

GREEN BUSINESS PRACTICES IN 22 GLOBAL COMPANIES – AN ANALYSIS OF CORPORATE ENVIRONMENTAL REPORTS

OBJECTIVES

- WHAT—Identify the details of green business practices that are being implemented in the 22 targeted companies.
- HOW—Analyze various reporting methods, approaches, and structures to explore how environmental reporting is conducted in global companies.
- WHERE—Map current green business practices with functional areas and the value chain to identify which of these practices are being implemented and why.
- IMPACTS— Determine the impact on the environment of the identified green business practices.
- VALUES— Link the green business practices with the business values they create and deliver.
- TRENDS—Synthesize the results of this analysis to identify the emerging trends.
- PERFORMANCES—Evaluate economic and environmental performance of the targeted companies.

METHODOLOGY AND ASSUMPTIONS

- Major source of the data: Each company's sustainability reports, corporate social responsibility reports, or global citizenship reports
- A maximum of 20 green business practice sets were chosen from per company based on the availability of hard data or detailed descriptions, such as targets and progress updates from each company's environmental report.
- Counting reported green practices: the majority of the statistics used in the analysis is based on the number of green business practices presented either in a company's internal environmental report or in news articles, and the relative proportion of each green business practice to the total number identified.
- Assumption: If practice A is reported on a company environmental report with details and back up data, it is considered as one of the focus environmental areas , practices, business values.

STRUCTURE OF THE ANALYSIS

The analysis incorporated following 4 dimensions – green business practice categories, areas of implementation, impacts on environment, and business values (Figure1). Green business practice category dimension is mainly categorizing the 367 green business practice sets (total number of findings) into 28 different types, which demonstrates 'what' each company is doing for the environment and its business. Areas of implementation show 'where' these green business practices are taking place within a company. Impacts on environment identify environmental areas in which these green business practices have an impact, such as water, climate, the ecosystem, etc. Business values capture business values such as cost saving or risk management, which companies aim to achieve from the implementation of their green business practices.

TARGET COMPANIES AND INDUSTRIAL SECTORS

- Energy – **Royal Dutch Shell** (UK), **Exxon Mobil** (USA)
- Mining, minerals, and steel – **Rio Tinto** (UK), **ArcelorMittal** (Luxemburg)
- Capital goods – **Boeing** (USA), **Siemens** (Germany), **General Electric** (USA)
- Automotive – **BMW** (Germany), **Ford Motors** (USA), **Toyota** (Japan)
- Chemicals – **BASF** (Germany), **Dow Chemical** (USA)
- Pharmaceutical – **Novartis** (Switzerland), **GlaxoSmithKline** (UK)
- IT and equipment – **HP** (USA), **IBM** (USA), **Samsung Electronics** (Korea)
- Consumer goods – **P&G** (USA), **Nike** (USA), **Coca Cola Company** (USA)
- Retailers – **Wal-Mart** (USA), **Marks and Spencer Group** (UK)

1. Top 5 green business practice categories among the 22 targeted companies were innovative green technologies and initiatives, increasing energy efficiency, waste recycling and reuse, green partnerships and alliances, and measuring and monitoring green practices via metrics (Figure2,3).

Figure2,3. Analysis of 367 green business practice 'sets' categorized by 28 green business practice categories

