# Emerging business practices to reduce GHG emissions

Caring for Climate
United Nations Global Compact
1 July 2010





# **Introduction to Caring for Climate (C4C)**

- The stats
  - 369 signatories (256 large companies, 113 SMEs), mostly European and Asian
  - 80% of large companies have "easily identifiable strategies" in their reports
  - Reduction of 3% in GHG emissions from '07 to '08 (vs. 2.2% in US) (1)
  - Energy, infrastructure & industrials generated 95% of emissions; retail <1% (1)
  - Technology generated high indirect emissions vs direct emissions (5% vs. 0.4%) (1)
- Integrity and transparency
  - Participants must respect the principles and communicate progress every year (CDP is recommended)
  - Those who fail to communicate progress are de-listed
- Next step climate change and development
  - Climate change session at the MDG Private Sector Forum (22 Sept)
  - Working group that will contribute to high-level panel on climate change and development (UNSG and heads of state), in preparation for Rio+20

<sup>(1)</sup> Based on representative sample of 65 companies (~25% of all signatories)

# **Emerging business practices to reduce GHG emissions**

- Beyond mitigation and adaptation
- A new framework for corporate climate change activity
- Broader engagement in spheres of influence
- "Total emissions" and "climate positive" approaches
- Innovation from C4C participants
- Low Carbon Leaders
- UN Global Compact Blueprint for Leadership

### **Beyond mitigation and adaptation**

Traditionally, climate change efforts focused on mitigation or adaptation

- Mitigation: Efforts to reduce direct damage done to environment through carbon emissions and energy use
  - Reduce energy usage for data centers
  - Carbon-neutral production processes
  - Low-carbon supply chain
- Adaptation: Efforts to fundamentally change business model or aspects of business to minimize effects of climate change
  - Drought-resistant crop varieties
  - Retrofit buildings with wind and solar power anticipating temperature changes

## A new framework for corporate climate change activity

Leadership in climate change effort requires a shift from mitigation (minimizing downside risk) to true adaptation and innovation (maximizing upside benefit)

#### **Assess**

- Diagnose expected impact of climate change on operating environment
- Measure and report emissions and other environmental data

#### **Define Goals**

 Set goals for addressing climate change, such as setting emissions reductions targets and defining a corporate environmental activism strategy

#### **Achieve**

- Alter company behavior so as to attain the environmental goals established
- Implement strategy and monitor results continuously

#### **Innovate**

 Adopt new approaches to addressing climate change, such as developing new technologies and forging new partnerships

#### Lead

 Assume a position of leadership among industry peers by demonstrating high levels of progress in climate change activities, and inspire others to further progress

### Broader engagement to spheres of influence

Climate change leaders not only improve company operations but also influence their industries and external environments (public agencies, civil society)

#### **Company**

- Reduce environmental footprint by cutting greenhouse gases and energy usage
- Lower costs by reducing utilities spending and developing green supply chains
- Redesign and launch new products that help customers reduce their own emissions

#### **Industry**

- Influence policy and regulation that pertains to the industry
- Reach out to the general public as a collective industry forum
- Generate R&D activity for technologies that may apply to the industry as a whole

# External Environment

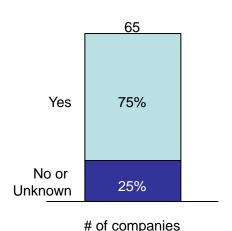
- Partner with regulators to guide legislation and directly advise governments in adaptation activities
- Promote green activities in local communities
- Support of collective UN initiatives such as the Global Compact and UNEP

# "Total emissions" and "climate positive" approaches

- From society's and policy makers perspective it is important to not only focus on companies with large emissions, but also on those companies that provide solutions
- Traditionally the focus has been on emissions from the company's own operations (scope 1 and 2) and emissions from the supply chain and 'use' phase (scope 3)
- "Total emissions" or "service" approach includes both emissions from the company (1-3) and the positive and negative impacts on society of its services
  - Examples: energy efficient lighting; enzymes that allow washing on lower temperatures; e-book solutions
- With this approach a company can become "climate positive" i.e. company's activities lead to overall reduction of emissions in society
- These solutions need to be measured and reported so that companies with important solutions become more visible and are rewarded

