Sustainability as a Critical Driver of Profitable Growth - Green Order

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Clean Energy Connections

Sustainability as a Critical Driver of Profitable Growth

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GreenOrder
www.greenorder.com
Outline

- About GreenOrder
- Trends in Sustainability and Business Response
- Corporate Strategies for Profitable Growth
- Clean Energy beyond the Utility
A strategy and management consulting firm that has made environmental leadership a catalyst for competitive advantage

We address the complex challenge of environmental sustainability from an integrated perspective to achieve…

Performance:
Align environmental initiatives with key business goals

Innovation:
Work cross-functionally to accelerate innovation and improve products and services

Influence:
Engage stakeholders and create sustainable leadership practices that build long-term value

…and have partnered with senior executives at some of the world’s largest corporations

“Green business’ go-to guys”
FORTUNE
GreenOrder’s broad expertise

*Interdisciplinary, holistic approach to problem solving*

- **Strategy**: Work with senior management to develop sustainability strategies that are aligned with core business objectives
- **Eco Assessment**: Conduct environmental audits of products, technologies, assets, and processes and identify opportunities to reduce impacts
- **Stakeholder Analysis**: Identify and interview key stakeholders to gain insights and inform strategy development
- **Risk Assessment**: Characterize the risks and unintended consequences of particular actions and identify mitigation measures
- **Green Building**: Develop green building strategies, marketing plans, and financial analyses
- **Marketing & Comms**: Advise on brand strategy, alignment, and valuation; develop credible, authentic green marketing strategies
- **Policy Analysis**: Evaluate and advise on critical business and policy-facing strategies related to major legislative proposals
The GreenOrder network

Longstanding ties and partnerships with leading thinkers, entrepreneurs, policy makers, topical experts, and other influencers

**EE TECH & DSM**
- Major Utilities
- Major IT companies
- GridPoint
- Echelon
- Google
- Energy Hub
- Climate Culture
- Efficiency 2.0

**LEADING NGOs**
- NRDC
- EDF
- ASE, ACEEE
- Sierra Club
- TNC
- WWF
- Audubon
- Ducks Unltd.
- NWF

**EXPERTS ON…**
- Employee training
- Policy and Regulation
- Research and Polling
- Branding
- Energy efficiency / auditing
- Consumer trends and behavior
- Green Building

**INDUSTRIES**
- Major utilities
- Buildings & Real Estate
- Finance
- Consumer Products
- High Tech and IT
- Automotive
- Heavy Industry
- Oil & Gas

**ASSOCIATIONS/COALITIONS**
- Conf of Mayors
- USGBC
- USCAP
- USPREF
- Assoc. of Governors
- BRT
- Reserve Officers
- Faith Based Orgs

**ACADEMY**
- Universities
- Think Tanks
- Research Instits.

**GOVERNMENT**
- Fed Agencies and Programs
- Selected State and Muni Govts
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The business view is evolving

**Leading companies are using green to win as they integrate sustainability into their core business strategy**

- **Proactive risk reduction**: Actively mitigating potential environmental business risks
- **Compliance**: Meeting legal requirements in regions of operation
- **Strategic Philanthropy**: Environmentally focused charitable activities aligned with business goals
- **Efficiency and Cost cutting**: Cost savings with clear ROI, often short payback periods
- **Differentiation**: Credible green marketing and messaging
- **Innovation**: Product/service innovation tied to and improved by sustainability
- **Inspired culture**: Aligning employee and company incentives to foster collaboration and innovation around sustainability
- **Profitable value creation**: Sustainability as a strategic growth platform and a lens for new markets, partnerships

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**Sustainability Uptake**

**Value**

**NEW**
Evolving views of the green economy

**Traditional Sector Approach**

The **green niche view** sees the obviously green businesses/jobs within different industry verticals (e.g., *renewable* energy, *organic* food) and targets policy on just those sectors.

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**Our Comprehensive Approach**

The **Green Investment Framework** sees environmental drivers (e.g., *global warming awareness*, *high energy prices*, *food toxicity*) that touch many industries, and promotes investments which create measurable job growth throughout the economy.
Leaders look beyond their own operations to capture sustainability opportunities across the value chain

**Value Chain**

- **Design**
  - Steelcase
  - Committed to sustainable sourcing of palm oil and tea; introducing drip irrigation and other sustainable techniques to global suppliers.

- **Raw Materials**
  - Unilever
  - Renewable energy use, energy efficient manufacturing, reduction of VOC emissions, wastewater recycling, and photocatalytic paint at facilities.

- **Production**
  - Toyota
  - Fleet fuel efficiency and new vehicle designs; Founding EPA Smartway Partner; network efficiency technology.

- **Logistics**
  - UPS
  - Committed to LEED certification for all new Starbucks-operated stores beginning in 2010.

- **Sales**
  - Starbucks Coffee
  - Portfolio of industry-leading eco products that reduce customer environmental impact, including water, energy, emissions, waste, etc.

- **Use**
  - GE
  - Product recycling in 53 countries; $$$ incentives for recycling in U.S., audits of 3rd party recycling vendors.

