



Independent Statistics & Analysis
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Administration

U.S. Natural Gas Imports & Exports 2011

July 2012



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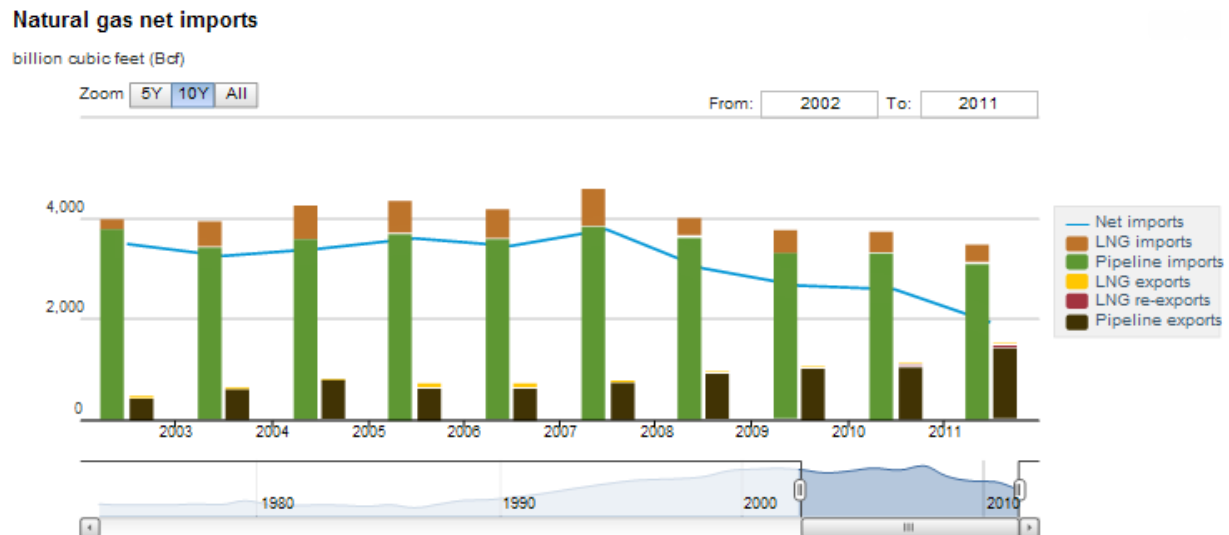
Summary

In the face of unprecedented levels of domestic natural gas production, net imports of natural gas into the United States fell 25 percent in 2011. Net imports as a percentage of total natural gas [consumption](#) decreased to around 8 percent in 2011. A combination of both higher exports and lower imports led to a decline in net imports. Based on preliminary data for 2011, domestic [dry natural gas production](#) increased by about 8 percent to 23,000 billion cubic feet (Bcf) in 2011 while total natural gas delivered to consumers increased to a lesser degree, rising by just 2 percent during the same period. This combination led to greater domestic natural gas supply and relatively low prices in the United States, thus reducing the U.S. reliance on foreign natural gas. It also widened the price differential between Henry Hub and foreign markets outside of North America, making liquefied natural gas (LNG) exports more attractive than ever before. By the end of 2011, seven [project sponsors](#) applied to the Department of Energy (DOE) for authorization to export domestic LNG to foreign countries. As of June 30, 2012, [Sabine Pass Liquefaction LLC](#) has been the only terminal that received DOE's approval to export domestic LNG to both [Free Trade Agreement and Non-Free Trade Agreement](#) countries.

Overview

Net Imports

Figure 1. Natural gas net imports



 U.S. Energy Information Administration, based on Office of Fossil Energy, Department of Energy

Strong natural gas exports and lower imports reduced net imports to around 1,949 Bcf, the lowest level since 1992.

