

Graphical Summaries, Comparisons, and Trend Analysis

2011 Year in Review

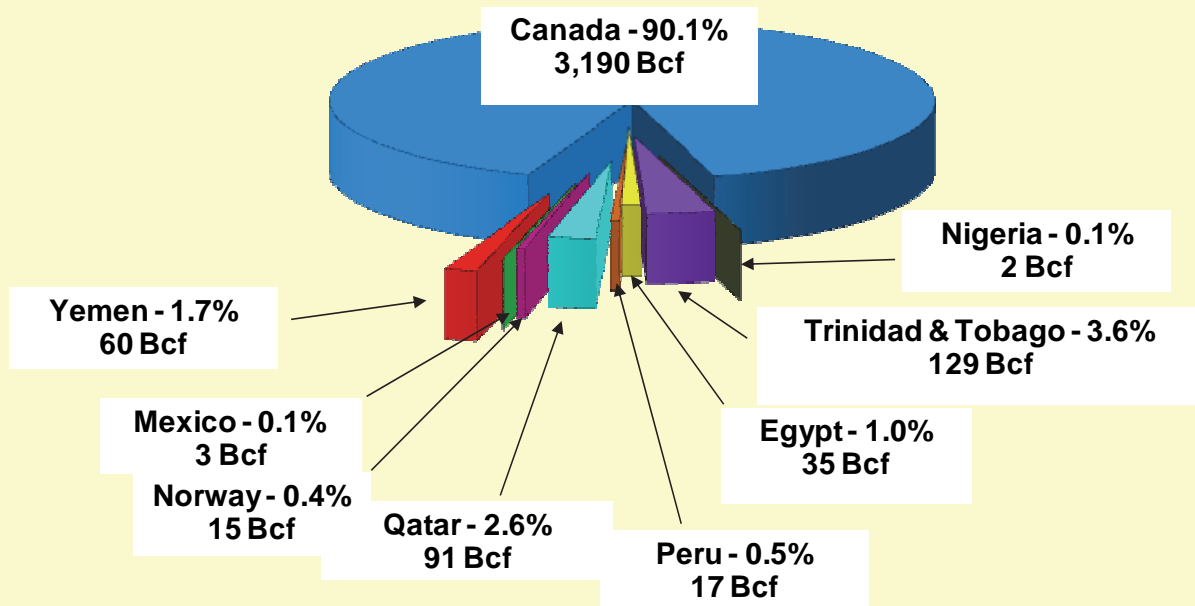
2011 vs. 2010

Long-Term Trend Analysis

2011 Year in Review

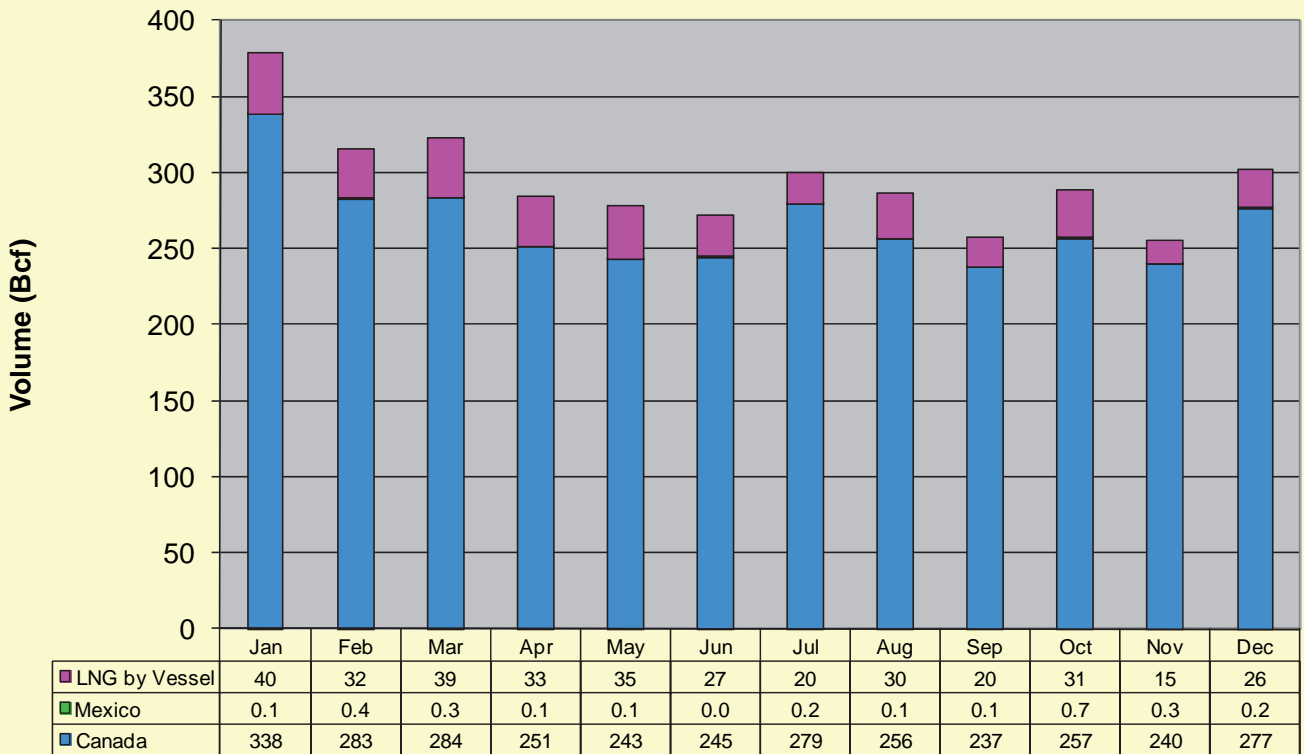
Natural Gas Imports, 2011

Total Imports - 3,541 Bcf



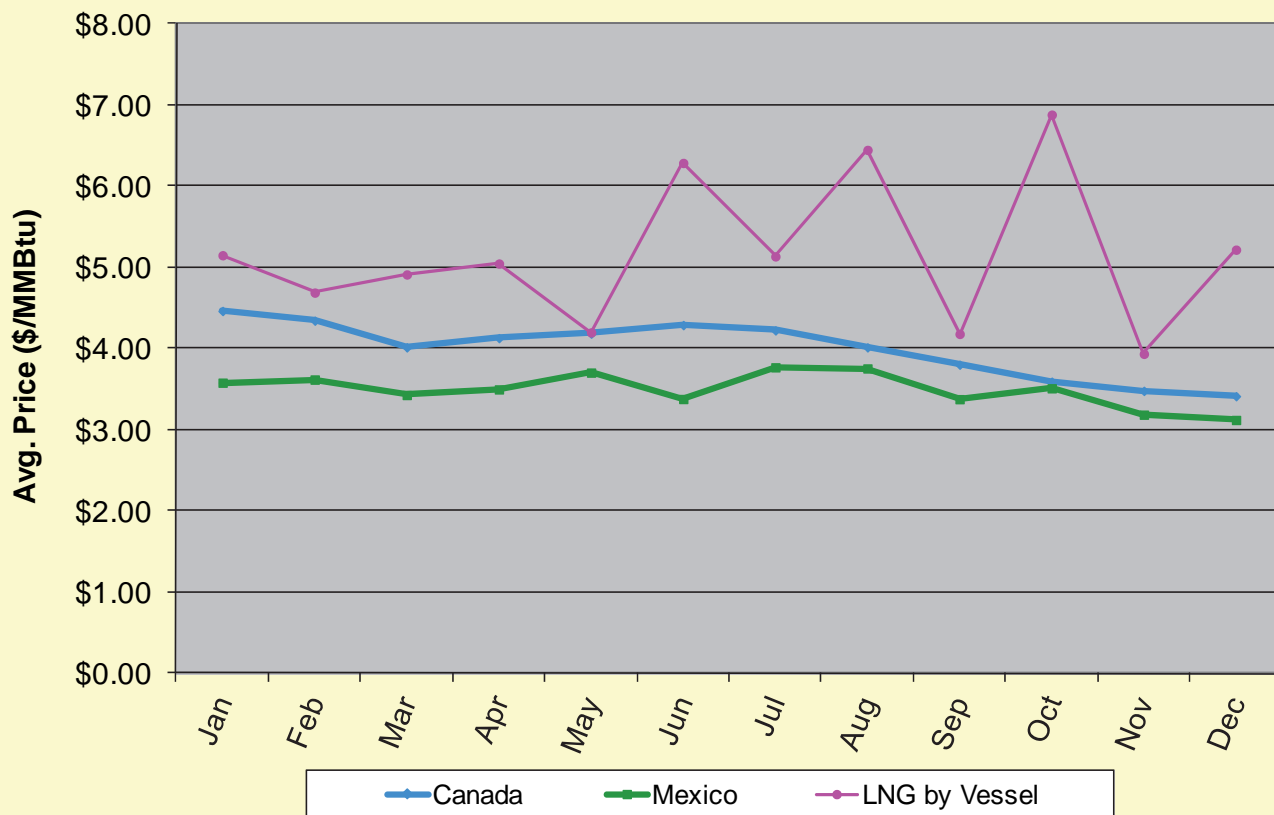
- In 2011, the U.S. imported more than 3.5 trillion cubic feet of natural gas.
- The vast majority of imports originated in Canada, continuing a long-term trend.
- Trinidad & Tobago was the next-largest supplier, providing less than 4% of imports, in the form of LNG.
