

# What Size is Your Footprint?



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# Agenda

- ▲ Business Case for Sustainability
- ▲ Industry Challenges
- ▲ Carbon Footprint
- ▲ Laundry Sustainability
- ▲ The Total Impact Approach

# The Business Case for Sustainability

- ▲ Top performing organizations view sustainability as a **“must have” strategy** for long term business viability and success
- ▲ Sustainability focused companies **outperformed their peers by 18-20%** in 2008
- ▲ **Best-in-Class performers** share several common characteristics:
  - Are **52% more likely to incorporate sustainability metrics** into value chain performance management
  - **74% have an organization-wide sustainability policy** compared to 58% of all others
  - **Carbon reduction targets evolving from “Nice-to-Have” to “Must Do”** as more firms are setting reduction targets than ever seen before
- ▲ **Top performers achieving 6% to 10% reductions** in a variety of costs while also making strides in retaining customers:
  - **9% reduction in carbon footprint**
  - **6% reduction in energy costs**
  - **7% reduction in facilities costs**
  - **10% reduction in paper costs**
  - **7% reduction in transportation / logistics costs**
  - **16% increase in customer retention**

Source: Aberdeen Group, May 2009

# Industry Challenges

## What Does “Green” Really Mean?

- ▲ There is no global consensus definition or industry standard for what “green” means
- ▲ There are more than 300 organizations offering third-party certifications worldwide (e.g. Green Seal, EU EcoFlower)
- ▲ Many certification standards focus only on chemistry - Majority do not consider packaging, water, energy
- ▲ The focus on ingredients is an oversimplified look at environmental impact
  - A product may use environmentally friendly ingredients, but may take more energy to produce or may be designed with excessive packaging that will eventually end up in landfills
- ▲ Public perception of what’s “green” isn’t always accurate
  - Example: It takes considerably more natural resources to produce recycled-content paper bags than plastic
- ▲ Many key product categories exist without defined “green” industry standards



# Industry Challenges

## Green Claims Can Be Misleading

Some products claim to be “green,”  
“chemical-free” or “all-natural”

The truth:

- ▲ There is not a clear, consistent definition for the term “green”
- ▲ No substance on Earth is free of chemicals
- ▲ Many “all-natural” substances can be toxic

## Not Black & White issues



# Industry Challenges

## Efficacy Should Not Be Sacrificed

- ▲ Many cleaning products can help remove dirt and germs from surfaces, but only disinfectants or sanitizers actually kill disease-causing microorganisms when used as directed





# What is Carbon Footprinting?

# Corporate and Product Emissions

## ▲ Two Approaches:

- **Corporate:** considers *activities* that create or release emissions
- **Product:** evaluates *materials* and *processes* required to deliver a product

## ▲ Corporate inventories **best capture the aggregate emissions** required to operate a company

- More suitable for accounting-style activities; information based on company records
- Limited granularity since emissions are aggregated

## ▲ Product inventories **best highlight inefficiencies** in bringing a good or service to market

- Excellent granularity to determine specific emission trouble spots
- Subjectivity & judgments made during assessment limit accounting practicality

# Corporate Emissions Standards

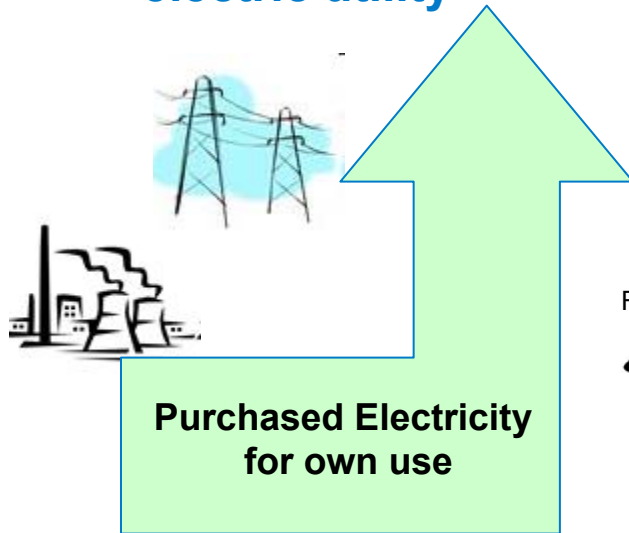
## Only Scope 1 and 2 globally defined today

