2008 ecomagination Annual Report

ecomagination is GE

CONTENTS

1 GE's ecomagination commitments and results
2 A letter from Jeff Immelt and Steve Fludder
4 A business strategy that is delivering results
6 Increase revenues from ecomagination products
8 Double investment in R&D
10 Reduce greenhouse gas (GHG) emissions and improve the energy efficiency of GE's operations
12 Reduce water use and improve water reuse
13 Keep the public informed
14 Businesses overview
33 GE at a glance

Ecomagination is a business initiative to help meet customers' demand for more energy-efficient products and to drive reliable growth for GE. Ecomagination also reflects GE's commitment to invest in a future that creates innovative solutions to environmental challenges and delivers valuable products and services to customers while generating profitable growth for the Company. This document is designed to report on GE's growing partnerships with customers, governments, non-governmental organizations, and universities to execute on our products and services to help address some of the world's big challenges.

Our Progress

In its fourth full year after the launch of ecomagination in May 2005, GE has made significant progress on each of our **five main commitments.**

1

Increase revenues from ecomagination products:

- GE has increased its ecomagination portfolio—from 17 products in 2005 to more than 80 products today.
- 2008 revenues reached $17 billion, an increase of 21% over the prior year.

2

Double investment in R&D:

- In 2008, GE invested more than $1.4 billion in cleaner technologies, up from $750 million in 2005.

3

Reduce greenhouse gas (GHG) emissions and improve the energy efficiency of GE's operations:

- GE is on track to reach its internal commitment. GHG emissions from operations in 2008 have been reduced by about 13% from the 2004 baseline. GHG and energy intensity have been reduced by 41% and 37%, respectively, compared to 2004.

4

Reduce water use and improve water reuse:

- We announced in May 2008 our commitment to reduce our freshwater consumption by a 20% reduction of water by 2012. During this year, we have established a plan to identify and assess our sites for water reduction.

5

Keep the public informed:

- In addition to this report, GE is keeping the public informed through its ecomagination Web site, dozens of global conferences, stakeholder events, work with its ecomagination Advisory Board, and new public-policy engagements, including the historic "Blueprint for Climate Action" delivered by USCAP.

To Our Investors, Customers, and Other Stakeholders,

When we first conceived of ecomagination a little over five years ago, our vision was to create a program that would be consistent with GE's mission to earn the best possible returns for our shareowners by solving big problems like improving energy efficiency and reducing environmental impact. Since 2005, we have invested heavily in harnessing the power of our technology and industrial capabilities to reduce our environmental impact while also reducing our costs by over $100 million dollars. In this report, we'd like to share some of our recent results and our plans for the years ahead.

In the current difficult economic environment, we have seen that ecomagination is even more relevant. As governments around the world structure their economic stimulus programs, virtually all of them include a "green" component designed to support and create jobs that will develop and advance tomorrow's competitive skills. Given our experience with ecomagination, we have had the opportunity to share our insights into the creation of "green collar" jobs with these governments. By some estimates, the total green component of all global stimulus programs now exceeds $400 billion. We are encouraged by this prioritization, and we support the idea that these programs not only address a current need, but they also lay the groundwork for a stronger, energy-independent future for all.

Beyond the immediate goals of the stimulus programs, ecomagination also has provided us with the opportunity to work with global thought leaders and legislators to craft longer-term policies designed to accelerate innovation and spur action. Earlier this year, the United States Climate Action Partnership (USCAP) delivered our consensus report, "A Blueprint for Legislative Action," which provided a detailed framework for legislation to address climate change. As a founding member of USCAP, we, along with our industry and NGO partners, are encouraged that many of the elements of the blueprint are embodied in the proposed legislation.

We are excited about the progress that ecomagination continues to make, and we are especially pleased with the milestones we reached in 2008. Historically, all successful cross-Company initiatives at GE have been grounded in metrics, and ecomagination is no different. When we launched the program, we committed to reducing our greenhouse gas emissions intensity on a revenue basis by 30 percent by 2008, and we did. We also increased our

portfolio of ecomagination offerings by one-third, to a total of 80; grew revenues of ecomagination offerings by 21 percent, to $17 billion; and increased our investment in the research and development of clean tech solutions by 25 percent, to $1.4 billion.

Looking ahead, we remain committed to this pace of growth. Despite the tough economic environment, we will strive toward a revenue target of $25 billion and an increase in R&D to $1.5 billion in 2010.

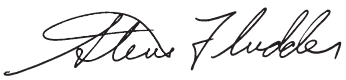
One of our most rewarding achievements is that ecomagination's success has not been limited to GE. A number of our customers are also partnering with us to amplify the impact. Whether it is our advanced coal technology that will provide Duke Energy's Edwardsport facility lower emissions from abundant coal supplies or our water treatment technology reducing Elion Chemical's industrial discharge into the environmentally sensitive Yellow River in China, ecomagination has helped companies improve their operations while managing their overall environmental impact. We also have expanded the number of companies we have invested in on a venture capital basis as we continue to seek innovation inside as well as outside of our Company.

Around the world, ecomagination is playing a role in boosting economic recovery, supporting the jobs of the future, improving the environmental impact of our customers' (and our own) operations, furthering energy independence, and fostering innovation and growth in profitable environmental solutions. We got an early start, and we like our momentum.

We hope you enjoy this report, and we welcome your feedback. **Please visit ecomagination.com and let us know your views.**

Sincerely,

Jeffrey R. Immelt
Chairman of the Board
and Chief Executive Officer



Steven M. Fludder
Vice President
ecomagination

▸ ecomagination

A business strategy that is delivering results

Ecomagination is a business strategy designed to drive innovation and the growth of profitable environmental solutions while engaging stakeholders. We invest in innovation through both our own R&D efforts and outside venture capital investments. The resulting products enable GE and our customers to reduce emissions while generating revenue from their sale. Combining profits and energy savings, we continue to invest in environmental solutions, perpetuating the cycle.

Specific targets have been established for each of three target years: 2008, 2010, and 2012. We have already exceeded our 2008 commitment, reducing greenhouse gas (GHG) intensity by 30%.

2008

reduce GHG intensity **30%**

goal attained ☑

2010

double R&D to **$1.5 billion**

strive to grow revenues to **$25 billion**

2012

reduce water **20% absolute**

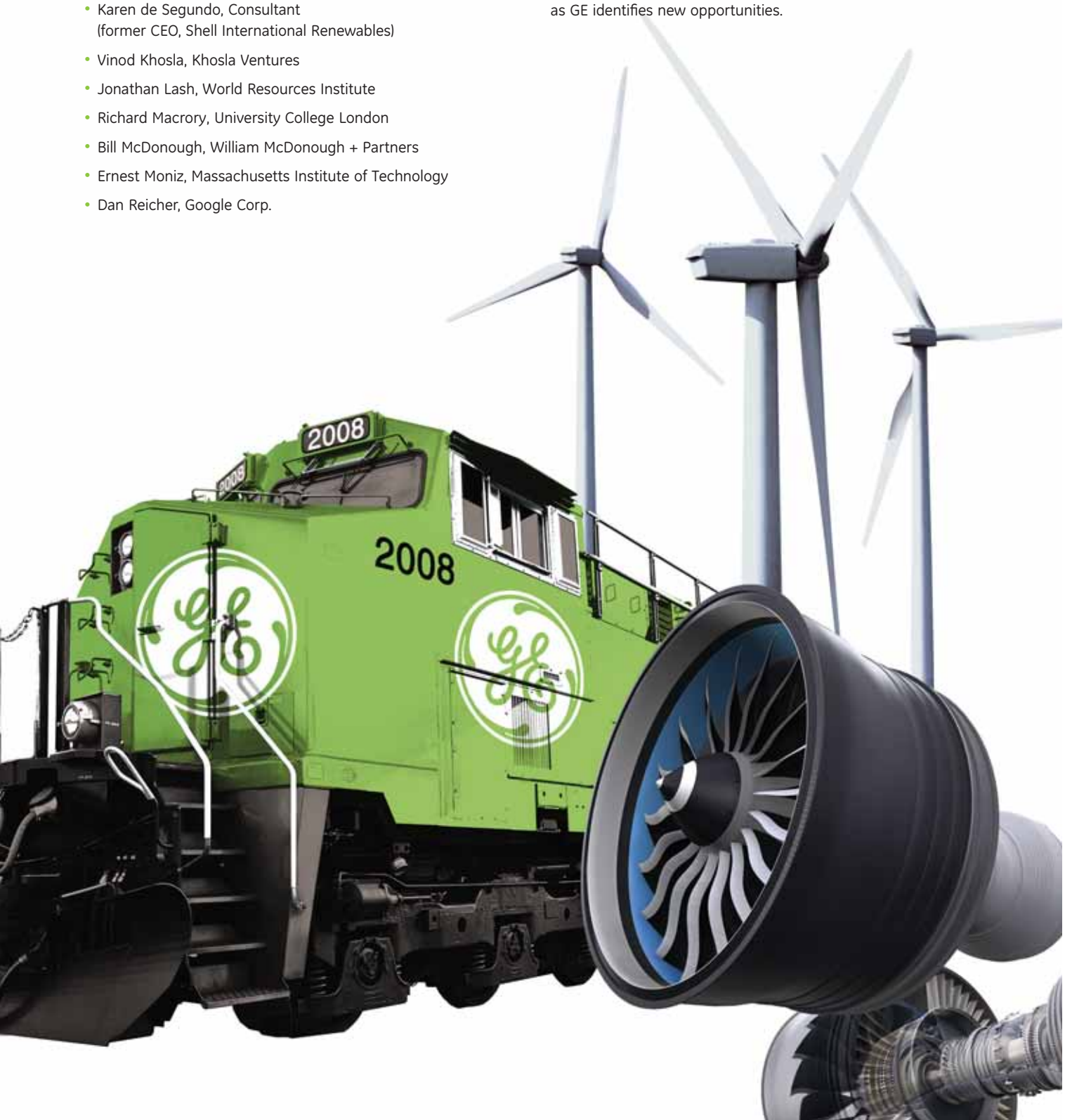
reduce GHG **1% absolute**

ecomagination Advisory Board

For the third consecutive year, GE convened a group of nine energy and environment thought leaders serving on our ecomagination Advisory Board. This team advises the Company's ecomagination team on critical environmental and business issues. The Board is also a venue for thought leaders to hear about what GE is doing. Current members of the Board include:

- James Cameron, Climate Change Capital
- Eileen Claussen, Pew Center on Global Climate Change
- Karen de Segundo, Consultant (former CEO, Shell International Renewables)
- Vinod Khosla, Khosla Ventures
- Jonathan Lash, World Resources Institute
- Richard Macrory, University College London
- Bill McDonough, William McDonough + Partners
- Ernest Moniz, Massachusetts Institute of Technology
- Dan Reicher, Google Corp.

