

**STATEMENT OF JOHN G. RICE
VICE CHAIRMAN, GE
BEFORE THE HOUSE SELECT COMMITTEE ON
ENERGY INDEPENDENCE AND GLOBAL WARMING
JULY 28, 2008**

Mr. Chairman, Members of the Committee. Good morning and thank you for the opportunity to appear before you today. I am John Rice, Vice Chairman of the General Electric Company, and President and CEO of GE Infrastructure. GE's Infrastructure organization is GE's largest business, and includes our aviation and energy businesses, our financial service units for aviation and energy, as well as our oil and gas, rail and water businesses.

I am pleased to join you to explain how we have taken the term "sustainable" and applied it to these broad and diverse operations and across the whole of GE.

1. SUSTAINABLE BUSINESS IS GOOD BUSINESS

After 130 years, we have a unique perspective on how sustainable business can be good for the bottom line. We took some risks – but we have been rewarded. I'm pleased to share our experience with you today.

GE launched its sustainable business strategy – what we call "ecomagination" – in 2005. It is our commitment to invest in technologies that help our customers and our selves address growing climate and resource scarcity challenges. Our commitment has been grounded in the belief that what is good for the environment is good for business, and what's good for business can be good for the environment. We like to say green is green: that the power of technology is going to enable environmental investing, environmental development and energy savings to drive profits for our shareholders.

We made four concrete, measurable commitments three years ago:

- 1) to grow cleaner revenues to \$20 billion by 2010
- 2) to double cleaner R&D to \$1.5 billion by 2010
- 3) to reduce our own GHG footprint and energy use, and
- 4) to keep the public informed.

We have recently added a fifth commitment:

- 5) to reduce our water use by 20% by 2012.

The results are encouraging for our company, our employees and our shareowners. Our ecomagination revenues will be \$18 billion this year and we will reach our \$20 billion goal a year ahead of plan, and therefore are raising our goal to \$25 billion by 2010. Our order backlog is more than \$70 billion. Ecomagination revenue has been growing at 20 percent a year, faster than the rest of the company as customers opt for products that provide them better environmental performance and better economics.

With record-high prices for oil, natural gas, coal, and almost every raw material, green is truly green.

It is also driving innovation. We will spend \$1.4 billion on “cleantech” this year, nearing our goal of \$1.5 billion in annual clean R&D investment by 2010. We continue to invest in products and new technologies to make more efficient and less emitting gas turbines, aircraft engines, locomotives and compression equipment. These investments cannot be made instantaneously. We continue to grow our R&D spending year over year, contributing an additional \$2 billion in the five years stated to reach out 2010 goal. We are funding improvements in wind turbines and solar that will make these renewable technologies more efficient and cost effective. We have already seen the huge impact on the cost of wind power – now at 8 cents/kwh, competitive with mainstream generation.

We are working on new technologies such as Integrated Coal Gasification Combined Cycle, which will allow this country to use its indigenous, secure coal resources. Other technology programs include more efficient grid transmission and the ability for utilities to utilize existing resources more efficiently through Smart Meters and demand side management – the latter which would allow ratepayers to “talk” to their utility over power lines and use energy more judiciously.

We have invested in numerous technologies that allow industrial and municipal customers to use water more efficiently. In many industrial applications, our technologies enable 90% recovery of wastewater.

And finally we are exploring the potential of next generation biofuels: both the ability to utilize these fuels in all of our combustion products – like aircraft engines, gas engines, gas turbines and locomotives – as well as in supply equipment to make these processes more efficient and sustainable.

We also committed to lowering our own greenhouse gases by 2012 by an absolute 1%, compared to our 2004 baseline. We have more than 5,000 projects across the company, helping reduce our CO₂ footprint by 8% thus far, or 700,000 tons. We committed to lowering our energy intensity by 30% by 2012; we currently are down 34%.

What is equally important is that these actions have resulted in savings to the bottom line in reduced energy and fuel consumption of \$100 million last year and an estimated \$120 million this year. Most of these projects have less than a two-year payback and many are under 6 months. Investment in energy efficiency is just smart business – and a hedge to future high-energy prices and the very real likelihood of a price on CO₂. This is good news for GE investors as it reduces risk. It is also an energizer within our company, offering employees opportunities to highlight savings within their own businesses.