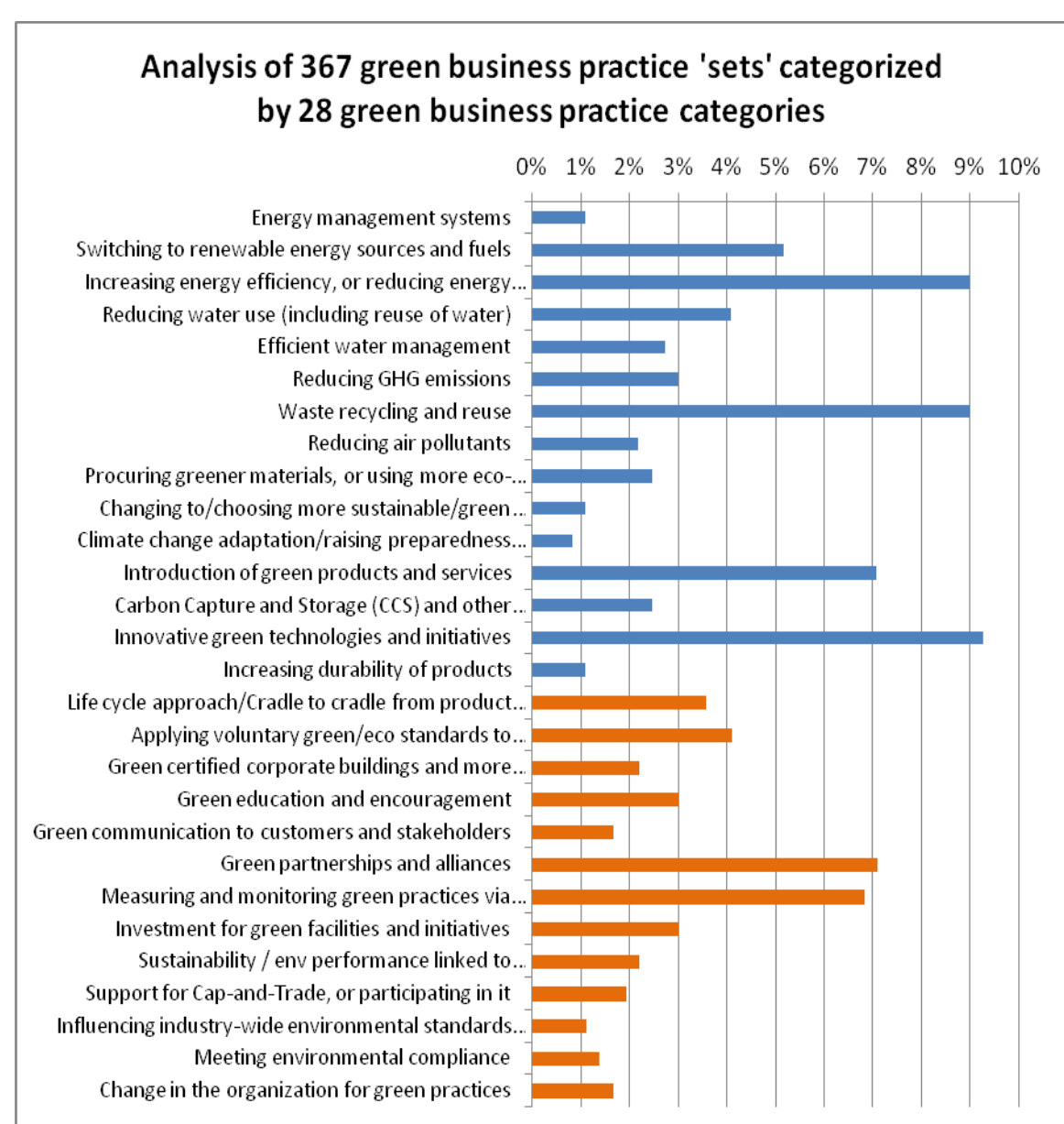


Figure2. Analysis of 367 green business practice sets categorized by 28 green business practice categories (Percentiles of green business practice sets in each green business practice category; 100% = 367)