- Qatar was third, with 2.6% of imports. The remaining volumes were supplied by six countries, each contributing less than 2% to the total: Yemen, Mexico, Norway, Peru, Egypt, and Nigeria.

Imports by Origin, 2011



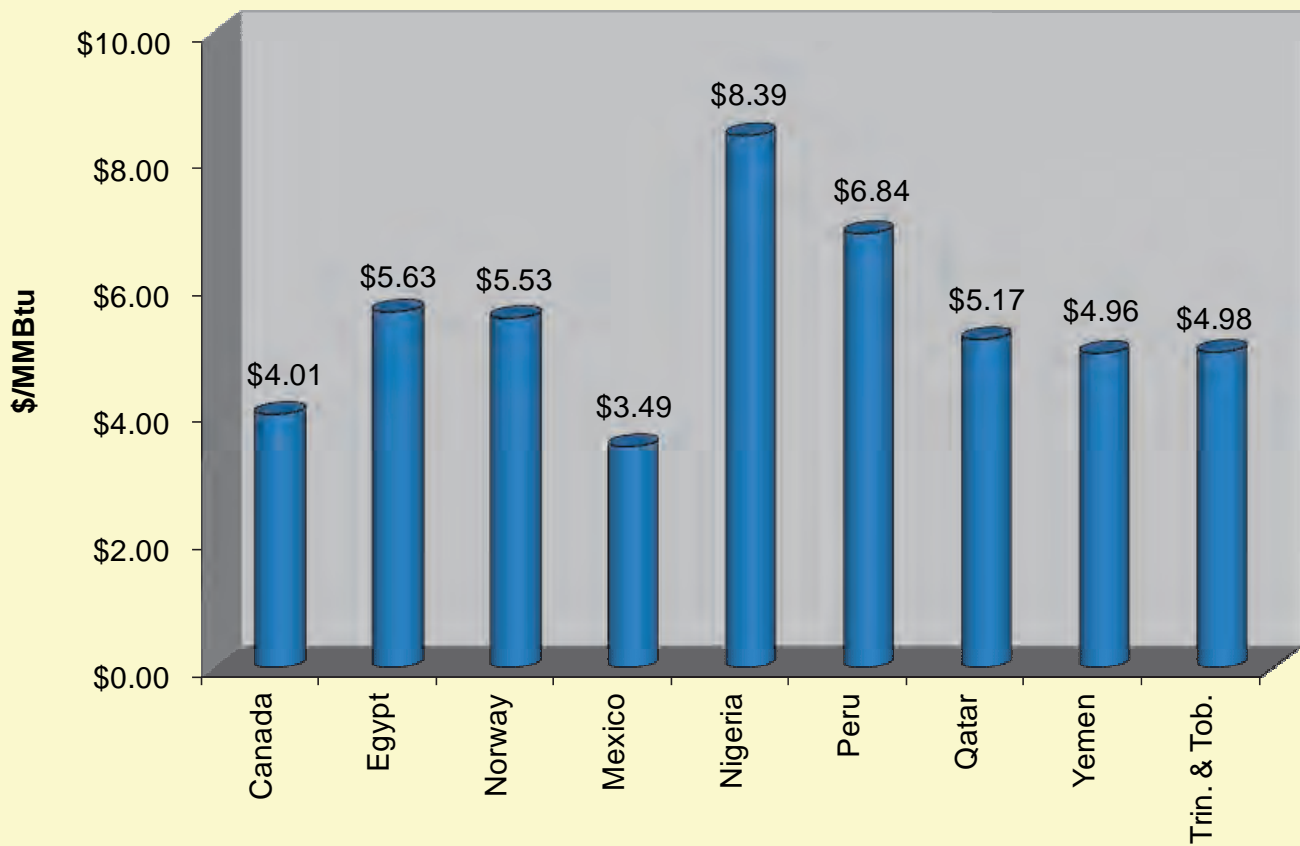
- Canada supplied the vast majority of imports not only for the year as a whole, but consistently throughout 2011.
- LNG, from all world suppliers, was the second-largest source of imports in every month of 2011, followed by Mexico.

