

# Building Cleaner, Healthier Communities Around the World



INTRO

| INTRO  |    | GOVERNANCE   |      |  |  |  |  |  |
|--|----|--|------|--|--|--|--|--|
| Letter from the chairman   | 2  | Good governance foundation for success                       | 64   |  |  |  |  |  |
| A worldwide company  | 4  | Cummins Board of Directors                                   | 68   |  |  |  |  |  |
| Who we are   | 6  | Sustainability means managing risks                          | 71   |  |  |  |  |  |
| How we do it   | 7  | Joplin branch learns life can change in an instant           | 75   |  |  |  |  |  |
| Our history  | 8  | CORPORATE RESPONSIBILITY                                     |      |  |  |  |  |  |
| Vision, Mission, Values and Principles                                   | 10 | A growing commitment to community involvement                | t 76 |  |  |  |  |  |
| Recognition  | 12 | Building stronger communities in Brazil                      | 80   |  |  |  |  |  |
| COVER STORY  |    | There's something fishy going on here                        | 82   |  |  |  |  |  |
| Remanufactured is the new 'new'  | 14 | Cummins empowering remote populations                        | 84   |  |  |  |  |  |
| ENVIRONMENT  |    | 2 <sup>nd</sup> Environmental Challenge yields great results |      |  |  |  |  |  |
|  | 20 | New stoves help improve villages' quality of life            |      |  |  |  |  |  |
| Honoring our commitment to every stakeholder                             | 20 | Philanthropy: A track record of commitment                   | 93   |  |  |  |  |  |
| Cummins China poised to play key role in country's environmental efforts | 24 | Cummins' investment in corporate responsibility              | 95   |  |  |  |  |  |
| Environmental Stewardship // Products                                    | 28 | EMPLOYEE RELATIONS   |      |  |  |  |  |  |
| SCR reducing emissions   |    | Safety   |      |  |  |  |  |  |
| and improving fuel efficiency  | 35 | Safety in the workplace is a job never done                  | 98   |  |  |  |  |  |
| Generator to help Army   |    | Safety teams help communities, too                           | 101  |  |  |  |  |  |
| go green anywhere  | 37 | Team in Australia develops new tool                          |      |  |  |  |  |  |
| These engines turn heads, too  | 38 | to enhance safety  | 103  |  |  |  |  |  |
| Environmental Stewardship // Practices                                   | 40 | Diversity  |      |  |  |  |  |  |
| Green buildings growing at Cummins                                       | 48 | Leveraging differences to fuel innovation                    | 104  |  |  |  |  |  |
| Sometimes 'treasure' is under our nose                                   | 51 | Groups join forces to extend hand to vets                    | 106  |  |  |  |  |  |
| Environmental Stewardship // Partnerships                                | 52 | Challenging project provides lessons in diversity            | 108  |  |  |  |  |  |
| Cummins helps customer cash in   | 58 | Goal rising for supplier diversity                           | 110  |  |  |  |  |  |
| on fuel efficiency   |    | Workforce  |      |  |  |  |  |  |
| COB water treatment system – the rest of the story                       |    | Creating a sustainable workforce                             |      |  |  |  |  |  |
| He really hates throwing things away                                     | 60 | FINANCIAL  |      |  |  |  |  |  |
| Q&A with John Wall   |    | From uncertainty to growth:                                  | 440  |  |  |  |  |  |
|  |    | Cummins finishes 2010 in record fashion                      | 116  |  |  |  |  |  |
|  |    | This is Africa's time for Cummins                            | 120  |  |  |  |  |  |
|  |    | Cummins works to make supply chains sustainable              | 122  |  |  |  |  |  |
|  |    | Solso: A leader driven by sustainability                     | 123  |  |  |  |  |  |

## Letter from the chairman



#### **Cummins Stakeholder:**

The past year has been extremely rewarding at Cummins. The Company enjoyed the most profitable year in its 92-year history in 2010 despite a U.S. economy that is only now recovering from the global recession. The good news continued for Cummins during the first quarter of 2011 and we expect both sales and profits to be at record levels this year.

These results reflect the hard work of many employees who at the height of the recession helped the Company align our manufacturing capacity with demand, control costs and improve efficiency while continuing to provide the kind of worldclass service our customers expect.

But as proud as I am of these outstanding financial results, I'm equally pleased that Cummins emerged from the recession with an even stronger commitment to our core values. We worked to create a cleaner and healthier environment, build stronger communities and to create the right work environment where the diversity of our employees fuels the innovation our customers count on.

Last year's Sustainability Report highlighted the community involvement work undertaken by our employees across the world, building on the stakeholder model developed by our longtime Chairman and CEO J. Irwin Miller. Mr. Miller believed passionately that building successful communities ultimately results in stronger markets for our products and is essential to attracting and retaining the best employees.

This year's report focuses on the way Cummins is meeting its mission that "everything we do leads to a cleaner, healthier, safer environment." We believe our technological advantage enables us to build the cleanest, most efficient diesel engines and power generation systems in the world. Our environmental efforts don't stop there, though.

Our ReCon Parts and Engines business, the subject of this report's cover story, is keeping tons of material out of landfills around the world while providing our customers with a clean, low-cost option to meet their transportation needs.

Another story looks at how Cummins China is taking a leadership role in helping that country address its environmental and energy challenges. Of course, it all starts with employees like Environmental Engineer Mark Slaton, who is profiled in this report. Mark's passion for keeping material out of landfills is well known around the Columbus Engine Plant.

You'll still find plenty here about our community involvement activities. In the past year, Cummins has established fulltime Corporate Responsibility leaders in each business unit as well as in Brazil, China, India and Mexico. Our employees are helping to bring power to remote towns and villages in India and elsewhere, clean one of China's largest freshwater lakes and improve the neighborhoods surrounding the Company's campus outside São Paulo, Brazil.

At Cummins, we believe sustainability is also about establishing a workforce and workplace that will thrive amid the complexities of global marketplace for years to come. It's about developing the next generation of leaders to guide that workforce. And it is about providing our

employees with safe places to work, allowing them to fully contribute to the success of the Company. You will find stories on these topics as well.

Finally, in the report's financial section, you'll find a recap of our 2010 performance. You also can read about our plans to increase our presence in Africa and the ways we're weaving corporate and environmental responsibility into our business strategy.

As I announced in July, I will be retiring at the end of 2011 after 40 years with Cummins. Tom Linebarger will lead the Company starting Jan. 1, 2012. He is a remarkable individual who lives by the values that have guided Cummins for more than 90 years. I know he'll do a great job. My faith in our new leadership and Cummins' current position make me more optimistic than ever about the Company's future.

I hope you enjoy learning about Cummins' sustainability efforts. To find out more, please visit www.cummins.com/sustainability.



**Tim Solso** 

Chairman and Chief Executive Officer Cummins Inc.

## A worldwide company

Cummins is a global power leader. Here's a look at our international footprint.

## **NORTH AMERICA**

INTRO

Cummins was established in Columbus, Ind. in 1919. Today, it is home to the Company's Corporate Headquarters as well a number of business unit operations and the Cummins Technical Center. More than 6,000 Cummins employees work in the Columbus area.

## UNITED KINGDOM

Cummins acquired its first overseas manufacturing facility in 1956 in Shotts, Scotland. Today, the Company has seven plants in the United Kingdom including facilities in Darlington, Daventry, Huddersfield, Kent and Stamford in England and Cumbernauld, Scotland.

## **INTERNATIONAL**

More Cummins employees work outside the United States than inside.

## **MEXICO**

Cummins has had a wholly-owned manufacturing presence in San Luis Potosí, Mexico since the early 1980s and employs approximately 2,000 people in the city. The

company's presence in the country, however, goes back to the 1960s.

## **BRAZIL**

Cummins Brazil was established in 1971 and today is home to divisions of the Engine Business, the Distribution Business, Emission Solutions, Turbo Technologies, Filtration and Power Generation. About 2,000 employees work for Cummins Brazil. Sales in Brazil grew by about 70 percent from 2009 to 2010.



This map includes Cummins plants, offices and distributors.

## Who we are

## CORPORATE **HEADQUARTERS**

500 Jackson Street Columbus, Ind., 47201



## **SALES / EARNINGS**

In 2010, Cummins earned

\$1.0 billion on sales of

\$13.2 billion.

## **STOCK SYMBOL**

(traded on New York Stock Exchange)

**FORTUNE 500 RANKING** (2011)

**186** 

**FOUNDED** 

1919

## **WEB SITE**

www.cummins.com

## **PRODUCTS**

Cummins consists of complementary business units that **design**, manufacture, distribute and **service** diesel and natural gas engines and related technologies including electrical power generation systems.



## **EMPLOYEES**

Worldwide, approximately

40,000 people.

About 60 percent of the Company's employees are located outside the U.S.

## **CUSTOMERS**

The Company's customers are located in approximately

## 190 countries

and territories that Cummins reaches through a network of more than 600 companyowned and independent distributor locations and approximately 6,000 dealer locations.

## How we do it

## Cummins is organized into four business units:

#### **CUMMINS ENGINE BUSINESS //**

The Engine Business manufactures and markets a complete line of diesel and natural gas-powered engines for on-highway and off-highway use. Markets include heavyand medium-duty trucks, buses, light-duty trucks and industrial uses such as agricultural, construction, mining, marine, oil and gas and military equipment.



### **CUMMINS POWER GENERATION BUSINESS //**

Power Gen is a global provider of power generation systems, components and services in standby power, distributed power generation, as well as auxiliary power in mobile applications. It also provides a full range of services including long-term operation and maintenance contracts and turnkey and temporary power solutions.



## THE COMPONENTS BUSINESS // Consists of four related businesses:

**Cummins Emission Solutions** develops and supplies catalytic exhaust systems and related products to the medium- and heavy-duty commercial diesel engine markets.

Cummins Filtration designs and manufactures heavy-duty air, fuel, hydraulic and lube filtration, chemicals and exhaust system technology products.

Cummins Fuel Systems designs, develops and manufactures new fuel systems and remanufactures Electronic Control Modules.

**Cummins Turbo Technologies** designs and manufactures turbochargers to boost power, and related products for diesel engines.







### **CUMMINS DISTRIBUTION BUSINESS //**

Seventeen Company-owned distributors and 10 joint ventures work through 233 locations worldwide - selling and distributing Cummins-branded products and services.



## Our history



Cummins' commitment to quality products, principled leadership and community involvement can be traced back to the men who founded the Company and waited patiently for it to make a profit.

Three played an especially key role.

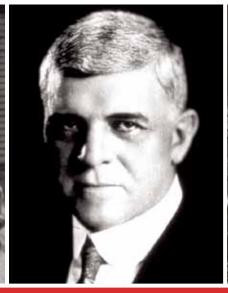
## **CLESSIE CUMMINS**

Clessie Cummins (1888-1968) was the driver and mechanic for W.G. Irwin, a Columbus, Ind. businessman. Cummins opened a repair shop in 1913 in addition to his other duties for Irwin.

His business would become a machine shop, performing work for the military during World War I, and eventually the Cummins Engine Company in 1919 after the war ended.

A prolific inventor and entrepreneur, Cummins became especially interested in diesel engines and promoted the technology in barnstorming trips around the United States.







## W.G. IRWIN

W.G. Irwin (1866-1943) pursued profits with a sense of community mission.

The businessman backed the creation of the Cummins Engine Company. But the business got off to a rocky start and there was talk of shutting it down.

Irwin's family, however, persuaded him to keep the business open to provide jobs to the young men of Columbus. Nineteen years after the Company was founded, Cummins turned its first profit.

## J. IRWIN MILLER

Miller (1909-2004) was the grand-nephew of W.G. Irwin. Educated at Yale and Oxford, he joined the Company in 1934 and would spend more than a decade learning about the business before being elected president in 1947 and ultimately chairman and CEO.

Miller had a global vision. Cummins entered India and China long before most other American companies. He also helped organize Dr. Martin Luther King Jr.'s 1963 March on Washington while serving as leader of the National Council of Churches.

"As a world Company, this is one family," Miller said of Cummins in 1969. "And as such, we know no national boundaries. We know no racial boundaries. And a person can rise in this Company from any part of the world on his own merits."

Clessie Cummins used diesel engines in racing cars to demonstrate diesel's power and reliability. He's standing (far left) beside the cockpit of the 1931 Dusenberg Cummins Diesel Special, which finished 13th at the Indianapolis 500. Cummins' benefactor was W.G. Irwin, middle, a Columbus businessman who enioved backing entrepreneurs. Cummins became an international Company under the leadership of J. Irwin Miller (right).

## Vision, Mission, Values and Principles

### **VISION**

Making people's lives better by unleashing the power of Cummins.

## **MISSION**

We unleash the Power of Cummins by:

- » Motivating people to act like owners, working together.
- » Exceeding customer expectations by always being the first to market with the best products.
- » Partnering with our customers to make sure they succeed.
- » Demanding that everything we do leads to a cleaner, healthier, safer environment.
- » Creating wealth for all stakeholders.

## **PERSONALITY**

Decisive. Driven to win. Agile. Passionate. Caring.

## STRATEGIC PRINCIPLES

## **Leverage Complementary Businesses**

Cummins is a family of complementary businesses that create value for our customers by leveraging relationships and applying innovative technology across business boundaries.

#### Increase Shareholder Value

Cummins' financial success is measured by growth in shareholder value. We will focus on ROE / ROANA and Earnings Growth (not Revenue Growth) as the principal drivers of shareholder value.

## **Become the Low Cost Producer**

Cummins will pursue an operational strategy of cost leadership.

## **Lead in Critical Technologies**

Cummins will be the market leader in technologies most critical to our customers' success and our Company's performance.

## **Seek Profitable Growth**

Cummins will seek profitable growth by leveraging our assets and capabilities to grow in market segments with favorable industry dynamics and where Cummins can establish an advantage.

## **Create the Right Work Environment**

Cummins will assure that the physical and cultural work environment is conducive to excellent performance and continuous improvement.

## **VALUES**

## Integrity

Strive to do what is right and what we say we will do.

#### **Innovation**

Apply the creative ingenuity necessary to make us better, faster, first.

## **Deliver Superior Results**

Exceed expectations consistently.

## **Corporate Responsibility**

Serve and improve the communities in which we live.

## **Diversity**

Embrace the diverse perspectives of all people and honor both with dignity and respect.

## **Global Involvement**

Seek a world view and act without boundaries.

## **Cummins Operating System**

The Cummins Operating System helps develop common practices and approaches to improve customer satisfaction.

Here's a quick look at the 10 practices:

- 1 Put the customer first and provide real value.
- 2 Synchronize flows (material, physical and information).
- 3 Design quality in every step of the process.
- 4 Involve people and promote team work.
- 5 Ensure equipment and tools are available and capable.
- 6 Create functional excellence.
- **7** Establish the right environment.
- 8 Treat preferred suppliers as partners.
- 9 Follow common problemsolving techniques.
- 10 Use Six Sigma as the primary process improvement method.

#### SIX SIGMA AT CUMMINS

Six Sigma is a business improvement tool that uses data-based analysis to identify defects and variation in a wide range of manufacturing and business processes. It has created a common language for Cummins employees to solve problems and develop new products and processes.

Here's a quick look at what Six Sigma has meant to Cummins:

- » More than 11,000 people have been trained in how to use Six Sigma tools at Cummins since the process was initiated in 2000.
- » More than \$3.4 billion has been saved by Six Sigma projects.
- » More than \$780 million has been saved by Cummins customers using Six Sigma techniques.
- » The Company also uses Community Impact Six Sigma to help community and non-profit groups use the business improvement tool to upgrade their operations and address critical issues. In 2010, 34 Community Impact Six Sigma projects were completed, up from 11 projects in 2009.

## Recognition

Here's a look at some of the awards Cummins has won in the past year:

#### **Environmental**



In 2011, Cummins was again named to the FTSE4Good index. The FTSE Group selects companies for the index based on their environmental records,

whether they develop positive relationships with their stakeholders and whether they support universal human rights. The index is designed to help investors and researchers, as well as serve as a reference for benchmarking purposes.



Cummins was named to the **Dow Jones Sustainability Index** for the sixth consecutive year in 2010. The index represents the top 10 percent of the world's

largest companies rated by Dow Jones across a range of environmental, economic and corporate responsibility measures.



Cummins finished in the top third of the companies reviewed as part of Newsweek's environmental rankings of the 500 largest **U.S.** companies in 2010.

The magazine partnered with three environmental research organizations

to review the environmental footprints of the companies along with their policies and reputations.

Cummins won WorkBoat's

## **Environmental Management Plan**

award at the International WorkBoat Show in 2010. WorkBoat recognizes businesses and government agencies operating in the U.S. maritime industry that have successfully included environmentally sustainable practices into their operations.

In 2010, Cummins China was awarded the Green Technology Medal by China's leading business publication, the China Business News. The publication's Green Enterprises Appraisal recognized Cummins for its industry leading emissions technology research and development.

Cummins India was a first-prize winner in the 2010-2011 Confederation of **Indian Industries Eastern Region for** Safety, Health and the Environment.

The non-governmental organization plays a leadership role on development issues in India. Cummins also received a National Energy Award in 2010 for its sustainable energy practices by the West Region of the Confederation.

Cummins MidRange Engine Plant in Walesboro, Ind. was one of five Indiana companies to receive the

## 2010 Governor's Award for **Environmental Excellence**

for identifying and implementing innovative environmental practices.

## Governance, ethics and corporate responsibility

In 2011, Cummins once again was named one of the World's Most Ethical **Companies** by the Ethisphere Institute. The institute evaluates companies' commitment to ethical leadership, compliance practices and corporate responsibility. It was the fifth straight year that Ethisphere selected Cummins as one of the world's most ethical companies.



Cummins was named by Corporate Responsibility magazine in 2011 as one of the world's 100 Best

Corporate Citizens. It was the 11th time in 12 years the Company has been named to that list. Overall, the Company finished 48<sup>th</sup> on the magazine's list.

Cummins India in 2011 won the **BG Deshmukh Award** for corporate social responsibility presented by the Mahratta Chamber of Commerce, Industries and Agriculture for its work to help remote villages gain access to power.

## Workplace, diversity, people



DiversityInc named Cummins to its list of the **Top 50** Companies for **Diversity** for a fifth consecutive year in 2011. The Company

finished 18th on the magazine's 2011 list up from 26<sup>th</sup> in 2010.



The Company received a perfect rating for a sixth consecutive year from the **Human Rights Campaign**, the largest advocacy group for gay, lesbian, bisexual and transgender employees. The group rated more than 800 employers as part of its 2011 Corporate Equality Index, which reviews companies on their LGBT policies, practices and more.

Cummins was recognized as one of the **Top Companies for Diverse Managers** and Women by Diversity MBA Magazine in 2011. Cummins ranked 43rd on the magazine and Web site list.

Cummins was one of 18 companies named **Bravo Award** winners in 2010 by the U.S. Hispanic Advocacy Association. The second biannual Bravo Awards recognize companies that despite hardships remained committed to best practices in the workplace and supplier diversity.

For the fourth year in a row, Cummins was named in 2011 one of the **Best Employers** for Healthy Lifestyles by the National Business Group on Health. The Company was recognized at the gold level for the third time. The awards annually recognize employers who work to improve their employees' health, productivity and quality of life.

## **COVER STORY**

## Remanufactured is the new 'new'

Remanufacturing benefits the environment, performance and the bottom line



Building Cleaner, Healthier Communities Around the World



2010 - 2011 Cummins Sustainability Report

Everyone wants to talk about sustainability these days. More than 40 years ago, long before the term became fashionable, Cummins was already working to extend the life of its products.

The first and oldest "green business" and the ultimate form of the "three Rs" - reduce, reuse and recycle - remanufacturing returns Cummins' engines and parts to productive use so they stay out of landfills longer. In addition, the practice saves energy that would otherwise be used to manufacture new products.

In 2010, some 50 million pounds of Cummins product were reclaimed to be put back on the road thanks to remanufacturing.

The Company has become increasingly sophisticated in what it can remanufacture, and for how long it can extend a product's life, through the common application of salvage technology, component re-use guidelines and remanufacturing-specific policies and procedures.

In fact, remanufactured products today are in many cases "up-cycled" to include design and quality upgrades.

Cummins remanufacturing business, or ReCon as it's called, is part of the New and ReCon Parts function of the Company's Engine Business.

ReCon is today a worldwide business and industry leader. In the past several years, Cummins has opened remanufacturing operations in India and China brimming with new technology, adding to ReCon's existing strong roots in the Americas.

"Remanufacturing is a perfect opportunity to be good stewards of our environment and at the same time, give our customers much better value," said Norbert Nusterer, Cummins Vice President - Parts Business and the leader of New and ReCon Parts. "All over the world, end users are asking for our remanufactured products as they recognize their economic, environmental, and performance benefits compared to a completely new replacement part or engine."



In addition to offering customers an environmentally sensitive, low-cost alternative, ReCon contributes to Cummins' financial sustainability by providing a buffer against downturns in the economy: When economic times are tough, demand for remanufactured parts and engines typically increase.

## THE CASE FOR REMANUFACTURING

There are many benefits to remanufacturing: environmental, product and process quality, and cost.

Remanufacturing requires about 85 percent less energy than manufacturing the same product with new parts. Take an engine, for example. If the block can be reused, the energy consumed in the ore mining, ore processing, transportation, casting and machining to make a new one is eliminated.

The same principle applies to all the other components that Cummins remanufactures. Since most of the energy used at Cummins and in the Company's supply chain is fossilfuel based, the energy savings equate to greenhouse gas (GHG) reductions.

In addition to the energy and GHG savings, remanufacturing reduces landfill waste and saves water used in the casting process.

"The use of remanufactured products almost always makes sense, as they offer performance and reliability the same as new at a more attractive price," said Shawn Zwicker, ReCon New Business Development Leader.

Remanufactured engines and components can offer substantial cost advantages over their new counterparts. The use of remanufactured components can also costeffectively extend the life of an entire piece of equipment, whose vehicle and chassis

facility in Phaltan, India is equipped with the latest technology which enables the Company to keep parts and engines on the road longer and, in some cases, improve them with innovations developed since they were first built.

Cummins' new remanufacturing



## **CUMMINS** REMANUFACTURING **PORTFOLIO**

- » Engines and long blocks (3.3 to 19 liter) including internal components
- » Turbochargers
- » Cylinder heads
- » Injectors
- » EGR valves
- » Connecting rods
- » Air compressors / accessory drives
- » Diesel particulate filters, diesel oxidation catalysts
- » Water pumps / lube pumps
- » Fuel injection pumps
- » Electronic Control Modules (ECMs)
- » Urea dosers

can be updated to match the extended life of the engine.

Not only can remanufactured components extend useful life, they can also improve power and durability because product improvements that have occurred since the components initial manufacture are included in the remanufacturing process. And they come backed by warranties, parts availability and service.

## **CHANGING WITH THE TIMES**

Remanufacturing technology is changing as engines change. Rising fuel costs are affecting the way the Company thinks about the design and overall operation of today's high-tech diesel engines. Engines need to be lighter and more compact. Components need to be lighter, smaller and more energy-efficient.

Today's remanufacturing business is adapting to these trends as well as to technological advances through a variety of reclamation techniques, both time-tested and the latest advanced methods. All new salvage processes adhere to the same internal processes and standards as new product introductions.

The Company's more traditional salvage techniques are often processes to reverse the wear and tear that comes with time and use: repairing crankshaft seals, remachining housings or fusion welding.

Advanced reclamation techniques, however, enable employees to recover and reuse failed computer chips from Electronic Control Modules, graft ventilated cylinder

blocks and heads to enable recasting and re-machine turbine wheels to meet specifications.

Specialized laboratories – with complete access to all of Cummins 26 global technical centers – offer state-of-the-art tools in metallurgy and fluid chemistry, as well as scanning electron microscopes and particle counters.

In short, Cummins' remanufacturing customers benefit from 40 years of experience and the most up-to-date techniques and technological advances.

## **DESIGN FOR REMANUFACTURING**

The Company maximizes the benefits of remanufacturing for customers and the environment by planning and designing Cummins products to have many useful lives.

A typical Cummins engine has several hundred parts but 80 percent of the material cost is contained in just 40 of them. The Company's design process for new engines takes into account remanufacturing the engine later, identifying up front feature-specific characteristics that will contribute to cost-effective remanufacturing later.

Cummins' new Megasite in Phaltan, India was inaugurated in January 2011. The 300-acre site will be home to 10 Cummins facilities by 2014. The site currently has three plants operating with another coming on line in 2011. The ReCon plant is the second building on the right in this picture, taken from a hill overlooking the site.



## **ABOUT THE RECON BUSINESS**

- » 2010 Sales \$750 million
- » Employees 2,685
- » Percent of an engine that can be remanufactured 85 percent
- » GHGs avoided per year 200 million pounds
- » Pounds of material reclaimed 50 million
- » Number of part numbers offered 1,000 components and 2,000 engines



A robotic arm sprays metal onto a worn surface to facilitate remanufacturing.



Remanufacturing is considered in the design phase of new products, technology development and material sourcing to achieve a final product plan.

A current trend in the remanufacturing industry is to move from a "remove metal" philosophy to a "deposit metal" as the design for remanufacturing becomes more sophisticated. The advanced techniques of metal deposition, or adding metal to a worn or damaged surface, is expanding the potential for remanufacturing.

## **LOOKING AHEAD**

Now that engines are being designed with remanufacturing in mind, customers are getting a product with even greater value and useful life.

Components that were once not salvageable may be remanufactured and done so many more times than was once thought possible.

Cummins is considered a pioneer in the remanufacturing business, and the Company intends to maintain its leadership position. Our goal is to expand our expertise to all Cummins business units and JV partners to benefit our customers, our Company and the environment.

## Remanufacturing process



### DISASSEMBLY

- » Core received as intact assemblies are disassembled to component level.
- » Unsalvageable parts are scrapped and salvageable components are routed to cleaning.





### **CLEANING**

- » Maximum cleaning with minimum abrasiveness.
- » Liquid-aqueous chemical baths, high pressure wash, ultrasonic and molten salt.

## INSPECTION

- » Methods include visual, optical comparator, dimensional, Magnaflux, liquid penetrant, electrical properties, leak and other functional tests.
- » Disposition is based on reuse standards: accept as is, salvageable, future salvage and scrap.





