

Beyond Operations Emissions Reductions

Advancing low carbon products / services, sectoral initiatives, policy engagement, and other ways to lead on climate

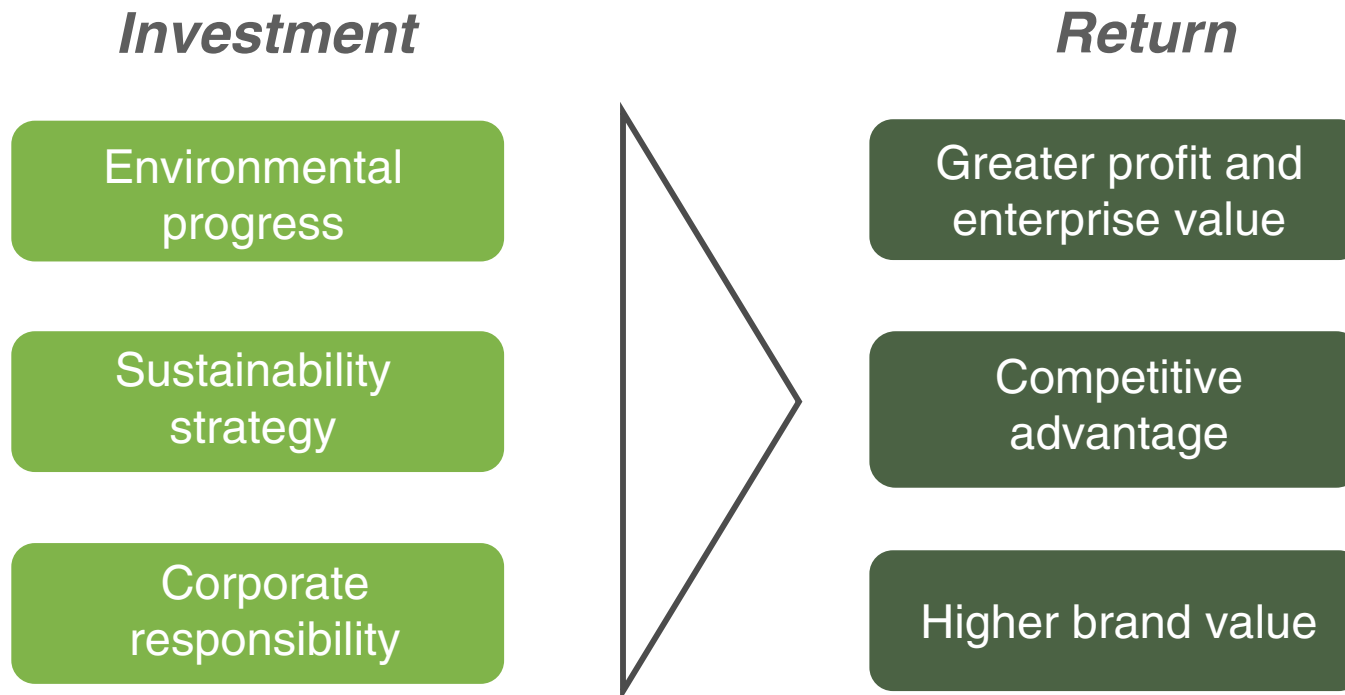
October 8, 2008

GreenOrder, Inc.
www.greenorder.com
Confidential



About GreenOrder

A strategy and management consulting firm that helps companies maximize their return on investment in sustainability...



Making progress profitable

Our Approach

We combine 3 core skill sets...



Business Strategy:

Align environmental initiatives with key business goals

Empirical Analysis:

Ground environmental strategy in sound science and technical analysis

Marketing:

Tell a credible, compelling, and differentiated story to customers and partners

Sample Clients

Citi Property Investors
Citi Alternative Investments



Morgan Stanley



Office DEPOT.

