

2012



The AMERICAN CHAMBER of COMMERCE in SHANGHAI

VIEWPOINT

SUPPLY CHAIN MANAGEMENT

The China CSR Imperative:
*Integrating Social Responsibility into
the China Supply Chain*

Industry
Insight



Introduction

China's supply chains have developed rapidly in the past 30 years. What was once merely a discussion of export oriented factors, such as low cost manufacturing and supplier selection, now involves a greater variety of considerations.

Companies in China are now focused not only on domestic and export oriented supplier development, but also efficiencies in manufacturing, logistics and distribution as well as an increasing consumer demand for quality.

During this evolution, the development of China's supply chain infrastructure has become a top priority for China's government with the objective of easing China's logistic bottlenecks. Major infrastructure projects include an ambitious plan to add more than 13,000 miles of rail lines each year until 2020 and to build nearly 100 new airports.

However, the government's focus on growth is balanced with a new emphasis on sustainable development. As supply chains impact a growing number of communities throughout

China, government policy is focusing on positive contributions to Corporate Social Responsibility (CSR) initiatives. These priorities are echoed in China's 12th Five-Year Plan (FYP), adopted in 2011, that prioritizes sustainable development through social responsibility.

China's Government Goals Affecting the China Supply Chain and Social Responsibility

- Cut carbon intensity by 40-45 percent from 2005 to 2020
- Reduce energy use per unit of GDP to 16 percent by 2015
- Increase non-fossil fuel use to 11.4 percent by 2015





The Need for a CSR Strategy: Balancing Cost and Consumer Preferences

Two factors have emerged which are dictating both business and government directives in the development of supply chains in China – the cost directive and changing consumer preferences.

The Cost Directive

It is no secret that costs in China are rapidly increasing, as raw material demand, inflation and exchange rate pressure rise. This is putting significant pressure on both U.S. multinationals and the PRC government, where the cost to upgrade infrastructure has opened the door for other low cost manufacturing countries. Recent economic uncertainty has also created higher than normal variability in the China supply chain. This has forced both companies and the government to look inward and outward to cut costs and remain competitive.

China's Rising Costs

- Labor
- Raw material cost increases in specific segments
- Transportation – both domestic and international
- Investment and overhead costs for new factory development
- Foreign exchange rate movement
- Enforcement of penalties for non-compliance of government policies



The Rise of the Green Consumer in China

Consumers in China are increasingly focused on eco-friendly products, ethical labor practices and carbon footprint reductions. Many are poised to make consumer choices based on these criteria. In a recent survey by Penn Schoen Berland, 82 percent of consumers in China said they planned to spend more on green products and services in the next year. 40 percent of Chinese consumers said that green was “very important” to think about when deciding what brands to

Consumers are increasingly focused on eco-friendly products

Key consumer preferences:

- Sustainable input materials and eco-friendly sourcing
- Fair labor practices
- Sustainable manufacturing practices
- Emissions and water treatment
- Quality oversight and management

buy. The number of those in China using sustainability criterion in their purchasing choices is substantially higher than the 16 percent in the U.S. and the U.K.

China’s government is responding to consumer awareness by providing its own policies to ensure responsible supply chain practices are a part of the China landscape. Sustainable supply chain management is a key component of China’s 12th FYP, with mandates for the reduction of CO₂ emissions and energy consumption.



How CSR Makes Good Business Sense

Supply chain operations and corporate social responsibility (CSR) are often considered mutually exclusive.

However, implementing CSR initiatives can create cost reductions in supplier, manufacturing and logistics operations while fulfilling consumer demands for more socially responsible supply chains. In addition, these initiatives positively impact ties with China’s government. Aligning operating goals with the government’s societal welfare targets is increasingly important to business success in China.

This report summarizes CSR strategies that U.S. multinationals can employ in their China supply chain to manage costs, meet emerging customer preferences and comply with government policies. The summaries are divided by three key sectors in the supply chain: sourcing and procurement, manufacturing and operations and logistics and transportation.



