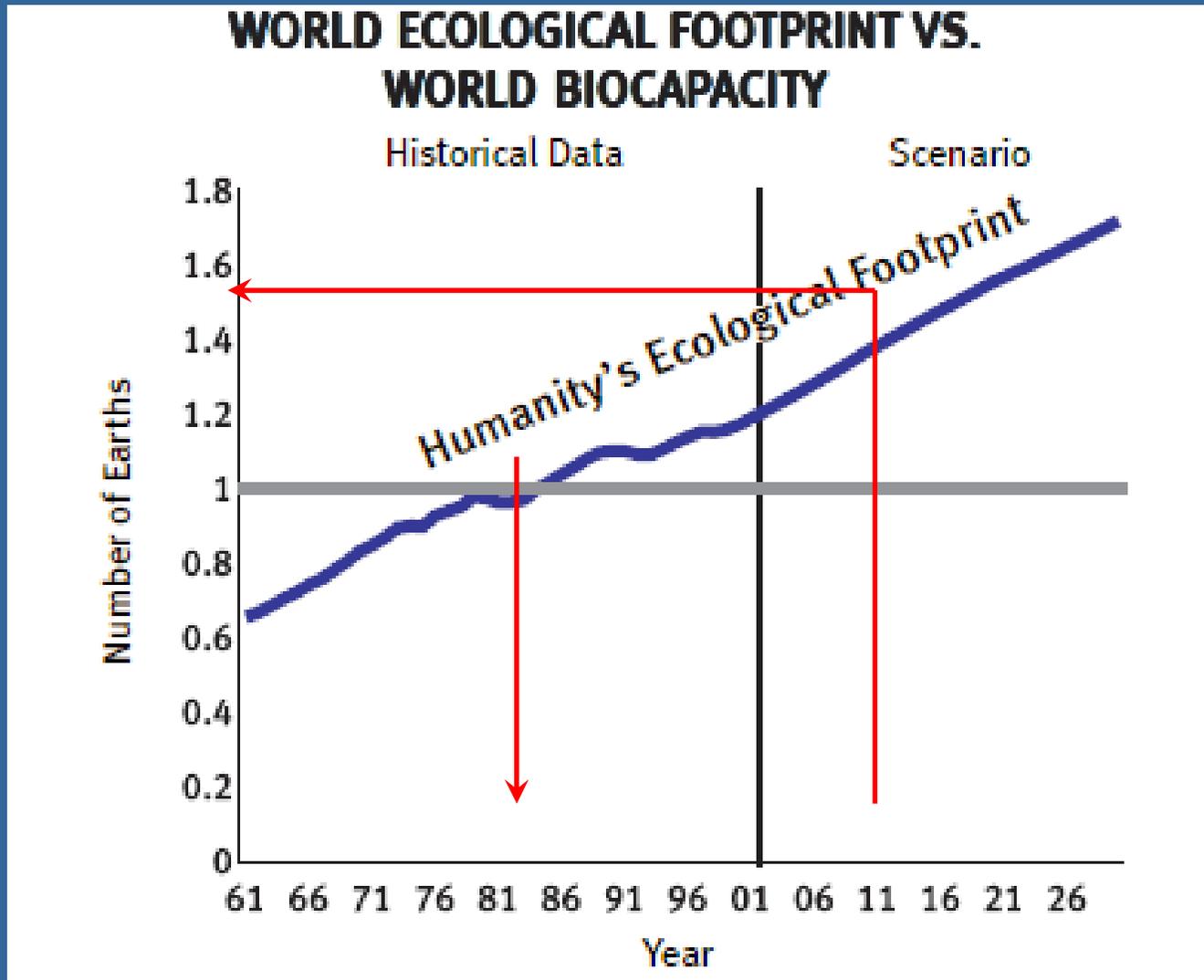
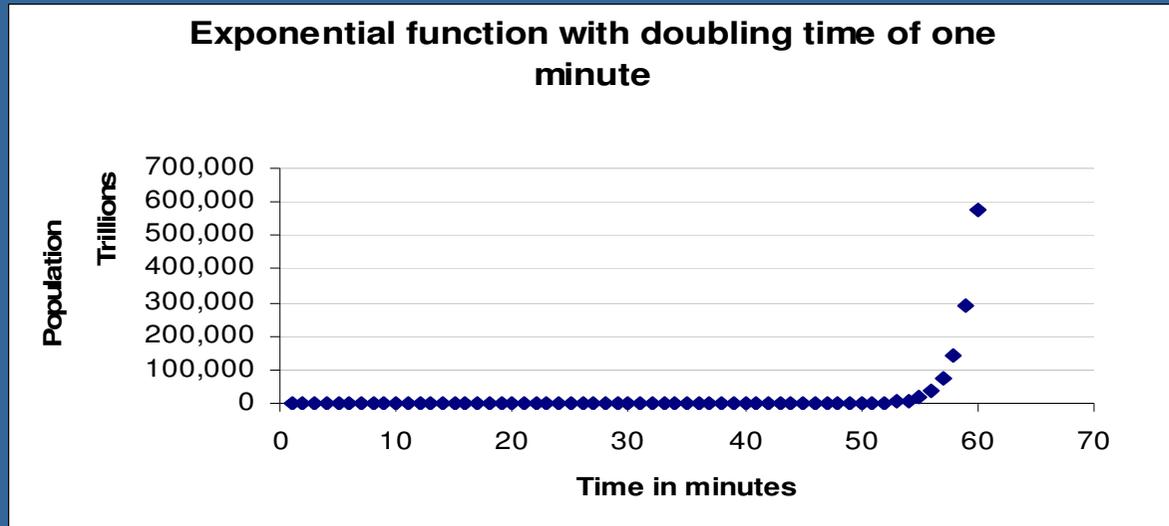