Allianz

"Green business' go-to guys"
FORTUNE

Strategy development for climate leadership

Phase I

Assess Footprint, Market Context, Risks, and Opportunities

- Assess Energy Footprint and Emissions Profile
 - Operations
 - Products and Services
 - Supply chain
- Market Assessment
- Competitive Analysis

Phase II

Analyze Market Context, Risks, and Opportunities

- Gauge Risks Associated with Energy and Environment
 - Financial
 - Regulatory
 - Reputational
 - Legal
 - Physical
- Identify / Evaluate Energy & Emissions Management Options
- Identify Broader Opportunities
- Supply Chain Initiatives
- Product/service Offerings

Phase III

Develop Climate and Energy Strategy

- Align on Vision, Scope, Goals, Metrics
- Set Goals & Targets
 - Scopes 1 & 2
 - Scope 3
 - Offsets
- Agree on Direction for Up and Downstream Initiatives
- Define Marketing & Communications Strategy – Internal and External

Phase IV

Implement Strategy

- Offsets
- Enabling Tools – Scorecards, Reporting, Trading, etc.
- Organizational Improvement
- Marketing Plan, Messaging, Branding
- Stakeholder Outreach
- Policy Engagement
- Partnerships
- Supply Chain Efforts
- New Products, Services, & Business Models

Leadership Beyond Emissions Reductions

New Products and Services

- Many examples to follow

Supply Chain

- Wal-Mart
- Staples
- HP
- Unilever
- PepsiCo
- Procter & Gamble
- And others

Sponsored Research

- GHG abatement cost curves
- Resources for the Future Climate Policy Options report
- Pew Center on Global Climate Change Energy Efficiency report
- Etc.

Leadership Beyond Emissions Reductions, Cont.

Sectoral /Industry Initiatives

- Cement Sustainability Initiative
- Climate Savers Computing Initiative
- Aluminum for Future Generations

Public / Private Partnerships

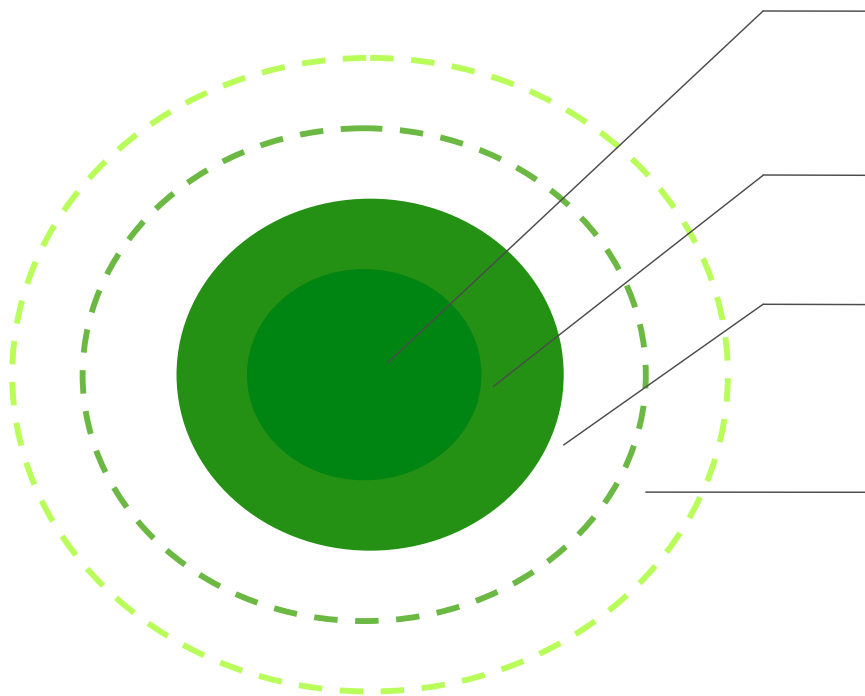
- Climate Leaders
- ENERGY STAR
- SmartWay
- Climate VISION

Policy

- Business Environmental Leadership Council (BELC)
- World Economic Forum
- USCAP