Sourcing and Procurement

As sourcing and supplier development in China evolves for both export oriented and domestic production, companies are moving towards a sustainable supply base. They are thinking about where materials are produced, how to dispose of waste and how to develop their suppliers.

China's government itself limits the industrial use of key resources such as energy, trees and water while significantly penalizing high polluting manufacturers.

For most companies concerned with CSR supply chain initiatives, sustainable sourcing is a priority area. The negative influences on a company's global brand can be substantial if there are issues with quality management, major recalls, tainted input materials (such as lead paint) or child labor violations.

In addition, a first tier supplier's supply base influences the visibility, or the tracking of

materials, throughout the supply chain. In order to meet government targets, cut costs and generate positive consumer sentiment connected to a company's brand, a company must focus on upstream supplier operations.

Key Aspects in Sustainable Sourcing

One area integral to effective sourcing is network integration. A company must look at how all points and processes in the supply chain, including input material suppliers, component suppliers, production manufacturing and all logistics operations,



The negative influences on a company's global brand can be substantial if there are issues with quality management

Government Policy Trends to Watch

China's government is looking at ways to improve the image of China's vital manufacturing industry. Areas of focus include:

- **The protection of natural resources.** The government has the goal of increasing forest coverage by 1.3 percent by 2015 to sustain China's supply of trees.
- **Encouraging investment in eco-friendly suppliers.** The government has a target to decrease pollutants chemical oxygen demand (COD) and sulfur dioxide by 8 percent each by 2015.
- **Sustainable technology parks.** The government is encouraging high-tech parks to recruit more environmentally sustainable manufacturers and encourage green technology advancement. Industry experts have forecasted that the government will invest up to RMB4 trillion (US\$600 billion) to support IT, environmental protection and scientific research by 2015.

are connected. Having too many points in the supply chain can increase complexities and unnecessary costs.

Companies must also pay great care to efficiently manage inventory. Effective inventory placement is critical to cost reduction strategies and integrating social responsibility – poor inventory management, or less than optimal supplier locations, can drive up direct and indirect costs, while creating waste.



CASE STUDY

Haworth Corporation

Haworth Corporation, headquartered in Holland, Michigan, designs and manufactures adaptable workspaces, including raised floors, movable walls, office furniture and seating. It has streamlined its operations in China by coordinating how it is getting its supplies. The company, for example, increased the strength of the corrugated cardboard used to ship in specific component material, which means that the packaging is reusable. When it receives supplies, the Haworth factory simply breaks down the cardboard immediately upon delivery and returns the packaging to suppliers, saving spend on truck usage as there is less need to ship discarded shipping materials elsewhere.

Haworth has streamlined its operations in China

Recommendations for a Socially Responsible Supply Base

- **Reduce maverick purchasing.**

Pressures to meet deadlines often result in maverick purchasing – that is, purchases that go around standard procurement policies. Though materials may be secured in time for a deadline, such practices can result in the purchasing of input materials that do not meet customer requirements. Short-term consequences of maverick purchasing are a high risk of a product recall. Long-term consequences can include brand erosion and a loss of consumer confidence.

- **Maximize efficiency.** During peak seasons, manufacturers operate 24 hours per day, seven days per week, but many do not change their manufacturing processes. Higher production volumes without improved efficiency usually mean lower productivity. If a company plans to operate at a higher volume, it must adjust its processes to allow for high production volumes.

- **Use all resources at hand.** Using scrap materials and recycling cuts direct costs and lowers waste production and waste removal costs associated with waste removal. Recycling efforts can serve as an alternative revenue channel and can be leveraged to support a positive brand image for customers.

- **Use sustainable materials.** Working with suppliers that are sustainable can lower production requirements for limited resources such as water, trees and coal. In many cases, sustainable suppliers encourage healthy and regenerative material inputs, which lower long-term variability and costs in the supply chain. In addition, certifications and frequent official auditing are good practices to quantify knowledge of sustainable supply chain development.



