The Dow Chemical Company

STATEMENT FOR THE RECORD

SELECT COMMITTEE ON ENERGY INDEPENDENCE AND GLOBAL WARMING

HEARING ON

What's Cooking with Gas: The Role of Natural Gas in Energy Independence and Global Warming Solutions
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Submitted By:
Rich Wells
Vice President, Energy

The Dow Chemical Company appreciates the opportunity to submit these written comments to the Select Committee on Energy Independence and Global Warming.

Dow was founded in Michigan in 1897 and is one of the world's leading manufacturers of chemicals and plastics. We supply more than 3,300 products to customers in 175 countries around the world, including hundreds of specialty chemicals, plastics, agricultural and pharmaceutical raw materials for products essential to life. About 21,000 of Dow's 46,000 employees are in the US, and Dow helps provide health benefits to more than 34,000 retirees in the US.

Dow is committed to sustainability. We have improved our performance on greenhouse gas (GHG) emissions, and we are committed to do even better in the future. Our ambitious 2015 sustainability goals underscore this commitment. (See the Appendix for more details.)

Dow is an energy-intensive company. Dow uses energy, primarily natural gas and natural gas liquids, as a feedstock material to make a wide array of products essential to our economy and quality of life. We also use energy to drive the chemical reactions necessary to turn our feedstocks into useful products, many of which lead to net energy savings.

This testimony describes the current US energy crisis and recommends specific policies to ensure a sustainable energy policy for the United States. Particular attention is focused on natural gas prices, which have and continue to adversely affect the US manufacturing sector.

Natural Gas and the US Chemical Sector

Before turning to policy issues, it is important to first understand the role that natural gas plays in the chemical sector.

Natural gas from the wellhead is processed to produce methane and natural gas liquids (NGLs). NGLs, also called liquefied petroleum gases, include ethane, propane, and butane and can be produced via natural gas processing or through petroleum refining. Petroleum refining yields a number of products, including NGLs and naphtha. Naphtha and NGLs are processed in large vessels, or crackers, in which the materials are heated and pressurized to crack the hydrocarbon chains into smaller chains. The smaller chain hydrocarbons include olefins (ethylene, propylene, and butylene) and aromatics (benzene, toluene, and xylenes). These petrochemical feedstocks serve as the building block materials for plastics, pharmaceuticals, electronic materials, fertilizers, and thousands of other products.

Total energy consumption by the chemical industry in 2007 was 6.17 quads (quadrillion BTUs), which represented about 6.2% of total US energy consumption. Of this amount, 55% is from natural gas (NG or NGLs).

The industry uses 1.93 trillion cubic feet (TCF) of natural gas annually, representing 8% of US natural gas consumption. The majority of steam boilers and cogeneration units in the manufacturing sector are powered by natural gas. The remainder is for feedstock purposes. Due to the historic abundance and low cost of natural gas in the USA, natural gas has been vital to domestic chemical production.