## SALVAGE

- » ReCon salvage technology provides highest quality at lowest cost.
- » Salvage processes follow new product / process introduction procedures based on Cummins and International Standards (VPI-APQP).

## **ASSEMBLY AND TEST**

- » New material supplements core.
- » Some parts are 100 percent new (gaskets, seals).



INTRO

## ENVIRONMENT

## Honoring our commitment to every stakeholder

A decade ago, Cummins set out to clearly define and articulate its vision, mission and core values so that they might guide the Company in its journey toward sustained excellence in all it does.

## **HIGHLIGHTS**

- » Cummins exceeds greenhouse gas reduction goal in 2010
- » Key environmental performance indicators see significant cumulative improvement
- » Company continues support for greenhouse gas and fuel efficiency standards for heavy-duty and medium-duty vehicles

The mission statement demanding that "everything we do leads to a cleaner, healthier environment" has served as a guidepost for Cummins' environmental efforts ever since, directing the Company's actions in our products, facilities and in our relations with all our stakeholders.

It means Cummins is unwavering in the Company's commitment to produce the cleanest and most fuel efficient products in the world and to reduce the Company's environmental footprint while sharing our knowledge with other stakeholders.

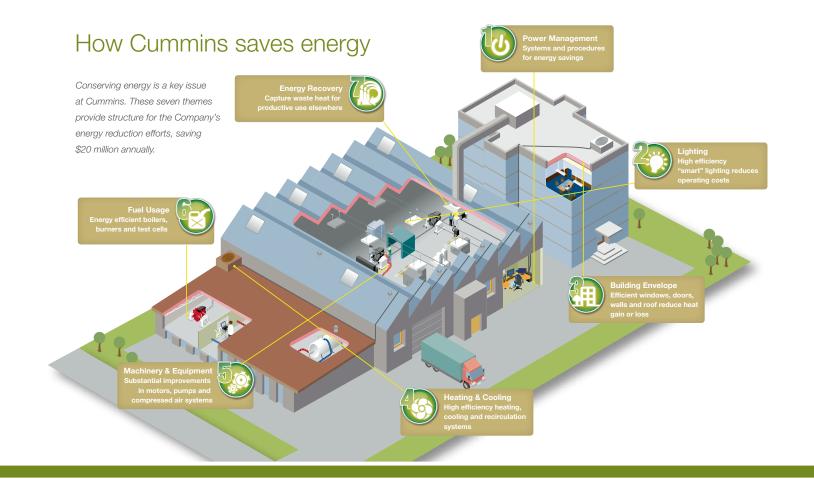
In the past year, Cummins achieved several important milestones in honoring that commitment, including:

» Cummins' portfolio of on-highway engines continued to meet customer demands for better fuel economy, performance and reliability. Cummins produced 90,000 EPA-certified engines with Selective Catalytic Reduction (SCR) aftertreatment for North American markets through March 2011 (page 35).

- » A 28 percent reduction in greenhouse gases since 2005, exceeding the 25 percent goal set as part of the Company's participation in the U.S. Environmental Protection Agency's (EPA) Climate Leaders Program (page 40).
- » A 281 million gallon reduction in water consumption at Cummins facilities since 2008.

## GREATER FUEL ECONOMY. **REDUCED EMISSIONS**

Cummins Chief Technical Officer John Wall has said that "climate change is the single most important issue that will define the Company over the next 20 years." Going forward, more of Cummins' annual investment in research and development will be focused on improving the efficiency of the Company's engines and reducing the greenhouse gases (GHGs), specifically carbon dioxide (CO<sub>2</sub>), that can trap heat in the atmosphere and contribute to climate change.



For Cummins, reducing CO<sub>2</sub> is a direct result of improving fuel efficiency, which has been and will continue to be core to our business and technical expertise.

The evidence of our focus on fuel efficiency and greenhouse gases can be seen throughout this report. The Company has introduced portable generators for military use that are 21 percent more fuel efficient than their predecessors (page 37). Cummins' longstanding remanufacturing business is growing (page 14), keeping millions of pounds of material out of landfills, and we are developing more products fueled by clean-burning natural gas (page 38).

Cummins has embraced the emissions standards for heavy-duty and mediumduty vehicles supported by U.S. President Barack Obama as both a competitive advantage for the Company and the right thing to do for the environment.

The proposal by the EPA and the Department of Transportation to regulate GHG and fuel consumption from mediumand heavy-duty commercial vehicles has been four years in the making.

The Company has been active throughout, forming a stakeholder group on the issue with other companies in the industry; writing a regulatory framework white paper; supporting the rule publicly when it was proposed in October 2010 and providing extensive feedback during the comment period.

Cummins believes that clear and consistent greenhouse gas regulation can drive the technological innovation needed to produce more fuel efficient products. In 2010, the Company received \$54 million from the Department of Energy to help develop more efficient heavy-and light-duty vehicles. Cummins is making progress on that mission.

# 'Co-loading' reduces carbon footprint

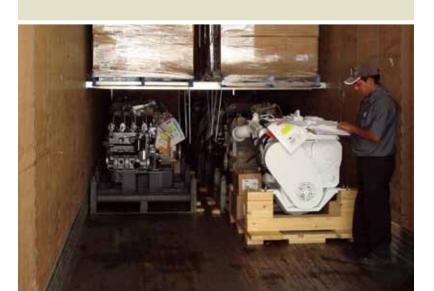
A desire to be more efficient and reduce Cummins' carbon footprint are bringing two of the Company's businesses together in San Luis Potosí, Mexico.

The Company has a remanufacturing and a filtration facility at the campus in Mexico that are now joining forces to ship filters and engines.

Engines are heavy, but take up relatively little space on trucks. Filters, on the other hand, are just the opposite - lightweight but bulkier. The two businesses realized that combining the transportation of the filters and the engines could be much more efficient.

Now the campus does what it calls "co-loading." Engines are loaded at the remanufacturing plant and then the same truck is loaded with filters at the filtration facility a few blocks away. The truck delivers engines to the Memphis Distribution Center in Tennessee and then continues on to deliver the filters to the Kentucky Distribution Center.

The co-loading project has led to annual savings of \$231,735 and 20 weeks saved in shipping time per year. Additionally, the project has led to a 257-gallon reduction in fuel use per trip.



#### A DECADE OF PROGRESS

Adopting a policy is one thing. Bringing a commitment to life across a global organization is quite another.

Cummins has stepped up to that challenge. A decade ago, the Company's environmental management was decentralized with separate business unit and corporate efforts going on with limited coordination and management.

In the last 10 years, Cummins has dramatically recast its environmental management function by forming the Enterprise Environmental Management System (EMS) as well as the Health, Safety and Environmental (HSE) Council, setting objectives and targets in the EMS to drive further reductions in the Company's environmental footprint.

The new structure has created a culture that has evolved beyond compliance to being at the forefront of environmental stewardship.

In just the last three years, Cummins has reduced water use by 22 percent, reduced hazardous waste produced during manufacturing by 36 percent and landfill waste by 11 percent when normalized to employee hours.

By packing shipments more effectively, and coordinating transportation shipments between business units, Cummins not only cut costs but also reduced carbon emissions equivalent to taking 122 passenger cars off the road annually.

#### **LOOKING AHEAD**

Emissions compliance is as important to Cummins' business as the emissions technology the Company designs. As emissions regulations grow tougher and more global, the business risk of noncompliance also becomes more significant.

In 2010, the Company redefined Cummins' emissions compliance function as influencing and understanding regulations, designing and manufacturing products to meet those requirements and selling and servicing them in the market.

Development of the right technology for each customer application, assembly and delivery of the right products, robust service and maintenance practices are all important elements of emissions compliance.

Through a newly-created Emissions Compliance Committee, compliance activities will be globally managed, coordinated and connected so as a Company, Cummins will better understand risks and exposures. The Company will also have improved internal collaboration and visibility, and be well-positioned to react to cross-functional issues.

Cummins continues to expand the breadth and reach of its climate change efforts. For example, the Company has created a team of experienced Six Sigma professionals who

focus specifically on using the business improvement tool to coordinate efforts and leverage expertise, and to develop environmentally responsible products, processes, supply chains and facilities.

The Company has also piloted a carbon measurement tool for transportation and packaging in 2010. The tool creates a simple way to measure the carbon footprint of packaging and shipping our products. Going forward, as Cummins makes changes to reduce fuel costs or redesign packaging materials to reduce waste, the Company will know whether the work is leading to real reductions in carbon emissions.

Working with customers will also be critical to future climate change efforts. In January 2011, the Company launched the Distribution Business Unit Climate Change Working Group, in addition to the existing Power Generation Business Unit climate group, to further business unit collaborations with customers.

Initiatives with end-user customers using Six Sigma tools have already led to significant results. Sixty-seven fuel economy Six Sigma projects with Cummins' truck fleet customers have saved 50 million gallons of fuel and avoided 446,000 metric tons of GHGs over the past seven years.

## **ENVIRONMENT CHALLENGES**

#### Water

The global water supply both quantity and quality has become an issue of equal importance to Cummins as energy and climate change. The Company is increasing its focus on water conservation. Cummins sites have been directed to construct a water balance – an analysis of water taken in, used and discharged.

## **Environmental organization**

Cummins is using Six Sigma tools to design a global collaboration framework. Our challenge is to foster innovation and creativity within a framework that utilizes targets and goals but is not burdensome.

## GHG emissions from suppliers, customers, employees

Cummins will increasingly focus on helping our suppliers, customers and employees reduce their carbon footprints. The challenge is how to tackle such a large population and the inherent challenge in managing behavioral change. Our Climate Change Working Group is actively addressing this issue.

### INTRO

Liu Xiaoxing, middle, Vice President

MidRange and Heavy-Duty Engine

and General Manager of the

Businesses in China, receives

behalf of Cummins from the

the Green Technology medal on

# Cummins China poised to play key role in country's environmental efforts

As China works to reduce its greenhouse gas emissions and energy consumption, Cummins is poised to play a leading role both through its engines and related technologies and through its power generation systems.

engines produced by the Beijing Foton Cummins Engine Company – a 50-50 joint venture between Cummins and China's Foton Motors – are reducing emissions

For example, the new ISF light-duty diesel while improving fuel economy.

Cummins Power Generation's combined heat and power system is enabling Chinese customers like the Beijing South Railway Station to achieve significant energy savings.

And public transit buses powered by Cummins' hybrid diesel/electric and natural gas engines are widely used in Beijing and other provincial capital cities to improve air quality.

Cummins China is working closely with government agencies, academic institutions and the Company's customers to design solutions to help China meet its energy and environmental goals.

"Cummins and our partners share a common set of values that have served us well throughout our respective histories," said Liu Xiaoxing, Vice President and General Manager of the MidRange and Heavy-Duty Engine Businesses in China. "Those include a passion for innovation and a strong commitment to the environment.

"The products made through our partnerships will please our customers and will further cement our commitment to ensuring that everything we do leads to a cleaner environment," he added.





The Company has been recognized for its environmental leadership. In 2010, Cummins China was awarded a prestigious Green Technology medal as part of the Green Enterprises Appraisal sponsored by the China Business News, the most influential business newspaper in China.

The appraisal noted the Company's relentless pursuit of environmentally friendly technologies.

## **UNIQUELY POSITIONED**

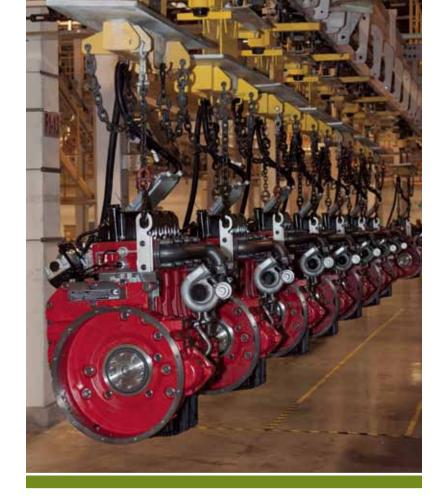
Cummins' long history in China dating back to 1975 gives the Company a significant advantage in the highly competitive Chinese market.

The Company was the first foreign diesel maker in China to invest in the local manufacturing of key sub-systems, including turbochargers, filtration products, fuel systems and after-treatment products.

Those vital engine components support Cummins' Chinese partners and customers as they work to meet future emission and related environmental standards.

The Cummins East Asia Research & Development Center, based in Wuhan, has played a critical role in developing the capability for low emission technologies. The center has provided engineering support to the Company's four engine joint venture partnerships in China, as well as to Cummins' components business.

The Beijing Foton Cummins Engine Company, a 50-50 joint venture between Cummins and China's Foton Motors, is producing a new ISF light-duty diesel engine that is reducing emissions while improving fuel economy.



Cummins was the first foreign diesel maker in China to invest in the local manufacturing of key sub-systems. Leaders say the Company draws on that experience in new ventures such as the Beijing Foton Cummins Engine Company where these engines were produced.

"Ever since it opened in 2006, the East Asia R&D Center has successfully leveraged our global resources and the local knowhow to respond to the engineering and product needs of local customers better. quicker and with less cost," said Lixin Peng, Executive Director - China Engineering.

That investment is paying off. In 2010, Cummins' ISF2.8L and ISF3.8L diesel engines were among the first light-duty diesel engines in China certified to meet Euro V emission requirements. Cummins' ISM11L engine produced in Xi'an as part of a 50-50 joint venture between Cummins and China's Shaangi Group, became the country's first heavy-duty diesel engine to receive Euro V emission certification.

"Cummins engines are totally integrated from the air intake to the exhaust," said Steve Chapman, Cummins Group Vice President for China and Russia.

"Local manufacturing of Cummins" key components further unleashes our integrated strength. That is critical ... in cementing our long-term commitment of bringing in clean power technology and products to serve our partners and customers in the Chinese market."

#### STRONG PARTNERSHIPS

Cummins' progress in developing green technologies hasn't been achieved by the Company working alone. In addition to working with government agencies, Cummins also partners with the Company's customers and academic institutions.

The Company partners with both key Original Equipment Manufacturers (OEMs), companies that use Cummins engines in products sold under their own brand, and end users such as Dongfeng, Foton and the Beijing Public Transport, to make sure Cummins products meet power, performance and emission needs.

Such collaboration ensures that the Company's emission-reduction technologies can be effectively integrated with other equipment for optimal performance.

Cummins also works with China's leading universities and institutions. For example, the Company signed a joint research agreement with Tsinghua University in



2006 to research hybrid technologies and their impact on emissions and energy efficiency as well as bio-fuel applications for diesel engines.

"We are delighted to be able to complement our resources and strength with Cummins' expertise and leading technology," said Professor Ouyang Minggao, Director of the State Key Lab of Automotive Safety and Energy at Tsinghua University.

"Working with Cummins offers us invaluable access to best-in-class engine technologies and worldwide application experiences, which will be vital in laying the foundation for the breakthroughs in green initiatives," the professor added.

Finally, Cummins employees in China collaborate with Company employees around the world to leverage Cummins' vast knowledge base to develop solutions that make sense for the particular conditions in China.

"Today, we're very much a global technical organization and we take advantage of that," said Cummins Vice President and Chief Technical Officer John Wall, "It allows us to access the best talent around the world, not just in the United States. It also allows us to appreciate the differences in the requirements for our products and for emission control around the world."

## **CUMMINS IN CHINA**

## Headquarters

Beijing

## **Employees**

More than 7,000

#### Sales

Consolidated sales in China grew by 66 percent during the first quarter of 2011 compared to the same period in 2010.

## **Operations**

Twenty-six operating companies including 15 engine, genset and component plants.

### **Engines**

Eleven of 18 Cummins engine series produced in China.

## **Tech Centers**

Wuhan and Wuxi

## Key partners

Dongfeng Motors, Foton Motors, Chongqing Machinery and Electric

## Locations

Beijing Chengdu Chongqing Guangdong area Kunming Shanghai Shenyang Taiwan Urumqi Wuhan, Hubei

Wuxi

Xi'an

Cummins demonstrates good environmental stewardship through our products, practices and our partnerships.

> The Company's leadership in combustion research, fuel systems, air-handling systems, electronics, filtration and aftertreatment enables Cummins to provide the most appropriate emissions control for each market the Company serves.

Cummins' diverse product portfolio meets or exceeds all emissions requirements and at the same time delivers on our customers need for fuel economy, performance, reliability and durability.

#### **ENGINES**

Since the 1970s, Cummins on-highway engines have been regulated by the U.S. Environmental Protection Agency (EPA) and similar regulatory agencies around the world for combustion emissions, including nitrogen oxide (NOx), carbon monoxide (CO), hydrocarbons (HC) and particulate matter (PM), also known as soot. When compared to emissions from unregulated engines 40 years ago, today's on-highway diesel engines emit 99 percent less PM and NOx.

Throughout the years, Cummins has been a leader in clean diesel technology, pioneering the design and use of integrated subsystem technology such as combustion controls, fuel system development, and turbocharger technology.

Continued innovation has enabled Cummins to deliver exceptional fuel economy for the Company's on-highway customers, ultimately driving a reduction in their output of carbon dioxide (CO<sub>2</sub>). Cummins is committed to doing both the right thing for our customers and the right thing for the environment.



In 2010, all heavy-duty diesel engines sold in the United States had to meet the EPA's NOx standard (0.20 grams per brake-horsepower hour (g/bhp-hr)) and the PM standard (0.01g/bhp-hr). These are the most stringent emissions regulations in the world. The EPA has reduced both allowable NOx and PM levels by 90 percent compared to levels in 2004.

The 2010 regulations not only required near zero NOx and PM emissions, but also the phase-in of advanced on-board diagnostic tools with additional sensors to monitor the effectiveness of emission-control systems on the engine. The sensors alert drivers if emission-reduction devices fail and need to be repaired.

In addition to the new exhaust emission standards, the EPA lowered the limit for diesel sulfur fuel from 500 parts per million (ppm) to 15 ppm. The new fuel standard was phased in between October 2006 and September 2010.

Cummins was among the first companies to meet all of these new standards. In 2010, the Company successfully introduced the ISX15 engine for use in 18-wheel heavy duty commercial trucks. The engine provides six percent greater fuel economy,

stronger performance, faster throttle response and best-in-class driveability and reliability compared to our previous industry leading ISX engine.

The ISX15 features the Cummins XPI fuel system, the next generation of Exhaust Gas Recirculation (EGR), an advanced turbocharger and a new Cummins Aftertreatment System that incorporates Selective Catalytic Reduction (SCR) technology to reduce emissions (page 35). Each ISX15 can reduce CO<sub>2</sub> emissions by up to 12 metric tons per year compared to a 2007 ISX engine.

Cummins also introduced the new ISX11.9 engine for the smaller vocational- and work- truck market, including commercial work trucks, emergency vehicles and motor coach applications. This engine also successfully met all regulatory requirements.

## Off-Highway engines

The off-highway equipment industry is facing the challenges inherent in meeting the EPA's final Tier 4 emissions regulations that extend through 2014. The Tier 4 Interim regulations, which started in 2011, require companies to look beyond engine technologies to areas such as high pressure fuel systems, turbocharging, electronics and aftertreatment systems.



This fork lift, powered with a Cummins off-highway engine, meets 2011 Tier 4 Interim low emissions standards with a major increase in fuel efficiency. The resulting innovations not only help to meet the latest regulations, but can also lead to more fuel efficient products that produce less CO<sub>2</sub>. Looking beyond Tier 4 Final regulations, technologies such as Onboard Diagnostics (OBD), telematics to better track engine use and performance, and various hybrid systems or waste heat recovery methods will become more common in the industry.

In 2008, Cummins announced that the Company's EPA Tier 4 Interim engines for 2011 will have an improved fuel efficiency of up to five percent and improved performance while maintaining Tier 3 levels of durability. Cummins designed its Tier 4 Interim products with Tier 4 Final requirements in mind. The Company's engineering staff worked hard to ensure that the Tier 4 Final system also included a fuel economy advantage of up to three percent.

Beyond complying with Tier 4 legislation, Cummins customers are counting on the Company's expertise to manufacture engines that produce fewer emissions and provide greater fuel efficiency. These fuel efficiency gains translate into lower operating costs for Cummins customers as well as a reduction in the amount of CO, in the atmosphere. While the EPA has not made any official regulations after Tier 4 Final, it is expected that future regulations will be similar to the CO<sub>2</sub> regulations proposed for the on-highway market.

## Fit for Market

Fit for Market is a Cummins strategy to meet customer requirements by using the Company's knowledge, tools and technologies to deliver low-cost products with the right capability for each market in every global region.

This is not a one-size-fits-all approach, but a strategy to listen to customers and understand the specific demands of the environment where they do business.

Cummins has a portfolio of technologies that can be adapted to meet the power needs of specific markets, taking into account local product and application requirements, the local service environment and local manufacturing capability.

Cummins continues to support the development of engines capable of running on alternative fuels that will give an option to customers to help meet their energy and environmental goals. This includes the expanded application and continued integration of B20 bio-diesel blends as an approved fuel into all Cummins product launches.

In the past year, Cummins has increased its research activities - including simulation and engine testing - on the viability of the next generation of bio-fuels that could replace petroleum-based fuels. These include bio-fuels derived from algae and other biomass, including dedicated feedstocks for bio-energy production such as grasses and shrubs planted specifically for energy production.

Cummins Westport Inc. is a joint venture established in 2001 between Cummins and Westport Innovations Inc. that has produced over 28.000 alternative fuel engines for customers worldwide. Cummins Westport (CWI) natural gas engines are available as factory installed options from over 50 truck and bus manufacturers, establishing CWI as the leading global provider of midrange automotive natural gas engines.

Recent development of new reserves of natural gas in North America and elsewhere is encouraging natural gas producers and distributors to look at heavy-duty transportation as a new market, and is also leading governments to view natural gas as one way to reduce their dependence on oil imports (page 38).

#### **CUMMINS FILTRATION**

For more than 50 years, Cummins Filtration has been a leader in the filtration industry, developing integrated solutions that not only protect engines but also contribute to a cleaner, healthier and safer environment.

For example, a current program under way will reduce the amount of steel needed to produce five high-volume filter product lines by 700,000 pounds per year. The reduced amount of steel used to make filters, while maintaining performance standards, is expected to reduce greenhouses gases by 1.3 million pounds per year.

The business unit designs products that remove contamination from engine systems, reduce engine emissions and minimize disposal issues. As the only filter manufacturer that is part of a company that also produces engines, Cummins Filtration has a key technology advantage that has resulted in a number of innovations including:

- » Crankcase Ventilation systems that filter up to 99 percent of oil drip, up to 95 percent of aerosol vapors and 100 percent of engine compartment fumes.
- » ES Compleat™ Glycerin Premix Long-life Antifreeze / Coolant, a heavy-duty engine antifreeze /coolant that uses glycerin instead of traditional ethylene glycol or propylene glycol. Glycerin is derived from renewable resources and is the primary by-product of the bio-diesel manufacturing process.

- » Direct Flow™ Air Filtration, which utilizes a straight air flow path allowing filter media to be packaged in a smaller profile for easier service, longer service intervals and environmentally-friendly disposal with no metal components.
- » Filter-in-Filter, which combines two filters in a single, reusable cartridge that reduces the amount of waste material during regular fuel system maintenance. Filter-in-Filter is part of the User-Friendly Filter line, first introduced in 2006, that is made of composite material and has significantly less environmental impact than steel models.

The manufacture of the User-Friendly filters reduces volatile organic compounds because the filters do not have to be painted, the reformulated paper media does not require curing and the use of plastisol adhesive is avoided.

Industry research indicates that 50 percent of all used oil filters end up in landfills. To address the end of a filter's lifecycle, Cummins Filtration has developed a filter recycling management program called "Filtering Change."

This program, expected to launch in 2011, aims at fostering partnerships between customers' service centers and fleet locations throughout the United States - and later globally - with filter and oil recycling companies.

One hundred percent of the steel from a filter can be repurposed along with more than 90 percent of the waste oil from the media element.

### **POWER GENERATION**

## Cogeneration

Cummins Power Generation designs and builds cogeneration systems used around the globe in various applications. Combined Heat and Power (CHP) systems are providing power to hospitals, schools, sports complexes and commercial facilities.

Cogeneration is the production of two kinds of energy — usually electricity and heat from a single source of fuel. Cogeneration can replace traditional methods of supplying energy from multiple sources; For example, purchasing electricity from the power grid and burning natural gas or oil separately in a furnace to produce heat or steam.

These methods can waste up to twothirds of the energy in the original fuel. With cogeneration, 70 to 90 percent of the energy in the original fuel is put to productive use and total energy savings can be 30 percent or more.

A cogeneration system normally consists of some kind of machine turning an alternator to produce electricity and a waste heat recovery system capturing the heat from the exhaust and cooling water jacket.



Cummins Power Generation's combined heat and power cogeneration system powers the Jingiao Sports Center, a 120,000 square foot sports facility in Shanghai, China.

Cummins has 430 megawatts (MW) of cogeneration installations globally with an average project size of 2 MW. These installations represent a greenhouse gas reduction of about one million metric tons of CO<sub>2</sub> per year for our customers.

## **DC** gensets

DC generators offer a cost-effective and environmentally-friendly alternative to conventional large battery reserve systems and traditional AC generators used to power remote community access TV, telecom and wireless tower sites.

They continuously monitor the battery system and seamlessly restore power should battery backup fail or a prolonged power outage occur. Not only are generators generally more fuel efficient, DC generators reduce the number of onsite batteries needed and protect the smaller number of batteries required. Fewer batteries result in fewer environmental issues related to battery disposal.

## Hybrid generators for RVs

A hybrid generator set is a great example of how Cummins is using technology to reduce fuel consumption by recreational vehicle (RV) owners as well as noise pollution.

By using a combination of inverters, power unit and coach batteries, Cummins Power Generation has been able to reduce generator fuel consumption by up to 20 percent. Power Generation has also been able to reduce noise pollution by five decibels.

While this number may not seem very big, it represents about a 40 percent reduction in audible sound levels. In addition, the hybrid generator weighs up to 374 pounds less than the Company's large diesel generators. This translates directly into better fuel economy for RVs, which in turn means a reduction in their carbon footprint.

