Leveraging “The Sustainability Advantage” in Supply Chains

RIT

July 30, 2013
Staples Inc.

- Staples founded in Brighton, MA in 1986
- World’s largest reseller of office products and services
  - $25 billion sales
- Operations in 26 countries
- 85,000 Associates worldwide
- Business is comprised of Retail, Contract and International
- Operate 2nd largest e-commerce site in the world
Sustainable Business Approach

Legal Compliance

- Don’t get in legal trouble
  - Led by Legal
  - Most Companies

CSR, Environmental Protection, Philanthropy

- Be a good corporate citizen
  - Led by staff (e.g. CSR, PR)
  - Separate from the business

- Tap into new sources of value
  - Good for business
  - Good for the world
  - Business Value from Smaller Footprint and Solving World’s Challenges
  - Driven from the top
  - Led by line management
  - Integrated into the business

Traditional Business  Social Responsibility  Sustainability Leadership
Sustainable supply chains, why now?

- Resource depletion of raw materials, energy resources
- Commodity price volatility
- Regulatory pressures ...REACH, RoHS, WEEE, Prop 65, carbon tax, cap and trade etc.
- Supply chain risks...climate, social/ civil conflict impact interdependent global supply chains
- Increased requirements in transparent reporting and corporate governance
- Create competitive advantage regardless of company size.....sustainability “the great equalizer”
Sustainability within the “4 Walls “of our business

• Energy and carbon management
• Waste reduction and recycling
• Building in operational efficiencies at every level of our business data centers, call centers, distribution centers, fleets and support operations.
Green building design and operation

• Cross functional design for sustainability engaging multi-stakeholder team including Operations, Construction, Facilities, Energy Management, Design and Procurement

• Investment in EMS and energy retrofits

• 26.3% reduction in energy intensity sq ft since 2006.

• (9) LEED certified facilities

• (513) Energy Star certified facilities met goal of 500 buildings by the end of 2012
Renewable Energy

• EPA # 6 Green power purchaser 100% of all electricity from renewables

• 640,000 MWh in direct renewable and Green-e certified non-vintage wind RECs

• 15 + MW solar installed or in development (43 locations)

• 1st company to sign 3rd party Solar PPA

• 2 MW Low/ Zero Carbon Fuel Cells installed or in development

• Energy independence and long term hedge value
Fleet Operations

• 58 All Electric Delivery Trucks in Fleet
• 10 CNG Tractor Trailer Units in Southern California
• 30% improvement in fuel economy since 2006 within existing fleet.
93% of the GHG footprint\(^1\) is embedded in the products we sell

Greenhouse Gas (GHG) Environmental Footprint\(^1\)

(mtCO2e)

- **Operations**  7%
- **Remaining Product Categories**  35%
- **Top 4 Products Categories**  58%
  1. Printer cartridges
  2. Paper
  3. Laptop computers
  4. Desktop computers

**Note:** Product footprint analysis is based on economic input-output (EIO) life-cycle assessment (LCA) model that provides order-of-magnitude comparisons; further analysis using a hybrid LCA model would likely result in refined and adjusted figures.

**Source:** (1) Product footprint based on Climate Earth’s Comprehensive Environmental Data Archive (CEDA), Climate Earth analysis, and Blu Skye analysis of 2009 US COGS (excludes US Corporate Express Contract data) by product department; Operations footprint based Blu Skye analysis of 2009 US electricity, natural gas, diesel (based on mileage), business travel (rental car, commercial air, corporate jet), and HQ employee commuting.
Sustainability leadership requires examining the entire value chain:

- Raw Materials
- Manufacturing
- Distribution/Retail
- Consumer
- End of Life
Lifecycle assessments help companies understand where the major environmental impacts are.

