Meeting the requirement of climate risk disclosure through LCMP

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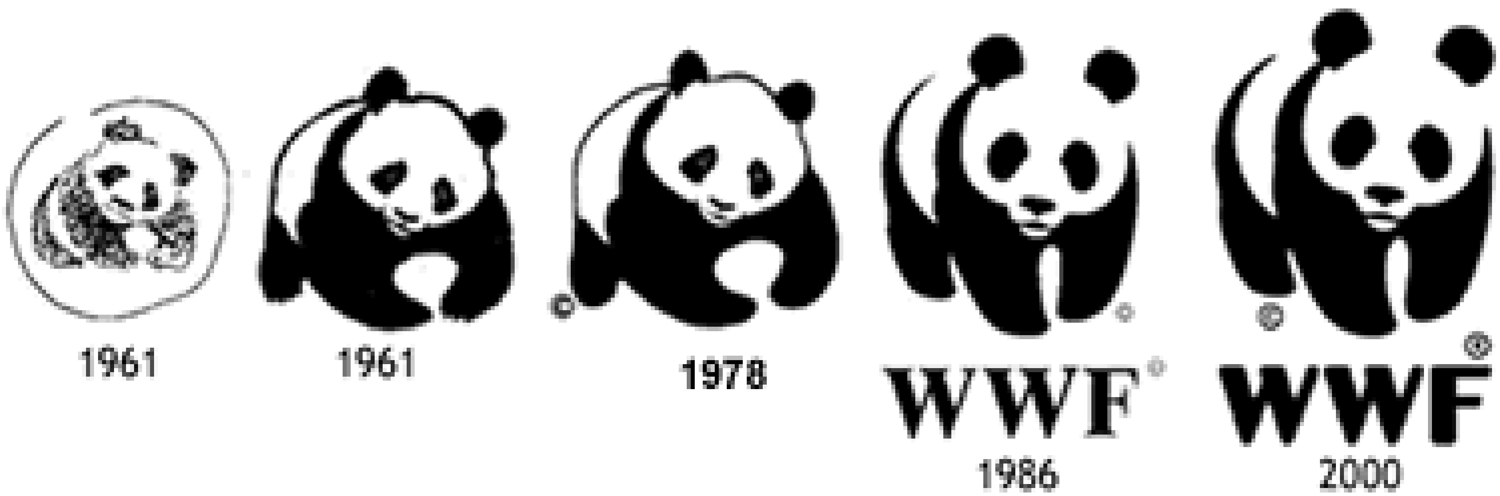
Who Are We?



- Global conservation organization
- Activities in more than 100 countries
- The Hong Kong office was established in 1981

Our Mission

Building a future in which humans live in harmony with nature

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Overview

- Current international regulatory requirement of climate risk disclosure
- Implication of climate risk disclosure regulations on electronics industry
- Low Carbon Manufacturing Programme (LCMP) methodology and application tools

