

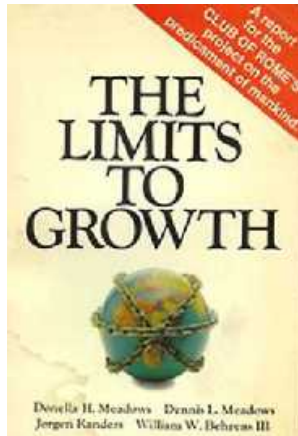


Interaction of the Concepts of Sustainable Development and the Information Society

Dr. Thomas Schauer

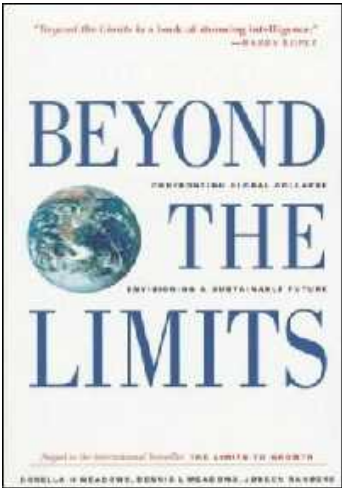
Director, European Support Centre of the Club of Rome

1972 – Limits to Growth



by Donella Meadows,
Dennis Meadows,
Jorgen Randers

- mathematical model for resource consumption
- computer based scenario building
- alerting results



1992: The 20-Year Update

2004: The 30-Year Update



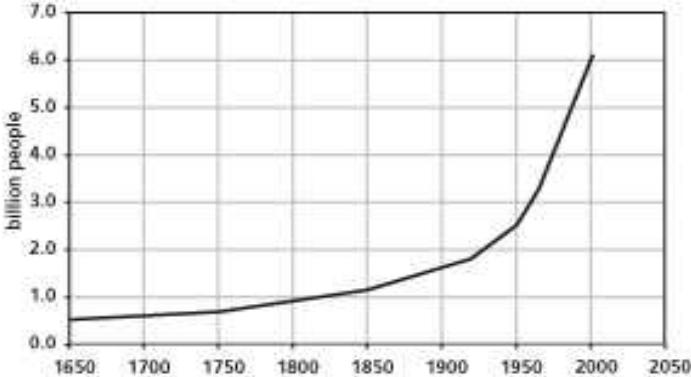
Many statements from the 1972 report proved to be correct.

Further increase of resource consumption could not be stopped.