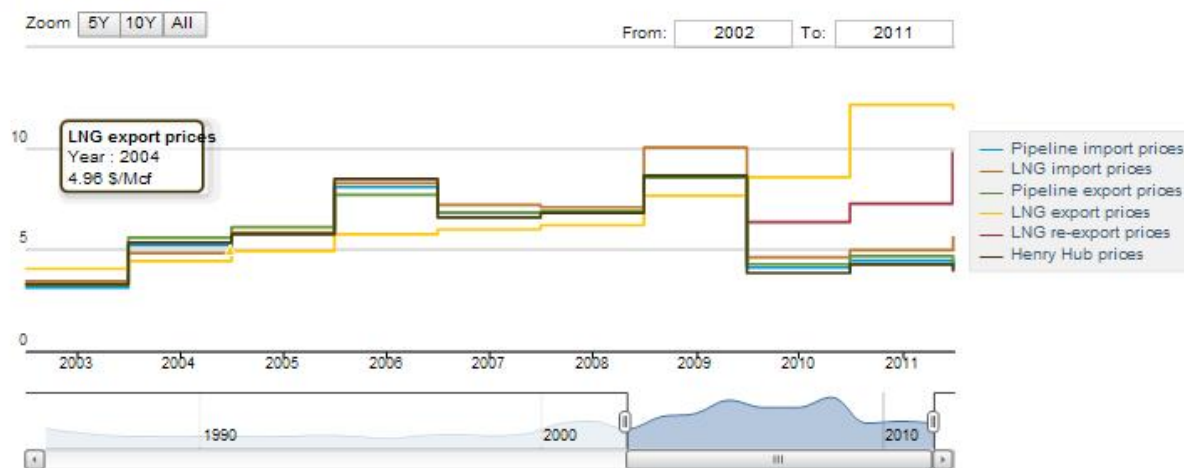
- Total imports decreased by 8 percent to 3,456 Bcf in 2011. Pipeline and LNG imports decreased by 6 percent to 3,107 Bcf and by 19 percent to 349 Bcf, respectively.
- Total exports increased by 33 percent to 1,507 Bcf in 2011. Pipeline exports and LNG re-exports increased 34 percent to 1,436 Bcf and by 55 percent to 53 Bcf, respectively. LNG exports, which exclude re-export volumes, decreased by 41 percent to 18 Bcf. Growth in pipeline and LNG re-exports significantly exceeded the decline in LNG exports.

Prices

Figure 2. Nominal natural gas import and export average prices

Nominal natural gas import and export average prices

dollars per thousand cubic feet



eia U.S. Energy Information Administration, based on Office of Fossil Energy, U.S. Department of Energy

Notes: Henry Hub prices are available from 1997 to 2011. LNG re-exports began in 2009. Except re-export prices, both import and export prices include transportation cost.

Source: U.S. Energy Information Administration, based on Office of Fossil Energy, Department of Energy

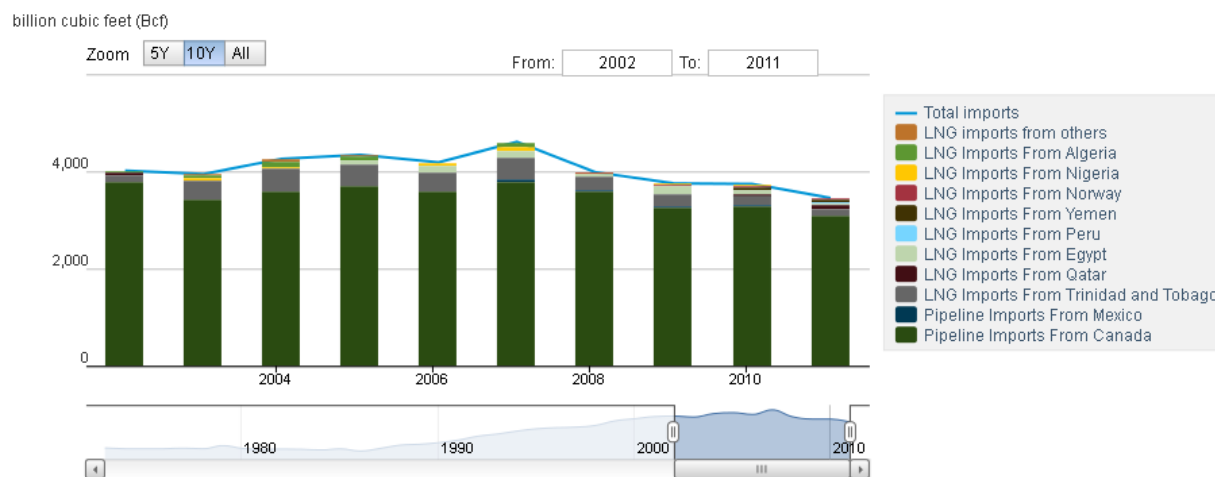
In 2011, the price differential between Henry Hub and both LNG exports and re-exports averaged about \$6.59 per thousand cubic feet (Mcf), the highest level on record. LNG prices in the international markets have increased significantly within the last 2 years mostly because LNG prices in Asia and Europe are generally linked to crude oil prices, which have increased over the same period. At the same time, U.S. natural gas spot prices at Henry Hub have decreased to about \$3.91 per Mcf. These trends contributed to the price differential increase. However, the price difference between Henry Hub and both pipeline imports and exports remained stable compared with 2010's level.

