

TENDANCES IBM 2009

DONNEZ DU SOUFFLE À VOS AFFAIRES ET À LA PLANÈTE

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Les bonnes pratiques vertes au sein des entreprises

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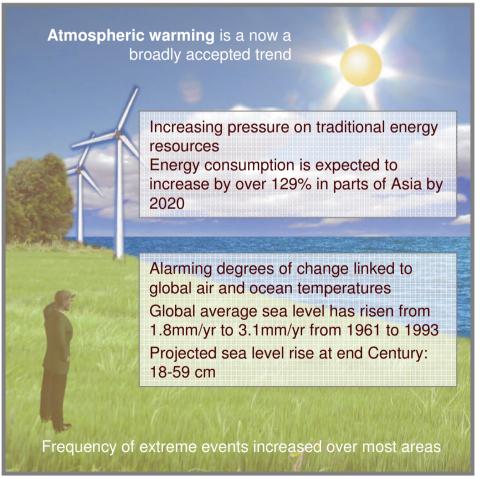
Agenda

- 1. Context
- 2. Companies Best Practices
- 3. Lessons Learned



It's not speculation anymore

There is overwhelming evidence to make the case for "green"

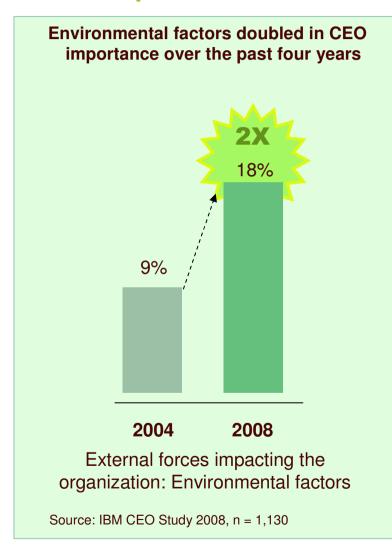


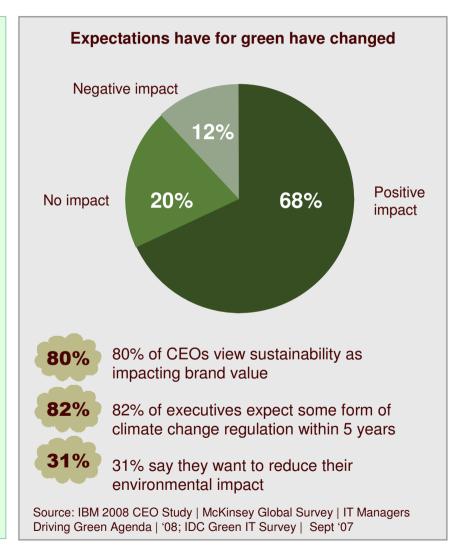
...But even hardened skeptics understand the imperative for action is material





Leadership focus on environmental issues has doubled







The imperative and pressures are shifting beyond traditional principled motivation

Energy	Traditional view Conserve fossil fuels Explore alternatives Reduce environmental impact	 Reduce cost of energy Meet and exceed regulations Improve operational efficiency
Air	 Reduce pollution Reduce carbon footprint 	 Meet and exceed regulations Leverage tax and governmental incentives Provide employee benefits (such as work at home programs)
Water	Reduce pollutionPreserve marine life	 Reduce water and waste water expenditures Regulatory compliance Improve products and services
Land & Resources	 Reduce pollution Conserve nature and open/natural spaces 	 Reduce operational footprint and associated costs Reduce redundant infrastructure Leverage improved, smarter technology



The imperative and pressures are shifting

Traditionalist view: I need to do what is right for the planet Enera Conservation & clean energy Reducing pollution/ CO₂ Water Clean water Land & Resources Protection Traditional imperatives for green focused on a moral imperative to preserve safety & life



Today's green business leader doesn't abandon principle nor business acumen, but embraces both in the new sustainability view.



Making sense and taking action requires a *Green Strategy*

Many organizations struggle with how green fits into their business. Others can't find the right sponsorship or agreement for green initiatives. Others know they have to act, but don't know what to do. A green strategy addresses these challenges.