**Environmental Stewardship** continues with Practices on page 40.

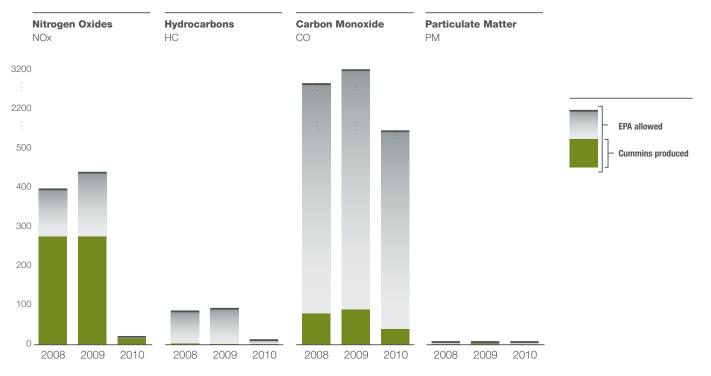
### **PRODUCT EMISSIONS**

The on-highway charts for North America compare the estimated maximum allowable emissions by U.S. EPA standards and Cummins' estimate of its engines actual emissions for the past three years. Estimates are based on the number of engines, both heavy-duty and midrange, manufactured in the United States for on-highway use per year.

The figures in the off-highway charts are based on the number of midrange, heavy-duty and high-horsepower engines produced to EPA standards for non-road uses.

## **AUTOMOTIVE (ON-HIGHWAY) USEFUL LIFE EMISSIONS TOTAL**

IN THOUSANDS OF METRIC TONS



**DIESEL ENGINE VOLUMES** 

Non-road

IN THOUSANDS

**Automotive** 

## **NON-ROAD USEFUL LIFE EMISSIONS TOTAL**

**Carbon Monoxide** 

IN THOUSANDS OF METRIC TONS

**Nitrogen Oxides** 

| <b>+ Hydrocarbons</b> CO<br>NOx + HC |          |      | PM   |      |      | (On-highway) |      |      |     |      |      |      |      |        |                              |
|--------------------------------------|----------|------|------|------|------|--------------|------|------|-----|------|------|------|------|--------|------------------------------|
| 500                                  |          |      |      |      |      |              |      |      | 200 |      |      |      |      |        |                              |
| 400                                  |          |      |      |      |      |              |      |      | 150 |      |      |      |      |        | Horsepower<br>r-Duty<br>ange |
| 300                                  |          |      |      |      |      |              |      |      |     | 09   | 89   | 16   |      |        |                              |
| 200                                  |          |      |      |      |      |              |      |      | 100 |      |      |      |      |        |                              |
| 100                                  |          |      |      |      |      |              |      |      | 50  | 108  | 100  | 109  | 9 2  | 24 4 1 | 43 9 2                       |
| 020                                  | 008 2009 | 2010 | 2008 | 2009 | 2010 | 2008         | 2009 | 2010 | 0 – | 2008 | 2009 | 2010 | 2008 |        | 2010                         |

**Particulate Matter** 

# SCR reducing emissions and improving fuel efficiency

Cummins' decision to produce on-highway engines with Selective Catalytic Reduction (SCR) aftertreatment is paying off in more ways than just near-zero emissions.

The Company's EPA- and ARB (California Air Resources Board)-certified 2010 engines are delivering up to six percent better fuel economy, which lowers carbon dioxide (CO<sub>2</sub>) emissions because the engines are using less fuel.

"Customers are experiencing the benefits of better fuel economy and performance as well as the reliability and durability they expect from Cummins engines," said Rich Freeland, President - Cummins Engine Business.

Through March 2011, Cummins shipped 90,000 EPA-certified Heavy-Duty and MidRange engines with SCR for North American markets. Those engines were produced at the Company's manufacturing plants in Jamestown, N.Y.; Rocky Mount, N.C. and Columbus, Ind.

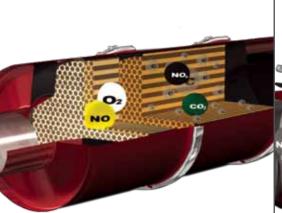
"With SCR technology, I'm confident that the next decade will provide many advances that are mutually beneficial to clean air and satisfied customers," said Srikanth Padmanabhan, Vice President and General Manager - Cummins Emission Solutions, which makes the SCR systems.

SCR is an exhaust aftertreatment system that converts oxides of nitrogen (NOx), which can cause smog and acid rain, into nitrogen and water that can be safely emitted into the atmosphere. Here's how the Cummins system works:

- » Engine exhaust passes through a diesel particulate filter and oxidation catalyst and becomes nitrogen dioxide (NO<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>).
- » A light mist of Diesel Exhaust Fluid is sprayed into the hot exhaust as it moves into a Decomposition Reactor to form ammonia.
- » The NOx and ammonia react in the SCR catalyst, becoming nitrogen and water vapor.

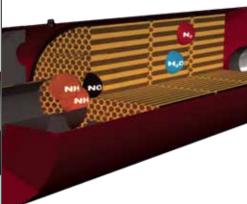
The technology improves fuel efficiency because the use of SCR optimizes combustion, providing better fuel efficiency and power. Fuel efficiency is a critical issue for many in the transportation industry.

After exhaustive study, Cummins' technical leaders decided that the best way to meet 2010 EPA emission standards, and at the same time provide improved fuel economy, performance, reliability and durability, was to use a combination of SCR and Exhaust Gas Recirculation (EGR).



**ENVIRONMENT** 





DIESEL PARTICULATE FILTER

Engine exhaust that includes NOx passes through a carbon filter and becomes nitrogen dioxide (NO,) and carbon dioxide (CO<sub>2</sub>).

### **DECOMPOSITION REACTOR**

A light mist of specially designed Diesel Exhaust Fluid is next sprayed into the hot exhaust as it moves into a Decomposition Reactor and forms ammonia through a series of reactions.

### **SELECTIVE** CATALYTIC REDUCTION

Then, the nitrogen oxides and ammonia pass through the SCR catalyst where they react, becoming nitrogen and water vapor.

Working in partnership with companies like Ashland Inc. (producer of Valvoline), Cummins Filtration entered into alliances to make Diesel Exhaust Fluid widely available across North America.

Company officials report customer response to the SCR aftertreatment system has been extremely positive, both from a reliability and performance perspective as well as from a fuel efficiency standpoint.

Cummins Vice President and Chief Technical Officer John Wall says Cummins has a competitive advantage because it produces not only a range of engines but also critical components such as fuel systems, exhaust aftertreatment, filters, and turbochargers.

Having a broad range of engines available for different emissions levels and markets enables the Company to apply the right technology to each engine, using what it has learned from one engine platform to improve the performance of another.

"We were working with Selective Catalytic Reduction (SCR) for our MidRange engines because we believed that was the right technology for our MidRange customers, and it was," Wall said. "As we learned about the SCR technology in the context of the MidRange engines, what we found was we could increase the efficiency of NOx reduction far beyond what we had anticipated when we first started this development."





Imagine a power generator that's 21 percent more fuel efficient than its predecessor at a lower cost. Now, imagine you can parachute that generator into remote locations and it will operate under any number of environmental extremes.

That's the idea behind Cummins' Advanced Medium Mobile Power Sources (AMMPS), a new line of mobile power generators for military use whose environmental and logistical benefits include greater fuel efficiency, lighter weight, quieter operations and increased reliability with a lower total lifecycle cost.

The U.S. Army, AMMPS' first customer, expects fuel savings of \$745 million annually and \$11.2 billion over the life of the generator fleet. Plus, fueling fewer times requires less logistical support such as fuel caravans to keep the generators operating. That enhances safety in war zones.

"Our work with the Army on the AMMPS program demonstrates our joint commitment to providing our fighting men and women the tools they need to do their important work effectively and safely," said Tony Satterthwaite, President of Cummins Power Generation.

He said AMMPS will also reduce the military's environmental footprint, "consistent with Cummins' commitment to contributing to a cleaner environment."

The annual carbon emissions reductions associated with the generators are 509,698 metric tons of carbon dioxide (CO<sub>2</sub>), or 7.7 million metric tons over the expected life of the generators. That's equivalent to taking 93,000 cars off the road.

Production of the AMMPS generators is expected to begin sometime in 2011.

The U.S. Army expects significant savings from Cummins' Advanced Medium Mobile Power Sources (AMMPS). Former Plant Manager Scott Schneider speaks at a presentation on AMMPS at Power Generation's Fridley, Minn. facility in February 2011. Schneider is now Executive Director of MidRange Engineering.

# These engines turn heads, too



ISL G natural gas engine

Since its founding in 1919, Cummins has

been known for diesel engines. But the Company is fast developing a reputation for engines that use another fuel entirely - natural gas.

The same clean-burning fuel that heats homes and drives industrial processes around the world also fuels several Cummins product lines, including on- and off-highway engines as well as power generators.

As new techniques for extracting shale gas promise to open up a 100-year supply of stable prices, it's a market that's expected to grow significantly.

Consumption of natural gas is projected to grow by 50 percent over the next 20 years – although there is still debate over the environmental impact of some extraction techniques.

In the case of biomethane (either bio-gas or landfill gas), natural gas is actually CO<sub>2</sub> (carbon dioxide) neutral.

"Customers worldwide are discovering the benefits of natural gas," said Roe East, General Manager, Cummins Westport, a 50-50 joint venture between Cummins

and Westport Innovations, which specializes in midrange natural gas engines. "It's clean, abundant and inexpensive compared to petroleum-based fuels like diesel and gasoline."

Perhaps the most visible example of the rising popularity of natural gas engines can be seen with transit buses. Cities across the world have been turning to natural gas engines for their mass transit systems to reduce pollution and provide some alternatives to the price fluctuations in petroleum-based fuels in recent years.

Cummins natural gas engines are now powering bus fleets on every continent except Antarctica.

Generator sets fueled by natural gas are also commanding attention. Natural-gas fueled generators can provide primary power in the developing world, where largescale generating stations are still years away from completion. Significant new markets are opening up as a result.

"Natural gas holds tremendous potential for power generators," said Paul Stohr, Director of Cummins' Power Generation's Energy Solutions Business. "It is particularly



important in developing markets where gas fired generation often forms a more significant part of the overall grid infrastructure than in developed countries.

"Many developing economies have significant gas reserves. Distributed gas-fired generator solutions provide an economical way to deploy power generation much more quickly than many centrally-fired solutions can be implemented," Stohr added.

Cummins is expanding its natural gas product line in both the automotive and stationary power categories. Engineers are working to increase the range of fuels Cummins engines can use, making the Cummins line of products more robust and better able to handle

various qualities of natural gas now being extracted around the world.

That flexibility should put Cummins natural gas engines in demand in growing markets.

Whether hauling freight or powering factories, Cummins natural gas engines are preparing to power the future.

More transit operators across the world, like this one in Sweden, are turning to natural gas-powered engines from Cummins to reduce pollution and provide alternatives to petroleum-based fuels.

"Many developing economies have significant gas reserves. Distributed gas-fired generator solutions provide an economical way to deploy power generation much more quickly than many centrally-fired solutions can be implemented."

DIRECTOR - POWER GENERATION, ENERGY SOLUTIONS

INTRO

# **Environmental Stewardship // Practices**

Cummins doesn't just talk about environmental stewardship. The Company puts its words into action. Here's a look at some of the ways we ensure that "everything we do leads to a cleaner, healthier and safer environment."

#### **CLIMATE LEADERS PROGRAM**

In May 2011, Cummins announced it exceeded its 25 percent greenhouse gas (GHG) emissions reduction commitment upon completion of the U.S. Environmental Protection Agency's (EPA) Climate Leaders Program.

Companies in the Climate Leaders Program complete a corporate-wide inventory of their GHG emissions based on a quality management system, set aggressive GHG emissions reduction goals, and report their progress annually to the EPA.

Cummins joined the program in 2006 and set the goal of a 25 percent reduction of GHG emissions per dollar revenue from 2005 to 2010. As of the end of 2010, the Company achieved a 28 percent reduction in GHG emissions. Cummins' GHG reduction from 2005-2010 was an absolute reduction of 110,324 tons of CO<sub>2</sub>.

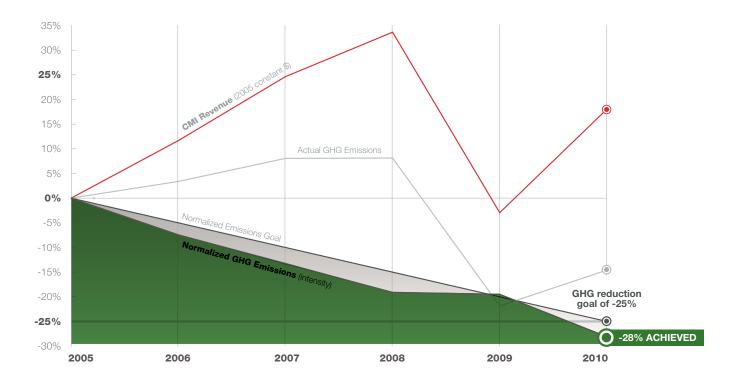
"Cummins strongly believes in the business case for climate change actions," said Vice President and Chief Technical Officer John Wall. "It is good business, good for our business, and it is the right thing to do. Meeting our goal not only has been good for the environment, it saves Cummins more than \$20 million dollars annually."

### **RECYCLING AND WASTE MANAGEMENT**

Recycling initiatives were particularly critical in 2011 to offset the increased use of material and the potential for waste generation because of rising production volumes. Compared to 2009, Cummins increased combined recycling of all materials including metals, wood, cardboard, and plastics by more than 25 percent.

However, the true measure of recycling success is avoiding waste generation. Total landfill tonnage increased in 2010, but remained below 2008 levels. The Company's waste generation intensity, tonnage normalized to labor hours, has decreased by 11 percent since 2008.

INTRO



In addition to recycling efforts, Cummins continues focusing on process improvements and management techniques that first reduce and/or reuse to:

- » Minimize our use of resources.
- » Reduce waste material output.

Cummins has reduced hazardous waste as a by-product of the manufacturing process in the United States by more 50 percent on an absolute basis since 2008 by changing painting processes, cleaning procedures, and resizing material order quantities.

#### WATER CONSERVATION

Since more than 60 percent of the Company's business is in international markets, Cummins recognizes the challenges associated with the rising global issue of water and has for several years focused on conserving water and reducing wastewater discharges.

In 2010, the Company's total water use was stable despite increasing production rates and labor hours, reflecting a 22 percent reduction in labor-normalized water use intensity. Some recent examples of water conservation around the Company include:

- » On our grounds Cummins ReCon in San Luis Potosí, Mexico reduced potable water consumption for irrigation by using soil moisture sensors to measure demand, and by using reclaimed wastewater for irrigation. Sites in Beijing, China; Darlington and Daventry, in the U.K.; and Melbourne, Australia are harvesting rain water to reduce their potable water demand.
- » In our facilities The Company continues to reduce its water use intensity by implementing creative, facility-oriented solutions including: comprehensive leak detection and employee education programs; automatic shut-off faucets,

Cummins reduced its GHG emissions by 28 percent per dollar of revenue from 2005 to 2010, exceeding the 25 reduction goal it set with the U.S. EPA.

# "Cummins strongly believes in the business case for climate change actions. It is good business, good for our business, and it is the right thing to do."

#### **JOHN WALL**

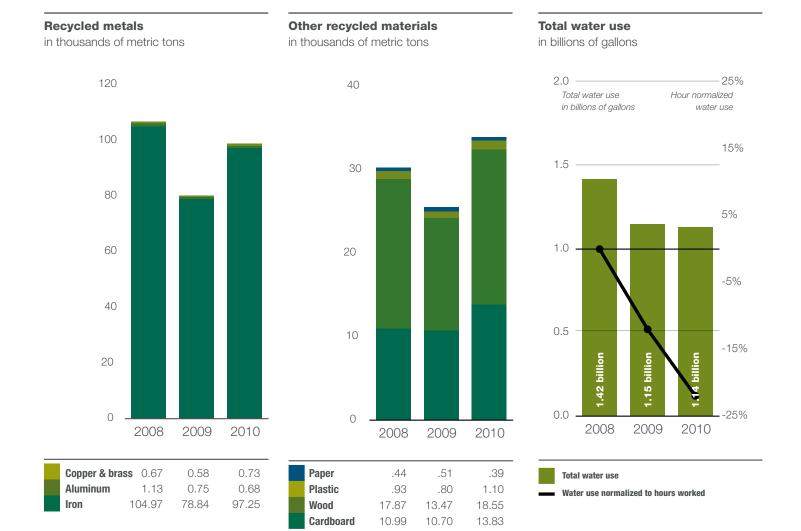
VICE PRESIDENT AND CHIEF TECHNICAL OFFICER

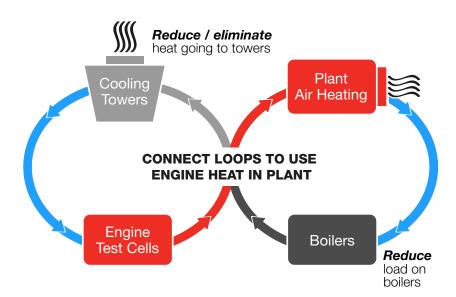
sensors and kitchen sprayers; waterless urinals; reusing treated wastewater to flush toilets and optimizing cooling tower operations to save more than 18 million gallons a year at one U.S. manufacturing site.

### » Through our processes -

Our conservation efforts also extend into the processes that comprise the core of our business - designing,

manufacturing and testing our products. In Seymour, Ind., employees reduced water use and wastewater generation by automating controls and adding procedures to optimize washing processes. In Daventry, U.K., the Company's Six Sigma process saved nearly 1.8 million gallons in the site's engine test cells by implementing new control systems and variable speed motors.





### **ENERGY EFFICIENCY**

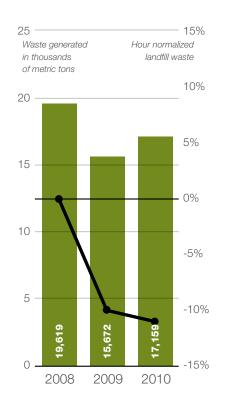
Cummins has created a culture and structure for energy efficiency that is now part of how the Company does business. Our global energy efficiency team has implemented nearly 300 energy efficiency capital projects across seven specific energy themes, with an aggregate return on investment of 50 percent.

The team, with leaders from each business unit and related environmental functions,

manages the capital fund allocated specifically for energy efficiency, analyzes proposed capital projects for energy efficiency and greenhouse gas reduction and tracks our progress.

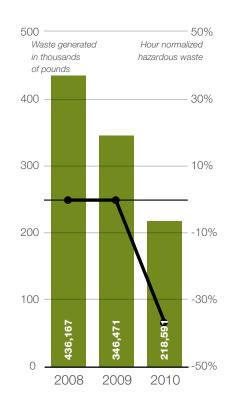
Cummins' Seymour Engine Plant used to just dump all the heat generated by test engines at the site to outside cooling towers. Now, heat from the engines is captured by a heat exchanger to help heat the plant.

### **Landfill waste** in thousands of metric tons



Total landfill waste Landfill waste normalized to hours worked

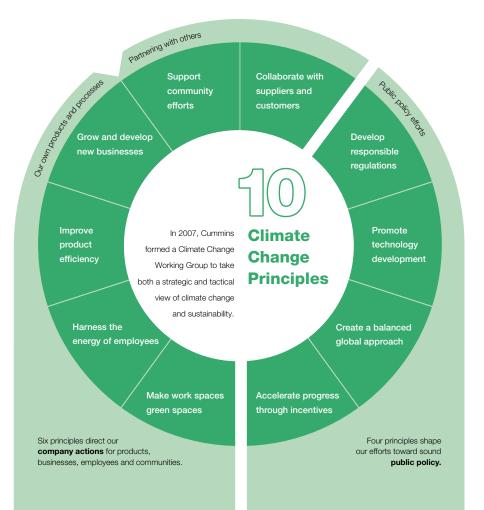
### **Process hazardous waste** in thousands of pounds



Total hazardous waste Hazardous waste normalized to hours worked The Company's wide-ranging energy savings actions have included projects such as high-efficiency lighting upgrades, power management systems, energy-efficient motors, pumps and fans, compressed air optimization, heating and cooling equipment upgrades, and energy recovery from engine test cells. Some best-in-class examples in 2010 of energy efficiency from capital projects include:

- » The turbocharger plant in Pithampur, India optimized power usage by addressing energy supply issues. The "Power Perfector" systems installed provide voltage optimization and active power factor correction for improved energy use by shop floor equipment.
- » Compressed air can be a large part of a plant's expenses. A project on dry machining engineered air nozzles at Cummins' Rocky Mount, N.C. Engine Plant optimized demand by computer controls and the installation of thousands of engineered nozzles throughout the plant's dry machining lines. The nozzles reduce usage by 40 percent while significantly decreasing shop floor noise levels.
- » Energy recovery projects capture energy normally discharged as waste heat for productive use elsewhere. A project on energy recovery of test cell water jackets used to prevent overheating at Cummins' Seymour, Ind. Engine Plant used high efficiency heat exchangers to capture energy. Instead of dumping water to cooling towers, the water now provides the energy for heating the plant, and in later phases for heating for wash and paint operations.

These 10 principles form the basis to Cummins' climate change initiatives.



### **ENERGY CHAMPIONS**

In addition to implementing capital projects, Cummins has trained a broad network of Energy Champions who coach and mentor site Energy Leaders to find and implement, through a process called an energy treasure hunt, low and no-cost energy projects that also save money for their sites.

Stickers on plant equipment make energy use and cost visible and empower employees to turn off equipment not in use when appropriate.

The Company now has 100 trained Energy Champions and 270 Energy Leaders at 21 sites, who completed 10-week programs over the lunch hour in energy efficiency.

#### **CLIMATE CHANGE**

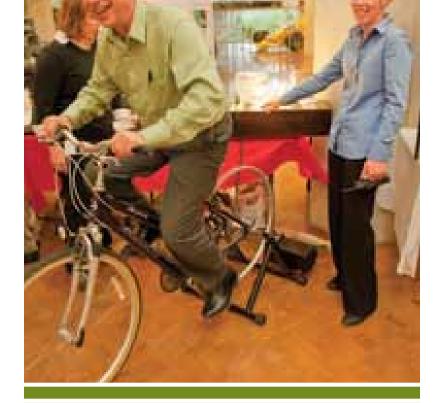
Early in 2007, Cummins formed a climate change team to take both a strategic and tactical view of climate change and sustainability at Cummins. The Climate Change Working Group's members come from across the Company - business units, facilities, product planning, corporate strategy, environmental policy, supply chain, and government relations, among others.

The team takes a very structured and results-oriented approach to Cummins' 10 climate change principles, which collectively represent the Company's climate change policy, to meet the challenges of climate change going forward. Six of these principles direct company actions for Cummins' products, businesses, employees and communities, while four of them shape our partnerships with legislative and regulatory entities to develop sound public policy.

The work of the Cummins climate change policy as carried out by the working group are reflected in many areas in this report: in achieving our greenhouse gas reduction target, collaborating with customers and suppliers on efficiency efforts, supporting community efforts and creating our global sustainable building standards.

### **CUMMINS ENVIRONMENTAL MANAGEMENT SYSTEM**

Cummins Enterprise Environmental Management System (EMS) ensures a common approach to implementing the Company's environmental standards at its sites worldwide. Through the EMS,



### **'HSE BEGINS WITH ME' THEME** AT GLOBAL WORKSHOP

Cummins Health, Safety and Environmental (HSE) Leaders learned about water conservation, supplier safety, ergonomics and more at the bi-annual Cummins HSE global workshop in Indianapolis, Ind. in May 2011.

More than 150 employees from 18 countries customized their educational experience by selecting from more than 30 technical break-out session topics.

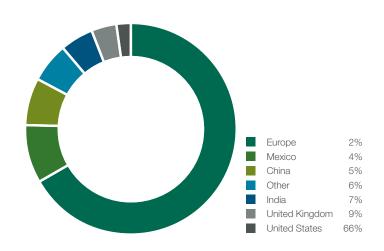
the Company sets and cascades key environmental improvement objectives, monitors environmental performance and provides a framework for continual environmental improvement.

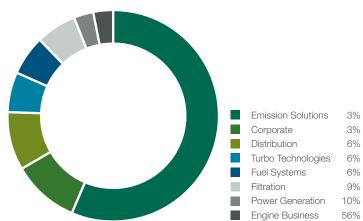
Cummins has incorporated the ISO 14001 international environmental management standards into the EMS and has committed to registration of all in-scope locations by an independent third-party auditor. In-scope sites are those including manufacturing and other locations as determined by potential

Cummins Business Services Director of Quality Tom Bailey learns through a bicycle-powered generator how less energy is needed to light the more energy-efficient light bulbs at an environmental fair in Columbus, Ind. Cummins has done more than 30 high-efficiency lighting projects at its sites.

### **Cummins GHG emissions by country**

### **Cummins GHG emissions by business unit**





environmental impact and operational complexity and exclude office buildings and smaller parts distribution centers.

At the end of 2010, Cummins had 77 sites and the corporate entity, or 84 percent, certified within the Company Enterprise EMS and therefore conforming to the ISO 14001 Standards. The Company is committed to increasing participation to 96 percent by the end of 2011.

Cummins is not limiting EMS development to our manufacturing base. The Company intends to certify environmental management systems in our global distribution facilities. The business plans to have all distribution entities registered to Cummins EMS, conforming to the ISO 14001 Standards by 2015.

### **ENVIRONMENTAL OBJECTIVES AND TARGETS**

When the EMS was established in 2003, overarching Corporate level objectives were established as the basis for setting environmental performance improvement targets in any given year. They are:

- » EMS development and implementation
- » Environmental continual improvement
- » Reduction of GHG emissions
- » Reduction of waste
- » Resource conservation and pollution prevention
- » Environmental performance reporting
- » Promotion and recognition of functional excellence
- » Voluntary Environmental Stewardship Program participation

of the business.

Each year, the Health, Safety and Environmental Council sets objectives and targets for the organization to ensure the ongoing improvement of Cummins environmental performance. Corporate objectives are supplemented with business unit initiatives which are of special importance and address a unique risk or opportunity specific to that segment

Over the years, objectives were launched that included the development of Cummins greenhouse gas emissions inventory, addressing environmental footprint reduction project using Six Sigma tools and more recently for each site to develop a water balance identifying key uses of water and ways to further water conservation efforts.

