Working to Solve the World's Energy and Climate Challenges

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Energy and Climate Change Core Principles

Providing humanity with a sustainable energy supply while addressing climate change is one of the most urgent environmental issues the world faces. Dow is leveraging the strength of the Human Element in our laboratories and facilities around the world to achieve technological breakthroughs that will help address climate change, energy efficiency, conservation and security of supply.

Dow's vision is reflected in our 2015 Sustainability Goals — a public commitment to hold ourselves accountable in the pursuit of solutions to pressing global challenges including climate change and energy. We are making significant financial investments in R&D to achieve breakthrough solutions that will contribute to the slowing, stopping and reversal of the rate at which greenhouse gases are being emitted.

Dow operates at the nexus between energy and all the manufacturing that occurs in the world today. More than 96% of all manufactured products have some level of chemistry in them. As the premier chemical producer and one of the largest industrial energy users, no one has more at stake in the solution — or more of an ability to have an impact on — the overlapping issues of energy supply and climate change than we do. Dow is uniquely positioned to continue to innovate concepts that lead to energy alternatives, less carbon-intensive raw material sources, and other products and solutions not yet imagined.

Dow is one of the biggest producers in the world of products that reduce energy use. We are recognized as a leader in conservation and energy efficiency, and as stewards of the science of chemistry and innovation, we bring real solutions to the table.

Dow's efforts in the development of alternative energy sources, such as solar power, are resulting in groundbreaking applications that will have global implications. Dow envisions a future of reliable, affordable and sustainable energy that enables economic growth and stability.

Dow will implement its solutions in the context of the wedge stabilization model developed by Princeton University professors Robert Socolow and Stephen Pacala. This model provides a framework for utilizing existing technologies and practices and developing new technologies that will lead to a world in carbon equilibrium.

We are committed to put these important challenges at a center stage in our company and we will continue to strongly contribute to the debate, to the policy development process, and to the solutions on these issues.

Global Climate Change: Dow's Beliefs

Dow accepts the U.N. Intergovernmental Panel on Climate Change's (IPCC) conclusion that it is very likely that human activities are contributing to global warming. If left unchecked, the increase in GHGs poses a significant risk. We believe the threat warrants bold action with clear, long-term performance

About The Dow Chemical Company

Dow is a diversified chemical company that harnesses the power of science and technology to improve living daily. The Company offers a broad range of innovative products and services to customers in more than 175 countries, helping them to provide everything from fresh water, food and pharmaceuticals to paints, packaging and care products. Built on a commitment to its principles of sustainability, Dow has annual sales of $49 billion and employs 43,000 people worldwide. References to "Dow" or the "Company" mean The Dow Chemical Company and its consolidated subsidiaries unless otherwise expressly noted. To learn more visit www.dow.com.

objectives. The world's response must be comprehensive, far ranging and expeditious. In the long term, renewable and alternative energy will play a significant role in meeting the world's energy needs and will have a positive impact on climate change. Accelerating technology development is critical, and must be based on the economic and ecological sustainability of those solutions across their life cycle.

Until alternative technologies become a larger part of the energy mix, traditional fossil fuels (oil, natural gas and coal) will remain critical to meeting demand and feedstock needs. Efficient use of these limited resources with an emphasis on carbon management must be a strong component of any climate change strategy. Dow also believes that nuclear power is an essential technology that must be expanded as more R&D is done on safe handling and fuel reprocessing.

The long-range nature of technology development and commercial maturity requires different solutions over successive timeframes to meet the climate change challenge. The effect of climate change is global and will require immediate action by all major GHG emitting industry sectors and countries. We advocate for a global climate change strategy that calls for sharp, firm, and direct action now to dramatically slow, stop, and then reverse the growth of greenhouse gas levels in the atmosphere. Delivering the world to future generations in a viable state is a responsibility we all have.