Sales Prices of Imports, 2011



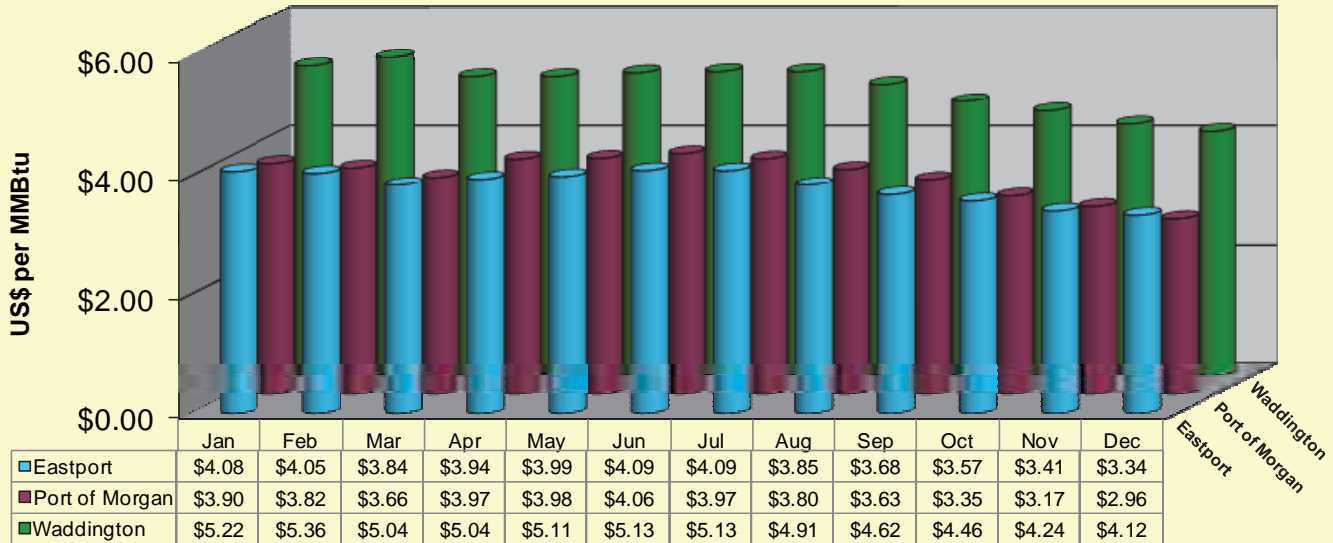
- Average prices from Canada, Mexico, and LNG suppliers were relatively close to one another during the first five months of 2011. The relationship held and even tightened between Mexican and Canadian prices for the rest of the year, but LNG import prices moved up and down, with some much higher prices.

Avg. Import Prices, 2011



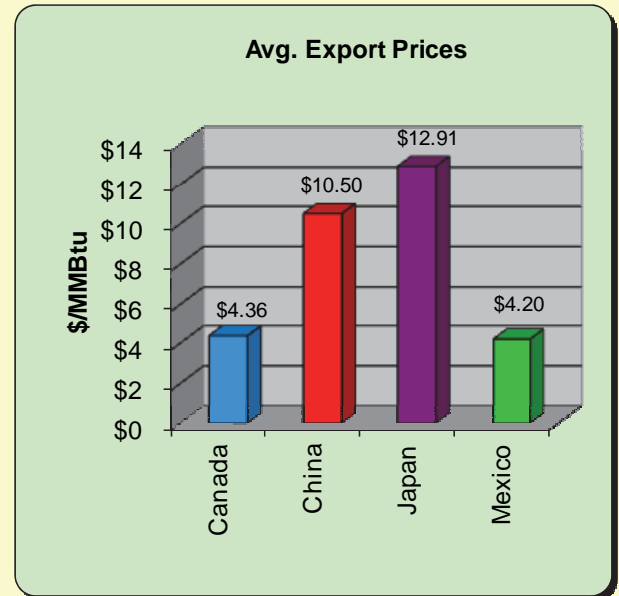
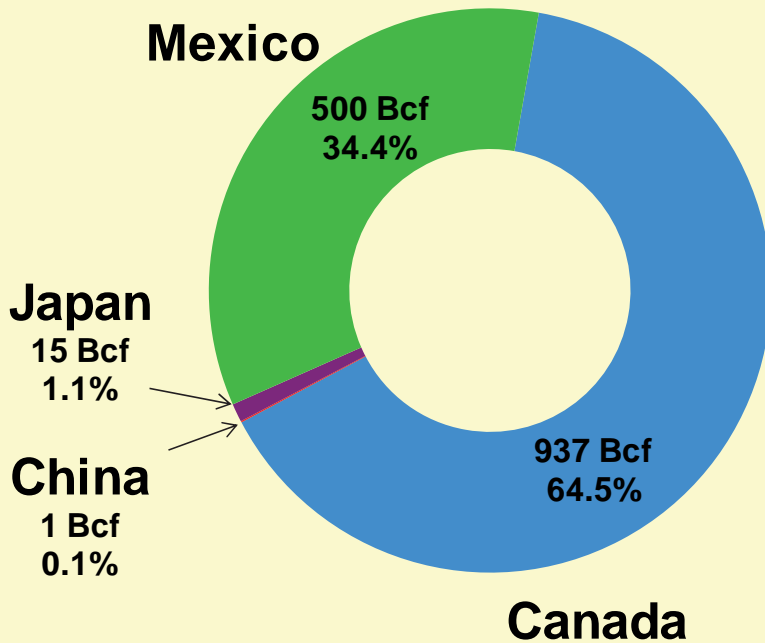
- Canadian and Mexican pipeline imports and LNG imports from seven other countries averaged in the range of \$3.49 to \$8.39 per MMBtu in 2011.
- Imports from Nigeria and Peru were significantly higher-priced than country averages of all other import prices.

Prices of Canadian Imports for Selected Points, 2011



- Prices of imports from Canada for these three major entry points held fairly steady through most of 2011, then began to fall in late summer, declining for the rest of the year.
- Among these three points, Waddington, NY had consistently higher import prices throughout the year.