To support energy efficiency and the Company's greenhouse gas (GHG) reduction efforts, Cummins has made energy a "significant aspect" of the EMS. This designation means that making energy efficiency part of our daily work remains a key focus at Cummins facilities and critical to the Company's sustainability efforts.

Designation as a "significant aspect" requires not only a focus on controlling high energy processes and equipment, it also compels the Company's EMS leaders to train all employees on the importance of energy efficiency and how each person can positively impact the environment.

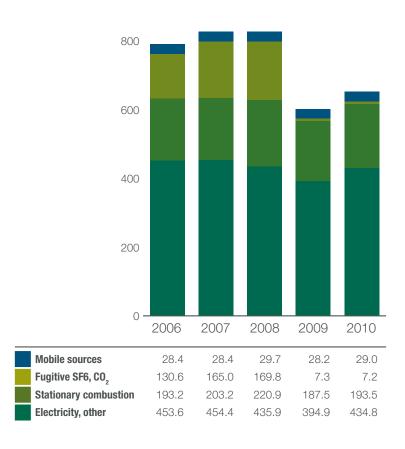
Our 2010 GHG emissions inventory was audited by an independent third party, Bureau Veritas for which we received a certificate of assurance.

**Environmental Stewardship** continues with Partnerships on page 52.

### **Total GHG emissions**

in thousands of metric tons CO<sub>2</sub>e

1000



### U.S. and Non-U.S. GHG emissions

in thousands of metric tons CO<sub>2</sub>e

|          |          | 2006  | 2007  | 2008  | 2009  | 2010  |
|----------|----------|-------|-------|-------|-------|-------|
| DIRECT   | U.S.     | 258.4 | 284.5 | 294.9 | 128.1 | 127.6 |
|          | Non-U.S. | 93.9  | 112.2 | 125.5 | 94.9  | 102.1 |
| INDIRECT | U.S.     | 354.1 | 351.0 | 327.6 | 290.5 | 309.4 |
|          | Non-U.S. | 99.5  | 103.4 | 108.3 | 104.4 | 125.4 |

# **Green** buildings growing at Cummins

New Cummins plants and office buildings across the world are going green with environmentally-friendly features ranging from high-efficiency lighting to water collection systems used to irrigate landscaping.

"We want to build good buildings that are easy to maintain, environmentally sustainable and help us create great places to work," said Tim Updike, Cummins' Director of Global Facilities Services. "But they need to make sense for each location and they need to be adaptable to our future needs."

The new "Megasite" in Phaltan, India is a good example. The 300-acre site will be home to 10 Cummins' facilities by 2014. The site currently has three plants operating with another coming on line in 2011. The site was inaugurated Jan. 14, 2011.

Because it was built relatively far from an urban area, water at the Megasite is a big issue. It makes sense to collect so-called "greywater" - water used in sinks and canteens - as well as rain water that falls on the property. The rainwater is gathered through a system of small pits or cisterns interconnected with small canals that run through the property.

The water collected is then used for such things as watering landscaping, including

a field of purple, pink and white flowers that greets visitors and employees. Potable water is brought to the site by truck.

Water isn't the only challenge at the Megasite. When work started on the property in 2008, the location was littered with large rocks. Rather than cart that rock away, it was used in the masonry in the buildings at the site and in the security wall that surrounds the complex.

In addition to energy-efficient lighting, the buildings at the Megasite include skylights and windows to let in natural light. And those are just a few of the green features at the development.

Over the past two years, Updike and other Cummins officials have been updating Company standards for new construction to integrate technology while balancing initial costs with the costs over the lifetime of a building as well as the building's environmental impact.

Compliance with these Global Building Standards will result in a building that is capable of being certified, Updike said. The actual process of certification and the regulatory agency used - LEED, Energy Star or others – is a decision left to the building occupant based on need and region of the world.



LEED stands for Leadership in Energy and Environmental Design. It's a set of standards widely used in the United States and elsewhere to measure whether a building is environmentally sustainable. In India, the India Green Building Council (IGBC) sets similar standards for industrial facilities.

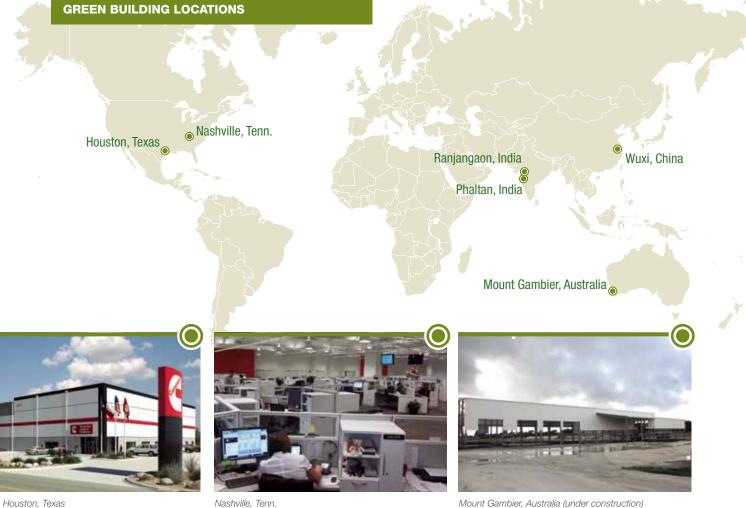
If a Cummins business unit believes certification is important, it can pursue that designation. For example, the Cummins Middle East Regional Distribution and Middle East FZE complex in Dubai, which opened in May 2010, is a LEED Silver-qualified facility.

The first Cummins facility to go green was the Cummins Generator Technologies India plant in Ranjangaon, India in 2007. The plant has been widely recognized for its design which includes high efficiency glass for windows and skylights, fly ash in the building's bricks and rooftop landscaping.

Cummins' new building standards are followed whether a building is new, being expanded or remodeled. A growing list of Company facilities are taking advantage of the standards to follow Ranjangaon's lead, including:

- » The Cummins Generator Technologies expansion in Wuxi, China, which will include a "green roof" that provides insulation when the weather is cold and absorbs heat when temperatures are high.
- » The new Customer Support Center in Nashville, Tenn., which opened in 2010, and includes new control systems that allow for better management of the lighting, heating and air conditioning when the center is not occupied. The chairs in the break room are made with recycled plastic soda bottles and there is recycled rubber flooring in the fitness room.

The new Megasite in Phaltan, India is one of the newest "green" facilities at Cummins. Water used in sinks and canteens as well as rain water that falls on the property is gathered and used for such things as watering landscaping, including these purple, pink and white flowers that greet visitors and employees.



Houston, Texas

- Nashville, Tenn.
  - » The Mount Gambier facility in Australia now under construction will include solar panels, recycling of grey water, rain water storage, environmentally friendly building materials and more. Leaders there used Six Sigma tools to determine what features made the most sense for that location.
- » Cummins' new Oil and Gas Center of Excellence located in Houston, Texas, which opened in 2011 to deliver customized and integrated packages for oil and gas land-based applications, will have a number of green features when it's fully complete. They include

low-flow water devices in the bathrooms, occupancy sensors for shop and office lighting as well as high efficiency lighting.

Updike said the new standards reflect a more balanced approach to the Company's construction needs that evolved over the past few years. The Company had been very focused on first-time construction costs but now is looking increasingly at the lifetime costs of its new buildings as well as their environmental footprint.

"Our goal is the construction of high performance, sustainable, but flexible buildings," he said.

### Sometimes 'treasure' is under our nose

The Energy Champion program at Cummins helps plants and facilities review their operations for potential energy savings that can get overlooked in meeting day-to-day work demands.

That's exactly what happened at Cummins Turbo Technologies (CTT) in Charleston, S.C., and that second look is paying off in a big way.

In reviewing the operations at CTT in Charleston, the Energy Reduction Team at the plant, led by Energy Champion David Willey, noticed that three compressed air vacuum units in a drilling operation were for the most part turned on in the morning to collect metal chips and turned off at the end of the day.

However, they were only actually sucking up chips for a fraction of that time.

"We utilize stand-alone vacuums for chip evacuation during our balancing operations," explained Willey, Maintenance and MRO Leader at the plant. "The actual cut time for the balancing was about 10 seconds per cut and 30 cuts per hour. Total shift vacuum run time was less than 40 minutes, but we were in operation 480 minutes."

Compressed-air vacuums use a lot of energy and therefore cost of a lot money to operate. The team estimated the vacuums

were sucking up thousands of dollars worth of energy annually in addition to the metal chips.

Willey said the team implemented a two-fold solution in 2010. Some electric vacuums were installed that could be shut down when cutting wasn't taking place. In addition, a valve was installed on the remaining compressed-air units so they wouldn't run constantly.

In all, six units were replaced or reconfigured and Willey estimates savings of more than \$50,000 annually.

Cummins Energy Champions like Willey are discovering that sometimes the treasure they seek isn't hidden very deep. It just requires looking at a situation in a different way.

By installing some vacuums that could be shut down when cutting isn't taking place, Cummins Turbo Technologies employees are saving thousands of dollars.



# **Environmental Stewardship // Partnerships**

Cummins' partnerships have helped the Company meet our product and emissions goals and become more efficient in our use of energy. Here's a look at some examples:

### **SCIENCE AND TECHNOLOGY ADVISORY COUNCIL**

Cummins seeks advice from its Science and Technology Advisory Council in developing products to meet various standards, to reduce the Company's environmental footprint and to meet customer demands.

The Council, formed in 1993, has given the Company access to some of the country's leading scientific thinkers and policymakers from the worlds of academia, industry and government. The Council was restructured in 2010 to facilitate access to a broader group of international specialists and align their expertise with the specific topics being addressed by the Council at a particular time.

The permanent members are:

- » Chairman Gerald Wilson, former Dean of Engineering at the Massachusetts Institute of Technology.
- » Harold Brown, former U.S. Secretary of Defense and former President of the California Institute of Technology.

Other senior international scientists and engineers are invited to participate as advisors depending on the topic.

The Safety, Environment and Technology Committee of the Cummins Board of Directors also advises senior leaders and the technical leadership of Cummins regarding:

- » Environmental and technological strategies, compliance programs and major projects as they relate to the Company and its products.
- » Public policy developments, strategies and positions taken by the Company with respect to safety, environmental and technological matters that significantly impact the Company or its products.
- » Progress of strategic environmental programs and policies.

The Committee consists of Cummins Board Members Robert J. Bernhard, Franklin R. Chang-Diaz, Stephen B. Dobbs, William I. Miller, Georgia R. Nelson and Carl Ware.

### Cummins has long worked in partnership with the U.S. Department of Energy (DOE) to develop advances in diesel engines and related technologies.

Previous Cummins programs funded by the DOE have led to both evolutionary and breakthrough technologies and analytical approaches, speeding up the time for the commercialization of vehicles powered by advanced combustion engines.

In 2007, for example, Cummins introduced its 6.7 liter Turbo Diesel, which met 2010 emissions standards three years early. That engine uses a Nitrogen Oxide (NOx) Adsorber Catalyst developed and demonstrated in collaboration with the DOE.

The Company received a \$54 million grant from the DOE in 2010 for two projects it is currently working on to improve fuel efficiency in heavy-duty and light-duty vehicles.



Cummins became a charter member of the DOE's Save Energy Now LEADERS program in 2009. Cummins pledged to improve its energy efficiency at least 30 percent by 2015.

### U.S. EPA

The Environmental Protection Agency is charged with developing and enforcing environmental regulations in the United States. By working with a trusted business resource such as Cummins, the agency can better match its technology mandates with realistic timelines to meet those regulations.

Cummins, for example, has supported improved fuel efficiency and greenhouse gas reduction from medium and heavy-duty commercial vehicles and endorsed the rule as proposed by the agency and the U.S. Department of Transportation in October 2010. The Company has provided extensive feedback during the comment period in 2010.

#### **ACADEMIC PARTNERSHIPS**

Aluminum versus steel. Microfinishing a surface. Energy use and industrial ovens.

Working with Purdue University, Cummins is trying to learn more about these subjects and others to better understand the environmental impact of our product design decisions and how we can adjust our material selection and manufacturing processes to use less energy.

Cummins employees are also learning from the Massachusetts Institute of Technology about the measurement of the full life-cycle of our products. That's not an easy task given there are approximately 2,500 distinct part numbers to a heavy-duty diesel engine.

### Collaborating with customers for better performance

Since 2004, Cummins has collaborated with its end user truck fleet customers on 67 customer-focused Six Sigma projects, which saved 50 million gallons of fuel and avoided 446,000 tons of CO2 emissions. That's equivalent to taking 87,000 cars off the road.



INTRO

# How much is a ton of CO<sub>2</sub>?

This report includes a lot of statistics regarding carbon dioxide (CO2), a colorless gas that contributes to global warming. In many instances, statistics are based on tons of CO<sub>2</sub>. So, how much is a ton of CO<sub>2</sub>?



### **DUKE ENERGY**

Cummins has continued to partner with Duke Energy on many energy efficiency initiatives and was named a "Power Partner" in 2009.

In the latest collaboration, Cummins in 2010 expanded to three more sites a successful and innovative Energy Contract for Service piloted in 2009. In the pilot, three major Indiana manufacturing sites were upgraded with high-efficiency lighting and smart sensors which Duke Energy owns and maintains.

The facilities pay for the energy service as provided - in this case lumens of light - and the cost of that service has always been less than the energy costs avoided. The pilot demonstrated a facility can gain improved quality lighting with no capital and net negative expense while reducing its carbon footprint.

Both partners realize benefits in the arrangement: more Cummins production means more lighting used - lumens are variable to our production needs - and expected usage and savings are positive for the Company.

### **PUBLIC SECTOR COLLABORATIONS -**CITY OF COOKEVILLE

Cummins Filtration has partnered with the City of Cookeville, Tenn. to replicate Cummins successful "Unplugged Challenge" program to address energy use overnight, over the weekend and over holidays when city facilities are closed.

Cummins provided technical assistance and training to the city, which identified its own Energy Leaders to take inventory of all electrical items in all city facilities.

"The energy efficiency partnership we have with Cummins Filtration and its staff has proven to be one of the best public-private partnerships we have ever had here at the City of Cookeville," said City Manager Jim Shipley. "The Energy Leader program they have helped us establish has not only saved our city money, but has also provided invaluable knowledge to our employees by helping them reduce their home energy costs as well."

### SUSTAINABILITY REPORTING AND **PRODUCT WEB SITES**

Cummins takes a number of steps to report its environmental information to the public and work with other companies to share best practices.

For the past six years, the Company has participated in the Carbon Disclosure Project (CDP), an institutional investor consortium that seeks to encourage greater environmental reporting among companies.

CDP asks companies to provide details on their carbon emissions, their response to the impact of climate change on their markets and regulatory environment, their use of energy and planning for the future.

In addition, Cummins is a member of the Business Roundtable Climate RESOLVE (Responsible Environmental Steps, Opportunities to Lead by Voluntary Efforts), whose members have voluntarily committed to reduce or offset greenhouse gas (GHG) emissions.

Cummins also is a member of the Business Environmental Leadership Council of the Pew Center on Climate Change and sits on the President's Council of Resources for the Future.

Some Cummins business units are also releasing more environmental information about their products and practices. Power Generation's newly launched environmental sustainability Web site brings together news and information from across the business about its varied products, services, projects, development initiatives and employee activities that have a bearing on climate change and reducing carbon footprints.

In addition to links to Cummins' corporate Web site, the Power Generation site includes descriptions of its own products with environmentally sound and sustainable features. Examples include Power Generation's lean burn gas product line and heat and power, waste-to-energy and alternative fuels systems, and backup power for solar energy.

"We are committed to being fact-based, open and engaged with our customers, suppliers, employees and communities about the issue of climate change," said Tony Satterthwaite, President of Cummins Power Generation.

The URL is www.cumminspowerdocs.com/ climate/climate-landing.ht

### **AMERICAN ENERGY** INNOVATION COUNCIL

**Cummins Chairman** and CEO Tim Solso has joined several

key U.S. business



leaders serving on the American Energy Innovation Council, a group advocating for development of clean energy to boost the nation's economic competitiveness. Other members include Microsoft founder Bill Gates and Jeff Immelt, Chairman and CEO of General Electric.

The Council has called for more research into nuclear, solar and wind power, fossil fuels and other energy technologies. The council has also asked Congress to create an energy strategy board charged with developing and monitoring a national energy plan as well as overseeing what the business leaders call a new "Energy Challenge Program" for large-scale demonstration projects.

### INTRO

# Cummins helps customer cash in on fuel efficiency



Mark Kennedy (left) and Russ Thompson, Swift's Vice President of Procurement and Shop Operations and a sponsor of Kennedy's Six Sigma project, are pictured next to one of Swift's trucks.

When Mark Kennedy of Swift Transportation took Cummins Six Sigma training in 2006, little did he know his project would become an award winner.

Nor did he know it would lead to his current job as Equipment Optimization Manager, heading a department that has saved Swift millions of dollars over the years thanks to Six Sigma.

"For Swift, the whole project helped our relationship with Cummins grow stronger," Kennedy said. "And it has helped us to focus on everything we do, and do it as efficiently as possible."

Six Sigma is the business improvement tool that uses data-based analysis to identify defects and variation in manufacturing and business processes. Cummins believes strongly in Six Sigma and frequently invites customers to learn about the process.

The goal of Kennedy's 2007 project was to improve the Phoenix, Ariz.-based company's miles per gallon (mpg) from an average 6.63 to 7 mpg for its Cummins-powered trucks without changing load weights or engine size. The project came up with a number of recommendations addressing everything from tire pressure to gearing.

Swift, now at 14,500 trucks with 10,000 of them powered by Cummins engines, was a smaller fleet back then with 5,000 trucks with Cummins engines. Still, the project exceeded its goal, delivering an estimated \$15 million in savings from the Cummins powered-trucks alone.

Two Six Sigma team members plus one of Kennedy's project sponsors were from Cummins. The effort received a Chairman's Six Sigma Quality Award. These awards are given annually to outstanding projects at Cummins.

Swift has embraced Six Sigma and other lean management processes, saving millions of dollars from process improvements. For example, Swift has continued a long-term process improvement of giving every truck that falls below a certain mpg threshold a thorough inspection.

A two to three percent fuel economy improvement can translate to \$1,000 to \$2,000 in fuel savings per truck per year. Kennedy says that's more than enough reason to stay on top of each truck's performance.

# COB water treatment system – the rest of the story

Here's an update on a story in last year's Sustainability Report.

In 2009, 25 years after the Corporate Office Building (COB) was built in Columbus, Ind., Cummins replaced the facility's old water cooling system. The old system circulated chemically treated well water to support three chillers for air conditioning.

Millions of gallons of water were discharged annually into a local waterway after passing through the system.

The new system included a high-efficiency cooling tower that used an electronic technology to treat the water so it wouldn't damage the equipment. Cummins stopped using well water and started purchasing water from the city to cool the building.

But water could still only be circulated once through the cooling tower process and then had to be discharged into the city sewer system. In addition, the tower had to be drained and cleaned periodically.

As a result, Cummins went from using well water that was essentially free to using city water that increased the Company's water and sewer costs dramatically. And the Company wasn't accomplishing much in terms of water conservation.

Now, Cummins has taken its water management efforts to the next level. The Company is using a new, low-impact



process that allows water to be re-circulated many more times through the cooling tower. That process is saving water. The new technology has also reduced maintenance.

High efficiency water softeners - similar to those found in many homes - prevent scaling by removing the calcium and magnesium in the water. The system adds silica, which works with the water supply's natural chemistry to prevent corrosion of the cooling tower equipment.

"We are very pleased with the treatment system and its performance", said Phil DeVinney, the Facilities Manager at Cummins headquarters. "Through the first quarter of 2011 our utility bills reflected a 90 percent water use reduction and an over 80 percent water and sewer cost reduction."

The Company's high-efficiency cooling tower system is discretely located within this brick enclosure at one end of a parking lot across the street from Cummins' Corporate Office Building. New water softeners are helping the system conserve water.

# He really hates throwing things away



### **MARK SLATON**

#### Title

Environmental Engineer

### Education

Bachelor's and master's degrees from Indiana University.

### Career

Joined Cummins in 1988 and has spent more than 20 years based at the Columbus Engine Plant. Prior to joining Cummins he worked at the Indiana Department of Toxicology.

#### Quote

When asked about his dedication to the environment, Slaton explained: "I'm kind of a passionate person."

Mark Slaton says it's true that he likes to ride with the trash trucks at least once a quarter to photograph what Cummins throws out at the Bartholomew County Landfill.

And the Environmental Engineer at the Columbus Engine Plant (CEP) admits to diving into the occasional dumpster when he believes it's necessary.

But even before the question can be asked, he is quick to point out there are some limits to what he will do to ensure Cummins disposes of as little trash as possible.

"When I go to the landfill," he says with a sly smile, "I ride in the cab (of the truck)."

While Cummins models good environmental stewardship through its products, practices and partnerships, it depends on people like Slaton to fulfill its mission that "everything we do leads to a cleaner, healthier (and) safer environment."

Slaton's commitment to throwing out as little as possible - he analyzes the photos he takes at the landfill, for example, to find hidden opportunities to reuse or recycle - has been noted both in and outside the Company.

"Mark is an environmentalist in the truest sense of the word," says Jim Murray,

Director of the Bartholomew County Solid Waste Management District. "He will do anything to avoid throwing something away."

In 2010, Slaton was given an Environmental Excellence Award from the Association of Indiana Solid Waste Management Districts in recognition of his efforts.

Ernie Smith, Cummins' Environmental Affairs Manager, said he's never known a more committed and driven environmentalist than Slaton.

"Mark is obsessed with protecting the environment," he said.

Slaton says he simply loves the challenge of finding a home for everything CEP thinks about throwing away - as long as it isn't a landfill. The effort pays off, literally. CEP's recycling initiatives brought in \$77,000 for the Company in 2010.

While he's based at CEP, Slaton now works with several Cummins facilities in Southern Indiana to help them reduce what they throw out.

Slaton started with the Company in 1988. Back then, CEP was shipping out lots of trash, including the equivalent of a semi-truck full of wooden pallets to the Bartholomew County Landfill each week.



Crews collect household hazardous waste at the Bartholomew County Fairgrounds in Columbus, Ind.

Then, the landfill warned that it would run out of room if the community didn't find ways to shrink its waste stream. And Slaton became an active partner in finding a solution.

Take those pallets, for example. Today, none are being sent to the landfill. They are sent to a company that refurbishes them for reuse. Those that are broken and can't be used again are ground up and recycled.

Slaton is quick to credit his fellow employees at CEP and elsewhere.

Here are some of their other recycling triumphs at CEP:

- » Finding a way to reuse tons of concrete removed from the plant during a major remodeling. Some 800 truckloads were used along a nearby creek to stabilize its banks.
- » Recycling the cardboard and other packaging that came along with several large office furniture orders delivered to CFP.

» Recycling hundreds of pounds of Styrofoam and plastic packing materials that were part of the recent PowerSweep laptop computer replacement program.

When he isn't riding out to the landfill or working on a specific project, Slaton can often be found strolling through the CEP - he doesn't spend much time at his desk - talking reuse and recycling. He says most people welcome his help, and don't hide their trash cans when he walks by.

"I think most people see me as a resource," he said. "They want to recycle."

That's not to say there aren't some nonbelievers out there.

"A few are like that," Slaton acknowledges, pointing to a soda can in a waste basket near one of the entrances at CEP. "Don't worry," he says, "I'll get that before we leave."

### **HELPING THE COMMUNITY**

This year, Mark Slaton took on perhaps his biggest green initiative: Working with other local companies and agencies to organize the first-ever household hazardous waste day for Bartholomew County.

He was a key force in raising the tens of thousands of dollars needed to hire a firm capable of safely taking the paints, solvents, bleach and other materials collected at the May 14, 2011 event at the Bartholomew County Fairgrounds.

"Mark saw the need and set about finding a way to fill it," said Ernie Smith, Cummins' Environmental Affairs Manager. "He is just as concerned about what's happening in the community as he is at Cummins."

INTRO

### **Q&A** with John Wall:

# CO<sub>2</sub> will drive future emissions efforts

Editor's note: Cummins Vice President and Chief Technical Officer John Wall talks about emissions reduction and the Company's future. Wall has been in his current post since 2000 and is celebrating his 25th year with Cummins.



### Q: WHAT'S NEXT IN **EMISSIONS REDUCTION?**

A: NOx (nitrogen oxides) and particulate were really the focus in the mid-1980s. Since that time, we've reduced NOx and particulate emissions each by more than 98 percent. We have reduced the health impact from our products significantly over that time, and so the attention of the EPA (the U.S. Environmental Protection Agency) is now moving on from NOx and particulate towards greenhouse gases. I think that's the next big thing for the Company.

Greenhouse gas regulations, CO<sub>2</sub> (carbon dioxide) emissions will be the driver of our emissions technology and efficiency technologies over the next decade or more, just as NOx and particulate have driven us in the past, and so we're getting ready for that.

### Q: WHAT KINDS OF THINGS **CAN BE DONE TO REDUCE** CO, EMISSIONS?

A: As we look at CO<sub>2</sub> emissions, there are several things that you can do. There are things you can do with the fuel. So, you can go to lower carbon fuels, and we have a full line of natural gas products. Our engines are certified to run on B20 (20 percent bio-diesel, 80 percent petro-diesel).

If you look at the additional technologies that we'll have to meet CO2 emissions, there are two major ones. Hybrid powertrains are systems that will capture the kinetic energy of the vehicle, store it in a battery, and then use that to accelerate the vehicle later, like a Toyota Prius, for example. Hybrids like that will come into commercial applications.

And the second is waste-heat recovery, and that's really something that is quite old from a thermodynamics standpoint, but it's new from a product standpoint.

INTRO

If you look at the energy that comes from the fuel tank, about a third of it makes it to the rear wheels of the vehicle, about a third of it goes out as waste heat in the exhaust, and about a third of it goes out as waste heat through the radiator. And so really, two-thirds of the fuel energy that you put in the tank gets lost before it ever makes it to the rear wheel.