CO<sub>2</sub> SF<sub>6</sub> CH<sub>4</sub>

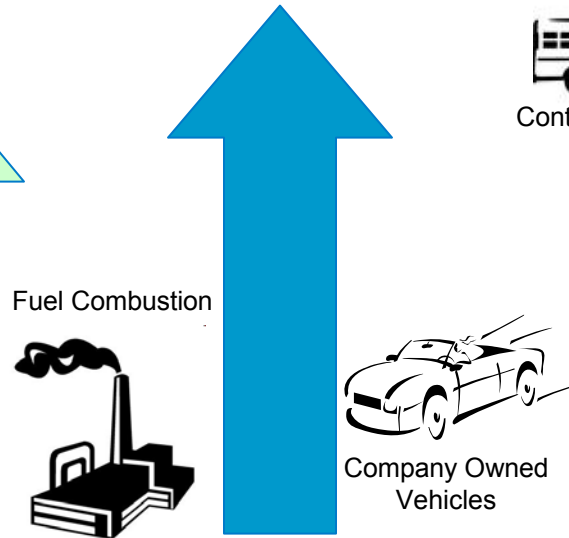
Emissions

N<sub>2</sub>O HfCs PFCs

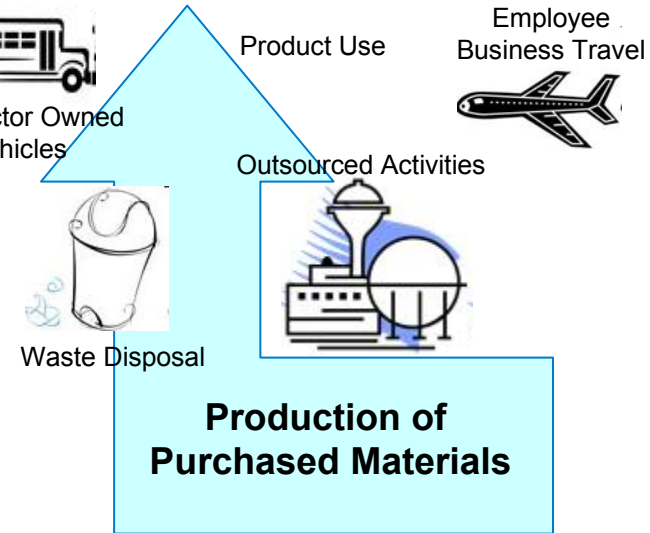
**Scope 2: Indirect Emission from electric utility**



**Scope 1: Direct Emission from combustion**



**Scope 3: Supplier emissions from goods/services**



**Defined Global Standards**

**Undefined Standards**

# No Clearly Accepted Global Standard Today

## ▲ Carbon Trust

- Established by the British Government in 2001 as an independent company. Its mission is to accelerate the move to a low carbon economy by working with organizations to reduce carbon emissions and develop commercial low carbon technologies
- The Carbon Trust and Defra have co-sponsored the publication by the British Standards Institution of PAS 2050, the product carbon foot printing standard



## ▲ WRI

- Following the success of the Corporate Standard and Project Protocol, the WRI/WBCSD GHG Protocol is developing a new standard for product and supply chain GHG accounting and reporting



## ▲ ISO

- ISO (International Organization for Standardization) is the world's largest developer and publisher of International Standards.
- Likely to enter the carbon emissions standards space





## Carbon Foot Printing Position Paper Excerpt

- ▲ Carbon footprint calculation methodology and supporting data are **not yet sufficiently developed** to allow meaningful mainstream carbon labelling of individual products that is understood by all
- ▲ **Relevance** of on-pack carbon labels for consumers **has not been proven** and labelling should be seen as **one of a number of ways to communicate** with consumers on climate change (including on their possibilities to act)
- ▲ Specifically on carbon footprint measurement and on-pack carbon labelling, the industry is looking for solutions which, at the same time :
  - Are based on sound-science
  - Are both meaningful and helpful in achieving carbon reductions
  - Form a meaningful part of an overall sustainability implementation strategy
  - Are actionable from practical standpoint with a clear benefit/cost ratio
  - **Preference would be given in that domain for a harmonized international standard**

Source: Excerpt from AISE (International Association for Soaps, Detergents and Maintenance Products) Position Paper



