



CASE STUDY

‘ENVIRONMENTAL MANAGEMENT AT IBM (A): MAKING SUSTAINABILITY SUSTAIN THROUGH PASSION AND PROCESS’

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Agenda

2

- **Introduction – IBM Background**
- **Origins of Environmental Management at IBM**
- **The Environmental Management System**
- **Environmental Management System in Action**
- **“Green” Businesses for a “Smarter Planet”**
- **Major ‘Highlights’ in IBM’s environmental activity**
- **Conclusion : IBM - Why Green? – Group Thoughts.**
- **Q & A**

Introduction – IBM Background

- ❑ Founded in 1911 and become leader of the world's computing industry. Launched System/360 considered one of the most successful product in history.
- ❑ Remained a leader in IT for almost 30 years after which by 1993 its net losses reached to \$8 billion.
- ❑ Lou Gerstner was hired and transformed IBM from a computer H/W manufacturer to a company with a diverse business portfolio(S/W, H/W & Services).
- ❑ Under guidance of Sam Palmisano, generated revenue over \$103 billion by 2008 (21% S/W, 21% H/W & Financing, 57% Services and 1% Other).
- ❑ Came up with the “Smart Planet” agenda, with a vision of how IBM could contribute by enabling smarter and more efficient systems.

Origins of Environmental Management at IBM

4

- In 1971 – IBM's first corporate policy on environmental responsibility was established . It says - “Line management in IBM must be continuously on guard against adversely affecting the environment”.
- It emphasizes on “Pollution Prevention” instead of “Pollution Control”.
- The company established the Process Environmental Impact Assessment (EIA) program in 1973 and the Product EIA in 1977.
- Added momentum was gained due to some events such as ozone hole discovery(CFC-113 largest emission in US), chemical release at Union Carbide's plant in Bhopal(India) - killed over 3,000 people and injured more than 300,000 and Exxon Mobil's oil spill in Prince William Sound, Alaska.
- IBM pulled together environmental, energy and legal experts from across the company to form a corporate staff function called Corporate Environmental Affairs (CEA) in 1990.
- This group focused on three tasks :
 - i) Continuing the work of the Environmental Engineering Team
 - ii) Raising the stature of the Environmental Management System across IBM
 - iii) Strengthening IBM's Environmental Strategy

Origins of Environmental Management at IBM

5

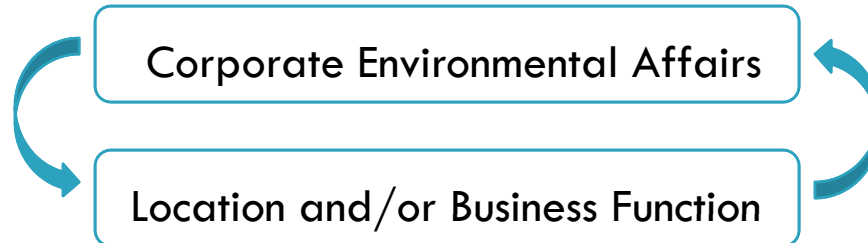
- Major challenges identified by the group were:
 1. **Consumerism** – To recognize that consumers were increasingly aware of the environmental, energy, and safety attributes of products.
 2. **Credibility** - Earning people's trust. IBM needed to prove its practices & policies.
 3. **Communications** - Challenge was to communicate its environmental policy, programs, objectives, and stewardship activities results & environmental impact for corporate disclosures.
 4. **Issue Coordination** - Complexity of the world's environmental issues and the increasing demand that business become involved.
 5. **Public policy and regulation** - Continuous changes in environmental policy and regulations were well communicated via CEA and understood across the board within IBM.
 6. **The need to build upon a record of success** - Continuously building on already accomplished record of success and to demonstrate environmental leadership.

The Environmental Management System

6

□ **EMS Approach**

*Develop and
Deploy common
requirements*



*Implement,
Monitor and
Feedback for
improvements*

□ **EMS Structure**



The Environmental Goals/Intersections

7

Product Development	<ul style="list-style-type: none">•Energy Efficiency•Environmentally Preferable Materials•Information for Users & Recyclers
Research and Manufacturing	<ul style="list-style-type: none">•Chemical & Waste Management•Discharges to the Environment•Regulatory Permits & Reporting
Procurement	<ul style="list-style-type: none">•Materials Content Prohibition & Restrictions•Supply Chain Compliance Verification
Logistics	<ul style="list-style-type: none">•Packaging•Carriers' Conduct
Product End-Of-Life Management	<ul style="list-style-type: none">•Collection & Treatment•Regulatory Reporting•Financing

Environmental Management System in Action

8

- IBM's Corporate-wide Product Stewardship Objectives from design to release of IBM logo products.
- Develop products with consideration of their reuse and recyclability at the end of the product's life.
- Develop products with consideration their upgradeability to extend the product's life.
- Develop and manufacture products that use recycled materials where economically and technically justifiable.
- Develop products that will provide improvements in energy efficiency and/or reduced energy consumption.
- Develop products which minimize resource use and environmental impact through selection of environmentally preferred chemicals and materials.

