

An aerial photograph of a lush, green landscape. A winding river flows through a vibrant green field, surrounded by dense, dark green forest. The sky is filled with soft, white clouds. The overall scene is a natural, healthy ecosystem.

Obsolete business models for tomorrow

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Initiative, WWF
8 June 2011

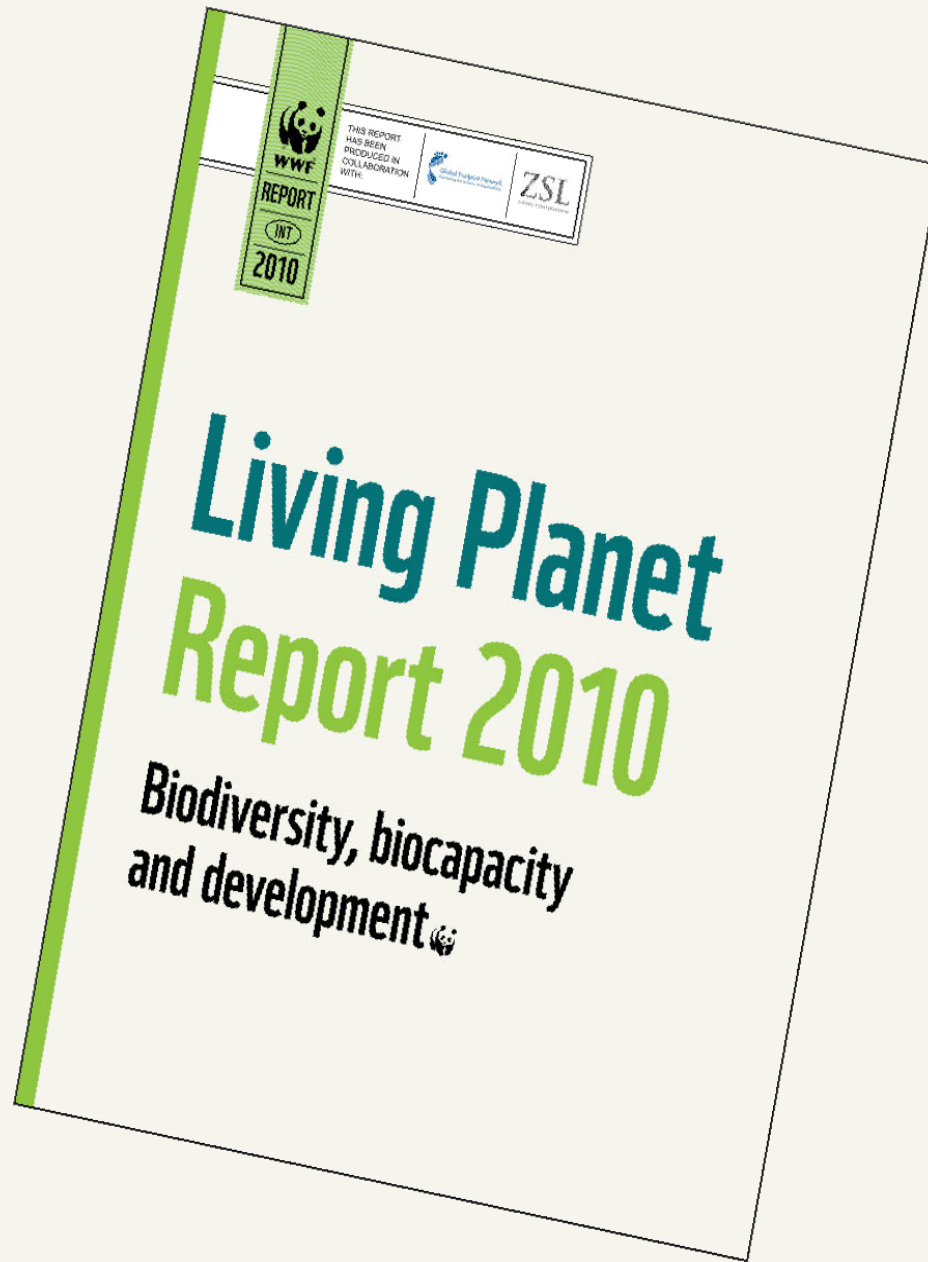


" This has a great future. There could be one in every town!"