Current international regulatory requirement of climate risk disclosure

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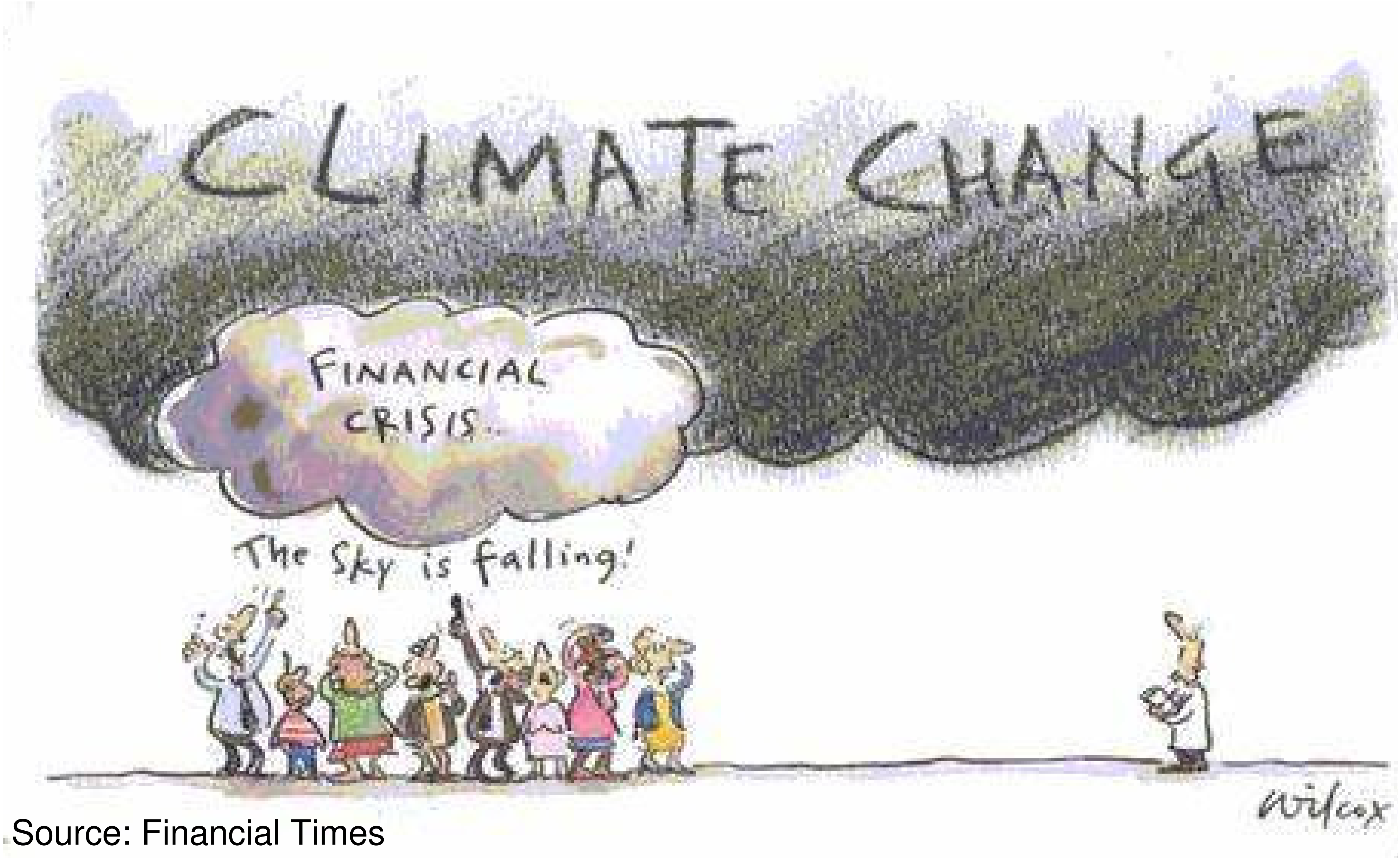
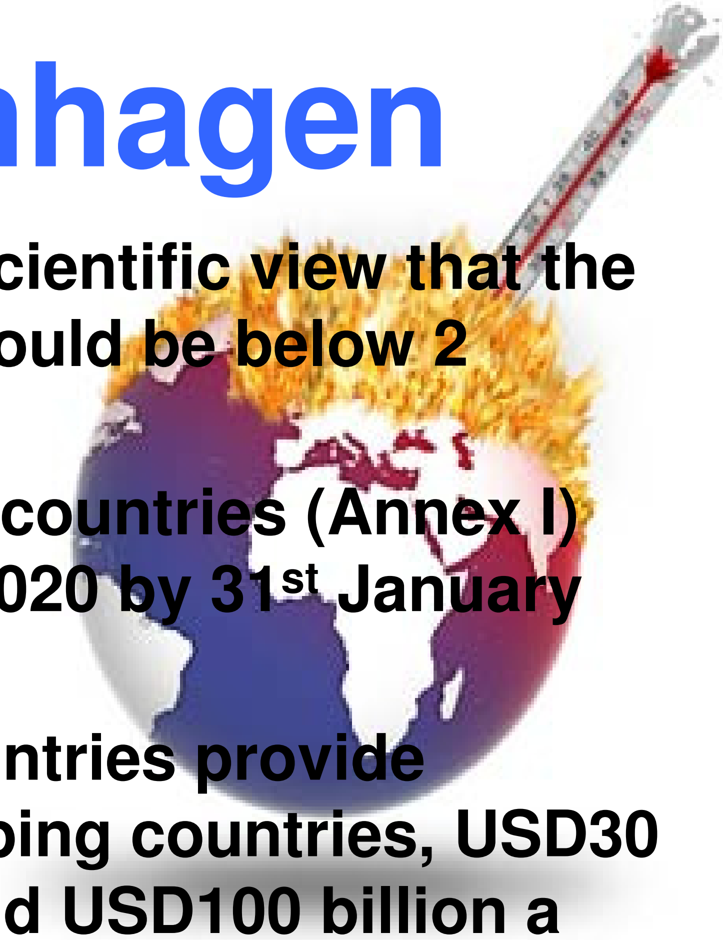