<table>
<thead>
<tr>
<th>ILLUSTRATIVE</th>
<th>Raw Materials</th>
<th>Manufacturing</th>
<th>Distribution/Retail</th>
<th>Consumer</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gases and air pollution</td>
<td><img src="image1" alt="Logos" /></td>
<td><img src="image2" alt="Logos" /></td>
<td><img src="image3" alt="Logos" /></td>
<td><img src="image4" alt="Logos" /></td>
<td><img src="image5" alt="Logos" /></td>
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<tr>
<td>Soil and Land Use</td>
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<td><img src="image2" alt="Logos" /></td>
<td><img src="image3" alt="Logos" /></td>
<td><img src="image4" alt="Logos" /></td>
<td><img src="image5" alt="Logos" /></td>
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<tr>
<td>Water</td>
<td><img src="image1" alt="Logos" /></td>
<td><img src="image2" alt="Logos" /></td>
<td><img src="image3" alt="Logos" /></td>
<td><img src="image4" alt="Logos" /></td>
<td><img src="image5" alt="Logos" /></td>
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<tr>
<td>Natural resources, waste &amp; recycling</td>
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<td><img src="image2" alt="Logos" /></td>
<td><img src="image3" alt="Logos" /></td>
<td><img src="image4" alt="Logos" /></td>
<td><img src="image5" alt="Logos" /></td>
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<tr>
<td>Harmful substances</td>
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<td><img src="image2" alt="Logos" /></td>
<td><img src="image3" alt="Logos" /></td>
<td><img src="image4" alt="Logos" /></td>
<td><img src="image5" alt="Logos" /></td>
</tr>
<tr>
<td>Biodiversity</td>
<td><img src="image1" alt="Logos" /></td>
<td><img src="image2" alt="Logos" /></td>
<td><img src="image3" alt="Logos" /></td>
<td><img src="image4" alt="Logos" /></td>
<td><img src="image5" alt="Logos" /></td>
</tr>
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STAPLES easy on the planet
Language

lan·guage (lan’gwij) n. [< L lingua, tongue] 1 human speech or the written symbols for speech  2 a) any means of communicating b) a special set of symbols used in a computer  3 the speech of a particular nation, etc. [the French language]  4 the particular style of verbal expression characteristic of a person, group, profession, etc.
“A woman without her man is nothing!”
“A woman, without her, man is nothing!”
Business

Mature
Cost of Capital
Gross Margin
Sales
P&L
Amortization
Conservative
Balance sheet
Depreciation
Cash Flow
RONA
IRR
Taxes
ROI
Trendy
Liberal
Limited Appeal
Treehugger
Hippies
Groovy
younger generation
Radical
"The Dead"
Poor quality
More expensive
How can we communicate in this new language of sustainability?

There is a gap in many businesses today about how to talk about sustainability. We lack a common vernacular or language.

- Carbon Footprint
- Sustainable
- Biodegradable
- Life Cycle Accounting
- Compostable
- Recycled
- Low VOC
- Environmentally Friendly
- Non Toxic
What do our customers want?

• Customers look to Staples to provide them the products that they need to improve their productivity meeting quality, fit, form, function and competitively priced above all else.

• Contrary to popular belief the reality is that very few Retail customers are willing to pay a premium for a more “sustainable” product.

• Many Contract customers, however, have sophisticated environmental and social criteria built into RFPs and seek comprehensive reporting relative to their spend.
Many of our products conform to leading eco accreditation standards
Toner Cartridges

Objective was to compare the life cycle environmental impact of a new toner cartridge to that of a remanufactured cartridge.

- Toner cartridge life cycle: cradle-to-grave for a single customer use. (equal number of similar quality pages printed)
- Model shows that remanufacturing provides significant life cycle benefit compared to new
  - Major benefit from part material and process recovery, with some materials recovered during remanufacturing which are not typically recycled.
Staples is developing category specific scorecards for all product categories and committed to removing chemicals of concern, designing products based upon a life cycle approach and reducing energy/ carbon and material impacts for all products and packaging.

Today

Min. Entry for Sustainability

Bronze

Silver

Gold

“Unsustainable” SKUs

Tomorrow

More SKUs

More SKUs

Gold

Silver

Bronze

Min.