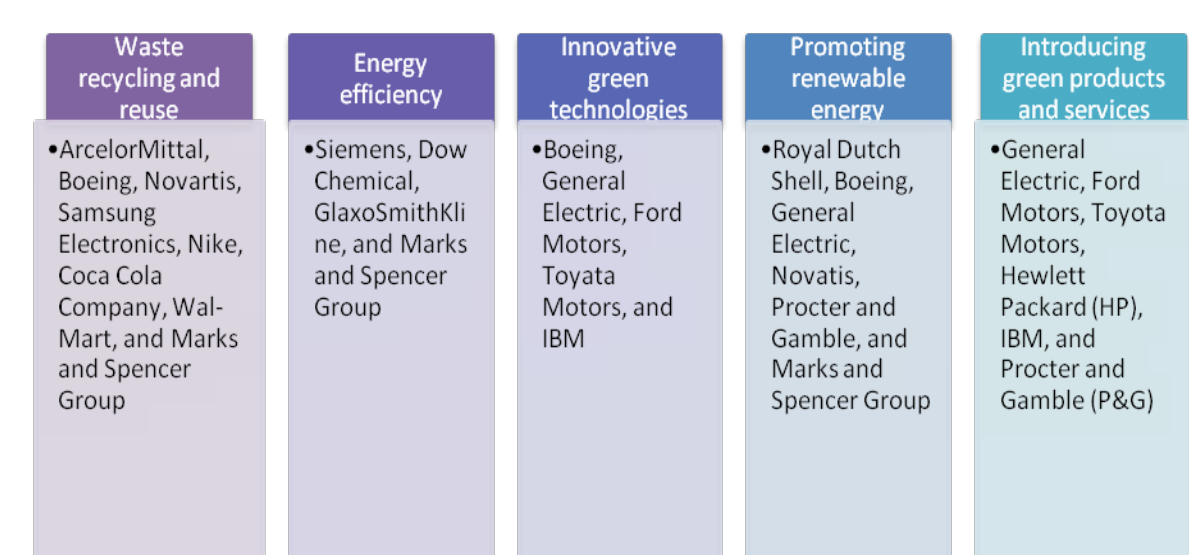


Figure3. Various focuses of green business practices

VALUE OF THIS RESEARCH

- A touchstone that corporate leaders, NGOs, governments, and others can use as input when considering the progress that a company is making toward environmental sustainability.
- The results can be used internally by the targeted companies. They may compare the results of the analysis with their own environmental strategies in order to check the impact of their communication regarding environmental management and performance.

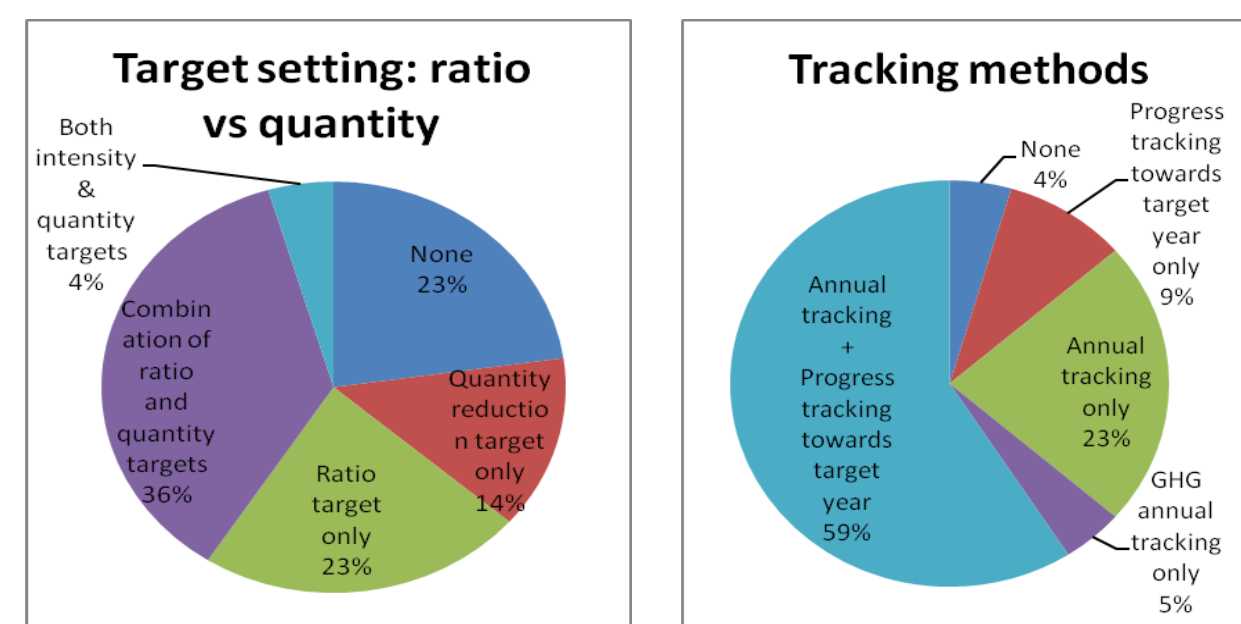


Figure4,5. Target setting and data tracking (Percentiles of the number of companies out of the total number of the targeted companies = 22)

Over 75% of the targeted companies use ratio targets, such as energy efficiency or revenue adjusted targets, absolute quantity targets such as greenhouse gas emission reduction goal by %, or both. About 60% of the companies used both annual data tracking and progress tracking towards target year.