### Q: HOW DOES CUMMINS' **GLOBAL FOOTPRINT AFFECT** THE COMPANY FROM A **TECHNOLOGICAL PERSPECTIVE?**

**A:** One of the important phrases that we use in Cummins is, "The right technology matters." And the whole point of that is you don't derive one solution and then try to drive that into every application. But in fact, you develop a portfolio of technologies and then understand which one of those match the specific applications that we're trying to address, whether it's on-road or off-road applications, whether it's in North America or India or China, and that's really been a strength of Cummins.

We have an organization of product line architects and their responsibility is to be able to develop worldwide platforms in a consistent way, but platforms that can then be optimized with different technologies and different components for different applications, depending on where they are in the world.

### Q: HOW DID CUMMINS DEVELOP ITS LEADERSHIP ROLE IN **REDUCING EMISSIONS?**

A: We talk a lot about technology, but our real competitive advantage is the people here that are developing the technology, and we have a long history of that, dating back - in my experience to Dr. Alyn Lyn, who was the head of research at Cummins when I was in graduate school.

Dr. Lyn was an absolute lion in the industry. He was one of the first to do very detailed combustion modeling of the diesel engine process, looking at how we can reduce emissions and improve efficiency, and that means fuel economy, and also increase the power and performance of the engines. His legacy really lives on.

The initial modeling that he did gave us the foundation for what we call today Analysis-led Design. We apply it in our combustion and emissions analysis, we apply it in our machine design for structural analysis, and we're able to integrate those solutions to deliver products that not only meet emissions, but also serve all of our customers with better fuel economy, better performance, and lower costs and more reliable products.

# Good governance foundation for success

Business success is rooted in strong governance principles that promote ethical behavior by both leaders and employees, and responsiveness to all of a company's stakeholders.

### **HIGHLIGHTS**

- » Ethics principles, Code of Conduct guide Cummins
- » Average time to close Code of Conduct cases falls significantly
- » Board of Directors adds 10<sup>th</sup> member

Cummins believes much of its recent success is built on a strong governance foundation, starting with the Company's 10 Statements of Ethical Principles, which guide Cummins through the complexities of a global marketplace:

- We will follow the law everywhere.
- We will embrace diverse perspectives and backgrounds and treat all people with dignity and respect.
- We will compete fairly and honestly.
- We will avoid conflicts of interest.
- We will demand that everything we do leads to a cleaner, healthier and safer environment.
- We will protect our technology, our information and our intellectual property.
- We will demand that our financial records and processes are clear and understandable.
- We will strive to improve our communities.
- We will communicate with honesty and integrity.
- We will create a culture where all employees take responsibility for ethical behavior.



Cummins Board of Directors traveled to Mexico in 2010 to see the Company's operations in San Luis Potosí.

Later this year, they will visit China to learn more about the Company's operations there. To learn more about the Board's work, go to page 68.

Cummins, in turn, puts those statements into practice through an aggressive compliance training program targeting appropriate employee groups to promote ethical behavior.

The Company's policies and procedures in these areas are periodically updated.

The Treatment Policy was updated in 2009, for example, to provide more guidance on manager-subordinate relationships.

Both the Export Controls and the Anti-Bribery/Foreign Corrupt Practices Act courses were also updated in 2009 and offered to targeted employees to make sure they had up-to-date information.

Cummins started a new Internet-based training course in 2010 on Information Protection. The course covers sending classified or confidential data by email, electronic identity protection, acceptable use of the Internet, telecommuting and reporting procedures.

### **2010 COMPLIANCE TRAINING**

Course

|                                    |        | Rate |  |
|------------------------------------|--------|------|--|
| Code of Conduct                    | 1,899  | 92%  |  |
| Treatment of Others                | 1,813  | 92%  |  |
| Anti-Bribery                       | 2,082  | 93%  |  |
| Export Compliance                  | 12,753 | 92%  |  |
| Antitrust                          | 6,362  | 93%  |  |
| EU Competition                     | 131    | 95%  |  |
| Careful Communication              | 6,234  | 89%  |  |
| Intellectual Property              | 1,123  | 94%  |  |
| Lobbying and<br>Political Action   | 80     | 74%  |  |
| Managing within the Law            | 91     | 97%  |  |
| Information Protection             | 17,662 | 93%  |  |
| Fair Labor Standards Act           | 337    | 93%  |  |
| Records and Information Management | 10,868 | 85%  |  |

Enrolled

Completion



Mark Levett, Vice President & General Manager, High Horsepower Engine Business, talks with Indiana Lt. Gov. Becky Skillman at the July 2010 announcement that Cummins would build a \$200 million expansion of its Seymour Engine Plant to create a technical center and manufacturing line to design and produce a new high horsepower engine.

Company officials are confident Cummins' strong governance principles will help the Company with the challenges inherent in rapid growth.

### **ETHICS VIOLATIONS, REPORTING AND INVESTIGATIONS**

To support ethical behavior, Cummins has a global team of Master Investigators who respond to reports of violations to the Company's Code of Conduct and make sure that appropriate action is taken in a timely fashion. The Company now has Master Investigators in nine regions of the world.

In 2010, the Company investigated 814 Code of Conduct-related complaints compared to 699 in 2009. Forty-seven percent of the complaints in 2010 came from outside of the United States.

Of those cases investigated in 2010, 57 percent resulted in a finding that the complaint had some merit and 35 percent resulted in employee terminations.

Reports of unprofessional behavior and those grouped into the category of Human Relations accounted for more than half of the total Code of Conduct cases investigated in 2010.

The EthicsPoint system used at Cummins allows employees around the world to report concerns either through toll-free telephone numbers or on-line. Both services are available in multiple languages.

Employees can report concerns anonymously where allowed by law, but only about a quarter of the reports in 2010 were made that way. Those reporting on any topic are protected under the Company's anti-retaliation policy.

Following the recommendations of a Six Sigma project implemented in 2010, the Company reduced the average time to close cases from 24 days in 2009 to 15 days in 2010.

The Company closely monitors reported violations. Each quarter, business unit leaders receive an update on reports in their regions. Chairman and CEO Tim Solso and President and COO Tom Linebarger also get updates, and an annual update is reviewed by the Audit Committee of the Cummins Board of Directors.

### **ETHICS CERTIFICATION PROCESS**

In 2010, 15,266 employees completed their annual Ethics Certification including 44 Company officers and all members of the Board of Directors. Employees certified their compliance with the Company's Code of Business Conduct and underlying policies and reported any exceptions to Company policy.

Internal Audit and Cummins Law Department reviewed all exceptions to ensure they were documented and investigated, according to Company policy.

### SUPPLIER CODE OF CONDUCT

Cummins wants to do business with suppliers that share its passion for sustainable practices and policies. The Company's Supplier Code of Conduct includes provisions banning child or forced labor, respecting employee rights and providing a safe workplace for employees.

The Company holds suppliers to a higher standard than just compliance with local laws. That's why the code has been translated into more than a dozen languages. By the end of 2010, Cummins had sent the code to about 4,000 of its top suppliers and all reported they were in compliance.

#### JOINT VENTURE RELATIONSHIPS

Cummins does business around the world through alliances with business partners and joint venture agreements to increase market penetration, streamline supply chain management, expand product lines and develop new technologies.

The Company takes appropriate steps to ensure they share Cummins values regardless of whether Cummins directly manages these alliances and joint ventures. Cummins screens potential partners carefully and only initiates a joint venture with partners whom Company leaders know and trust.

By making values important to Cummins a part of negotiations, and by ensuring Cummins employees are included on joint venture boards of directors, the Company strives to ensure its values are a part of joint venture agreements and operations.

### **Cummins Board of Directors**

Cummins Board of Directors added a 10<sup>th</sup> member and visited the Company's operations in San Luis Potosí, Mexico during a busy 2010.

Stephen B. Dobbs, Senior Group President over Fluor Corporation's Industrial & Infrastructure and Global Services business groups, joined the Cummins Board in 2010.

Dobbs has worked at Fluor since 1980 in numerous U.S. and international locations, including southern Africa, Europe and China. He earned his doctorate in engineering from Texas A&M University and holds an undergraduate degree in nuclear engineering from the same school.

"Steve is an accomplished leader who has significant experience in a number of markets where Cummins competes," said Cummins Chairman and Chief Executive Officer Tim Solso. "He also brings valuable international experience to the Board, which will serve Cummins well as the Company continues to expand its presence around the world."

#### **ABOUT THE BOARD**

The Board represents and protects the interests of Cummins' stakeholders. The Board has the legal responsibility for overseeing the affairs of the Company, including:

- » Advising senior management.
- » Adopting corporate governance principles consistent with Cummins' Vision, Mission and Values.
- » Exercising sound and independent business judgment with respect to significant, strategic and operational issues.

The Board takes an active role in fulfilling these responsibilities. It traveled to Mexico, for example, to see the Company's multiple operations in San Luis Potosí including Cummins Filtration, ReCon and Regional Parts Distribution.

Cummins has had a wholly-owned manufacturing presence in San Luis Potosí since the early 1980s and employs approximately 2,000 people in the city.

This fall, the Board will travel to China to explore in detail the Company's operations and opportunities there.

**GOVERNANCE / RISK MANAGEMENT** 

### **BOARD RESPONSIBILITIES**

The Board monitors a number of issues including:

- » The performance of the Company.
- » The performance of senior management.
- » Compliance with all applicable laws and regulations.
- » Communications and relationships with stakeholders.
- » The effectiveness of internal controls and risk management practices.

To assist the Board with risk management, Cummins staff prepares a risk management "Dashboard" for every member each Board meeting. The Dashboard details the top risks facing the Company.

### **INTERNAL AUDIT**

Cummins' Internal Audit department provides the Board and senior leaders with objective and independent information on the performance of the Company's control environment.

The Executive Director - Internal Audit reports to the Audit Committee of the Board of Directors. In 2010, the Internal Audit Group published 101 audit reports and memos. To ensure management has addressed identified risks and implemented corrective action, Internal Audit has a formal follow-up process.

A business unit leader must present a corrective action plan to the Audit Committee of the Board of Directors when a function or business receives an "Unacceptable" audit grade.

### **COMMITTEES**

Cummins Board of Directors has six standing committees:

- » Executive Committee
- » Compensation Committee
- » Governance and Nominating Committee
- » Audit Committee
- » Finance Committee
- » Safety, Environment and **Technology Committee**

The Company complies with all New York Stock Exchange and regulatory requirements concerning the membership of certain committees.

### **Board Members**



**ROBERT J. BERNHARD** 

Vice President for Research and a professor in the Department of Aerospace and Mechanical Engineering at the University of Notre Dame. He joined the board in 2008.



### **WILLIAM I. MILLER**

President of the New York-based Wallace Foundation focused on K-12 education and the arts. He joined the Board in 1989.



### FRANKLIN R. CHANG-DIAZ

Founder, Chairman and CEO of Ad Astra Rocket Company, a U.S. spaceflight engineering company based in Houston, Texas. He joined the Board in 2009.



### **GEORGIA R. NELSON**

President and CEO of PTI Resources, LLC, an independent consulting firm. She joined the Board in 2004.



STEPHEN B. DOBBS

Senior Group President at Fluor Corporation. He joined the Board in 2010.



### **CARL WARE**

Retired Executive Vice President, Public Affairs and Administration, the Coca-Cola Co. He joined the Board in 2004.



**ROBERT K. HERDMAN** 

Managing Director of Kalorama Partners, LLC, a Washington, D.C.based consulting firm. He joined the Board in 2008.



### N. THOMAS LINEBARGER

President and Chief Operating Officer of Cummins Inc. He joined the Board in 2009.



**ALEXIS M. HERMAN** 

Chairman and CEO of New Ventures, LLC, a corporate consulting company. She joined the Board in 2001 and currently serves as Lead Director.



### THEODORE (TIM) M. SOLSO

Chairman and CEO of Cummins Inc. since 2000 after serving as Company president since 1995. He joined the Board in 1994.

# Sustainability means managing risks

**GOVERNANCE / RISK MANAGEMENT** 

At Cummins, risk management takes many forms.

It's the development of Business Continuity Plans to keep Company sites across the globe up and running if disaster strikes. It's developing new ways to protect and secure information so Cummins can continue to innovate for our customers. It's training Cummins employees to travel safely as they work around the world.

Cummins believes strongly that companies failing to manage risk effectively have a harder time investing to build stronger communities or taking steps to shrink their carbon footprint. In short, effective risk management is essential to any sustainable business.

That's why senior leaders at Cummins maintain a list of the top threats facing the Company that is constantly updated and frequently assign Six Sigma Black Belts to research those potential threats and develop possible actions. Leaders also present a "Risk Map" and a "Risk Dashboard" to members of the Board of Directors at every Board meeting so they stay informed.

"Effective risk management means protecting yourself from the risks you know about," said Brian McBroom, Cummins Director of Risk Management, "and preparing yourself to react to the risks you don't see coming."

#### **BUSINESS CONTINUITY PLANS**

Over the past 12 months, the Company continued to make progress in establishing Business Continuity Plans for the most critical Cummins locations. The Company now has completed plans for more than 100 locations, but as Cummins grows, the list of sites needing plans grows, too.

These plans include detailed information on crisis communications, operational recovery and emergency preparedness. Upon completion, the plans are transferred to local leaders who update them annually.

Floods in Nashville, Tenn. and Australia and earthquakes in China, Haiti, Chile and Japan over the past two years underscore the urgency to get the plans completed. To protect Cummins' supply chain against similar risks, suppliers have also been asked to create and maintain their own continuity plans.

#### **INTERNATIONAL TRAVEL**

In the past year, Cummins Global Security staff has taken several steps to build on creation of the Travel Safe Travel Smart Web site in 2010 to aid Cummins employees who travel frequently. The site links employees to the iJET Intelligent Risk Systems, which provides around-the-clock medical, security and travel support.

By accessing iJET's Web site, employees can get in-depth reports on the security status of the locations they will be visiting. Working with iJET, Cummins recently enhanced its monitoring of Company travelers. No matter what time of day an incident happens around the world, an assessment is completed to determine whether any Cummins personnel or assets could be affected.

The iJET monitoring system then notifies the appropriate members of the global security team so they can react accordingly. This ensures the staff is responding to global events affecting Cummins travelers even if they happen in the middle of the night or on a holiday.

Cummins is also working with Global Rescue, a Boston-based firm that assists companies with evacuation and emergency response around-the-world. Global Rescue specializes in evacuating people from remote or high-risk locations. The firm also helps develop emergency action plans for certain high-risk destinations where Cummins sends employees.

Finally, in 2011, Cummins is rolling out online training for employees who travel for their jobs. The first phase focuses on employees who travel to high-risk areas. The second phase will include employees who travel to countries with moderate to low risks.

The training covers all phases of travel from departure to hotel stays and road travel. Some elements covered by the training include avoiding displaying Cummins logos in public, taking different routes to work sites and heightening awareness of surroundings.

**GOVERNANCE / RISK MANAGEMENT** 

Cummins maintains an office in Washington, D.C. to coordinate government relations activities and monitor changes that might have a significant impact on the Company, such as energy policy, environmental legislation, taxes, trade and transportation policy to name just a few.

For example, Cummins worked extensively in Washington to protect the EPA's 2010 heavy duty on-highway emissions standards from delay or modification. The Company also supported the government's effort to establish the first-ever greenhouse gas and fuel consumption standards for commercial vehicles, which likely will take effect in the middle of this decade.

The Company belongs to a number of trade organizations to further its business interests. These organizations help Cummins by leveraging the Company's resources with other companies on issues where we share similar interests. While Cummins might not agree with the positions these associations take on every issue, the Company believes participating in these groups helps ensure the Company's voice is heard.

Cummins' current policies ban political contributions using corporate funds to candidates, political parties or independent expenditure campaigns.

Political contributions are made by the Cummins Inc. Political Action Committee (CIPAC), but the committee is funded solely by voluntary employee contributions. CIPAC makes contributions to federal candidates on a bipartisan basis after review and approval by CIPAC's Executive Committee and according to federal law.

For a complete list of the political action committee's contributions to candidates. go to www.fec.gov.

## **GOVERNANCE AND RISK MANAGEMENT CHALLENGES**

#### **Training**

Maintaining Cummins culture will be critical as the Company enters a significant growth period. Compliance training will be key.

#### **Travel Safety**

More employees are expected to travel as the global economy recovers making monitoring global travelers more important than ever.

#### **Business Continuity Plans**

As Cummins grows, the number of critical sites needing emergency plans grows, too. Keeping up will be critical.

- » All CIPAC contributions are strictly voluntary.
- » The Company will not reimburse employees directly or indirectly for political contributions.
- » Employees will not be pressured to contribute to CIPAC or make any other personal political contribution.
- » A decision not to contribute to CIPAC shall not disadvantage an employee's career in any way.

Contributions to political candidates and political organizations are based on the following criteria:

- » Public integrity of the candidate.
- » Representation of a Cummins facility or employees.
- » Support for issues of importance to Cummins.
- » Timely and effective constituent service.
- » Political leadership or organization.
- » Support for the Company's values.

All of CIPAC's political activities are disclosed to the Cummins Board of Directors in an annual political contribution report.

#### **LOBBYING**

Here is a list of the trade organizations to which Cummins paid dues in excess of \$50,000 during calendar year 2010 and the U.S. Chamber of Commerce, which fell below that \$50,000 threshold. Listed with each entity is Cummins' estimation of the portion of these dues used by each organization for lobbying or other political expenditures.

#### Group

Amount for lobbying

### **The American Trucking Associations**

\$11,930

#### The Business Roundtable

\$30,326

#### The Diesel Technology Forum

\$127

#### **The Engine Manufacturers** Association

\$8,682

#### The National Association of **Manufacturers**

\$21,012

### **U.S. Chamber of Commerce**

\$12,500

## Joplin branch learns life can change in an instant

**GOVERNANCE / RISK MANAGEMENT** 

The employees of Cummins Central Power branch in Joplin, Mo., know how quickly life can change.

At 5:41 p.m. on May 22, 2011, a mile-wide tornado with winds topping 200 miles per hour roared through the western Missouri town, killing more than 150 people and leaving a wide swath of destruction including the Central Power facility in Joplin.

Thankfully, Cummins employees and their families were safe although some extended family members suffered personal losses.

Fred Venhoff, Vice President and General Manager of Cummins Central Power, learned about the tornado when he was passing through the state just a few hours away.

"I headed to Joplin loaded with containers of water and gasoline and a small generator," Venhoff said. "The first thing that struck me on arrival was that I could see across the entire city and nothing looked the same. It was even hard to recognize the

property where the branch had set for many years."

The Cummins facility lost a 40- by 80-foot storage building, along with a semitrailer used for storing parts. Automobiles blown in from neighboring properties were scattered about the site.

"All of our service trucks and four customer vehicles suffered severe damage and had blown against one another inside the building until the roof collapsed," Venhoff said.

In short order, Venhoff and his employees developed and implemented a recovery plan. Slowly but surely, the Joplin area is clearing the rubble and rebuilding.

"In general, the morale and attitude of our people have been very positive despite the overwhelming devastation and their personal losses," Venhoff said. "Everyone has been eager to help one another and do whatever necessary to aid in the support of those in need."

Before and after pictures of the Cummins Central Power branch in Joplin, Mo., which was in the path of a May 22, 2011 tornado that destroyed much of the town. Winds topped 200 miles per hour and left a wide swath of destruction.





### CORPORATE RESPONSIBILITY

## A growing commitment to community involvement

To fulfill its Corporate Responsibility value to "serve and improve the communities in which we live," Cummins has made an unprecedented effort to integrate community involvement into the way the Company does business.

### **HIGHLIGHTS**

- » Company embeds Corporate Responsibility leaders in business units
- » Sponsors regional Corporate Responsibility conferences across the world
- » About 6,700 employees participate in 86 projects as part of the Company's second Environmental Challenge

In the past 12 months, Cummins has embedded 11 full-time Corporate Responsibility leaders in its business units in North America and in various countries around the world including Brazil, China, India and Mexico to coordinate community involvement activities.

In addition, Cummins conducted regional conferences in Brazil, China, India, the United Kingdom and the United States in the past year to promote community involvement work and Cummins' Business Case for Corporate Responsibility.

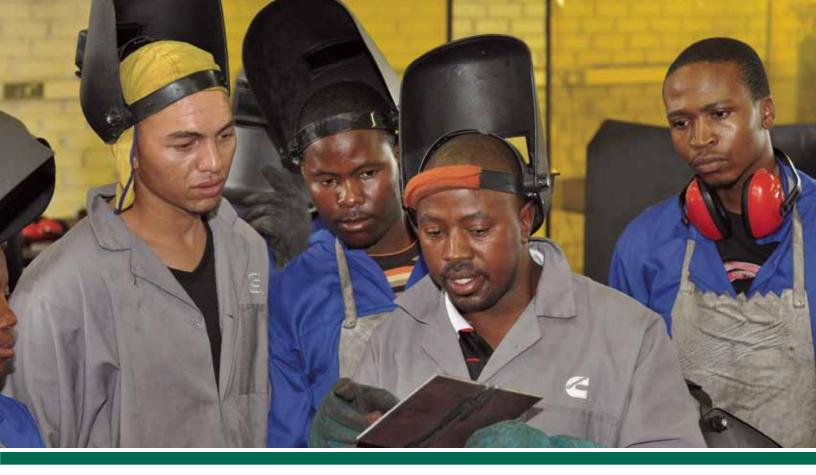
Cummins has also included Corporate Responsibility in the initial planning for major new initiatives such as increasing the Company's presence in Africa.

Jean Blackwell, Cummins' Executive Vice President - Corporate Responsibility, says the Company now has the organization in place to both help improve communities around the world and at the same time strengthen the Company.

"I see Corporate Responsibility as really two fold," she said. "It's first aligning with our vision and mission and our values of making our communities better. And second, it's about aligning with our strategic goals - that we will do better as a company if our communities are healthier, if society is more just, and if we have a better educated workforce."

#### **EMPLOYEE INVOLVEMENT**

Cummins has long believed that a Company is only as strong as the communities where it does business and where its employees live and work. Because most employees want to make a difference in their communities, Corporate Responsibility also helps create the right environment for Cummins' success, aiding in both recruiting new workers and retaining existing employees.



Working through a network of 170 employee-led Community Involvement Teams across the globe, Cummins tackles hundreds of community improvement initiatives each year.

In fact, participation in the Every Employee Every Community (EEEC) program reached record levels in 2010. More than 27,000 employees - about 62 percent of the Company's workforce donated 110,757 hours in 2010.

Under the program, the Company pays for employees to work on EEEC projects for at least four hours per year and much longer in many cases.

The Corporate Responsibility staff also conducted a second Environmental Challenge in 2010 to encourage Community Involvement Teams to leverage the Company's environmental expertise to address community concerns (page 86).

Fifteen projects were honored ranging from initiatives to recycle cooking oil in Brazil (page 81), to replacing dirty, inefficient stoves in villages in India (page 91), to reducing energy consumption by a community center in the United States. The winning initiatives received \$10,000 each from The Cummins Foundation for use by the not-for-profit organization of their choice.

About 6,700 employees from 13 different countries participated in the 86 projects entered in the 2010 Environmental Challenge. They collectively reduced greenhouse gases by an estimated 709 tons.

"These winning projects made a difference in Cummins communities around the world," said Carole Casto, Cummins Director of Community Engagement. "I'm constantly amazed by our employees' creativity and dedication."

Students at the Cumminssupported Ithemba Institute of Technology in Soweto are learning critical job skills that are in demand in South Africa.

## "Corporate Responsibility is only effective as a company if we add something to it; if we add our skills, if we add our passion, if it furthers our strategic goals."

#### **JEAN BLACKWELL**

EXECUTIVE VICE PRESIDENT - CORPORATE RESPONSIBILITY

## **CORPORATE** RESPONSIBILITY **CHALLENGES**

#### **Values**

Instilling in new employees an understanding of the Company's Corporate Responsibility value as Cummins experiences rapid growth.

#### **Metrics**

Establishing and implementing metrics to measure the impact of community projects and the effectiveness of employee-led Community Involvement Teams (CITs).

#### Leadership

Developing strong leadership support for community involvement activities.

#### **UNITED WAY**

Cummins U.S. employees also donated a record amount to the United Way in 2011. Employees pledged \$2.12 million. When combined with a matching gift from The Cummins Foundation and other fundraising, the local contribution resulted in a total gift of \$4.26 million to United Way in 2011.

At the Rocky Mount Engine Plant (RMEP) in Rocky Mount, N.C., a record-breaking 80 percent of the employees participated in 2011 - the highest United Way participation rate of any Cummins location in the United States. RMEP employees pledged a total of \$176,893.

In recognition of their outstanding efforts, Rocky Mount employees were presented a Spirit of North Carolina Award for their exceptional campaign by the United Way of North Carolina in February 2011.

#### SIGNIFICANT PARTNERSHIPS

Cummins also continued work in 2010 and 2011 on several special partnerships around the world that are addressing a range of concerns including sustainable agriculture, the lack of women engineers in India, people with developmental disabilities in Minnesota and more.

The Company has made significant investments in these partnerships in addition to contributing employees' time and expertise. They include:

» The Courage Center: Cummins employees in Fridley, Minn. work with the Minneapolis-based center whose mission is to help those with brain and spinal cord injuries and developmental disabilities. Company employees modify a wide-range of equipment and toys so the center's clients can experience more productive and fulfilling lives.

A similar initiative involving Cummins employees is taking place at the Willoughby School near Stamford in the United Kingdom and the two regularly share best practices.

» Cummins College of Engineering for Women: Cummins has long supported this college based in Pune, India, created to educate women who have been under-represented in the field of engineering.

## » EARTH University: This school in Costa Rica teaches sustainable agriculture and entrepreneurship to students who might never have afforded college. They are urged to share what they learned with others when they return home.

#### » Ithemba Institute of Technology:

The high school and technical institute in Soweto, South Africa, provides a technical education to students who would otherwise not have access to higher education. The training program provides students with critical job skills while also preparing Cummins' workforce for tomorrow.

Cummins is able to financially support these and other initiatives through The Cummins Foundation (page 93), one of the oldest corporate foundations in the United States. But donating money is a relatively small part of Cummins' Corporate Responsibility initiatives.

"If you think about corporate responsibility as merely philanthropy, as merely giving money, then I don't know that it is something a company should engage in," Blackwell said. "Corporate Responsibility is only effective as a company if we add something to it; if we add our skills, if we add our passion, if it furthers our strategic goals."