Source: Financial Times

Post Copenhagen



- **2°C Threshold:** Recognizing the scientific view that the increase in global temperature should be below 2 degree Celsius
- **Emissions Reduction:** Developed countries (Annex I) commit to emissions targets for 2020 by 31^{st} January 2010
- **Financial Support:** Developed countries provide funding for the vulnerable developing countries, USD30 billion for the period 2010-2012 and USD100 billion a year by 2020
- **Legally Binding:** UN Secretary-General Ban Ki-moon’s remarks, “We need to convert the commitments enshrined in the Copenhagen Accord into a legally binding climate change treaty as soon as possible in 2010.”

Emissions Reduction Target

Emissions reduction targets announced in the Copenhagen Accord:

- EU reduces 20-30% (absolute) by 2020 on 1990 level
- US reduces 17% (absolute) by 2020 on 2005 level
- China reduces 40-45% carbon intensity by 2020 on 2005
- India reduces 20-25% carbon intensity by 2020 on 2005

<< Note: carbon intensity = carbon emissions / GDP >>

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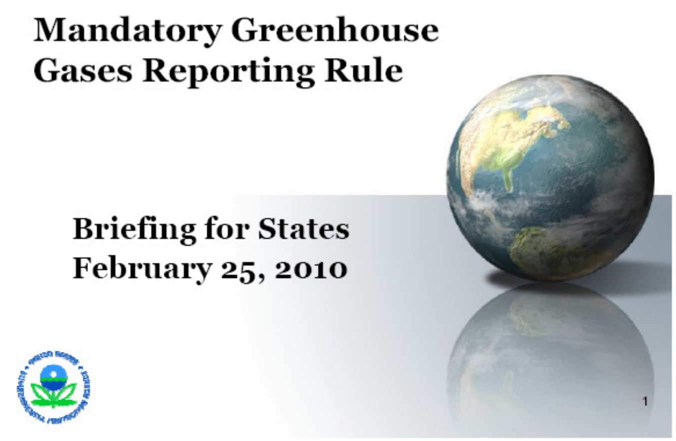
Requirement in USA

- **Environmental Protection Agency (EPA) enacted new mandatory greenhouse gas (GHG) reporting rule requiring 10,000 corporations to report their emissions starting 1 January 2010.**



http://www.epa.gov/slclimat/documents/pdf/mrr_presentation_02-25-10.pdf

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Key Elements of the Rule

- Annual reporting of GHGs by:
  - 25 source categories
  - 5 types of suppliers of fuel and industrial GHGs
  - Motor vehicle and engine suppliers (except light duty sector)
- 25,000 metric tons or more CO_2e per year reporting threshold for most sources; capacity-based thresholds where feasible
- Monitoring begins January 1, 2010; first reports due March 31, 2011
- Direct reporting to EPA electronically
- EPA verification of emissions data
- Reported gases include CO2, CH4, N2O, HFCs, PFCs, SF6, other fluorinated gases (except CFC and HCFC and gases <1 mm Hg @250 C)

Source Categories Not Finalized in 2009

EPA is reviewing public comments and other information before deciding on these subparts:

- Electronics manufacturing
- Ethanol production
- Fluorinated GHG production
- Food processing
- Magnesium production
- Oil and natural gas systems
- Sulfur hexafluoride (SF_6) from electrical equipment
- Underground coal mines
- Industrial landfills
- Wastewater treatment
- Suppliers of coal

Facilities with these source categories could be covered by the rule based on GHG emissions from stationary fuel combustion sources.

Requirement in USA

- The US Securities and Exchange Commission (SEC) provided important climate risk disclosure guidance in Feb 2010.

Emissions & Climate Change Position Disclosure
Company discloses GHG emissions data in SEC filings
SEC filings mention climate change or state the company's position
Risk Assessment Disclosure
Physical plant risks disclosed in SEC filings
Regulatory risks disclosed in SEC filings
Business model/strategic risks disclosed in SEC filings
Litigation risks disclosed in SEC filings
Disclosure of Actions to Address Climate Risk
Climate change-related opportunities disclosed in SEC filings
GHG emissions reduction pledges disclosed in SEC filings
Risk management and mitigation measures disclosed in SEC filings

Requirement in UK

- The UK Climate Disclosure Standard Board (CDSB) announced a framework for **inclusion of climate change information in companies' annual reports.**
- The framework sits well with the UK Department for Energy and Climate Change's direction and will become **mandatory** for UK companies **in 2012**.