Domestic Natural Gas Exports 2011

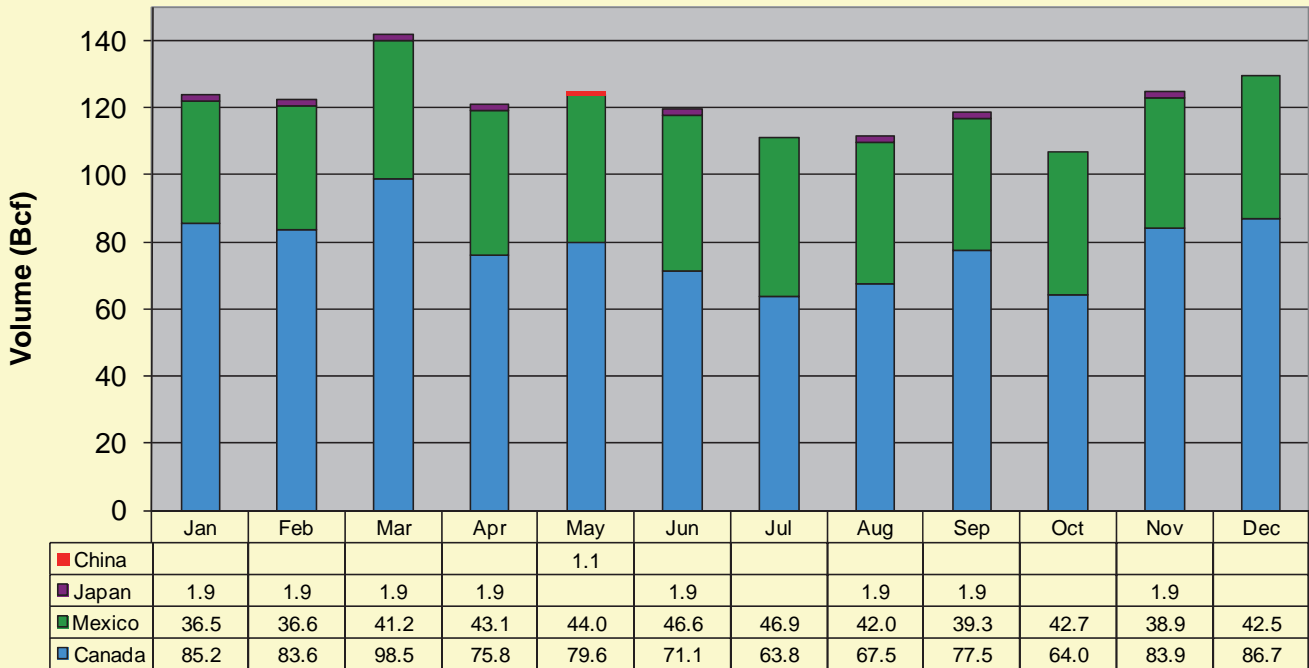


Canada and Mexico prices are at the U.S. border. Prices of U.S. gas to Japan and China are delivered prices.

Total Domestic Natural Gas Exports - 1,454 Bcf

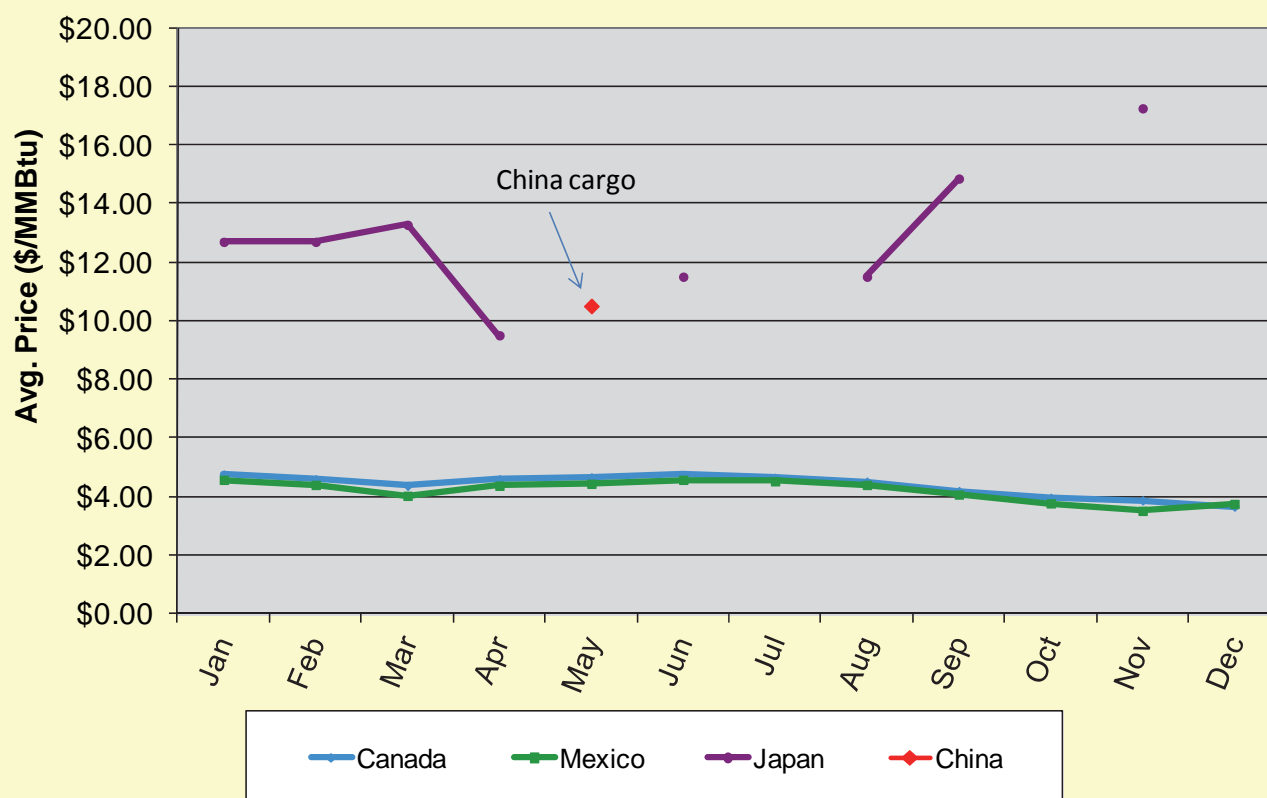
- The single largest destination for U.S. gas exports in 2011 was Canada, although export volumes were far smaller than volumes of imports from Canada to the U.S.
- The U.S. also exported a significant amount of natural gas to its other North American neighbor, Mexico.
- Japan continued to be a destination for LNG exports from Alaska. In addition, the first-ever export of domestic natural gas to China took place in 2011.
- Country-annual average prices for exports to Canada and Mexico were much lower than (delivered) LNG export prices, which is consistent with international gas market prices that are much higher than North American prices.