## **Global priority areas**

Cummins' Corporate Responsibility efforts are focused on three global priority areas:

### 1 THE ENVIRONMENT

### 2 EDUCATION

### **3 SOCIAL JUSTICE**

"We looked at what areas we could focus on that would bring something extra to the table – our skills, our reputation, our ability to help," said Jean Blackwell, Executive Vice President of Corporate Responsibility.

"We also looked at where it aligned with our employees' passion so that it would be something our employees wanted to engage in. And the three that rose to the top – the environment, education and social justice – also aligned with our business growth strategies."

Blackwell says addressing these priority areas will be critical the Company's future growth plans.

"As we think about growth in many new markets – growth in Turkey, growth in Africa, growth in many countries in Asia, for example – many of the things we see as barriers to our growth are aligned with our priority areas," she said.

## Building stronger communities in Brazil

Rosilene Souza first learned about Cummins Brazil when her daughter started attending a school sponsored by the Company in Guarulhos not far from the São Paulo-Guarulhos International Airport.

Now, Souza is part of a sewing cooperative sponsored by Cummins Brazil's Corporate Responsibility program where she is learning skills that are helping the single mother support her two children.

"I think there should be more companies helping the community, following the example of Cummins," said Souza, surrounded by white sewing machines paid for in part by donations from visiting senior leaders at the Company. Familiar with a similar initiative started earlier by Cummins employees in Mexico, the leaders wanted

GUARULHOS (SÃO PAULO) BRAZIL

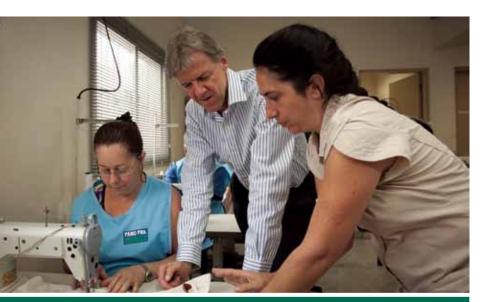
to help get a cooperative successfully launched in Brazil.

"If this program did not exist, it would not only be bad for me, it would be bad for other families." Souza said.

Cummins Brazil's leaders strongly believe in Cummins' philosophy that a company is only as strong as the communities where it does business and where its employees live and work.

Led by Luis Pasquotto, Vice President -Engine Business Latin America, Cummins Brazil supports a wide range of community involvement activities including several school-based initiatives, a job/leadership program for teens, the sewing cooperative, a community center and the Clessie Cummins Health Clinic, which this year celebrated its 20th anniversary.

Luis Pasquotto, Vice President -Engine Business Latin America, visits with some of the employees at Cummins' Brazil's sewing cooperative.



Many of Cummins Brazil's community involvement initiatives are connected with the Company's campus in Guarulhos. Most of the residents living outside the campus gates are poor, with little or no education. Many live in crowded conditions, often with little more than a roof over their heads - and sometimes not that.

"We have big disparities," said Pasquotto, during a recent visit to the sewing cooperative. "We live surrounded by a neighborhood that is poor. And for many of these people, they just don't have a chance to succeed in their lives. They don't have jobs. They don't have access to education in many cases. ... Many times, all they need is a little help."

Cummins Brazil's programs not only provide residents with medical and dental care, educational and recreational opportunities and job-training, they also provide hope in what can be a pretty desperate place at times.

Carlos Derman, Guarulhos City Hall Health Secretary, said Cummins' Corporate Responsibility initiatives are very important to the city.

"Many people are moving to Guarulhos with a lot of needs in terms of health, housing, and education," Derman said. "And the City Hall, sometimes, has difficulty in solving all these problems. So the partnership (with Cummins) for us, is very important."

Pasquotto said he has seen firsthand the positive impact from Cummins Corporate Responsibility efforts. Participants who have completed the required training in the sewing cooperative are producing uniforms for Cummins and other companies and are getting a regular paycheck.

"The ladies that are here, it's the first time that they have a job, an activity. So they feel more productive," Pasquotto said. "They feel more integrated in the society. So this is great because around them there are other people who depend on them."

Employees, meanwhile, say in addition to the satisfaction that comes with helping others, they feel better about the Company they work for when they engage in Corporate Responsibility activities.

"I think it's important to help people and I feel great that I work for a company that supports people," said Rosemeire Silva, a Materials Leader with the Cummins Power Generation in Brazil.

The wide range of initiatives sponsored by the Company reflects the many challenges Brazil faces, said Cummins Brazil Director of Human Resources Roberto Torres. He said government can't solve all of those challenges.

"We really, really believe the community work, the social work, is important for the Company, for the citizens and for the city," Torres said. "If you live in a place with very healthy, well-educated people, that's going to improve business not only for Cummins but for the entire community."

Souza, for one, is optimistic about her future. She moved into a better house recently and her son is now part of the teen leadership and job readiness program sponsored by Cummins. She says she feels like she's building a better life not just for herself but for her children, too.



### Oil recycling project wins challenge

A Cummins Brazil Corporate Responsibility initiative to collect and recycle used cooking oil was one of 15 projects across the Company honored during the

#### 2010 Environmental Challenge.

The project kept oil from reaching area water supplies. Cummins Brazil worked with a company that turns the used oil into bio-diesel and soap. Money raised by recycling the oil was used to purchase food for a local day care center.

Cummins Brazil's Community Involvement Team received a \$10,000 grant from The Cummins Foundation for the not-for-profit community partner of its choice.

## There's something fishy going on here

Bicycling and fish would seem to have very little in common. But for one city in China, they are the foundation of a major environmental cleanup and awareness project.

Cummins employees in Wuxi, China are working to clean Lake Taihu, one of the country's largest freshwater lakes, renowned for its scenic beauty. An estimated 30 million people rely on the lake for drinking water including over 1 million residents of Wuxi - about a quarter of the city's total population.

Employees at Cummins Generator Technologies (CGT) have focused their community involvement efforts on the environment in the past. But employees wanted to have a larger, more lasting impact in 2010. Though the task was tall by almost any standard, they were not intimidated by the challenge of improving the water quality of Taihu.

Previously a major tourist attraction, Taihu has been ravaged by pollution as a result of rapid economic growth in the surrounding area. After years of dumping by small factories and crab farms along the shore, a toxic blue-green algae overtook the lake, contaminating the water supply.

"We wanted to make a significant difference in our community, and helping to reverse the decline of Taihu seemed like a good



place to channel our efforts," said Yichan Wang, Cummins' Corporate Responsibility leader for China.

To tackle this issue, CGT employees partnered with their colleagues from Cummins Turbo Technologies and Wuxi Vane to form a roughly 1,200-member core of employees, primary school students and Wuxi residents.

Cummins employees began thinking about the best way to be involved and soon concluded that the real opportunity wasn't just in assisting with cleanup efforts at the lake. They wanted to also educate the local community about the water quality issues at Taihu and change the mind-set that individual actions have little impact on the environment.

To kick off their awareness campaign, employees distributed materials to residents on how they could care for the environment. As a more active demonstration, 50 cyclists



The Lake Taihu project was one of 15 efforts across the Company honored during the 2010 Cummins Environmental Challenge.

The Cummins Foundation awarded each winning project a \$10,000 grant that can be given to the notfor-profit of the winning Community Involvement Team's choice.





modeled one way to live a low-carbon lifestyle by taking a bike ride through the city - some with colorful banners flying from the back of their bikes. And the coalition held a community fair with lots of activities designed to educate residents about how they could help improve Taihu's water quality.

Then, it was time to get down and dirty. Five hundred volunteers spent several hours scouring the area around the lake collecting garbage, 60 percent of which was recyclable.

The coalition next focused their attention on the water. Cleaning the lake was done through manpower and "fish power." First, employees partnered with the community to scoop 240 tons of blue-green algae out of the lake. Then it was the fish's turn.

More than 8,600 fish were released into the lake. They are expected to eat an estimated

172 tons of blue-green algae annually. The primary algae-eating fish are silver carp. One fish can consume 110 pounds of algae and other plankton in its lifetime while gaining only 2.2 pounds in weight.

"We were so excited to be able to make such a visible difference to the lake." Yichan said after initial efforts concluded. "Our clean-up work will allow residents to once again feel safe about their drinking water. Personally, I'm also very proud to see how many residents came out for our environmental awareness fair to learn about how they can make a difference, too."

A three- to five-year strategy has been put in place to continue with clean-up efforts and the fish release at Lake Taihu. More than 3,600 volunteer hours from 900 employees were invested in this comprehensive endeavor to return one of China's most beautiful natural landmarks to its former splendor.

Cummins employees in Wuxi, China are helping to introduce fish that will eat the blue-green algae that plagues Lake Taihu.

## Cummins empowering remote populations



Cummins India employees helped residents of Padarwadi carry in a generator so they could mill rice close to home.



The Padarwadi project was one of 15 efforts across the Company honored during the 2010 Environmental Challenge overseen by Cummins Corporate Responsibility staff.

The initiative received special recognition as the "Best Continuation of a Project" and "Best Technical Project."

The Cummins Foundation awarded each winning project with a \$10,000 grant that can be given to the not-for-profit of the winning Community Involvement Team's choice.





An estimated 1.4 billion people worldwide about 20 percent of the global population don't have access to electricity, according to the International Energy Agency (IEA). About 85 percent of these people live in remote or rural areas.

That's not likely to change soon. By 2030, experts estimate 1.2 billion people will still lack access to electricity and by then 87 percent will be living in rural or remote areas.

Access to electricity, however, is essential to fulfilling basic human needs. That is why Cummins is exploring ways power can be brought to people living in remote areas.

The Company is involved in rural electrification efforts in Latin America, Africa and India. These efforts align with the Company's Corporate Responsibility priority for social justice and improving the human condition. In addition, Cummins is uniquely positioned to tackle this problem through its Power Generation Business Unit and its global reach.

"Rural electrification is a prime example where societal needs, our leadership, our employees' passion and Cummins core capabilities intersect," said Emily Johnson, Cummins' Director of Corporate Responsibility Strategic Investments.

But reducing the number of people without access to electricity is a significant challenge. Providing power to remote villages through decentralized, off-thegrid power generation systems has been attempted before only to be overwhelmed by the inherent challenges.

The Company's efforts to get power to the village of Padarwadi in Western India in 2011 illustrate both the challenges and the rewards.

Village residents worked with Cummins India and a non-governmental organization to get a specially-built power generation system, fueled by vegetable oil from the seeds of indigenous trees, to Padarwadi, as well as machinery to produce the oil and a rice mill.

Padarwadi, however, is only accessible by a narrow, twisting, mountain path. So all of the equipment, including a heavy generator, had to be disassembled in the nearest town and carried to Padarwadi - on foot.

#### **POWERING PADARWADI**

Padarwadi's 10 households are nestled in a large forest preserve. The residents grow about 35 metric tons of rice a year, but had no way to remove the hulls in the village. So they had to make approximately 1,800 annual treks across mountainous terrain to get their rice to the nearest mill.

Then, the villagers had to barter to get their rice hulled.

Cummins India provided the villagers with a 15 kVA genset in 2010 that could be fueled with either the oil from indigenous seeds or diesel. The genset was needed to run machinery to extract the oil from the seeds, hull the rice and produce flour. Everything had to be carried in before the rainy season started in June.

Cummins employees worked with village residents and the non-governmental organization to break down the equipment and carry it down the mountain path. The generator engine – some 250 kilograms or more than 500 pounds – was attached to two long wooden poles and carried in by 20 village men - some barefoot.

The automated operation now in place has made a huge difference. Villagers can sell any excess rice at full market price (the price of rice in the husk is just a fraction of hulled rice). In addition, residents can market the rice hulls as fertilizer as well as the seed cake left after the oil is extracted.

S. Ravichandran, Cummins' Corporate Responsibility Leader for India, said the project has made a huge difference in the village, especially for the village children who also formerly helped carry rice to town.

"The villagers now have a lot more time to improve their farming," Ravichandran said. "Farm production is expected to double because time and energy that used to be spent walking the rice to town can now be devoted to other activities."

### **RURAL ELECTRIFICATION'S FUTURE**

Cummins has taken the early lessons it learned on rural electrification and created a program office focused on:

- » Creating a sustainable economic model for use in rural areas rather than merely using rural electrification as a learning laboratory.
- » Providing leadership and management opportunities for Cummins employees by creating projects that employ a full range of business skills.

"In Padarwadi, by providing a source of income, villagers are better able to internalize the benefits of power and make the effort to sustain fuel-seed collection," said Emily Johnson, Cummins Director of Corporate Responsibility Strategic Investment. "Ideally, that will enable them to improve their standard of living."

## 2<sup>nd</sup> Environmental Challenge yields great results

In pursuit of its mission to break the cycle of poverty on Indianapolis' eastside, the Shepherd Community Center hadn't given a lot of thought to its light bulbs.

After all, there was plenty to do making 15,000 meals per year, helping neighborhood children with their homework and preparing younger children for success in school.

But then a team from Cummins did an energy audit at the Center and discovered Shepherd could save more than \$20,000 annually by replacing more than 600 inefficient fluorescent lights with energy-efficient bulbs costing a tenth of what it would save.

The light bulb went on for Cummins' Community Involvement Team (CIT) in Indianapolis, which worked with Duke Energy to purchase the bulbs at a discount for \$1,500. CIT members then installed the bulbs at the Center.

"The savings we're anticipating can go to programming for children and their families," said Jay Height, Shepherd's Executive Director. "Any way we can make our dollars go further is critically important to Shepherd."

The Shepherd project was one of 15 winners in Cummins' 2<sup>nd</sup> Annual Community Environmental Challenge. The winning projects each received \$10,000 that could be donated to the not-for-profit organization of their choice.

More than 6,700 Cummins employees from 13 countries worked on 86 projects during the challenge, donating almost 38,000 hours to their communities. That's up from the first year of the initiative when 3,200 employees from 11 countries participated.

"We think the Environmental Challenge is a great way for Cummins to leverage its environmental expertise to help communities with some of the key challenges they're facing," said Carole Casto, Director - Community Engagement.

Cummins employee Rob Norris installs an energy-efficient light bulb that will help the Shepherd Community Center save on its utility bills.





The 15 winners came from seven different countries and ranged from a cleanup project of one of China's largest freshwater lakes (page 82), to installing cleaner, more efficient cooking stoves in a village near Cummins new Megasite in Phaltan, India (page 91).

#### **CREATING OUTDOOR CLASSROOMS**

In the United Kingdom, employees at Cummins Generator Technologies in Stamford took an overgrown section of the Malcolm Sargent School campus and converted it into an outdoor classroom, where school children can learn about and interact with plants and wildlife.

Employees cleared away weeds and repaired a small wooden bridge so children could walk over a marshy area and get a close-up view of some of the plants and wildlife. They also built a "mini beast hotel," a small, partially enclosed area designed to encourage the presence of small creatures, insects and bugs by replicating their natural habitat.

"The reaction from the children has been amazing with them wanting to use the area as much as possible and explore real hands-on learning," said Project Leader Bev Lewis, a Project Manager at Cummins.

#### **GREENING OUR COMMUNITIES**

Meanwhile, employees at Cummins' New and ReCon Parts facility in San Luis Potosí, Mexico, were honored for their efforts to plant trees throughout the community. For several years, employees have planted trees at local schools, parks and on the Engine Business property.

Their passion was reignited when Cummins Chairman and Chief Executive Officer Tim Solso visited in February 2010 and talked about Earth Day and Cummins' commitment to celebrating it by planting as many as 50,000 trees worldwide.

Cummins employees in San Luis Potosí have now planted more than 4,500 trees. The project had a goal of planting as many trees as possible from May to October

Employees at Cummins Generator Technologies in Stamford (U.K.) work to create an outdoor classroom for the students at the Malcolm Sargent School.

in 2010. One of the challenges of the project was obtaining trees for planting. So employees set up their own nursery with trees and technical help from two companies that wanted to be part of the reforestation effort.

Once the trees were planted, Cummins employees - led by Patricia Rojas, Safety and Environment Manager, and Edna Espinosa, Environmental Engineer maintained them to ensure proper growth.

#### **REACHING OUT TO OTHERS**

In many cases, Cummins employees partnered with charities, schools, government agencies and other groups to carry out Environmental Challenge projects.

A team from Cummins Generator Technologies (CGT) in Craiova, Romania, for example, worked with students at

Saint Vasile School, a school for children with hearing and speaking disabilities.

Led by Tiberiu Olaru, a manager at CGT, Cummins employees learned how to communicate with the students and showed them the importance of caring for the environment.

Working together, they cleaned a small area in a park in the northern part of Craiova that was overgrown with weeds and had become a dumping ground for all kinds of material. In all, some 400 bags of garbage and about 40 tons of construction and other debris were removed.

As Olaru noted, the project showed the students, Cummins employees and the community that working together people can make a difference - regardless of age or ability.

#### WINNING PROJECTS

Here's a look at the 2010 Community Environmental Challenge winners:

#### CHATURSHRINGI GREEN HILLS Pune, India

This reforestation project by Cummins Power Generation India went beyond previous planting initiatives to include watering, fertilizing, weeding and general care for trees on the hillsides outside of Pune.

#### **COMMUNITY GIVING GARDEN Fridley, Minn.**

Cummins Power Generation in Fridley, Minn. raised vegetables for organizations that feed the hungry using Straw Bale Gardening, a form of gardening that employs straw bales as both a source of nutrients and a container of sorts.

#### CRTI BIO-GAS PROJECT Maharashtra, India

Cummins Research and Technology India employees are working to get a former bio-gas plant running again to provide low-income residents and others nearby with a source of safe and relatively inexpensive energy.

#### **ENERGY-EFFICIENT STOVES** Phaltan, India

The Cummins India Limited Industrial Engine Business Unit led a project to replace inefficient wood stoves in a village near Cummins new Megasite in Phaltan, India with cooking stoves that emit 80 percent less smoke and require 30 percent less wood (page 91).

#### MALCOLM SARGENT SCHOOL Stamford, U.K.

Cummins Generator Technologies employees created an outdoor classroom on the school grounds out of an overgrown section of the school's campus. Children at the school can now learn about nature and interact with plants and wildlife.

#### POTABLE WATER PROJECT Chafulla, India

Cummins India employees worked with a middle school in Chafulla, India to provide it with safe drinking water by using a rain water collection system with a purification system that runs on solar energy.

#### **RECYCLING COOKING OIL** Guarulhos, Brazil

Cummins Brazil has established special stations inside its main campus to collect used cooking oil so it doesn't foul area water supplies. Employees bring in bottles of the used oil which is sold to a non-governmental organization that uses it to produce bio diesel and soap. Money raised by recycling the oil is used to purchase food for a local day care center.

#### **REFORESTATION PROJECT** San Luis Potosí, Mexico

Cummins New and ReCon Parts employees have been planting hundreds of trees over the past several years to replace those lost to development and established its own nursery to guarantee a steady supply.

### SHEPHERD COMMUNITY CENTER Indianapolis, Ind.

Corporate employees have been partnering with a local community center to find ways the center can save on its energy bills. The employees purchased \$1,500 worth of energy-efficient light bulbs that could annually save the center as much as \$20,000.





Power Generation employees in Fridley, Minn. were 2010 Challenge winners both for their work to improve Rice Creek and a straw bale gardening initiative to feed the hungry.

#### LAKE TAIHU Wuxi, China

Cummins employees from Cummins Generator Technologies, Turbo Technologies and Wuxi Vane are working together on a major project to improve the water quality of Lake Taihu, one of the largest fresh water lakes in China (page 82).

#### THINK! ENERGY Columbus, Ind.

Cummins employees from several departments concerned about energy consumption partnered with the Energy Matters Community Coalition to deliver "Think! Energy" classes to elementary students.

#### TOGETHER PROJECT Craiova. Romania

Cummins Generator Technologies employees in Craiova, Romania worked on a project with a school for students with disabilities, cleaning up a park area, including removing 40 tons of debris.

#### Three projects in the competition were singled out for special recognition:

#### PADARWADI ELECTRIFICATION PROJECT Maharashtra, India

#### Best Continuation of a Project and Best Technical Project

Engineers with Cummins India developed power generators that run on the oil from seeds of indigenous trees (page 84).

#### RICE CREEK REHABILITATION Fridley, Minn.

#### **Best Community Partner Engagement**

Cummins Power Generation employees are working with several groups including the Anoka County Parks, the Minnesota Department of Natural Resources and the Rice Creek Watershed District to rehabilitate Rice Creek. A lot of the effort has focused on removing an invasive weed and clearing trash from the banks of the creek.

#### ST. JOSEPH RIVER CLEAN-UP Elkhart. Ind.

#### **Best New Project Entry**

More than 5,000 pounds of garbage was removed from a 1.5 mile stretch of the St. Joseph's River by Cummins Onan Elkhart employees working while water levels were low during repairs on some area dams.

## New stoves help improve villages' quality of life



Residents of the village of Nandal near Cummins' new Megasite in India are breathing a little easier thanks to a community involvement project started by Company employees in 2010 to install new cook stoves in village homes

But that's only one benefit of the cleanburning, energy-efficient stoves that ultimately will be installed in about 1,000 residences in villages near the 300-acre Cummins facility.

Nandal residents, who typically earn less than a dollar per day, are also spending less time gathering wood and washing kitchen walls and utensils because the stoves require less fuel and don't cause as much smoke. That leaves residents with more time to do other things to support their families.

It's just the first step in a comprehensive plan to improve the quality of life in the villages around the Megasite, according to Nagarajan Balanaga, Human Resources Leader for Cummins India.

When the plan is fully implemented, he hopes it will slow the flow of people from villages like Nandal to large urban areas where new arrivals often live in squalid conditions that strain the infrastructure of India's major cities.

Villagers who move to urban areas might find it somewhat easier to relieve their hunger, but in many cases the living conditions are much worse, said S. Ravichandran, head of Corporate Responsibility for Cummins India. "If we can improve conditions in rural villages, we can reduce or perhaps reverse the flow of people into urban areas," he said.

The stoves are the first step in building what Ravichandran calls "model villages." The Company's comprehensive plan calls for steps to improve sanitation, education and agriculture, including soil and water conservation.

Cummins employees are working with ARTI – the Appropriate Rural Technology Institute – established in 1996 to promote and facilitate sustainable rural development through the application of scientific and technical knowledge.

The Megasite, which will be home to 10 Cummins facilities by 2014, provides a unique opportunity for rural development. It is located in a sparsely populated area about 100 km from Pune near several villages in need of help.



The energy-efficient cook stove project was one of 15 efforts across the Company honored during the 2010 Cummins Environmental Challenge.

The Cummins Foundation awarded each winning project a \$10,000 grant that can be given to the notfor-profit of the winning Community Involvement Team's choice.



One of the families at the village of Nandal where Cummins India employees donated clean-burning. energy-efficient stoves.



A resident of Nandal uses one of the new cook stoves to prepare food for her family. The stoves require less firewood and produce less smoke. Company leaders decided they wanted the benefits of co-locating several Cummins facilities but needed a large, undeveloped parcel to do so. Working with government officials, they ultimately chose Phaltan, a rocky area in the state of Maharashtra.

The typical village home near the Megasite consists of two rooms. Many homes have two stoves – one for cooking and one for heating water. Small wood fires can be going for four or five hours per day and all family members can be affected by the resulting smoke.

The project team discovered older stoves have been a key source of indoor air pollution in India, leading to chronic bronchitis, pulmonary disease and lung cancer. About 500,000 women and children die of these diseases annually in India.

The team also learned that indoor air pollution increases the risk of other health problems in adults and children including low birth-weight babies, prenatal mortality, asthma, tuberculosis and more.

Cummins employees obtained an \$11,700 grant from the Cummins India Foundation

to purchase the stoves. Early results show they are reducing wood consumption and time to boil water by 30 percent. In addition, they are cutting carbon monoxide in homes by about 80 percent. The team interviewed women in the village who do most of the work over the fire and they have praised both the project's health benefits and the time-savings.

Cummins employees are now in the process of installing stoves in the villages of Survadi and Dhawlewadi. By the time the stove initiative is complete, 150 to 180 Cummins' employees will have donated 1,200 to 1,400 hours to the effort.

Mahesh Narang, Industrial Engine Business Leader in India, said working with village residents in a Six Sigma-style Voice of the Customer exercise to find out exactly what they needed has been critical to the success of the project.

"We have found that projects work best when are working directly with people to find out what they need to solve a problem," he said. "As we carry out our plan, that will be critical to our success."

## Philanthropy: A track record of commitment

## Cummins believes our company is only as healthy as the communities where we do business and where our employees live and work.

As a result, the Company contributes millions of dollars each year through operating funds and affiliated foundations to community organizations and programs around the world.

In 2010, \$20.7 million was invested in the Company's corporate responsibility efforts, which included \$13.3 million in donations to The Cummins Foundation.

The Cummins Foundation has played a critical role in hundreds of initiatives since its inception. Programs range from providing financial support for EARTH University in Costa Rica, which teaches sustainable agriculture to young people around the world, to bringing power to remote villages in India.

Cummins also operates separate foundations in India and Mexico. Grants from the Cummins India Foundation target higher education, energy and the environment and local infrastructure improvements.

The Philanthropic Association of Cummins in Mexico supports employment programs for marginalized individuals and other charitable projects.

To see a complete list of The Cummins Foundation's grants and a statement of its financial position, go to the Sustainability section on cummins.com.

Community Involvement Team leaders from throughout North America met in Nashville in 2010 to learn more about Cummins' Corporate Responsibility program and perform a day of community service.



#### THE CUMMINS FOUNDATION

Board of Directors

Chairman Tim Solso

Chairman and CEO, Cummins

Director Jean Blackwell

Executive Vice President of

Corporate Responsibility, Cummins

Director Mark Gerstle

Vice President & Chief Administrative

Officer, Cummins

Director Tom Linebarger

President and COO, Cummins

Director Will Miller

President Wallace Foundation and Member.

