



Go Further

**MANUFACTURING WATER
STRATEGY – LESSONS LEARNED**

SOME OF OUR PRODUCTS...



OUR PLAN IS ONE FORD

Ford remains focused on accelerating the development of new products our customers want and value, continually, improving our balance sheet and perhaps most importantly working together as ONE team.



ONE FORD

ONE TEAM • ONE PLAN • ONE GOAL

ONE TEAM

People working together as a lean, global enterprise for automotive leadership, as measured by:

Customer, Employee, Dealer, Investor, Supplier, Union/Council, and Community Satisfaction

ONE PLAN

- Aggressively restructure to operate profitably at the current demand and changing model mix
- Accelerate development of new products our customers want and value
- Finance our plan and improve our balance sheet
- Work together effectively as one team

ONE GOAL

An exciting viable Ford delivering profitable growth for all

Expected Behaviors

Foster Functional and Technical Excellence

- Know and have a passion for our business and our customers
- Demonstrate and build functional and technical excellence
- Ensure process discipline
- Have a continuous improvement philosophy and practice

Own Working Together

- Believe in skilled and motivated people working together
- Include everyone; respect, listen to, help and appreciate others
- Build strong relationships; be a team player; develop ourselves and others
- Communicate clearly, concisely and candidly

Role Model Ford Values

- Show initiative, courage, integrity and good corporate citizenship
- Improve quality, safety and sustainability
- Have a can do, find a way attitude and emotional resilience
- Enjoy the journey and each other; have fun - never at others' expense

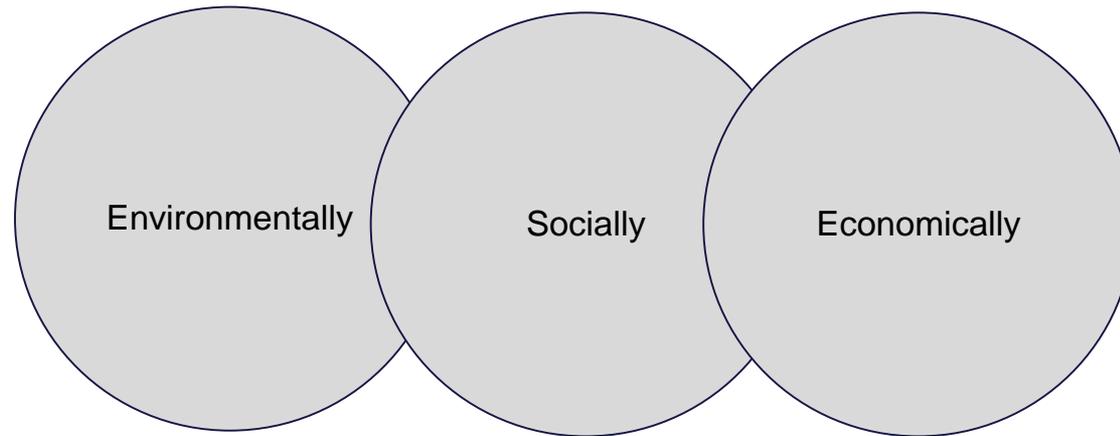
Deliver Results

- Deal positively with our business realities; develop compelling and comprehensive plans, while keeping an enterprise view
- Set high expectations and inspire others
- Make sound decisions using facts and data
- Hold ourselves and others responsible and accountable for delivering results and satisfying our customers



Ford's Sustainability Vision

Our vision for the 21st century is to provide sustainable transportation that is affordable in every sense of the word:



“Improved sustainable performance is not just a requirement, but a tremendous business opportunity.”

- *Bill Ford*

MANUFACTURING ENVIRONMENTAL STRATEGIC DIRECTION

Provides the foundation for all environmental actions

Strategic

Tactical



Environmental Strategic Direction

- Adopt holistic approach to reducing overall environmental impact of manufacturing operations:
 - Pursue integrated air emissions control approach that also reduces greenhouse gas emissions and improves energy efficiency.
 - Take resource conservation actions specifically toward eliminating land disposal and reducing water usage.
 - Evaluate and reduce toxicity of manufacturing byproducts (e.g., air emissions, wastewater, waste) in addition to quantity.