Domestic Exports by Country of Destination, 2011



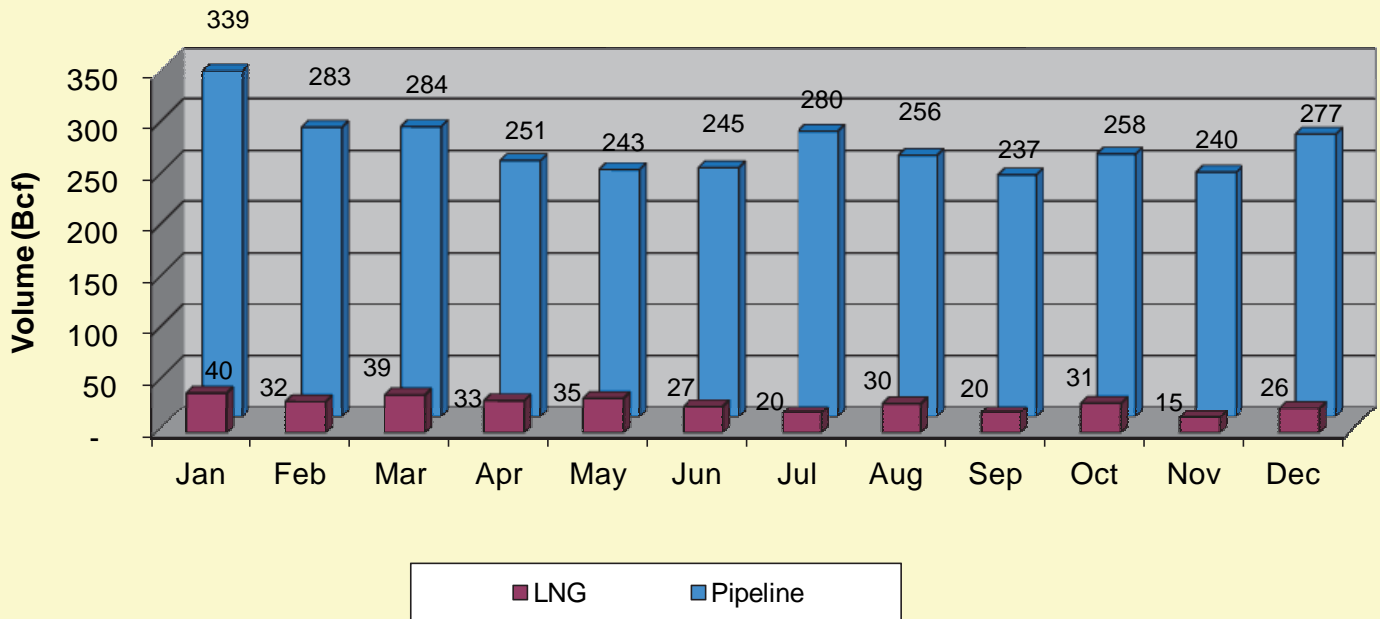
- Exports to Canada and Mexico, which are almost entirely by pipeline, showed a slight seasonal pattern, with somewhat lower volumes during the warmer months.

Sales Prices of Domestic Exports, 2011



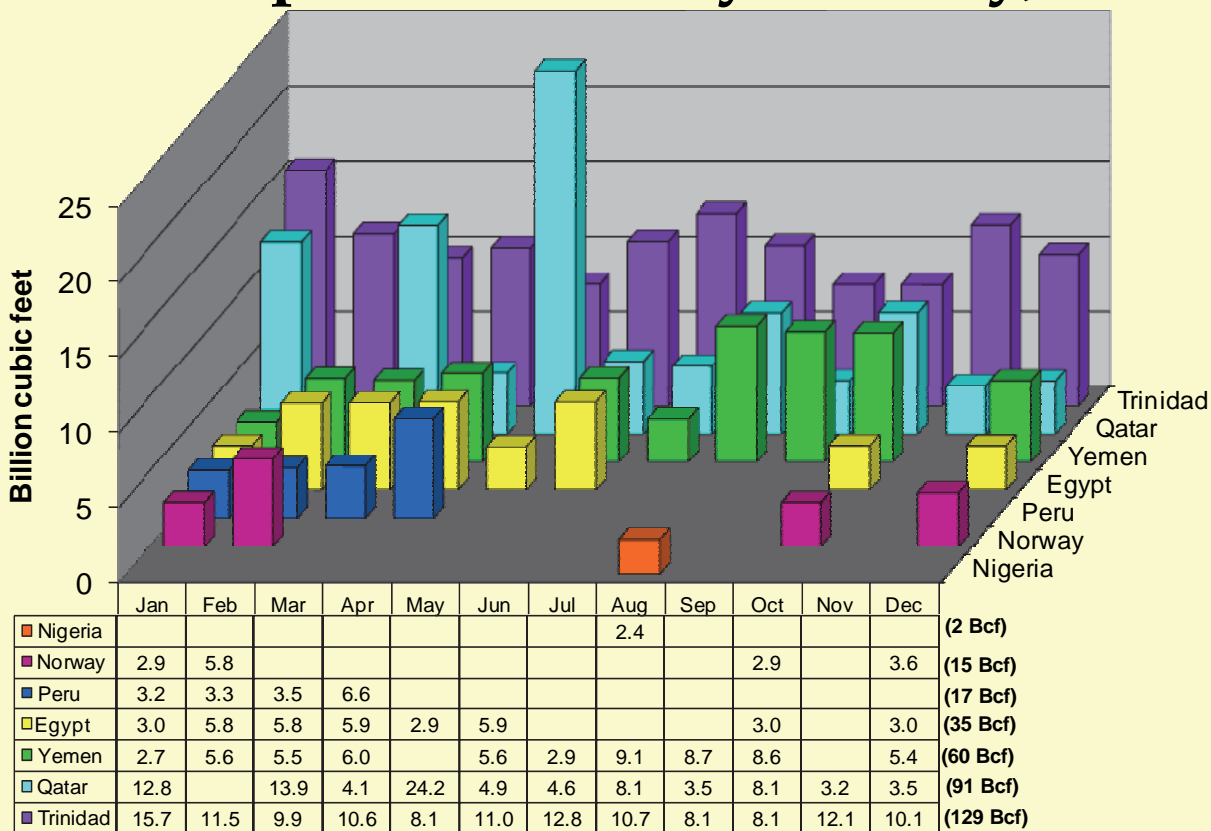
- Prices for pipeline exports to Canada and Mexico tracked closely throughout the year.
- Prices of LNG exports to Japan and China were higher than pipeline export prices throughout 2011. The discrepancy was large – frequently in excess of seven dollars per MMBtu, and reaching over \$13.00 in November. The growing discrepancy is consistent with the disconnect between North American and foreign market prices for natural gas.