- **End of Life / Reuse**
  - HP
  - Fleet fuel efficiency and new vehicle designs; Founding EPA Smartway Partner; network efficiency technology.

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Sustainability requires real transformation

Companies today need a green strategy just as, a decade ago, they realized they needed a globalization strategy or a digital strategy.
Companies need a sustainability strategy to effectively prioritize initiatives by desired business outcome.

**Strategies, Tools, and Tactics**

- **Green Building**
- **Benchmarking**
- **Solar Power**
- **Energy Audits**
- **Branding & PR**
- **Enter New Market**
- **Consumer Messaging**
- **Launch Green Product**
- **Public Reporting**
- **Carbon Offsets**
- **Water conservation**
- **Employee Training**
- **Double Sided Printing**
- **Internal Communication**
- **Carbon Footprinting**
- **Recycling**
- **Product Innovation**

**Business Goals**

- **Cost Savings**
- **Mind share**
- **Increased Sales**
- **Brand Value**
- **Employee Satisfaction**
- **Customer Loyalty**

Success depends on using the right combination of strategies and tactics to credibly deliver on business goals.
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Key emerging trends

- Resource Scarcity
- Information Democratization
- Climate Policy Uncertainty
- Frozen Financial Markets
- Energy Sector Transformation
- Multi-disciplinary Solutions
So...how are companies responding?

Leading companies are thinking strategically about these macro and sustainability trends...

...and incorporating them into their core business practices to drive profitable growth and long-term value
Our work with General Electric

Since 2004, GreenOrder has played a key role in developing GE’s groundbreaking, multi-billion dollar ecomagination initiative

GreenOrder’s Approach:

- Helped GE develop a strategy to align its diverse set of business units and drive growth through environmental sustainability and innovation
- Established a scorecarding process for GE’s diverse portfolio of products to qualify offerings, quantify benefits of ecomagination products, and establish compelling marketing claims
- Advised corporate leadership team and business units on ways environmental sustainability can continue to drive growth for GE

Through our work, GE:

» Achieved over $17B in ecomagination revenue and $1.4B in related R&D in 2008 across a portfolio of more than 75 products and services
» Cut GE annual energy costs over $100M while reducing greenhouse gas emissions and water usage
» Enabled innovative partnerships (e.g., GE-Google on smart grid), productive government engagement, and greater collaboration across GE’s businesses

GreenOrder Work Examples:

- Established a scorecarding process for product certification
- Certified over 70 ecomagination products ($17B in revenues)

Key Trends and Policy Developments

Advised executive team on key trends and policy developments
**Our work with General Motors**

*Since 2005, GreenOrder has served as a top advisor to GM on its sustainability strategy and has provided key direction and support for the Chevy Volt program.*

**GreenOrder’s Approach:**

- Coordinated stakeholder outreach around specific strategic initiatives
- Provided ongoing support for corporate environmental messaging and communications
- Initiated and facilitated the collaboration between GM, EPRI, and utility representatives on electric transportation infrastructure and other key issues integral to the success of the Chevy Volt program
- Advised top executives on policy and communication issues related to green jobs and federal bridge loans

**Through our work, GM:**

- Developed a critical understanding of the views and priorities of key individuals and organizations in the environmental community
- Gained insights into green jobs in the auto industry and the potential role of GM in advancing this growth opportunity
- Made significant progress toward plug-in vehicle roll-out
- Engaged in CEO dialogue with heads of leading environmental NGOs
Insights from other case studies

- Vision for sustainability
  - Long-term goals for sustainability
  - Relationship of sustainability to overall vision
  - Clear articulation of vision for sustainability

- Strategic communications
  - Ways to leverage existing platforms
  - New marketing platforms
  - Potential partnerships

- Internal process & organization
  - Structures, processes, and tools to enable enhanced strategic communications
  - Recommendations to leverage culture and overcome cultural barriers
Insights from other case studies (2)

*These companies are actively communicating externally about their initiatives, coordinating and scaling initiatives, and engaging with internal and external stakeholders*

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<tr>
<th>Vision for Sustainability</th>
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<td><strong>Alcan EP:</strong> positioned products as <em>sustainability solutions in select, high-growth markets</em></td>
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<tr>
<td><strong>Applied Materials:</strong> moved <em>core business (semiconductors) into renewables</em> market</td>
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<td><strong>IBM:</strong> transitioned from hardware/commodities to <em>solutions provider &amp; respected thought leader</em></td>
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<th>Strategic Communications</th>
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<td><strong>GE:</strong> customer/public marketing backed by <em>rigorous portfolio</em> of ecomagination products/services</td>
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<td><strong>Duke:</strong> gained powerful <em>voice on policy</em> and access to key government decision-makers</td>
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<td><strong>Whirlpool:</strong> focused external outreach on <em>enhancing consumer awareness and demand</em></td>
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<th>Internal Process &amp; Organization</th>
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<td><strong>3M:</strong> <em>supports innovation</em> through “15% culture”</td>
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<td><strong>J&amp;J:</strong> supports <em>local stakeholders relationships</em> through Credo and decentralized structure</td>
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<td><strong>Masco:</strong> defined <em>corporate role as facilitator for change</em> and resource for the business units</td>
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Whirlpool recognized the opportunity to leverage its existing strategic focus on appliance performance and shape the market standards for energy efficiency.