GE holds this annual summit involving all Advisory Board members and representatives from many different GE business units. At this year's summit, the Advisory Board provided valuable input on commercial, technical, and policy-related opportunities for GE in the key strategic areas of carbon capture, energy efficiency, and global economic recovery projects. Receiving ongoing input from the Advisory Board is one way GE increases its engagement with the public and leading environmental experts. This input will continue to shape the growth of the ecomagination program as GE identifies new opportunities.



▸ Commitment 1

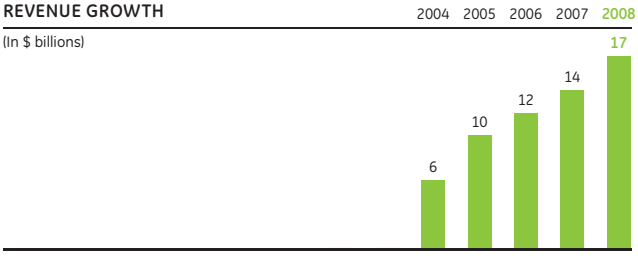
Increase revenues from ecomagination products

Revenues

In 2008, ecomagination revenues grew from $14 billion in 2007 to $17 billion, a 21% increase in revenue. Five years into this commitment, GE has experienced solid progress that is shown here.

ECOMAGINATION REVENUE GROWTH

(In $ billions)



Highlights of ecomagination products and services

The process behind ecomagination

To ensure that product introduction is met with the highest degree of integrity, GE employs a rigorous qualification process to effectively certify new ecomagination products. GE's process began with establishing a clear standard for ecomagination products based on two criteria. Ecomagination offerings are:

Products that significantly and measurably improve customers':

1. Operating performance or value proposition and

2. Environmental performance

or services that substantially enable such improvements.

These criteria work in tandem. At the heart of this standard is GE's belief that "green is green"—that by investing in and developing environmentally advanced products and services, GE will deliver solutions that increase customers' ability to compete and win. GE also created the Ecomagination Product Review scorecard that quantifies a product's environmental impacts and benefits relative to other products. To ensure the accuracy of the scorecard, GE receives third-party quantitative environmental analysis and verification for GE's product claims.

GE's portfolio of ecomagination products and services includes more than 80 at the time of the publishing of this year's report (see list) and spans the entire range of GE businesses. GE's ecomagination products and services are highlighted here.

GE Energy

- Amorphous Transformer
- Coordinated Volt-VAR Control Technology
- DLN 1+ Combustion System
- DLN 2.6+ Combustion System
- HEAT™ Steam Turbine
- H System™ Turbine Combined Cycle System
- Integrated Gasification Combined Cycle (IGCC) System
- Jenbacher™ Biogas Engine
- Jenbacher™ Coal Mine Gas Engine
- Jenbacher™ Combined Heat & Power
- Jenbacher™ Landfill Gas Engine
- Kn3 Optimization Software for Power Plants
- LMS100
- Nuclear: Advanced Boiling Water Reactor (ABWR) and Economic Simplified Boiler Water Reactor (ESBWR)
- OpFlex™ Turndown Technology
- ORegen Systems for Waste Heat Recovery
- Powerwave+™ Cleaning Systems
- PulsePleat™ Filter Elements
- Quadromatic™ Motors
- Solar
- Wind Turbines
- Zonal™ Combustion Tuning for Coal-Fired Boilers

GE Transportation

- 1033 Locomotive Emission Kits
- China Mainline Evolution™ Locomotive
- Evolution™ Hybrid Locomotive
- Evolution™ Series Locomotive
- Kazakhstan Evolution™ ES44ACi Locomotive
- Locotrol™ System
- PowerHaul™ Engine
- Russian-Built Locomotive Modernization Skids
- SmartBurn™ Technology
- Trip Optimizer™ System

GE Consumer & Industrial

- ecomagination Homebuilder Program
- ENERGY STAR® Compact Fluorescent Lighting (Screw in)
- ENERGY STAR® qualified Clothes Washers (Front & Top Load)
- ENERGY STAR® qualified Dishwashers
- ENERGY STAR® qualified Refrigerators
- ENERGY STAR® qualified Hot and Cold Water Dispensers
- High Efficiency Halogen Lamps
- High Efficiency Linear Fluorescent Lamps & Ballasts
- High Efficiency Motors
- High Efficiency Water Heaters
- LED Light Sources (4 products)

GE Oil & Gas

- BCL 300 Series Centrifugal Compressor for Sour Gas Reinjection
- DLN-1 IBH for FR5-2 Gas Turbines
- Hot Gas Expanders for Power Recovery Systems
- Integrated Compressor Line (ICL)
- PGT25 Products
- UltraScan™ Duo Pipeline Inspection Tool

GE Capital

- Australia eco MasterCard
- Environmental Performance Services with Telematics
- Energy Efficient Home Loan Products

GE Water & Process Technologies

- ABMet (Advanced Biological Metals Removal)
- Advanced Membrane
- Desalination
- DusTreat™ Control Treatment Programs
- E-Cell™ Electrodeionization System
- EDR (Electro Dialysis Reversal)
- Entrapped Air Flotation (EAF)
- GenGard Cooling Water Solution
- Homespring™ Central Water Purifier
- MetClear™
- PRO/Titan Reverse Osmosis System
- SAGD Produced Water Evaporator
- Waste to Value
- ZeeWeed™ Membrane Technology

GE Enterprise Solutions

- 750 kVA Uninterruptible Power Supply (UPS)

GE Energy Financial Services

- Greenhouse Gas Services, LLC, a GE AES Venture

GE Healthcare

- Digital X-Ray
- ecomagination Hospital Program
- Signa™ HDe 1.5T MRI
- Voluson™ E Series Ultrasound

GE Aviation

- CFM56 Tech Insertion
- CFM56-3 Advanced Upgrade
- Flight Management System (FMS) Optimized Descent
- GE90™-115B Aircraft Engine
- GEnx™ Aircraft Engine

▸ Commitment 2

Double investment in R&D

Today, GE has more than 30,000 technologists located around the world in our businesses and four global research centers (located in Niskayuna, New York; Shanghai, China; Munich, Germany; and Bangalore, India). They work intensely every day to deliver leading-edge technology and products that drive GE's growth and create a better world.

In 2008, GE invested $1.4 billion on cleaner technology research and development (R&D), drawing closer to our pledge to invest $1.5 billion on ecomagination R&D by 2010. R&D investment has reached a total of more than $4 billion since the program's inception. GE's commitment to provide meaningful solutions through ecomagination remains on track, as shown.

New ideas in wind energy take flight.

As the wind industry looks to the next generation of technologies, a key focal point is the blade. Improving the performance and economics of wind energy requires a longer, more aerodynamic blade. But the challenge of a longer blade is weight—adding too much additional weight not only places undue stress on the overall turbine structure, it also negates any potential gains in power capacity and efficiency. However, GE is well equipped for the challenge.

Applying 25 years of aviation research in carbon composites, GE researchers in Niskayuna, New York, and Munich, Germany, are developing a longer, more advanced wind blade. Carbon composites, which are comprised of carbon fibers and resins, provide a stronger and lighter alternative to current materials.

GE Aviation used composites in the fan blade of the GE90, which was commercialized in the mid 1990s. We have since expanded the use of composites to the fan case for the GEnx, Aviation's newest aircraft engine platform for wide-body aircraft. In both engines, reductions in weight have led to improved fuel economy and performance over previous-generation engines.

Reducing blade weight can allow wind power to be scaled in an economical way. Our researchers are applying lighter carbon fiber composites inside the blade, which could ultimately result in a weight savings of 30%. Researchers are also exploring new aerodynamic designs to further maximize wind capture.

From lighter material alternatives to more sophisticated designs, GE has given flight to new ways to improve wind power.

Advancing battery technology for tomorrow's opportunities.

Batteries have been a routine part of everyday life for years. But the batteries used for larger scale applications—including electric vehicles, hybrid locomotives, and the electric grid—require tremendous amounts of power and energy. Since our founder Thomas Edison championed battery-powered cars, GE has been exploring innovative uses of battery power. That drive has never been stronger than it is today.