# Laundry Sustainability

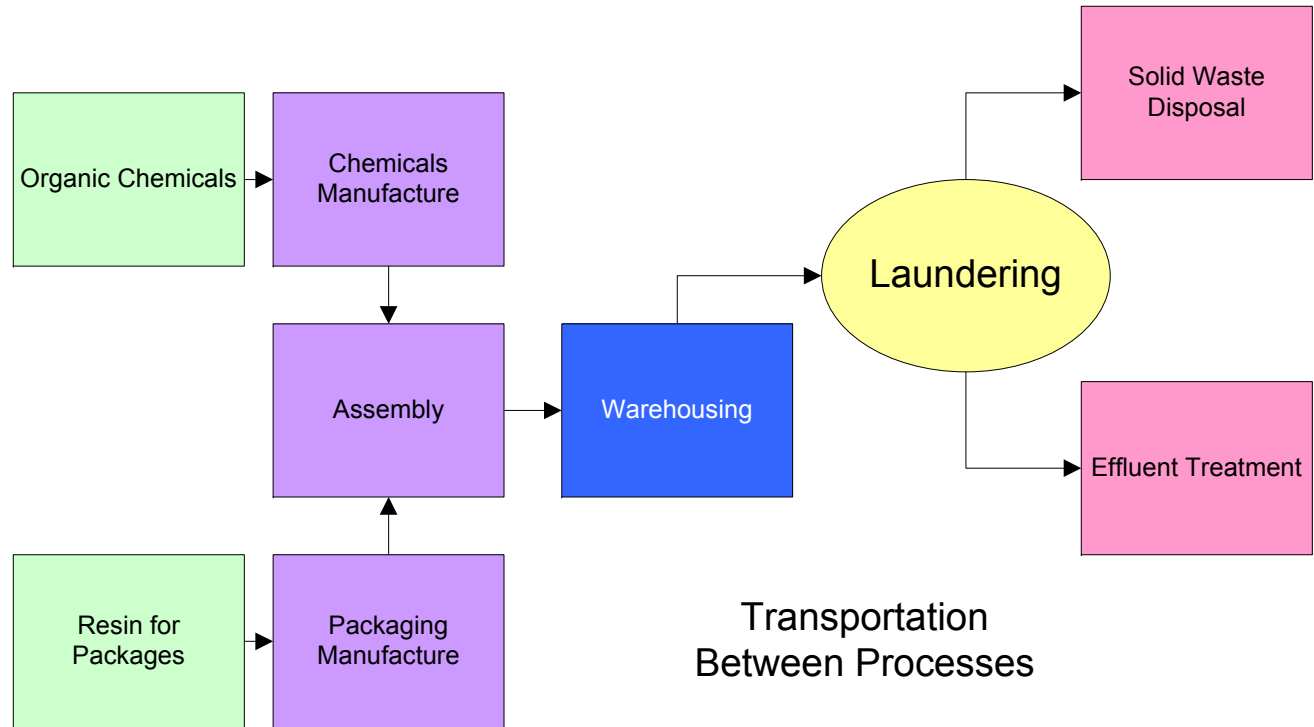
# Keys to Laundry Sustainability

- ▲ Reuse
- ▲ Recycle
- ▲ Reclaim
- ▲ Minimize
- ▲ Optimize
- ▲ Not Highly Toxic
- ▲ Not Persistent
- ▲ Not Bio-accumulative
- ▲ Biodegradable



# Laundry Product Inventories

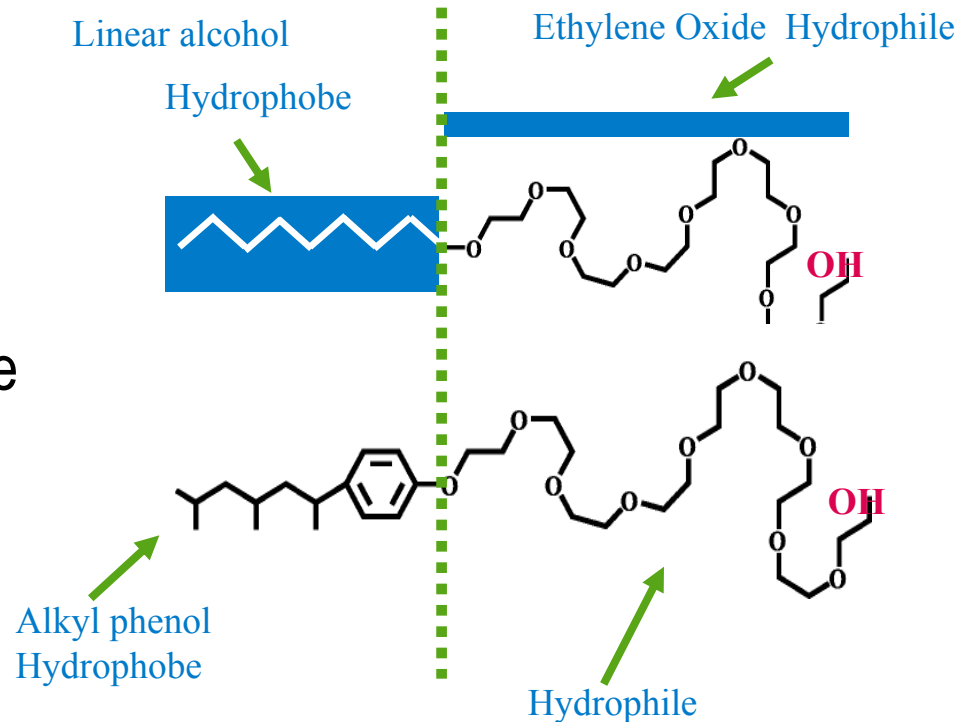
## Simplified Cradle-to-Grave Laundry Detergent Lifecycle