- LNG import and LNG re-export prices increase about 14 percent and 36 percent, respectively, in 2011. The price difference between LNG re-exports and LNG imports was around \$4.18 per Mcf. This price gap partially explained why U.S. LNG re-exports have increased significantly within the last 2 years.
- LNG export prices decreased slightly in 2011. The prices of domestic LNG to China were lower than the prices of domestic LNG to Japan contributed to the overall decline in the prices of LNG exports.

- Pipeline import and export prices decreased about 8 percent, which was comparable to the Henry Hub price decrease in 2011.

Imports

Figure 3. Natural gas imports



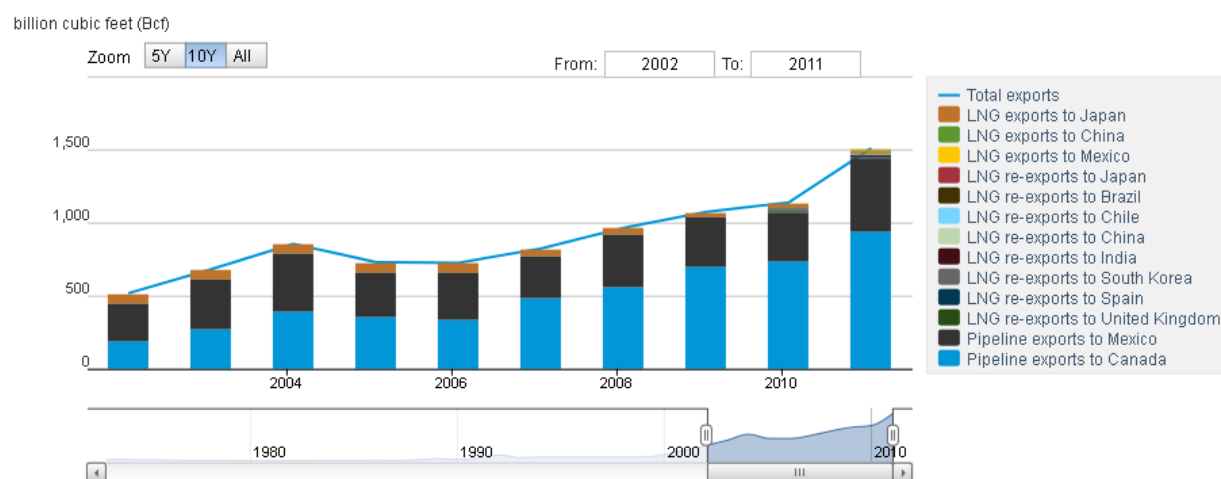
 U.S. Energy Information Administration, based on Office of Fossil Energy, U.S. Department of Energy

Gross natural gas imports decreased by about 8 percent to 3,456 Bcf in 2011, the lowest level since 1998.

- Around 90 percent of U.S. natural gas imports arrived via pipeline from Canada and Mexico. Pipeline imports from Canada and Mexico decreased by about 5 percent to 3,104 Bcf and by 91 percent to 3 Bcf, respectively.
- LNG imports decreased by 19 percent from 2010's level to 349 Bcf, the lowest level since 2002. LNG imports from Egypt, Qatar, Trinidad and Tobago, and Yemen comprised about 90 percent of total LNG imports. Lower LNG imports from Egypt, Nigeria, and Trinidad accounted for most of the total decline in 2011.