Fewer SKUs

Fewer SKUs
Packaging
Packaging moves

• Eliminate clamshell packaging and improve cube efficiency in master and break packs

• Packaging eliminates PVC and where required replace with recycled PET paperboard containing minimum 65% pcw and recyclable.
Packaging Concepts
Right size Packaging
Product Design
Recycled and Alternative Fibers in the Production of Paper Products

• Increased competition for resource from non-traditional industries such as energy for biomass fuel

• Agricultural waste and rapidly renewable fibers such as sugar cane (bagasse), wheat straw, flax straw, bamboo

• Post consumer recycled paper and textile wastes
Remanufacture, Recycle and “Downcycle”

**Step 1:**
- Sort empty cartridges
- Disassemble non-usable
- Grind plastic

**Step 2:**
- Ship recycled plastic pellets to manufacturer

**Step 3:**
- Recycled plastic pellets used to injection mold new parts

**Step 4:**
- New product is assembled and ultimately sold at Staples
End of Life Solutions
Recycling and responsible end of life solutions

- EPA Plug into e-Cycling founding member and e-Steward certified collector
- First national retailer to offer everyday e waste program in 2007
- e Steward and R2 certified no export
Ink and Toner Recovery

**Recycle**
1. Cartridges sorted by material type
2. Cartridges disassembled to component level
3. Components recycled
4. Plastic cartridge parts ground up
5. Raw material can be used to manufacture new products

**Reuse**
1. Cartridges qualified and sorted through ISO 14001:2004 inspection process
2. Cartridges remanufactured and quality tested
3. Remanufactured cartridges inspected, tested and packaged
4. Cartridges ready for reuse

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Spent cartridges collected for recycling
Carriers deliver units to collection center
Cartridges evaluated for recycling or reusing
Transparency and Reporting
Environmental Purchases Report

Purchases Summary for 7/1/2011 – 6/30/2012

<table>
<thead>
<tr>
<th>Purchase Category</th>
<th>All Products</th>
<th>Paper Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total product purchases:</td>
<td>$1,064,303</td>
<td>$418,472</td>
</tr>
<tr>
<td>No environmental features</td>
<td>$652,168</td>
<td>$142,551</td>
</tr>
<tr>
<td>Basic eco features</td>
<td>$91,880</td>
<td>$51,432</td>
</tr>
<tr>
<td>Advanced eco features</td>
<td>$320,245</td>
<td>$224,490</td>
</tr>
</tbody>
</table>

1. **Basic**: recycled content less than 30%, “industry standard” eco certifications or features (SFI, AP nontoxic, solar powered, Indoor Advantage, rechargeable batteries, etc.)

2. **Advanced**: 30%+ post-consumer recycled content; remanufactured; certified to following (BPI compostable, Cradle to Cradle, Energy Star, EcoLogo, EcoSense (EPEAT), Fair Trade, Forest Stewardship Council, GreenSeal, level, Rainforest Alliance, USDA Organic); or contain >= 30% bio-based plastics, rapidly renewable content, or agricultural residues.
Uncommon Collaboration
The Paper Working Group
Uncommon Collaboration

Norm Thompson Outfitters

McDonald's

FedEx Kinko's

Office and Print Center

Toyota

Starbucks Coffee

Bank of America

Cenveo

HP

STAPLES

Time Inc.

STAPLES

easy on the planet
The Paper Working Group

Environmental Performance Assessment Tool

Life Cycle Reporting Tool for Paper Purchasing
Uncommon Collaboration
Uncommon Collaboration
Where is your business today??
You can’t improve performance on a base that you don’t understand!

• Establish base level performance metrics
• Convert existing business data to corresponding environmental impact
• Systemically capture data going forward
• Focus on metrics that you can control i.e. consumption versus pricing alone.
Strategies to consider

• Focus on waste and energy first
• Link social and environmental performance with key company strategies
• Leverage Federal, State and Industry resources to assist in developing your plan
• Engage with vendor, supplier community and share goals and objectives
• Create value based *versus* strictly transactional relationships with suppliers
• Create transparency in the supply chain
• Locate the true win/wins and communicate them enthusiastically!!!
Final Thoughts

• Taking a life cycle approach reduces waste, improves efficiencies and reduce costs and builds resilience into supply chains
• The approach identifies supply chain risks and uncovers hidden opportunities.
• Uncovering “Uncommon Collaboratives” leads to long term strategic partnerships with non traditional stakeholders
• Accelerates the development of transformational business models and markets
• Lead, compete and win in a 21st Century economy!
Thank You!!!!