CASE STUDY

Dow Chemical

At Dow Chemical, based in Midland, Michigan, sustainable practices are core in its purchasing policies. In the chemical industry, companies often use intermediate bulk containers (IBCs) to transport and store fluids and bulk materials. They usually are discarded after use. In the Asia-Pacific, Dow widely uses secondhand and washed IBCs instead of new IBCs to receive its supplies. Every IBC is recycled/washed five to seven times before it is disposed. "Setting the standard for sustainability is one of Dow's four strategic themes," says Niklas Meintrup, director of Dow Business Services Group, Asia-Pacific. "We integrate sustainability in the way we conduct business, including supply chain, purchasing and all other business services to our clients and customers." Dow also uses the Dow S4TAR Award Program to promote sustainable business growth for both Dow and any operators along its supply chain, ensuring that all that partner with Dow follow Dow's standard of sustainable practices.



Manufacturing and Operations

Growing pressures concerning environmental sustainability and labor practices have accompanied the rapid growth of China's economy, even as the economy has created tremendous social improvements for millions. The pressure is on to mitigate the impact of manufacturing on local communities.

Pollution and waste are serious problems in many communities in China. The imperative to control costs must be balanced with a focus on fair labor practices, energy-and-resource consumption and harmful emissions control. Both consumers and the government continue to scrutinize the impacts of a company's manufacturing processes.

Key Aspects of Manufacturing Operations and Supply Chain

Product design in manufacturing impact costs as well as a socially responsible China supply chain. Important but often overlooked considerations in the product design and sampling phase include material component selection, material utilization and processes to

treat waste material, preventative quality procedures, compliance and environmental impact certifications. It is important to incorporate these facets when planning for production.

Companies must also choose optimal machinery and utilization. Choosing the right technology can influence the energy consumption of specific machinery. Efficient utilization of production capacity and improving productivity in manufacturing operations can significantly reduce unnecessary costs and lessen the negative environmental impact of the operations. Key considerations include idle and setup times, labor usage and energy consumption.



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Government Policy Trends to Watch

Business operations must actively connect their supply chain and social responsibility efforts to meet key government targets.

These include:

- Standards setting in manufacturing emissions to cut carbon intensity by 40-45 percent from 2005 to 2020.
- Standards setting in manufacturing emissions to reduce nitrogen oxide emissions by 10 percent by 2015.
- Standards setting in waste water treatment for manufacturers, with a target of 30 percent water usage reduction per unit of industrial added value by 2015.
- Standards setting in energy use for manufacturing to lower energy use per unit of GDP to 16 percent by 2015.

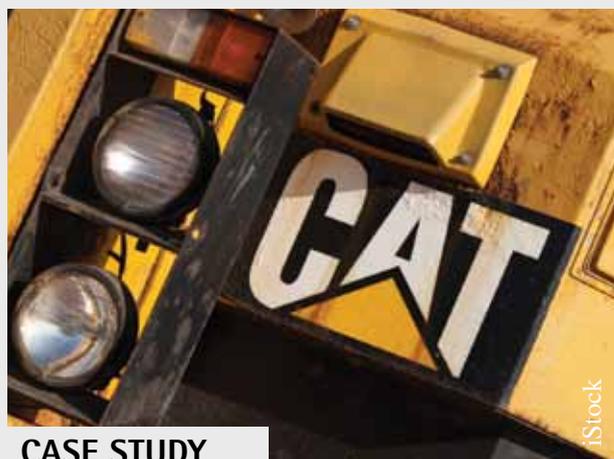
Recommendations for Socially Responsible Manufacturing

• **Manage energy consumption.**

Higher facility utilization rates often lead to higher and often unplanned energy consumption. By coordinating and planning for high energy consumption production periods ahead of time, energy pricing may be reduced. Overtime facility utilization will also influence lower labor costs.

