



United Nations  
Environment  
Programme



# Caring for Climate (C4C): Corporate Responsibility and the global environment agenda

*Cornis van der Lugt, UNEP DTIE  
@ Europe UNGC Networks, Athens, 29 May 2008*

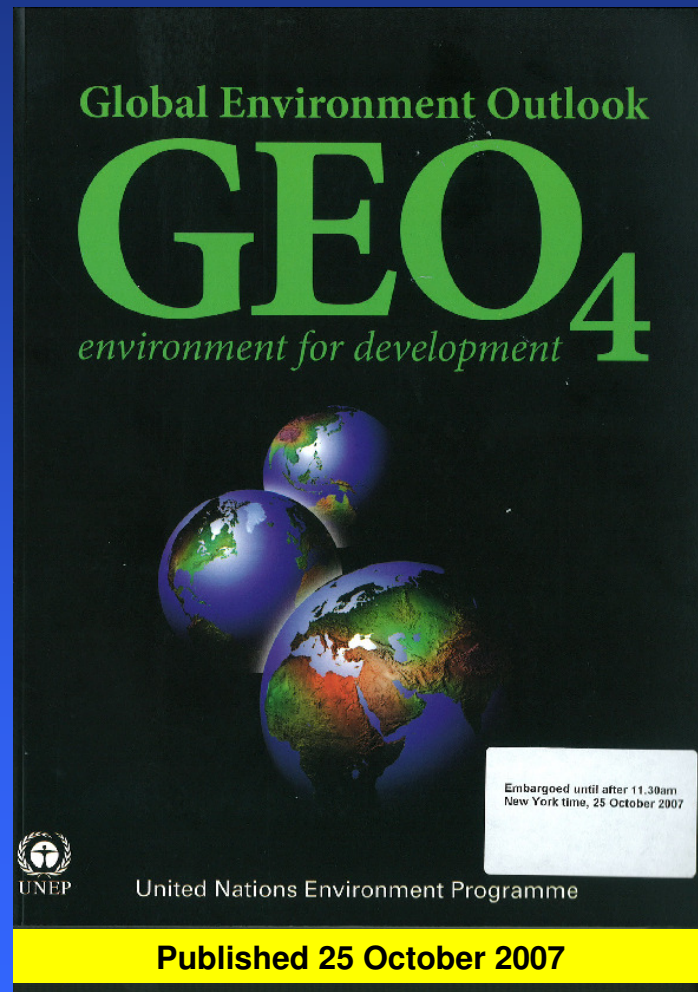
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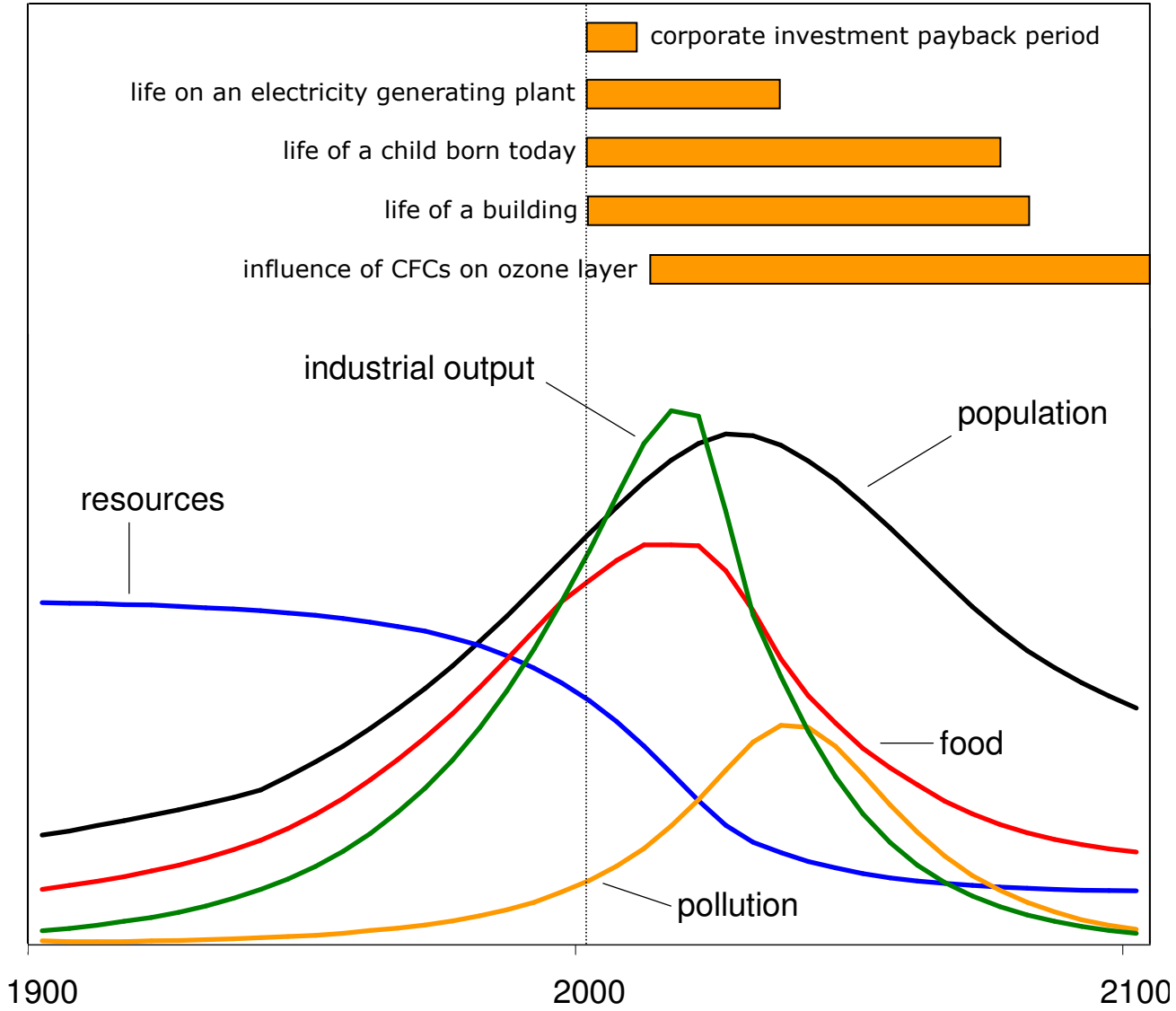
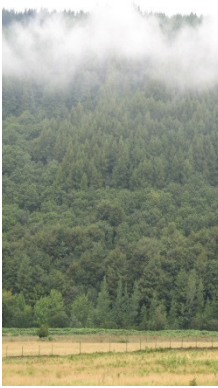
The State of the Planet