- View across lifecycle of product to predict emission sources
- Complete studies may contain thousands of sub-processes
- Most useful to track material flow and find unusually high-emitting processes

# Surfactants

- ▲ Alkyl Phenol Ethoxylates or Nonyl Phenol Ethoxylates (NPEs)
- ▲ Europe has eliminated APEs
- ▲ Canada is phasing out APEs by 90% by 2010
- ▲ USA: Sierra Club and UNITE Here (textile/laundry workers union) are promoting environmental pressure to change
- ▲ Linear Alcohol Ethoxylates (LAE) main alternative



# Biodegradable Surfactants

## SDSI - Safer Detergent Stewardship Initiative

- ▲ Elimination of detergents that are not completely biodegradable
- ▲ Alternative formulas available now



**Not Highly Toxic!**  
**Not Persistent!**  
**Not Bio-accumulative!**  
**Biodegradable!**

# Phosphates

- ▲ Sequester water hardness ions, preventing them from interfering with detergent action
- ▲ Suspend soils
- ▲ Enhance detergent efficacy
- ▲ Since the early 1970s “P” has been regulated
  - States developed limits and bans
  - No national standard



# Solvents

- ▲ New research on “renewable” solvents
  - Derived from plant sources, not petroleum
  - Soy and corn-based
  - Biodegradability is a plus



# Chlorine Bleach

- ▲ Chlorine reacts with organics in wastewater to create chloroforms and chloramines
- ▲ Europe limits use of chlorine in laundry



# Sustainability Leadership for the Laundry

## Better Living through Innovation

- ▲ NPE free detergents and stain removers
- ▲ Reduced phosphate water conditioners and laundry additives
- ▲ Chlorine replacement program
  - Safer environmental breakdown products when converted from chlorine to peroxyacetic acid bleaching
  - No chloroforms or chloramines
  - Lower bleaching temperature increases potential energy savings
- ▲ Low temperature detergents and oxidizers
  - Powerful cleaning and whitening at wash temperatures as low as 120° F
  - Ultra concentrated detergents provide the results you want



# A Practical Approach to Sustainability

## Product formulation

- ▲ Superior performance while minimizing impact on our environment
- ▲ Decisions based on scientific evidence and consider the total, long-term environmental impact
- ▲ Our **Global Raw Material Guidance Council** evaluates and rates ingredients on an ongoing basis to continually improve the sustainability of our product portfolio
- ▲ **Dynamic Global Product Profile Database** allows us to understand the Sustainability Attributes of our raw material ingredients