Challenges, and How Dow Will Contribute to Solving Them

Energy is the single most powerful engine of growth and prosperity in our society today. Its production and use will increase dramatically over the next few decades to serve the needs of the industrialized world, and even more so to meet the rising demand of the developing world. Add to this the growing relationship between sustainable energy and a sustainable water supply to all, and we conclude that this is the most urgent environmental issue our society faces.

The world must address climate change by accelerating the development and deployment of new technology to optimize fossil fuel use and to enable environmentally responsible production while minimizing GHG emissions. This is a challenge for countries and for humankind as a whole, and needs to rely on transparent and competitive energy markets.

Leverage Expertise on Efficiency. Dow is a firm believer that energy saved is energy produced. Dow will continue to leverage its expertise in energy conservation to other companies and countries as it improves the efficiency of its own fossil fuel utilization and emissions.

Dow products like Styrofoam™, which saves more energy each year than the Company uses to produce all products, contribute to greater energy efficiency. Dow Automotive contributes solutions to reduce vehicle weight, thus improving fuel economy, while innovations like its diesel particulate filter reduces emissions and enhances fuel efficiency.

Dow is working on an application that will allow diesel vehicles to exceed increasingly stringent environmental standards. This could lead to increased use of diesel vehicles which have better overall energy efficiency than spark-ignition vehicles.

In the U.S. alone, a 25% improvement in the nation's energy efficiency – similar to what Dow accomplished over the last ten years – could eliminate the equivalent Btu imported into the U.S. today from the entire Persian Gulf region.

Bring Low-Carbon Energy to Market. Dow will continue to develop innovative products and technologies that enable the use of renewable sources of energy. We will seek partners in the legislative, regulatory and environmental arenas to assist us in promoting rules that reward the development and use of renewable energy, as well as alternative sources that have smaller carbon footprints. Dow believes this will make a significant contribution to long-term energy supply while reducing impact on the global climate.

Solar power panels (photovoltaics) offer the most promising opportunity to significantly change the mix of energy options and is a technology in which Dow is uniquely advantaged to help achieve a breakthrough. Dow will invest over $100MM to enable the use of Building Integrated Photovoltaic

(BIPV) roofing and other building materials that show great promise in powering homes and buildings efficiently. In addition, we will begin to transition to lower CO_2-emitting technologies.

Greener, More Diverse Fuels and Feedstocks. Dow will lead an effort to advocate solutions that ensure fuel and feedstock diversity. Dow will devote a significant R&D effort to the discovery of less energy- and carbon-intensive routes to our key high-volume chemical feedstocks, ethylene and propylene. Accelerating the utilization of innovative technologies — those that advance more efficient hydrocarbon production and reduce the environmental impact of its production and use — needs to be a priority.

We will use soy and other agricultural products, including glycerin, a by-product of biodiesel production, as chemical feedstocks. This will enable customers to exercise their commitment to technologies that consume less fossil fuel and other finite resources. Dow will also utilize its technological prowess to understand and address concerns with biofeedstocks, which must resolve significant life-cycle issues to ensure that environmental, energy, and land use issues associated with them do not lead to unintended consequences.

Optimizing Use of Existing Energy Sources. Despite the increased role of alternative sources in the energy mix, hydrocarbons are expected to continue to play a leading role in total energy consumption well into this century.

Carbon capture and storage must be developed and proven to become a complementary technology to coal burning and gasification. In the next 10 years, Dow must find additional methods for CO_2 utilization as sequestration matures into commercial application. Because of our positioning and chemistry expertise, we will explore groundbreaking approaches to use CO_2 as a feedstock. For example, having an energy facility adjacent to a chemical facility may offer many other options for CO_2. Dow will seek for governments to indemnify early adopters of technologies that capture and/or store emitted CO_2.
Dow supports additional natural gas production, including in the Outer Continental Shelf in the U.S., in an environmentally responsible manner. Importing LNG is also a viable means by which to increase natural gas supplies.

Dow will aggressively promote the development of clean coal technology, such as coal gasification as a source of both energy and feedstocks, along with the use of economically-viable carbon capture and storage technologies.