Imports, Pipeline vs LNG, 2011



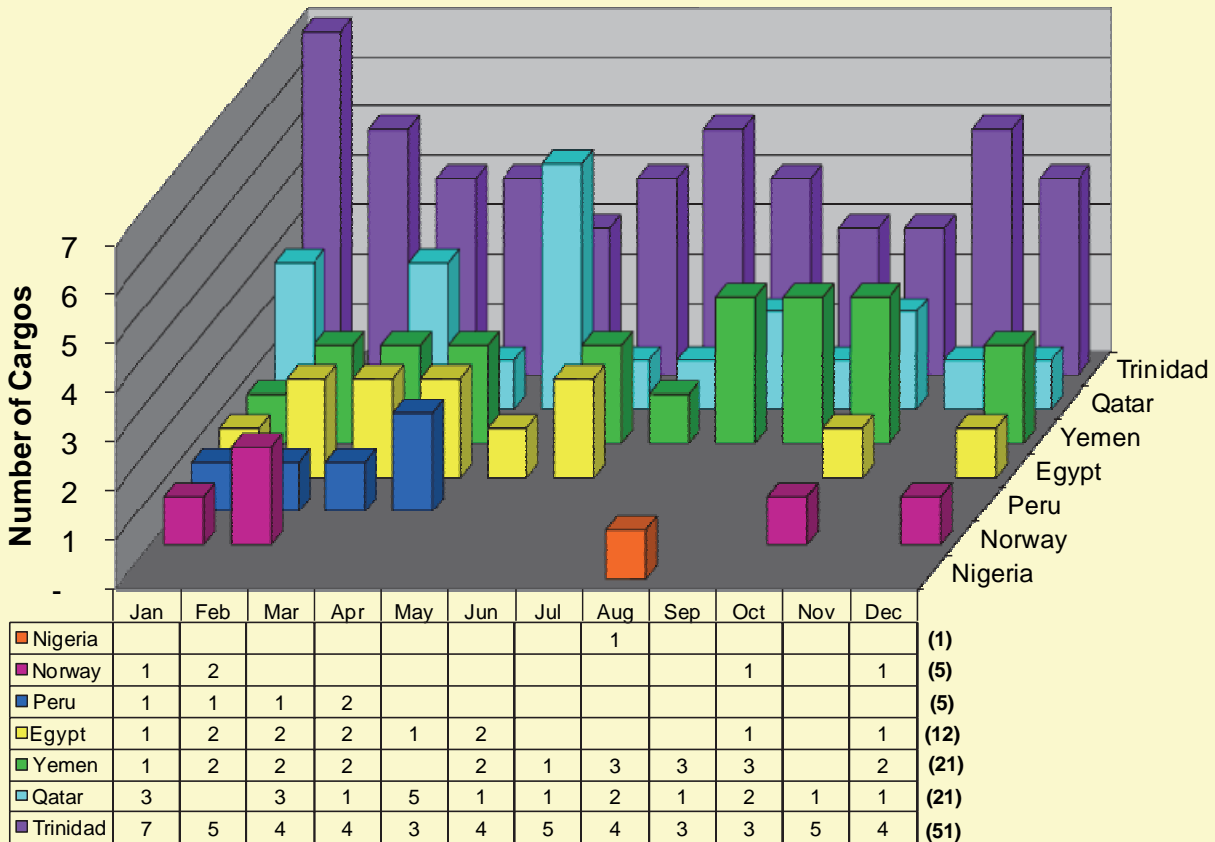
- Pipelines continued to be the major avenue for imports, with pipeline volumes far exceeding volumes of LNG.
- Pipeline imports experienced two peaks during 2011, with a higher volume tendency in the colder months. The seasonal pattern was not very pronounced, however.

LNG Import Volume by Country, 2011



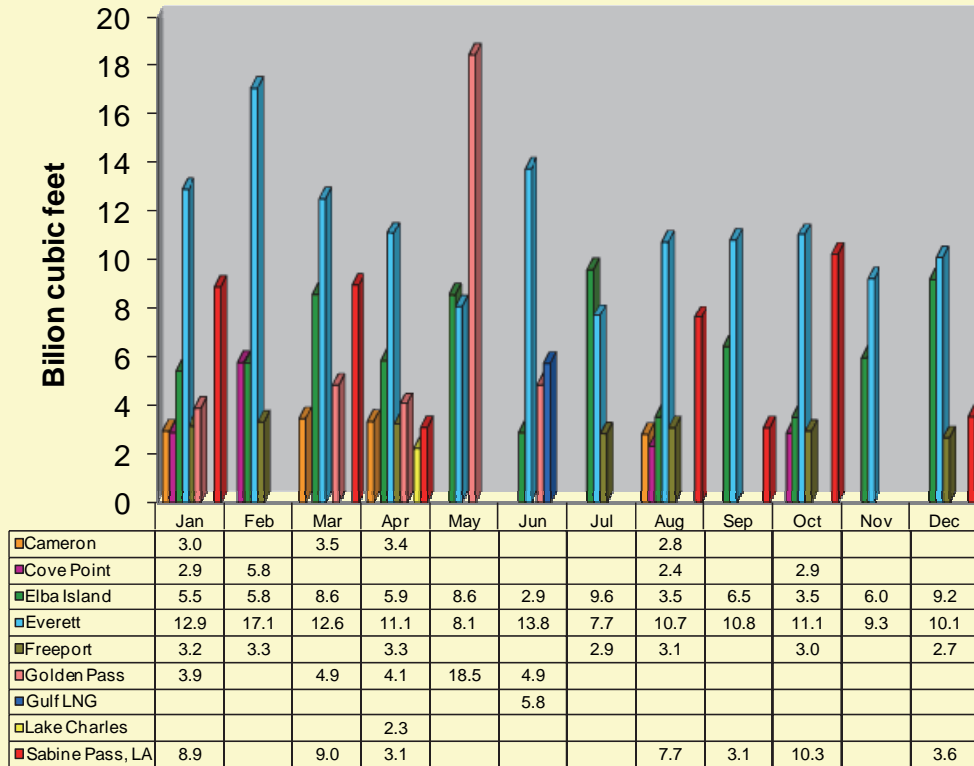
- Seven countries supplied LNG to the U.S. in 2011.
- Trinidad & Tobago was the main supplier of LNG to the U.S. in 2011, providing 129 Bcf, but was not the leading LNG supplier in every month throughout the year. Qatar, the second leading supplier overall this year, provided more LNG in March and May.
- Trinidad & Tobago was the only country providing LNG to the U.S. in each month of 2011.

Number of LNG Import Cargos by Country, 2011



- Trinidad & Tobago was the source of the largest number of LNG cargos (51) to the U.S. in 2011, originating more than twice as many shipments as any other country.
- Yemen and Qatar were tied for second, with 21 cargos each. Import volumes from Qatar this year were 50% higher than from Yemen, though, because many of the Qatar cargos were carried in the larger Q-Flex and Q-Max vessels.