Exports and re-exports

Figure 4. Natural gas exports and re-exports



U.S. Energy Information Administration, based on Office of Fossil Energy, U.S. Department of Energy

Notes: LNG exports to Mexico were delivered by truck. Re-exports are shipments to foreign countries of LNG that were previously imported, offloaded into above-ground LNG storage tanks, and then subsequently reloaded onto tankers for delivery to other countries.

Source: U.S. Energy Information Administration, based on Office of Fossil Energy, Department of Energy

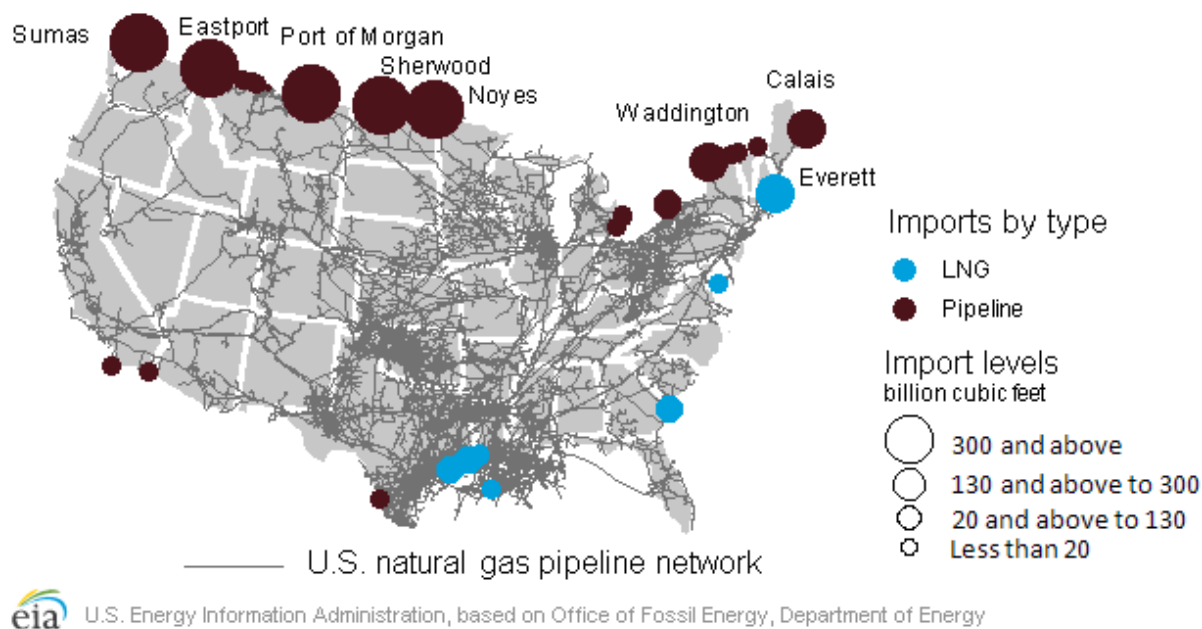
Gross natural gas exports increased by 33 percent to 1,507 Bcf in 2011, a new high. The growth in exports was driven by increased pipeline exports to Canada and Mexico.

- Pipeline exports accounted for 95 percent of U.S. total natural gas exports. Pipeline exports to Canada and Mexico increased by 27 percent to 937 Bcf and by 50 percent to 499 Bcf, respectively.
- Domestically produced LNG exports, most of which go to Japan, decreased by 41 percent to 18 Bcf. Most of the decline was due to the temporary closure of the LNG terminal in Kenai, Alaska, which is the only terminal that currently exports domestically produced LNG to countries on either side of the Pacific Rim. Prior to 2011, all domestically produced LNG for exports by vessel was shipped to Japan from Kenai, Alaska. In 2011, the United States began exporting a small volume of domestically produced LNG to China from Kenai LNG terminal.
- LNG exports to Mexico have been negligible compared to total LNG exports, however the exported volume to Mexico grew substantially from 0.2 Bcf in 2010 to 1.6 Bcf in 2011.

- LNG re-exports grew by 55 percent from the previous year's level to 53 Bcf. Additional re-exports to new destinations, China and Chile, contributed significantly to the increase.