Figure 1. *LTG BAU (Standard Run) scenario (dotted lines) compared with historical data from 1970 to 2010 (solid lines)—for demographic variables: population, crude birth rate, crude death rate; for economic output variables: industrial output per capita, food per capita, services per capita (upper curve: electricity p.c.; lower curves: literacy rates for adults, and youths [lowest data curve]); for environmental variables: global persistent pollution, fraction of non-renewable resources remaining (upper curve uses an upper limit of 150,000 EJ for ultimate energy resources; lower curve uses a lower limit of 60,000 EJ [Turner 2008]).*

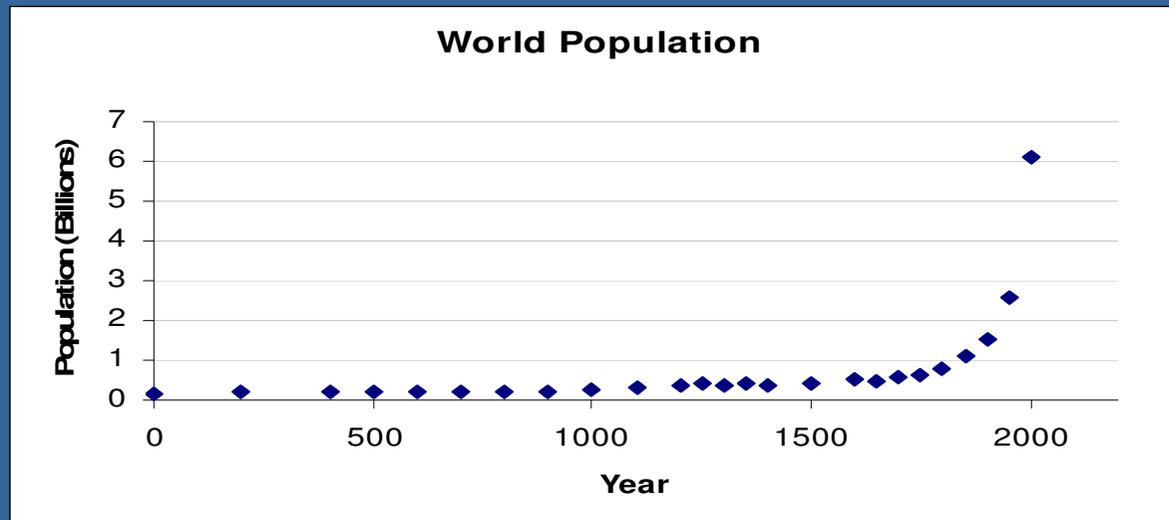
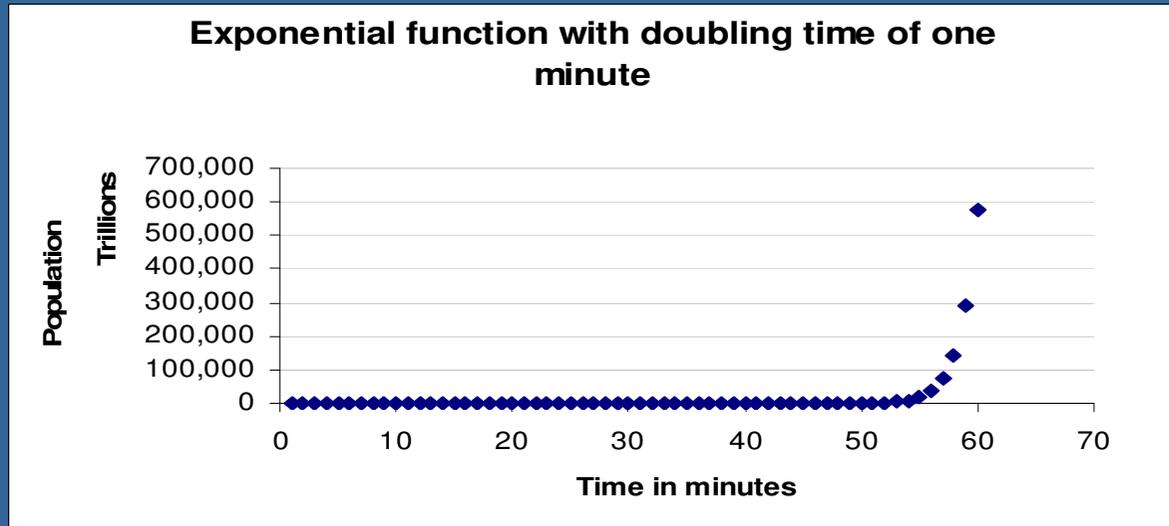
Carrying Capacity/Overshoot