3. Business areas for implementation of green business practices – targeted companies focused their green business practices mostly on manufacturing, R&D, and operation.

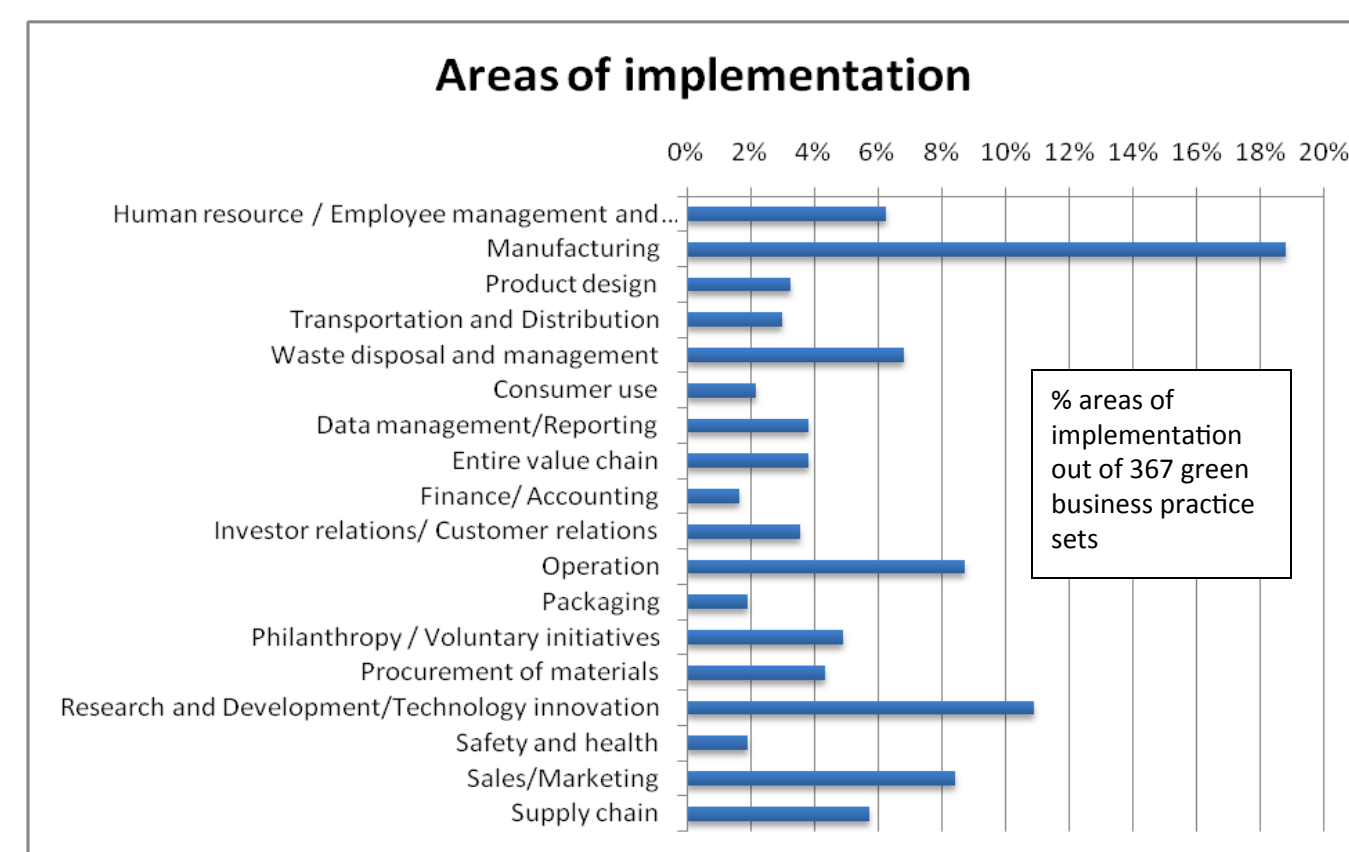


Figure6. Analysis on the areas of implementation

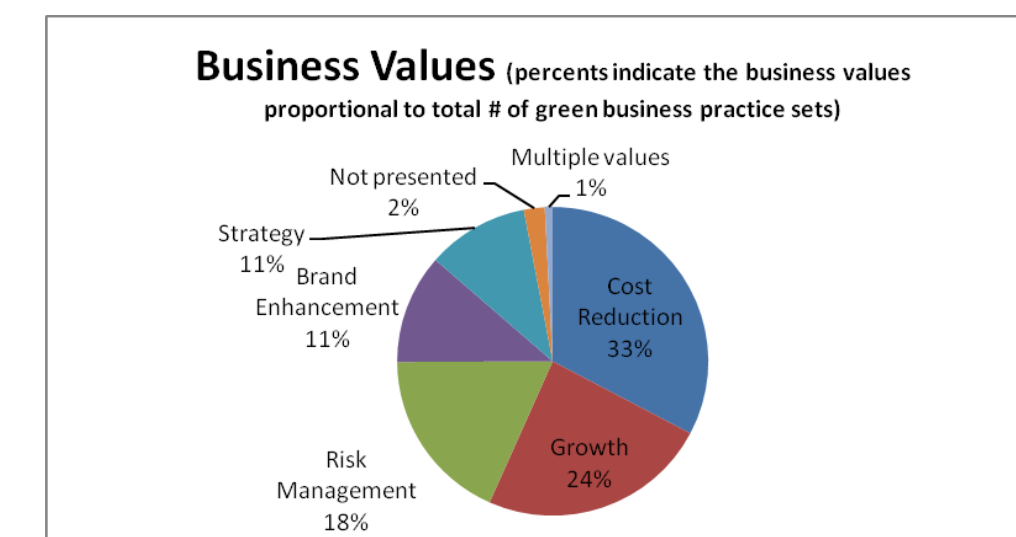
4. Business values created by green business practices –

Figure7. Six types of business values to be made from green practices



4. Business values created by green business practices (cont.)

Figure8 Analysis of business values (367 green business practice 'sets' categorized by 6 types of business values. 100%=367)



Out of the 6 categories of business values, the most commonly pursued business value was cost reduction, while growth and risk management were also actively sought out.

5. Mapping green business practices with business values

- Waste recycling related practices, energy, and water practices were especially high of cost reduction values.
- Developing innovative technologies and introduction of green products and services were often followed by revenue increase in many targeted companies.
- Communications, educational activities, voluntary standards, and partnerships tended to build a strong positive reputation for companies
- Data management strategies such as life cycle assessments or resource monitoring/tracking systems provided a good guidance for companies to make better environmental decisions by integrating the data into their business strategies.

7. Emerging trends

- Partnerships for developing business strategies, innovative emerging technologies, sharing knowledge and experiences, and developing quantitative methodologies and index for measuring environmental impacts, setting industry targets and standards.