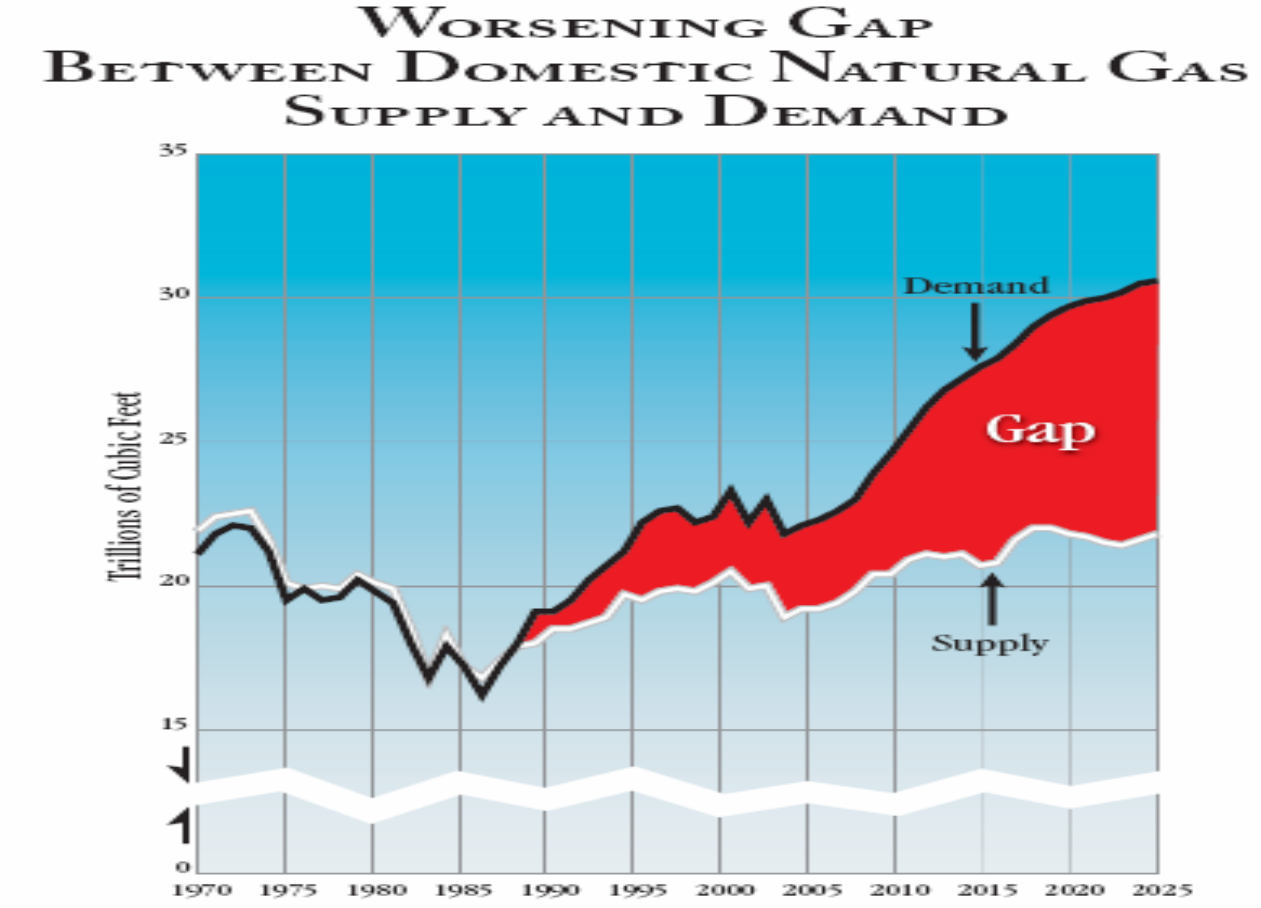
As a major chemical producer, Dow purchases natural gas and NGLs for use as (1) feedstock material, and (2) fuel and power. Approximately 80% of our hydrocarbon and energy purchases are for feedstock material. Dow is one of the largest industrial users of hydrocarbons, consuming the equivalent of 850,000 barrels of oil every day in energy and hydrocarbon feedstocks.

In the chemical sector, energy represents a significant share of production costs. For some chemicals, it can be as high as 85%. For Dow, energy costs in 2008 are expected to equate with about half of our total revenues. Energy represents, by far, the fastest growing segment of our production costs.