From Edison's time to the present, the economics of automobiles have favored the gasoline-powered combustion engine—but that dynamic has begun to change. The past few decades have seen increases in the cost of fuel and other drivers to reduce emissions. At the same time, the power, energy storage capacity, and economics of battery technology have steadily improved. The improvements have come far enough to where the electrification of transportation is now clearly in view—and batteries will be a key technology driving this evolution.

One concept GE is exploring is a dual battery system, which combines two different battery chemistries in one system. Where a single-battery system can involve trade-offs between power output and energy storage capacity, combining lithium-ion batteries with sodium batteries can make up for these deficiencies.

GE's researchers have had significant exposure to all types of energy storage, including both lithium-ion and sodium batteries. We have good insight into lithium-ion battery technology, in part, through a research partnership with A123 Systems.

And for the past four years, we have been developing sodium metal halide battery technology for a hybrid locomotive.

Drawing from our experience with both technologies, we believe combining these two types of batteries into one system can help achieve an optimal balance of acceleration and electric range, while minimizing the size and cost of the energy storage system and maximizing life. Moreover, we think this type of system could play broadly across the transportation sector, from locomotives and heavy-duty mining trucks to buses, SUVs, and passenger car applications.

Beyond transportation, batteries will also have impact in the stationary power sector. For example, they could play a key role in providing stable, integrated power solutions. In aviation, airplanes are becoming increasingly reliant on electric power to support the electronic systems on board.

GE recently convened a symposium of high-profile entrepreneurs, government leaders, and battery and energy experts to explore the future of battery technology in both the transportation and stationary power sectors. While uncertainties remain, the consensus among the experts was clear: It is not a matter of if, but when batteries will begin impacting these two industries in profound ways.

Today, interest and investment in new battery technologies are at an all-time high. Nearly a century after Edison and others first dreamed of battery-powered transportation, GE is addressing the key challenges around batteries, aiming to take them from the lab to the marketplace.

▸ **Commitment 3**

Reduce greenhouse gas (GHG) emissions and improve the energy efficiency of GE's operations

To make ecomagination truly "sustainable" from a business perspective at its inception, GE set very real, aggressive targets, one of which is to improve the energy efficiency of Company operations and reduce the Company's greenhouse gas emissions. GE's plan to achieve this is called 1-30-30.

The "1" reflects the percentage (versus 2004 levels) by which GE will reduce its absolute greenhouse gas (GHG) emissions worldwide by 2012. This is a major goal, given that GHG emissions would otherwise have grown substantially — by approximately 30% — based upon current business growth projections. GE also committed to reducing the intensity of its GHG emissions 30% by 2008 and improving energy efficiency 30% by the end of 2012 (also versus 2004 levels). Improving energy efficiency translates into significant energy cost savings for GE — another way ecomagination is rewarding investors.

By making a public commitment and then tracking the results, GE is leading by example and demonstrating how one company can make a difference.

Top: GE's Greenville, South Carolina, facility uses solar panels for power. Bottom left: GE's Hürth site, located just outside of Cologne. Bottom right: GE Canada's headquarters in Meadowvale, Ontario, was awarded LEED-EB certification by the U.S. Green Building Council in February 2008.

Operational GHG emissions

In 2008, GE's GHG emissions were 6.49 million metric tons, a reduction of 13% from our 2004 baseline. In addition to the continued implementation of many GHG and energy reduction projects in 2008, some of the emission reductions are in part attributable to the slowing of the economy. Our performance against GE's GHG Intensity and Energy Efficiency goals, which use revenue as a denominator thus reflecting economic conditions, showed continued progress, improving by 41% and 37%, respectively, compared to 2004. **GE has now achieved the first of its three GHG and energy goals—to reduce GHG Intensity by 30% by the end of 2008.**

Each year, GE adjusts its 2004 baseline to account for divestments and acquisitions in accordance with the WRI/WBCSD greenhouse gas accounting protocol. Although the number of large sites in the GE GHG inventory is approximately the same as in 2004, our adjusted baseline inventory is now approximately 46% lower than the initial 2004 inventory.

We continue to recognize the hard work of our employees through the eCO_2 awards and certification program, recognizing those sites that achieve at least a 5% absolute GHG reduction independent of changes in production levels. During 2008, we certified 41 sites which collectively achieved an aggregate reduction of 180,000 metric tons of CO_2. We also gave special recognition ecomagination awards to ten sites for extraordinary results. Five of these sites, located in Hungary, implemented programs using GE's Jenbacher engines in combined heat and power projects at their manufacturing sites. Our outreach efforts continue as well, as we share our approach with suppliers, customers, and partners.

GE Energy Financial Services' Investments

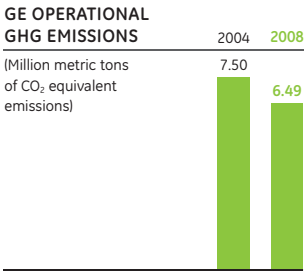
GE also is reporting GHG emissions from investments in power projects through GE Energy Financial Services.

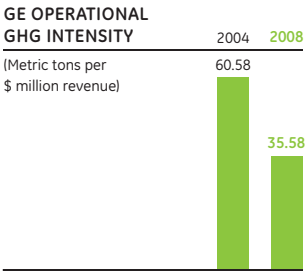
GE Energy Financial Services invests in power projects in a number of ways: equity, lease, and debt. We are reporting emissions for investments in which GE Energy Financial Services has an equity interest in the operation of the project based upon the business unit's percentage of equity ownership.

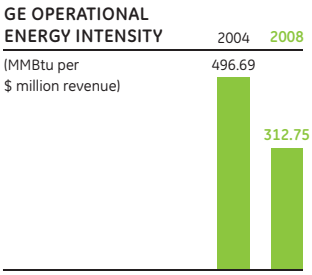
In 2008, GE Energy Financial Services' greenhouse gas emissions totaled approximately 9.80 million metric tons of CO_2 equivalent from 24 investments. Seven of these investments, representing 4.37 million metric tons, are subject to CO_2 emissions regulation in the United States or Europe. By comparison, GE Energy Financial Services held an equity interest in 25 power projects in 2007, which emitted 9.71 million metric tons of CO_2 equivalent. In addition, the renewable energy projects in which GE Energy Financial Services has purchased equity interests avoided 5.06 million metric tons of CO_2 equivalent in 2008.

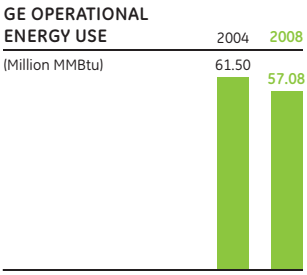
In 2006, GE Energy Financial Services demonstrated leadership by becoming one of the first financial services companies to report greenhouse gas emissions associated with power project equity investments. In 2007, the GE unit continued this leadership, outlining its guidelines on emissions involving these investments:

- Establish a long-term goal to balance investments in new coal-fired power plants with renewable energy, clean technology investing, and greenhouse gas emissions cuts.
- Focus investments in new coal power plants on efficient, super critical technology, and projects with sequestration potential.
- Price CO_2 for coal and other fossil fuel plants into deal approval processes.
- Engage with non-governmental organizations through USCAP on policy recommendations to ensure that new coal-fired generating units are designed to take into account the future cost of carbon.
- Voluntarily report emissions.
- Explore increasing focus on investments in energy conservation and efficiency.









▸ Commitment 4

Reduce water use and improve water reuse

GE water use

In May 2008, we announced our goal to reduce our freshwater consumption by 20% from a baseline of 2006 to 2012. During the year, we have developed tools for our sites to assess, identify, and quantify costs and benefits of implementing water reduction projects. Our first water reduction Kaizen blitz event was conducted at our Global Research Facility in Niskayuna, New York, with very favorable water reduction and cost benefits identified. We plan on using this approach at other targeted locations during the remainder of 2009 to identify more opportunities.

Since 2006, we have collected water consumption data for those sites across our businesses meeting a criterion of more than 15 million gallons annually of water consumed. Water consumption data includes water used for potable, process, and sanitary purposes as well as non-contact cooling waters (NCCWs) from freshwater sources. We adjust the data each year to reflect acquisitions and divestments.

In 2008, water use from these sources was 0.2% higher than our 2006 baseline. An increase in non-contact cooling water offset a 10.8% reduction in water use for potable, process, and sanitary purposes. This increase was due to a project at one of our largest water using sites to better quantify water use. The project, utilizing GE Sensing Ultrasonic Flow Meters, identified that water use at the site was substantially higher than originally estimated and had increased 11% since 2006.

As a result, we are evaluating significant reduction opportunities at this site and across all of our businesses.

2006
Total: 12.29 billion gallons
NCCW: 5.88 billion gallons

2008
Total: 12.32 billion gallons
NCCW: 6.6 billion gallons

GE technology works to reduce GE's water footprint.

GE Hitachi Nuclear Energy (GEH) and Global Nuclear Fuel (GNF), a joint venture of GE, Toshiba, and Hitachi, have been working toward achieving GE's ecomagination commitment to reduce our water footprint 20% by 2012. Already, a new energy-efficient wastewater system at the Wilmington, North Carolina site has reduced water usage by 25 million gallons annually, avoiding nearly 80 tons per year of CO_2 emissions and realizing annual savings of $160,000 in water and energy costs.

Using GE's ecomagination ZeeWeed® membrane bioreactor (MBR) technology, GEH is transforming up to 65,000 gallons per day of plant wastewater into a sustainable, drought-proof supply of high quality, non-potable water. This treated wastewater effluent is reused in the facility's cooling towers, an integral component of the campus heating, ventilating, and cooling (HVAC) system. It also eliminates the use of groundwater for this purpose.