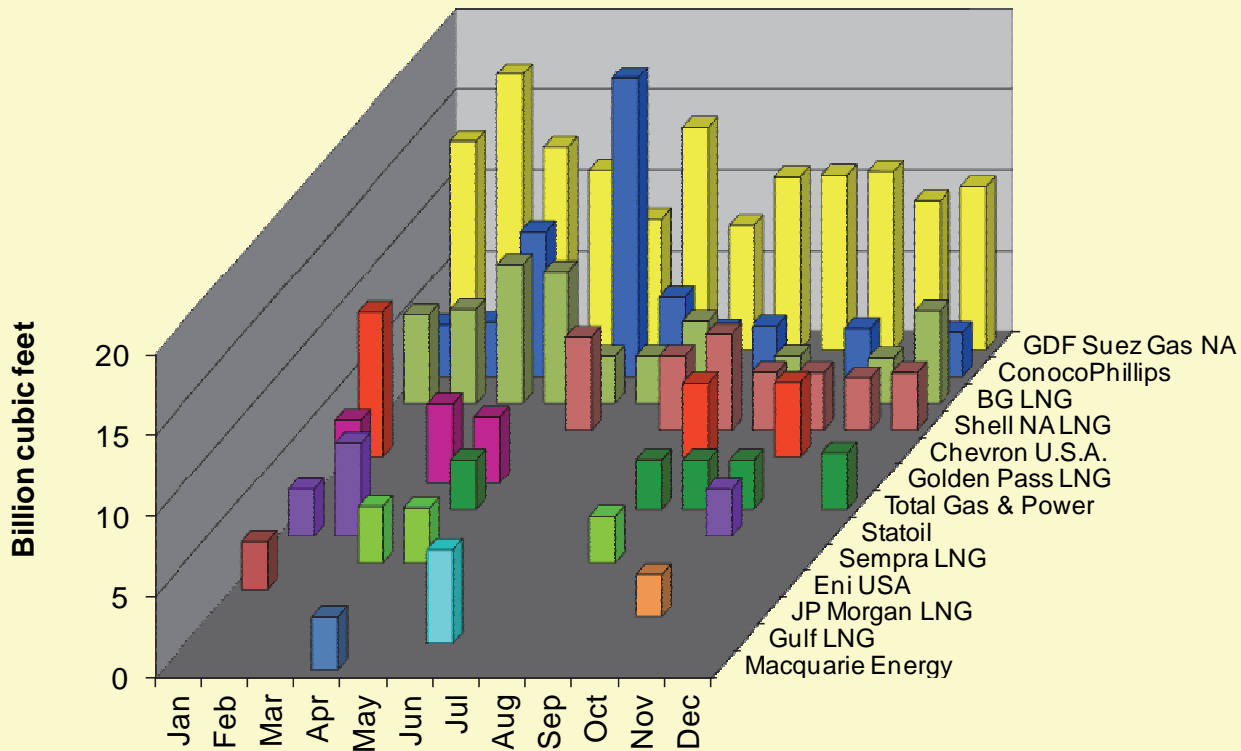
LNG Imports by Terminal, 2011



- Nine of the twelve active U.S. LNG terminals* (all of the land-based terminals) received at least one cargo during the year. Everett and Elba Island received the most LNG of all U.S. terminals in 2011. Both also received volumes in each month of the year.
- Seven other terminals received shipments during 2011, but none of these received cargos consistently on a monthly basis.
- The three offshore terminals, Gulf Gateway, Northeast Gateway, and Neptune Deepwater Port, did not receive any LNG during the year.

*Excelerate has announced plans to decommission the Gulf Gateway offshore terminal.

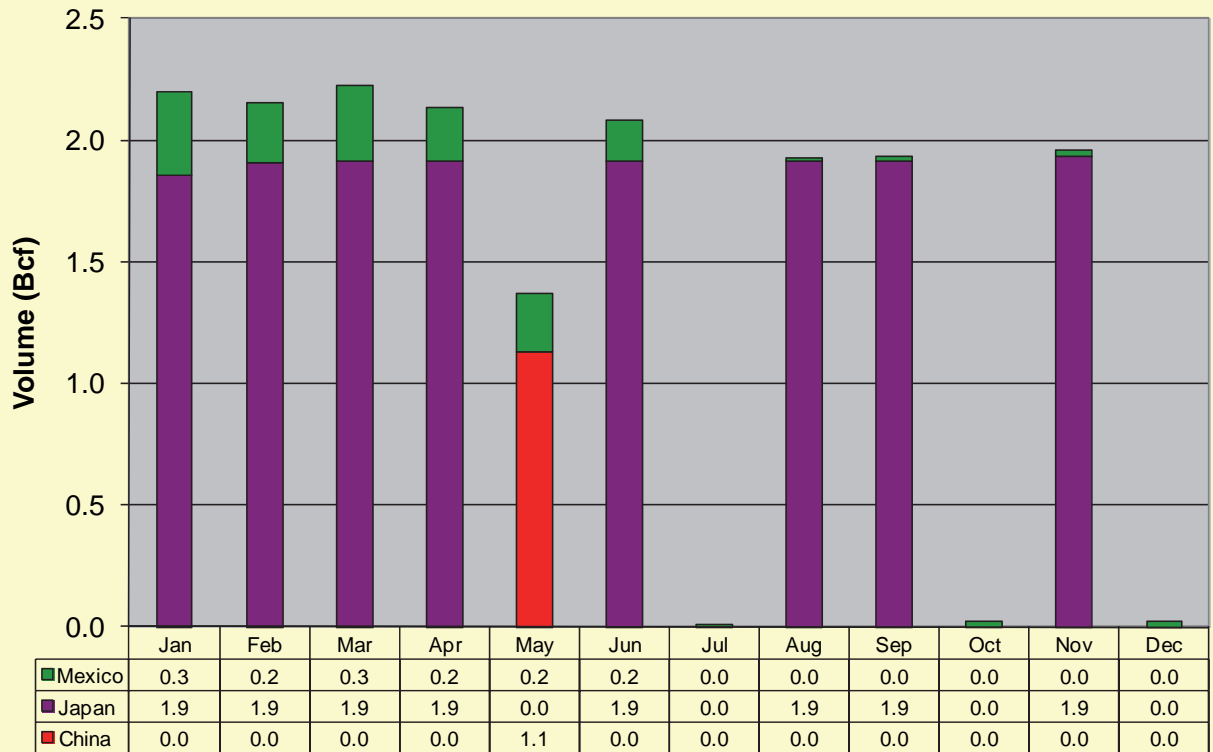
LNG Imports by Company, 2011



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
GDF Suez Gas NA	12.9	17.1	12.6	11.1	8.1	13.8	7.7	10.7	10.8	11.1	9.3	10.1	135.3
ConocoPhillips	3.2	3.3	9.0		18.5	4.9	2.9	3.1		3.0		2.7	50.6
BG LNG	5.5	5.8	8.6	8.2	2.9	2.9	5.1		2.9		2.8	5.7	50.3
Shell NA LNG					5.7		4.6	5.9	3.5	3.5	3.2	3.5	30.0
Chevron U.S.A.	8.9							4.5		4.6			18.0
Golden Pass LNG	3.9		4.9	4.1									12.9
Total Gas & Power				3.1				3.1	3.1	3.1		3.6	16.0
Statoil	2.9	5.8								2.9			11.6
Sempra LNG			3.5	3.4				2.8					9.7
Eni USA	3.0												3.0
JP Morgan LNG										2.6			2.6
Gulf LNG						5.8							5.8
Macquarie Energy				3.3									3.3

- GDF Suez was the largest LNG importer again during 2011. It was also the only company that received cargoes in each month of the year. ConocoPhillips and BG LNG were virtually tied for second place. Ten other companies imported at least one cargo during 2011.