• **Employ good labor planning.**

Effective management of labor can be adjusted based on long-term production



CASE STUDY

Caterpillar

Caterpillar Corporation, based in Peoria, Illinois, has a number of global operations in China and has taken extra steps to ensure that their factories are energy efficient, which has proven to be a good business practice beyond direct energy savings. In certain areas in China, companies can be subject to government mandated rolling electrical brownouts and blackouts to reduce overall energy usage. However, Caterpillar's energy-saving practices have helped the company avoid these brownouts and any disruption to its operations. Caterpillar's multi-functional research & development (R&D) center in Wuxi, Jiangsu province, for example, has been awarded Gold certification for Leadership in Energy and Environmental Design (LEED) in the new construction category (LEED-NC). The 10,000-square-meter, state-of-the-art facility was constructed in Wuxi New District in 2009 with a strong focus on environmental impact and energy efficient design. Subsequently, the Wuxi government has committed to not limit the facility's electricity sources, and the facility has been exempted from power brownouts and blackouts. It has operated for three years with no interruption to its power.

schedules, instead of short-term demand impacts. Creative solutions to remove the need for headcount reductions offer a positive community impact, supporting a positive brand image to customers and the government.

Labor solutions may include flexible pools of hours that can be used in busier periods or simply reducing shifts instead of resorting to mass layoffs. Cost reductions are achieved by reducing the need for overtime when production resumes.

• **Use environmentally friendly product design.** Inefficient product design processes increase costs through sample shipping, time delays and potential costs to quality during and after production. A company must integrate the design into the manufacturing process to reduce significant spend and improve the environmental sustainability of the product design process.

• **Focus on water use and treatment.** Production facility operations that efficiently use water can showcase



its positive contributions to the environment. Equipment to utilize rain water, for example, is a highly visible way to highlight a company's sustainability program. High polluting industries are receiving less support from local governments.

• **Focus on quality management.** Quality management is key to a sustainable business and supports CSR goals. Lowering production error rates helps to lower machine utilization, material usage and can create energy savings. In addition, because of the recent visibility of food and product safety scandals, consumers and governments are putting more pressure than ever on companies to ensure quality. It is likely that companies that focus immediately on quality management will fit into a larger trend of quality improvement in China.

ISSUE HIGHLIGHT

Wage Gap

Third party companies often play an important role in the China supply chain. Ensuring that these companies are closely supervised and accountable is vital to successfully implementing CSR across the supply chain. Poor production planning in third party companies, for one, can lead to unfair labor practices. Wage gap – that is, the difference between what employees are paid and what they are supposed to be paid – can occur when manufacturing management uses capital for inventory purchases at the cost of paying salaries. The poorer the production planning, the greater the risk of wage gap.

CSR and good business planning meet here: if a company ensures that its partners improve production and material purchasing planning, it will help reduce wage gap in the supply chain, meeting government objectives concerning social harmony and consumer demands for fair labor treatment.



Logistics and Transportation

Over the past 15 years, logistics in China have moved from being almost purely export oriented to domestically-focused. In 2009, expenditures on transport, storage and management services related to logistics and distribution reached RMB6.09 trillion.

The brand expansion of companies to the western provinces of China has also expanded China's logistics network. Some companies are already building their strategies to penetrate seventh- and eighth- tier cities across China.

As the domestic logistics industry grows, new areas for sustainable development are created. One example is logistics outsourcing, and partnering with third party logistics (3PL), which allows for greater efficiencies in operations as logistics are managed by an outside company. With the continued growth of logistics outsourcing, competitive advantages in service and efficiency will lead to greater integration for business operations.

Key Aspects of Logistics and Supply Chain

One key aspect is finding the right freight shipping and documentation methods. Time is important to every supply chain. The method of transportation and document filing selected influences costs, CO₂ emissions and paper usage.

Related to efficient shipping is the right method of transporting goods. The amount of capacity used in a shipping container – or a shipping cube – is a critical component to reducing unnecessary costs in the supply chain.

Packaging design also influences the



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logistics space required for shipping. Poor design can unnecessarily increase transportation costs and packaging spend. As most packaging is paper or petroleum-based, reducing packaging materials can reduce natural resource use.