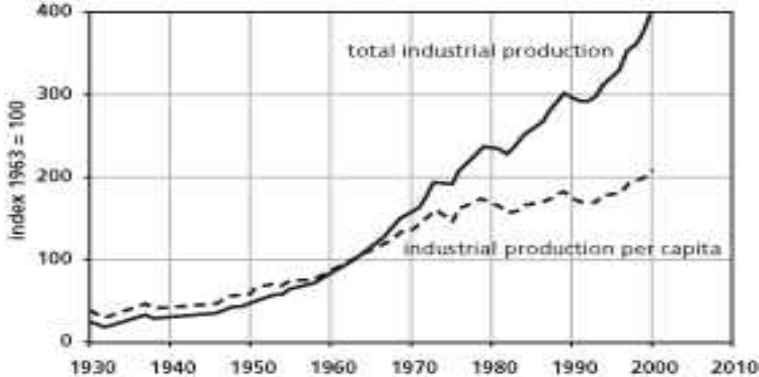


Trends

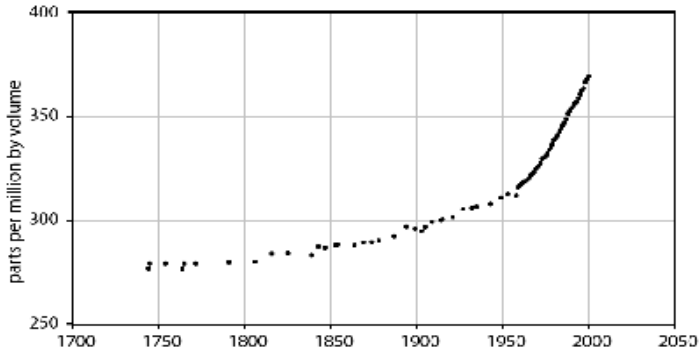
population



Industrial production



Metal use



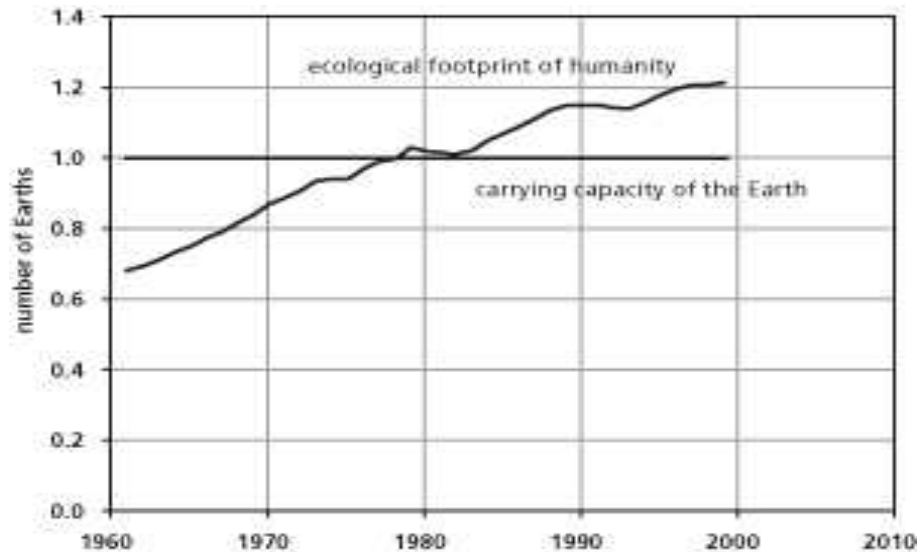
CO2 concentration



then, the concept of Sustainable Development came up:

a development in which present generations find ways to satisfy **their needs without compromising the chances of future generations to satisfy **their needs**.**

