



## SESSION TITLE:

Soup to Nuts & Bolts: How do we improve the eco-efficiency of supply chains from top to bottom?

## SPEAKER SUMMARIES:

Clay Nesler, Vice President, Global Energy & Sustainability, Johnson Controls

- Clay Nesler, facilitated the panel on energy efficient supply chains and added to the dialogue with some of the findings from the “Energy Efficiency Indicator” survey created by the Institute for Building Efficiency at Johnson Controls.

Jigar Shah, Executive Director, Institute for Industrial Productivity

- Jigar Shah addressed the topic of making the business case for an energy efficient supply chain and cited several examples of firms that have demonstrated improvements.

Andre de Fontaine, Advanced Manufacturing Office, U.S. Department of Energy

- Andre de Fontaine discussed how the Department of Energy is working with companies to create and deploy tools to aid in the development and improvement of energy efficient supply chains. Further comments described how distributed and small individual opportunities when aggregated across business could lead to significant savings.

Terry Yosie, CEO, World Environment Center

- Innovation is an important component of developing advanced and energy efficient supply chains. Terry Yosie described how technology is changing the supply chain including the use of traceability from raw materials through the final product and on to the end user.

Jim Stanway, Senior Director, Global Supplier Initiatives, Walmart

- Speaking from years of experience working with energy efficiency projects with Walmart, Jim Stanway described how corporations improve energy efficiency using a variety of methods ultimately resulting in an improved, stable, and stronger business.

Michelle VanderMeer, Senior Director, North American Logistics, Whirlpool Corporation

- Michelle VanderMeer described how Whirlpool is using innovation, software, and partnerships to reduce the footprint of shipping operations and improve energy efficiency.

## SESSION WRAP-UP

Early in the discussion Jigar Shah defined what an energy-efficient supply chain was and how it differed from the traditional notion of a retail supply chain. In this definition, Shah described the multiple tiers involved relating the concept to the automotive industry going from the OEM to parts supplier to raw material supplier. The energy efficient supply chain looks at each of these tiers and improves the use of energy at each level. Later, the question was posed, “Why do companies want to engage in supply chain energy efficiency?” Panelists responded with three main benefits of working toward an energy efficient supply chain including, environment, competition, and cost.

For the environment, the benefits were clear to the panelists. Michelle VanderMeer, Senior Director of North American Logistics at Whirlpool Corporation described how her organization was using innovation to



reduce the footprint of their shipping operation and improve efficiency. The unique characteristics of Whirlpool products, large in volume and light, create challenges for shipping. By combining routes with a tile manufacturer, the product of which is small in volume and heavy, has saved 500,000gals of diesel fuel over the last 100,000 shipments. Jim Stanway, Senior Director at Wal-Mart described how his team goes to manufacturing and shipping sites within the Wal-Mart supply chain to help suppliers to improve efficiency. In one example the team was able to reduce one building's electricity usage by 60% in only 45 minutes reducing the generation needs of the location.

Competition also plays a role in the decision of a company to use energy efficiency throughout the supply chain. Jim Stanway indicated that for a business to be successful, it must be able to access necessary supplies. By working with suppliers to reduce energy use, particularly smaller more financially vulnerable firms, the supplier is strengthened and becomes more stable. This stability in turn supports an economically efficient supply chain, which is a competitive advantage to both firms in terms of reliability. Terry Yosie supported the idea by saying, "There is no way to achieve goals without looking outside the [the firm], you have to look at the supply chain."

Energy efficiency also benefits companies and supply chains by reducing cost. Michelle VanderMeer described how 30,000 solar cells were installed on a 1.7 million square foot warehouse and shipping center in Paris, CA benefits not only the environment, but also the bottom line for Whirlpool. The benefits of cost saving energy efficiency was stressed by all panelists including Andre de Fontaine who said, "Energy efficiency is a great way to keep the cost of critical inputs low." Deeper financial benefits characterize some of the most advanced energy efficient companies including low cost of capital, increased ROI, and shorter payback periods.

The panelists agreed that energy efficient supply chains were essential to meeting business goals, ensuring financial supply chain stability, and fostering a successful eco-system of manufacturers and buyers. As Jim Stanway said, "Efficiency means lowering their [manufacturers] costs but maintain the product quality." Michele VanderMeer explained that engagement and energy efficiency work along the entire supply chain when it is "consumer relevant and employee relevant." Keeping the focus on doing business better through environmentally friendly, competitive, and cost reducing supply chains is the goal.

### **ACTION ITEMS & TAKEAWAYS**

- Engagement happens along the entire supply chain
- Never ignore the "low-hanging fruit" work on the easiest energy efficiency projects and work up to the harder ones
- Get in the habit of constantly looking for ways to increase energy efficiency
- Competition and collaboration are essential to continually developing effective energy efficient supply chains
- Understand that the strengthening and stabilizing a supplier in turn strengthens and stabilizes the buyer's business