# UNEP Global Environment Outlook



- **Climate change: visible and unequivocal evidence today of its impacts**
- **Decline of fish stocks**
- **Loss of fertile land through degradation**
- **Unsustainable pressure on resources**
- **Dwindling amount of freshwater available**
- **Recall Brundtland 1987: one global problematique, risks and opportunities...**



# How much time do we have?

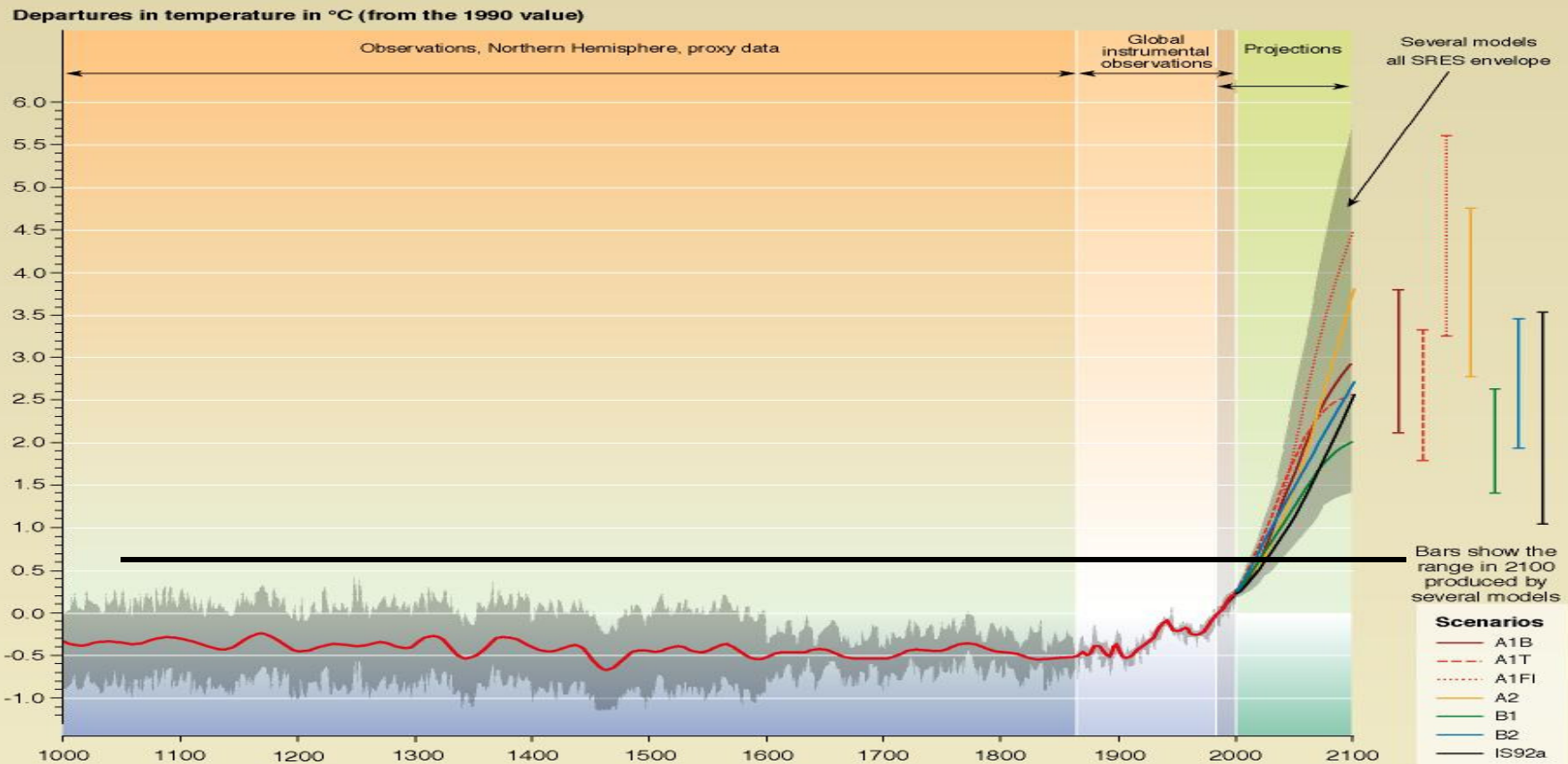
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# Climate Change 2007: scientists have “very high confidence”

Diagram from IPCC

Variations of the Earth's surface temperature: 1000 to 2100





Intergovernmental Panel on Climate Change (IPCC), under the chairmanship of Dr R K Pachauri, wins Nobel Peace Prize for 2007. IPCC shares the honour with Mr Albert Arnold (Al) Gore Jr.