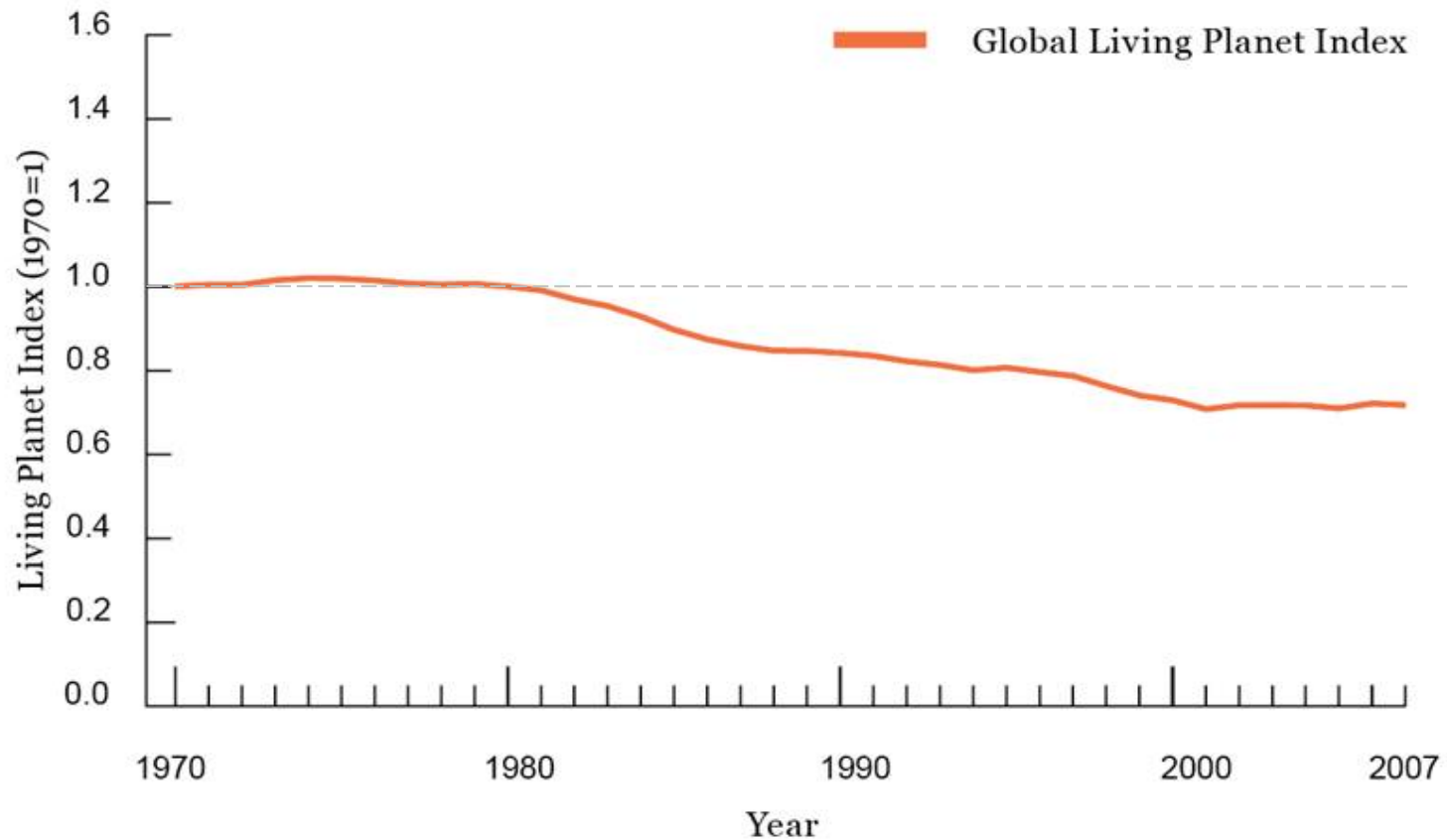
" This has a great future. There could be one in every town!"