ZeeWeed Z-MOD™ packaged membrane bioreactor plant.

▸ Commitment 5

Keep the public informed

GE is continuing ongoing discussions, dialogues, and communications to engage with the public on our ecomagination efforts. This year the Company is launching an updated Web site at **www.ecomagination.com** where the public can learn more about GE ecomagination, our customers, and our diverse stakeholders.

As part of GE's overall corporate effort to improve transparency, the Company issues this annual ecomagination report to track environmental goals as well as a separate citizenship report to highlight social responsibility initiatives. Throughout the year, the Company also provides updates on ecomagination through shareholder and analyst meetings.

Engaging the public through advertising.

To inform the public, GE launched a series of new advertisements with a common refrain, "Now." Included in the multi-faceted campaign was a focus on Smart Grid, GE's vision for a more efficient and sustainable electrical energy grid.

The campaign featured GE's first Super Bowl ad, called "Scarecrow," that focused on Smart Grid technology. A modern take on the classic song, "If I Only Had a Brain," from the film *The Wizard of Oz*, the ad imagines what can happen when old technologies become smarter.

The digital component of the campaign included a new microsite, **www.PlugIntoTheSmartGrid.com**, that features a breakthrough technology known as augmented reality.

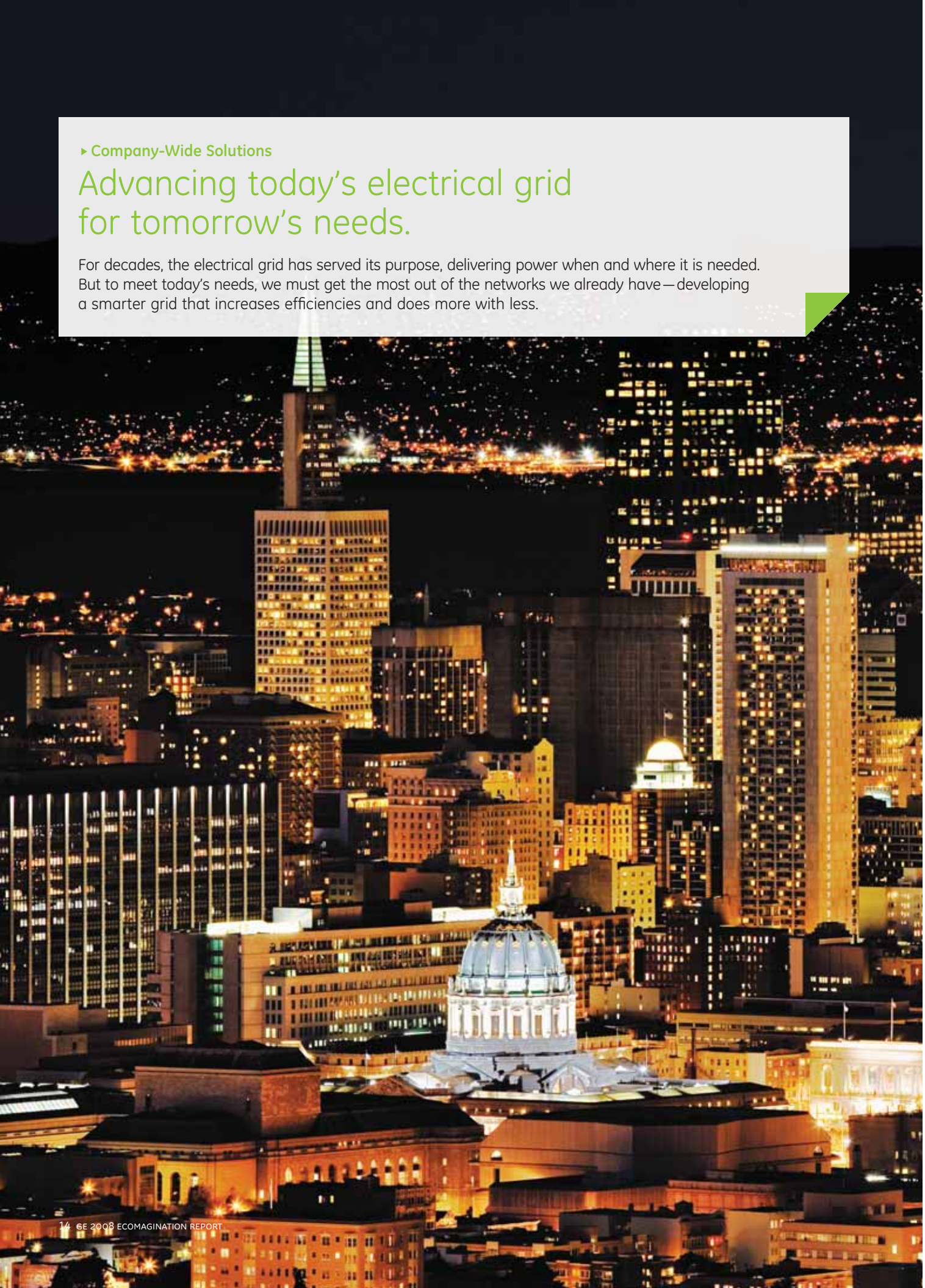
Working toward GHG-reducing legislation.

The United States Climate Action Partnership (USCAP), of which GE is a founding member, is a group of businesses and leading environmental organizations that have come together to call on the federal government to quickly enact strong national legislation to require significant reductions of greenhouse gas emissions. In 2009, the group created a proposal called a "Blueprint for Legislative Action" which calls for reductions between 14% and 20% of 2005 greenhouse gas levels by 2020 and an 80% reduction by 2050 through an economy-wide cap and trade program.

▸ Company-Wide Solutions

Advancing today's electrical grid for tomorrow's needs.

For decades, the electrical grid has served its purpose, delivering power when and where it is needed. But to meet today's needs, we must get the most out of the networks we already have—developing a smarter grid that increases efficiencies and does more with less.



Across GE, we are working on a variety of Smart Grid technologies to deliver real-time information within the grid. This information will increase renewable energy generation and grid support for plug-in electric vehicles, improve operational productivity, and lower associated emissions—all while allowing consumers to manage their energy use and save money without compromising their lifestyle.

GE has one of the broadest portfolios of Smart Grid solutions available today, ranging from energy distribution and appliances to financing and help utilities. As GE embarks on adding Smart Grid-enabling technologies to its ecomagination portfolio, we also continue to work with customers around the world to deploy solutions that bring governments, utilities, and consumers toward a more energy-efficient tomorrow.

Mexico's largest electric utility, Comisión Federal de Electricidad (CFE), has deployed high-efficiency transformer technology from Prolec-GE that is designed to reduce the loss of electricity from distribution transformers, helping to meet electricity demand more efficiently. CFE's investment has delivered more than five GWh of energy savings from 2006 to 2008, equivalent to the annual energy used by more than 3,000 average Mexican households.

GE worked with Oklahoma Gas & Electric (OG&E) on its project Positive Energy® SmartPower. Positive Energy® SmartPower uses a secure wireless network for two-way, real-time communication with more than 6,000 GE "smart" meters, programmable thermostats, and touch-screen information panels inside the homes.

Through its SmartMeter™ program, Pacific Gas and Electric Company (PG&E) of California announced plans to deploy as many as 3.3 million GE smart meters to utility customers in Northern and Central California. These meters can help customers manage their energy use and electricity costs, while helping the utility manage peak loads.

Some of our best scientific minds are dedicated to future advances at our state-of-the-art Smart Grid Lab in Niskayuna, New York. Along with developing smarter appliances, researchers are investigating the electrical stability challenges that a high penetration of wind and solar power generation could bring. They are also exploring better two-way communication within the grid, allowing a utility to manage power more reliably and efficiently while giving consumers better tools for reducing energy costs.

Image captions: 1. GE smart meter. 2. Substation switch. 3. OG&E In-Home Energy Display. 4. GE smart appliances. 5. Clean battery.


1


2

3


4

5

▸ Energy

Growing wind power capacity to meet demand.

Our Energy business maintains a strong focus on wind power, building and deploying technology in this ever-growing field.

1

2

3

2.5xl wind turbine

Europe has historically been a world leader in the development of renewable energy projects—and GE is helping to meet demand for wind energy in the region. Following the 2008 launch of the 2.5xl wind turbine in Europe, GE Energy has received more than one gigawatt worth of commitments for the turbine over the next year and a half. That investment represents enough wind-generated electricity to meet the needs of more than one million European households.