Press Release | Press Conference Webcast  
12 October 2007

*“Our climate crisis... has become a planetary emergency...” – Al Gore*





## Climate awareness 2006 – 2007: risks and opportunities

- *Stern Report* to UK Government by Sir Nicolas Stern, Oct 2006: makes case for economic benefits of early action, a “pro-growth strategy”; cost of action to mitigate / stabilise GHG emissions: 1% of world GDP by 2050, cost of inaction 5 – 20 times higher
- *In 2004 some US\$30 billion was invested in renewable energy worldwide (excluding large hydropower). Wind power has the greatest capacity of new renewable energy sources, growing 28% per year from 2000-2004*
- **Investment capital flowing into renewable energy climbed from \$80 billion in 2005 to a record \$100 billion in 2006 - “Global Trends in Sustainable Energy Investment 2007” Report by UNEP**
- **IPCC 4<sup>th</sup> Assessment Report 2007: world’s average surface temperature has increased by around 0.74 °C over the past 100 years (1906 - 2005). Eleven of the last 12 years rank among the 12 warmest years since modern records began around 1850 ... also highlights (in)direct economic benefits and opportunities**



# Key mitigation technologies and practices by sector

## IPCC Fourth Assessment Report, 2007

Sector	Key mitigation technologies and practices currently commercially available	Key mitigation technologies and practices projected to be commercialized before 2030
Energy Supply	Improved supply and distribution efficiency; fuel switching from <u>coal</u> to <u>gas</u> ; <u>nuclear power</u> ; <u>renewable heat and power</u> ( <u>hydropower</u> , <u>solar</u> , <u>wind</u> , <u>geothermal</u> and <u>bioenergy</u> ); <u>combined heat and power</u> ; early applications of <u>CCS</u> (e.g. storage of removed CO <sub>2</sub> from natural gas)	Carbon Capture and Storage (CCS) for gas, biomass and coal-fired electricity generating facilities; advanced nuclear power; advanced renewable energy, including <u>tidal</u> and <u>waves energy</u> , <u>concentrating solar</u> , and <u>solar PV</u> .
Transport	More fuel efficient vehicles; <u>hybrid vehicles</u> ; cleaner diesel vehicles; <u>biofuels</u> ; modal shifts from <u>road transport</u> to <u>rail</u> and <u>public transport</u> systems; non-motorized transport ( <u>cycling</u> , <u>walking</u> ); land-use and <u>transport planning</u>	Second generation biofuels; higher efficiency aircraft; advanced electric and hybrid vehicles with more powerful and reliable batteries
Buildings	<u>Efficient lighting</u> and <u>day light</u> ; more efficient electrical appliances and heating and cooling devices; improved cook stoves, improved <u>insulation</u> ; <u>passive</u> and <u>active solar</u> design for heating and cooling; alternative refrigeration fluids, recovery and recycle of fluorinated gases	Integrated design of commercial buildings including technologies, such as <u>intelligent meters</u> that provide feedback and control; <u>solar PV integrated in buildings</u>
Industry	More efficient end-use electrical equipment; <u>heat and power recovery</u> ; material <u>recycling</u> and substitution; control of non-CO <sub>2</sub> gas emissions; and a wide array of process-specific technologies	Advanced energy efficiency; CCS for <u>cement</u> , <u>ammonia</u> , and <u>iron</u> manufacture; inert <u>electrodes</u> for aluminum manufacture



## Non-climate policies can influence GHG emissions as much as specific climate policies

Sectors	Non-climate policies -- Candidates for integrating climate concerns	Possible influence (% of global emissions)
Macro-economy	Taxes, subsidies, other fiscal policies	All GHG emissions (100%)
Electricity	Diversification to low-carbon sources, demand management, limit distribution losses	Electricity sector emissions (20 %)
Oil-imports	Diversification energy sources/decrease intensity -> enhance energy security	GHGs from oil product imports (20 %)
Insurance (buildings, infrastructure)	Differentiated premiums, liability insurance exclusion, improved conditions for green products	GHG emissions buildings, transport (20%)
Bank lending	Sector/ country strategies, avoid lock-in into old technologies in developing countries	Notably development projects (25%)
Rural energy	Policies promoting LPG, kerosene and electricity for cooking	Extra emissions over biomass (<2 %)