Impact of High US Natural Gas Prices

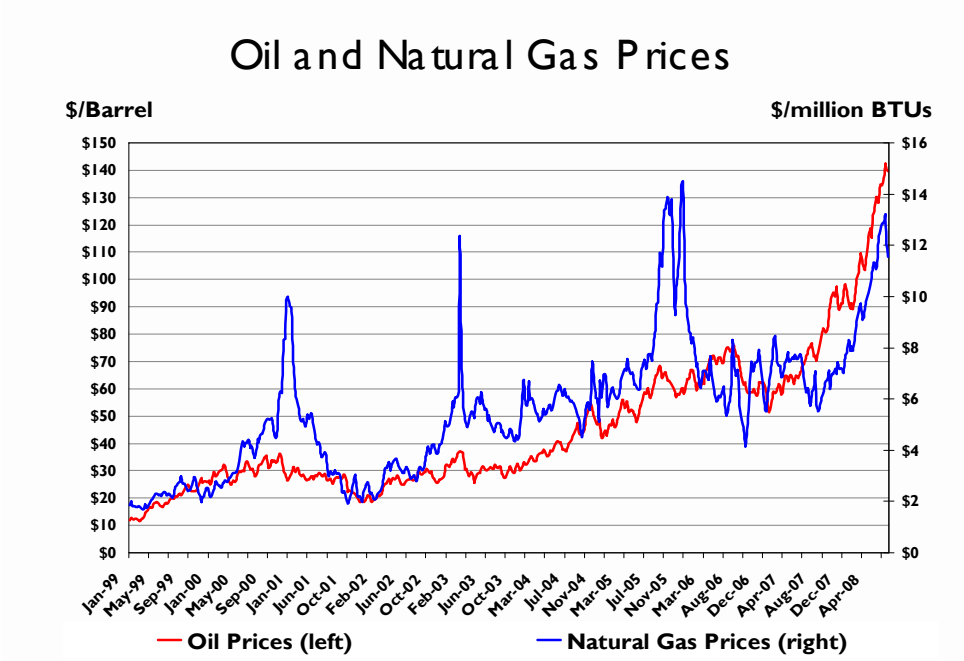
To understand the reason for high natural gas prices, it is important to understand supply and demand trends. Natural gas currently represents about 23% of US energy consumption. In 2005, US natural gas demand was 22 trillion cubic feet (TCF) per year, which was higher than US supply. By 2030, US natural gas demand is expected to grow over 30 TCF. The deficit between domestic supply and demand has been growing, and is expected to grow in the future. This demand/supply gap is driving higher prices.

Today, the demand/supply gap is filled through a combination of imports of LNG and pipeline supplies from Canada. But Canadian natural gas is being used in ever-increasing amounts in the recovery of oil from oil sands. This decreases the amount of natural gas available for export to the United States. This will increase US dependence on liquefied natural gas (LNG) and will increase our dependence on foreign sources of energy.



Although much attention is focused on the increase in the price of oil, natural gas has also seen significant price increases. Natural gas prices skyrocketed over 460% over the last eight years (Figure 1), and this price increase has significantly contributed to the US manufacturing sector losing over 3.7 million jobs, the chemical industry losing nearly 120,000 jobs, and the permanent loss of nearly half our fertilizer production capacity. The manufacturing sector, which has limited fuel switching ability, has become the shock absorber for high natural gas costs. America's farm sector is also being weakened by constraints on domestic natural gas development, even as global demand for food is growing. For the forest products industry, energy is the third largest manufacturing cost—up fifty percent in the last couple of years for pulp and paper mills. For some mills, the cost has eclipsed employee compensation.

Since 2001, high US natural gas prices have hurt the competitive position of U.S. manufacturers, who now operate in a predominantly domestic market. Exports of US manufactured goods are no longer competitive (i.e., imports greater than exports), even with the currently low value of the US dollar. For companies with global market share ambitions, overseas manufacturing bases are the only option. Meanwhile, consumers are paying more for electricity, home heating, gasoline, diesel fuel, and food. Today, many of the nation's homeowners are having difficulty paying their natural gas heating bills.



Source:
EIA

Dow first expressed alarm about high natural gas prices in 2002. At that time, our total annual energy and feedstock bill was $8 billion. Today we are projecting our 2008 costs to be about $8 billion per quarter. At this level, our energy expenditures are by far the largest component of our production costs, and equate to about half of our total revenues.

Due to the unprecedented run-up in oil and natural gas costs, we recently increased prices by up to 45 percent in order to maintain margins and continue to invest in our future. These increases will be reflected in the prices consumers pay for everything from trash bags and diapers to shampoos and detergents, food, building materials, and other products.

Our recent price increases were needed just to keep pace with spiraling costs. We are aware of the impact this ultimately has on the consumer. But in the first three months of this year, our feedstock and energy costs climbed 42%, while our total costs increased by 22%.

The rising costs incurred by the manufacturing sector, whether the result of higher-priced feedstocks and energy, government imposed tariffs or tougher regulations, will ultimately be borne by the consumer.

Most petrochemical production can occur in areas of the world where natural gas prices are low—such as the Middle East—and landed in the US at the natural gas equivalent price of $4 to $4.50/MMBtu. The current US price of natural gas is over $10. This is the basic indicator of competitive disadvantage our industry faces.