At the top level, a green strategy defines and understands:

Green priorities and objectives

Green business drivers, imperatives, and our current environment



At a tactical level, a green strategy determines:

Actions, programs, enablers and deployment plans

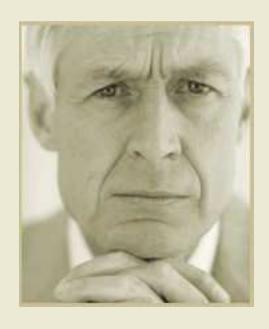
Financial justification, ROI, and business case

Leadership, sponsorship, and consensus-building



Key questions C-Suite and LOB executives are pondering

Key Questions



- How can I develop a Green strategy that is part of my overall Corporate Social Responsibility strategy and more important, part of an overall business strategy?
- How can doing the right thing for the Energy & Environment help my bottom line and improve my stock price?
- What is the cost of not acting on this?
- How can I ensure that I don't become the target of some NGO attack?
- How are we going to survive the rising energy costs and dwindling supplies of needed resources?



Green Industry Issues sharing



Government

- Paper reduction
- Smarter transportation systems
- Green workforce and virtualization



Retail

- Efficient Supply Chains and Merchandising
- Performance Analysis
- Store Operations and retail footprint
- Brand reputation
- Green as a differentiator and growth engine



T&T

- Fuel and energy optimization
- Intelligent routing, RFIDs, and logistic operations
- Green asset management
- Emission and carbon trading



Chemical & Petrol

- Constrained supply and demand growth
- Sustainable site, property, and asset mgmt
- Workforce attraction and optimization
- Regulatory compliance



Electronics

- Brand & reputation
- Supply chain optimization and materials usage
- Hardware & asset consumption /disposal/ recycling
- Manufacturing and supply optimization



CPG

- Efficient Supply Chains and Merchandising
- Performance Analysis
- Workforce attraction and optimization
- Brand reputation
- Green as a differentiator and growth engine



Telecom

- Hardware and asset disposal/ recycling
- Supply chain optimization and materials usage
- Manufacturing and supply optimization
- Brand & reputation



- Emissions and carbon trading
- Sustainable site, property, and asset management
- Sustainable performance management
- Waste disposal optimization



Banking, Financial Markets & Insurance

- Paper reduction
- Green workforce and virtualization
- Green data centers



Life Sciences

- Efficient Supply Chains and Merchandising
- Performance Analysis
- Manufacturing and supply optimization
- Brand reputation
- Green as a differentiator and growth engine



Aero & Defense

- Hardware and asset disposal/ recycling
- Supply chain optimization and materials usage
- Manufacturing and supply optimization
- Brand & reputation



Automotive

- Hardware and asset disposal/ recycling
- Supply chain optimization and materials usage
- Manufacturing and supply optimization
- Brand & reputation



Best practices sharing

- Natural England engaged
 Develop a Strategic Carbon Reduction Programme
- China Logistic Leader Green Logistic
- IBM Realtime Carbon Consol
- French Group EHS Information System (Process, Orga and Tools)
- IBM
 Boulder Green Data Center



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Natural England Develop a strategic Carbon Reduction Programme





The Client: Natural England's purpose is to conserve, enhance and manage the natural environment for the benefit of current and future generations

The Challenge

Natural England is working towards the delivery of four strategic outcomes:

- a healthy natural environment
- · enjoyment of the natural environment
- · sustainable use of the natural environment
- · a secure environmental future.

It has set itself the challenging target of achieving 50% carbon reduction within three years.

The Solution

IBM worked closely with Natural England to develop a vision, change roadmap and detailed delivery plan. A tailored staff communication and engagement programme, based on leading practices, were key to motivating people to change their behaviour.