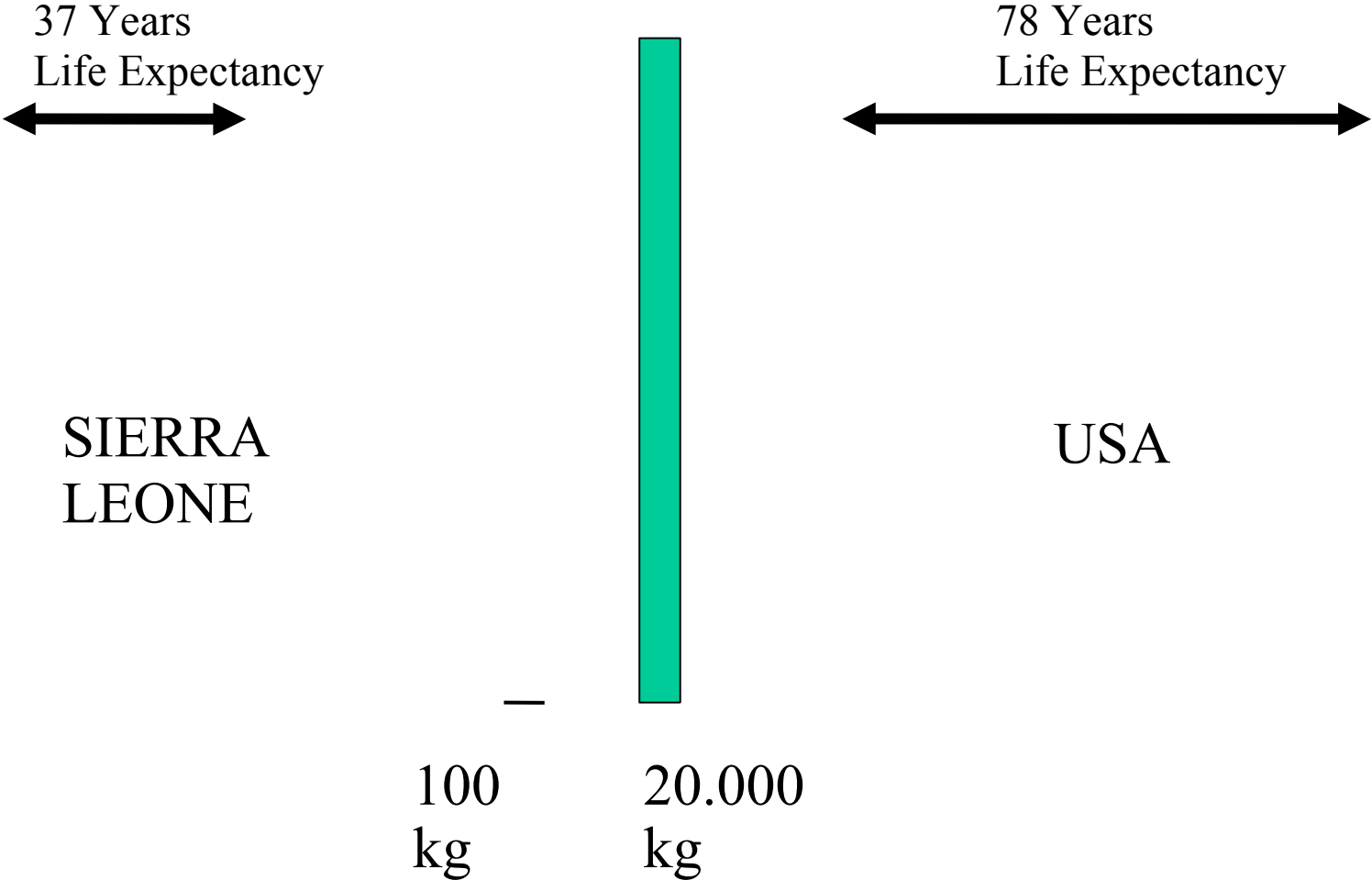
Change of the ecological footprint



The introduction of the concept of SD in 1987 seemed not to have an impact on the trends (yet?)