An anonymous visionary at
the demonstration of one
of the first telephone



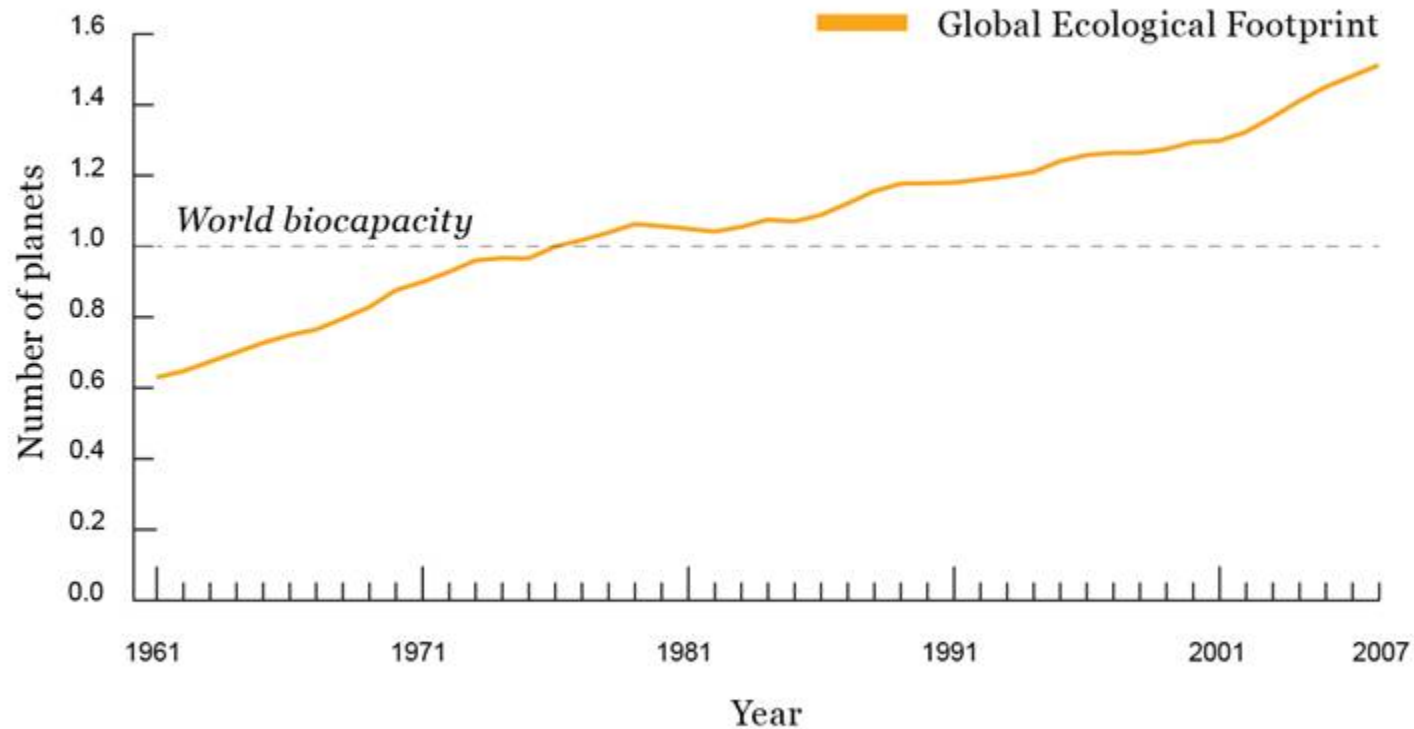


Global Living Planet Index





Global Ecological Footprint





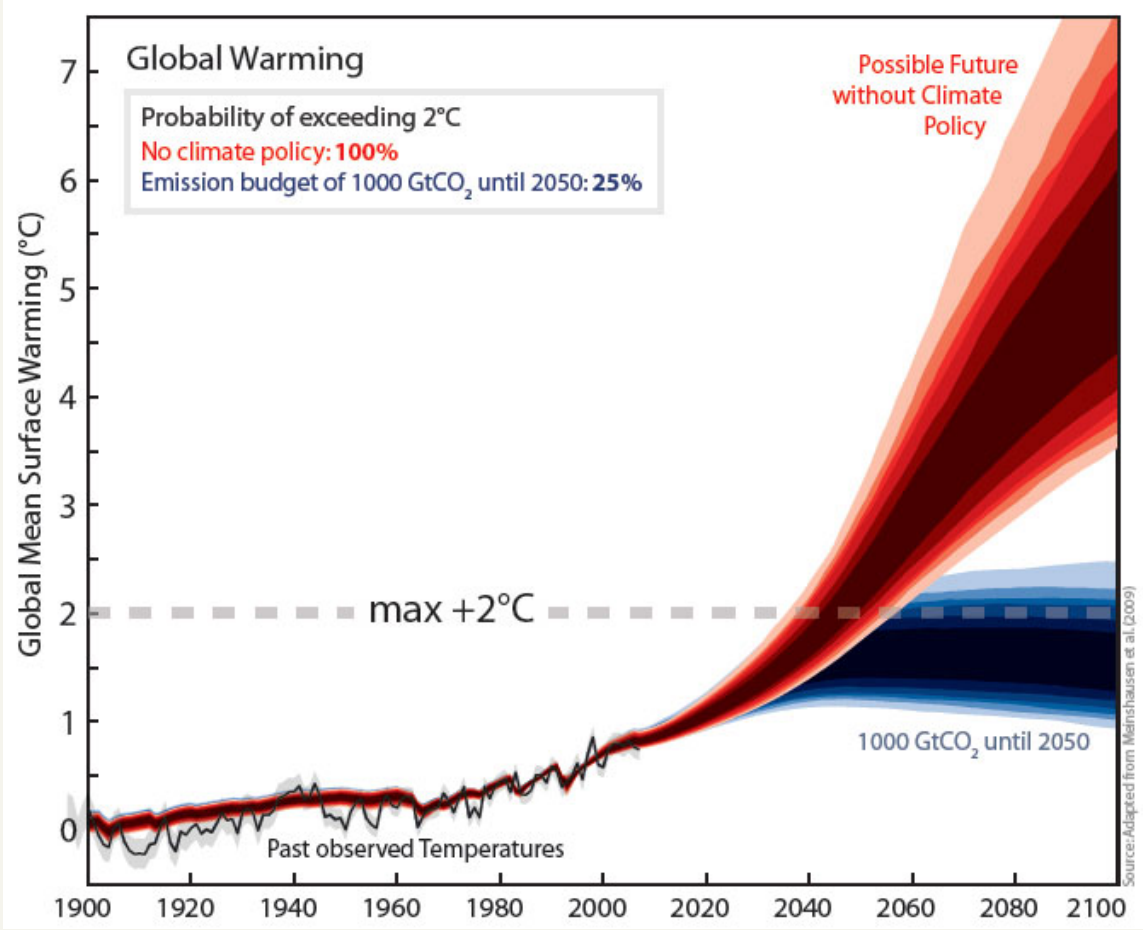
KEY MESSAGES: 1

- **50% Overshoot** – Humanity now consumes at a rate 50% higher than the Earth can regenerate sustainably. It takes 1.5 years for the Earth to produce the resources we use in a single year.
- **Humanity will need the capacity of two Earths by 2030** to keep up with natural resource consumption and absorb CO2 waste, and almost **three planets by 2050**.
- Our current overshoot is **largely due to carbon emissions** (grown 11-fold since 1961). **Major future concerns include land availability and allocation.**



KEY MESSAGES: 2

- **Low-income countries bearing the brunt of our abuse of the planet**
 - Their EF has remained constant (per capita)
 - But their **biodiversity has collapsed (58% decline)**
- **Emerging economies are becoming increasingly important**
 - especially because of energy use – ASEAN countries increased energy usage 100-fold since 1961
- **Biggest driver is rampant consumption in the OECD countries**
 - **If we all lived like U.S. residents – 4.5 planets**
 - relatively small proportion of global population in the OECD (18%), but account for almost 40% of humanity's Ecological Footprint



→ *“Dangerous Climate change”*

→ *“The Climate solution”*

Source: University of Oxford and Potsdam Institute for Climate Impact Research, April 2009