The U.S. domestic market continues to provide significant domestic business opportunity. We may be building a tremendous business overseas, but we also have a very good business here – albeit domestically focused – that we want to keep and grow. We want to invest in the U.S., but there must be an appropriate value proposition. Dow sales inside the United States remain by far the largest for any country – almost 3.5 times its nearest rival, Germany. But consider this: five years ago (2002) U.S. sales outstripped those of second place Germany by a factor of almost 6.5 to 1. Today, more than two-thirds of Dow's sales are generated outside North America.

Coping with High Energy Prices

Because of high energy costs, Dow has had to take a number of actions to remain viable as a company. We have focused relentlessly on improving our energy efficiency, shut down dozens of uncompetitive plants, pursued alternative energy and feedstocks, and invested preferentially in parts of the world where energy costs are lower.

Our strategy is two-fold**.** In the short term, we are controlling the things that we can control, including a sharp focus on energy efficiency. In the long term, we're building a portfolio of joint ventures with access to low-cost feedstocks and are dedicated to innovation breakthroughs in the areas of renewable and alternative energy and feedstocks.

Energy Efficiency

The Dow Chemical Company is a recognized industry leader in energy management. Energy efficiency has been part of our heritage since the very early years of our company, when Dow helped pioneer the use of industrial combined heat and power, also known as cogeneration. In conventional power plants, a significant portion of the energy is lost (usually through cooling towers or flue gas) in the process of electricity generation. In contrast, cogeneration captures more of the heat, utilizing less fuel, which has a significant impact on greenhouse gas emissions and improved air quality relative to conventional utility power. Cogeneration typically uses 20% to 40% less fuel than separate steam and power generation because energy is captured and used that would otherwise be wasted.

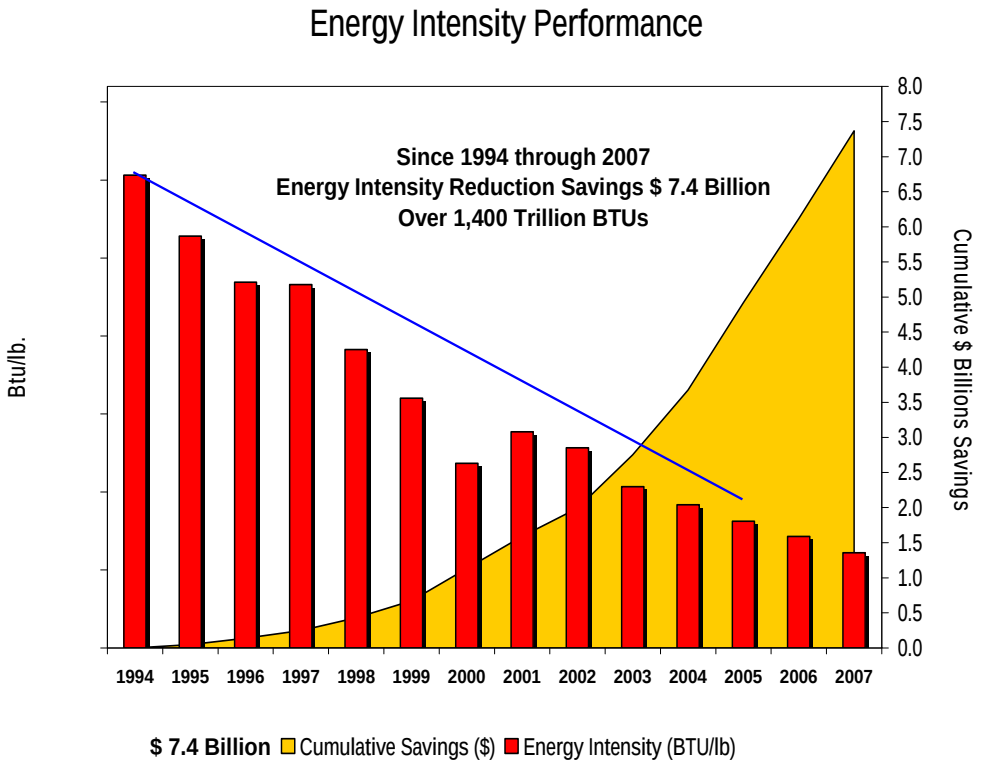
In recent years, through a companywide focus on energy efficiency, we have dramatically increased our energy efficiency -- and exceeded an aggressive, long-term corporate energy efficiency goal. Since 1994, we have reduced our energy intensity 24% worldwide. Our cumulative energy savings have reached approximately 1,400 trillion BTUs, and we have avoided about 74 million tons of carbon dioxide emissions. Figure 1 shows how our $1 billion investment in energy efficiency has returned more than $7 billion in energy savings. We are very proud of the fact that EPA has recognized Dow as their 2008 Energy Star "Partner of the Year".