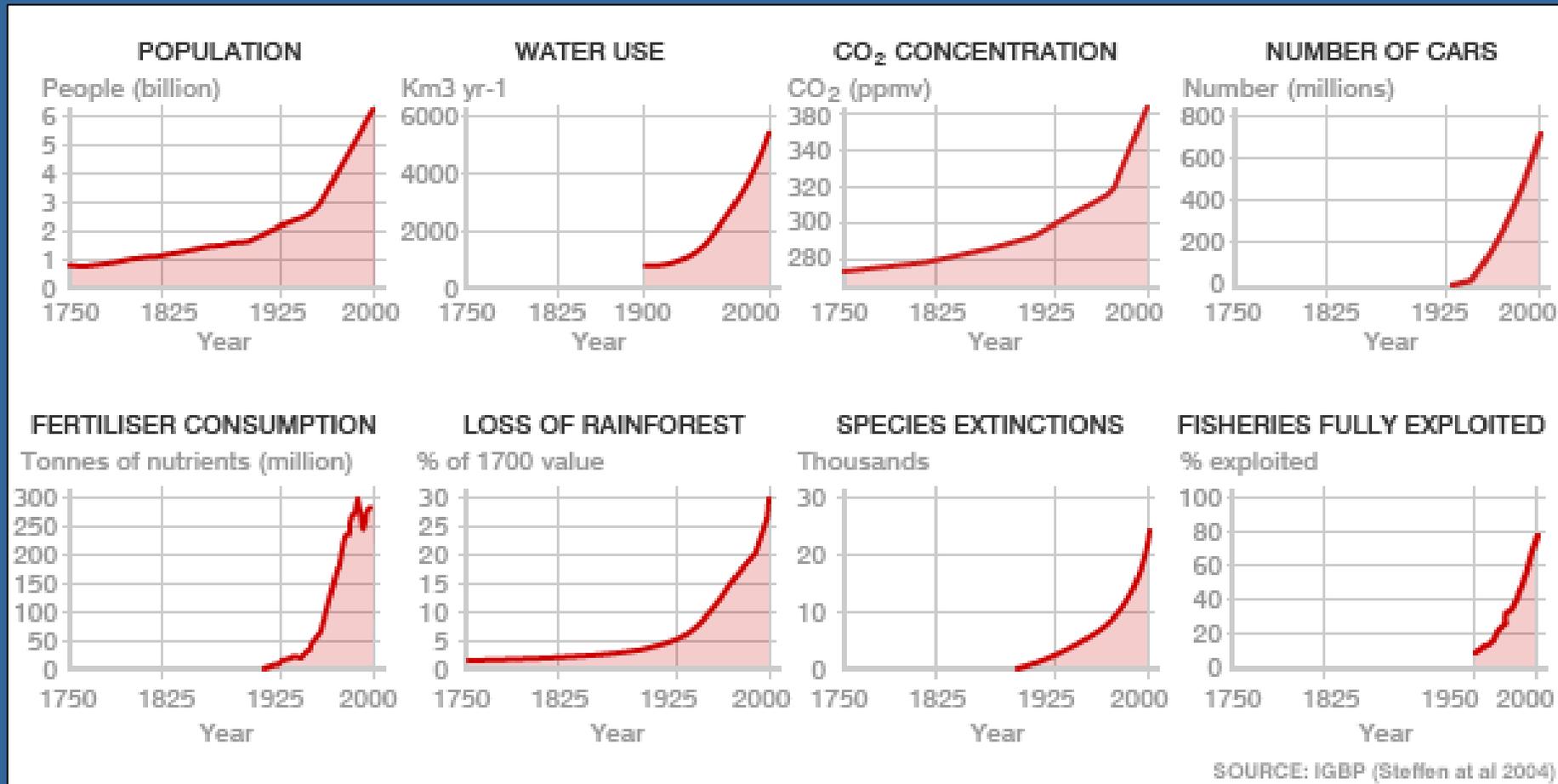
Exponential growth function



Exponential growth function