During the period of technology transition, Dow will support the use of advanced coal-fired power plants that replace older, less-efficient units. For example, ultra-super critical pulverized coal plants that replace conventional coal plants, even without carbon capture readiness, will provide about a 35% improvement in efficiency and equivalent reductions in GHG emissions. Dow also supports the use of best available control technology (BACT) for emissions.

Our Goals for the Future

Dow's Vision
Dow will contribute to the world being well positioned to achieve carbon stabilization, a target described by Princeton Professors Socolow and Pacala (*Scientific American*, September 2006).

In the next two years, we will lay out a program for other alternative energy technologies, and will leverage our expertise in energy conservation to other sectors, geographies, and the general public.

2015 Goals
Dow has committed to reducing GHG intensity by 2.5% per year reduction in emissions per pound of produced product, from a 2005 baseline by 2015. Sustaining our 2015 intensity improvement between 2015 and 2050 will significantly reduce Dow's GHG emissions compared to a Dow business-as-usual scenario.

Dow will report validated GHG emissions reductions from the use of our major product lines and solutions. We are committed to developing additional products and solutions that deliver improved energy efficiency and/or GHG reduction. Our products are a key part of solving the climate change dilemma we all face.

Dow will reduce energy intensity 25 percent from 2005 to 2015. Dow will leverage its advantaged biofeedstocks into the energy solution. Dow will also invest a significant portion of its research and development to support and develop alternative energy and less carbon-intensive raw material sources, especially solar photovoltaics. Dow is committing to using its knowledge of materials, processing, and component design to develop building integrated solar photovoltaic systems at a cost of less than $0.06 per watt with a manufacturing capability of 100 megawatts. This represents a three-fold reduction from a 2005 cost.

Dow will lead in technology transfer by actively engaging in the creation and use of project offsets through the Joint Implementation/Clean Development Mechanism (JI/CDM) process created under the Kyoto Protocol. By 2008, we will have created a business model to demonstrate that the JI/CDM approach is a sustainable business.

2025 Goals
Dow will stop the growth of absolute emissions of GHG within the company. Our absolute emissions will remain below the 1990 baseline and we will begin on a journey of year-over-year reduction in GHG emissions.

Dow is committing to manufacture and supply a minimum of 1 gigawatt of built-in solar photovoltaics.

Dow aims to have renewable energy provide at least 400 megawatt equivalents, or 10% of Dow's global electrical demand in 2004 (Dow's base year for 2015 Sustainability Goals).

By 2050, Dow will have contributed to the achievement of a world in carbon equilibrium, a target described by professors Socolow and Pacala.

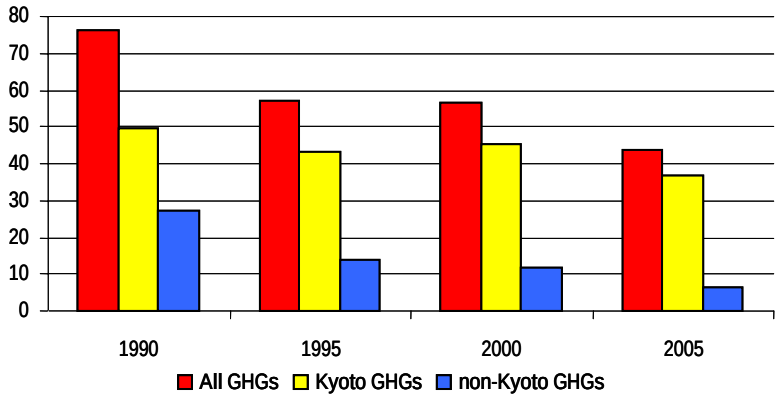
At least 50% of the energy consumed by Dow globally will be from non-carbon emitting sources. The energy mix will include renewables (e.g. wind and solar), alternatives (e.g. nuclear) and carbon sequestration technologies.