Key programme benefits include:

- Clear roadmap to achieving 50% CO₂ reduction by 2010
- implementation of a strong, evidence-based carbon measurement and management system
- on target to achieve a 20% reduction in within one year



Leading China logistics company **Green logistics**



The Client: is a diversified service company with one of the most recognized and admired brand name in the world focusing on shipping and modern logistics businesses. It operates over 250,000 sq m of warehousing, 1200 vehicles as well as shipping, rail and port assets

The Challenge

- •The leading third party logistics company in China needed to carry out a broad review of its logistics operations
- •The goal was to optimize logistics scheduling activities across multiple clients from their manufacturing facilities to customer delivery points
- •This project was under the banner of a Green Logistics project which required analysis of their operational 'carbon footprint' which met targets for reduced ghg emissions

The Solution

- •IBM Consultants worked with the client using their Carbon Supply Network Optimisation Workbench (SNOW) tool
- The model was used for tradeoff analysis between carbon, logistics cost and customer service as well as looking at alternative mode and freight consolidation strategies
- Preferred solution identified a 20% carbon reduction with negligible impacts on cost and service



International Industrial Group EHS Management System



The Challenge

- •Accelerate and secure EHS reporting from the local sites for General Management Use
- •Give an operational reporting tools for local EHS leaders and allow performance benchmark between sites in order to allow best practices identification
- •Be able to collect and analyze fire and security events coming from local sites in order to improve security investment, processes or organization
- •Easy to deploy solution

The Client EHS organisation:

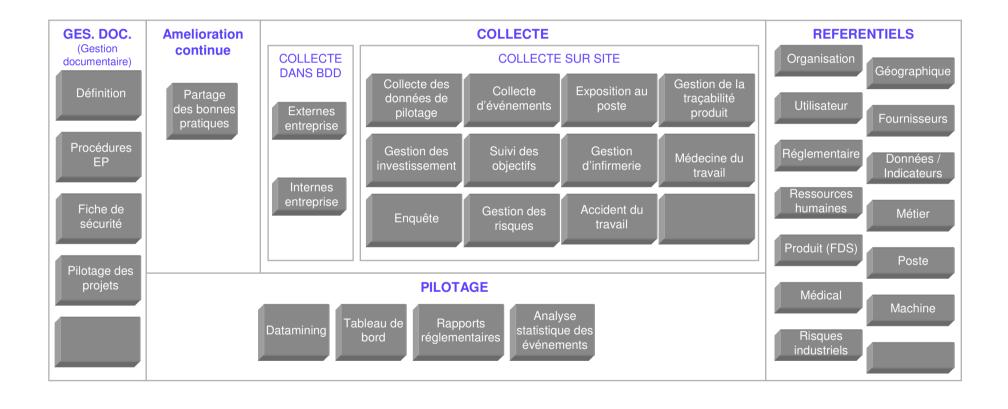
- A central EHS services supported by local EHS team
- · More than 100 sites around the world
- An EHS network of more than 2000 people
- 1 EHS KPI at the CEO level
- 50 EHS KPI to manage

The Solution

- •Build the EHS Information System Roadmap
- •Design and implement the a web reporting tool allowing local data collection and automated top down reporting using websphere application server
- •Design web application allowing event collection and analysis locally & centrally using websphere application server



Results examples: Targeted EHS IS





IBM Realtime Carbon Management System Pilot





IBM Boulder *Green Data Center*

IBM's new data center in Boulder, Colorado is a leader in energy efficiency and sustainability, and is the greenest data center in North America.



40%

Wind-generated electricity cuts carbon emissions, reduces energy costs by more than 40%



75%

Water economizer reduces annual energy consumption by 75%



98%

98% of an existing building's shell plus 25% of new products made from recycled materials make up the new 225K square feet center



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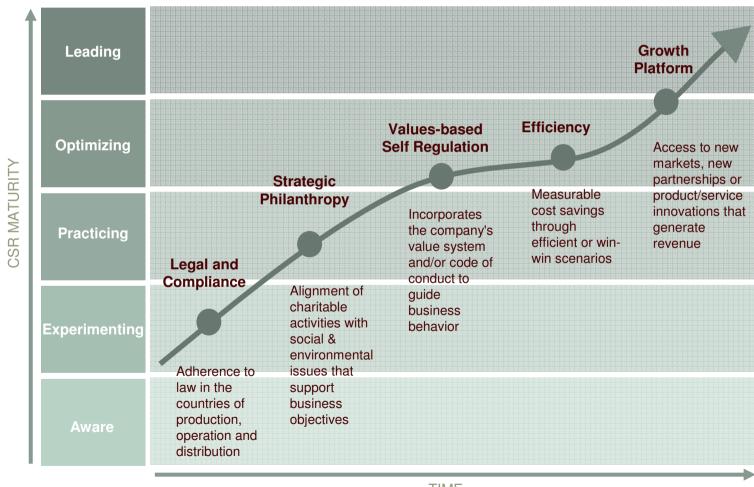
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The CSR & Green Value Curve: a shift from cost to returns