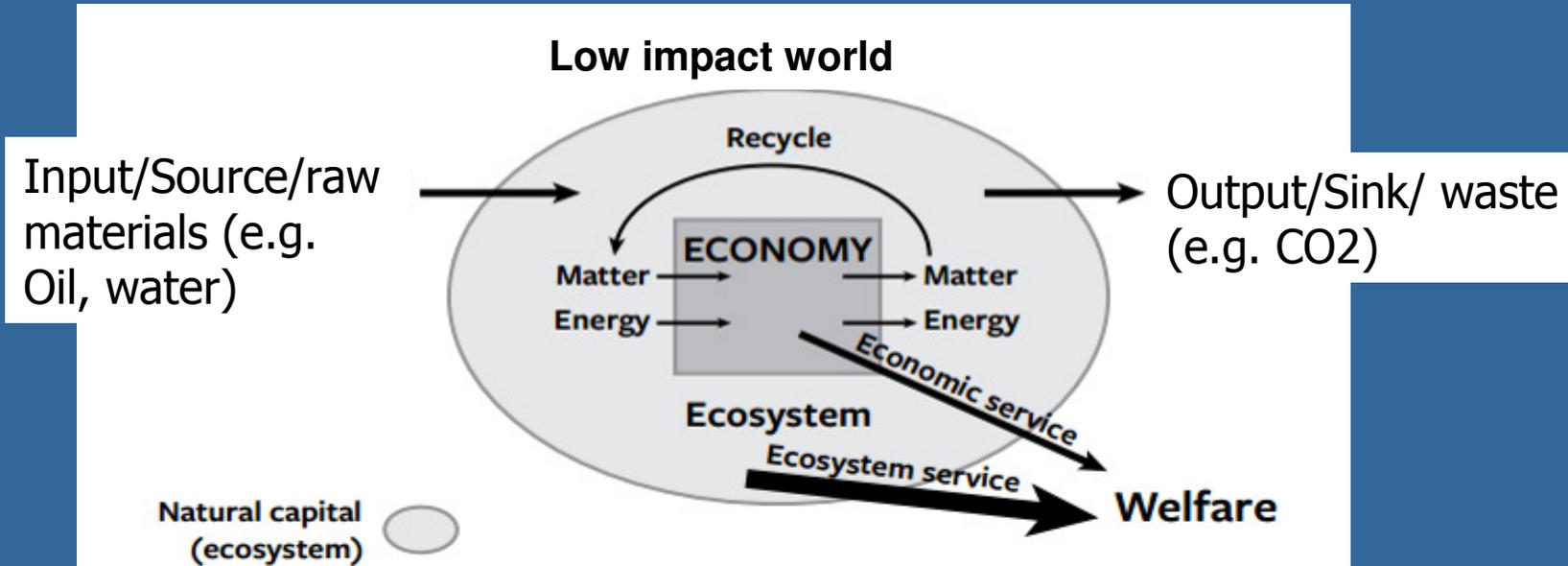


Exponential growth functions are everywhere!