## UNFCCC and its Kyoto Protocol flexible mechanisms:

- **Emissions trading:** Annex I countries (early experiments at level of region, national state, city & company e.g. BP)
- **Joint Implementation (JI to obtain Emission Reduction Units):** Annex I countries (economies in transition), Track 1 & Track 2 (international supervision)
- **Clean Development Mechanism (CDM to obtain Certified Emissions Reductions):** non-Annex I countries

Domestic actions: should constitute “significant element” of Annex I country efforts... (Marrakech Accords, 2001)

Precaution: “No regrets” approach? (cf The Netherlands voluntary agreements)

Aim: to reduce / avoid / sequester emissions of GHGs





## CDM Experience – CD4CDM project of UNEP Risø Centre on Energy, Climate

- **Project cycle:** Project design & formulation; National Approval; Validation & Registration; Project Financing; Monitoring & Verification; Issuance of CERs
- **Broader aim:** to achieve SD and Kyoto compliance
- **Not allowed:** diversion of ODA; and nuclear power
- **Stakeholders involved in project development:** investment community, Designated Operation Entity (does validation of project), Designated National Authority (gives approval letter), CDM Executive Board (runs e.g. international registry and transaction log / ITL)
- **Issues:** baseline assessment (incl “additionality”), duration of validation process, common pitfalls e.g. lack of evidence of Environmental Impact Assessment, lack of permits for e.g. construction, unclear boundaries
- **Tools:** e.g. IETA and WB’s CDM / JI Validation and Verification Manual





## UNFCCC and post Kyoto negotiations:

Bali Road Map agreed in Dec 2007, leading to Poznan (2008) and Copenhagen Dec 2009

Four building blocks: mitigation (differentiation criteria, equity), adaptation (SIDSs - insurance pool, levies), finance (eg funds), technology (incl IPR issues, JI FDI Annex II), and two tracks of negotiations:

- *Ad Hoc Working Group on Long-term Cooperative Action* – measuring, reporting & verification (MRV), carbon capture & storage (CCS), land use, land use change and forestry (LULUCF – incl sinks, biomass)
- *Ad Hoc Working Group on Further Commitments for Annex I Parties* – flexible mechanisms improvement (auction, price, nuclear, CCS, energy efficiency), LULUCF, (global, supplemental) sectoral approaches, aviation & maritime transport (bunker fuels)





# Caring for Climate...

**Launched in July 2007 by UNGC, UNEP, WBCSD at Leaders Summit:**

- Started with 153 CEO signatories, including 30 from the Fortune Global 500
- UN Global Compact invited to promote the public disclosure of actions taken by the signatories to the Statement and, in cooperation with UNEP and the WBCSD, communicate on this on a regular basis starting 2008
- C4C 1<sup>st</sup> Meeting of the Signatories, 21 October, Geneva, and UNEP Business & Industry Global Dialogue, 23-24 October, Paris





# Caring for Climate Statement...

## COMMIT TO:

- Taking practical actions now to increase the efficiency of energy usage and to reduce the carbon burden of our products, services and processes, to set voluntary targets for doing so, and to report publicly on the achievement of those targets annually in our COPs.
- Building significant capacity within our organizations ... and to develop a coherent business strategy for minimizing risks and identifying opportunities.
- Engaging fully and positively with our own national governments, inter-governmental organizations and civil society organizations to ....
- Working collaboratively with other enterprises nationally and sectorally, and along our value-chains...





# Caring for Climate Statement...

## EXPECT FROM GOVERNMENTS:

- The urgent creation, in close consultation with the business community and civil society, of comprehensive, long-term and effective legislative and fiscal frameworks designed to make markets work for the climate, in particular policies and mechanisms intended to create a stable price for carbon;
- Recognition that building effective public-private partnerships to respond to the climate challenge will require major public investments ...
- Vigorous international cooperation aimed at providing a robust global policy framework within which private investments in building a low carbon economy can be made...