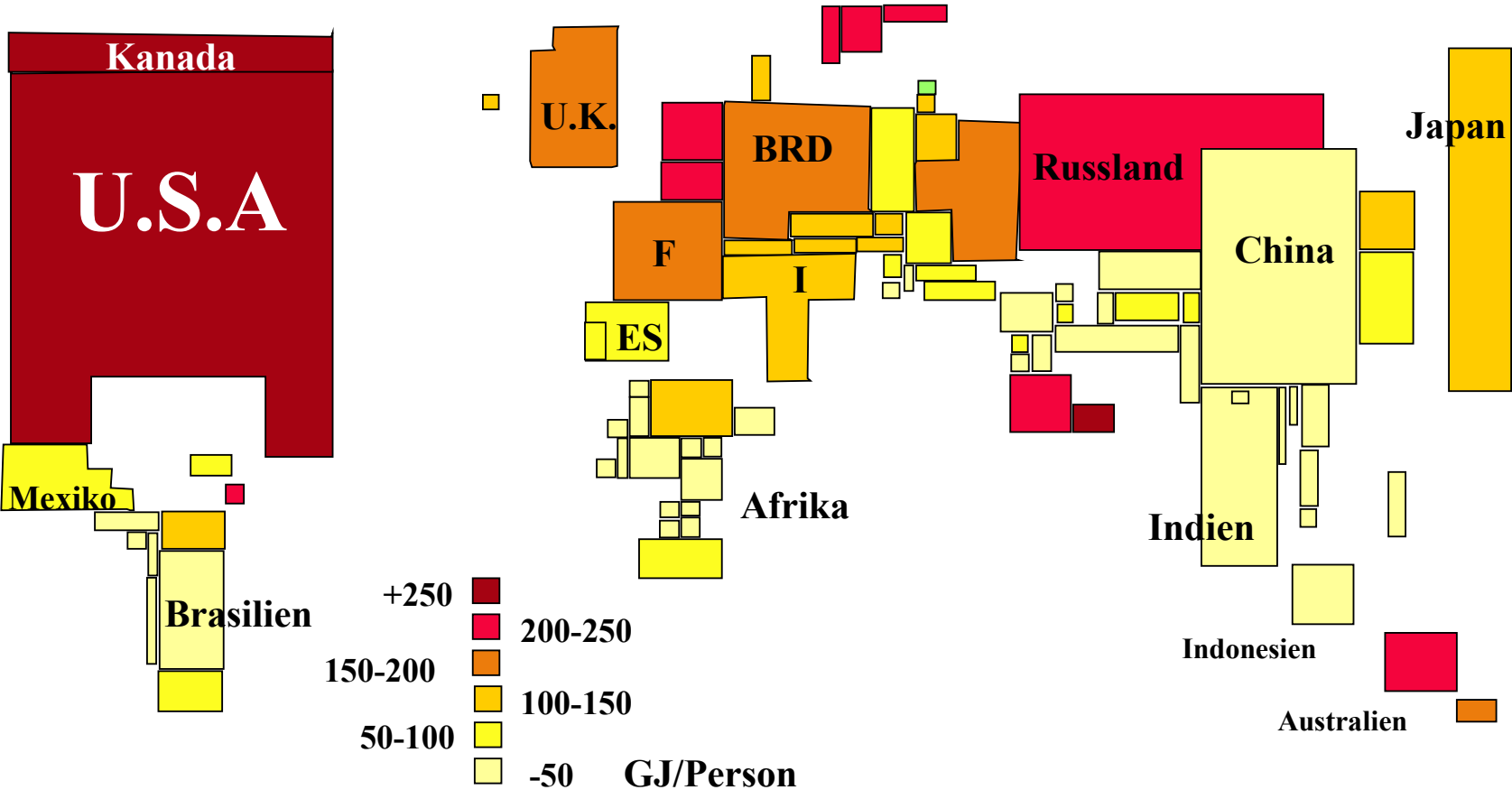


Distribution of CO2- Emissions



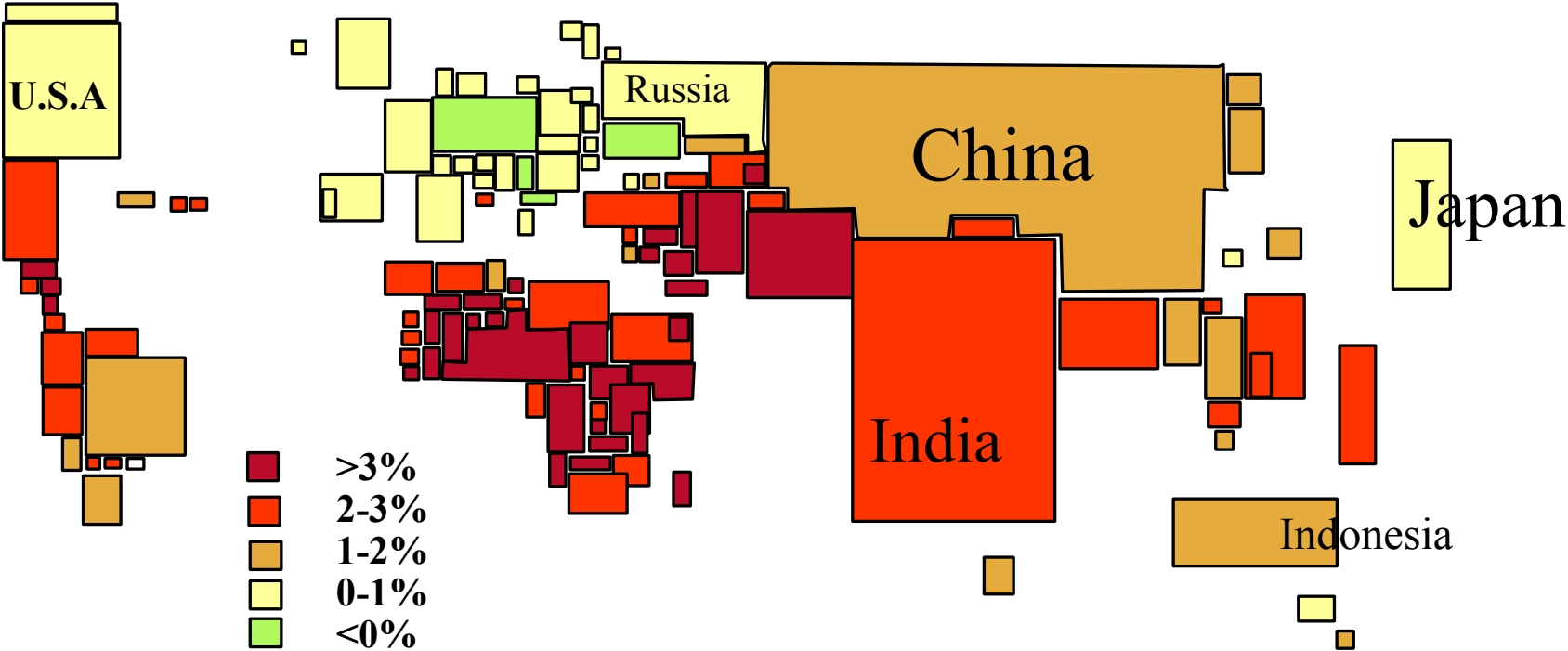


Resource use



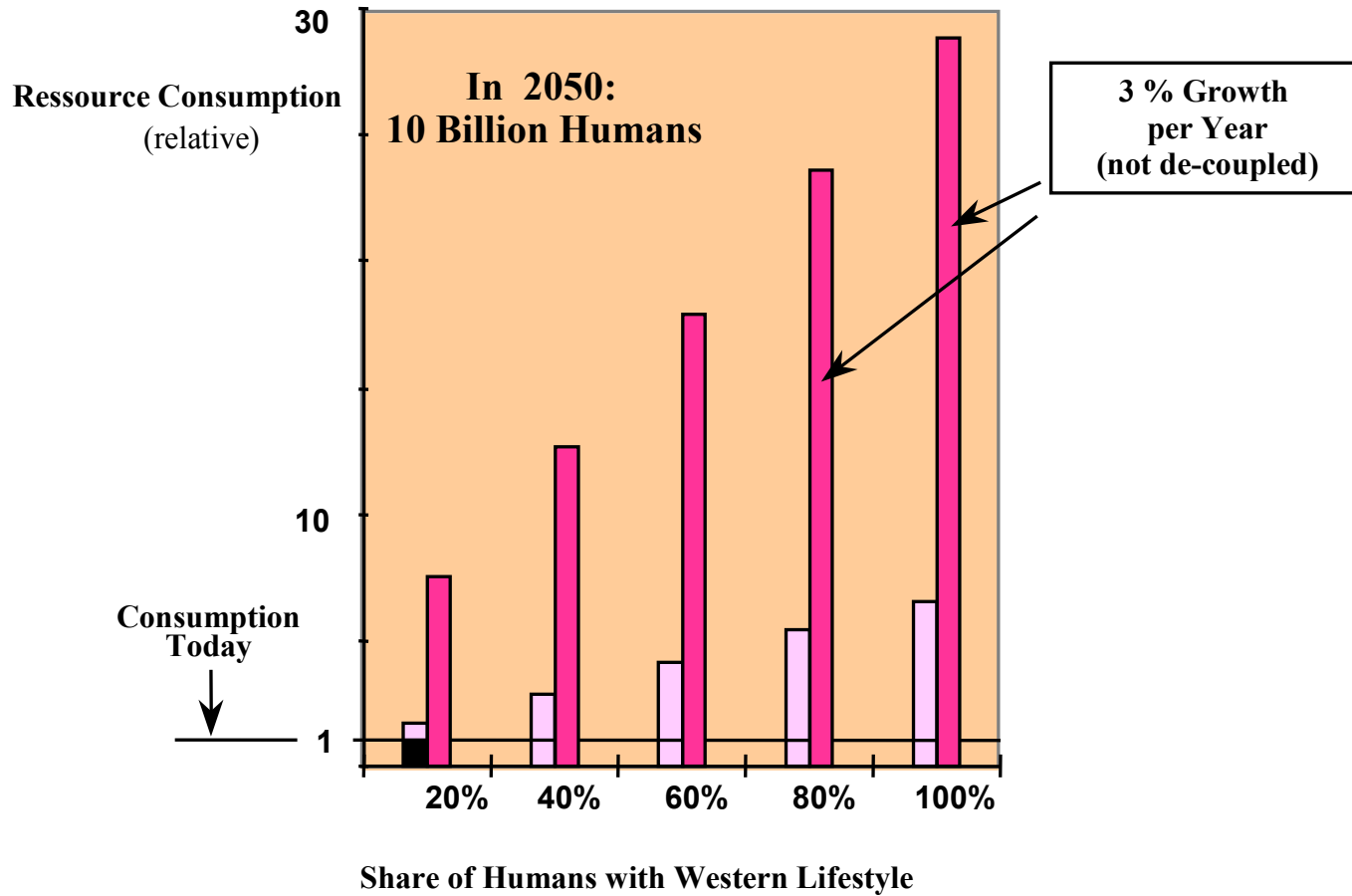


Population





Ressource Consumption 2000 - 2050





Lisbon Strategy, 2000

"to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion."



Lisbon Strategy

"The shift to a digital, knowledge-based economy, prompted by new goods and services, will be a powerful engine for growth, competitiveness and jobs. In addition, it will be capable of improving citizens' quality of life and the environment."



Sustainable Development Strategy 2006

Old
(2001)