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<th>Context and Challenges</th>
<th>Actions and Results</th>
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<td>Began world’s first appliance manufacturer to announce GHG reduction strategy</td>
<td>Has played a prominent role in crafting major appliance efficiency regulation beginning in 1970s — for example, close collaboration with EPA, DOE, and other influencers on Energy Star since before its announcement in 1992</td>
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| Did not change path; approach built on core competencies and cultural aspects:  
  - Continual search for increasing energy efficiencies (due to historic focus on cost/quality in low-margin industry)  
  - Midwestern roots: focus on corporate citizenship  
| Saw need to engage externally and push for efficiency standards that would allow the company to stay out ahead of the competition | External outreach sharply focused on enhancing consumer awareness and demand (e.g., educate retailers and consumers on benefits/efficacy of energy-efficiency appliances) |
| | Pushed Consumer Reports magazine to publish energy efficiency rankings of appliances |
| | Worked closely with Sierra Club, Natural Resources Defense Council, the Alliance to Save Energy to promote manufacturer’s tax credits in the Energy Policy Act of 2005 |
| | Worked with trade association to develop rigorous techniques for measuring energy efficiency that could be uniformly applied across the industry |

Whirlpool was able to create demand for its products and maintain its dominance in the market by influencing industry standards and raising customer awareness about the benefits of energy efficiency.
Applied Materials moved its core business in semiconductor technologies into the renewables business. Through acquisitions of solar PV companies, Applied Materials is strategically building capacity for high-growth solar technologies.

**Context and Challenges**

- Identified business risks including: ongoing and rapid changes in the semiconductor, flat panel display
- Launched new strategy in 2006: provide manufacturing tools, technology, and process innovations from flat panel and semiconductor industries in order to lower the overall cost per watt for solar electricity users

**Actions and Results**

- Entered solar photovoltaic equipment market (2006) and the crystalline silicon (c-Si) solar PV market (2007)
- Invests approximately $1B in R&D annually (representing almost 15% of net sales)
- Established Energy and Environmental Solution (EES) is group - responsible for growing company in new areas that build on Applied’s technology and manufacturing expertise
- Utilize an intranet/CEO bog and hold quarterly green bag luncheons to engage employees in sustainability
- Developed regional employee-led Green Teams to identify and drive environmental education and projects
- Joined Electronics Industry Citizenship Coalition (EICC) and Global Supply Chain Organization (GSCO) which monitor and evaluate suppliers for compliance
- c-Si solar business generating positive returns and EES segment is on track to operating profitability in 2010

Applied Materials leveraged its expertise in semiconductor technologies and grew through acquisitions to enter into the high-growth renewable energy sector.
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Since mid-2008, GreenOrder has advised the CEO and leadership team of a large public electric utility on transitioning to being a leading 21st century energy company.

GreenOrder’s Approach:

- Ran a large executive strategy workshop focused on sustainability and organizational capacity challenges and bold leadership moves
- Served on extended “brain trust” team to develop policy positioning and strategy for U.S. climate change legislation
- Advised CEO about NGO, Obama Administration, and other key stakeholder priorities and opportunities for proactive engagement and partnerships
- Worked with a diverse set of executive leaders across Corporate Strategy & Planning, Government Affairs, Communication, Environment Health & Safety, and Sustainability

Through our work:

» One utility developed a cooperative, multi-party strategy that dramatically improved its environmental performance and set the stage for a revitalization of its business
» Another utility was positioned with a proactive plan to market carbon offsets

GreenOrder Work Examples:
- Facilitated group discussions about high priority business strategies
- Advised client on stakeholder support related to climate policies
- Developed roadmap to position utility as leader in sustainability
An integrated approach to clean energy…

How different areas come together to maximize value

Systems approach to clean energy

LONG-TERM COMPETITIVE ADVANTAGE

EXTERNAL LEVERS

Technology
- Research & Development
- Products & Services
- Innovation

Policy
- Government Affairs
- Supply Chain

Capital
- Finance
- Strategy

Behavior
- Human Resources (internal)
- Marketing/communications (external)
...Requires more than a utility

- Equipment manufacturers
- Information technology players
- Third party energy service providers
- Buildings sector value chain
- Electric and hybrid vehicle manufacturers and supply chain
- Financial partners
MISSION:

To serve as an educational resource for government leaders as they design and implement legislation, policies and programs to deploy large scale renewable energy projects that will create jobs, improve energy security, and reduce greenhouse gas emissions

...And almost always requires innovative partnerships
U.S. Partnership for Renewable Energy Finance

Members Include:

- ACORE
- Citi
- MDP
- Google
- Troutman Sanders
- GreenOrder
- Hudson Clean Energy
- Bank of America
- Vantage Point Venture Partners
- GE Energy Financial Services
- Morgan Stanley
- Skadden
- US Renewables Group
- SolarCity
Thank You.

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