UNGC  
Principle 9  
Environmentally  
Sound  
Technologies

## Caring for Climate Action...

- Some are introducing comprehensive **climate strategies** overseen by senior management... eg *Cooperative Financial Services* with its “climate change campaign”, *Novo Nordisk* with its “CO2 strategy”, *Rio Tinto* with its “climate action plan” and *Ford* with its “climate strategy”.
- Some are shaping new markets by introducing new **eco-friendly product lines**, eg “Ecomagination” by *GE*, “Ecovision” by *Royal Philips* and “Eco products” by *Sony*





# Towards and beyond cleaner production strategies

END-OF-PIPE STRATEGIES



CLEANER PRODUCTION STRATEGIES

Dump and Dispose

Onsite Waste treatment

Waste Minimisation (Recycling)

Source Reductions

Green and Life Cycle Design and Manufacturing

1960s

1970s

1980s

1990s

2000+

Sustainable Value Chains (incl Design 4 Sustainability, Sustainability LCA), Integrated Business Models, Smart Regulation (enabling climate action)

- 2008 -



# The Business Case for Environmental Management



*Cf WRI Pathways*





# Green Jobs... and Climate

New report by UNEP, ILO, ITUC (June 2008):

- European Wind Energy Association (2004): Employment projections up to 2020 for EU 25 = 153.400 direct and indirect employees for manufacturing, 27.400 for installation and 16.100 for maintenance (excluding effect for windtech supplied to non-EU markets)
- 2006: > 70% of German-made wind power plants exported; 20.000 companies in renewables sector; 166.000 jobs related to renewables in 2004 and 260.000 in 2006 (BMU)
- EPIA / Greenpeace report *Solar Generation IV*: three scenarios (conservative, moderate, advanced – with political support pro PVs) for solar employment projections = by 2030, 6.3 million, 3 million or 287.000 jobs





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# Environmentally Sound Technologies...

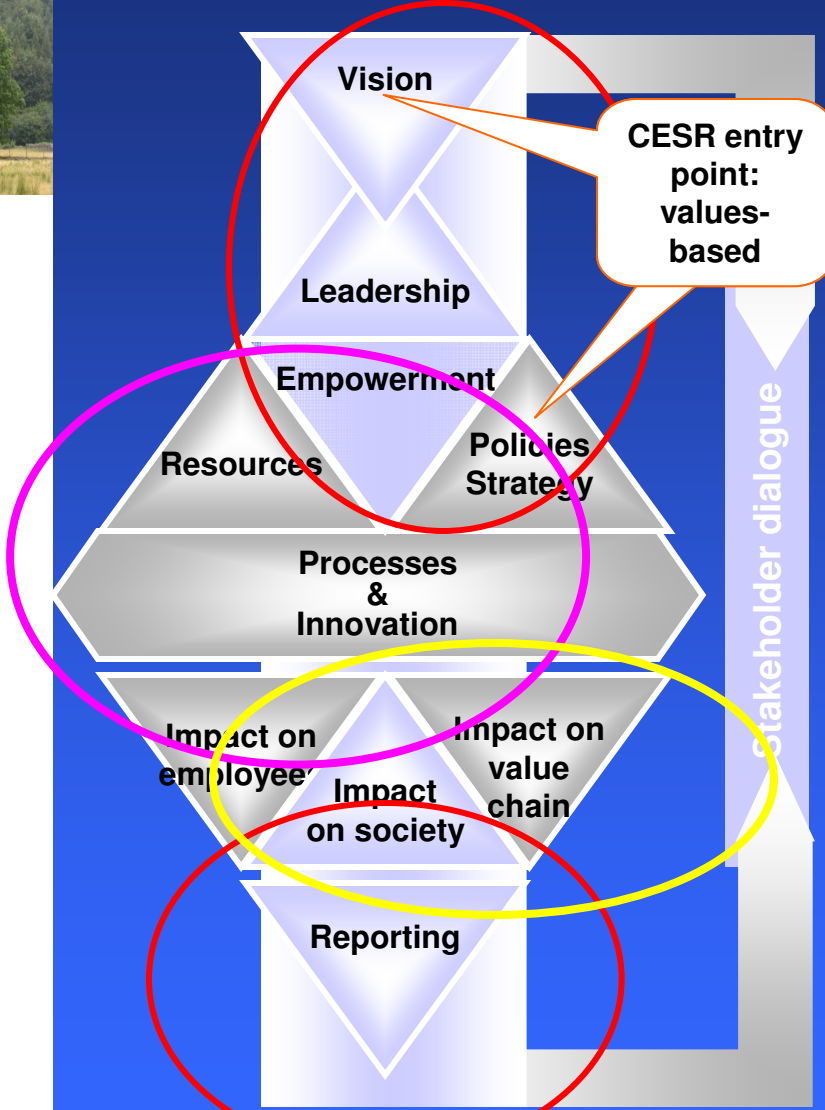
Achieved by, for example:

- Changing raw material and energy inputs
- Organisation and management practices
- Changing equipment and process technologies
- Re-using and recycling wastes (internally and externally)
- Introducing changes to the product and packaging





# Global Compact: Performance Model



▶ Corporate environmental and social responsibility (CESR) / corporate citizenship

▶ Operational technical: e.g. cleaner production (CP), eco-efficiency, ISO14001 EMS

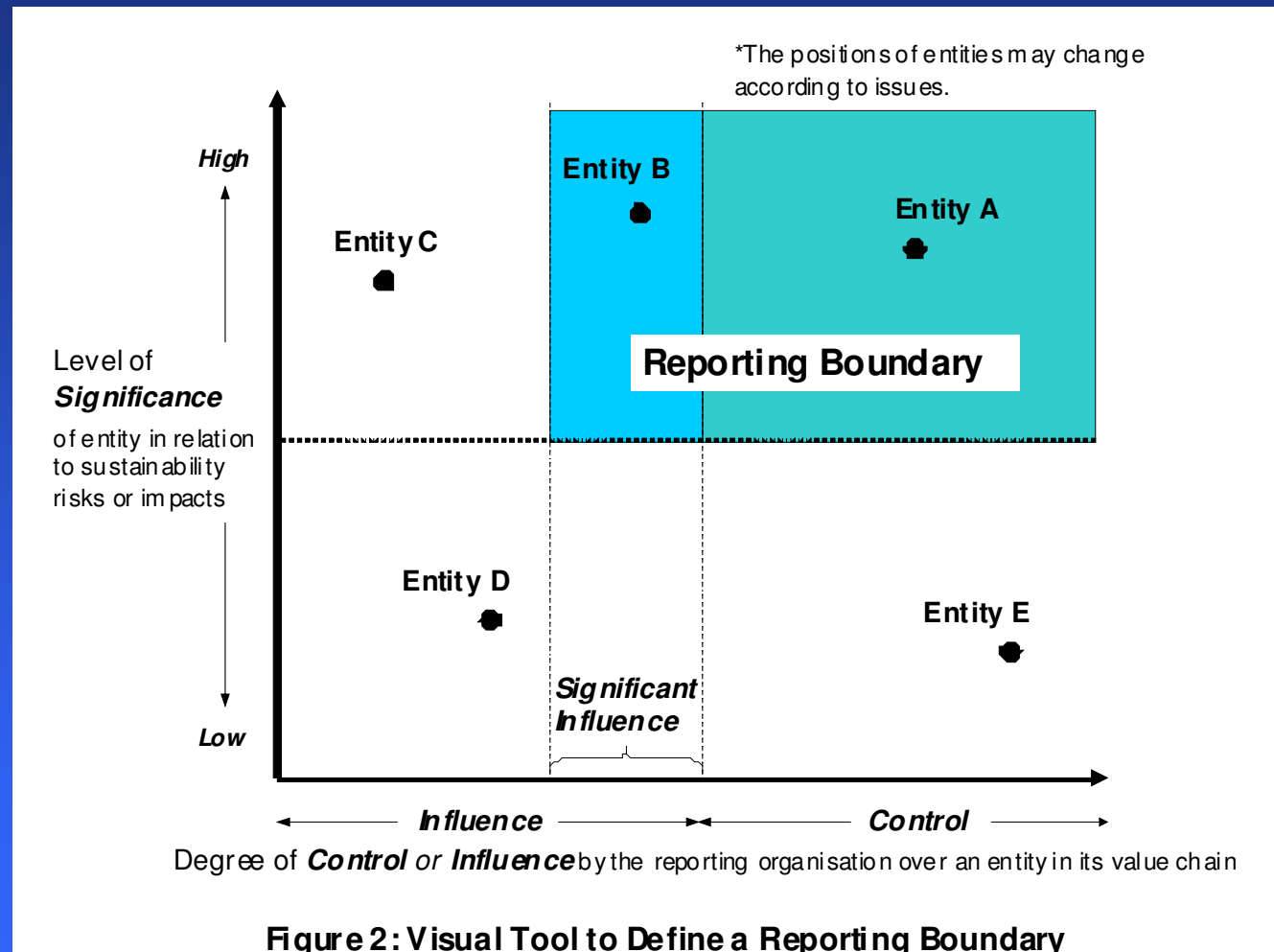
▶ Sustainable consumption (SC)