SLIDE 4

Env. Operating System

SAMPLE: 201X ENVIRONMENTAL PLAN

Note: Sample Data Only - Do Not Use

Metric	2011 Target / Comments	FNA	FSAO	FOE	FAPA
Environmental Compliance	• Environmental Compliance Index = 100	G	R	G	Y
Water Usage (m ³ /vehicle)	• X% YOY reduction	G	Y	G	G
CO ₂ Emissions (tons/vehicle)	• X tons/vehicle	G	G	G	G
Landfill Waste (kg/vehicle)	• X% YOY reduction	G	G	G	G
VOC Emissions (g/sq m)	• 2011 targets: FNA = X g/sq m; FSAO = X g / m ² ; FOE = X g / m ² ; FAPA: X g / sq m	G	G	G	G

■ Satisfactory
 ■ Marginal-Plan to Recover
 ■ Unsatisfactory
 ■ Change From / To



MANUFACTURING ENVIRONMENTAL STRATEGIC DIRECTION

Adopt holistic approach to reducing overall environmental impact of manufacturing operations:

- Pursue integrated air emissions control approach that also reduces greenhouse gas emissions and improves energy efficiency.
- Take resource conservation actions specifically toward eliminating land disposal and reducing water usage.
- Evaluate and reduce toxicity of manufacturing byproducts (e.g., air emissions, wastewater, waste) in addition to quantity.

Provides consistent foundation for environmental improvement and allows for detailed strategies by topic (CO₂, water, waste, etc.)

THE BEGINNING OF FORD'S WATER JOURNEY

In June 2000, Bill Ford attended the opening of the *Viva el Agua* exhibit at the Papalote Children's Museum in Mexico City, where he announced a Global Water Management Initiative focused on water conservation, reuse and water quality management.



DEVELOPING A MANUFACTURING WATER STRATEGY

Ford achieved its global water target two years early, in 2013.

1 Ford committed to a 3% year-over-year reduction in water use per vehicle produced at its manufacturing facilities globally.

2 This commitment resulted in a 42% reduction in water use per vehicle, from 2000 to 2009.

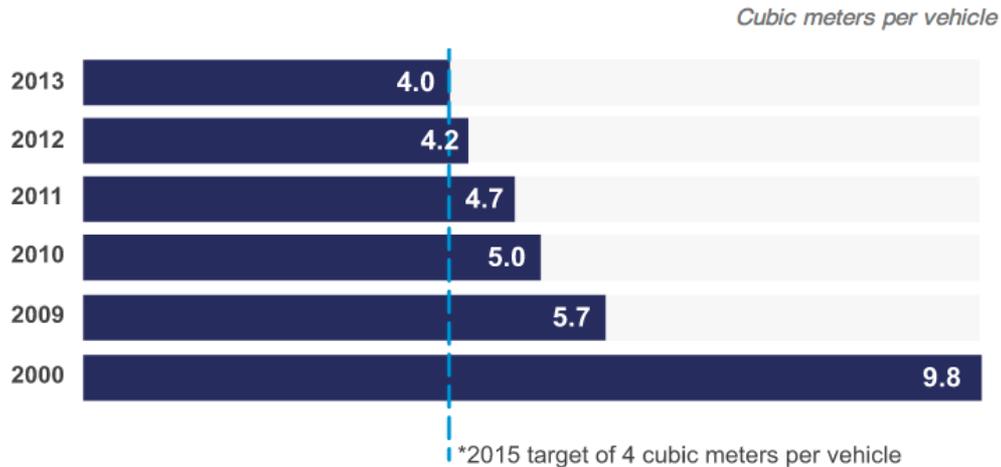
3 In 2010, a formal global manufacturing water strategy was developed, setting a target of 30% reduction in water use per vehicle from 2009 to 2015.

4 This target was achieved two years early, in 2013. 2014 maintained achievement with unprecedented number of NA launches.

EXTENDING THE STRATEGY TO THE CORPORATION

The success of the manufacturing water strategy led to receptivity to the development of a corporate water strategy.