New Offerings Grow Best in Phases

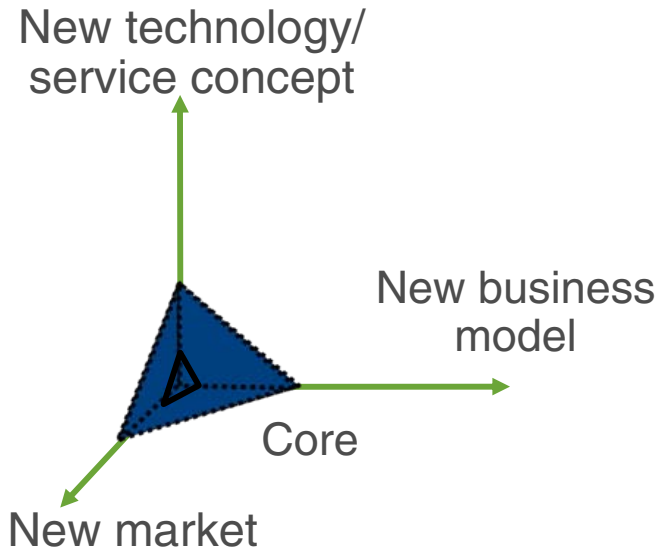
Initial phases focused on existing offerings can attune the business to emerging market preferences and demand trends around sustainability



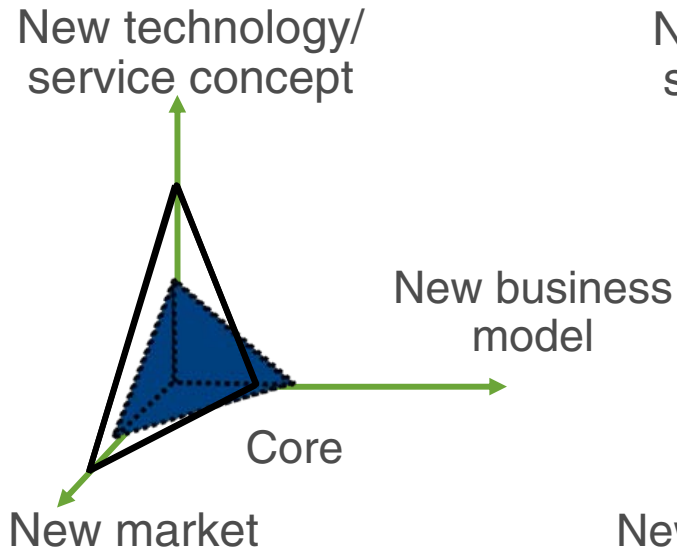
1. Establish the basis of the green offering (based on products / services in which there is high confidence)
2. Incorporate additional existing products into the green offering
3. Evaluate existing products that do not currently qualify, but could qualify if incrementally improved
4. Develop innovative products / services that can be included in the green offering upon commercialization (from R&D and product development, partnering, or acquisition)

Leaders Will Step Out of Their Comfort Zone

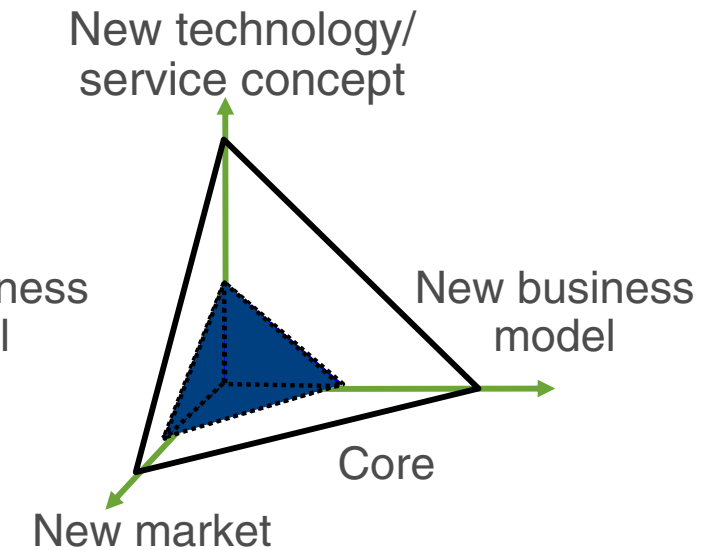
DuPont Bio-PDO



DuPont Biofuels



DuPont-BP Biobutanol Partnership



**Requires greater degree of new market knowledge,
new capabilities, and new management approaches**

Source: McKinsey & Co.; interviews with John Ranieri, DuPont Biofuels Vice President and General Manager