Dow's experience in energy efficiency has convinced us that we can help others realize these benefits, too. Indeed, energy efficiency is a universal tool. It should be the tool of

choice, irrespective of whether one's motivation is to save money, reduce GHG emissions, or reduce dependence on foreign energy. It is the cheapest and most renewable "fuel" of all.

To illustrate the benefit of energy efficiency, if the entire US economy was to adopt Dow's goal of increasing its energy efficiency by 25% from 2005 to 2015, then we would reduce the oil equivalent of 100% of our imports from the Persian Gulf.

Dow is also working with the UN Foundation and The Alliance to Save Energy to promote energy efficiency worldwide. A recent report from the UN Foundation concluded that doubling the annual rate of energy efficiency improvement to 2.5 percent in the G8 +5 countries would contribute to holding CO_2 levels in our atmosphere to a manageable level for the rest of the century.



Dow is working with Lawrence Berkeley National Labs and China's Energy Research Institute to improve the energy efficiency of small- and medium-sized companies in China.

Dow supports government and other organizations in their efforts to promote energy efficiency among all consumers. Dow was a major sponsor of The Alliance to Save Energy's "The Power is in Your Hands" energy efficiency campaign, designed to help

U.S. energy consumers save money and energy. Dow is also an active participant in the U.S. Department of Energy's "Save Energy Now" industrial energy efficiency campaign.

Dow is also working with the national Association of Manufacturers (NAM) to promote energy efficiency best practices to thousands of US companies.

Innovation

Dow has been a leading advocate of solutions that ensure fuel and feedstock diversity. Dow is devoting 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 — is a priority.

We are making significant financial investments in R&D to achieve breakthrough solutions that will help slow, stop and reverse emissions of greenhouse gases.

We are developing greener, more diverse fuels and feedstocks based on renewable and alternative sources of energy. For example, Dow and the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) recently announced an agreement to jointly develop and evaluate a process that will convert biomass to ethanol and other chemical building blocks. A mixed alcohol catalyst from Dow is seen as the key to unlocking the potential for this promising renewable energy resource. The process will use non-food ingredients, such as the leaves from a corn plant or wood wastes, and convert the bio-based material through a gasification process to synthesis gas. Dow's technology helps convert the synthesis gas into a mixture of alcohols including ethanol that can be used as transportation fuels or chemical building blocks.

Dow is investing more than $100 million in research and development for solar photovoltaics integrated in building materials such as roofing shingles and siding. Dow is committing to using its knowledge of materials science, processing, and component design to develop integrated solar photovoltaic systems at a cost of less than $0.06 per watt that is at grid parity from a cost perspective with a manufacturing capability of 100 megawatts. This represents a three-fold reduction from the cost in 2005.

Alternative Feedstocks

Because of the expense and environmental footprint associated with fossil energy, Dow is actively investigating and moving forward on alternate feedstock materials such as:

- Sugar cane to polyethylene for use in boat hulls, bathroom fixtures, and antifreeze.
- Glycerin to propylene glycol for use in pipes, films, and food packaging.
- Soy to polyols used in foam cushions and carpet backing.
- Coal to chemicals/polygeneration with effective carbon management.
- Coal/petcoke gasification to natural gas with effective carbon management.

For example, we recently announced a joint venture in Brazil to produce polyethylene from sugar cane ethanol. The new process will produce far less CO_2 than the traditional process.

Energy Saving Products

Dow, like many other U.S. manufacturers, already provides energy-saving products that will help consumers reduce their energy bills and reduce GHG emissions. Examples include the following:

- For the home or business, our products include STYROFOAM brand insulation and GREAT STUFF polyurethane foam sealants. Such solutions can reduce home and business energy costs by 20%-30%.

