

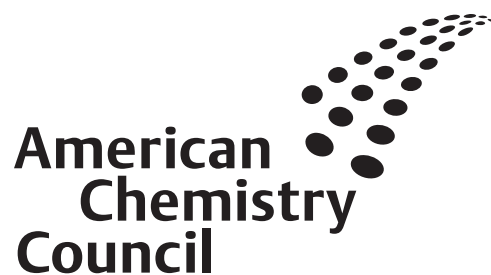
BALANCING THE NATION'S NATURAL GAS SUPPLY AND DEMAND

Comments Submitted to the Department of Energy

By the

AMERICAN CHEMISTRY COUNCIL

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Winter has officially arrived. For this winter we may be looking forward to home heating bills climbing by as much as 70 percent. Factories could be forced to close or cut back operations. Jobs will be lost. The economy will contract. The reason: demand outstripping supplies of natural gas.

What we can't predict is how Congress will respond to this crisis. What will it take to finally pass legislation to permit more access to new supplies of energy from the Outer Continental Shelf?

Here's why the cost of natural gas is so important to the chemical industry – and by extension – to the entire economy. Also, here's what ACC believes needs to be done to end the crisis in the US natural gas market.

The chemical industry uses 2.5 trillion cubic feet of natural gas each year. That's more than 10 percent of the nation's total consumption and it's more than the state of California uses.

Our manufacturers use gas to heat and power their facilities, but uniquely, natural gas is our most important raw material. Natural Gas is to chemical manufacturing as flour is to baking.

Chemical makers transform natural gas molecules into the essential materials that are found in computers, cars, clothing – and thousands of other products that everyone of us use everyday. The chemistry share of the materials value of a bottle of shampoo is 100%. For carpets it is 68%. For tires it is 62%. For semiconductors it's 30%. Even for paper cups it's 22%. In fact, chemistry is contained in 96 percent of all manufactured goods and chemistry directly supports 25 percent of US GDP.

In 2005, for the first time in history, the nation's natural gas bill will top \$200 billion. The chemical industry's gas bill, including natural gas liquids, will exceed \$30 billion. In 1999, when gas last sold in its historic band of \$2 to \$3 per million Btus, the nation spent just over \$50 billion and the chemical industry's bill was \$7.5 billion.

Because of the price of natural gas, Americans had \$150 billion less to spend this year on other things. And, because natural gas is an ingredient used to make chemicals ... and chemicals are ingredients used to make nearly everything the nation manufactures ... the cost of nearly everything Americans buy is going up. There will be about 130 million individual tax returns filed this year. That \$150 billion increase in the nation's natural gas tab is like adding \$1,100 to each taxpayer's bill.

When consumers have less money to spend on goods that cost more, the economy contracts. Every recession since the Eisenhower Administration began with a steep run-up in energy costs. That is precisely what is happening now.

The chemical industry has experienced a cumulative \$60 billion increase in its natural gas bill since the beginning of the decade. That's \$60 billion that wasn't invested in research, in building new plants, and creating new jobs.

That \$60 billion is also the reason why chemical company CEOs are being forced to put more of their future capital investment in other countries and less here in America. Recently, Frank Mitsch of Fulcrum Global Advisors, was quoted as saying that CEOs who spend money to build new production capacity in the US, at this time, should – quote – “have their heads examined.”

Dow Chemical President and CEO Andrew Liveris recently testified on Capitol Hill and noted that Dow is building a \$4 billion chemical plant in Oman. That plant will employ 1,000 people in high paying R&D, engineering and operations jobs. Until three years ago, that new plant, and those 1,000 jobs, was going to be built in Freeport, Texas. Liveris said that the high cost of natural gas here – now 12 times higher than it costs on the Arabian Peninsula – is why Dow moved the project.

Business Week wrote earlier this year that of 120 world-scale chemical plants (those costing \$1 billion or more) under construction around the globe, only one is in the United States. The industrial core of our country, Business Week said, “is being hollowed out” by natural gas costs that are far and away the highest in the world.

That \$150 billion is the price that natural gas consumers – homeowners, schools, hospitals, farmers and businesses – are paying for government policies that simultaneously increase demand and restrict new sources of supply.

Policies that drove utilities to switch much of their power generating capacity from coal to natural gas has turned out to be the straw that broke the camel's back.

Congress is trying to have it both ways. It can't continue. It is failing millions of Americans whose livelihoods depend on reliable supplies of natural gas at affordable prices.

Winter is here. The economics firm, Energy and Environmental Analysis, says that industrial demand destruction may be as great as 3.5 bcf/d this winter in order to balance demand and supply and ensure reliable service to residential and commercials.