Government Policy Trends to Watch

With China's target of 45 percent CO₂ emissions reductions by 2020, the 12th FYP included an unprecedented focus on domestic logistics development. The Ministry of Commerce (MOFCOM) has been shifting its focus to rural distribution consolidation to generate efficiency improvements in inner China. Examples include:

- Standards setting in logistics emissions, reducing CO₂ emissions per unit of GDP to 17 percent by 2015.
- The identification of clean vehicles as a focus industry in the 12th FYP.
- Standards for energy consumption in logistics, with an emphasis to increase non-fossil fuel use to 11.4 percent by 2015 and a potential move to push non-fossil fuel use up to 15 percent by 2020.

Recommendations for Socially Responsible Logistics

- **Consolidate logistics and documentation.** Aligning production plans, delivery schedules and the information flows through documentation reduces cost. Companies can reduce logistics spend while also helping to achieve government CO₂ emissions and paper usage reduction targets.



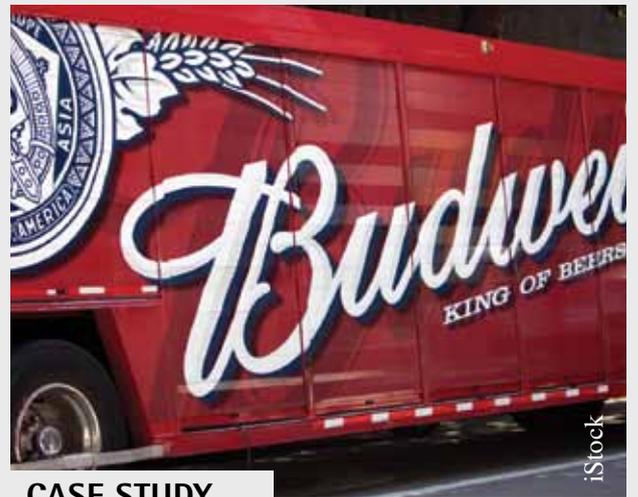
CASE STUDY

FedEx Express

FedEx Express, headquartered in Memphis, Tennessee, has a delivery network reaching more than 220 countries and territories. Within China, FedEx reaches more than 400 cities. More efficient planes are one important way FedEx keeps global businesses connected while conserving fuel and preserving the environment. FedEx has introduced the Boeing 777F as a way to increase access to new Asian markets while at the same time reducing operating costs and environmental impact. The inaugural 777F flew in to Shanghai in 2010. Since then, FedEx has introduced 777F aircraft into Shenzhen, Hong Kong and Seoul. The 777F carries a larger payload – 178,000 pounds of cargo – and can fly 5,800 nautical miles nonstop. Despite its formidable size, the 777F uses 18 percent less fuel than the aircraft it is replacing, while reducing emissions per ton of cargo. FedEx currently has 12 Boeing 777Fs in its fleet and is on track to have 45 in service by 2020. At the same time, FedEx is replacing its Boeing 727 aircraft with 757s, which have 47 percent lower fuel consumption per pound of revenue payload and lower maintenance costs.

As the domestic logistics industry grows, new areas for sustainable development are created

- **Reduce carbon footprint.** Inventory management and lead times importantly impact environmental sustainability. If, for example, inventory placement is not adjusted as suppliers are added, the risk of stock-out increases. When a product is stocked-out, a brand risks a loss of loyalty for consumers. This commonly results in in-transit expedited airfreight, created by a need to place inventory closer to the customer. To improve environmental sustainability and reduce costs, demand and production planning must be synchronized, with increased visibility and transparency.
- **Utilize efficient transportation.** By reducing unused space in transport, shipping costs per unit will be lower. Transportation optimization software is commonly used for daily logistics planning in the U.S. and Europe, yet rarely implemented in logistics originating from China. Government objectives currently in discussion, such as the Reduction of Unnecessary Transportation Space (RuTS) regulation, can be achieved well in advance of their implementation.
- **Use smart packaging design.** Integrating packaging design into a logistics plan, including packaging material inputs and logistics spent, can reduce material requirements such as paper and increase cube utilization.