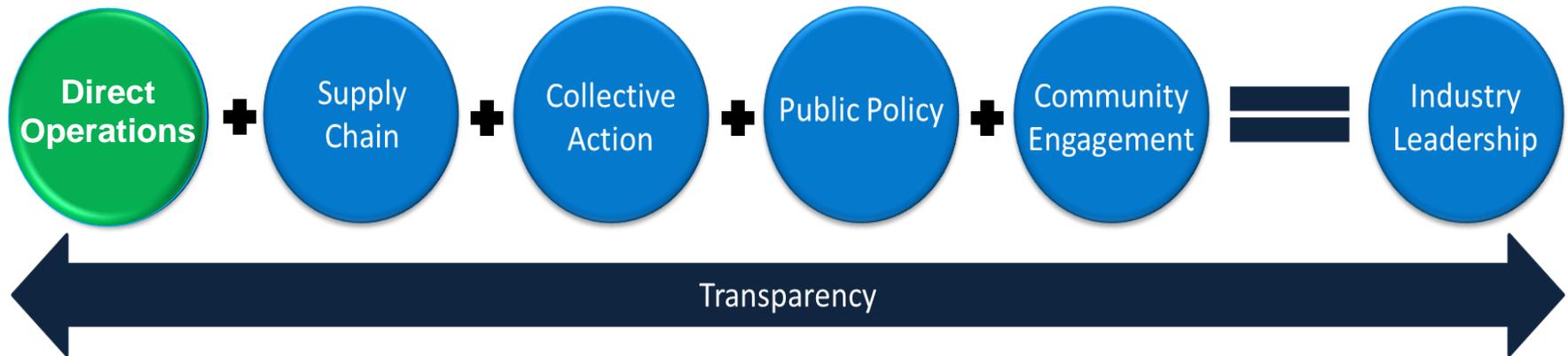
Global Water Use per Vehicle Produced



- Our corporate water strategy aligns with the core elements of the UN CEO Water Mandate.
- Companies that support the CEO Water Mandate commit to implementing the framework's six core elements for water management and pledge to publicly report their progress annually.
- Ford endorsed the Water Mandate in 2014.

FORD'S CORPORATE WATER STRATEGY

Ford's corporate water strategy aligns with the elements of the UN CEO Water Mandate.



Ford has reduced global manufacturing water use by over 10 billion gallons since 2000.

THE JOURNEY SO FAR



Since Bill Ford's 2000 announcement, Ford has:

- Reduced global manufacturing water use by over 38 million cubic meters (over 10 billion gallons).
- Reduced water use per vehicle by 60% , from 9.8 to 4.0 cubic meters per vehicle.
- Been an inaugural responder to CDP Water and participated in the pilot scoring.
- Acknowledged the Human Right to Water.
- Joined the US Water Partnership and the Global Water Challenge.
- Signed the UN CEO Water Mandate.
- Joined the U.S. DOE Better Buildings Challenge – Water Pilot

10.6 billion gallons of water is:



the amount of water that flows over Niagara Falls in

3.9 hours¹



equal to the amount of annual water use for about

99,000

U.S. residences¹



16,000

Olympic-size pools¹



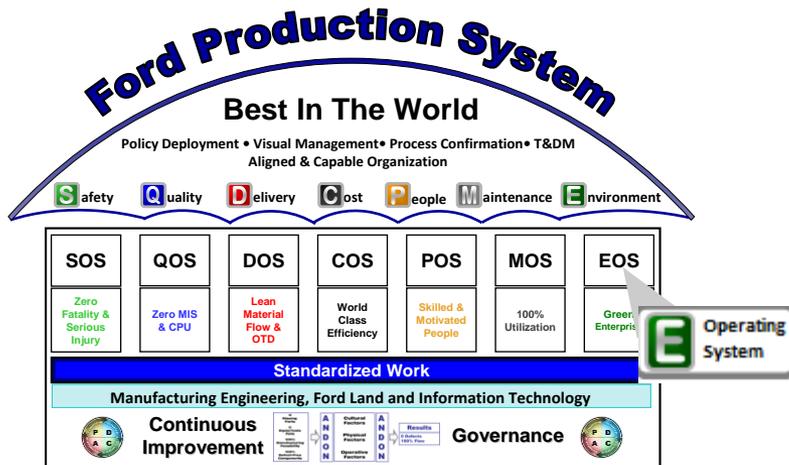
265 million

loads of laundry²



SUCCESSFUL SOLUTIONS

From 2000-2014, Ford has successfully implemented the “low cost” water projects in addition to advanced technologies with new programs



