

Wal-Mart and Sustainability: closing the eco-efficiency gap

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Outline

Research Question

Background

Methodology

Case Study I

Case Study II

Case Study III

Preliminary Findings

Acknowledgements



Research Question

What allows firms to be environmentally rational?

What elements of Wal-Mart's sustainability initiative are requisite for success?

The puzzle of the eco-efficiency gap

Why do consumers and firms forego apparently cost-effective investments in eco-efficiency?

Corporations that achieve ever more efficiency while preventing pollution through good housekeeping, materials substitution, cleaner technologies, and cleaner products and that strive for more efficient use and recovery of resources can be called 'eco-efficient.'

-Stephan Schmidheiny, *Changing Course*, 1992.

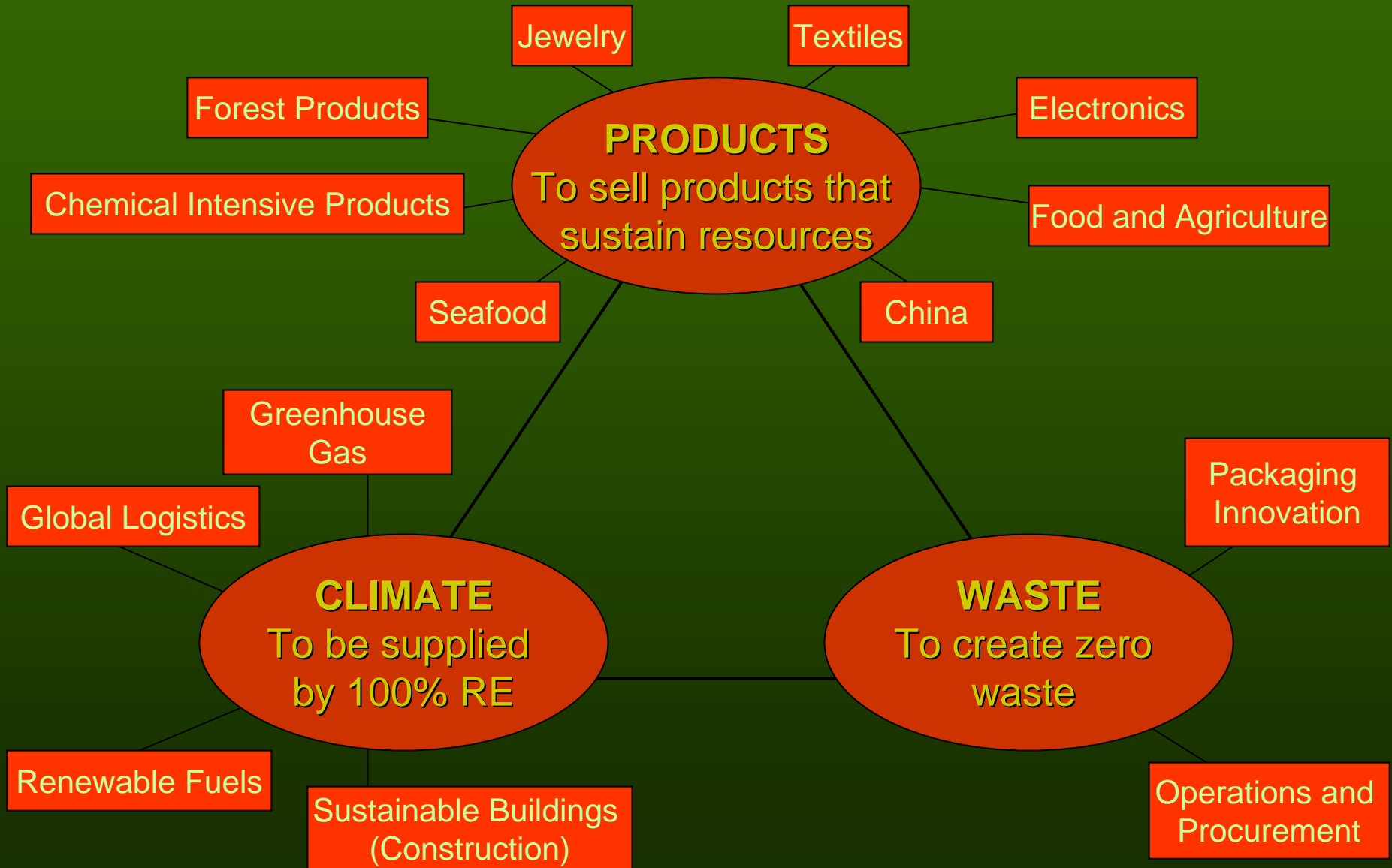
What does existing literature say about the efficiency gap?