Keys to Success

- Impact on business: from cost to growth
 - Align and incorporate Green with your business strategy and apply it across business functions
- Be pragmatic, as for example
 - Start with one KPI at the CEO level (such as energy consumption reduction) allowing you to fastly show green value, supported by a dedicated organisation
- Relationships: from containment to engagement
 - Increase the level of engagement with your employees, customers and key constituents



QUESTION



Back-up



Pressures & imperatives: Defining Your Green Strategy



Key questions:

- How do we align green with our core strategy to achieve our business objectives?
- We do not have a coherent overarching energy and environment strategy. Where do we start and what do we do when?
- What does "green" mean. What do we really need to do? What is enough?
- We need to access our information and make it transparent to our stakeholders
- I need new sources of revenue. Is there a market for the processes or new products I have implemented?

Green strategy requires a comprehensive framework

This framework helps identify manageable pieces of work to address as part of a larger, cross-organizational approach which can be prioritized and integrated into existing strategies and plans while also revealing opportunities for new business models, increased efficiencies and growth opportunities.



This Energy & Environment Framework is an holistic view of the challenges that organizations face in responding to energy, climate change and environmental responsibility. It is a component-based model that identifies the impact caused by an organization's strategy, people, information. product, IT, property and business operations.



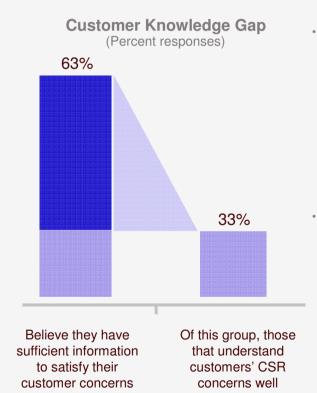
Pressures and imperatives: Drive brand and growth



Key questions:

- How do I use this goodwill I am generating to increase revenue and market share?
- What to communicate, why and how and to whom?
- How do we keep existing customers?
- How do we access our information and make it transparent to our stakeholders?

CEOs who feel prepared to meet customer concerns may be missing the mark



- 63% believe they have sufficient information about the sources (including labor) behind their products & services to satisfy customer concerns
- But two-thirds of those leaders admit they don't understand their customers CSR expectations well

How do companies bridge this gap?

Source: IBM CSR Study 2008, n = 250

How do Linnovate in

²⁴ sustainability DE COÛTS POUR VOTRE BUSINESS, PLUS DE RESPECT POUR L'ENVIRONNEMENT.



Pressures & imperatives: Manage talent & optimize workforce



Key questions:

- How do I green to attract and retain top talent?
- How do I tap the groundswell of interest in green to innovate my business?
- Our leaders are not advocates. How do we create momentum in our organization?
- How do we support our employees in accepting our own green changes?
- How do we frame the conversations internally?
- How do we get employee policies (e.g., travel and commuting) to consider energy and environment impact as well as cost



