The Role of Collaboration in Driving Sustainable Manufacturing

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We believe in harnessing the power of renewable and alternative energy and we’re one of the leading users in the manufacturing sector.
Solar Power – Installations

Global solar footprint equivalent to the size of 104 football fields

Commitment: 125MW by 2020

46MW at 18 facilities

Opel Rüsselsheim facility in Germany, 8MW rooftop array
Landfill Gas

- One of the largest industrial users of landfill gas in U.S.
- Three plants use landfill gas
  - Ft Wayne Assembly 22%
  - Orion Assembly 21%
  - Toledo Transmission 16%
Wind Power

First investment in wind power; expected to be live in 2016
Renewable Energy Buyers’ Principles

WWF, World Resources Institute and other companies teamed up to establish guidelines to help make renewable investments easier
Business Renewables Center

Collaboration with Rocky Mountain Institute and other companies to accelerate renewable energy procurement

“Instead of having hundreds of corporations reinvent the wheel, each member can get immediate access to the cumulative knowledge and wisdom of the industry.” – GM, Rob Threlkeld.
122 Landfill-Free Facilities

No other manufacturer has as many facilities contributing **zero waste** to landfill
Re-Use of Automotive Byproducts

Buick Verano
Recycled cardboard used in headliner

GMC Sierra
Plastic caps and shipping aids used in radiator shrouds

Chevrolet Volt
Old tires used in air and water baffles
Gulf Oil Booms Find New Life in Chevrolet Volt

- **227 miles** of booms incorporated into air deflectors
- **212,500 pounds** of waste prevented from entering landfills
- **149 tons** of CO$_2$-equivalent emissions eliminated
Shipping Crates = Raised Urban Garden Beds

1,200 shipping crates from Orion Assembly turned into raised beds

Provides nearby residents and soup kitchens with nutritious, locally grown food
Volt Battery Cases Benefit Wildlife

- **700** scrap Volt battery covers repurposed into wildlife nesting boxes
- Provides safe place to lay eggs
- Alternative use for thermoset, glass filled commodity
Corvette Adhesive Repurposed as Stalactites

• Piloted turning leftover adhesive into **stalactites**
• Anti-chip paint coating gives it the texture needed for bats to grip the surface
Collaboration Key to Innovative Projects

- Helped launch **Reuse Opportunity Collaboratory Detroit**
- Brings together institutions, businesses, and entrepreneurs to develop zero-waste partnerships
- Concept: one organization’s waste becomes another’s raw material
Habitat Enhancement

40 sites certified by:

5,000 acres dedicated
Watershed Education
GM GREEN: Global Rivers Environmental Education Network

- 10,000 students matched with GM volunteers/year
- Supported GREEN since 1989
- Educated over 150,000 students
- In 53 communities
Engaging Dealers: Green Dealer Program

Encourage dealers to continue their sustainability efforts and build a best-practice sharing network.
GENERAL MOTORS

- Waste reduction
- Energy efficiency
- Greener vehicles
- Resource preservation