CASE STUDY

Budweiser

Budweiser, a subsidiary of AB-InBev and headquartered in St. Louis, Missouri, has implemented logistics consolidation models in China, which have greatly reduced operational costs and the negative environmental effects of the company's operations. Budweiser has coordinated its logistical network and made it local, limiting the delivery distance, means and supplies it uses. The company, for example, sends bottles out to a designated region and makes runs that allow used bottles to be returned to the original bottling plant. Barges are used on the Yangtze River to transport bottles, which is both more economical and an environmentally friendly method of transportation for both finished product and reusable empty bottles.

Budweiser has coordinated its logistical network and made it local

Recommendations

Integrating Corporate Social Responsibility in the supply chain in China makes good business sense, potentially cutting costs, building good brand reputation and fitting into government policy trends.

In addition to the specific recommendations suggested previously in this report, companies can also implement the following practices throughout their operations:

1. Understand government CSR policies and initiatives that directly impact China supply chain operations.

U.S. multinational companies must actively follow and work with China's government to understand both CSR and supply chain policies as they are released. Important considerations should look at how cost reduction strategies can be achieved along with meeting sustainability targets. Key government policies are highlighted throughout this report.

2. Work together with companies in the same industry to identify best practices that impact sustainability and utilize them to build brand reputation.

U.S. multinational companies should work with other multinationals operating in China on best practices concerning cost reduction strategies that impact CSR activities. Once integrated, companies should actively promote and share CSR activities with customers when defining the brand image.

3. Connect cost reduction strategies throughout the China supply chain with tangible CSR targets.

Set concrete and achievable CSR targets in the supply chain. The practice will also make it easier to train employees and encourages

greater strategic development throughout the organization. Involving customers in similar educational opportunities can create a strong sense of community around the brand.

4. Consider the supply chain impact of every community a company reaches.

Supply chains are global networks that impact numerous communities. Whether a mining operation, production facility, or retail store, many people are touched by a company's supply chain and CSR strategy. Governments and companies should be engaged in outreach to show how shared goals can be achieved.

5. Build a global supply chain that operationally reflects the brand image.

Connecting a company's brand image with its supply chain is vital. This includes the socially responsible activities of the company in its sustainable sourcing, manufacturing and logistics operations. Global strategies must involve China beyond simply low cost sourcing and increased global market penetration. To secure an enduring brand image that promotes a socially connected organization, the China supply chain must be closely associated with CSR activities. 

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The AMERICAN CHAMBER of COMMERCE in SHANGHAI

VIEWPOINT

Viewpoint

An analysis of issues impacting today's business environment in China

About The American Chamber of Commerce in Shanghai

The American Chamber of Commerce in Shanghai (AmCham Shanghai), known as the “Voice of American Business in China,” is the largest and fastest growing American Chamber in the Asia Pacific region. Founded in 1915, AmCham Shanghai was the third American Chamber established outside the United States. As a non-profit, non-partisan business organization, AmCham Shanghai is committed to the principles of free trade, open markets, private enterprise and the unrestricted flow of information.

For more information, please visit:
www.amcham-shanghai.org.

About AmCham Shanghai's Corporate Social Responsibility Committee:

The mission of the Corporate Social Responsibility (CSR) Committee is to inspire, encourage and facilitate corporate social responsibility awareness and practices among AmCham Shanghai members. The Committee focuses on corporations' activities in community outreach, environmental stewardship, employee health and safety and corporate governance.

About AmCham Shanghai's Sourcing & Procurement Committee:

The Sourcing & Procurement Committee is dedicated to providing members with an open forum to discuss and learn about China's opening markets in sourcing and procurement. The Committee will cover best practices and lessons learned and seeks to bring the industry's best practitioners of sourcing together in order to provide a platform for networking and learning.

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