Commitment to Sustainability
“When I became CEO last year, I said that we would “broaden and accelerate” our commitment to sustainability at Walmart. By that, I meant we would make sustainability a priority throughout our entire company and we would act with a sense of urgency.”

Mike Duke
President and CEO
Walmart
Walmart Global Sustainability Report, 2010
Sustainability 360

Operations

Suppliers

Communities

Customers

Associates
What is Sustainable Product Design?

- EDLC
- Quality
- Lower Risk
- Environmental
- Social

Cradle to Cradle Design
Walmart’s Aspirational Sustainability Goals

- To be supplied 100% by renewable energy
- To create zero waste
- To sell products that sustain people and the environment
Logistics Network Goals

• Achieve a 25 percent increase in fleet efficiency in the U.S. by October 2008
  ➢ Completed and reached 38%

• Double fleet efficiency in the U.S by 2015
  ➢ Measured as cases shipped per gallon burned
Logistics Network Initiatives

• Double fleet efficiency by 2015
  ➢ Improve packaging
  ➢ More efficient loading
  ➢ Better routing
  ➢ Improve MPG

• Increase use of alternative fuels
  ➢ Renewable sources, equal or increased MPG, decrease emissions
Trailers Fill Process

- Adjust pallet and trailer capacities
- Group delivery days together
- Adjust delivery frequency
- Adjust trailer configurations
- Improve systems
- Educate local routers

<table>
<thead>
<tr>
<th>Straight (26 pallets)</th>
<th>Pinwheel (28 pallets)</th>
<th>100% Turned (30 pallets)</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Straight Trailer" /></td>
<td><img src="image2.png" alt="Pinwheel Trailer" /></td>
<td><img src="image3.png" alt="100% Turned Trailer" /></td>
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Doing More with Less

The fleet is committed to be the safest, most reliable, and efficient carrier through the continuing elimination of system waste.

**Improve Routing**
- Ensure full trailers
- Drive shorter, safer and smarter routes
- Reduce out of route excess mileage

**Reduce Empty Mileage**
- Increase vendor backhauls
- Integrate into the grocery business
- Optimize network design

**Deploy Innovative Technology**
- Enhance dispatching tools
- Gain metrics visibility through dashboards
- Deploy network optimization software
MPG

- Aerodynamics
- Electrification
- Alternative fuels
- Advanced engine technologies
- Auxiliary Power Units (APUs)
- Fuel Efficient Tires
- Nitrogen filled tires
- Synthetic oils
- Driver training
- Engine calibration
Wal-Mart’s Alternatively Fueled Trucks

- Hybrid Assist
- Full Propulsion Hybrid
- Liquid Natural Gas (LNG)
- Reclaimed Grease Fuel (RGF)
Distribution Center Initiatives

- Lighting Retrofit
- Energy Management Systems
- Area 100 Glycol Cooling
- Rapid Doors at A/B interface
- VFD’s on Evaporators & Condensers
- Solar Panels & Wind Turbines
DC Lighting Retrofit

- Started project in FYE04
- Completed retrofits in 114 facilities
- Total savings
  - 201,000,000 kWh
- Began lamp replacements in FYE09
  - New lamps are more efficient by 3 watts/lamp
  - Completed 34 Facilities
  - Additional annual savings of 6,500,000 kWh
Area 100 Glycol Cooling

• Utilize existing ammonia refrigeration equipment to provide cooling to office areas in Grocery Distribution Centers

• Eliminate the use of Freon in HVAC units

• Retrofit existing buildings as HVAC units reach end of life
Rapid Doors at A/B Interface

• Prevent chilled air from leaking into warmer rooms

• FYE10 - installed at 20 DCs
Solar Panels

• Apple Valley, CA: 7-acre ground mounted provide 1 MW or 18% of requirement

• Porterville, CA: roof mounted providing 600 kW or 8% of requirement

• Viable in regions that offer Federal or State incentives

• Unique partnership
  – Third party installing and will operate systems
  – Wal-Mart will purchase electricity at fixed price for 10 yrs
Waste Network

Goal
• Eliminate landfill waste generated by our U.S. operations 2025

Initiative
• Increase recycling
• Expand composting
• Close the loop on our waste

Actions – Super Sandwich Bale Process
• Enabled us to recycle 18.9 million pounds of plastic hangers, 12.4 million pounds of office paper and 1.3 million pounds of aluminum
DC Operations

- Trash Hauls
  - Expense
  - Impact of recalls

- Cardboard Recycling
  - 249 millions pounds recycled

- Plastics Recycling
  - 38 million pounds recycled

- Wood Recycling
  - Wood pallets and wood scraps pallet recycling companies