Corporate Responsibility: Operating in the Green
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Our Focus on Environmental Sustainability

Environmental sustainability is one of the most critical issues faced by today’s generation. Our choices—whether at home or at work—impact the air we breathe, the water we drink, the food we eat and the land we enjoy. Our world is not only becoming more interconnected through economics, communications and transportation, we are also growing environmentally interdependent. Just as nations have begun to take responsibility for environmental sustainability, many industries in the business sector have begun to do the same.

Within the materials handling industry, there are numerous opportunities to positively impact the environment. Our industry provides equipment that enables the optimum flow of goods, which is essential to a vibrant economy. To the extent that we can achieve this while improving air quality, reducing energy consumption, reducing waste, increasing recycling and increasing safety—we strive to contribute positively to environmental sustainability.

At NACCO Materials Handling Group, Inc. (NMHG), we are first improving efficiency and reducing waste in our own operations. Secondly, we are developing and producing lift trucks that help improve efficiency and reduce energy consumption for our customers’ operations. NMHG has been a leading producer of zero emission trucks for many years. This dedication is exemplified with our 2013 enhanced line of innovative and efficient electric lift trucks, which are designed to recover potential energy. We continue to collaborate on alternative energy technology to enable a broader group of customers to more easily make the transition from Internal Combustion Engine (ICE) trucks to zero emission electric trucks.

We have developed tools to aid our customers in choosing among alternative power options for their applications, based on cost and emissions impacts. These initiatives aren’t just good for the world—they deliver more value to our customers and to our company’s bottom line. They define our commitment to environmental sustainability and support our responsibility to our stockholders.

The journey toward environmental sustainability will be a long one, but we are committed to staying on the path. NMHG is aware that we have much to learn and many improvements to make, so we will continually challenge ourselves toward greater progress and higher goals. We consider this commitment an investment in our future and in the future of this planet we all call home.

Our Commitment to the Environment, Health and Safety

As a global leader in the development and manufacture of innovative and high-performance industrial lift trucks, we recognize environmental sustainability and the highest standards of health and safety in our products, workplace and community as fundamental to our worldwide business operations. We are a company with a heritage of environmental stewardship which is demonstrated in our product design choices and manufacturing operations, as well as a strong safety track record. Our commitment is underscored by the inclusion of incremental annual business plan objectives, which support our environmental and safety goals, policies and the steadfast pursuit of these objectives.

Key Focus Areas

- Product design which considers the environment
- Environment, health and safety (EH&S) management system
- Prevention of pollution and accidents
- Going beyond compliance
- Continual improvement of EH&S performance
Recognition of Our Dedication

Registrations

ISO 14001
All of our Americas and European manufacturing facilities have achieved ISO 14001 registration through Underwriters Laboratories (UL). ISO 14001 is a globally accepted blueprint for an environmental management system. It includes requirements for developing an environmental policy, assessing environmental impacts of products and processes, developing environmental goals and measurable objectives, implementing initiatives to meet objectives, auditing, corrective action and management review. Each of our locations closely tracks environmental and safety performance and sets objectives each year to drive continual improvement as an integral part of our business plan.

OHSAS 18001
Our Greenville, N.C., Sulligent, Ala., and Berea, Ky., facilities have achieved OHSAS 18001 registration through UL. This registration requires the establishment of a defined occupational health and safety (OH&S) management system, which is designed to minimize or eliminate OH&S risks and promote a process of continuous improvement. NMHG is currently pursuing registration at our other manufacturing facilities.

Awards

Rising Environmental Steward Recognition
The Greenville, N.C., operations have been recognized by the State of North Carolina as a Rising Environmental Steward. We are one of only 15 companies to receive this distinction. The award criteria includes a mature environmental management system (EMS) based on ISO 14001, a demonstrated commitment to go beyond compliance, site-specific measurable goals including pollution prevention and process efficiency improvement and the annual reporting of progress toward those goals.

Gold Award and Million-Hour Safety Award
Our Greenville, N.C., operations have received the Gold and Million-Hour Safety Award for outstanding achievement in employee safety multiple times. Presented by the N.C. Department of Labor, this program is designed to stimulate interest in accident prevention and promote safety in the workplace.

OSHA Voluntary Protection Program (OSHA VPP)
To be a VPP site indicates the highest level of safety performance in working toward achieving zero accidents. The Greenville, N.C., facility is Carolina Star recognized (VPP in North Carolina) for accident rates well under half of the industrial truck manufacturing industry average and demonstrating management commitment and employee ownership in safety.

75 Green Supply Chain Partners
Our lift truck brands (Hyster and Yale) are recognized as Inbound Logistics 75 Green Supply Chain Partners (G75). Companies considered are measured on green results, sustainability innovation, continuous improvement and industry awareness for providing sustainable solutions. Only companies leading the way in sustainability and logistics are selected for the G75 designation.

Top Green Providers
Food Logistics recognized our lift truck brands (Hyster and Yale) in the 2013 Top Green Providers. Those considered for the Top Green Providers have displayed products, services or exemplary leadership at enhancing sustainability in the food and beverage supply chain.
Intelligent Product Design

By offering products that can improve productivity, we can help customers reduce fleet sizes while still moving the same amount of product.