Analyze Drivers of Market Transformation

Macro Trends

- Energy supply / demand
- Economic growth (particularly in BRIC countries)

Regulation, Standards, Codes

- GHGs, energy, buildings, transportation, water, toxics, recycling, etc.
- International / trade, national, regional / local

Supply Chain Pressures

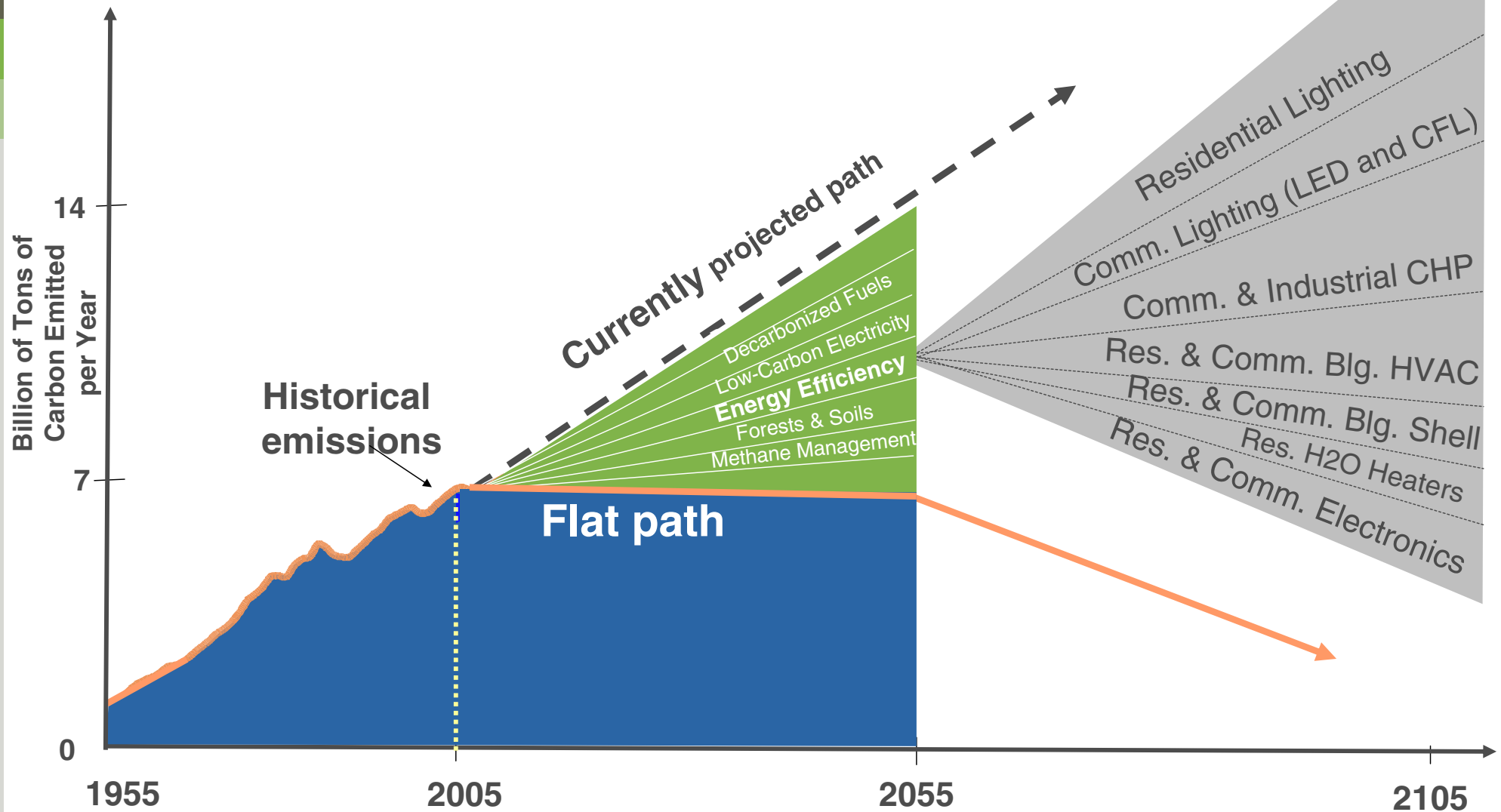
- Major retailer initiatives → the new regulators
- Increased consumer attention to toxics, etc.