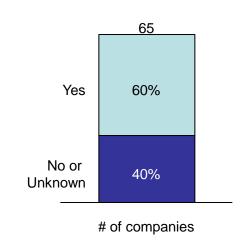
## **Innovations from C4C participants**

# Signatories that have redesigned products to "go green"



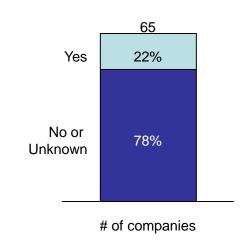
- \* Kikkoman: "Eco-Cap" can be easily removed when recycling bottles
- **AVIVA**: Special "green" insurance package for drivers who also bicycle frequently
- RICOH: Plastic component with 70% biomass content

# Signatories with stated investments in renewable energy



- **Deutsche Post:** 68% of electricity in German facilities from renewable sources
- Diageo: Bioenergy plant diverts wastewater to make site selfsufficient
- Dow Chemical: Methane gas used in manufacturing plants

# Signatories interested in carbon capture and storage / sequestration



- ENI: Partnering with Italian Minister of Environment on sequestration project
- **ESKOM**: Developing national carbon storage atlas for South Africa
- Rio Tinto: Commercializing carbon capture through hydrogen energy

# **Innovations from C4C participants (cont.)**

#### Company

#### **Cost reduction**

Tata Steel: Energy management technology in Wales that re-uses generated gas, reducing consumption by 60%

#### Revenue generation

**CEMEX:** Launch of Rizal Green ("green cement") with lower carbon footprint than ordinary cement

#### Security

**BT Group:** Development of ICT to monitor weather activity due to climate change

#### Industry

#### Industry-wide forums

**Nokia:** Board member of Global e-Sustainability Initiative (GESI)

Published SMART 2020, identifying potential ICT industry contributions to low carbon activities

#### **Collective action campaigns**

**Pepsi Co:** Leading party in Beverage Industry Environmental Roundtable

Submitted testimony to Congress on role of federal government in water supply, conservation and management

# External environment

#### Civil society engagement

**Veolia Environnement:** Partnership with Poznan, Poland, to conduct carbon assessment for the city using proprietary technology

#### Regulatory engagement

**Saint-Gobain**: Supported regulatory progress for energy-efficient buildings by introducing energy performance diagnostics system

## Low Carbon Leaders – joint project of C4C and WWF

- Demonstrate to policy makers and general public that solutions exist today that companies with solutions need to be acknowledged and supported
  - Showcase transformative low-carbon solutions related to buildings, transport and food with potential reduction of >20m tons of CO2 by 2020
  - 12 in-depth cases and 300 micro case (using web 2.0. and crowd sourcing)
  - Describe solution, measure impact, assess potential and barriers for uptake
- Formulate policy goals on specific measures needed to accelerate the uptake of innovative low carbon solutions
- Toolkit for calculating reductions using transformative low-carbon solutions
- Released in October at the B4E meeting, in preparation for COP 16

# **Low Carbon Leaders – illustrative solutions**

Service	Short descrition	Provider w/ calculations and policy work
Energy efficient light	Getting customers to switsh from incandessant lights to CFL or LEDs	IKEA
Smart washing	Enzymes that allow washing to be done on lower temperatures	Novozymes
Smart goods transport	Helping customers with modal shifts through new smart ships	Maersk
Smart insulation	Chemicals that make insulation better and reduce the need to heating and cooling	BASF
Smart reading	Providing e-papers that allow for less production, transportation and storage of paper	China Mobile
Virtual meetings	Providing virtual meeting solutions that allow people to meet without having to fly	Cisco, Ericsson and HP
Teleworking	Allowing people to work outside the office, reducing the transport need and reduce office space	Ericsson, IKEA, HP, Cisco
Solar power	Allowing people to get low/zero carbon electricity and supporting decentralised smart system solutions	Trina, Suntech, Yingli sloar, First Solar
Wind Power	Allowing people to get low/zero carbon electricity and supporting decentralised smart system solutions	Suzlon, Baoding companies, Vestas