"We're very pleased that our 2.5xl technology is helping Europe expand its wind power capacity," said Victor Abate, Vice President, Renewables for GE Energy. **"Wind energy is expected to be a major contributor in achieving the European Union's target to have 20% of its energy supply come from renewable sources by 2020, and we are committed to supporting that effort."**

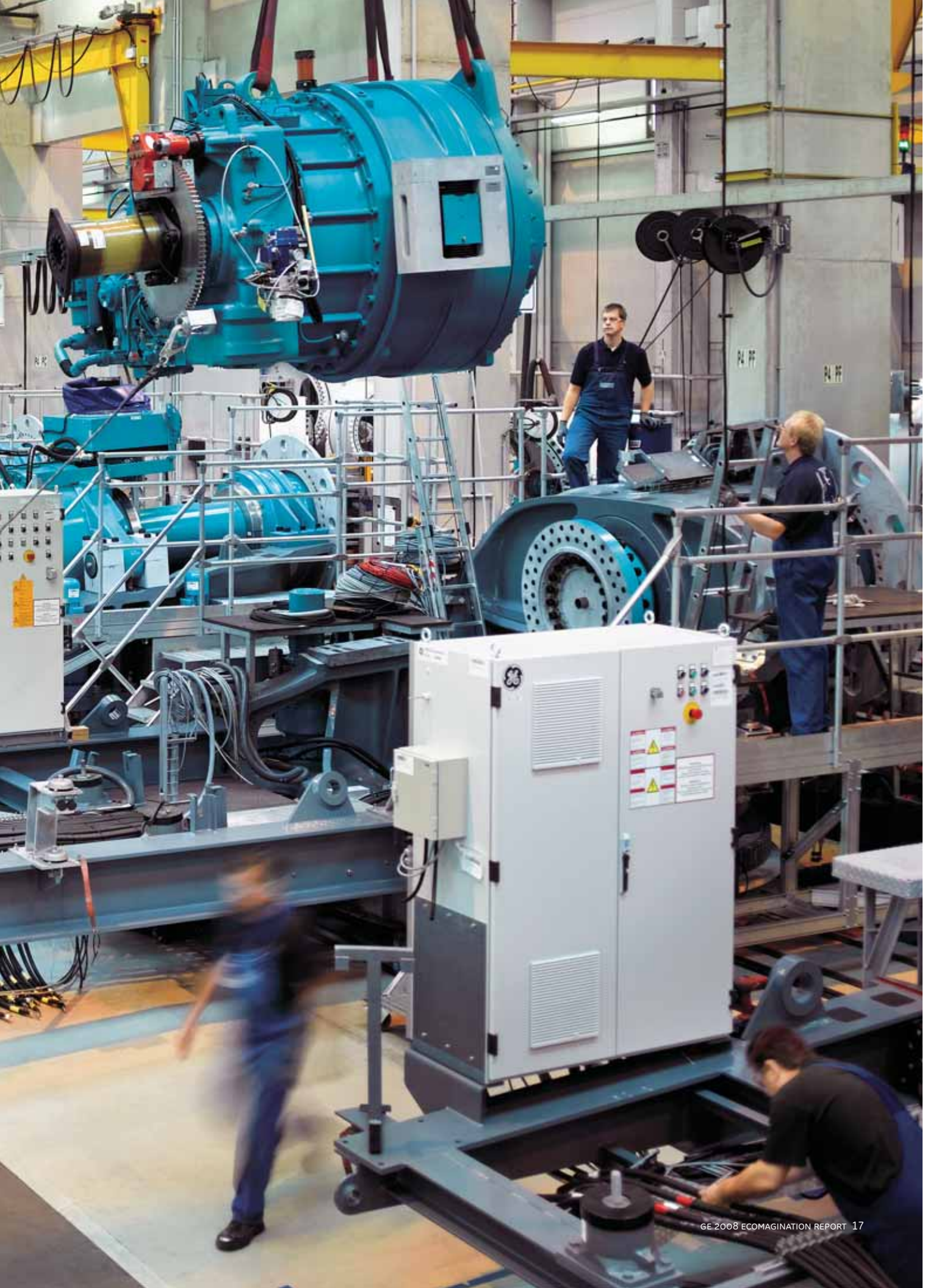
To meet the growing demands of Europe's wind power industry, GE Energy is making advancements to its wind turbine manufacturing facility in Salzbergen, Germany. Along with greater manufacturing capacity, the Salzbergen expansion will increase GE's European training and service resources, creating more than 160 jobs.

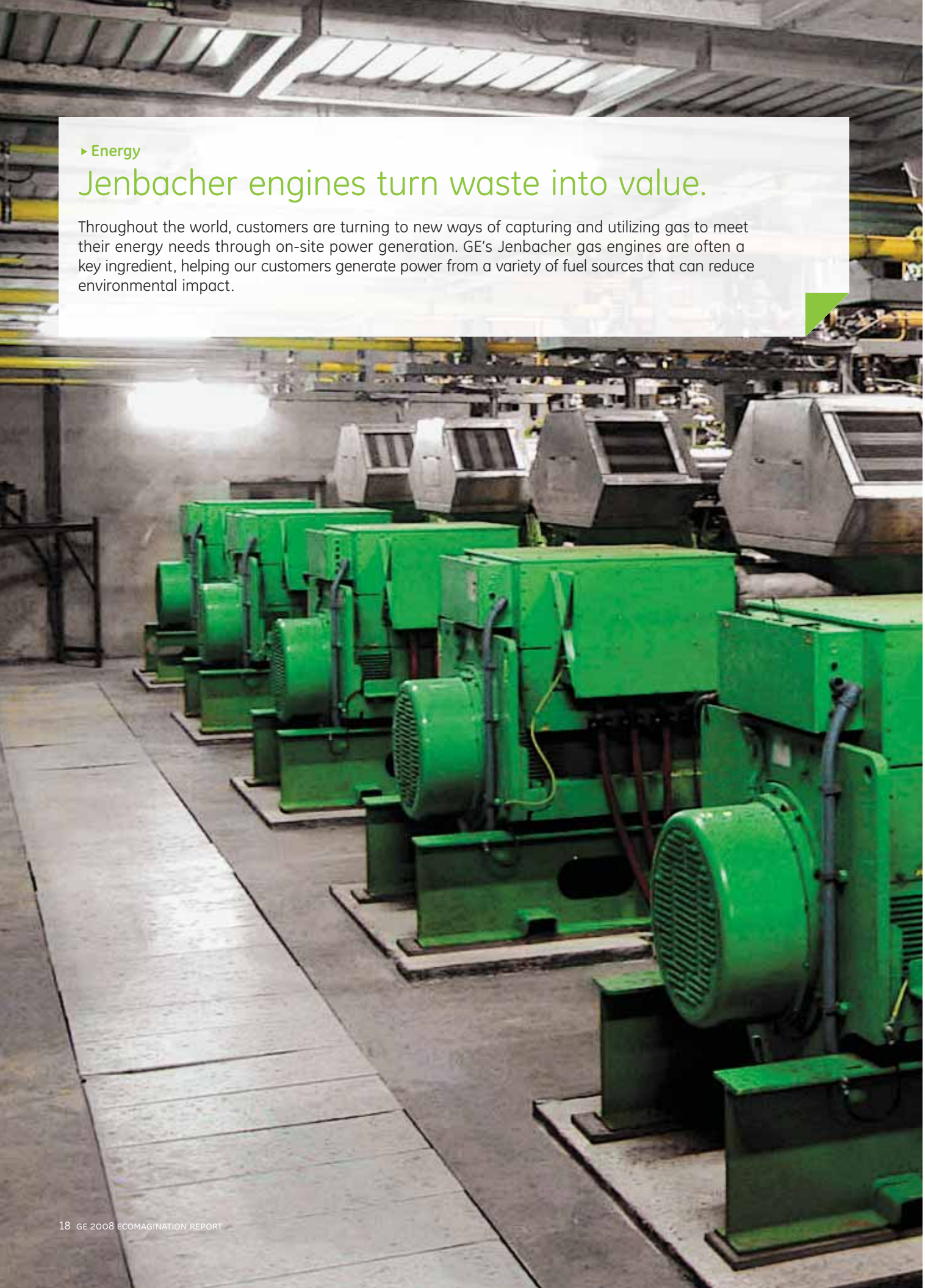
1.5 MW wind turbine

In late 2008, GE Energy shipped the 10,000th 1.5 MW wind turbine to FPL Energy, the largest U.S. generator of wind power, for the Ashtabula Wind Energy Center in North Dakota. As one of the world's most widely used wind turbines in its class, it is an industry workhorse that has been proven in nearly every wind regime, terrain, and climate worldwide.

In 2008, our global fleet of 1.5-megawatt machines had the capacity to produce more than 53 million megawatt-hours of electricity per year, enough to power more than 4.5 million U.S. homes. This is equivalent to avoiding the emissions of over 32 million metric tons of CO_2 per year from traditional U.S. grid sources, or the emissions of over six million cars on U.S. roads.

Image captions: 1. GE 2.5xl wind turbine. 2. GE 2.5xl wind turbine installation. 3. GE 1.5 MW wind turbines for Rokkosha Mura Wind Project, one of Japan's largest wind power installations.