- Many of the target companies are putting investments and research into developing innovative green technologies and future-oriented environmental initiatives to grow, expand, differentiate, and create new business opportunities.
- Materiality assessment: It is a powerful tool to understand where business interests overlap with the sustainability priorities of a company's stakeholders. Usually in a materiality assessment, issues are categorized according to their concern to stakeholders and their current or potential impact on the company.

8. Discussion

- In most cases, the 22 targeted companies did not provide specific numbers on their reduced costs or earned revenues. More important than disclosing these absolute numbers, is to improve the Return on Investment (ROI) of green business practices and initiatives. Out of the 22 targeted companies, none provided such information. Only a few companies attempted calculating their comprehensive revenues and cost savings generated by environmental efforts.
- External rankings of the these companies' environmental efforts varied greatly depending on their ranking methodologies.
- Current proliferation of environmental reporting and the focus on sustainability will soon herald an era of integrated reporting, where value creation will integrate environmental sustainability and profitability

6. Impacts on environment

Most companies emphasized on their efforts to protect our environment and reduce negative impact on environment in their environmental reports. The 18 identified impacts on environment were categorized into 9 areas, as shown in Figure9. The strongest focus was on the reduction of greenhouse gas emissions, to fight against climate change, followed by green practices with indirect impacts on environment.