We remain transparent in our actions and are publicly accountable. We issue an annual ecomagination report, are founding members of the US Climate Action Partnership, engage with customers, thought leaders, governments and NGOs all around the world and, of course, are here today as part of that commitment.

Finally, regarding our fifth, and newest, goal: a 20% water reduction. This commitment is expected to free up enough fresh water to fill over 3,000 Olympic-sized swimming pools every year. Mr. Chairman, while CO₂ is a major challenge in today's environment, we believe water scarcity is the next such challenge – and is already upon us. And we think that GE technology can help.

In short, we see financial benefits by having more differentiated, competitive products that are winning in the market place, lower operating costs due to better efficiency, and significant public recognition for our efforts. This is of exceeding value in our relationships with customers – my second point today.

2. HELPING CUSTOMERS COMPETE AND WIN IN THE NEW GREEN ECONOMY

Sustainability often casts a myopic view toward improving the environment and combating climate change. We find that unless these solutions are coupled with a realizable economic benefit, rapid implementation cannot be realized. With respect to the competitive advantage that sustainability offers, some numbers make the case most clearly.

We are the number one wind turbine manufacturer in the U.S. and number two worldwide, with over 8,700 wind turbines installed. Wind will be a \$6 billion this year, up from \$300 million when we bought it just 6 years ago. The business has grown because we invested in technology – wind capture, reliability, and maintenance – that improved both performance and economics.

Our evolution locomotive, 5% more efficient than the competition, was and continues to be the most successful uptake of a technology in the rail industry, where we enjoy a strong number one position.

Our GeNX, GE90 and CFM aircraft engines continue to hold number one positions on all the aircraft they power and we were just recently awarded over \$4 billion in orders at the Farnborough International Airshow. Our biomass engines, called Jenbacher, continue to grow their installed base around the world with over 8000 engines installed and a third in renewable applications such as landfill, biomass or coal mine methane applications.

These numbers are clearly good for GE. But they are only so because they help our customers compete both technically and commercially to win in an increasingly carbon-constrained world. Whether an airline, a utility or a railway, these customers need these technologies to succeed in today's changing regulatory and policy landscape.

We plan to continue making money doing this, and helping our customers to make money. We are capitalists at GE.

And if industry cannot make money for shareowners, then that is not a "sustainable business" – or a logical way to produce real policy progress. Big solutions require big bets on big technology. Anything else will not work.

3. FUTURE U.S. CLIMATE AND ENERGY POLICY

Now: to our views on climate and energy policy.

We need a national climate change and energy policy to provide certainty so the necessary investments can be made in the most cost effective way possible.

Our goal must be availability, affordability, sustainability, and security. It requires convergence of policy and technology.

Our recommendations on climate and energy policy are grounded in the following principles:

- It is critical for our energy and national security that the U.S. avoid overdependence on any single source or region for energy. Energy security can best be achieved through government policies that promote diversification—of geographic sources, fuel types, and technologies—so that the potential impact from disruption of any one source is minimized.
- Government should expand funding for advanced research and promote broader private sector investment in order to realize breakthrough technologies. Public-private investment can also reduce costs for existing technologies like solar, geothermal, wind, and coal gasification. Adequate protection of intellectual property rights is essential for promoting continued private investment in cleaner energy research and development.

- Energy-saving technologies and conservation can bolster energy security, reduce emissions quickly and at low cost. Incentives are necessary to encourage their adoption and must be directed both to technologies to reduce consumption and to encourage upgrades to the installed base.
- Governments must establish policies that establish a price on greenhouse gas emissions in the very near future. This price must be predictable, long-term and at a level that achieves required emission cuts. The backbone of this program must be a mandatory cap and trade program that covers as broad a spectrum of emission sources as is politically achievable and administratively practicable.
- Governments must create incentives for accelerated deployment of low-carbon power generation and renewable technologies. For example, we need a long-term production tax credit for wind.
- Nuclear energy is a near-zero, low cost energy source. Early, widespread deployment of nuclear should be promoted through financial, regulatory fuel storage and liability protection initiatives.
- Coal is the most available energy source in the U.S. supplies much of our energy and should remain part of our framework. Coal gasification and carbon capture and sequestration require legal structures, emission standards comparable to natural gas, and incentives for technology demonstration and deployment.
- Natural gas is a low-cost, plentiful and cleaner-burning fuel for power generation and heating. Natural gas is the cleanest, non-renewable fuel choice in the short-term and will be a primary fuel of choice due to current structural and regulatory constraints on coal and nuclear. Government policies must encourage increased efficiency and reliable and consistent siting of natural gas plants and facilities.