Cummins Board of Directors

Director Marya Rose

Vice President - General Counsel,

Cummins

Director Pat Ward

Vice President - Chief Financial Officer,

Cummins

#### **FOUNDATION OFFICERS**

Chief Executive Officer Jean Blackwell

Treasurer Marsha Allamanno

Corporate Responsibility Finance Director,

Cummins

Secretary Mary Chandler

Director - Corporate Responsibility

Policy and Planning, Cummins

#### **AUDIT COMMITTEE**

Chairman Marsha Hunt

Vice President - Controller, Cummins

**Luther Peters** 

Executive Director of Internal Audit,

**Cummins** 

James Guilfoyle

Executive Director - Corporate Accounting,

Cummins Investment Committee

#### **INVESTMENT COMMITTEE**

Chairman Greg Ehlinger

Director Corporate Strategy, Cummins

Gloria Griesinger

Director - Global Treasury and Pensions,

Cummins

Marsha Hunt

Vice President - Controller, Cummins

## Cummins' investment in corporate responsibility

Cummins invested \$20.7 million in its corporate responsibility efforts in 2010. This figure includes funding to The Cummins Foundation, donations and sponsorships from the Company's operating funds, employee volunteer hours on Company time as part of the Every Employee Every Community program, and staff efforts around the world to further our corporate responsibility mission.

Grants from The Cummins Foundation are primarily focused on communities where our employees live and work and where Cummins facilities are located.

Grants are made to further the Company's global priority areas of education, the environment and social justice. In 2010, these grants totaled \$7.1 million.

Cummins also supports foundations in India and Mexico. In 2010, grants from these foundations totaled \$908,000.

A sample of Cummins' larger philanthropic contributions is included on the next two pages.

Cummins Filtration employees work to improve their community by giving books and other support to students at the Pudong Chuansha Limin Preliminary School in Shanghai, China.



| GRANTEE ORGANIZATION  | COMMUNITY               | GRANT OR DONATION | CUMMINS FOUNDATIONS | CUMMINS INC. |
|---|-------------------------|-------------------|---------------------|--------------|
| Community Development - Educat                                | ion                     |                   |                     |              |
| Community Education Coalition                                 | Columbus, IN            | \$175,000         |                     |              |
| Town of Whitakers - Public Library                            | Whitakers, NC           | \$79,000          |                     |              |
| The Library Project   | Wuxi, China             | \$82,000          |                     |              |
| Jamestown Community College                                   | Jamestown, NY           | \$50,000          |                     |              |
| Save the Children UK - China Programme                        | Urumqi & Xi'an Branches | \$50,000          |                     |              |
| Literacy Network  | Madison, WI             | \$39,549          |                     |              |
| 21st Century Scholar Program                                  | Columbus, IN            | \$30,000          |                     |              |
| Wuxi Shanbei Central Primary School                           | Wuxi, China             | \$25,000          |                     |              |
| Chongqing Red Cross Foundation                                | Chongqing, China        | \$25,000          |                     |              |
| Millstream Career & Technology Center                         | Findlay, OH             | \$25,000          |                     |              |
| Beechgrove Elementary School                                  | Independence, KY        | \$25,000          |                     |              |
| Building Tomorrow   | Indianapolis, IN        | \$25,000          |                     |              |
| Mineral Point High School Technology<br>Education Department  | Mineral Point, WI       | \$25,000          |                     |              |
| New Haven Elementary School                                   | Walton, KY              | \$25,000          |                     |              |
| Asociación Bermudez   | Juárez, Mexico          | \$24,760          |                     |              |
| World Vision  | Kowloon, Hong Kong      | \$20,935          |                     |              |
| Connected Community Partnership                               | Columbus, IN            | \$20,000          |                     |              |
| Human Services, Inc.  | Columbus, IN            | \$19,357          |                     |              |
| Bartholomew Consolidated School Foundation                    | Columbus, IN            | \$15,000          |                     |              |
| Peking University Education Foundation of China               | Beijing, China          | \$13,750          |                     |              |
| Saint Vasile School   | Romania                 | \$10,000          |                     |              |
| College Mentors for Kids                                      | Indianapolis, IN        | \$10,000          |                     |              |
| ABC Stewart School  | Columbus, IN            | \$10,000          |                     |              |
| Community Development - Environ                               | nment                   |                   |                     |              |
| China Foundation for Poverty Alleviation                      | Beijing, China          | \$50,000          |                     |              |
| China Guangdong Lions Club                                    | Guangzhou, China        | \$25,000          |                     |              |
| Cumberland River Compact                                      | Nashville, TN           | \$25,000          |                     |              |
| Granthan Angling Association                                  | Lincolnshire, UK        | \$10,000          |                     |              |
| India Foundation - Rural Electrification                      | Pune, India             | \$10,000          |                     |              |
| Shanghai Oasis Wildlife Conservation and Communication Center | Shanghai, China         | \$10,000          |                     |              |
| India Foundation - Bharatiya Agro Industry Foundation(BAIF)   | Pune, India             | \$10,000          |                     |              |
| India Foundation - Deep Grinha Society                        | Pune, India             | \$10,000          |                     |              |
|   |                         |                   |                     |              |

Columbus, IN

\$10,000

Bartholomew County Solid Waste

Management District

### **EMPLOYEE RELATIONS // SAFETY**

## Safety in the workplace is a job never done

Health and safety leaders at Cummins continued to drive down injuries, illnesses and incidents across the Company in the past year, implementing an industry-leading driver safety program for employees in 2010 and launching a major initiative to improve contractor safety in 2011.

#### **HIGHLIGHTS**

#### **SAFETY**

- » Significant improvement in several key safety metrics
- » Named to EHS Today magazine's list of safest U.S. companies
- » Launched major effort to increase contractor safety

Other safety milestones over the past year included:

- » Cummins had 96 facilities with Severity Lost Work Day rates of zero in 2010 up from 61 in 2009; seventy-five facilities in the Company's network recorded Safety Incidence rates of zero in 2010.
- » Release of a major Health & Safety Toolkit on Slip, Trip and Fall Prevention.
- » Major work on existing initiatives, including programs to improve hand safety and hoist and crane safety.
- » Development of a number of new initiatives for 2011, including the enhancement of data gathering and analysis, and efforts to improve electrical safety.

The Company received national attention for its safety efforts in 2010. Cummins



was one of 12 companies named to EHS Today magazine's list of America's Safest Companies.

But Cummins experienced a few serious safety incidents around the world within the past year that, while isolated, serve as a sobering reminder that safety is a job never done.

"I think we've made some great progress," Chairman and CEO Tim Solso told Cummins safety leaders meeting in Indianapolis for the Company's 2011 Global Health, Safety and Environment Workshop in May, "but we have so much more to do."

#### SAFETY MANAGEMENT

Cummins identifies and assesses potential safety hazards through the Company's Health and Safety Management System, which sets key objectives and monitors health and safety performance in a uniform way across all Company facilities.

The system establishes minimum standards at Cummins' locations for chemical safety, emergency preparedness, ergonomics, lockout and tagout of equipment and much more.

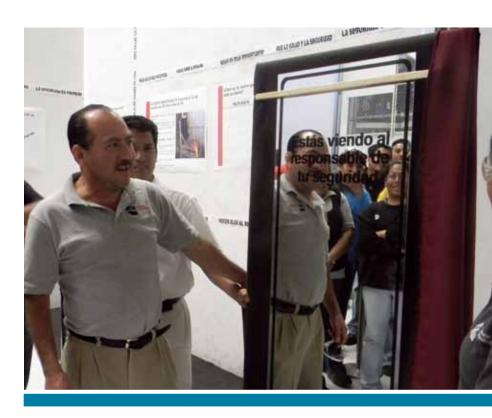
A key part of the system is the "Red Flag" designation. Cummins sites having the highest risk levels or safety performance metrics most in need of improvement are designated "Red Flag sites."

These sites participate in safety strategy review sessions with business unit and corporate safety leaders as well as senior leaders. They undergo in-depth safety audits and are closely monitored as they address identified gaps.

A location can't be removed from the Red Flag list unless it passes a five-day safety audit and a follow-up visit by a member of the Corporate Safety staff. The Red Flag system has been an effective way to help sites focus on their safety needs.

Engaging employees in safety efforts is critical. A number of Cummins' sites and business units took steps in the past 12 months to raise awareness and encourage involvement, including:

» Cummins Filtration South Africa held a special ceremony in 2010 after achieving 49 months with no safety incidents.



- » In 2011, Cummins Emission Solutions in Brazil celebrated 1,000 days without an accident, highlighting several initiatives undertaken to improve its safety record.
- » Cummins Generator Technologies Mexico in San Luis Potosí initiated its "Today, I Choose Safety" program in March 2011. Plant leaders installed mirrors around the plant with the words: "You are seeing the person responsible for safety."

Some business units are even taking a competitive approach to safety. This spring, the Engine Business issued a global challenge to all of its manufacturing sites to complete April accident free.

In addition, employees were asked to participate in a new activity called "Spot the Hazard" in which employees see a safety issue, fix it and then report their solution to their supervisor.

Cummins Generator Technologies employee Amado Rivera looks at one of the mirrors in the plant in San Luis Potosí, Mexico that says "you are seeing the person responsible for safety" in Spanish.

## **DRIVER SAFETY**

One major type of on-the-job injury takes place outside plants, warehouses and offices. An estimated 45 percent of autorelated incidents occur during the course of the work day.

Cummins safety professionals have taken an aggressive approach to safe driving, launching a major driver safety initiative in 2010 that continued in 2011.

Some 40,000 Cummins employees worldwide from nearly 40 countries and five continents participated in this initiative, signing "Cummins Safe Driving Pledge" and filling out a "Driving for Work Questionnaire." Those indicating they drive on Cummins business must then complete additional training.

The Company's driver safety initiative prohibits cell phone use - both handheld and wireless - while operating a vehicle on Company business. Cummins believes strongly that cell phones and other devices can distract drivers and ultimately contribute to accidents.

Phase II of the Company's Driver Safety Initiative, launched in May of 2011, includes an additional online training module called RoadRISK, which focuses more specifically on the risks drivers face when behind the wheel.

"Cummins will continue to place high importance on this program going forward as it is very important that each

employee participates as required," said Ignacio Garcia, Vice President - Chief Manufacturing & Procurement Officer and the senior leader overseeing the Company's safety initiative.

#### **KEEPING CONTRACTORS SAFE**

The Company also launched a new safety program regarding the use of contractors, mindful that as Cummins grows it is likely to have significantly more contractors on its properties performing tasks like construction and installing equipment.

Contract workers may not be familiar with Cummins' safety procedures and may be relatively inexperienced, too. In that way, they may pose a danger to Cummins' workers at the same sites.

Cummins safety officials say it's critical to make sure contractors are qualified and understand the Company's safety standards. They are working with purchasing officials to make sure contractor safety is a part of the selection and evaluation process for contractors.

In addition, Health and Safety officials at Cummins locations are being urged to work closely with contractors once they arrive on site, helping them to identify potential hazards and controls so they can protect themselves.

"While we've seen an improving trend in safety," said Michelle Garner-Janna, Director - Corporate Health and Safety, "maintaining focus and a proactive approach will be critical for continued success in the future."

#### **SAFETY CHALLENGES**

#### New markets

Enhancing safety initiatives at Cummins facilities in new markets, often in developing countries, will be key to creating great places to work.

#### Rapid growth

Ensuring proper systems are in place to manage change in an environment of growth.

### **Continued penetration** of existing initiatives

Continuing the momentum that exists behind current Health & Safety initiatives while also focusing on the development of new tools for continuous improvement.

**EMPLOYEE RELATIONS** 

## Safety teams help communities, too

Every week or so, Bryan Marr will suddenly dash from his work in Indirect Purchasing at Cummins Emission Solutions in Mineral Point, Wis., to his second job.

Every second counts as he races to the parking lot. That's because Marr is the Assistant Fire Chief for the Mineral Point Volunteer Fire Department.

He wants to get to the fire scene first so he can direct his fellow firefighters when they arrive. Five other Cummins employees will likely be on the fire truck when it pulls up in this rural area of southwestern Wisconsin.

They are just a few of the thousands of Cummins employees - both in and outside the United States - who make the Company a safer place because they bring their emergency response skills to work.

Many participate on the Emergency Response Teams (ERTs) established at Cummins plants and facilities. Often, they also serve as Emergency Medical Technicians, volunteer firefighters or in some other capacity in their own communities.

Marr and his fellow firefighters at Emission Solutions are unusual in that they are allowed to drop everything and run if a fire occurs while they are working. That's because without them it's uncertain the department could come up with the 15 volunteer firefighters needed for a call between 7 a.m. and 5 p.m.



"If we weren't able to do this," Marr says, "it would put a tremendous burden on the city, our businesses and residents. There would be a much longer wait (for help), that's for sure."

Cummins Occupational Safety Director Jim Dorris doesn't have an estimate for how many Cummins ERT members also serve in some kind of emergency capacity in their local communities. He said he believes it's a common occurrence.

"Our Emergency Response Teams are important in a couple of ways," Dorris said. "First, they significantly enhance protection for our workforce. The faster the response to something like a heart attack, the more likely it will end with a good outcome."

Bryan Marr works both in Indirect Purchasing at Cummins Emission Solutions in Mineral Point, Wis., and as Assistant Fire Chief for the Mineral Point Volunteer Fire Department.

Working on a Cummins Emergency Response team led Karen Ferguson (middle) to eventually become an Emergency Medical Technician. She joined fellow Company employees Terry Sweasy (left) and Terry Underwood (right) at an accident re-creation designed to promote prom safety in Columbus, Ind.

"In addition, they bring their skills to the community," he added. "So if a kid, say, gets hit with the ball at a Little League game, they are there to offer their firstaid skills."

Dorris said he believes it's all in keeping with the Company's mission to build stronger, safer and healthier communities.

Cummins health and safety leaders say in many cases people get interested in emergency response by serving on a team at Cummins. After getting the basic training offered by the teams, they start acquiring additional skills on their own and end up certified as Emergency Medical Technicians (EMTs).

That's pretty much how Karen Ferguson got started. She joined a team at Cummins Technical Center in Columbus in 1991. When she moved to Fuel Systems in 1994, she joined the ERT there. Four years later, she and two other members of the team went through a basic EMT class.

**EMPLOYEE RELATIONS** 

Now, in addition to her work in Drafting at Fuel Systems, she volunteers with the Jennings County, Ind. Emergency Medical Service (EMS) and is the volunteer representative on the EMS board.

"I really enjoy helping people," Ferguson said. "This is a great way to do it."

At Mineral Point, the volunteer firefighters get credit for the hours they leave work on emergency calls under the Company's Every Employee Every Community Corporate Responsibility program.

For Marr, a Cummins employee for the past five years, the policy allows him to continue a family tradition. His grandfather is a former department chief and his father is a former Captain. Marr has served for more than 18 years.

"Growing up I probably spent more time working on engines at the fire station than at home," he said. "It's just always been a part of my family's life."

**EMPLOYEE RELATIONS** 

# Team in Australia develops new tool to enhance safety



Aussie blokes - and ladies, too aren't much for complaining.

So when health and safety leaders in Australia noticed an uptick in musculoskeletal injuries in 2009 among their technicians, they quickly investigated what was happening.

"The technicians worked primarily on engines, making repairs on trucks in the field," said Sylvia Ryan, Director of Quality, Occupational Health & Safety and the Environment (OHS&E) for Cummins' Distribution Business in the South Pacific.

The technicians sometimes had to stretch, twist and reach in awkward ways, aided only by a small plastic step. That step could become slippery in a shop environment where oil and lubricants are present.

The South Pacific Central Safety Committee decided there had to be a better way. So they put Ryan and Charles Charalambous,

OHS&E manager, in charge of a team to solve the problem.

Their answer took less than a year to develop, was relatively inexpensive (\$20,000 in development costs), and improves both safety and efficiency.

The Australian team calls it the "Tractor Working Platform." It's a tri-level platform to control slips and fall hazards in engine bays. The platform has a secure place for tools and a place for a laptop computer as well - that's where the efficiency gains come in.

It should be available for use at all of the Company's Distribution locations in Australia by September 2011. Cummins safety leaders maintain the platform holds promise for use at Company locations around the world.

"Employee engagement was absolutely critical," said Ryan, adding that feedback from employees and management was used to refine the design three times.

She says the platform may also bring in revenue to Cummins as other companies discover its safety and efficiency benefits.

Safety leaders in Australia helped to develop a tri-level platform that helps technicians both work safely and more efficiently.

### TRACTOR WORKING **PLATFORM**

The tri-level platform provides stable access to:

- » The top of the engine for tune-ups and access to the cylinder head;
- » To the middle of the engine for access to the turbochargers and the intercoolers as well as for testing coolant;
- » The lower part of the engine for access to starter motors and oil coolers.



## Leveraging differences to fuel innovation

## **HIGHLIGHTS**

#### **DIVERSITY**

- » Affirmative Development Project is successfully implemented globally
- » Resource guide completed for employee diversity groups
- » Chairman's Diversity Council strengthened

Sometimes creating the right environment for success means establishing an environment where employees can have difficult conversations.

That's why Cummins Global Diversity Department has been taking its Affirmative Development Project on the road the past year to help employees develop the tools they need to speak with each other in a way that's respectful but provides critical input.

"We found that some managers weren't having difficult conversations with people from different cultures or backgrounds for fear they would offend them," said Lisa Gutierrez, Cummins Executive Director -Global Diversity.

"But that means they weren't giving those employees the feedback they needed to have successful careers at Cummins," she said.

The project was successfully piloted in the United States with the Company's African & African-American Affinity Group in Southern Indiana and GOAL - the Latino Affinity Group based in Columbus, Ind.

In the past year, the project has been implemented in India and China. In August 2011, it will be presented in Brazil. Cummins plans to also take the project to Australia later in 2011.

In general, the initiative operates like this:

**EMPLOYEE RELATIONS** 

- » Along with senior leaders, employees from certain under-represented demographic groups meet together at an all-day workshop to talk about their career goals and any issues the employees may be facing as a group.
- » Then, they discuss career development and the ways they can accomplish their career goals both collectively and as individuals.
- » For part of the day, their managers are invited to sit in and learn about the issues raised during the workshop.
- » Finally, managers meet in their own daylong workshops where they learn tools and techniques to help them manage diverse teams. Gutierrez says a key assumption is that managers want to move their teams "from good to great."

The workshops are designed to get people to feel comfortable enough to talk about challenging topics.

The response has been tremendous. In India, 98 percent of the respondents rated the program as good or very good and 95 percent said the same thing in China.

to succeed.

Managers are told the most important thing they need to do is to treat the people they

supervise with honesty and respect, and to communicate clearly that they want them

"I'm less afraid than before to say the

will keep me out of trouble."

thoughtful debate.

**OTHER KEY INITIATIVES** 

wrong things," said one participant in China. "As long as I treat others with respect, I trust that my intentions and my honesty

It's a skill that can be used in settings other than manager-employee relationships. Gutierrez says the ability to disagree constructively is integral to innovation. Sometimes the best ideas come during a

"It's not enough to respect different cultures, we also have to be able to work together if we're going to leverage the full power of a diverse workforce. That means learning to exchange ideas and sometimes disagree."

#### **LISA GUTIERREZ**

CUMMINS EXECUTIVE DIRECTOR - GLOBAL DIVERSITY



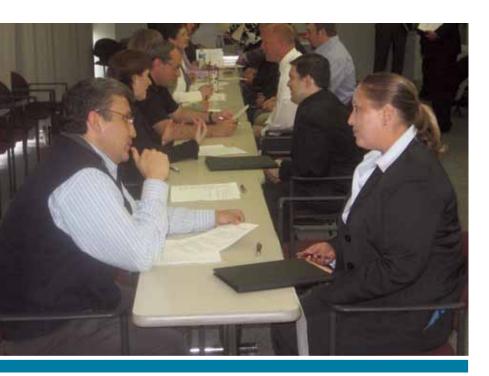
- » The Company altered the Chairman's Diversity Council. Council membership now consists of members of the Operating Leadership Team, a group of senior leaders charged with making key decisions on Cummins operations. This both confirms diversity as a key Company concern and ensures initiatives can be easily rolled out to
- » The Global Diversity Department continued work on ways to increase the pool of diverse candidates for leadership positions through such things as mentoring and coaching.

the organization through each leader.

- » The Department also completed a Resource Guide for employee resource groups including affinity groups, which are typically organized around a specific under-represented trait at the Company (African-Americans, Women, etc.). The guide also targets Local Diversity Councils, employee-led groups charged with creating an inclusive work environment at locations throughout the Company.
- » Cummins now has more than 90 Affinity Groups and Diversity Councils including new groups being formed in Brazil, China and India.

Diversity consultant Roland West meets with employees in Beijing, China as part of the Affirmative Development Project. West says successful managers treat the people they supervise with honesty and respect and communicate clearly that they want them to succeed.

## Groups join forces to extend hand to vets



Two Cummins Affinity Groups sponsored "Cummins 101," where disabled veterans and others got a chance to learn about the Company and to practice their interviewing skills with some frequent recruiters.

Thanks to advances in body armor and emergency medicine, experts expect more soldiers to return home from war alive, but with injuries to their arms, legs and hands.

Two affinity groups at Cummins have joined forces to make it a little easier for these veterans to find jobs at the Company when they come back.

The World Wide Veterans and Supporters Affinity Group and the Special Needs and Abilities Affinity Group (SNAAG) are working together to help qualified veterans with disabilities navigate the Company's hiring process.

"We're very good at recruiting from traditional sources like colleges and universities," said George Strodtbeck, Executive Director of Quality and the Cummins Operating System and the leader of the veterans group. "But if you're in a group that's not so traditional, it can be very hard to find the door to a job at Cummins."

SNAAG and the veterans group are two of about 40 employee-led affinity groups at Cummins, most organized around different demographic traits that are underrepresented at the Company.

These affinity groups focus on issues such as recruiting, retention and career development. Both SNAAG and the veterans group had been working to recruit more people with disabilities and veterans, respectively. Leaders of both groups say it was only natural to work together on recruiting veterans with disabilities.

"It has not taken the affinity groups long at all to mesh because we have this common interest," said Pam Donohoe-Duncan, Global Change Manager for Cummins Turbo Technologies and Leader of SNAAG.

The two groups are partnering with a third organization, the Career Learning and Employment Center (CLEC), a private notfor-profit that helps veterans with disabilities

**EMPLOYEE RELATIONS** 

successfully transition to civilian careers. CLEC is helping the two affinity groups look for veterans who would be a good fit for Cummins.

"Veterans have many skills that make them valuable employees," said Ken Williams, the Director of CLEC's Indianapolis office. "First, of course, is that they are very good at taking orders. They gain an understanding of the mission very quickly and they bring to the job a lot of skills - both technical and people skills."

Williams said it's unusual to see a company like Cummins, which doesn't do a lot of business with the military, working to identify disabled veterans to hire. "To be working on the ground floor with a company like Cummins is very, very exciting," he said.

So far, the two groups have had a modest impact - two individuals have been hired in part because of their efforts. But the initiative has really only started.

The biggest event to date was something the groups called "Cummins 101." The May 16, 2011 event was an opportunity for two dozen or so invited veterans and people with disabilities to learn more about the Company. They also got a chance to test their interviewing skills with hiring officials in an exercise loosely based on speed dating.

"In many ways, you are starting over," Strodtbeck told participants. "And you have to find ways to describe your experiences in the military so a hiring manager can understand how you will bring value to the Company."

Strodtbeck, a graduate of the U.S. Military Academy at West Point, N.Y., joined private industry in 1986 after a career in the Army.

One resource disabled and veteran applicants can tap is Sandy Tumbarello, Cummins' Veterans and Special Needs Corporate Liaison. Tumbarello dispenses advice on resumes (keep them short), interviewing (be positive and do your homework) and dress (always interview in business formal to make a good first impression).

The initial reviews are promising. DeeAnne J. Marlow, Director - Human Resources for Cummins Turbo Technologies and one of the interviewers at the Cummins 101 event, said she was very impressed by the people she met.

"These candidates bring great skills that we can leverage as we continue to grow our business," Marlow said. "It can take a little more effort to determine where these skills can best fit. As often times, the roles in which they've developed their skills don't mirror what we might think of as traditional 'corporate' experiences."

### **DIVERSITY &** SUPPLIER DIVERSITY **CHALLENGES**

### **Development**

Continue implementing Affirmative Development Project for diversity groups and their managers outside the United States.

#### Reach potential

Leverage the full potential of the Company's Affinity Groups and Local Diversity Councils on the key issues of recruiting, retention, career development and business enhancement.

#### Goals

Build support for new diversity procurement goals in the midst of anticipated rapid growth.

## Challenging project provides lessons in diversity

A telecommunications project in Bolivia that had Cummins employees working both in sweltering jungles and the cold winds of the Andes mountains provided the Company with one of its most challenging business opportunities—and a lesson in the importance of diversity and cultural understanding, too.

"One of the most important aspects learned from this project was to be close to the customer, keep an open mind and communicate continuously," said Cummins Project Manager Carlos Salvatierra, who works out of Santa Cruz, Bolivia.

The initiative started in 2009 when the Bolivian National Telecommunication Company selected China-based Huawei Technologies S.A. to bring network coverage to the entire country. Huawei provides broadband video, mobile telephone, and high-speed data systems.

The Bolivian contract represented a doorway to significant new business for Huawei - provided it could show itself to be fast, efficient and stable. Being new to the region, Huawei had no infrastructure to work with.

It needed to set up a series of base transceiver stations—the antennas and radio equipment that provides wireless service. Some of those base stations had to



go up in the Andes at altitudes higher than 15,000 feet, where the oxygen is thin and the winds reach 70 knots.

Others had to go into jungles, where the rain is constant and temperatures reach 113 degrees Fahrenheit. None of these sites was within reach of electrical service.

That's where Cummins enters the story. Cummins Bolivia and Cummins Power Generation were commissioned to supply more than 350 generators in 2010, as well as automatic transfer switches, fuel tanks, fuel level sensors, parts and services for prime power, emergency backup and continuous electrical power.

Huawei needed this equipment to be set up and working properly, and it needed the job to be turned around quickly.

Cummins personnel found themselves driving through trackless terrain, in many instances enduring foul weather. When they

**EMPLOYEE RELATIONS** 

While the living conditions could be primitive, the Cummins employees soon learned that one of the most challenging issues was working in an environment of cultural differences. Chinese, English, and Spanish were all spoken on this project, and ongoing modifications in Huawei's plans made constant communication essential.

They had to work through questions about the sites, logistics, security, safety, equipment and more.

