

American Chemistry Council Statement
US Senate Committee on Commerce, Science and Transportation
Hearing on "Shale Gas Development: Meeting the Transportation, Pipeline and Rail Needs
to Renew American Manufacturing

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Mr. Chairman, on behalf of the American Chemistry Council, thank you for the opportunity to address infrastructure issues related to shale gas development.

The American Chemistry Council (ACC) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$720 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

The chemistry industry is the foundation of U.S. manufacturing and the engine of our National economy. Chemistry creates the basic building blocks for countless products that Americans rely on every day, from the packaging that keeps our food fresher longer to building products that make our homes more energy efficient to materials such as high-tech composites that make our cars, planes, and electronics lighter, stronger and more fuel efficient. In fact, 96% of all manufactured goods made in the U.S.A. rely on chemistry.



In chemical manufacturing it all begins with natural gas. U.S. chemical manufacturers use ethane, a liquid found in natural gas, as their primary raw material, or "feedstock." Cell phones, computers, tires and carpeting all use chemistry, and all are made with ethane. The shale gas found in the western Pennsylvania and West Virginia portions of the Marcellus shale contain some of the most ethane-rich shale gas deposits found anywhere in the country. That large supply of ethane is attracting strong interest from ACC member companies.

Shale gas is a game changer for the chemistry industry. It holds the promise of a renaissance of chemical manufacturing in the United States and will dramatically improve our competitiveness globally. With today's more abundant and stable natural gas supplies, U.S. manufacturers have access to lower-cost ethane. We have a big advantage over foreign competitors who use a different process based on a raw material from crude oil, called naphtha. With the global oil prices hovering around \$100 a barrel and U.S. natural gas under \$2 per million BTUs, America's chemistry industry is in a strong competitive position for the first time in years.

The news is full of announcements of U.S. investments, new ethane cracking plants, production expansions and restarts, increased exports of American goods and the positive impacts on many industries that rely on chemistry and plastics – including auto manufacturing, construction, agriculture, health care, and technology. Recently, Shell Chemical announced that it is taking the next step in considering a new world-scale ethane cracker – the first in the U.S. in more than a decade. It's yet another sign of expansion in the domestic chemistry industry through the promise of shale gas.

Shale gas could create hundreds of thousands of manufacturing jobs in areas that have been hardest hit by the recession. In fact, ACC projects that a 25 percent boost in ethane supplies could generate 400,000 U.S. jobs, \$132 billion in U.S. economic output and \$4.4 billion in local, state and federal tax revenue every year. These include direct chemical industry jobs and thousands more in our supplier industries and the sectors that support all those jobs.

In West Virginia, a \$3.2 billion investment in an ethylene production complex will generate \$4.8 billion in additional chemical industry output and would create more than 12,000 jobs in the chemical industry and its supply chain.

We were pleased to see that in his State of the Union Address, President Obama highlighted natural gas from shale as key to our energy and economic future and offered assurance that his administration "will take every possible action to safely develop this energy." He included natural gas as part of his "all-of-the-above" energy strategy.

With shale gas development poised to play an important and growing role in the country's energy strategy, the next question is: What are the best ways to ensure that America develops these resources, and does so in a responsible way? Regulations and policies around natural gas production and infrastructure development will ultimately determine whether shale gas becomes the "game changer" everyone hopes for, generating economic growth and new jobs and revitalizing U.S. manufacturing.

Robust regulatory activity is already underway at the federal and state levels. Nine separate federal agencies are considering policies or regulations related to hydraulic fracturing. The U.S. EPA alone is considering three major regulatory proposals related to fracturing operations. The federal Bureau of Land Management has proposed a rule that mandates, among other things, 30-day advance notice and approval for specific fracturing fluids to be used at wells. Multiple bills in Congress would require a larger role for the federal government in regulating shale gas development. Numerous states have already updated their regulations, or are in the process of doing so.

For chemical manufacturing, we believe the U.S. needs to capitalize on shale gas as a significant domestic energy source while ensuring that we have appropriate regulatory policies to protect our water supplies and our environment.

We support state-level oversight of hydraulic fracturing, and we are committed to transparency regarding the disclosure of the chemical ingredients of hydraulic fracturing solutions, subject to the protection of proprietary information. We oppose outright bans on shale gas production or the hydraulic fracturing process.

Many states are already paving the way in developing regulations. Some states have implemented a mandatory chemical disclosure system that works – disclosing relevant information while appropriately protecting confidential business information. Texas, in particular, has a law that strikes the right balance and could serve as a guide for other states.

The bottom line for us is that the full potential from shale gas will only be realized with sound state regulatory policies that allow for aggressive production in an environmentally responsible manner.

We also need to harness the value of ethane as a feedstock that leads to thousands of products used in commerce on a daily basis. That means investing in infrastructure to separate ethane and other liquids from the gas supply, ship it to markets, and develop adequate capacity to store it before use. Today, the existing infrastructure and pipeline capacity is not adequate to move ethane to market. As a result, much of the ethane-rich shale gas in the Marcellus is shut in. Fortunately, businesses are moving quickly to bring ethane infrastructure to the Marcellus and we expect to see ethane moving to market by the end of next year.

We also expect chemical companies looking to invest in new petrochemical capacity to continue taking a hard look at West Virginia as the site for a future world-scale petrochemical complex. West Virginia hosts an abundant supply of fuel and feedstock, it has excellent road, rail and river transportation networks, a skilled workforce, and is within 500 miles of the primary US markets for petrochemicals and plastics. The state's rail networks also make it an attractive platform from which to ship plastic pellets and sheet to Atlantic ports for shipment to Europe and elsewhere. We believe West Virginia makes an excellent fit as the potential home to at least one of the petrochemical complexes that will be built in the US in the coming years.

In closing, we agree with the President that "the United States has a huge opportunity at this moment to bring manufacturing back." Delivering on the promise of shale gas means that the regulatory and financial environment to fully develop the resource – including the development of the necessary infrastructure – must not impose needless barriers. By making the most of shale gas, we can support new manufacturing capacity here in the United States, good high-paying jobs and economic growth and prosperity for years to come.