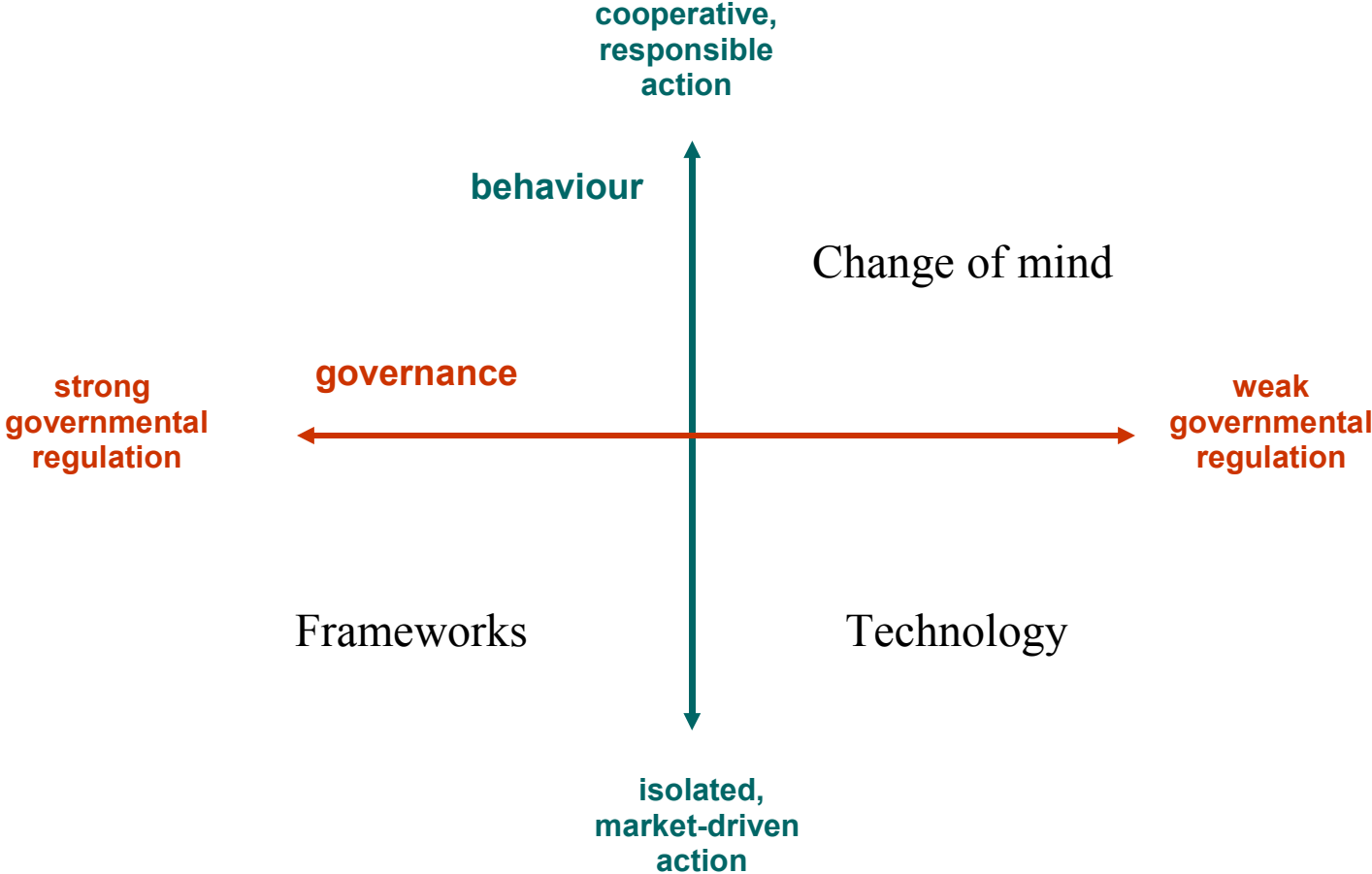
- 1) Limit climate change and increase the use of clean energy,
- 2) Address threats to public health,
- 3) manage natural resources more responsibly
- 4) Improve the transport system and land-use management
- 5) combat poverty and social exclusion,
- 6) Deal with the economic and social implication of an ageing population.

New
(2006)

- climate change and clean energy
- public health
- conservation and management of natural resources
- sustainable transport
- social inclusion, demography and migration
- global poverty and sustainable development challenges
- sustainable consumption and production



strategies





environmental awareness

80% of German citizens stated that they contributed consciously to environmental protection in the last two years.

45 % are willing to co-operate on an environmental initiative in the district they live in.



Eco-Schizophrenia

a survey of the most environmentally minded third of the population showed that:

74 % of them travelled by car or by air on their last holiday

39 % made no effort to save hot water

correlation awareness / behaviour : 0,15



problems with framework setting



"2,50 Euro per Liter" and voters ran away....



IT - Revolution and Ressource Consumption

Substitution hypothesis (cyberworld-scenario)