Finally, in considering the important pieces of a viable near-term energy policy, I would respectfully call your attention to the renewable energy tax credits that expire at the end of this year, and ask your urgent help in renewing them soon.

Long-term, stable, predictable incentives encourage innovation and give technology manufacturers and suppliers the confidence to invest in expanding capacity. It also drives improvements in efficiency and cost. For example, innovations in wind turbine design since 1985 have lowered the cost of wind-generated energy by over 80%. Size and efficiencies have also improved. In 1985 the average wind turbine was 100 kilowatts with a 17-meter rotor blade. Today our standard turbine is 1,500 kilowatts with an 82-meter rotor and each provides energy for roughly 500 homes.

Unpredictable policies, conversely, stunt investment and send an unwanted signal that the US government is an unreliable partner in the difficult and expensive quest of deploying cleaner technologies.

A clear illustration of the importance of stable, long-term, predictable policy is the historical “boom-bust” pattern of the US wind segment resulting from the “on-again, off-again” nature of the production tax credit. When the production tax credit expired at the end of 1999, 2001, and 2003, wind power installations declined by 73% to 93%. By contrast, the repeated extensions in 2005 and 2006 have stabilized the policy environment, establishing the United States as the world leader in the annual wind power installations and stimulating investments and jobs.

With only months remaining for the current credits, GE Energy Financial Services estimates that over 6 gigawatts, or more than \$12 billion of project investment, are at risk. They have also assessed the overall economic impact of the 5.2 gigawatts of wind installed in 2007, and found that the PTC more than paid for itself through project and other tax revenues.

4. CLEAN R&D

There needs to be a convergence of policy and technology that will allow us to reach a goal of greater energy availability and affordability, growth in sustainability and strengthening of energy security.

In this world we can never be certain which technology, which public policy is going to pass. But GE is big enough to spread a number of different, big bets at the same time.

Our R&D pipeline is full with new product and white space ideas and we have grown our eco product portfolio three times since we started. We now have more than 60 ecomagination products demonstrating both environmental and commercial benefits for our customers.

In addition to the technologies discussed above, GE has invested in technologies that help end users – such as small and medium enterprises and individual consumers – lower their carbon footprints, energy bills and water consumption.

These technologies include the world's most efficient lighting products, such as linear fluorescents and compact fluorescent bulbs, Energy Star appliances, and energy management and controls.

Two interesting new offerings include the Homebuilder Program inspired by ecomagination which guarantees 20% less energy and water use for the certified home. Even in this distressed homebuilders' market, this program is doing well, with close to 30,000 homes under contract.

A similar product for hospitals has been introduced which not only improves the workflow efficiency in the hospital but its energy and water footprint. It is an exciting new product that will be built at the intersection of energy and healthcare – clearly, two of the major concerns facing this country.

5. ENSURING FREE AND FAIR TRADE FOR TECHNOLOGY

From a global perspective, we must remain aware of the impact of trade barriers, including unreasonable tariffs on clean technology, and other “debates” that impede the flow of technology, and ultimately our ability to achieve energy security.

International trade is an integral part of the U.S. economy, accounting for more than one-quarter of the U.S. gross domestic product and supporting more than 12 million U.S. jobs.

At GE we are forthright free traders – because we see thousands of jobs in Lynn, Massachusetts, Greenville, South Carolina, Erie, Pennsylvania and Cincinnati, Ohio that exist due to our ability to compete globally. We don’t see how we can have smart energy policy without smart trade policy.

CONCLUSION

Mr. Chairman, in closing, let me make an appeal for this country to pursue a full portfolio of choices from which to choose – and it must include renewables, nuclear, natural gas and coal. And we need forcing functions to advance technologies to produce energy from all these fuels.

The U.S. needs to draw equally from business, government, and non-governmental bodies to create climate and energy policy that is integrated, coherent and clear. That commits to market mechanisms. That promotes a diverse energy mix of proven technologies and encourages future technologies through tax credits and other economic incentives.

At GE, we invest in innovation because we find that applying technology against big problems is good business. But in the end, we need to work together to make true, lasting progress for business, the country and the world.

Thank you.