Carbon Disclosure Project

Questionnaire approach:

- Part 1 focuses on assessing a company's understanding of the climate issue and of the management systems that it has in place
- Part 2 (optional) concentrates on emissions data itself asking companies to report on emissions, emissions trends and metrics such as emissions per unit product.
- *CDP does not provide an accounting methodology for companies to use and does not therefore lead to a set of results that facilitates direct comparison between companies.*

Questionnaire (Part 1)

1. Does the company have a climate policy?
2. Are they tracking their emissions?
3. …

(Part 2)

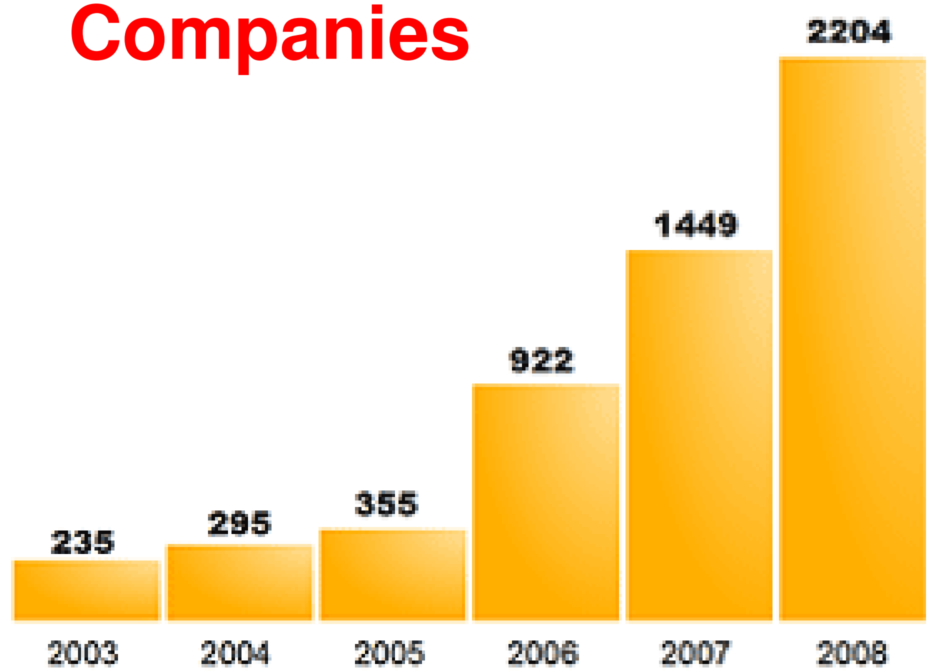
1. What are their carbon emissions in MT?
2. What is the emissions trends?
3. …

CDP

Electronics Brands Companies 2010

- Acer, Taiwan
- DELL, US
- Fujitsu, Japan
- Hewlett-Packard, US
- IBM, US
- Sony Corporation, Japan

Number of Responding Companies



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Requirement in China

- China committed a **40 to 45 percent reduction in carbon intensity** on 2005 levels by 2020 in the Copenhagen Accord.
- In 2009, Chinese enterprises published 582 **CSR reports**, representing three times increase from 2008, and 15% of world's total.

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Implication of climate risk disclosure regulations on electronics industry

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The whole process: IT powerhouse cuts emissions from supply chain to employees to customers.

HP, the world's largest technology company, simplifies the technology experience for consumers and businesses with a portfolio that spans printing, personal computing, software, services and IT infrastructure.

How HP has promised to fight climate change

HP's Climate Savers commitment is to reduce greenhouse gas emissions by 6 million tonnes below 2005 levels by 2010, through environmental innovation and accomplishments in:

- Its own operations
- Product design and energy efficiency
- Logistics efficiencies
- Data center energy efficiency solutions.

HP has also commited to strive to enable additional customer-owned emissions reductions of 3 million tonnes below 2005 levels by 2010, through deployment of innovative carbon-reducing solutions including print management technology, reuse/recycling programs, and travel avoidance solutions.

The HP achievement

HP is over 2 years ahead of schedule in meeting the commitment to cut the combined energy consumption and associated greenhouse gas emissions of HP operations and products to 20% below 2005 levels by 2010 – so they have raised their goal to 25%.