The Spirit and the Promise

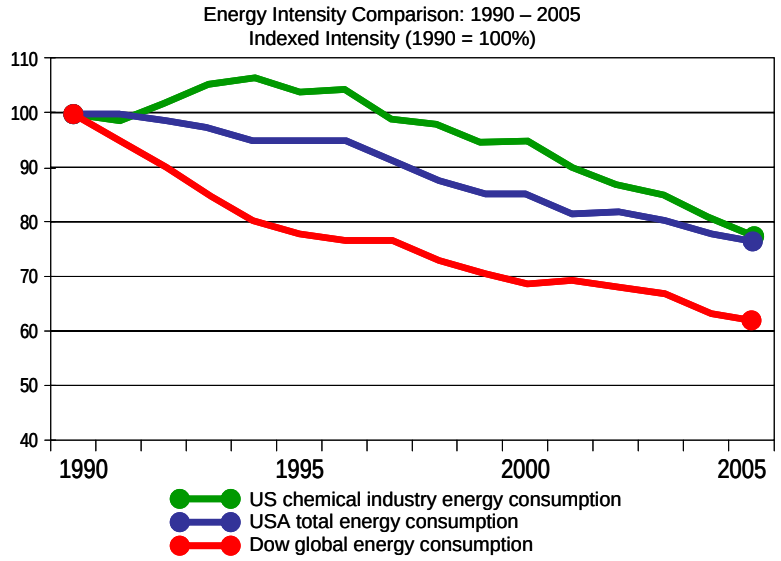
- **Dow will focus its innovative Dow product and process ingenuity to continue providing solutions to the world's energy and chemical feedstock needs.** We will report regularly on our progress, our contributions, and our dilemmas with non-sustainable options while helping solve these challenges.
- **Dow will continue to advance and bring its world-class know-how and expertise in energy efficiency and conservation to other companies and countries** that are earlier in the technology cycle in order to deliver more rapid progress to reducing their contributions to the world's GHG emissions. We will continue to focus R&D and engineering resources on improving yields and energy efficiency of our processes. This will enable Dow to attain even lower energy intensity targets, and we will be recognized as the energy efficiency leader.
- **Dow will advocate for an international framework that establishes clear pathways to slow, stop, and reverse the rate of emissions** by all major carbon dioxide-emitting countries.
- **Dow will make the case that transparent, efficient and competitive energy markets worldwide are needed** and should be focused on the security of supply, sustainability and competitiveness. This will help maintain and improve the standard of living worldwide.
- **Dow will advocate for and participate in the monetization of carbon in fair marketplaces**, a critical objective in establishing country market mechanisms for cost-effective carbon management. Each country should be allowed to establish their own systems with targets set fairly for each industry sector with appropriate linkages to a globally negotiated system.
- Wherever we operate, we are enabled by the energy and feedstocks available in that country through its own governmental policies. **We will advocate for domestic policies that generate the most energy efficient and least GHG intensive processes and products possible.** Further, Dow pledges to be the most effective and efficient producer using available energy and feedstocks, wherever we operate.

Our Contributions to Date

- From 1995 to 2005, Dow has reduced its energy intensity (Btu per pound of product) by 22%, saving 900 trillion Btu, which is enough to power eight million homes for a full year. Since 1990, Dow has reduced its energy intensity by more than 38%.



- Dow has reduced its absolute GHG emissions by more than 20% since 1990, a more rapid reduction than required by Kyoto Protocol targets.
- GHG emission reductions achieved through the use of Dow products have more than offset the GHGs produced during the manufacture of those products. For example, Dow Automotive products reduce vehicle weight, thus improving fuel economy. And Dow Building solutions save energy. One square foot of one-inch-thick Styrofoam will save one ton of CO2 emissions over the average life of a house. Hundreds of millions of metric tons of CO_2 emissions are averted each year through the use of Styrofoam® products alone.



- Dow is enabling the generation of 2,400 megawatts (MW) of renewable energy through the use of Styrofoam® in windmill blades. Dow epoxy is also a critical component of most wind turbines operating today.
- Down-gauging of industrial stretch film (PE) saves 37 trillion Btu, equivalent to 293 million gallons of gasoline each year.