- 3.5 bcf/day is equal to closing 70 chemical plants;
- it equals 57 percent of chemical industry's daily consumption;
- it equals 73 percent of pulp and paper, food processing, and primary metals industries daily consumption (third, fourth and fifth largest industrial consumers);
- it equals 100 percent of the daily residential winter consumption of Ohio, Wisconsin, Minnesota and Indiana combined.

The chemical industry is hard at work trying to manage our natural gas costs by becoming more efficient consumers. The American Chemistry Council recently honored 11 of its member companies for implementing efficiency improvements in 2004 that together enough save enough energy to power a city the size of Minneapolis. In 2004, ACC members managed to reduce energy consumption per pound of output by 6 percent and greenhouse gas emission intensity were down by 7.6 percent. Since 1974, the US chemical industry has improved its energy efficiency by 46 percent. Being more energy efficient is one of the smartest business investments this industry makes, but we can't save our way out of this problem.

ACC believes that a wide range of policy responses are needed to unknot this problem, ACC supports funding for energy efficiency measures; investment in diverse sources and supplies of fuel, especially gasification technology; and, upgrades to natural gas infrastructure. From a policy perspective, what is most obvious to us is that new sources of supply are needed to meet the new sources of demand.

That is why large natural gas consumers, like the chemical industry, support increasing access to new sources of natural gas in the the Outer Continental Shelf (OCS). More sources of new domestic natural gas supplies, in our view, is in the nation's economic and security interests.

This winter, we think that it will become painfully clear that the nation's natural gas supplies are insufficient to meet its needs. It will become painfully clear that Congress can no longer continue to support a 25-year old policy that was developed in a long gone era when natural gas was cheap and plentiful.

There has never been a better – or more critical -- time to pass natural gas supply legislation.

In addition to supporting legislation that leads to more access to off shore sources of natural gas, here are additional policy measures ACC believes need to be taken to ease the natural gas crisis:

1. We join the Alliance to Save Energy in asking Congress to immediately provide 10 million dollars to begin funding the energy efficiency public education campaign called for in Title I of the Energy Policy Act.

Funds are needed now for a nationwide energy conservation and efficiency campaign. The public must be told that natural gas will be in short supply this winter. Consumers will pay record prices to heat their homes, factories will be closed and jobs will be lost. If every American home turned their thermostat down by two degrees this winter, that would free up 3 Bcf/d of natural gas, an amount equal to the daily output from three LNG terminals. If Congress were to pass an emergency supplemental appropriations bill funding a national campaign it would help American

consumers make it through the winter. We also call on Congress to fully fund the energy efficiency provisions authorized in Title I of the Act. Among many other things, funding Title I will accelerate adoption of new appliance energy efficiency standards and it would provide funds to states to help adopt the latest building codes and achieve high rates of compliance.

2. Fund the incentives for innovative energy technology authorized in Title XVII of EPAct05 to diversify this nation's fuel portfolio.

Title XVII of the Act authorizes DOE to create programs and provide federal assistance to help commercialize a number of new energy technologies. These technologies have the potential, over time, to fundamentally change the way the nation makes and uses energy. Gasification technology, in particular, has the potential to become the foundation for the nation's future energy infrastructure. The United States has the world's largest proven and potential supplies of coal and biomass. On a Btu basis, US coal reserves are the equal of world petroleum reserves. Gasification technology converts coal and biomass (and other energy-bearing raw materials) under heat and pressure into a high quality gas. Since the raw material is not burned, gasification produces remarkably little pollution. Gasification technology is exceptionally versatile. The gas it produces can be used to heat homes and businesses, make power, low-sulfur diesel fuel, fertilizer and chemicals. Given gasification's strategic potential, ACC believes it is especially critical for DOE to design a successful gasification commercialization program and for Congress to fully fund that program.

3. Condition funding of hurricane recovery projects on achieving maximum efficiency in the generation, transmission and use of energy.

Extensive power loss in the Gulf states after the hurricanes meant that nationally-critical energy facilities, like crude oil terminals, petrochemical facilities, natural gas processing plants, refineries and product pipelines were rendered inoperable because of a lack of electricity. The energy infrastructure in the Gulf is clearly of strategic importance to the United States. Given the energy infrastructure's dependence on electricity, it is in the national interest for that infrastructure to be supplied by highly reliable, robust and resilient sources of electricity. ACC believes any federal funds made available to address the damages sustained by electric utilities should be to design and build a transmission grid in the Gulf Coast region that will ensure a reliable source of power to the many facilities that comprise a significant part of the nation's energy infrastructure.