## **UN Global Compact Leadership Blueprint**

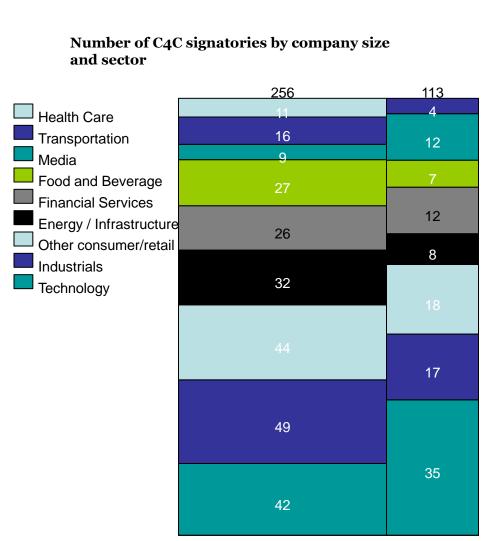
- At the Leaders Summit 2010, UN Global Compact released a Blueprint for Leadership
  - After 10 years, recognition that a new level of performance is needed in order to address key global challenges, internally and through collective action
  - Focuses on (i) implementing of the principles, (ii) action in support of UN goals and (iii) engagement with the UNGC
  - Core elements:
    - CEO commitment and leadership
    - Board adoption and oversight
    - Stakeholder engagement
    - Transparency and disclosure

# Thank you!





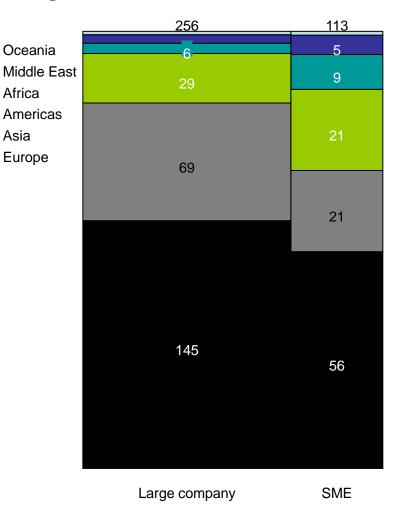
## **Annex: C4C in numbers**



Large company

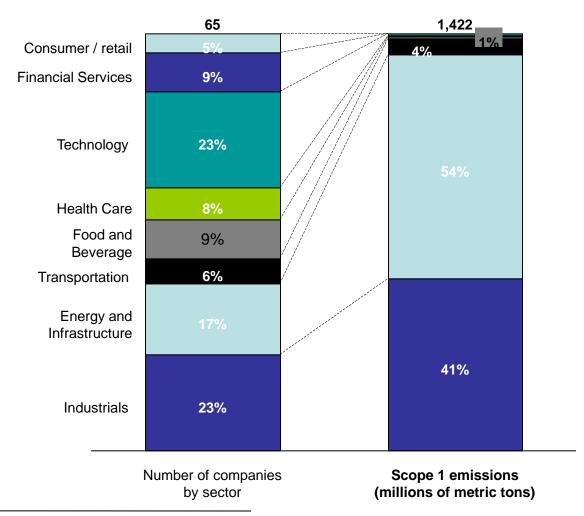
**SME** 

# Number of C4C signatories by company size and region



# **Annex: C4C in numbers (cont.)**

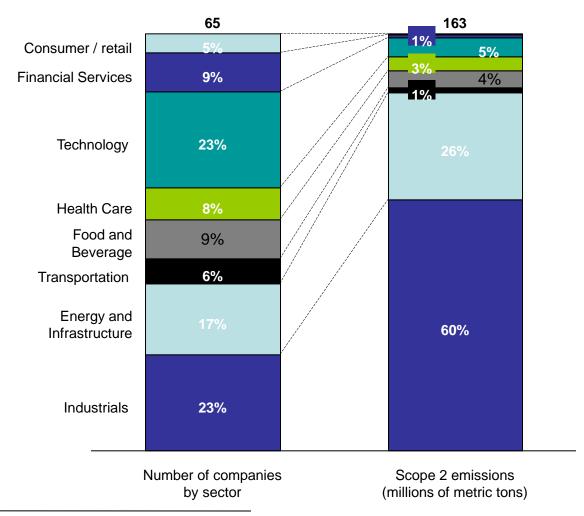
Scope 1 CO<sub>2</sub> Emissions by Sector, 2008



Note: Based on representative sample of 65 companies (~25% of all signatories)

# **Annex: C4C in numbers (cont.)**

Scope 2 CO<sub>2</sub> Emissions by Sector, 2008



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