Some of Huawei's Chinese managers were being exposed to Western culture for the first time. For example, they did not share Western holidays, including New Year's Eve, and expected workers to spend these holidays installing generating equipment.

The urgency of the job sometimes required Cummins personnel to work extremely long hours with limited time to sleep. But they adjusted. And they lived Cummins' diversity value of treating everyone with dignity and respect.

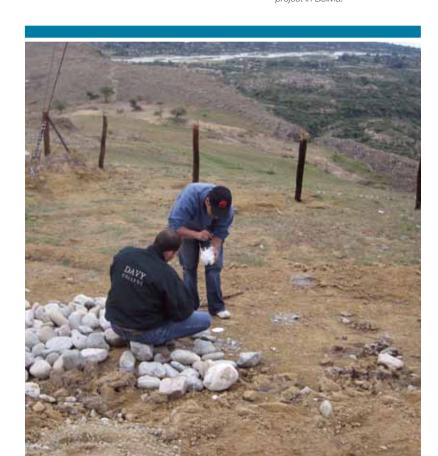
"We could not learn Chinese in the short time we were on the job, but we found a shared language in English," said Salvatierra, who led the Cummins team

of about a dozen people who themselves came from several countries, "Once we were able to find such common ground and develop some level of confidence and mutual trust with key members of the team, the project experienced good progress."

Today, Huawei is the number one provider of telecommunications systems in Bolivia, with representation in the top three cellular companies in that market.

And Cummins, because of its experience on this project, knows it can meet the most demanding expectations of customers anywhere in the world, making them tops in their market, too.

A Cummins team worked high up in the Andes mountains and in sweltering jungles, but found cultural and language differences among the biggest challenges it faced in a telecommunications project in Bolivia.



# Goal rising for supplier diversity

#### **HIGHLIGHTS**

#### **SUPPLIER DIVERSITY**

- » Company raises targets for business with diverse suppliers
- » On track to reach \$1 billion goal
- » Successfully promotes benefits to diversity procurement

Efforts to build support for supplier diversity during the downturn in the U.S. truck market seem to be paying off for Cummins Diversity Procurement initiative.

Based on new projections, the Company's Diversity Procurement Council has raised its target for purchases with diverse suppliers in the U.S. and Canada from 12 percent to 14.5 percent of total purchases by 2012.

If current purchasing levels continue, the Company should reach CEO Tim Solso's goal of \$1 billion in purchases from diverse suppliers that same year - a figure some thought impossible in the depths of the recession.

"The estimates we're seeing from the business units are amazing," said Gordon Fykes, Cummins Director of Diversity Procurement. "I'm very, very pleased."

Cummins had \$540 million in spending with diverse suppliers in 2010. That number is expected to reach \$679 million in 2011 a nearly 26 percent increase.

Fykes acknowledged the rosy forecast is partly due to higher volumes as the U.S. truck market recovers after two slow years. But he says the improving forecast also demonstrates that efforts by his staff and the council to promote the benefits of supplier diversity are paying dividends.

"Our diversity procurement message had a very good year in 2010," Fykes said. "We had both (President) Tom Linebarger and Tim Solso talking to suppliers and our purchasing staff about the importance of supplier diversity. And Ignacio Garcia (Vice President - Chief Manufacturing & Procurement Officer) has consistently said this is a priority. I think the message has gotten through."

**EMPLOYEE RELATIONS** 

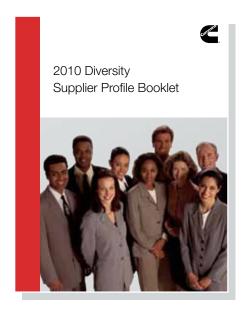
#### **CUMMINS STRATEGY**

At Cummins, diversity procurement, also known as supplier diversity, is a logical extension of Cummins' Global Diversity initiatives. It is also part of the Company's commitment to "serve and improve the communities in which we live."

By working with diverse suppliers, Cummins is able to increase economic opportunity in all of the communities where the Company's employees live and where Cummins does business.

Diversity procurement, however, is also a key business strategy with bottomline benefits. Helping diverse suppliers develop and grow will eventually increase competition for Cummins' business, ultimately resulting in lower prices and better quality for the Company's purchases and better service, too.

**EMPLOYEE RELATIONS** 



There are no set-asides or handouts in our Diversity Procurement program. Diverse suppliers must compete on price and quality.

#### **KEY TOOLS**

Cummins Diversity Procurement staff serves as a resource for purchasing leaders and business unit officials who want to solicit bids from diverse suppliers for Cummins purchases. The staff also works with diverse suppliers to help them develop.

Fykes and his staff have developed several tools to help Company purchasing personnel find diverse suppliers:

#### Diverse Supplier Booklet -

The Diversity Procurement staff updated its Diverse Supplier Booklet in 2010. Initiated a year earlier, the booklet includes detailed descriptions of women- and minority-owned businesses that have offered top quality goods and services at competitive prices in their previous work for Cummins. The catalog is also available to all Cummins' suppliers in the hope they will use it to

find diverse partners to help them meet Cummins' supply contracts. A 2011 version of the booklet was in production as this report went to press.

**Diversity Procurement Website** – The staff's other principal tool is the initiative's Web site - http://supplier.cummins.com. It provides one place where potential diverse suppliers can register their interest in doing business with Cummins and learn about new business opportunities that exist with the Company. In addition, suppliers can record their spending on diverse-owned businesses as well as access Cummins' catalog on diverse suppliers.

Getting all suppliers to use and report their spending with diverse-owned businesses remains a challenge. The Company has set a 10 percent goal for spending on diverse suppliers by other suppliers with Cummins contracts.

Nevertheless, the future looks bright for the Company's supplier diversity initiative. Fykes, however, says the Company cannot get complacent.

"We're in a pretty good spot but there's so much more we can do," he said. "We must continue our efforts to include diverse suppliers in all areas of our procurement strategies."

#### **PROMISING RETURNS**

Looking ahead, the Company is seeing promising results from a program designed to help diverse suppliers take their businesses to the next level.

The Diverse Manufacturing Supply Chain Alliance (DMSCA) is a mentoring initiative that provides suppliers with benchmarking information, gap analysis, counseling and more. Cummins is one of four corporate sponsors of the initiative led by David Burton which grew out of the National Minority Manufacturing Institute formed in 2004.

Cummins is sponsoring two diverse suppliers participating in DMSCA - AMG Engineering & Machining of Indianapolis, Ind. and Indiana Research Institute of Columbus, Ind.

"Both companies have grown tremendously through this process," said Gordon Fykes, Cummins Director of Diversity Procurement. "I really believe they have the potential to be strategic suppliers with Cummins."

**EMPLOYEE RELATIONS** 

## Creating a sustainable workforce

As Cummins enters a period of accelerated growth, it is going to be more important than ever that the Company attract top employees and invest in its people around the world to retain the talent necessary to remain successful on a global stage.

#### **HIGHLIGHTS**

#### **WORKFORCE**

- » New training program targets middle managers
- » Manufacturing workers focus of Operations Excellence Academy
- » Developing future leaders is key Company objective

Cummins currently has about 40,000 employees working around the world and expects to increase its workforce significantly over the next few years to meet strong forecasted growth across all its businesses.

Much of that growth will occur outside the United States, where 63 percent of the Company's current employees are located. One of the Company's strategic goals is to create a workforce - and a leadership team - that is a reflection of Cummins' global scope.

For example, in the past year Cummins has elevated the profile of its business in Latin America and China by adding leaders from those regions to the Company's roster of Corporate Officers. Additionally, Cummins has launched leadership development programs in China and India over the past year.

These 18-month programs will prepare approximately 15 high potential employees in each country for future senior leadership roles in their home countries - and beyond by strengthening their leadership skills and raising their profile in the Company.

All of this is just part of creating the right environment for employees to succeed, which is one of the Company's six strategic principles. The effort to create a sustainable workforce begins as soon as an employee joins Cummins and continues throughout his or her career.

Cummins invests significantly in employee development at all levels and across all parts of the organization, and the Company has a number of initiatives aimed at improving the skills and increasing satisfaction among its workforce.



Here is a look at some of the larger employee education efforts at Cummins today:

#### **BUILDING SUCCESS IN OTHERS**

In 2011, the Company launched the first phase of its Building Success in Others: Leadership Essentials course that targets mid-level managers among the Cummins' professional workforce.

This program is designed to provide managers with the tools they need to help their direct reports become successful at Cummins, with an emphasis on managing the growing number of employees new to Cummins. At the same time, the course is meant as a first step on the leadership development journey for many of the Company's managers.

Among the expected outcomes from the course:

» Helping managers to effectively evaluate and accelerate employee performance and development

- » Helping managers understand the motivational needs of their staff members
- » Improving communication between managers and their staff members
- » Helping managers gain a better understanding of the leadership environment at Cummins and their role in the success of the larger organization

# CREATING EXCELLENCE ACROSS OUR MANUFACTURING SYSTEM

Over the past year, Cummins has embarked on an ambitious effort to strengthen its global manufacturing system by identifying, communicating and reinforcing best practice standards for a wide range of processes in our plants around the world.

A key part of the effort will be the creation of the Cummins "Operations Excellence Academy," which is designed to provide a comprehensive suite of training programs to our manufacturing employees.

Cummins employees in remanufacturing, like this woman in India, work with high-tech tools including scanning electron microscopes and particle counters to help add miles to the Company's engines and parts.

#### **WORKFORCE CHALLENGES**

#### Hiring

Hiring people during a period of significant growth who share the Company's Mission, Vision and Values.

#### Leadership

Developing the next generation of Cummins leaders.

#### **Excellence**

Creating operational excellence from the shop floor through the executive suite.

Starting in the fourth quarter of 2011, shop floor employees in the United States will begin receiving awareness and user training on 31 key processes that have been identified as crucial to our manufacturing success in the future. Eventually, the program will be rolled out at plants around the world.

#### **BUILDING A CULTURE OF LEADERSHIP**

A company is not truly sustainable without an effective process to identify and develop leaders.

Ask Tim Solso to name his most important responsibility in his role as Cummins Chairman and CEO and the answer you will get is "developing leaders across the Company."

Cummins believes it's especially important for a global company because of the complexities inherent in leading a corporation with employees in different countries, living in different time zones, with different customs, often speaking different languages.

The Leadership Culture Series was created in 2009 to strengthen the Company's commitment to providing the skills necessary to build successful leaders across Cummins. The program, designed for the Company's top 300 leaders, focuses on five specific leadership skills considered critical to Cummins' future success.

The five skills are:

- » Coaching and development
- » Fostering open communications
- » Managing diversity
- » Talent management
- » Thinking strategically

A top executive at Cummins takes ownership of each individual skill area, helping to develop curricula and leading training sessions across the globe. Participants are expected to incorporate lessons from the sessions into their work plans and day-to-day interactions with staff members, colleagues, customers and other stakeholders.

The Leadership Culture Series is in its final stages and is expected to be completed by the end of 2011.

# COACHING AND DEVELOPMENT: A LIFELONG JOURNEY

At Cummins, coaching and development doesn't stop when an individual reaches a senior leadership position in the Company.

As part of the Company's commitment to creating a sustainable organization,

Cummins has, over the past four years, developed an executive leadership development program aimed at educating today's top leaders – and those of tomorrow – about the breadth and depth of the Company's business.

Now in the middle of its third cycle, the executive development program brings together small cohorts of high potential senior leaders and mid-career professionals for 24 months of extensive education about the Company's operations.

All those selected are viewed as having the potential to become a member of the senior leadership team at some point.

Cummins' top leaders, including the CEO and President, are heavily involved in the program and program participants gain significant insights to the issues and opportunities facing the Company through their interactions with these leaders and with one another. Members of the group have a hand in developing the program and executive development groups have traveled globally to learn about various aspects of the Company's business.

Workers display teamwork at the Beijing Foton Cummins Engine Company. In 2011, the Company has started a new effort to strengthen manufacturing standards in Cummins' plants around the world.

#### **Cummins workforce**

Cummins depends on a high-tech workforce.

Of its roughly 40,000 employees as of

June 2011, the Company has:

#### **Engineers**

» Almost 7,000 engineers

#### Information Technology

» Nearly 900 people in information technology positions

#### Other areas

» More than 3,200 employees who are not in engineering or information technology but have a college degree – either bachelor's, master's or PhD – in engineering or a sciencerelated field of study.

#### Location

» Almost 63 percent of the Company's workforce resides outside the United States.

#### Union

» Nearly 40 percent of the workforce belongs to a union.



#### **FINANCIAL**

# From uncertainty to growth: Cummins finishes 2010 in record fashion

Cummins entered 2010 facing a significant amount of uncertainty, especially around the general health of the economy in the United States and the state of the North American truck markets.

#### **HIGHLIGHTS**

- » Cummins records stellar 2010 despite sluggish U.S. truck market
- » Company sees rapid growth in Brazil. China and India
- » Earnings surpass \$1 billion for first time in Cummins' history

As a result, the Company's original forecast for 2010 was for sales and profits to be essentially the same as 2009, which was a solid year but down substantially from Cummins' record performance in 2008.

The North American truck markets recovered even more slowly than expected, but the Company's growth far exceeded our expectations in 2010, primarily on the strength of Cummins' performance in large emerging markets such as Brazil, China, and India.

Sales were \$13.2 billion, up 22 percent from 2009 and second only to 2008 revenues. Net income attributable to Cummins rose 143 percent to \$1.04 billion, from \$428 million in 2009. For the first time in the Company's history, earnings surpassed \$1 billion.

Earnings before interest and taxes (EBIT) were a record \$1.66 billion, or 12.5 percent of sales - more than double what Cummins reported in 2009.

"Last year showed, beyond a doubt, that Cummins is more than a North American heavy-duty truck engine maker," said Chairman and CEO Tim Solso.

All four business seaments reported strong sales and profits compared to 2009. Some highlights:

- » The Engine and Components segments had record earnings from operations despite a decline of 61 percent in North American heavy-duty engine shipments. Medium-duty engine shipments also were down 44 percent.
- » Distribution reported record sales and profits, demonstrating significant global growth and improving service capability around the world.
- » Power Generation had significant sales increases and improved profits. Power Generation lags behind other Cummins' businesses in the economic cycle, but is beginning to recover from the effects of the recession.



- » Total sales in China, including the Company's unconsolidated joint ventures, increased by 70 percent in 2010. In addition, Cummins grew market share in every segment in which the Company competes.
- » Sales in Brazil also grew by about 70 percent from 2009. Cummins remains the leader in truck engine markets in the country.
- » And in India, total revenues, including those from the Company's unconsolidated joint ventures, increased 46 percent over 2009. Cummins strengthened its joint venture partnership with Tata Motors, India's leading truck manufacturer, opening a second Tata-Cummins engine plant along with two other facilities in India in January 2011.

Cummins also successfully launched our new products in North America. Cummins sold 62,000 EPA 2010-compliant engines with Selective Catalytic Reduction (SCR)

systems in 2010 and sales of SCR engines in North America totaled nearly 90,000 through the end of the first quarter of 2011.

The Company's SCR-based engines deliver up to a six percent improvement in fuel economy, compared to the 2007 EGR-only engines. Fuel economy in Cummins' new engines also surpassed 2010 engines not using SCR systems.

Customers have said they are delighted with the performance and reliability of the new engines and Cummins is more convinced than ever that SCR is the right technology to meet current and future environmental standards in our leading markets (page 35).

Cummins' performance in 2010 and throughout the global recession is a clear example that the Company is a diverse global power leader that competes effectively in a wide range of engine and power generation markets around the world.

President and Chief Operating Officer Tom Linebarger cuts the ribbon to officially open Cummins' new corporate Africa headquarters in Woodmead, South Africa in June 2011. To learn more about the Company's plans for Africa, go to page 120.



Cummins celebrates the inauguration of the Company's new Megasite in Phaltan, India in January 2011. The 300-acre site will be home to 10 Cummins' facilities by 2014. Chairman and Chief Executive Officer Tim Solso and Anant Talaulicar, Vice President & President, Cummins' Component Group and Chairman of Cummins India, joined local dignitaries at the ceremony.

> Still, the North American truck markets are very important to the Company's success. In 2011, Cummins expects the heavy-duty truck market in North America to grow by 50 percent, while the medium-duty truck market is expected to grow by 40 percent.

> As a result of this growth, and continued strength in other product and geographic markets around the world, Cummins expects 2011 sales to grow by as much as 30 percent from 2010, and EBIT to be 14 percent of sales. The Company expects 2011 to be a record year in terms of both sales and profits.

Cummins believes that a strong financial performance is critical to sustainability. It allows the Company to invest in initiatives to build stronger communities and a stronger workforce. We are also investing in the business.

Capital investment is expected to grow by 75 percent to as much as \$650 million in 2011, and Cummins' joint ventures will invest another \$300 million in their operations. In addition, our research and development spending is forecast to grow by more than 40 percent as the Company continues to develop the cleanest, most fuel efficient products on the market.

Solso says he's more optimistic than he has ever been in his 40 years with the Company.

"We have more growth opportunities ahead of us today than at any time in our history," he said.

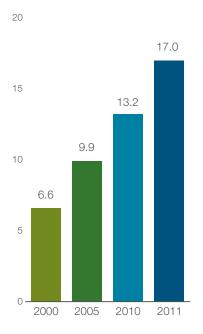
| 2010 - A RECORD YEAR OF PROFITABILITY |          |
|---------------------------------------|----------|
| Revenue                               | \$13.2 B |
| EBIT                                  | \$1.66 B |
| Net earnings                          | \$1 B    |
| EPS                                   | \$5.28 B |
| Cash Flow from Operations             | \$1 B    |

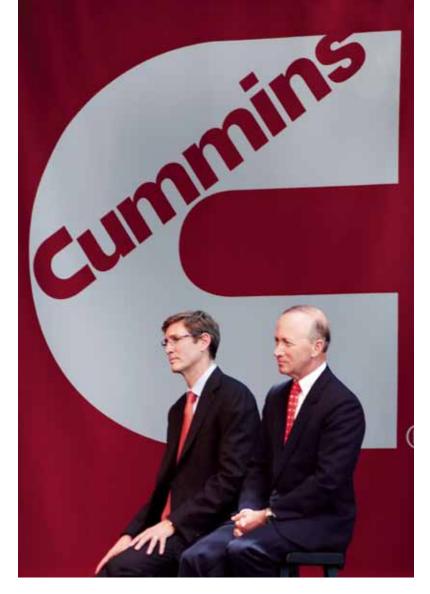
#### **GROWTH SINCE 2000**

Cummins is projected to have a record year in 2011.

#### **Consolidated Sales**

in billions of dollars





President and Chief Operating Officer Tom Linebarger sits with Indiana Gov. Mitch Daniels in June 2011 after Cummins announced it would add 600 new professional employees and build a new office building in downtown Columbus, Ind.

### 2011 and beyond: A different kind of challenge

As Cummins looks to 2011 and beyond, the Company sees significant profitable growth opportunities in markets around the world, but challenges as well.

#### Discipline

As Cummins makes the transition to a period of accelerated growth, it is imperative that we pursue growth opportunities with the same discipline we demonstrated during the economic downturn. This is especially true when it comes to managing costs and retaining the productivity gains realized over the past two years.

#### Management

Cummins is going to be a larger, more complex and more global company in the future. That means it will be more important than ever that the Company hire well – and then develop its employees – and execute our growth strategy so that the Company can take full advantage of the opportunities ahead.

#### Supply chain

Substantial gains can be made to improving the supply chain by reducing waste and recycling materials. Implementing global packaging standards will be an important first step.

### This is Africa's time for Cummins



A billboard heading west out of Accra, the capital of Ghana. advertises Cummins' distributor business in the country. The Company is planning to increase its presence throughout the continent.

Cummins' presence in Africa dates back to World War II, but it's only been in the last few years that the Company has begun to view the continent as a significant future growth market.

In 2010, the Company completed work on its Africa strategy, which takes a continentwide view of Cummins' capability to serve a range of diverse markets. Much like the Company's efforts to establish an early foothold in India in the 1960s and China in the 1970s, Cummins is working to lay the foundation in Africa today for success in future decades.

For the first time, Cummins has a team dedicated to growing the Company's business across the entire continent - from powering the gold mines of Ghana and South Africa, to meeting the significant electricity demands in Nigeria to better serving customers in remote regions.

"Africa is one of the next great emerging regions of the world and holds great promise for Cummins," said Cummins Africa leader Brady Southwick. "We have an ambitious plan to grow our business across the continent over the next decade, and want to achieve that growth by acting in a way that is consistent with our values."

Cummins is investing significantly in Africa - \$75 million over the next five years to achieve its goals of quadrupling sales on the continent to \$1 billion in 2015.

At the heart of Cummins' Africa strategy is a commitment to the Company's customers, employees and communities. Cummins' goal is to attain a leadership position in all its primary markets in the continent - power generation, mining and filtration - by differentiating itself through superior customer support.

At the same time, the Company strongly believes that to be successful in Africa in the long-term it must develop a world class set of local leaders to drive business and change across the continent. Following a model that has been successful in China and India, Cummins already has begun to identify and develop local talent across Africa that will lead the Company's work in the future.

Finally, Cummins is taking a holistic approach to its growth in Africa. The Company recognizes that it has an opportunity and a responsibility to help strengthen the communities in which it operates around the continent and has built a strong corporate responsibility component into its Africa strategy.

A member of the Company's Corporate Responsibility organization sits on the Cummins Africa leadership team, helping drive alignment with the Company's values and building on the good work already done in some communities with Cummins facilities in Africa.

The Company has played a key role, for example, in the launch and early success of the Ithemba Institute in the Soweto section of Johannesburg, which provides secondary education and technical training to students in one of the poorest areas of the city.

"Strong communities are vital to the success of any business, and we are committed to doing our part to help improve the communities in which we live and work across Africa."

#### **BRADY SOUTHWICK**

**CUMMINS AFRICA LEADER** 



In addition to financial support, Cummins employees provide significant volunteer support to the school.

"Strong communities are vital to the success of any business," Southwick said, "and we are committed to doing our part to help improve the communities in which we live and work across Africa."

An employees works on an engine at the Cummins distributor business in Ghana. Today, the Company has 25 facilities in Africa and approximately 1,100 employees with plans to significantly accelerate growth on the continent between now and 2015.

### Cummins works to make supply chains sustainable

Every Cummins business segment faces the challenge of delivering the right product or service to the right place at the right time to meet customer demands. Meeting those demands while building sustainable supply chains compounds the challenge.

Developing supply chains across Cummins that reduce the Company's carbon footprint is one of the goals of the new Corporate Supply Chain organization.

Led by Lisa Yoder, Vice President – Global Supply Chain, the organization was created in mid-2010 to take a more comprehensive approach to the Company's supply chains so they deliver to customers with speed, dependability and efficiency.

"Our supply base is all over the world and our customers are all over the world," Yoder said. "So to operate in that environment and to deliver on customer requirements, we really need to get much more effective at the supply chain elements."

Building sustainable – or green – supply chains means figuring out ways to reduce the amount of packaging on products so there isn't as much waste, combining shipments so that delivery trucks don't travel half empty and using shipping materials that can be reused or recycled rather than discarded.

Several critical projects have been completed that will help lay the groundwork for future work:

- » The first-ever survey of suppliers was launched to learn how many of Cummins' suppliers are measuring the impact of their products and processes on the environment.
- » Cummins published green supply chain principles, spelling out the Company's commitment to sustainability. They ask suppliers to help build sustainability by reducing or minimizing their impact on the environment.
- » The Company outlined three-to-five year goals for creating an environmentally sustainable supply chain. Work is underway to identify projects to meet the goals.

Cummins also piloted a carbon measurement tool for transportation and packaging in 2010. The tool creates a simple way to measure the impact or carbon footprint - of packaging and shipping products.

Packaging is one area where substantial gains can be made by reducing waste or allowing materials to be recycled. That is why a Cummins Six Sigma team is working to establish global packaging standards and implement them in at least one region -Europe – in 2011.



Many factors go into the sustainability of a company – financial success, environmental responsibility, community involvement, ethics, an exceptional workforce and an engaging workplace. Tim Solso has had a transformational impact on all these areas during his 12 years as Chairman and CEO at Cummins.

First and foremost, the Company returned to a solid financial footing under Tim's leadership. The operational improvements implemented over his tenure have led to the financial success we're enjoying today.

Success has enabled the Company to invest in research and development that has kept Cummins at the forefront of technical innovation to the point we see environmental regulations as a business opportunity – not a burden. In the past decade, Cummins has also taken extraordinary steps to reduce its own environmental footprint. The use of Six Sigma as a tool to both improve our products and our practices has been something Tim promoted fervently.

Cummins expanded on its already outstanding community involvement work over the past 12 years, helping to build stronger communities and ultimately stronger markets for our products.

This report includes a few examples from around the world. Tim frequently says visiting these projects are one of the best parts of his job.

Finally, Cummins has made significant strides in developing a diverse, ethical and highly skilled workforce. Creating an inclusive workplace where people can reach their full potential is something Tim cares deeply about. The Company, under his leadership, implemented a number of initiatives addressing ethics, skills enhancement and leadership development.

In short, Tim's leadership has been all about creating a sustainable company. I am so grateful for the opportunity to work closely with him and to learn from his example.

I know what he has helped build will serve our Company well for years to come.

Thank you Tim! I wish you great happiness in your retirement. You will be missed.



#### **Tom Linebarger**

President and
Chief Operating Officer
Cummins Inc.



# SOLSO'S TENURE LEADING CUMMINS

A few measurements of Cummins' success under Tim Solso's leadership:

- » Sales grew from \$6.6 billion in 2000 to \$13.2 billion in 2010.
- » From 2000 to 2010, shareholders enjoyed a total return of 13.2 billion.
- » International business grew from 40 percent of sales in 2000 to more than 60 percent in 2010.
- » The Company won numerous awards for diversity, corporate responsibility and environmental achievements.

Linebarger will succeed Solso as Cummins' leader in January 2012.



Cummins' sustainability reporting doesn't end with this document.

Go to our Web site – www.cummins.com/sustainability – for regular updates on how we're meeting the needs of all of our stakeholders and practicing good corporate citizenship.



Cummins Inc. Box 3005 Columbus, Indiana 47202-3005 U.S.A.

cummins.com ©2011 Cummins Inc.

Bulletin Number 4986098