**SAFETY**



**ENERGY**



**WATER**

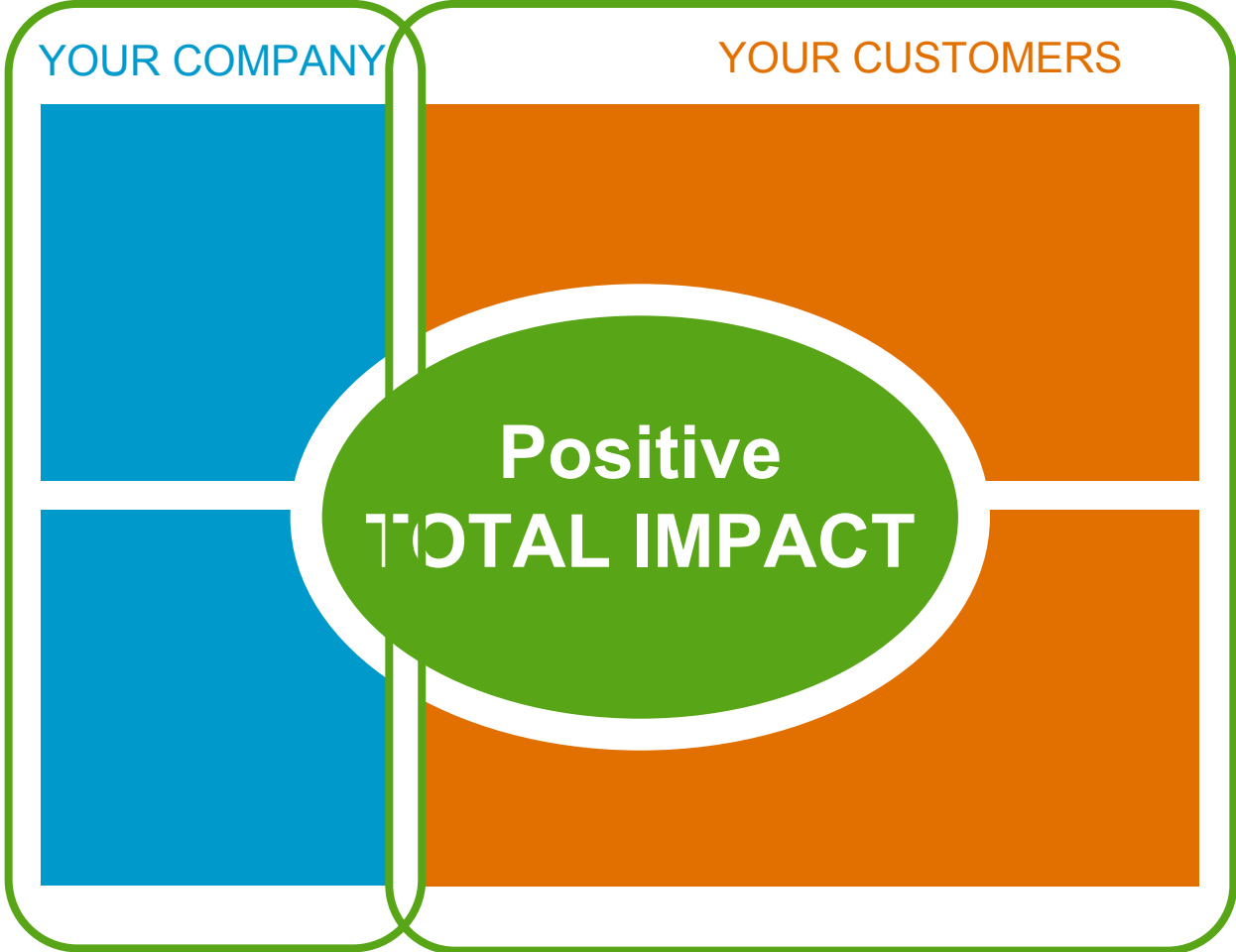


**WASTE**

# Total Impact Approach

# Comprehensive Approach

Identify where You can have the Biggest Impact, It May Come from Helping Your Customers Minimize Their Impact



# The Total Impact Approach

## Four Key Elements



SAFETY

Helping to keep people safe is everyone's business. We all must be committed to the safety of your employees and your customers and the environment.



ENERGY

Lowering your energy consumption is just one way to reduce your impact on the environment.



WATER

Innovative solutions are designed to use less water without compromising effectiveness.



WASTE

All solutions must conserve resources and help keep waste out of landfills from the beginning of the product life cycle to the end.

# Healthcare Laundry Reduces Annual Water Usage by 36%

## Background

- ▲ North American laundry operator using more than 10 million gallons of water annually
- ▲ Processing 12 million lbs of healthcare laundry

## Business/Technical Challenge

- ▲ The customer's key goals were to:
  - Trim water usage
  - Reduce cost
  - Minimize impact on the environment

## Result With Water Reuse Technology

- ▲ The laundry recognized a significant reduction in waste water discharged to sewers
- ▲ Minimized overall water consumption
- ▲ Reduced fresh water consumption
  - From 0.91 gal/lb to 0.58 gal/lb

ESTIMATED ANNUAL WATER SAVINGS:

**3,960,000 gallons**

Enough to wash more than 99,000 loads of residential laundry.

# We are all Partners in Sustainability



**Economic Progress**



**Environmental Stewardship**



**Social Responsibility**



**Building for the Future**



Thank You