Other Stakeholder Pressure

- Shareholders
- NGOs
- Communities

Understand how drivers affect changing demand, prices, etc. in your current market space, as well as in adjacent spaces – and how you can affect those drivers

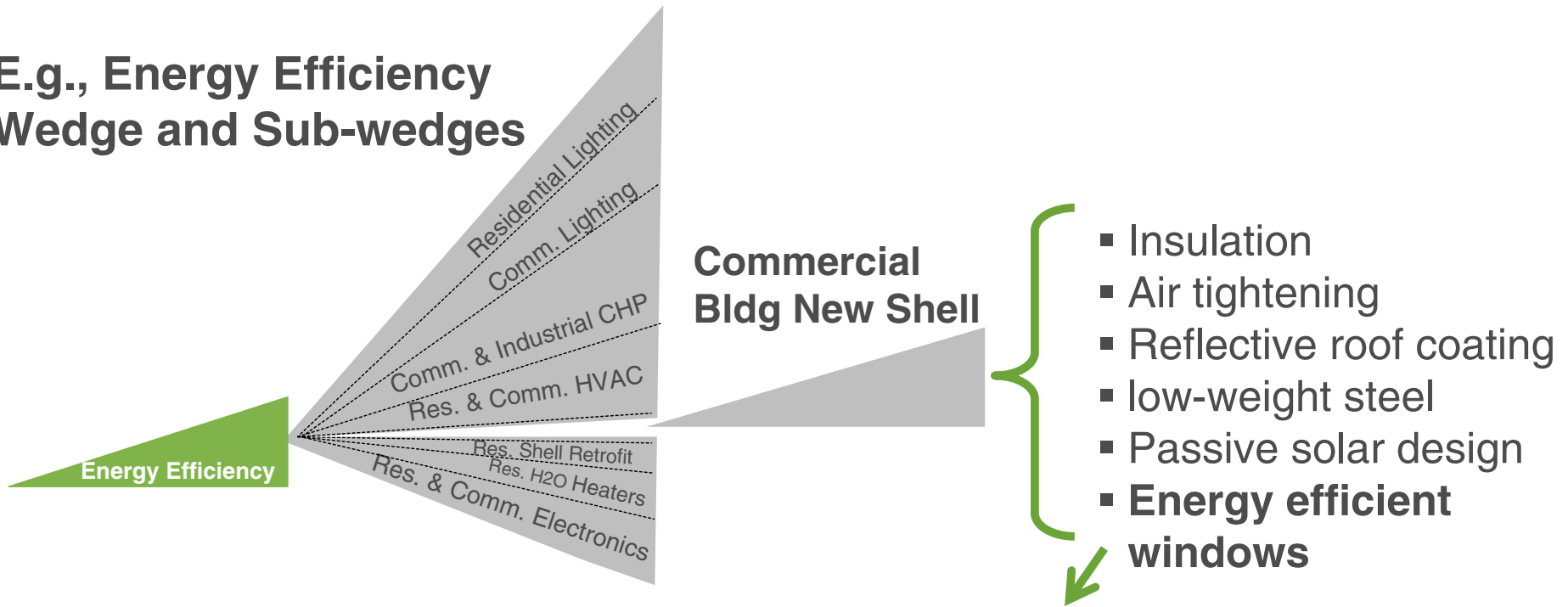
Assess Markets, Beginning with Wedges



Derived from: S. Pacala and R. Socolow "Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies," *Science*, August 13, 2004:V305, 5686, pp 968-972.