WWF

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Climate Savers

Innovating for emission reductions.

IBM is a global leader in technology manufacturing, integrated computer systems, software and I/T business services and solutions.

How IBM has promised to fight climate change

IBM has a long history of commitment to promoting energy efficiency in its operations and addressing climate change issues through participation in meaningful voluntary NGO and governmental initiatives. These efforts have generated measurable, reported activities since before 1990. As part of this commitment, IBM was one of the charter members of the Climate Savers program.

IBM made a Climate Savers commitment in 2000 to achieve annual average reductions in greenhouse gas emissions between 1998 and 2004 equivalent to 4% of emissions associated with the company's annual fuel and electricity use. IBM aimed to achieve these reductions through energy conservation actions.

The IBM achievement – and ambitious new commitments

IBM met – and exceeded – its initial Climate Savers commitment, avoiding greenhouse gas emissions associated with the company's annual energy use by an average of 5.7% from 1998 to 2004, and generating energy cost savings of $115 million. This achievement was the result of energy conservation efforts and the use of renewable energy sources alone, and does not reflect additional CO_2 emissions savings from consolidations and restructuring.

Savings from IBM's efforts since 1998 equal taking 51,600 midsize cars (travelling 10,000 miles a year) off the road.

WWF

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Climate Savers

NOKIA

Leading the mobile phone industry into the next generation.

Nokia is the world leader in mobility.

"As the world's largest mobile company we have a responsibility to look at how we can play our part in tackling climate change. This is not about grand gestures but everyday things that when multiplied by the scale of our operations, or the one

How Nokia has promised to fight climate change

In the context of products and solutions, Nokia's Climate Savers commitment is to:

- Reduce the average charger's no-load power consumption from 2006 level by 50% by the end of 2010
- Continue to investigate how renewable energy technologies, such as solar panels and kinetic energy, can be applied to mobile phones.

And in the context of offices, sites and green energy, Nokia has committed to:

- Create 6% of new energy savings in facility technical systems (cooling, heating, air conditioning, lighting...) between 2007 and 2012 compared to the baseline year 2006, in addition to the savings of 3.5% achieved already in 2003 – 2006.
- In 2009 – 2010, start spreading out green electricity purchases to those countries where Nokia operates and where buying green electricity makes the greatest impact on CO_2 savings. This will depend on how carbon intensive the local power generation industry is and where green electricity purchases are available.
- Reduce CO_2 emissions through these measures by a minimum of 10% in 2009 and by a minimum of 18% in 2010, compared to the base year 2006.

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Climate Savers

SONY

Leading the world in consumer electronics – and in cutting CO_2 emissions.

Sony Corporation is a leading manufacturer of audio, video, game, communications, key device and information technology products for the consumer and professional markets. With its music, pictures, computer entertainment and on-line businesses, Sony is uniquely positioned to be the leading electronics and entertainment company in the world.

How Sony has promised to fight climate change

Sony's Climate Savers commitment is to achieve a 7% reduction in the absolute amount of greenhouse gases emitted by all of Sony's sites – and all those of its subsidiaries worldwide – by the fiscal year 2010, compared to its fiscal 2000 emissions.

Sony will work to realize this goal through a variety of means, such as increasing energy efficiency at all relevant sites, changing from fossil fuels to renewable energy sources, and shifting over to the use of natural gas.

Sony will also reduce the energy consumption of its products. In fiscal 2005, emissions from product use were calculated to be about five times the total Sony Group emissions for the year.

And together with WWF, the company will also engage in a wide-ranging program of communication addressing issues of global warming.

The Sony achievement

Learning

- **Leading brands are ahead of the game disclosing their achievement in carbon emissions reduction.**
- **Areas of focus are product innovation, energy conservation in owned operation sites and managing supply chain carbon.**

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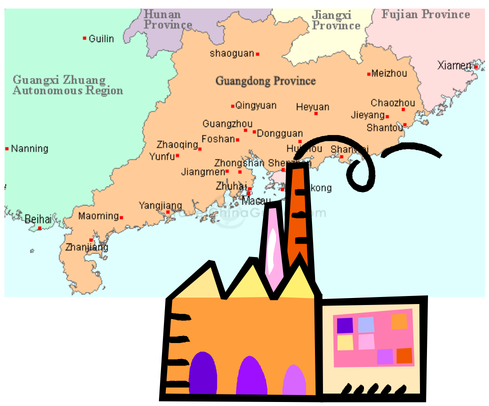
Low Carbon Manufacturing Programme (LCMP)