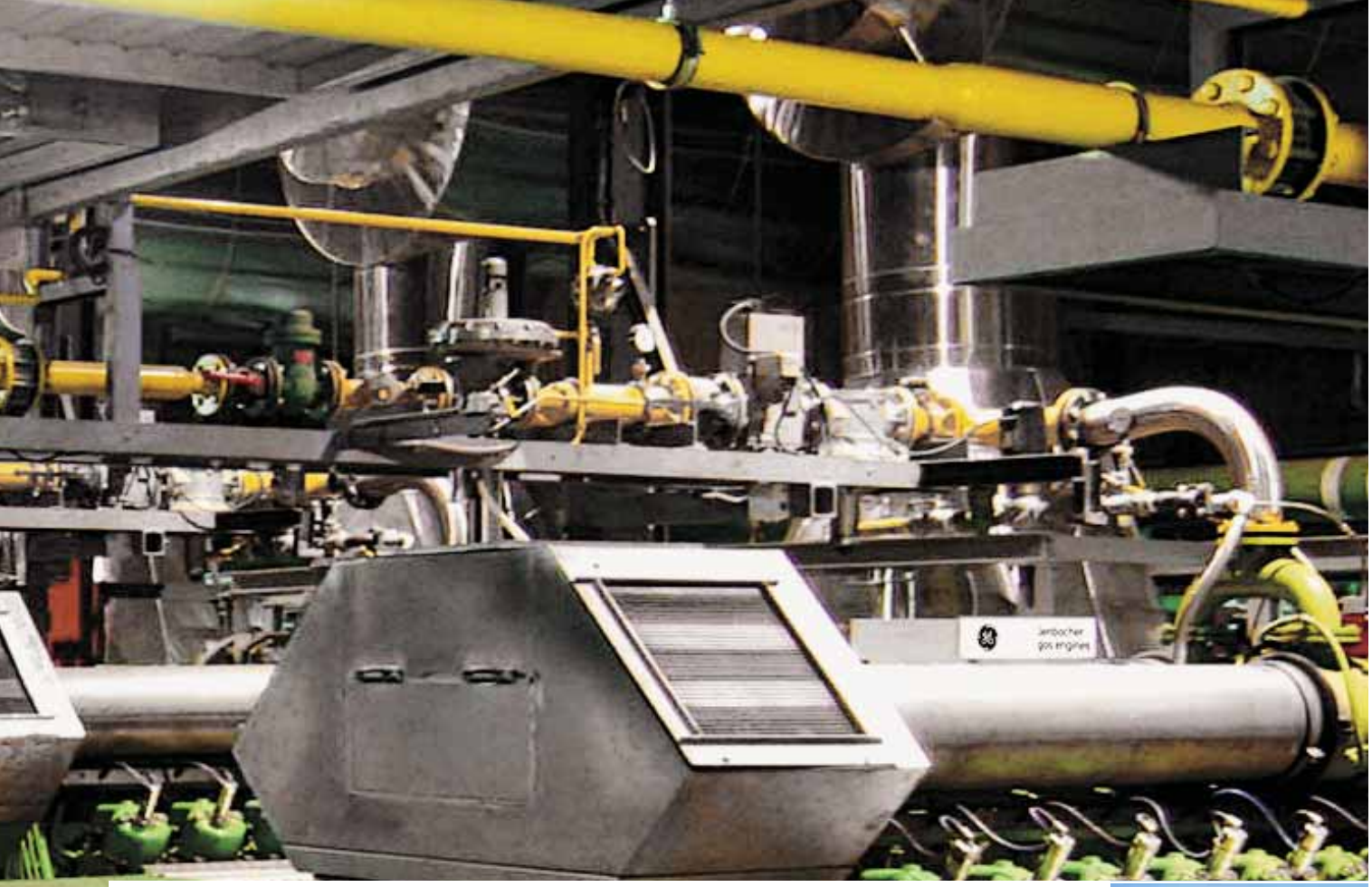




▸ Energy

Jenbacher engines turn waste into value.

Throughout the world, customers are turning to new ways of capturing and utilizing gas to meet their energy needs through on-site power generation. GE's Jenbacher gas engines are often a key ingredient, helping our customers generate power from a variety of fuel sources that can reduce environmental impact.



In **Australia**, the Jenbacher gas engine business has made contributions to several of the country's largest coal mine methane projects, including a power plant commissioned in 2008 operating on Jenbacher coal mine methane gas engines. The methane-rich gas coming from the mine is being used to generate on-site power at Anglo Coal's Moranbah North mine in the state of Queensland, helping to reduce the amount of greenhouse gas that can escape into the atmosphere.

Through the capture and utilization of mine gas, the Moranbah North project will deliver significant environmental benefits, avoiding the emissions of about 1.5 million tons of CO_2 equivalent per year.

Across the Pacific in **Mexico**, Jenbacher engines are at the heart of a newly expanded landfill gas-to-energy project, hailed by President Felipe Calderón as "a model renewable energy project" for Latin America. The 12-MW project converts the Simeprode landfill's gas into electricity, which is used to support the solid waste facility's operations as well as Monterrey's light-rail system during the day and city street lights at night.

In the **Netherlands**, at a sprawling commercial tomato greenhouse outside of Amsterdam, the world's first commercial 24-cylinder gas engine is in operation. The Royal Pride Holland project is made possible by two Jenbacher units, which were installed in a pilot project to demonstrate the engine's commercial viability for the horticultural industry. It highlights the increased emphasis on combined heat and power (CHP) in Europe as the region increases its focus on energy efficiency.

Thousands of miles to the east in **China**, Jenbacher gas engines are at work in a far different way, using biogas created from chicken manure to generate needed power and heat at a large chicken farm north of Beijing. The plant is the first of its type in China, and could pave the way for similar applications in the future.

Providing 14,600 MWh of electricity per year, the project is designed to help reduce suburban electricity shortages. By using the biogas for power generation in place of previously used coal-fired power, the new project is expected to avoid the emissions of about 95,000 tons of CO_2 equivalent per year.

Image captions: 1. GE Energy's coal mine methane power plant in Australia. 2. Mexico's President Felipe Calderón at plant opening. 3. Monterrey Landfill Gas Project. 4. Netherlands' commercial tomato greenhouse Royal Pride boosts production with worldwide first 24-cylinder gas engine. 5. First chicken manure biogas plant powered by Jenbacher gas engines in China.

▸ Energy Financial Services

A GE AES venture reduces greenhouse gases on behalf of Google.

Carbon credits are often an important tool for companies to offset their emissions and help meet environmental and regulatory goals. Thanks to a venture formed in 2007 by GE Energy Financial Services, several projects to generate such credits are under way.


1


2

Greenhouse Gas Services, LLC

A venture between GE Energy Financial Services and global power producer AES Corporation, Greenhouse Gas Services is building a portfolio of projects that reduce, avoid, or destroy gases that directly contribute to global warming. Current portfolio projects include those that create carbon credits by capturing and destroying methane from landfill gas, coal mines, and agricultural waste.

Greenhouse Gas Services joined with Google in 2008 to co-develop a greenhouse gas reduction project at a landfill in Caldwell County, North Carolina. Under the arrangement, Greenhouse Gas Services will capture and destroy methane gas emitted from the landfill to generate an estimated 110,000 tons of carbon credits over a ten-year timeframe. Google will use a percentage of the credits to advance its goal of company-wide carbon neutrality.

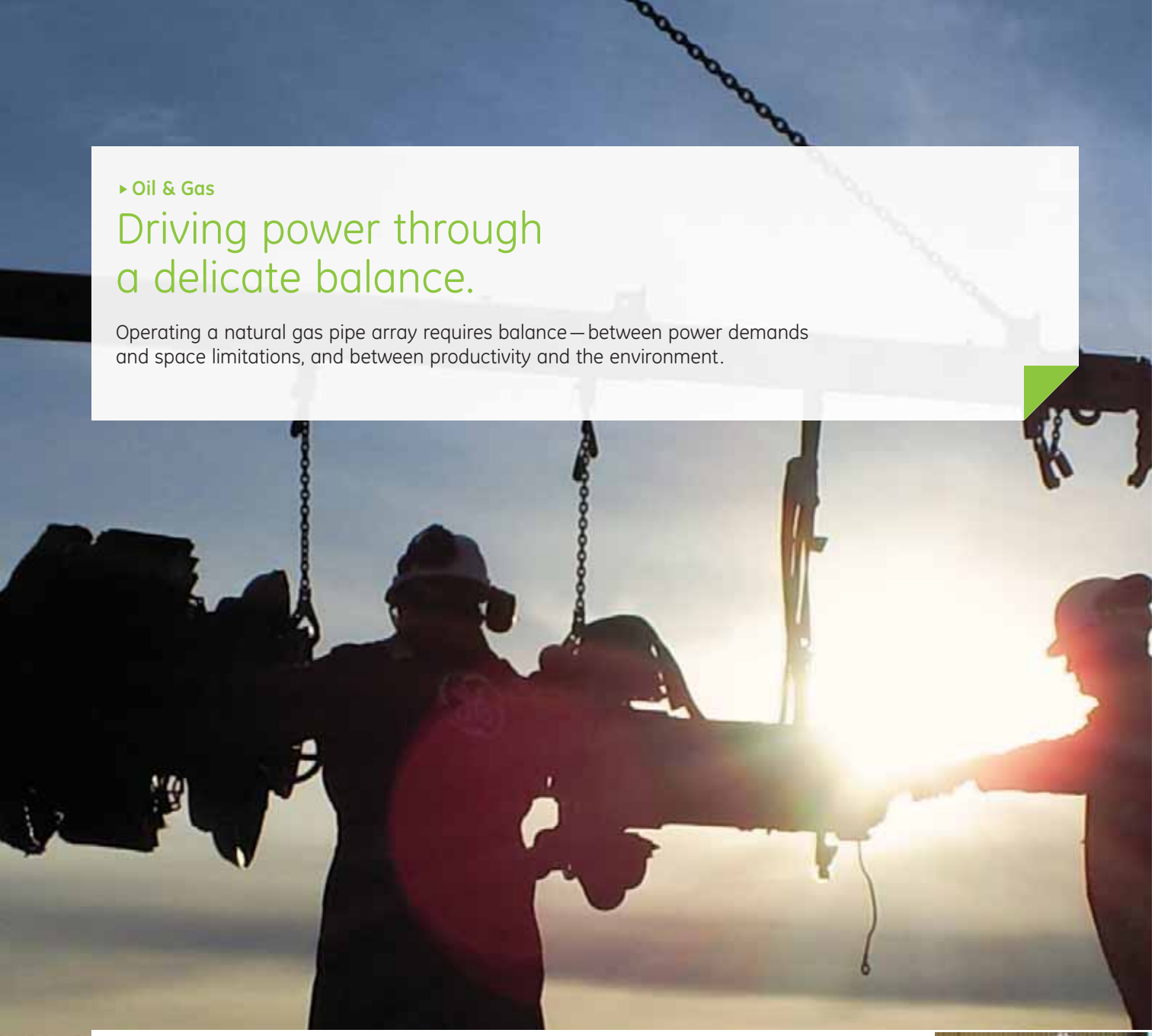
In addition to methane destruction projects from landfill gas and agricultural waste, Greenhouse Gas Services is also exploring opportunities from precision farming and energy efficiency as future sources of emissions reductions.