Drill Down Further into Sub-wedges and Inputs

E.g., Energy Efficiency Wedge and Sub-wedges



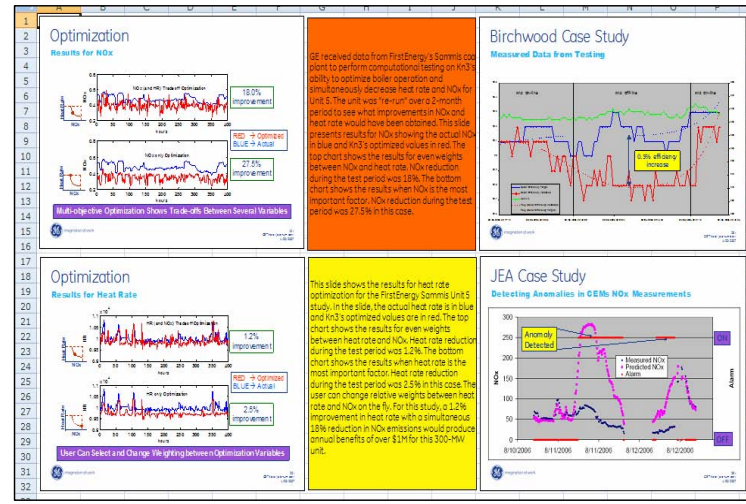
Sample Inputs: Energy Efficient Windows

- Light-weight, low-conductivity framing materials
- Inert gas filling
- Multiple glazing
- Low-emissivity coating
- Double/triple-paned
- Location-specific tinting

Example: GE ecomagination Scorecards & Applications

GreenOrder-designed tool and process with deep quantitative analysis

Energy Efficiency Metrics						
Company	Brand	Model #	Rated Voltage (Volts)	Lumen Output (Lumens)	Efficiency (lumens/watt)	Rated Ball Life (Hours)
Bare 2-D						
GE Lighting	General Purpose	25021	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25022	277V	75	0.27	\$0.050
Bare C-Shape						
GE Lighting	General Purpose	25023	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25024	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25025	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25026	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25027	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25028	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25029	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25030	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25031	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25032	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25033	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25034	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25035	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25036	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25037	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25038	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25039	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25040	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25041	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25042	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25043	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25044	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25045	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25046	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25047	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25048	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25049	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25050	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25051	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25052	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25053	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25054	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25055	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25056	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25057	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25058	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25059	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25060	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25061	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25062	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25063	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25064	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25065	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25066	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25067	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25068	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25069	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25070	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25071	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25072	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25073	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25074	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25075	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25076	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25077	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25078	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25079	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25080	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25081	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25082	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25083	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25084	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25085	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25086	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25087	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25088	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25089	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25090	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25091	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25092	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25093	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25094	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25095	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25096	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25097	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25098	277V	75	0.27	\$0.050
GE Lighting	General Purpose	25099	120V	80	0.67	\$0.039
GE Lighting	General Purpose	25100	277V	75	0.27	\$0.050



Business Units

GE Scorecard Example, Continued

A **Process** and a **Tool** that:

- Qualifies products under a rigorous **performance standard** with a **customer-centric focus**
- Quantifies energy and environmental performance of products with a **customer-centric focus**
- Translates technical information into **clear claims**
- Provides the marketing *compelling, unique* to make environmental *credible*

The Scorecarding process attunes the Business Unit to sustainability-based market value – to apply in R&D, new business development, M&A, partnerships, etc.