Green Dragon Fund

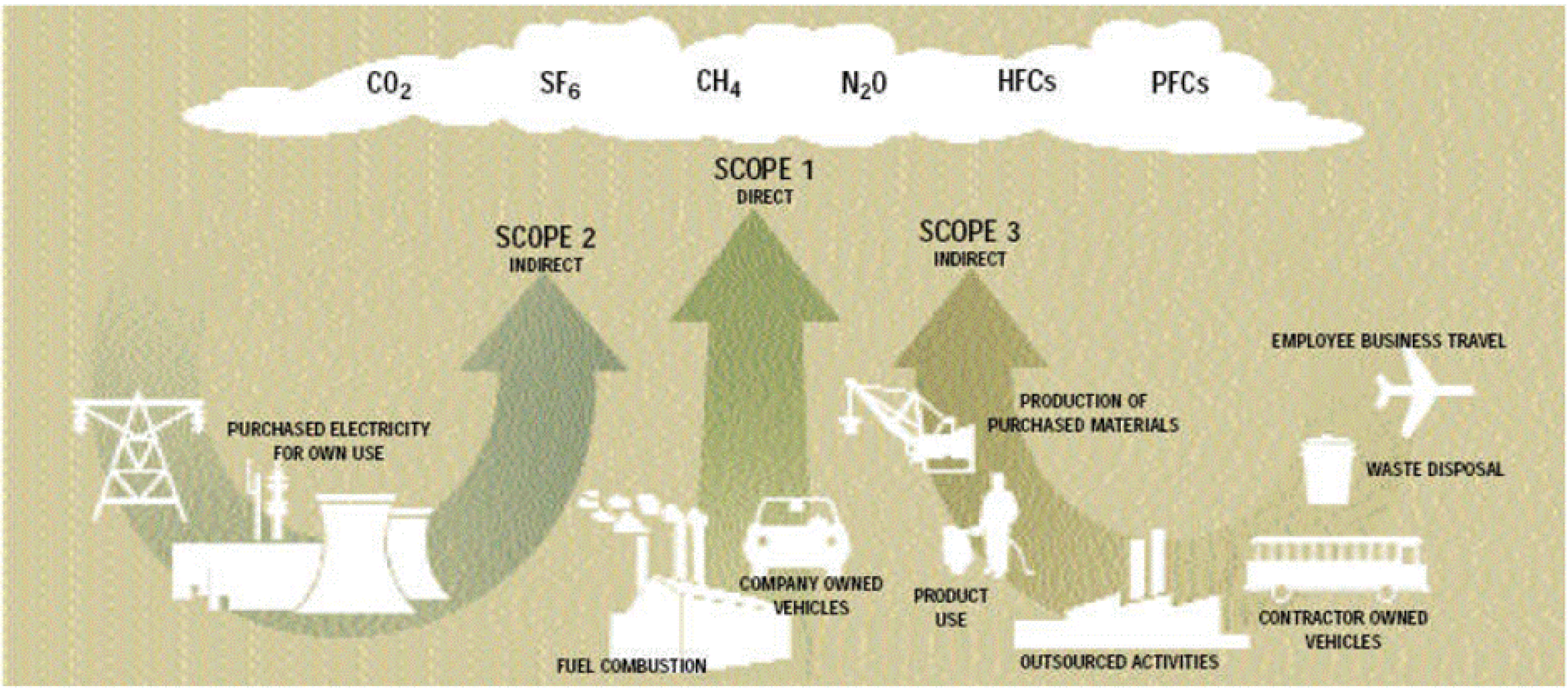
ECOFYS

Hong Kong Productivity Council
香港生產力促進局



GHG Protocol

- Greenhouse Gas (GHG) Protocol is the most commonly used international carbon accounting and reporting standard
- GHG Protocol was developed by World Resources Institute (WRI) and the World Business Council of Sustainability Development (WBCSD)



Scopes of Emissions

- **Scope 1** is the **direct GHG emissions** occur from sources that are owned or controlled by the companies
- **Scope 2** accounts for **indirect GHG emissions** from the generation of purchased electricity, steam, and heating/cooling.
- **Scope 3** is all the **other indirect GHG emissions** such as employees business travel, employees commuting to and from work, use of sold products or services, etc…