Image captions: 1. Biogas collection well to expand existing gas recovery system at Virginia landfill site. 2. Methane flare at Virginia landfill site.

▸ Oil & Gas

Driving power through a delicate balance.

Operating a natural gas pipe array requires balance—between power demands and space limitations, and between productivity and the environment.



Integrated Compressor Line

For RWE, a leading electric power and natural gas utility in Europe, GE's Integrated Compressor Line (ICL) plays a key part in achieving this balance.

Two ICL units provide a flexible solution for RWE's combined cycle gas turbine power plant in Lingen, Germany, allowing natural gas to be temporarily buffered. Each unit is operated as a gas booster that enables more than 250 stops and starts per year. Thanks to their compact design, the ICLs can meet these demands within a limited amount of space.

Developed over a 20-year span, the ICL is a fully integrated compression system that incorporates a high-speed electric motor drive and a centrifugal compressor in a single sealed casing. Because it lacks a combustion engine, uses oil-free active magnetic bearings, and operates within a completely sealed case, the unit produces no direct CO_2 emissions and leaks no methane into the atmosphere—balancing productivity and environmental concerns.

Image captions: 1. GE's Integrated Compressor Line detail. 2. GE's Integrated Compressor Line.

▸ Water

Reusing and recycling water in cities and businesses.

Water conservation and reuse have grown in importance across both public and private sectors. Two recent recipients of GE's ecomagination Leadership Award provide examples of this critical technology at work.

ZeeWeed Membrane technology

In arid climates like the American Southwest, the ability to reuse water is vital. The City of Tempe, Arizona, recently improved its reuse capabilities dramatically in collaboration with GE Water & Process Technologies. Expansion of the city's water reclamation program allows Tempe to reuse an additional 2.5 billion gallons of water per year for commercial and industrial applications, as well as aquifer storage.

By upgrading to GE's ecomagination ZeeWeed Membrane Bioreactor (MBR) technology, Tempe's Kyrene Water Reclamation Facility was able to boost its productivity. Upon doubling its water recycling capabilities from 4.5 million to 9 million gallons of water each day—with a peak flow of 11.7 million gallons—the facility became one of the largest MBR plants in North America today.

Reverse Osmosis system

For years, National Semiconductor Ltd. used a GE BOO (Build Own Operate) advanced water treatment system to provide high-quality water for manufacturing and cooling towers at its facility in Greenock, Scotland. But when the company began looking for ways to further reduce water and power consumption throughout the plant, innovative enhancements by GE engineers yielded big savings for the electronics manufacturer.

National Semiconductor has reduced its freshwater usage by 40 million gallons per year—reusing the concentrated brine reject water from GE's reverse osmosis and electrodeionization systems for cooling towers rather than the municipal water supply. This efficient recycling process also boosts overall water recovery to 99% and reduces the plant's effluent discharge. New variable frequency drives to power the pumps have decreased power consumption by 25%, saving more than 500,000 kWh of electricity and lowering carbon emissions by 215 tons per year.

Advanced membrane technology

To help improve Beijing's wastewater treatment capabilities, the Qinghe Waste Water Plant adopted GE's advanced membrane technology to filter more than 80,000 cubic meters of wastewater daily, which was ultimately recycled to maintain landscaping during the Olympic Games. GE's membrane technology is a highly reliable method for recycling water, and with its advantages of non-chemical treatment and superior water quality, it has been useful in solving Beijing's water shortage issues, producing recycled water.

Image captions: 1. Tempe's Kyrene Water Reclamation Facility with ZeeWeed MBR technology. 2. Close-up of ZeeWeed Membrane fibers. 3. Tempe's Kyrene Water Reclamation Facility. 4. Reverse osmosis membrane. 5. National Semiconductor Ltd. facility in Greenock, Scotland.

▸ Transportation

A new advance makes train trips more efficient.

Centuries after its introduction, rail transportation remains a critical means of delivering freight. An innovative ecomagination product illustrates how GE continues to improve fuel efficiency and control costs.

Trip Optimizer™ System

GE's Trip Optimizer™ System automatically controls a locomotive's throttle while minimizing fuel use.

Canadian Pacific owns a fleet of Olympic Games-branded Evolution™ Series Locomotives that are traveling across Canada prior to the 2010 Winter Games in Vancouver, both transporting games-related equipment and moving the Olympic spirit. In 2008, Canadian Pacific tested the Trip Optimizer on 18 of these GE Evolution Series locomotives. They reported that fuel savings results were impressive in the pilot territories.

Trip Optimizer creates an optimal trip profile that can minimize braking by automatically learning a train's characteristics. The system calculates the most efficient way of running by considering such factors as train length, weight, grade, track conditions, weather and locomotive performance. During the trip, a sophisticated network of onboard computers and GPS systems updates the profile continuously, adjusting for changes so the train can reduce fuel.

Even in a single year of use, the effect of the system is significant. For each locomotive on which it is used, Trip Optimizer can reduce fuel consumption by 32,000 gallons, cut CO_2 emissions by over 330 metric tons, cut NOx emissions by 3.7 tons, and decrease particulate matter emissions by 140 pounds per year.

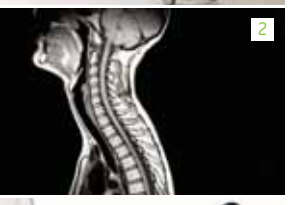
Image captions: 1. A Canadian Pacific Evolution running with Trip Optimizer. 2. GE Trip Optimizer system. 3. GE Trip Optimizer on Canadian Pacific locomotive. 4. Canadian Pacific Olympic Games-branded Evolution Series Locomotive.

▸ Healthcare

Healing energy usage at hospitals.

2008 marked the first year that GE Healthcare products have joined the ecomagination portfolio. These products not only provide outstanding clinical performance, but also significant savings. They are part of a broader GE effort to help our hospital customers achieve their efficiency and environmental goals.


1


2


3


4

Signa HDe 1.5T MR

With healthcare costs on the rise, many organizations are looking for ways to save on energy expenses. For Dr. Verena Scholz, who runs a private imaging center in Braunschweig, Germany, such savings have arrived—thanks to the ecomagination portfolio and the Signa HDe 1.5T MR system.

By employing efficient gradient and electronics design as well as innovative water-cooling technology, the Signa HDe is among the most energy-efficient 1.5T MR systems available commercially, using about 41% less energy than previous GE generation systems. The amount of electricity saved is estimated to be about 70,000 kWh per year, equivalent to the annual electricity use of about 17 European Union households.

While GE has estimated potential savings for the Signa HDe 1.5T MRI versus prior generation GE technology at €500 each month, savings may be greater depending on specific circumstances.

Dr. Scholz's specific application realized an improvement closer to €1,000 each month based upon current local electricity prices and the equipment that was being replaced. Most importantly, these improvements have been made without sacrificing image quality.

The Signa HDe was inspired by customers in Japan who desired lower running costs, increased ease of use, and smaller siting space requirements. However, the system has also met with a broad appeal in Europe, the U.S., and China, where two HDe systems scanned nearly 700 athletes in the Beijing Olympic Village Hospital during the 2008 Summer Games. An outpatient imaging center in the U.S. recently placed an order for the 500th HDe system.

Image captions: 1. Signa HDe 1.5T MR machine. 2. A spine clinical image shows the outstanding image quality of the Signa HDe 1.5T, including broad field-of-view images. 3. Patient being prepared for a scan. 4. The easy-to-use Signa operator interface.

▸ Company-Wide Solutions

Hospitals inspired by ecomagination.

Given their unique mission and 24/7 operation, hospitals are very heavy consumers of energy and water. Around the world, hospital executives face increasing financial, regulatory, and community pressures to decrease the environmental impact of their facilities.

GE is responding to this need with a program that brings together the breadth and depth of GE's ecomagination capabilities and provides our customers with solutions that include on-site renewable power generation, high-efficiency lighting and electric distribution equipment, building management systems, and water saving technologies. In addition to infrastructure products, GE offers a growing family of clinically state-of-the-art medical equipment—such as digital X-ray machines—that impact the environment less.

GE's hospital solutions are designed to lower operating costs and help create a better experience for patients and staff. Hospitals in the U.S., Europe, and Asia are already deploying GE ecomagination technology to capture these benefits.

Image captions: 1. Solar panel installation.
2. GE Jenbacher engines.

▸ Aviation

Fuel efficiency is in the air.

Our Aviation business has led the industry in innovation for years, and 2008 was no exception. From boosting our customers' flight capabilities to developing a fuel-saving landing approach, GE has enabled a number of success stories to take flight.

Flight Management Systems Optimized Descent

An airline's choice of engines is important to its ultimate performance—but its flight management system (FMS) can also make a dramatic difference. For Boeing 737 operators in Europe, an optimized descent profile using GE's FMS has helped airlines achieve lower fuel costs, reduced emissions, and less noise.