Zero Emission Electric Powered Lift Trucks

We are one of the largest volume producers of zero emission electric lift trucks in the North American market. The company is among the earliest adopters of energy-efficient AC motor and control technology in our range of counterbalanced lift trucks.

Environmentally Friendly Internal Combustion Engine (ICE) Powered Lift Trucks

We engineer our ICE products for extended service intervals in order to reduce engine oil, transmission and hydraulic oil and engine coolant change requirements for our customers. All of our ICE equipped models shipped in the U.S. and Canada meet or exceed California Air Resources Board (CARB) requirements. According to testing by the Environmental Protection Agency (EPA) and the CARB, the emissions generated by our lift trucks are among the lowest in the industry.

Continuously challenging ourselves to design trucks with greater fuel efficiency, reduced oil dependency and lower operational cost is one of our key focuses. Our diesel lift trucks are becoming cleaner all the time. In fact, ongoing development with our diesel engine suppliers to meet Tier 4 Final standards has led to a phasing process of Tier 4 Final engines into production beginning in 2012, with expected completion in 2015 for all models.

Smart and Efficient Innovations

We developed and introduced a patented electronically controlled transmission which significantly reduces tire and brake wear for our ICE lift truck customers, decreasing total tire usage by up to 50%. For our electric trucks, we have introduced a system which recaptures energy during braking and the lowering of loads. This energy is then reused, lowering the overall energy consumption of the truck. Through innovative engineering, we reduce non-productive energy use throughout the vehicle by means of weight reduction, drive train efficiency and hydraulic system efficiency.

Recyclability is also a prime consideration in our lift truck design—starting with the design stage, we actively select materials used in our lift trucks with recyclability in mind.

Alternative Power Initiatives

Over the years, we have consistently engineered our lift trucks to be compatible with the latest in alternative power technologies including electric batteries, LP, CNG and clean diesels. This tradition is being upheld most recently with fuel cells, as we were among the first to use working fuel cells in actual applications. We have deployed more than 300 trucks powered by hydrogen fuel cells.

As a company, we support the adoption of greener technologies through engineering collaboration, analysis and extensive internal and field validation testing. We are always looking toward advanced, more efficient battery chemistries and technologies to aid in the reduction of energy consumption and carbon impact, which will increase productivity and reduce toxic material content. Our commitment to these initiatives is reinforced through our participation in developing industry standards to adopt these greener technologies safely and reliably.

Fleet Management Expertise

We are a leader in fleet management with over 50,000 trucks under our corporate program. Fleet management helps to decrease customer costs while simultaneously reducing energy usage and emissions. Through lift truck utilization reports and fleet optimization activities, we enable accurate cost tracking and cost performance management for our customers.
Fleet optimization includes right-sizing the fleet where necessary and retiring of older, more costly assets that have outlived their useful economic life. These assets typically consume the most resources and have less efficient emission management capabilities. Periodic maintenance is properly timed to ensure that unnecessary technician travel is minimized and equipment is maintained for peak performance. These activities translate into reduced emissions and conservation of energy.

Scalable wireless asset management systems available through our company take fleet management to the next level. By offering a variety of wireless monitoring, wireless access and wireless verification features, our wireless asset management systems allow users to proactively optimize fleets of equipment, increase visibility and capability to help reduce costs of operations, provide better operator management and real-time reporting—all activities that can result in improved operator performance, a reduction in the customer’s carbon footprint and lower overall material handling costs.

Green Facts

- We are one of the largest volume producers of zero emission fully electric lift trucks in the North American market.
- We offer lift trucks which operate on cleaner burning alternative fuels such as LP, CNG and clean diesel, as well as hydrogen fuel cells.
- Did you know that it is estimated that over 1.5 million tires are consumed on lift trucks in North America every year? We are helping to decrease this number by offering our Techtronix and DuraMatch transmissions which provide a Controlled Power Reversal feature for minimizing drive tire spin during direction changes, increasing tire life span.

Responsibility Demonstrated Through Practice: Corporate Sustainability Initiatives

Safety Performance
We continue to put top priority and focus on the safety of our employees in all operations. As a company, we foster a work environment where employees are deeply involved in developing and maintaining safe processes and equipment in all aspects of their work.

Americas Energy Committee
In 2008, the company chartered the Americas Energy Committee. The objective of this committee is to continually reduce energy consumption and carbon footprints by identifying and standardizing best practices both internally and externally. Each year the committee sets aggressive targets and shares best practices for energy usage efficiency, reduction in carbon and volatile organic compound air emissions and waste minimization with zero landfill operations. Targets are based on each site’s prior years’ experience and adjusted for increased and decreased production levels.

