# Made in IBM Labs: McKesson Taps IBM to Reduce Greenhouse Gas Emissions, Boost Pharmaceutical Supply Chain Efficiency

IBM

**ARMONK, N.Y. - 15 Nov 2010:** McKesson Corporation and IBM (NYSE: IBM [1]) are teaming on an initiative aimed at reducing carbon dioxide emissions and trimming drug distribution costs. Working with IBM researchers and business consultants, North America's largest distributor of prescription drugs is bringing a new level of intelligence to the pharmaceutical supply chain as well as its own business operations.

(Photo: http://photos.prnewswire.com/prnh/20101115/NY01477-a [2])

(Photo: http://photos.prnewswire.com/prnh/20101115/NY01477-b [3])

(Photo: http://www.newscom.com/cgi-bin/prnh/20101115/NY01477-a [4])

(Photo: http://www.newscom.com/cgi-bin/prnh/20101115/NY01477-b [5])

McKesson supplies one-third of the prescription drugs used by hospitals and pharmacies in North America every day. The company provides pharmaceuticals to more than 40,000 health locations in the U.S., ranging from hospitals and health systems to community pharmacies and national chain stores to the Department of Veterans Affairs.

Now, McKesson is breaking new ground by using IBM's new Web-based analytics offering called the Supply Chain Sustainability Management Solution (SCSM) to simultaneously minimize both its carbon dioxide emissions and its distribution costs. According to the U.S. Environmental Protection Agency, [6] transportation is the second largest contributor to the nation's CO2 emissions.

The new technology McKesson is using was developed in collaboration with IBM Global Business Services and IBM Research mathematicians. The system draws on McKesson's supply chain, sales and geographic data to create "what if" scenarios that are helping in decision-making concerning distribution network modeling, supply planning, inventory positioning, vehicle routing and sustainability management.

"Today we are advancing our ability to contain costs while contributing to the health of our environment," said, Don Walker, senior vice president distribution operations, McKesson Corporation. "IBM has given us the tools we need to weigh the environmental and financial effects of actions we may take in our supply chain. "This system will be valuable to any business seeking ways to achieve both their financial and carbon reduction goals."

For example, McKesson could use the system to determine the value of keeping pharmaceuticals that need to be kept cold, such as insulin and vaccines, in one central refrigeration facility. The engines in the tool calculate the inventory cost and the potential reduction in carbon emissions against the option of keeping such products in all its warehouses.  Based on such comparisons the system provides recommendations to allow for increased efficiency with minimal environmental impact.

Similarly, SCSM can identify the best ways to bring pharmaceutical products into McKesson's distribution network and manage inventory and customer deliveries in a way that minimizes both McKesson's carbon footprint and its costs..  For instance, it can calculate the emissions implications and monetary cost of transporting a given product from the vendor directly to local warehouses or through a central warehouse and recommend the best action.

"Any enterprise interested in boosting efficiencies and promoting responsible environmental stewardship should take note of what McKesson is doing," said Dave Lubowe, vice president, supply chain, IBM Global Business Services.

Earlier this year, IBM announced a program to address sustainability and environmental aspects of its nearly 30,000-member strong supply chain that spans 90 nations.

**Addressing the Environmental and Financial Imperatives of Supply Chains**

Among the capabilities of IBM's new SCSM offering are:

- Evaluating site locations based on CO2 emissions, transportation, warehousing and inventory costs.
- Determining the cost of serving a customer based on carbon dioxide emissions and dollars and cents.
- Weighing the costs and benefits of alternative transportation modes.
- Predicting the impact of using solar panels on a warehouse, or using alternative fuels on a given route.

The sustainability module of SCSM uses detailed data on all the energy consuming equipment McKesson has in its warehousing and transportation operations, including fork lifts, conveyers, refrigerators, HVAC and trucks, along with their specifications and hours of operation.  Based on this information, the tool estimates energy use and carbon emissions relating to supply chain activities and reports on them by operation, site, product, or other categories.  For example, if a demand for a particular medication rises in a specific region, the tool can calculate how much more energy those sites will have to consume, how much more carbon will be emitted and by what amount material handling and storage costs will rise.

In addition SCSM can be used to better understand the cost and carbon implications of alternative distribution configurations.  For instance, it can quantify the cost and

carbon benefits of relocating a warehouse, or opening an additional warehouse in a given location.

The SCSM uses a Web interface and a Cognos dashboard for reporting. It runs on a variety of IBM middleware.

**About McKesson**

McKesson Corporation, currently ranked 14th on the FORTUNE 500, is a healthcare services and information technology company dedicated to helping its customers deliver high-quality healthcare by reducing costs, streamlining processes, and improving the quality and safety of patient care. Over the course of its 177-year history, McKesson has grown by providing pharmaceutical and medical-surgical supply management across the spectrum of care; healthcare information technology for hospitals, physicians, homecare and payors; hospital and retail pharmacy automation; and services for manufacturers and payors designed to improve outcomes for patients. For more information, visit http://www.mckesson.com [7].

**About IBM**

For more information on IBM, visit: http://www.ibm.com/smarterplanet [8]

SOURCE [9]

**Source URL (retrieved on *05/21/2013 - 8:16pm*):**
http://www.mdtmag.com/news/2010/11/made-ibm-labs-mckesson-taps-ibm-reduce-greenhouse-gas-emissions-boost-pharmaceutical-supply-chain-efficiency?qt-video_of_the_day=0

**Links:**
[1] http://www.ibm.com/investor
[2] http://photos.prnewswire.com/prnh/20101115/NY01477-a
[3] http://photos.prnewswire.com/prnh/20101115/NY01477-b
[4] http://www.newscom.com/cgi-bin/prnh/20101115/NY01477-a
[5] http://www.newscom.com/cgi-bin/prnh/20101115/NY01477-b
[6] http://www.epa.gov/climatechange/emissions/usgginventory.html
[7] http://www.mckesson.com/
[8] http://www.ibm.com/smarterplanet
[9] http://www.ibm.com/press/us/en/pressrelease/33007.wss