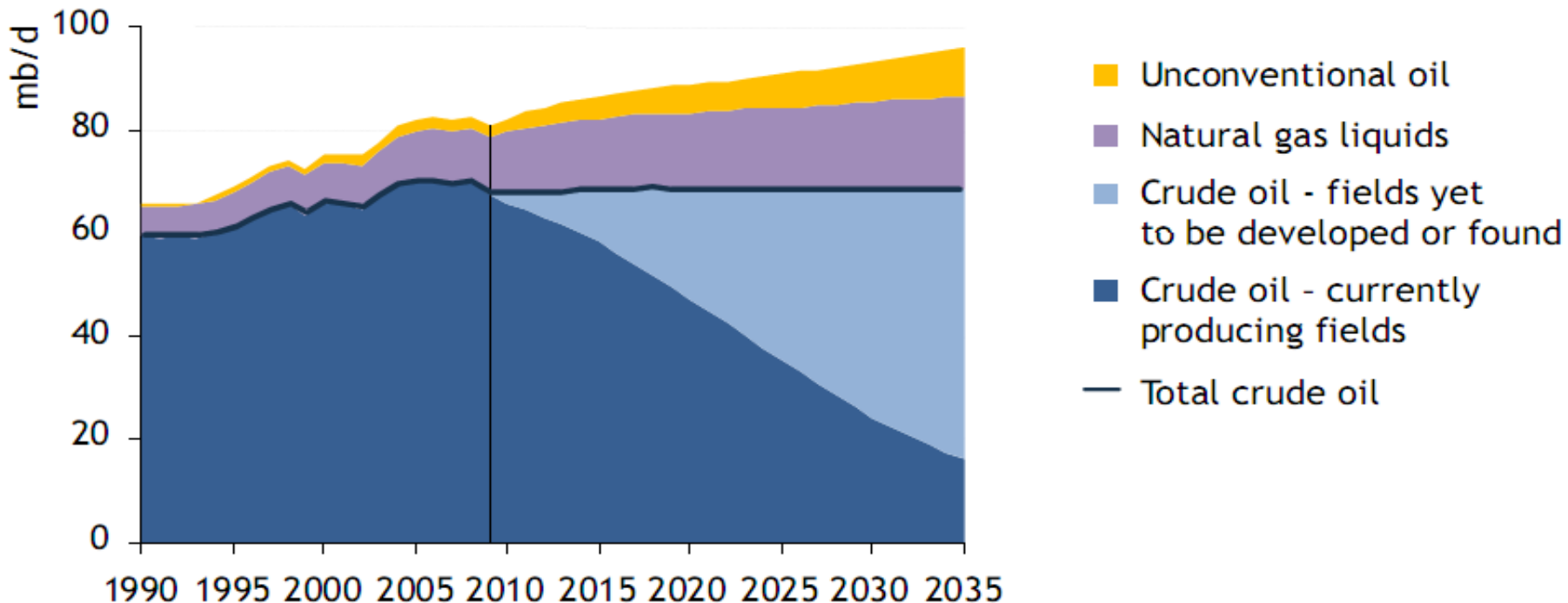


We're Running Out of Oil – We Have No Other Choice

The Energy Report

(IEA, 2010)