Imports by entry point

Figure 5. United States natural gas imports by entry point in 2011

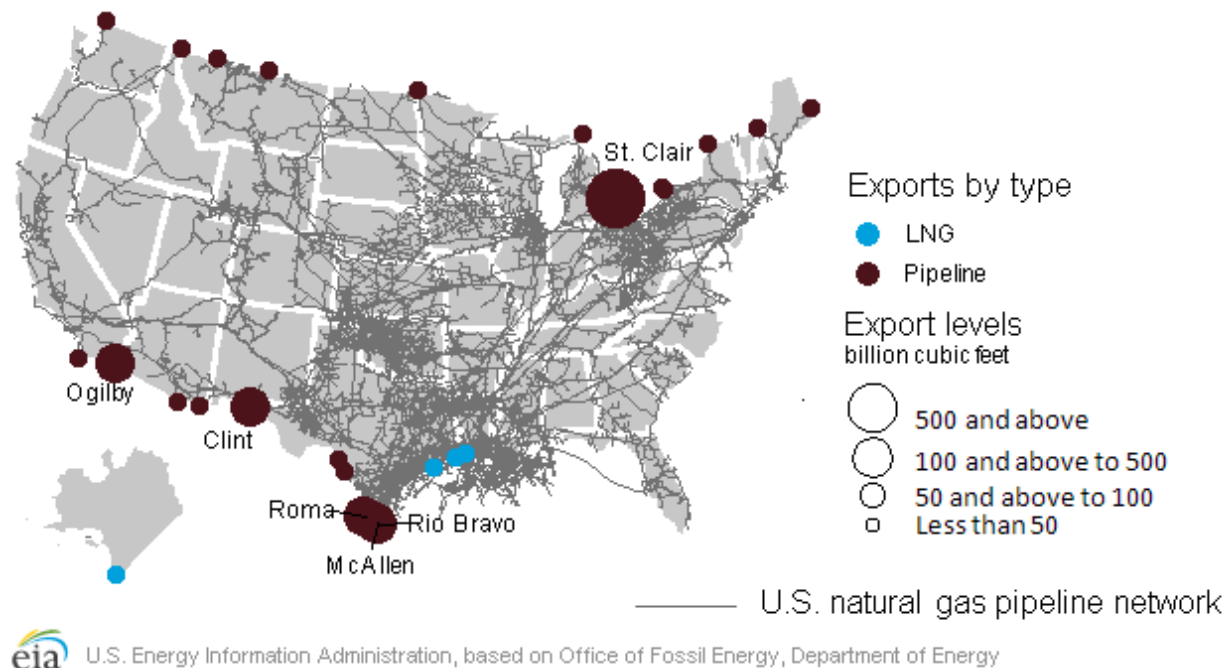


About 90 percent of all U.S. natural gas imports were received at the eight most active entry points.

- Pipeline imports from Canada through Port of Morgan, Eastport, Noyes, Sherwood, and Sumas accounted for 83 percent of total pipeline imports.
- Everett, Massachusetts, is by far the most active entry point for LNG imports in the United States, representing 39 percent of total LNG imports. Everett's imports came from Trinidad and Yemen with 93.6 Bcf and 41.6 Bcf, respectively. While total LNG imports decreased about 19 percent in 2011, LNG imports at Everett decreased by 9 percent from 2010's level.

Exports and re-exports by exit point

Figure 6. United States natural gas export and re-exports by exit point in 2011



Notes: LNG exports to Mexico were delivered by truck. Re-exports are shipments to foreign countries of LNG that were previously imported, offloaded into above-ground LNG storage tanks, and then subsequently reloaded onto tankers for delivery to other countries.

About 77 percent of all U.S. natural gas exports were delivered through the six most active entry points.

- Pipeline exports through St. Clair, Michigan, accounted for about 83 percent of total exports to Canada.
- Pipeline exports through Clint, Roma, McAllen, Ogilby and Rio Bravo, totaling 381 Bcf, represented 76 percent of total pipeline exports to Mexico.

All United States LNG re-exports were delivered at Cameron, Freeport, and Sabine Pass LNG terminals. Re-exports at Sabine Pass accounted for 65 percent of total LNG re-exports in 2011.

NOTE: Data as of April 2012 from [June 2012 Natural Gas Monthly](#)