Cost Reduction

Rebound Effect



communication and traffic grow parallel

Electronic waste has become a problem

Paperless office made slow progress



The Industrial Revolution

Employment
decreases

agriculture

Output
increases



Employment
increases

industry

Output
decreases

Substitution

Addition



The IT

Employment
decreases

industry

Output
increases



Positive Feedback



Employment
increases

IT Sector

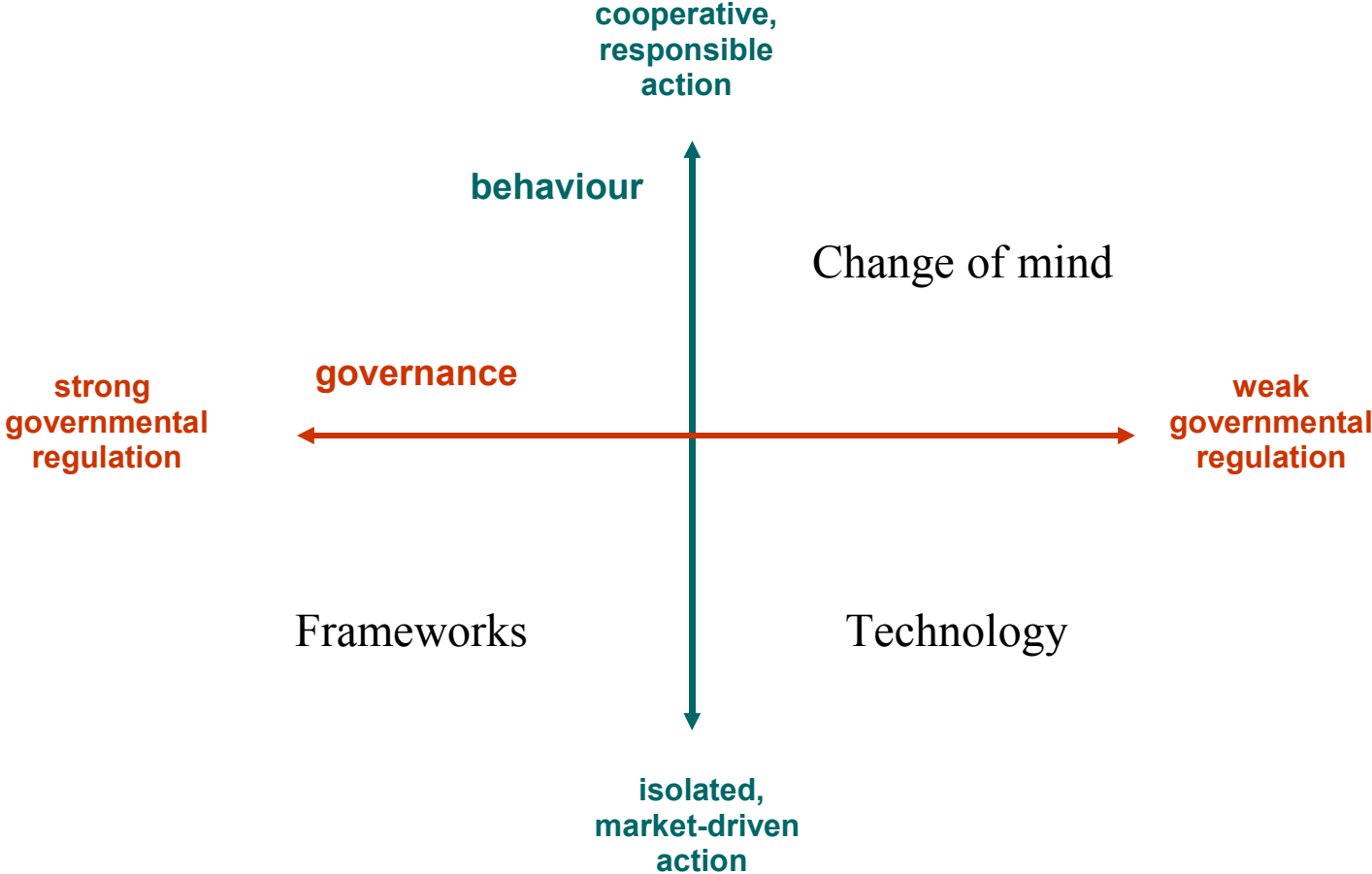
Output
decreases

Substitution

Addition



strategies





Links:

Information Technology and the Environment:

<http://www.clubofrome.at/technology/>

European Environmental Education

<http://www.eeeprojects.net>

General / Publications of the European Support Centre

<http://www.clubofrome.at>