- For saving energy on the road, we've developed a new diesel particulate filter technology within Dow Automotive, enabling improved environmental performance and fuel efficiency.

- We also offer plastics, composites, and adhesives to help make cars stronger and lighter, while improving overall gas mileage. According to the U.S. Department of Energy, for every 10% reduction in weight, fuel economy improves by 7%. Plastics-enabled solutions include BETAFOAM™ structural foams that enhance vehicle structural integrity while allowing for down-gauging of steel and BETAMATE™ structural adhesives that decrease vehicle weight by reducing or eliminating welds and mechanical fasteners. Another Dow offering that helps car manufacturers reduce vehicle weight is MAGNUM™ ABS resins for light-weight exterior and interior components.

- For the industrial sector, Dow has been down-gauging industrial stretch film (PE), which will save 37 trillion BTUs per year (industry-wide), equivalent to 293 million gallons of gasoline. Down-gauging is the process of making a plastic film thinner but stronger, so that less plastic can be used while getting the same benefits in use.

Need for a Sustainable Energy Policy

No company in the world is more intensely aware of the need to reinvent our dependence on oil and natural gas than Dow. We will lead the way on energy transformation because we have to. And we have taken important steps already.

But private sector actions alone cannot solve the problems posed by high natural gas prices. Government leadership is also necessary. Congress can do its part to develop a sustainable energy policy for the United States, one that addresses the triple threat of high energy prices, rising energy dependence, and global warming. A sustainable energy policy is one that relies on aggressive energy efficiency, diversification and expansion of

domestic energy supplies, cost-effective controls on greenhouse gas emissions, and long-term incentives for development of breakthrough technologies.

We have developed a list of specific policies that, if implemented, would form the basis of a sustainable energy policy.

First, aggressively promote the cleanest, most reliable, and most affordable "fuel"—energy efficiency. Energy efficiency is the consensus, first-step solution to each of the three problems identified previously. It is often underappreciated for its value. Of particular importance is improving the energy efficiency of buildings. Buildings are responsible for 38% of CO2 emissions, 40% of energy use, and 70% of electricity use. A combination of federal incentives and local energy efficiency building codes is needed.

Second, increase and diversify domestic energy supplies, including natural gas. The United States is the only country with abundant domestic supplies that restricts deep water natural gas exploration. Nuclear energy and clean coal with carbon capture and sequestration (CCS) should also be part of the solution, as should solar, wind, biomass, and other renewable energy sources.

An estimated 86 billion barrels of oil and 420 trillion cubic feet of natural gas are not being tapped. (History suggests that the more we explore, the more we know, and the more our estimates of resources grow. EIA has said that "the estimate of ultimate recovery increases over time for most reservoirs, the vast majority of fields, all regions, all countries, and the world.") And we have the technology that allows us to produce both oil and natural gas in an entirely safe and environmentally sound manner. Any new fossil energy resources must be used as efficiently as possible.

One way to maximize the transformational value of increased oil and gas production is to share the royalty revenue with coastal states and use the federal share to help fund research, development and deployment in such areas as energy efficiency and renewable energy**.** Production of oil and gas on federal lands has brought billions of dollars of revenue into state and federal treasuries. Expanding access could put billions of additional dollars into state and federal budgets.

Third, act boldly on technology policy through long-term tax credits, and increased investment in R&D and deployment. These are costly but necessary to provide the certainty that the business community needs to spur investment. We didn't respond to Sputnik with half-measures. We can't afford to respond to our energy challenges with half-measures, either.

Fourth, employ market mechanisms to address climate change in the most cost-effective way. There is a need for sharp, firm, and direct action now to dramatically slow, stop, and then reverse the growth of greenhouse gas levels in the atmosphere. We concur with the principles and recommendations of the US Climate Action Partnership (USCAP), of which Dow is a proud member. And we recognize that concerted action is needed by the rest of the world to adequately address this global problem.

Recent Proposals

Our current crisis has spurred evaluation of potential solutions. Most recently, The Pickens Plan proposes to reduce US dependence on foreign oil by harnessing domestic energy alternatives such as wind, solar, and natural gas. Specifically, the plan involves building new wind electric generation facilities and greatly increasing the use of natural gas as a transportation fuel. The goal is to reduce US reliance on foreign sources of oil.

