Statement for the Record
Cal Dooley
President and CEO
American Chemistry Council
Before
Senate Energy and Natural Resources Committee
Natural Gas Roundtable on Supply and Exports
May 21, 2013

The American Chemistry Council* is pleased to comment on the critical role that abundant and affordable natural gas is playing in revitalizing the US chemical industry. The US chemical industry is highly energy intensive. We use energy inputs, mainly natural gas and natural gas liquids, as both our major fuel source and feedstock. Our ability to compete in global markets is largely determined by the price and availability of natural gas and natural gas liquids.

According to the Potential Gas Committee, the nation's leading group of natural gas supply experts, the US has a potential natural gas supply of 2,384 Trillion Cubic Feet, well more than a hundred years of continuous supply. What's more, the consulting firm IHS Global Insight forecasts that the US has a 30 year supply of natural gas – some 900 trillion cubic feet – that can be profitably produced at $4.00 per million BTU or less. This abundant and affordable supply of natural gas has transformed the US chemical industry from the world's high-cost producer five years ago, to among the world's lowest-cost producers today.

As a result, the US enjoys a decisive competitive advantage in the cost of producing basic petrochemicals like ethylene, ammonia and methanol. For example, it costs less than $400 a ton to produce ethylene in the US. That compares to $1200 a ton in Europe and $1700 a ton in Japan.

These structural changes in the world chemical industry are creating a profound upheaval in the global supply chain. Dozens of companies are making plans to invest in new US-based chemicals production capacity. IHS estimates more than $100 billion in new capital expenditures will be invested in the US between 2012 and 2025. The US is emerging as "the place to manufacture chemicals now" as European and Asian companies (in addition to US firms) make plans to source production in the US. Roughly half of the US chemical industry investments announced to date are from firms based abroad. The fact that such large numbers of foreign-owned companies are choosing to source their chemistry in the United States is unprecedented in recent history, and a testament to the value and affordability of America's shale gas and ethane supplies.

IHS notes that as recently as 2011, North American and Western European chemical firms both produced about 30 million tons of basic chemicals and plastics. But, as IHS says, "changes in global energy markets are having a profound impact on (global) petrochemicals markets. Thanks to tremendous supplies of low-cost natural gas, North American chemicals and plastics

production is expected to more than double to 70 million tons by 2020, while Western European output contracts to 20 million tons."

Much of the newly built chemical capacity will be used to serve export markets. IHS wrote in January (Energy and the New Global Industrial Landscape: A Tectonic Shift?), "fueled by exports, North American basic chemicals and plastics production from 2013-2020 is forecast to increase at an average rate of about 5 percent a year."

In a new report published this week, ACC examined nearly 100 chemical industry investment projects – valued at $71.7 billion – that have been announced through the end of March 2013. Our analysis found that by 2020, the announced projects can lead to the creation of 46,000 direct chemical industry jobs, 264,000 indirect jobs in supplier industries, and 226,000 "payroll-induced" jobs in the communities where all of those workers spend their wages. Additional, temporary jobs are also created during the capital investment phase between 2010 and 2020: 485,000 in construction and capital goods manufacturing, 285,000 in firms along the supply chain, and 442,000 payroll-induced jobs. The report is the third in a series studying the potential economic and employment benefits of natural gas development from shale.

Today's hearing focuses on natural gas supply and the prospects for liquefied natural gas (LNG) exports. On the subject of LNG exports, in February ACC's Board reaffirmed its support for free trade principles in the context of energy policy. ACC supports the application of existing trade rules (including WTO commitments and bilateral Free Trade Agreements). We support exports of American-made products, including Liquefied Natural Gas, and we oppose imposition of any new LNG export bans or restrictions.

LNG exports are one of several demand drivers affecting natural gas markets. Other growth markets for natural gas include power generation, industrial use, and transportation. Collectively, these markets have the potential to increase demand for natural gas by more than 14 percent (11 BCF/D) by 2020. ACC believes the fundamental solution to growing demand for natural gas is for government to increase access to public lands for natural gas development. Today, the federal government restricts access to gas resources on both onshore and offshore public lands.

A number of policy decisions will factor in whether or not the US will realize the full benefits of its vast store of natural gas. They include:

- Access to oil and gas reserves on federal, state and private lands;
- Preserving coal's important role as an energy source for baseload power generation;
- Maintaining accelerated depreciation schedules for chemical industry investments in new plant and equipment;
- Improving the ability to site, permit and build midstream infrastructure investments needed to link upstream oil and gas production to downstream chemical manufacturing facilities;

- Continuing state-based regulation of unconventional oil and gas production;

- Expanding access to foreign markets for US goods.

Thank you for providing the American Chemistry Council with the opportunity to explain how America's natural gas abundance is creating an unprecedented expansion in the US chemical industry and to emphasize the importance of implementing policies that can sustain the nation's new-found competitive advantage.

* 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 $760 billion enterprise and a key element of the nation's economy. It is the largest exporting sector in the US, accounting for 12 percent of US 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.