World Oil Production by Type in the New Policies Scenario

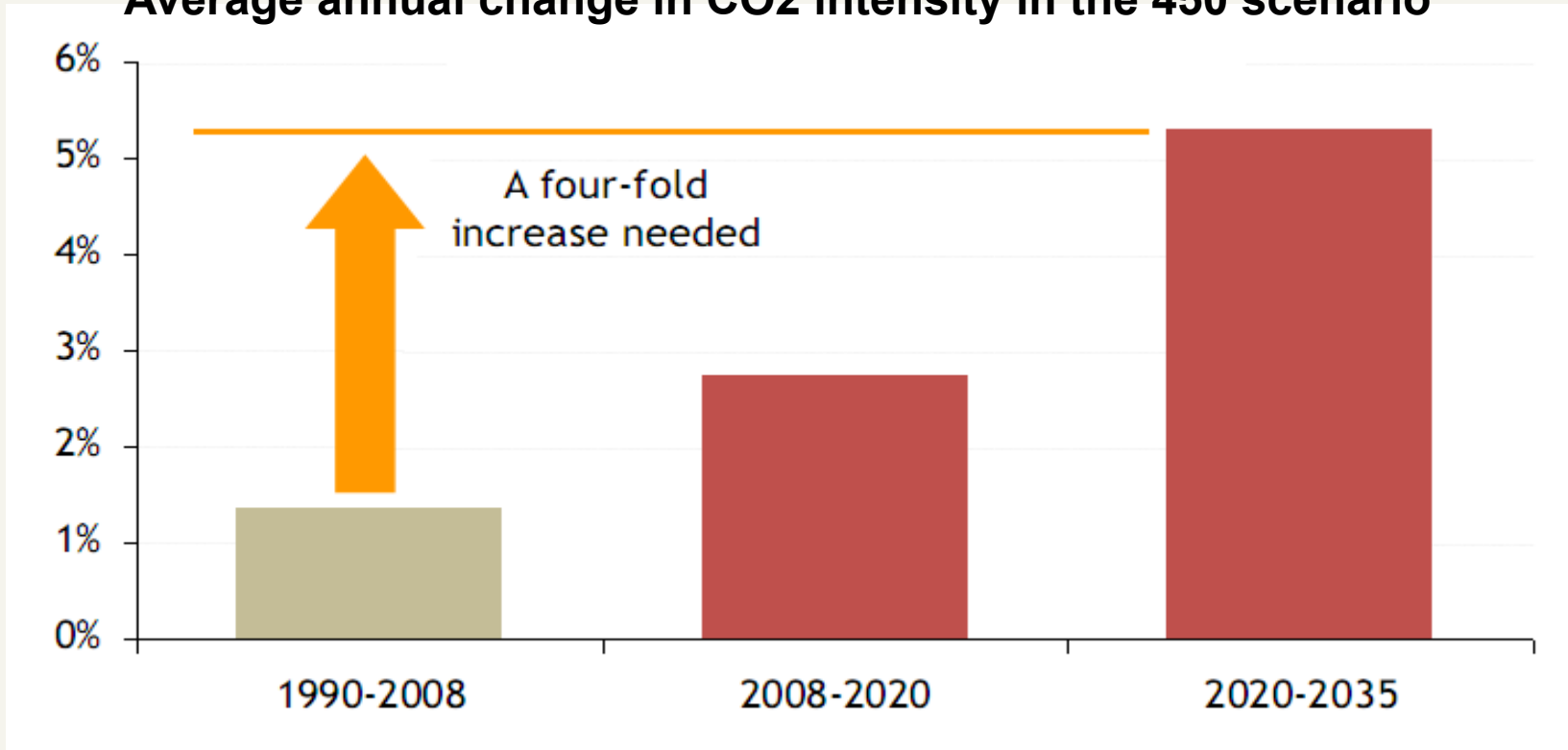


Global oil production reaches 96 mb/d in 2035 on the back of rising output of natural gas liquids & unconventional oil, as crude oil production stagnates

Efforts Need to be Quadrupled

(IEA,
2010)