We appreciate the fact that Congress is considering energy proposals that are large-scale and that would begin soon. We also support Mr. Pickens' five principles for US energy policy: (1) We must slash US dependence on foreign oil by at least 30% in 10 years. (2) We must rely 100% on domestic resources. (3) We must use existing, proven, and workable alternatives to foreign oil. (4) We must call on private enterprise to execute the plan quickly. (5) The federal government should clear a path for implementation. In our opinion, these principles are sound.

However, we have concerns about the specifics of the Pickens Plan. First, we would like to clarify some important facts. Currently, natural gas is cheaper than oil. This, however, is not always true. In fact, on average, from January 2003 through December 2005, natural gas was almost exactly at parity with oil (natural gas was 1% cheaper over this time period). Just as importantly, the volatility of natural gas is much higher than that for oil. During one three-month period, natural gas went from being 25% more valuable than oil to 50% less valuable.

Mr. Pickens has stated that natural gas is priced favorably when compared to oil. We would point out that both coal and nuclear are much cheaper than either natural gas or oil.

Our biggest concerns with the Pickens Plan are that it would (1) increase the volatility of energy prices and (2) harm the US manufacturing sector.

To see why it would increase volatility, consider that you can't use solar power if it's cloudy, or wind power if it's calm. So, the country would have to build more "peaking-only" electric power plants. To pay for these units (which would sit idle most of the time), the price of peak power would have to rise dramatically. If these prices were passed directly to consumers, we might save a lot of gas over time as people would cut back demand. The likely result, however, is that we have to pay traders and utilities to manage increased volatility; consumers would see the increased cost only slowly.

In recent testimony before Congress, Mr. Pickens said, "It's not our job to provide cheap gas to the chemical industry. They're going to have to compete globally." Fundamentally, this statement is correct. The only issue is that many other countries offer the chemical industry energy at below LNG prices precisely because they realize that the jobs provided are valuable, and the diversification of the economy provides a more steady revenue stream than relying on energy alone.

For the business of chemistry, our next best alternative is not LNG, as Mr. Pickens suggests, but rather long-term fixed-price natural gas at attractive prices in other regions of the world. We can then move the plastic or chemicals produced to local markets (helping the country grow) or create export currency for these countries by serving the world's growing markets. These products are much cheaper to move than LNG, so the world creates value by turning ethane into chemicals.

We do not wish to be overly critical of the Pickens Plan. As stated previously, we support the five principles that Mr. Pickens used as the basis for his plan. There are, however, other plans that follow Mr. Pickens' principles but without increased volatility and without harming the US manufacturing sector. For example, a combination of more efficient use of gasoline engines (higher fuel economy), and more clean coal, nuclear, and renewables would be a better plan. If we built a smart electric grid which could optimize charging plug-in electric vehicles when power was available from base-load power (i.e. new clean coal or nuke) or could take advantage of the wind/solar power if available, then plug-in vehicles could greatly reduce the reliance on oil while simultaneously reducing the volatility of power prices. We would in effect, build an interruptible source of energy which could store solar/wind power in a usable form while not creating a huge need for additional peaking power. The key is the smart grid and the increased base-load power from coal and nuclear. In this scenario, we should also increase home energy efficiency, and by so doing would free up base-load power for plug-in hybrids.

Recently, Rep. Emanuel and Senator Inhofe separately announced legislative initiatives to increase the use of natural gas as a transportation fuel. The Emanuel proposal would compel automakers to make sure 10% of their fleet vehicles run on natural gas by the year 2018. The bill would also include incentives and tax credits to add natural gas pumps at 20,000 fueling stations. Senator Inhofe's bill, S.3281, would promote natural gas as transportation fuel without any mandatory targets through tax credits, changes to the renewable fuels standard, and a new R&D program.

Aside from these proposals, there are campaigns underway to promote natural gas-fired power plants and oppose traditional, coal-based power plants because of the global warming implications. Like the Pickens plan and the proposals from Rep. Emanuel and Senator Inhofe, these campaigns would have the effect of increasing demand for natural gas.

Dow is pleased to see Members of Congress develop and consider proposals that could improve our nation's energy security and help reduce greenhouse gas emissions. These proposals represent a serious contribution to the debate. These proposals could, however, increase net demand for natural gas, which will raise US prices to ever higher levels, forcing manufacturers to compete with yet another sector of the economy, and add to the burden of residential homeowners.

