



ACCO Operation Supply Chain Workshop

Logistics Sustainability

June 22, 2010

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6-Sigma Master Black Belt, Material Planning & Logistics

Slide 1



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FORD AIMS TO HELP REDUCE THE CARBON FOOTPRINT


Ford recently announced plans to survey 35 top global suppliers on their energy use and estimated greenhouse gas emissions.

"Suppliers play an important role as we look to reduce our overall carbon footprint and drive more efficiency in an energy constrained world."

- Tony Brown, group vice president, Global Purchasing
May 20, 2010

Slide 2

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HOW SHOULD SUPPLY CHAIN PROGRAMS BE QUANTIFIED?

Reductions by suppliers would be in addition to Ford's own goal of reducing greenhouse gases 30 percent by 2020 from the company's 2006 model year baseline.

"Understanding the carbon footprint of our supply chain is a crucial part of our comprehensive global strategy to reduce greenhouse gases."

- Susan Cischke, group vice president, Sustainability, Environment and Safety Engineering
May 20, 2010

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WHAT ARE SIGNIFICANT CHALLENGES?

Material Planning & Logistics manages the transportation of material from tier 1 production suppliers to the Ford plants.

"Preliminary estimates indicate that large tractor trailers can reduce greenhouse gas emissions by as much as 20 percent and increase their fuel efficiency by as much as 25 percent with the use of existing technologies."

- President Obama
May 21, 2010

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HOW TO TRAIN INTERNAL AND EXTERNAL STAKEHOLDERS? $Y=f(X)$

Truckload, Intermodal, Rail, Ocean Modes
 GHG emissions = $f(\text{mode, distance, density, fuel efficiency})$


←

Fuel efficiency = $f(\text{weight, driving, speed, equipment, etc.})$

←

EPA SmartWay publishes a list of equipment tested to reduce aerodynamic drag, engine idling, rolling resistance, etc.

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IS CARRIER INFRASTRUCTURE EQUIPPED TO HANDLE THE SHIFT?


Conduct designed experiments on key input variables using internal and external carrier fleets.

Reduce variability & extract waste from the key input variables.

Measure change in response variable (GHG emissions).

Communicate at all-carrier meetings and other forums.

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THE KEY TO CONTINUOUS IMPROVEMENT

“Today’s standardization...is the necessary foundation on which tomorrow’s improvement will be based. If you think of “standardization” as the best you know today, but which is to be improved tomorrow-you get somewhere. But if you think of standards as confining, then progress stops.” – Today and Tomorrow 1926



Henry Ford

Slide 7
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LOGISTICS SUSTAINABILITY

Speaker: David J. Shepps, Material Planning & Logistics, *Ford Motor Company*

David J. Shepps is Master Black Belt, Material Planning & Logistics, Ford. He applies 6-Sigma and Lean methodology to Logistics Sustainability. Ford has a patent pending for his Sustainable Packaging invention.

In his current role, Shepps leads 6-Sigma projects and manages the Network Analysis & Logistics Value Engineering team. He is also a member of the Resourcing Implementation Board. He contributed Logistics Sustainability expertise at the WRI/WBCSD Washington D.C. May 2010 conference for development and road testing of the scope 3 (value chain) greenhouse gas emissions reporting standard, in collaboration with 40 organizations.

With 20 years experience at Ford, Shepps has held key positions in Logistics, Material Flow Engineering, Forward Program Management, Marketing & Sales, Supply Chain Management, Metal Procurement & Utilization, and Finance. He facilitated kaizen seminars in the Americas & Europe. Shepps completed Ford Lean Learning Academy training and has trained Black Belts.

Shepps served as past Chairman of the Natural Resources Commission of Pittsfield Township (Ann Arbor, Michigan) and was honored with a Citizenship Award for outstanding leadership of the Committee that wrote the Township Wetlands Protection Ordinance. He holds a BBA (Finance) and a MBA (Operations Management) from the University of Michigan.