Preliminary Results for GE: Very Positive

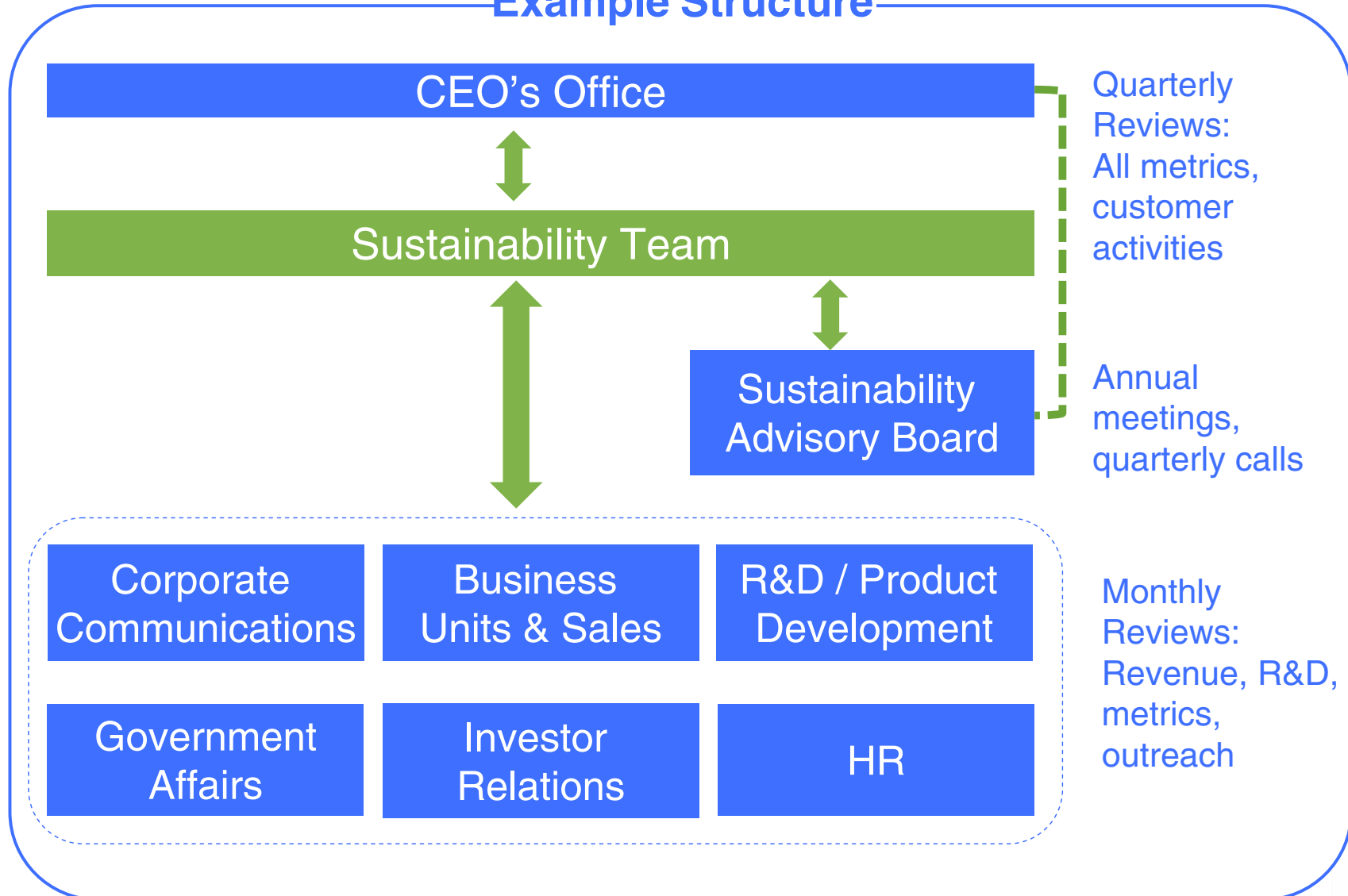
Results for ecomagination (2007):

- \$1.1B in R&D investment
- 60+ certified products
- \$14B in revenue
- 9% reduction in GHG emissions



Organization for Profitable Climate Leadership

Example Structure



Thank You

Truman Semans

Principal

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Making progress profitable.