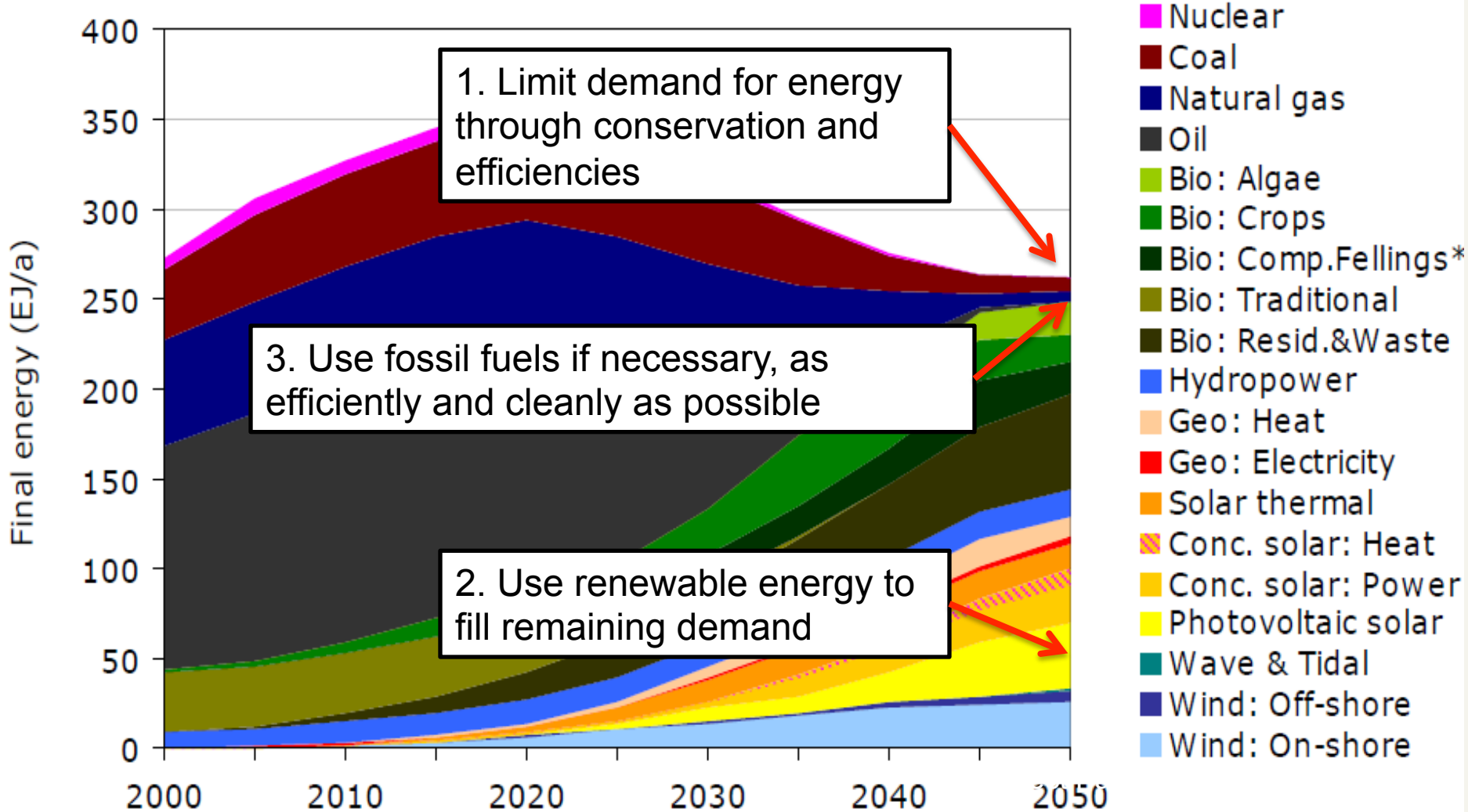
Average annual change in CO2 intensity in the 450 scenario



Carbon intensity would have to fall at twice the rate of 1990-2008 in the period 2008-2020 and almost four times faster in 2020-2035



The Scenario



SOURCE: Ecofys Energy Scenario, 2010

Challenges and Solutions

- **Energy conservation**
- **Electrification**
- **Land and sea use**
- **Equity**
- **Lifestyle**
- **Finance**
- **Innovation**





What questions does this raise?

- How do we decouple profitability and business growth from carbon emissions?
 - What do these business models really look like?
 - What opportunities will this shift provide for business?
 - What does this mean for the business leadership we need?
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My Five Key Points

- Business and management research needs to be robust enough to help business and society be prepared for a very different future
 - Research needs to form the link between where we need to go as a society, and where companies are now.
 - Not just incremental improvements, but completely new business models that need to be developed
 - The approach needs to be holistic, not just a 'bolted-on' but integrated bottom line. Needs to tap into how business works.
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Question

- 1) Do the business paradigms we use to train our future business leaders make sense?
 - 2) How are these new business paradigms being developed, and what is the role of business education in this? and
 - 3) How can the challenges of a resource constrained planet be translated into a business opportunity?
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Examples of Research and Cooperation with academia

- Developing regional plans around the energy vision
 - Young Scholars Entrepreneurship Academy (U of St. Gallen)
 - Low Carbon Innovation Case Studies
 - IMD and University of Exeter
 - One Planet MBA
 - What does it mean for all aspects of business leader training that we are on a resource-constrained planet?
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Thank you

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