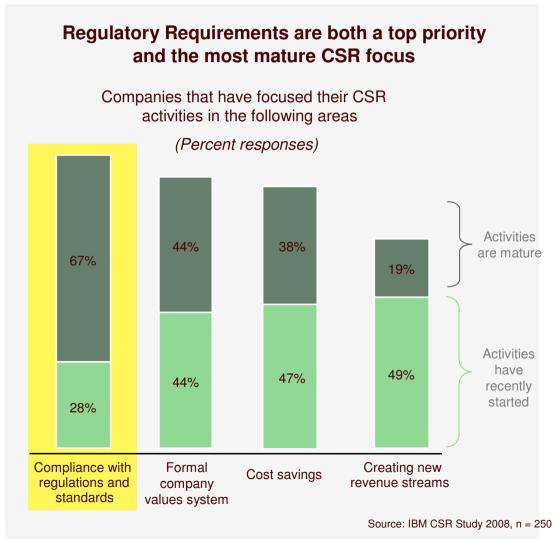


Pressures & imperatives: Comply with regulatory requirements



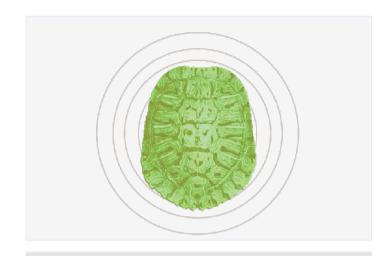
Key questions:

- We need to meet the regulatory requirements related to green issues like carbon, waste and water.
- How do I exceed regulatory requirements and gain competitive advantage?
- My product engineering, manufacturing and disposal are not compatible with energy and environment requirements.



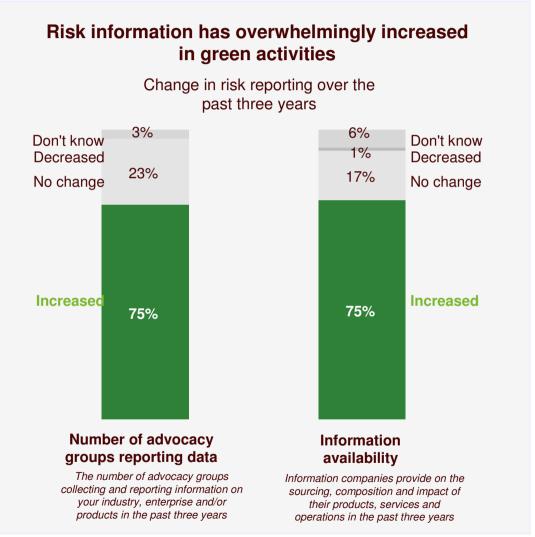


Pressures & imperatives: Manage risk and enhance performance



Key questions:

- How do I identify the gaps in my strategy and operations putting me at risk?
- Stakeholders including NGOs are increasingly monitoring our activities. How do I prepare and participate in this?
- What are the key green indicators I need to monitor?
- How do we implement a compliance program?



Source: IBM CSR Study 2008, n = 250



Pressures & imperatives: Drive operational performance, efficiency and excellence



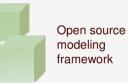
Key questions:

- What is the operational or business value of green – what is the business case?
- How do I identify green initiatives that create operational efficiencies?
- How can I manage fuel and energy costs?
- How can we build off of our existing IT systems and not deploy all new ones?
- How can I change my operations and processes to be more environmentally

Sophisticated performance monitoring and modeling can improve operational performance

Green Performance
Dashboard
Computational Modeling





Advanced Water Management



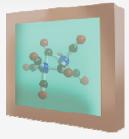
- Sensor data capture, analysis and visualization
- Irrigation services
- Utility/water network management
- Novel filtration membranes

Alternative Energy Management



- Sensor data capture, analysis and visualization PV technologies and mfg processes
- Grid management (IUN)
- Battery and fuel cell membranes

Carbon Management



- Carbon modeling and tradeoff management
- Energy management
- Green data centers
- Green sourcing and product design
- IBM Green Sigma[™]/Activity Based Carbon Costing"



Pressures and Imperatives: Reduce costs and secure resource availability



Key questions:

- How can green help me drive down costs?
- How do we pay these rising costs of energy, water?
- How do I seek alternative sources?
- How do I reallocate my scarce resources?

Reduction in resource use can have direct. measurable cost reduction/avoidance impact Areas of cost reduction Power Raw materials Asset Fuel Supply chain: usage e.g. water management Human Travel Talent Paper/ Office space resources: retention communications expense Marketing, Contact Retail/branch Paper/ Return service & center footprint communications management sales footprint Hardware Data center Information Hardware Power usage disposition reduction refurbishing technology Finance, legal, Regulatory Consumer Paper/ Infrastructure operations litigation communications fines/incentives reduction The business imperative must be to achieve this while maintaining or improving quality and performance