LCMP Tools

(1) User-friendly online Carbon accounting tool

(2) GHG mngt system checklist

(3) Best practices checklists

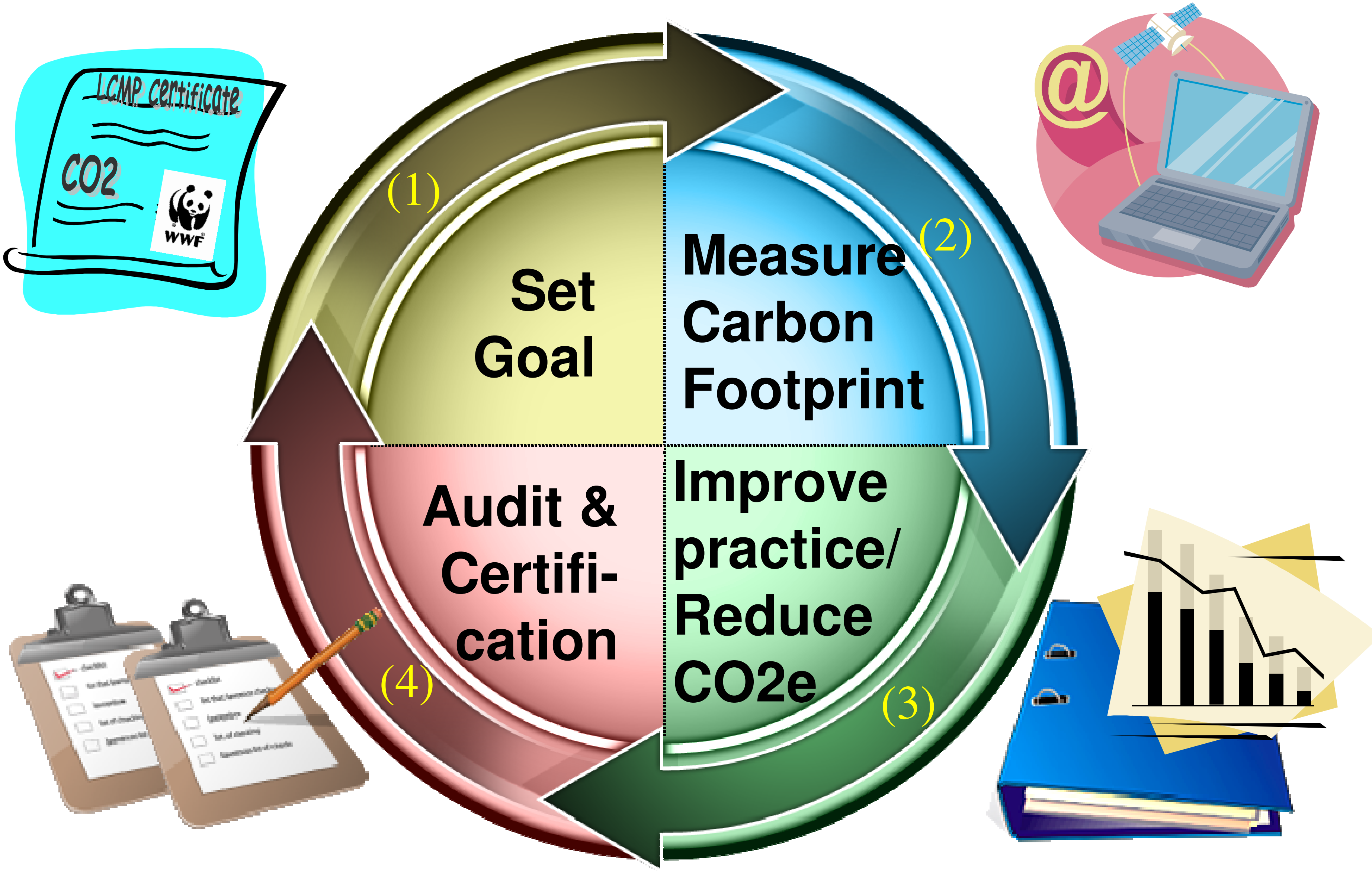
No.	Item	mandatory	score: little or no evidence 0	some elements 1	fully implemented 2	comments
1	GHG Policy					
1.1	GHG policy statement	*				Does the company have a clear policy statement on GHG emissions pertaining to its activities?
1.2	Applicable to all activities of the company					Does the GHG policy cover all activities the company is engaged in?
1.3	Senior management commitment					Does the GHG policy have demonstrable senior management commitment?
1.4	Policy communicated to employees					Is the GHG policy clearly communicated to employees?
1.5	Policy available to the public					Is the GHG policy available to the public?
1.6	Compliance with relevant laws and regulations	*				Does the GHG policy include a reference to applicable laws and regulations and does it comply with these?
1.7	Continuous improvement	*				Does the GHG policy include a statement that indicates the company's commitment to continuous improvement of its GHG performance?
2	GHG Targets and management programme					
2.1	GHG aspects					A GHG aspect refers to an aspect of an activity within the company's organisational control that has a positive or negative effect on GHG emissions
2.1.1	Identification of activities that impact on GHG emissions	*				Has the company identified significant GHG/energy aspects of the operating processes, including all energy carriers and other GHG sources within its operational control?
2.1.2	Identification of non-energy activities that impact on GHG emissions					Have non-energy GHG emission sources been identified?