SPLS

WW Cost Savings Single Point Lesson EQDFM4L #77 2nd
 WBO JAWO A PTO Plans Revised Date February 11, 2009

Subject: Cooling Tower Optimal Operation - Reduce Water Usage

WBLAT: Information: Information

HOW: Steps for Implementation

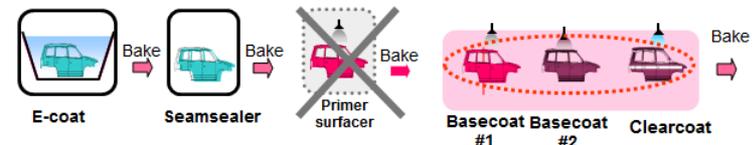
1. The main efficiency of water is to be measured in terms of water consumption in a production cycle (water per unit of production).
2. The water consumption is to be measured in terms of water consumption per unit of production.
3. The water consumption is to be measured in terms of water consumption per unit of production.
4. The water consumption is to be measured in terms of water consumption per unit of production.
5. The water consumption is to be measured in terms of water consumption per unit of production.

Additional Information or Comments

Other Comments

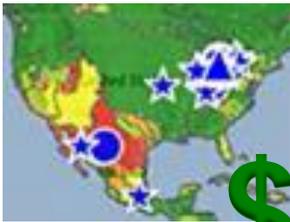


Leaks



MAJOR CHALLENGES

Update water strategy to acknowledge new challenges and identify new opportunities



Risk



Cost



Aging
Infrastructure

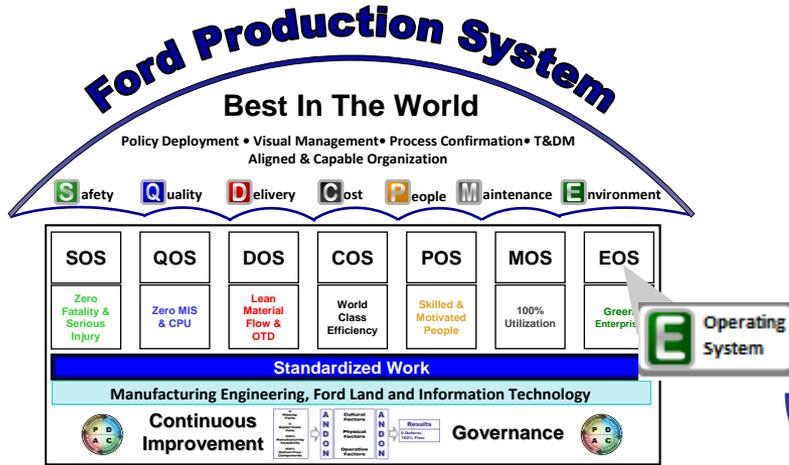


Collaboration

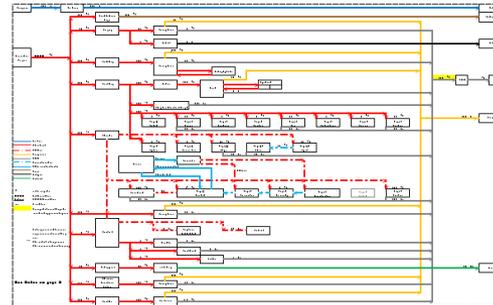


MOVING FORWARD

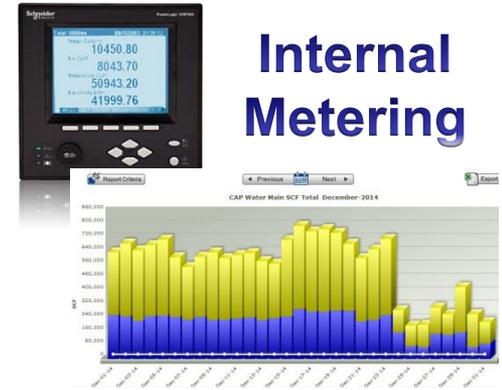
Ford has developed, and is in the process of implementing, strategic actions used to lay the foundation for implementing higher cost water reduction actions.



Water Balance



Internal Metering



Operating System



- 100 Point Sustainability Program
- Incorporates environmental best practices into new/modified plants receiving new programs
 - Established rating system for key environmental areas including water
 - Allows for prioritization of sustainability actions



Technology Expansion





Go Further

Thank You!