Manufacturers have seen their competitive position weaken as US natural gas prices increased over the past few years. Policies that increase natural gas demand will make this already bad situation even worse. For example, policies that mandate corn-based ethanol will increase demand for natural gas. One billion gallons of ethanol require the

use of 28 billion cubic feet of natural gas. Another example is climate change legislation. Natural Gas Council models predict that pending climate change legislation will increase natural gas demand by as much as 10 TCF per year.

Congress has been enticed into over-reliance on natural gas before. The Clean Air Act Amendments of 1990 were enacted with the belief that natural gas would be the clean fuel of the future and would be cheap and plentiful for as far as the eye could see. Unfortunately, Congress did not anticipate the run-up in natural gas prices and the resulting demand destruction in the industrial sector.

Before we repeat this mistake and consider creating new demand for natural gas, we need to (1) address the need for more domestic supply and (2) reduce the growth of natural gas in power generation.

Conclusions

Since 2001, high US natural gas prices have hurt the competitive position of U.S. manufacturers, who now operate in a predominantly domestic market. Exports are no longer competitive. For companies with global market share ambitions, overseas manufacturing bases are the only option.

Meanwhile, consumers are paying more for electricity, home heating, gasoline, diesel fuel, and food. Today, many of the nation's homeowners are having difficulty paying their natural gas heating bills.

No company in the world is more intensely aware of the need, ultimately, to reinvent our dependence on oil and natural gas than Dow. We will lead the way on energy transformation because we have to. And we have taken important steps already.

Dow supports a sustainable energy policy. Such a policy would promote energy efficiency; increase domestic supplies of energy, including natural gas; act boldly on technology policy through long-term tax credits, and increased investment in R&D and deployment; and employ market mechanisms to address climate change in the most cost-effective way.

Before we consider creating new demand for natural gas in the transportation sector, we need to (1) address the need for more domestic supply and (2) reduce the growth of natural gas in the power sector. Increasing net demand for natural gas is not a sustainable policy.

Appendix—Dow's Progress and Commitment To Reduce Its Climate "Footprint"

Dow accepts the Intergovernmental Panel on Climate Change (IPCC) conclusion that it is very likely that human activities are causing global warming. We recognize the serious nature of the threat and that it warrants bold action with clear, long-term performance objectives.

We understand that it is not enough to agree with consensus scientific opinion. Our commitment to sustainability requires that we act upon such information responsibly and swiftly. To that end, Dow has made considerable progress in reducing its climate "footprint":

- From 1995 to 2005, in keeping with its publicly announced sustainability goals, Dow reduced its energy intensity (BTU per pound of product) by 22%, resulting in energy saving of 900 trillion BTUs, which is enough to power all the homes in the entire state of California for a year.
- Since 1990, Dow reduced its absolute greenhouse gas (GHG) emissions since to a level that exceeds Kyoto targets. Overall, emissions of Kyoto GHGs were reduced by more than 20% during this time period.
- GHG emission reductions achieved through the use of Dow products more than offset the GHGs produced during the manufacture of those products.

Although this record is positive, we are committed to continued improvement and reduction of our environmental footprint. In order for Dow to contribute even more to climate change solutions, we have developed a clear vision and key milestones for the years 2015 and 2025. Our vision will guide our decisions today and into the future, and based on this vision, we pledge to reach a number of far-reaching objectives:

- Our vision is to have contributed to the achievement of a world in carbon equilibrium, a target described by Princeton University professors Robert Socolow and Stephen Pacala in the September 2006 edition of *Scientific American*. We will have set the industry benchmark through our own performance. We will apply our innovation and expertise to help solve the world's GHG and energy challenges.

- Our key milestones:

    - By 2015, Dow will reduce its energy intensity by another 25% compared to base year 2005.
    - By 2015, Dow will reduce its GHG emissions intensity (tons of CO_2 per pounds of production) 2.5% per year.
    - By 2025, 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.
    - By 2025, Dow aims to have non greenhouse gas emissive energy provide at least 400 MW equivalents, or 10% of Dow's global electrical demand

- By 2050, at least 50% of the energy consumed by Dow globally will be non-carbon emitting.