...building on  
total quality  
management





# Global Reporting Initiative (GRI): reporting, within boundaries



# UNEP / UNGC Environmental Principles Training Package – Table of Contents

- **GLOBAL COMPACT TRAINING BASICS**
- **MODULE 1: INTRODUCTION TO THE GLOBAL COMPACT**
- **MODULE 2: THE BUSINESS CASE FOR THE UNGC ENV PRINCIPLES**
- **MODULE 3: UNDERSTANDING THE UNGC ENV PRINCIPLES**
- **MODULE 4: FROM PRINCIPLE TO PRACTICE**
  - **Session 1: Steps to Sustainability/ The GC Performance Model**
  - **Session 2: The GC Toolkit – Environmental Principles**
  - **Session 3: Principles to Practice – Additional Reference Material**
    - eg Life Cycle Assessment, Eco-design, S-Consumption
- **MODULE 5: ENVIRONMENTAL INITIATIVES AND INSTITUTIONS**
- **APPENDIX 1 – IMPLEMENTING THE UNGC ENVIRONMENTAL PRINCIPLES: A FRAMEWORK FOR ACTION**
- **APPENDIX 2 – THE UNGC ENVIRONMENTAL PRINCIPLES AND SELECTED GRI PERFORMANCE INDICATORS**
- **APPENDIX 3 – COMMUNICATION ON PROGRESS**
- **APPENDIX 4 – REFERENCES AND FURTHER READING**

Available online at:

[www.unep.fr/scp/publications/details.asp?id=DTI/0601/PA](http://www.unep.fr/scp/publications/details.asp?id=DTI/0601/PA)

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## Caring for Climate...

*“Climate change is shaping global markets and global consumer attitudes. There will be winners and losers. Companies who seize the opportunities, who adopt environmental, social and governance policies and who evolve, innovate and respond to these challenges are likely to be the pioneers and industry leaders of the 21st century.”*

*UNEP Executive Director Achim Steiner*

- See UNEP Climate Neutral Network:  
[www.climateneutral.unep.org](http://www.climateneutral.unep.org)
- Climate Action by UNEP / SDI:  
[www.climateactionprogramme.org](http://www.climateactionprogramme.org)





[www.unglobalcompact.org/Issues/Environment/Climate\\_Change](http://www.unglobalcompact.org/Issues/Environment/Climate_Change)

[www.unep.org](http://www.unep.org)

[www.unep.fr](http://www.unep.fr)

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