Barriers to Overcoming the Eco-Efficiency Gap

Market
1. Market Failures: conditioned by the market

Non-Market
1. Behavior Barriers: within individuals
2. Organizational Barriers: within organizations, particularly firms
3. Institutional Barriers: caused by political, social, legal institutions

Wal-Mart and Sustainability



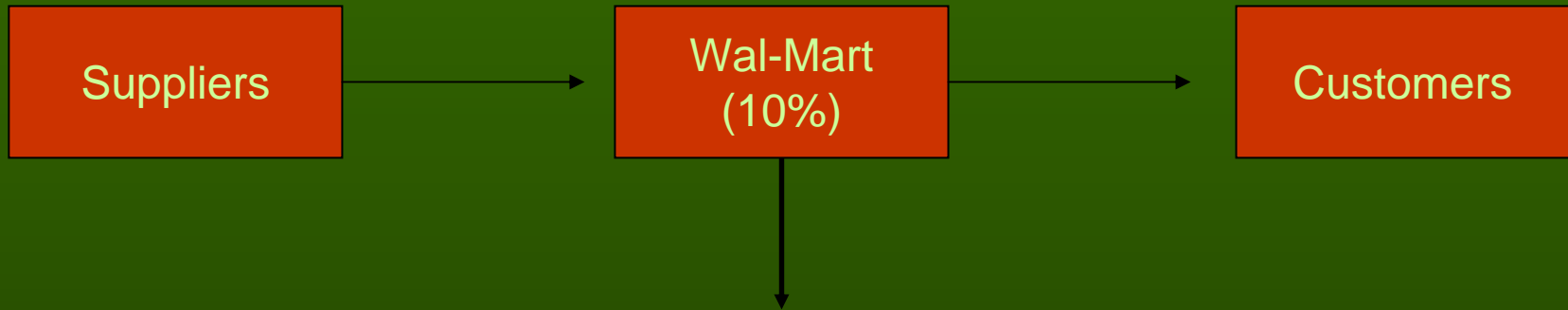
Wal-Mart Matters: Analytic Reasons

- Wal-Mart is a unique case because of its size:
A “market-maker” rather than a “market-taker”
- Not subject to barriers other firms face

“For us here in the United States, because Wal-Mart has such a large stake in our business, we include Wal-Mart very soon after the concept stage... partnering with them to make sure that once that product comes to market that it would be something that they’re comfortable with, that they feel ownership in, and that they believe is right for their customer... Wal-Mart is a much bigger part than I think a lot of people understand in the development of a product like this.”

-Joe Raleigh, Unilever

Wal-Mart Matters: Environmental Reasons



Wal-Mart Emissions Compared to U.S. Emissions (million metric tonnes CO2 equivalent)

Wal-Mart Operations (US operations only, 2005)	United States (including LULUCF, 2004)	Percentage Attributed to Wal-Mart
15*	6294**	0.24%

Sources: * http://wal-martstores.com/com/microsite/walmart_sustainability.html

** http://unfccc.int/ghg_emissions_data/predefined_queries/items/3842.php

Methodology: Research Design

Case Study Selection

Case	Footprint	Focus Area	Benefit
Concentrated Detergent	Upstream	Waste	Supplier
Compact Fluorescents	Downstream	Products	Customers
Fleet Fuel Efficiency	Internal	Climate	Wal-Mart

Methodology: Data Collection

Organization	Total Interviews
Wal-Mart	19
Cummins	1
Eaton	1
General Electric	1
International Truck and Engine	1
Unilever	3
Blu Skye Sustainability	1
Brown University	1
Conservation International	1
Rocky Mountain Institute	1
Total	30

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Case Study I: Concentrated Detergent

1. Developed product idea to reduce costs
2. Went to Wal-Mart early to solicit support
3. Engineering challenges
4. Aggressive advertising campaign
5. Marketed to Wal-Mart CEO as VPI



Concentrated Detergent: Elements of Success



1. Unilever's Previous Experience:
Double Power Wisk
2. Additional savings to Wal-Mart
3. Wal-Mart partnership / 2006 VPI
4. Unilever has institutional experience
with sustainability and eco-efficiency

Case Study II: CFLs

1. Executive Education
2. Partnered with GE
3. Replaced Ceiling Fan Bulbs and Rearranged Lighting Aisles
4. Employee and Consumer Education
5. Engage Stakeholders



CFLs: Elements of Success

1. GE's previous experience
2. CFL as initiative icon
3. Employee participation/buy-in
4. Appropriate yet aggressive target
5. Positive feedback
6. GE has institutional experience with sustainability (Eco-magination)



Case Study III: Fleet Efficiency

1. Abrupt beginning

2. Engage and Collaborate with Suppliers

- Vendor Summit Meetings
- Engineering Partnership
- Vendor sharing

3. Carrier Preference, Fuel
Surcharge

4. Implemented

- 15.6%
- 2007 Orders: additional 7.05%



Fleet Efficiency: Elements of Success

1. Suppliers involved closely
2. Suppliers have technology “shelved”
3. CEO Mandated Target
4. Vendors invited to Wal-Mart to experience “seriousness” of CEO’s commitment
5. Positive Externalities

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Findings: Shared Elements

1. Require consumer behavior change
2. Supplier involvement
3. Supplier has previous experience with similar project
4. Supplier has existing relationship with sustainability
5. Existing Wal-Mart connection
6. Projects target big-picture change, but have narrow parameters
7. Clear Goals
8. Explicit Executive Support
9. Reinforcing Synergies

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