Labelling Scheme

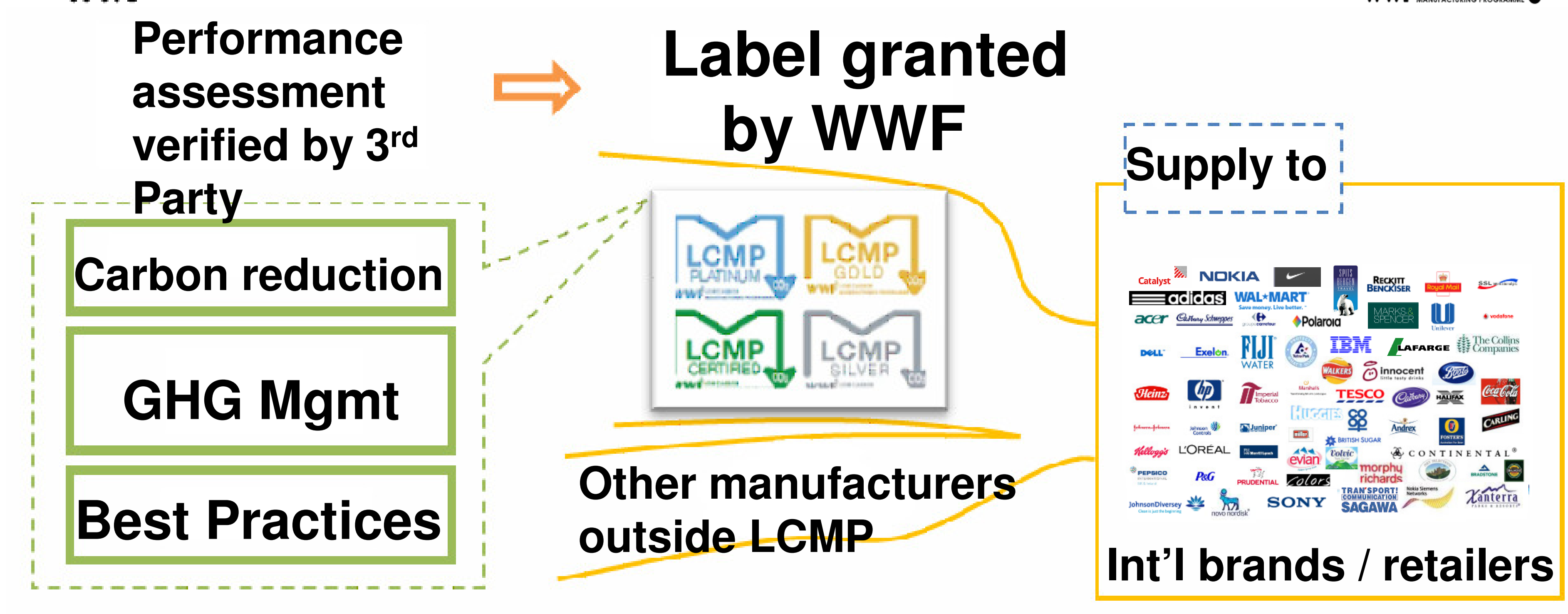
The programme grants a label to participating manufacturers after assessing their performance in:

1. Carbon footprint reduction (25%)
2. GHG management (35%)
3. Distance to best practice in energy efficiency of processes and operations (40%)

A Sustainable & Continuous Development Process …



Conclusion



- International retailers and brands focus at supply chain emissions.
- Manufacturers who joined LCMP are perfect choice or business partners for global retailers / brands.
- Competitive advantage of manufacturers with LCMP labels will increase.

THANK YOU!

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