Global Carbon Footprint
In 2008, we also conducted our first-ever global carbon footprint calculation. Data was collected from worldwide operations and calculations were performed. Included in the calculations were sources from scopes 1 (direct combustion) and 2 (upstream combustion associated with electricity consumption). We further analyzed our carbon footprint by both energy source and global region. The Americas Energy Committee continues to take the lead in setting energy reduction targets and sharing best practices to make significant reductions in our global carbon footprint.
Supplier Sustainability Survey
To begin the process of engaging our supply chain partners in our sustainability efforts, we conducted our first supplier sustainability survey in 2008. Moving forward, we have continued working with our suppliers to educate them about how to reduce material waste, lower energy consumption and lower emissions.

Energy Consumption Management
At all our locations, we closely monitor our electrical and natural gas usage and any resulting carbon emissions. By employing efficient energy management practices, we have decreased pollution and greenhouse gases, helping to make our operations more cost competitive while also reducing our carbon footprint. To date, the Americas Energy Committee has implemented various strategies to decrease energy consumption including:

- Use of low energy lighting (resulting in a decrease of over 100,000 kilowatt hours per month)
- Replacement of High Intensity Discharge (HID) lamps with high efficiency fluorescent bulb technologies
- Use of LEDs for emergency lighting
- Installation of motion generated light detectors
- Employment of energy management systems to regulate heating and cooling temperatures within the buildings based on occupancy levels
- Monitoring for compressed air leaks with ultrasonic detectors
- Utilization of high-efficiency motors with cog belts to reduce electrical demand
- Substitution of surface preparation chemicals to reduce wash tank temperatures
- Improved paint curing oven insulation

Energy-Efficient IT Management
Our corporate data center utilizes an energy-efficient climate control system. The high efficiency, 3-stage split HVAC system reduces our energy consumption by around 50% and eliminates potential downtime. In addition, our computer rooms have very tight temperature controls to avoid wasted energy. On a corporate wide basis we have moved from cathode ray tube (CRT) to liquid-crystal display (LCD) monitors, helping reduce energy consumption by 40-45% and increasing the useful life around 25% on our approximately 2,500 displays.

Renewable Energy
Our Berea, Ky., plant utilizes a passive solar hot water system to produce hot water for the facility.

Energy-Conscious Fleet Management
A key purchase criterion for our corporate automotive fleet is fuel efficiency. We strive to utilize vehicles that are not only efficient, but also responsible.

Trip Reduction
Many of our manufacturing facilities operate on a modified work week schedule to reduce the impact of employee commuting. At our urban locations, carpooling is coordinated to further reduce emissions based on total trip miles.

Air-Quality Enhancements
We have made great strides in the area of painting/coating. Over a decade ago, we began using low Volatile Organic Compound (VOC) paints. Recently we have gone a step further and introduced powder coating operations, which further reduces VOCs and waste.
Recycling
All of our sites have focused programs resulting in recycling between 85% - 90% of cardboard, paper, wood, metal/ steel and plastic resources. By increasing the use of returnable racking, we have further decreased the amount of cardboard and wood waste generated from component packaging. We also employ programs for recycling lift truck batteries, tires and oil, both for our own operations, and for our customers through our distribution networks. In addition, our IT department proudly follows a 100% recycling program for all computer equipment.

Hazardous and Solid Waste Reduction
The amount of hazardous waste generated from our painting operations has been reduced through a process of solvent distillation and reuse, and by better transfer efficiency. We work with waste facilities to process a greater percentage of our ignitable paint wastes through solvent recovery rather than cement kiln fuels blending to recover resources. Our landfill goal is to achieve zero industrial landfill wastes through utilization of returnable or recyclable containers from our suppliers. Furthermore, we have various quality initiatives focused on reducing waste in our production processes. In our Ramos Arizpe, Mexico facility, we converted 100% of our pallets from wood to reusable steel pallets.

Ecological/Societal Effects
An ecological impact assessment of our sites has been performed to proactively minimize any potential impact on their surroundings. In our Greenville, N.C., facility, we eliminated outdoor, unprotected storage of oil-containing equipment to ensure protection of the environment from contamination. We use only heat-treated wood in shipping our international products to prevent transmission of pests.

Multiple NMHG sites employ storm-water retention ponds to control run-off utilizing pollution-filtering vegetation. These ponds offer havens for waterfowl and habitat for the local fauna. We utilize biodegradable chemicals and waste water treatment processes to exceed discharge permit requirements. We also have multiple initiatives for water conservation, including reduction of landscape watering.

About Yale Materials Handling Corporation
Yale Materials Handling Corporation markets a full line of materials handling lift truck products and services, including electric, gas, LP-gas and diesel powered lift trucks; narrow aisle, very narrow aisle and motorized hand trucks. Yale has a comprehensive service offering including Yale Vision wireless asset management, fleet management, Yale service, parts, financing and training. Yale® trucks are manufactured in an ISO 9001:2008 registered facility and range in capacity from 2,000 to 36,000 lbs. For more information, or to find the Yale® lift truck dealer nearest you, call 1-800-233-YALE or visit www.yale.com.

Yale Materials Handling Corporation is part of NACCO Materials Handling Group (NMHG), a wholly owned subsidiary of Hyster-Yale Materials Handling, Inc. (NYSE:HY). Hyster-Yale Materials Handling, Inc. and its subsidiaries, headquartered in Cleveland, Ohio, employ approximately 5,200 people worldwide.