

U.S. Chemical Investment Linked to Shale Gas: \$204 Billion and Counting

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Shale Gas – A Game Changer for U.S. Competitiveness

After years of high and volatile natural gas prices, new domestic supplies of more affordable natural gas and natural gas liquids (NGLs) have created a competitive advantage for U.S. chemical manufacturing, leading to industry growth and new jobs. Companies from around the world are investing in new projects to build or expand their shale-advantaged capacity in the United States. Since 2010, 334 projects cumulatively valued at \$204 billion have been announced, with 53 percent of the capital investment completed or under construction, 40 percent in the planning phase, and 7 percent of delayed or unknown status. Much of the investment is geared toward export markets for chemistry and plastics products, which can improve America's trade balance. Fully 70 percent of the investment is by firms based outside the United States or includes a foreign partner.

Economic Benefits of U.S. Chemical Industry Investment

ACC examined* 334 chemical industry investment projects cumulatively valued at \$204 billion announced as of May 2019. The projects include new facilities, expansions, and factory re-starts. We analyzed permanent economic impacts as a result of ongoing increased chemical industry output made possible by lower natural gas prices and increased availability of ethane, an NGL and key chemical feedstock. Findings are summarized below.

Economic Contributions from Chemical Industry Investment in the U.S.

| From Higher Chemical Industry Output 2010-2025 (Permanent) | | | |
|---|----------------|--------------------------------|-------------------------------|
| | Jobs | Payroll (\$Billion) | Output (\$Billion) |
| Direct | 79,251 | \$9.7 | \$106.2 |
| Indirect | 351,585 | \$29.2 | \$127.7 |
| Payroll-Induced | 354,948 | \$18.3 | \$58.3 |
| Total | 785,784 | \$57.2 | \$292.2 |

Government Policies Key to Realizing the Shale Gas Opportunity

A number of policies will influence whether domestic natural gas and NGL supplies remain robust, affordable, and accessible and, in turn, whether America's manufacturing renaissance reaches its full potential. They include:

- Allowing access to oil and natural gas reserves on federal, state, and private lands;
- Continuing responsible, state-based regulations that avoid undue restrictions on production;
- Expediting the building of infrastructure, such as pipelines, to transport supplies;
- Ensuring a timely, transparent, and efficient regulatory permitting process for manufacturing projects and investments;
- Expanding access to foreign markets for U.S. goods.

*This latest analysis builds on ACC's first report, "Shale Gas, Competitiveness, and New U.S. Chemical Industry Investment – An Analysis of Announced Projects." Released in May 2013, it analyzed the 97 potential projects valued at \$72 billion that had been announced from 2010 until March 2013. Full text is at <https://www.americanchemistry.com/First-Shale-Study/>. ACC updates the figures as new projects are announced.