Green Businesses for a smarter planet

9

- Our world is becoming smarter & interconnected – businesses need to be smart enough to be sustainable
- Nov 2008 Palmisano launched IBM's "Smarter Planet" agenda – Enable more smarter & efficient systems
- Govt. actions for the climate change threat presented IBM with emerging 'Green' business opportunities such as - Energy Efficient or Green Data Centers, Intelligent Utility Networks, Intelligent Transportation Systems & Strategic Water Information Management
- Help make remaining 98% energy consumption in society more efficient.
- Financial Angle – smart grid set up, future emission cap & trade schemes.

Green Businesses for a smarter planet

10

- Three differentiators for IBM in the “green” businesses area:
- 1. The ability to help clients address matters in a systemic fashion (management of large network infrastructure-related projects).
- 2. IBM’s software infrastructure and platform
- 3. IBM’s internal experience and expertise in environment management backed by solid implementation history.
- Branding - Clients trying to solve an environmental problem asked constantly “what does IBM do?”

Few major 'Highlights' in IBM's environmental activity

11

- In seventies :
 - IBM had Corporate Policy on Energy Conservation
 - Established Process Environmental Impact Assessment Program
 - Eliminated polychlorinated biphenyls (PCBs) in products.
 - Established Supplier Environmental Evaluation Program
- In 1995, began to voluntarily report its greenhouse gas emissions.
- 1'st semiconductor company to target perfluorocompounds (PFCs) emissions reduction.
- Goal to reduce CO2 emissions associated with IBM's energy use by 12% between 2005 and 2012
- Eliminated Class I & II Ozone Depleting Compounds from products and processes
- Established nonhazardous waste recycling goal and also set a goal for recycled plastic resins use in products. – met annually.

Few major 'Highlights' in IBM's environmental activity

12

- ❑ In late 80s, offered IBM's first product take back program.
- ❑ In the 90s
 - Prohibited Asbestos from use in products.
 - Prohibited lead from use in plastic housing and paints.
 - Prohibited mercury from use in IBM parts of assemblies.
 - Published Corporate Packaging guide and shared with suppliers.
 - Published Engineering Specification on Baseline Environmental Requirements for supplier deliverables
- ❑ In 2004, Established IBM Supplier Conduct Principles and supporting audits.
- ❑ By 2007, IBM had avoided 4.4 million pounds of volatile organic compounds
- ❑ IBM sent less than 1% of EOL product waste to landfill or incineration.

Conclusion : IBM - Why Green? – Group Thoughts.

13

Should IBM put 'carbon labels' on its products?

- Valuable information for customers - empower people to make informed choices.
- Shows total CO2 emission during the product life cycle – Raw material supply to transportation to retailers.
- Shows commitment from organizations to reduce CO2 emissions.
- Shopper understanding for the 'carbon level' needs to be evaluated. – UK Pilot did not show clear impact on buying patterns.

Conclusion : IBM - Why Green? – Group Thoughts.

14

Should IBM continue pursuing for environmental sustainability?

- Why IBM portray itself as 'Green Company'? What are the concrete gains from this branding?
- '40 Years of IBM Environmental Leadership' – clearly IBM invested great deal of time, effort & funds for the Green branding.
- IBM report reads - 'Corporations only prosper to the extent that they satisfy human needs. Profit is only the scoring system. The end is better living for us all.'

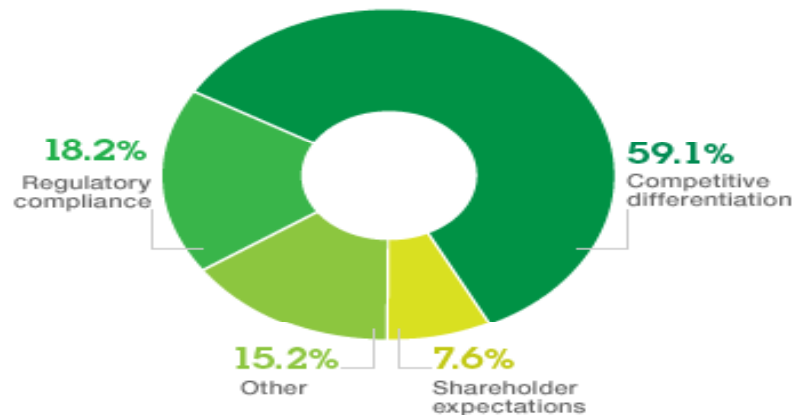
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15

- IBM's reasons for being sustainable are competitive differentiation, regulatory compliance and shareholder expectations.

Benefits of eco-efficiency to organizations

Participants at the 2010 IBM eco-efficiency jam ranked the benefits of sustainability.



Source: Poll of Jam participants.

Conclusion : IBM - Why Green? – Group Thoughts.

16

- IBM works closely with US government on issues such as water management, transportation, and carbon footprint. – This good relationship provides incentives to IBM.
- IBM has incentive to take the shareholder point of view in terms of being environmentally friendly.
- Financial gains – Cutting carbon emissions leads to \$ savings.
- CSR (Corporate social responsibility) - Manage business to produce overall positive impact on society through economic, environmental and social actions.

Q & A

17

Q&A?

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