Contribution to environment (18 impacts on environment)	9 impact categories
Reduction of heavy metals and hazardous pollutants	Air
Cleaning air and the atmosphere	Air
Climate change mitigation – by afforestation	Ecosystem
Contribution to reduction of consumption	Ecosystem
Climate change adaptation – increase in resilience of societies and people	Ecosystem
Reduction of natural resources use	Ecosystem
Biodiversity and ecosystem protection	Ecosystem
Promoting cleaner energy while reducing fossil-fuel energy	Climate
Reduction of energy use	Climate
Climate change mitigation – by GHGs abatement	Climate
Indirect environmental impact	Indirect
Protecting lands against degradation and desertification	Land
Environmental land remediation	Land
Multiple impacts	Multiple
Protecting oceans against acidification and pollution	Ocean
Reduction of wastes	Waste
Cleaning water and improving water quality	Water
Reduction of water use	Water

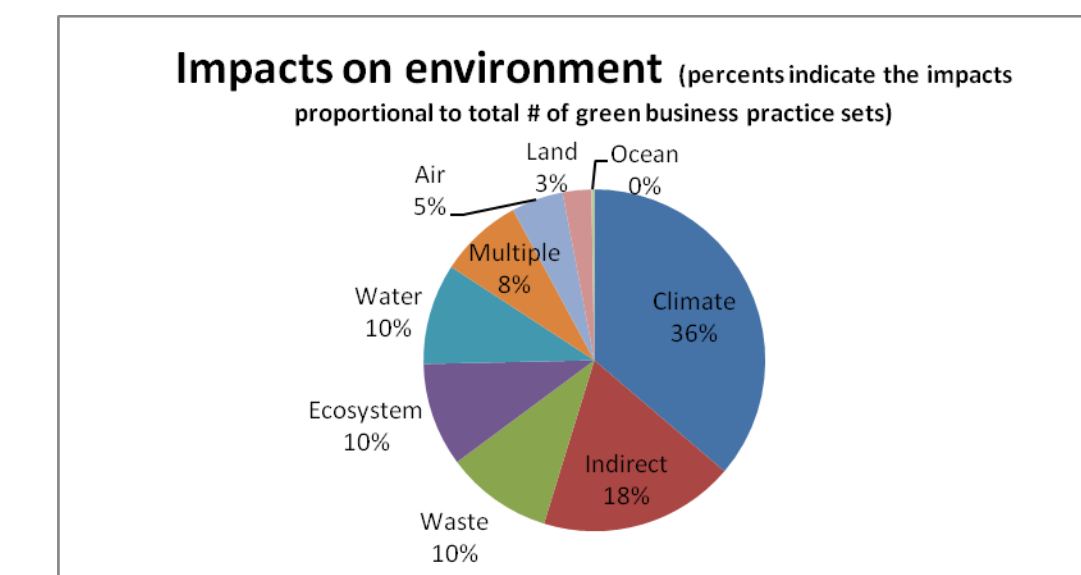


Figure9,10. Analysis of impacts on environment by 9 impact categories (367 green business practice 'sets' categorized by 9 categories of impacts on environment. 100%=367)

9. Conclusion

- The analysis of business value creation presented the evolution of corporate responses to sustainability. Companies' views towards environmental sustainability have shifted from a short term, internal sight to a long term, external sight, which enables more external communications and long term planning. At the same time, their main drivers for action have shifted from reacting to external pressures, to proactively responding to the companies' internal needs and strategies.
- In order to improve environmental reporting and green business practices, the paper suggests paying more attention to the supply chain, improving consistency of the reporting beyond transparency, incorporating a financial approach to environmental sustainability, and customizing green business practices to each company's own needs for enhanced effectiveness.

Figure1: Structure of the 4 dimensions in 367 green business practice