The FMS enables pilots to determine, while maintaining a highly efficient cruise altitude, the exact point where the throttle can be reduced to flight idle while allowing the aircraft to arrive precisely at the required runway approach point without the need for throttle increases. This optimization procedure, referred to as a continuous descent approach, lowers fuel burn.

The groundbreaking effort was initiated at SAS Scandinavian Airlines, where the approach saved hundreds of pounds of fuel and reduced emissions throughout 2008. SAS estimates that from a potential 36,000 optimized descents yearly into Stockholm alone, annual benefits could reach $6 million in fuel savings with an additional $4 million in cost avoidance due to increased efficiency.

GE90-115B Jet Engine

In taking delivery of its first Boeing 777-200LR—a passenger plane powered by the GE90-115B jet engine—Delta Air Lines established the flagship aircraft for its new global transport offering. The engine also enables Delta to fly more efficiently and quietly than other long-range widebodies in its fleet. The GE90-115B meets next-generation emissions standards, reduces fuel consumption, and meets some of the world's most stringent airport noise requirements.

Its lower overall emissions are due in part to an improved combustor as compared to previous-generation technology. The combustor meets all 2008 international emissions standards with margin, including no more than 40% of allowable hydrocarbons. The engine is also popular with customers worldwide—nearly 1,000 have been sold, logging more than two million flight hours since entering service in 2004.

Image captions: 1. SAS Boeing 737 powered by CFM56 engines with GE FMS. 2. Delivery of Delta's first GE90-powered Boeing 777 transport. 3. Powerful, efficient GE90-115B ecomagination engine on wing. 4. GE90-115B jet engine during assembly at Durham, North Carolina. 5. GE90-115B during ground testing near Peebles, Ohio.

▸ Consumer & Industrial

Advanced lighting technology with a familiar profile.

Light bulbs remain an important part of GE's heritage, dating back to our founder Thomas Edison. But today, a century after the invention of the first commercially viable light bulb, we continue to advance the technology.

1

2

GE Energy Smart® CFL

New GE Energy Smart® compact fluorescent light (CFL) bulbs use miniaturized electronics developed by GE Consumer & Industrial engineers and scientists. Covered by more than a dozen U.S. patent applications, the products fit these electronic components within the neck of the bulb, resulting in a profile that is practically identical to standard incandescent light bulbs.

The new 9-, 15-, and 20-watt incandescent-shaped covered GE Energy Smart® CFL delivers nearly the same light output, respectively, as 40-, 60-, and 75-watt traditional bulbs. It's a unique design for consumers who want the energy savings and long-life performance of a GE Energy Smart® Spiral® CFL, but with the appearance, size, and fit of a traditional incandescent bulb. The new bulbs' 8,000-hour-rated-life is guaranteed for five years, based on four hours of daily use.

Image captions: 1. The new GE Energy Smart® incandescent-shaped CFL bulb. 2. GE Energy Smart® Spiral® CFL bulbs.

▸ NBC Universal

Using the power of communication to advance environmental practices.

NBC Universal and its portfolio of media and entertainment brands is committed to educating and activating our audiences on taking care of the environment and pursuing more energy-efficient practices within our own facilities and operations.

NBC Universal is capitalizing on the reach of more than 40 on-air and digital brands to reach key audiences. Our "Green is Universal" initiative provided a combined total of more than 200 hours of green-themed content during last year's November "Green Week" and April "Earth Week" programming events, informing audiences about the state of the environment and providing tips for living a more environmentally conscious lifestyle.

Across our worldwide operations and employee base, NBC Universal is changing the way we do business to reduce our own impact on the environment.

Our sustainability efforts spanned both television and film physical production. Several television productions, including *Saturday Night Live* and *Nightly News*, incorporated more environmentally sensitive operations, such as more efficient lighting and energy systems, set construction, recycling, and repurposing efforts.

NBC Universal's Focus Features became one of the first studios to implement comprehensive sustainable practices on a major motion picture production. The 2009 film *Away We Go* redirected nearly 50% of its waste away from landfills toward recycling and composting.

Image captions: 1. Green is Universal battery recycle station in a NBC Universal building. 2. Biodiesel being used on the set of Away We Go. *Background image: John Krasinski and Maya Rudolph on the set of* Away We Go. *Photo by François Duhamel.*

▸ Partnerships

Investing for a better tomorrow.

Our GE Energy Financial Services Venture Capital group invests in early and later growth stage companies that have unique proprietary technologies in clean technology. The ability to leverage GE's combined financial, technical, and commercial expertise to assist our portfolio makes GE a compelling venture capital partner.

A123Systems

As GE looks to accelerate the expansion of U.S. lithium ion battery manufacturing and smart grid capabilities, the Company unveiled a new investment in A123Systems. The invested capital will help create new jobs by expanding A123's current facilities; build new factories in Michigan; and support A123's efforts to develop applications for the smart grid, such as utility-scale energy storage.

As emissions standards and fuel availability become more serious issues facing the automotive industry, manufacturers have turned to new advancements in the electrification of vehicles. Among the companies using A123 batteries, battery systems, and technology are customers spanning across the transportation, grid energy storage, and portable power industries.

GE Energy Financial Services and GE Capital's Equity unit provided $15 million in funding as part of GE's seventh investment in A123. GE is now the company's largest cash investor, with a cumulative investment of $70 million and an ownership stake of more than 10%.

Beyond providing capital, GE Global Research provided system design expertise and supported A123's stationary power product development for electric grid applications, and helped to design battery system components for A123's automotive programs.

Southwest Windpower

Harnessing the power of the wind as a form of renewable energy is not new, but putting highly efficient small wind turbines in backyards, on light poles, or in remote islands to reduce diesel fuel consumption is an emerging market. GE has invested in Southwest Windpower, the world's largest manufacturer of small wind turbines.

Much of the company's growth will center on the market expansion and continued enhancement of Skystream, a 2.4-kW wind generator that produces electricity that can be cheaper than retail electricity. Skystream's unique plug-and-play design allows the user to connect directly to the electric grid. For residential applications, Skystream can provide anywhere from 40% to 90% of the home's electricity, depending on consumption and wind availability. Southwest Windpower is also expanding into commercial applications, such as within parking lots and highway light poles, and other municipal structures.

Image captions: 1. The auto industry benefits from electrification advancements. 2. A123's battery technology. 3. Skystream wind turbine at U.S. Capitol. 4. Skystream at a residence in Baldwinsville, New York.

GE at a glance

Technology Infrastructure

GE is one of the leading providers of essential technologies to developed and emerging countries in healthcare, aviation, transportation, and enterprise solutions.

Energy Infrastructure

GE provides a broad range of products and services throughout the world in energy, oil and gas, and water and process technologies.

GE Capital

GE offers an array of financial services and products worldwide aimed at enabling businesses to grow and at providing credit and banking services to consumers, retailers, and auto dealers.

NBC Universal

NBC Universal is one of the world's leading media and entertainment companies in the development, production, and marketing of entertainment, news, and information for a global audience.

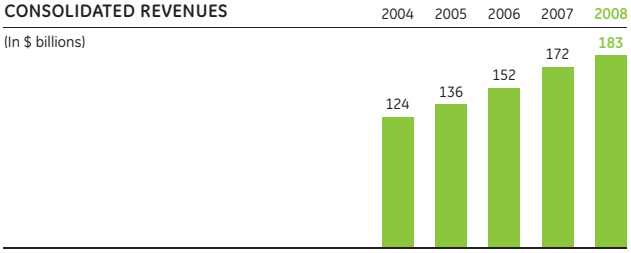
GE financial highlights

2008 Company Highlights

- Earnings were $18.1 billion, the third highest in Company history
- Revenues grew 6% to a Company record of $183 billion
- Global revenues grew 13%
- Infrastructure and Media segments grew operating profit 10%
- Total equipment and services backlog grew to $172 billion, an increase of 9%
- Services grew 10% with a backlog of $121 billion
- Industrial organic revenues grew 8%
- Invested $15 billion in the intellectual foundation of the Company, including products, training, marketing, and programming
- Filed 2,537 patent applications in 2008, an increase of 8%
- Named 4th most valuable brand in the world by *BusinessWeek*

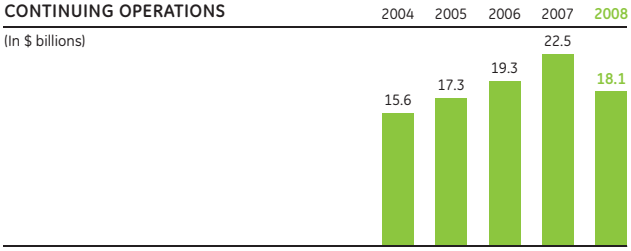
CONSOLIDATED REVENUES

(In $ billions)



EARNINGS FROM CONTINUING OPERATIONS

(In $ billions)



Note: Financial results from continuing operations unless otherwise noted.

Design by VSA Partners, Inc. Printed by UniqueActive LLC a Forest Stewardship Council (FSC) certified printer.

This report is printed on Mohawk Options 100% post-consumer content. Mohawk Fine Papers purchases enough Green-e certified renewable energy certificates (RECs) to match 100% of the electricity used in their operations. The paper is certified by Green Seal and by SmartWood for FSC standards that promote environmentally appropriate, socially beneficial and economically viable management of the world's forests.

To learn more about GE's ecomagination strategy and get updates on progress as it relates to products, services, and our overall commitment, please visit **www.ecomagination.com.**

imagination at work