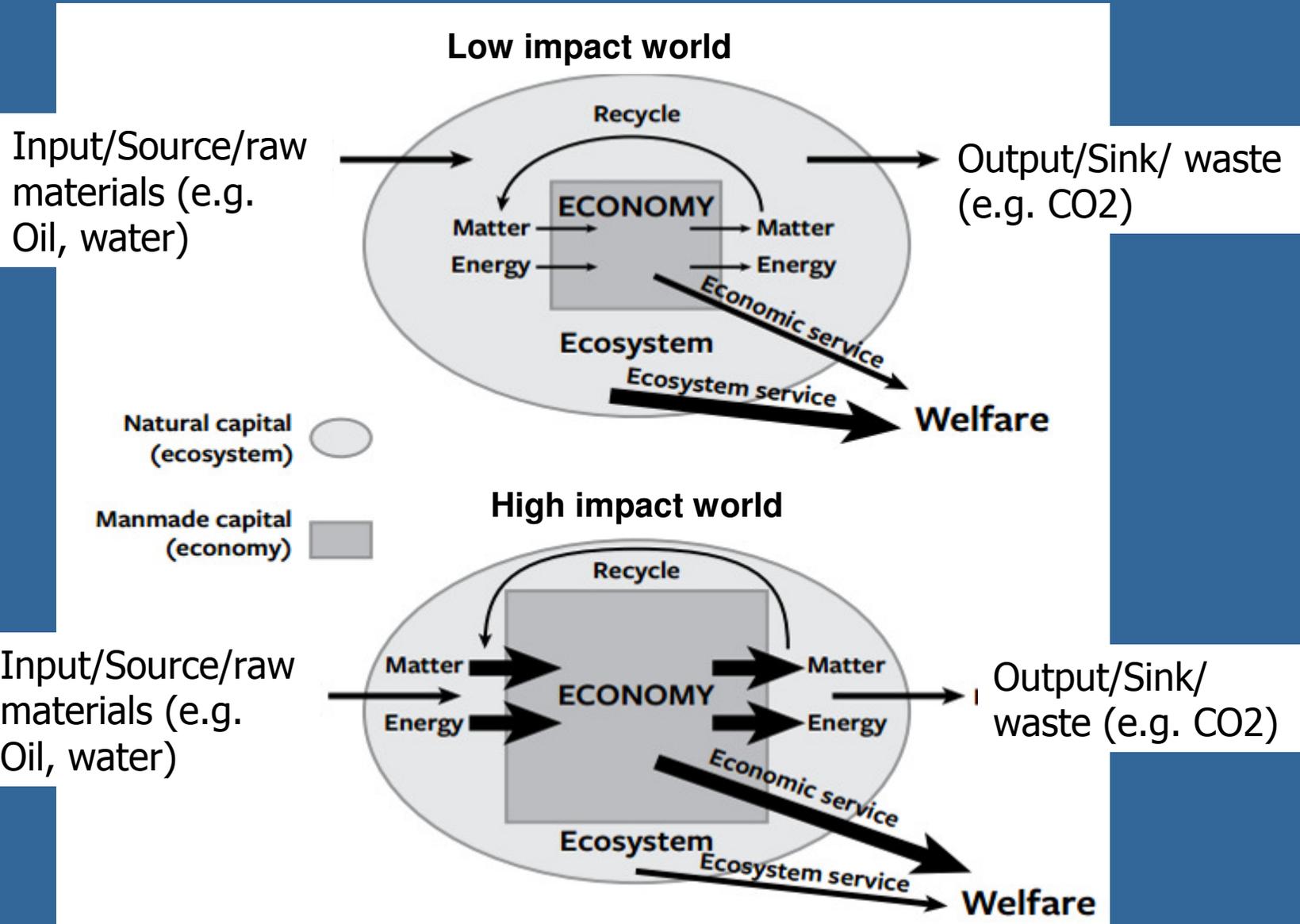


2% growth doubles demand every 35 years

Simple global model for integrating issues



Simple global model for integrating issues



<1.5 deg warming as a lever/entry point

Soon links to the likes of:

- fossil fuel use
- material growth as a good
- currency with a growth imperative
- infrastructure arrangement – transport, energy, water, agriculture, food chains, technology, etc.
- ecosystem integrity and biodiversity
- agriculture, public health etc.

Summing up

1. Global sustainability is a prerequisite for National and local sustainability
2. Acknowledging global resource limits provide an essential biophysical basis for developing plans at all levels and scales
3. Climate change is one expression of encountering a critical limit but an excellent “hook” for addressing many others

Summing up

1. Global sustainability is a prerequisite for National and local sustainability
2. Acknowledging global resource limits provide an essential biophysical basis for developing plans at all levels and scales
3. Climate change is one expression of encountering a critical limit but an excellent “hook” for addressing many others
4. Strong alliance between like-minded groups to provide impetus
5. A body formally responsible for long-range planning beyond direct political control.

Thankyou