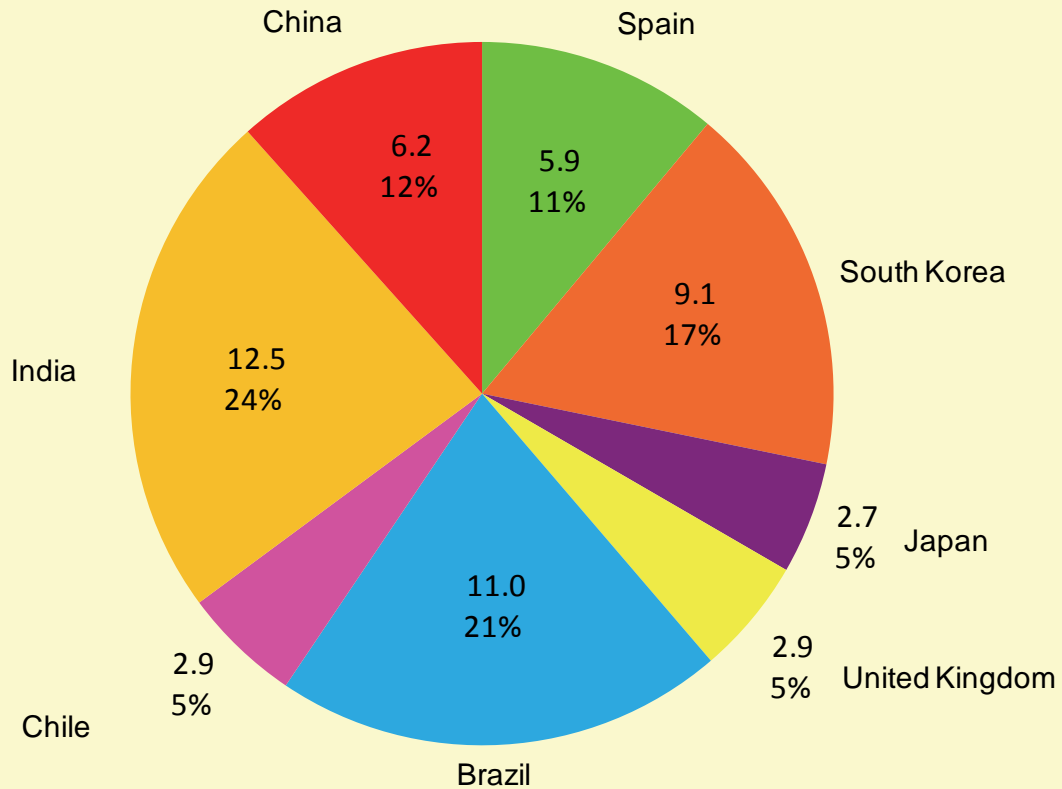
Exports of Domestic LNG, 2011



- LNG exports from Alaska to Japan continued in 2011 despite earlier discussions of discontinuing them. An export cargo was sold to Japan in most months of the year.
- The first cargo of domestic natural gas was shipped to China in 2011, in May.
- Exports of LNG by truck to Mexico were up sharply during the first half of the year, returning to historical levels during the latter half.

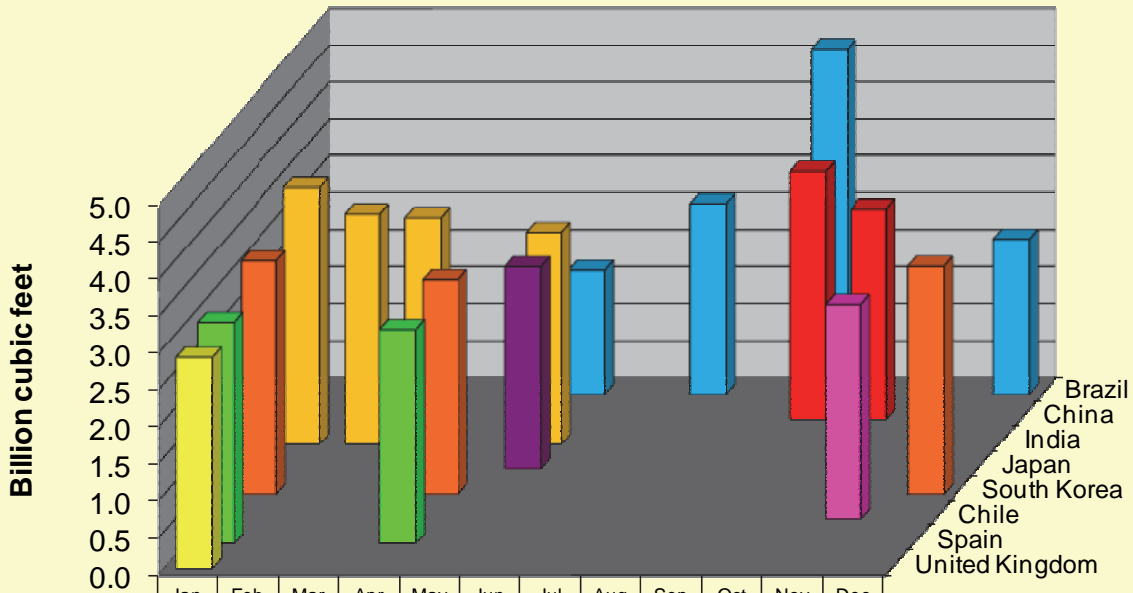
LNG Re-Exported from the U.S., 2011

(Billion cubic feet)



- Beginning late in 2009, some LNG imported into the U.S. was stored and then re-exported. During 2011, 53.4 Bcf of LNG was re-exported to Asia, Europe, and Latin America. This volume dwarfed the amount of domestically-produced LNG that was exported (18.0 Bcf).
- More re-exported LNG was shipped to India (12.5 Bcf) than any other single country, followed by Brazil (11.0 Bcf), and six other countries.

LNG Re-Export Volume by Country, 2011

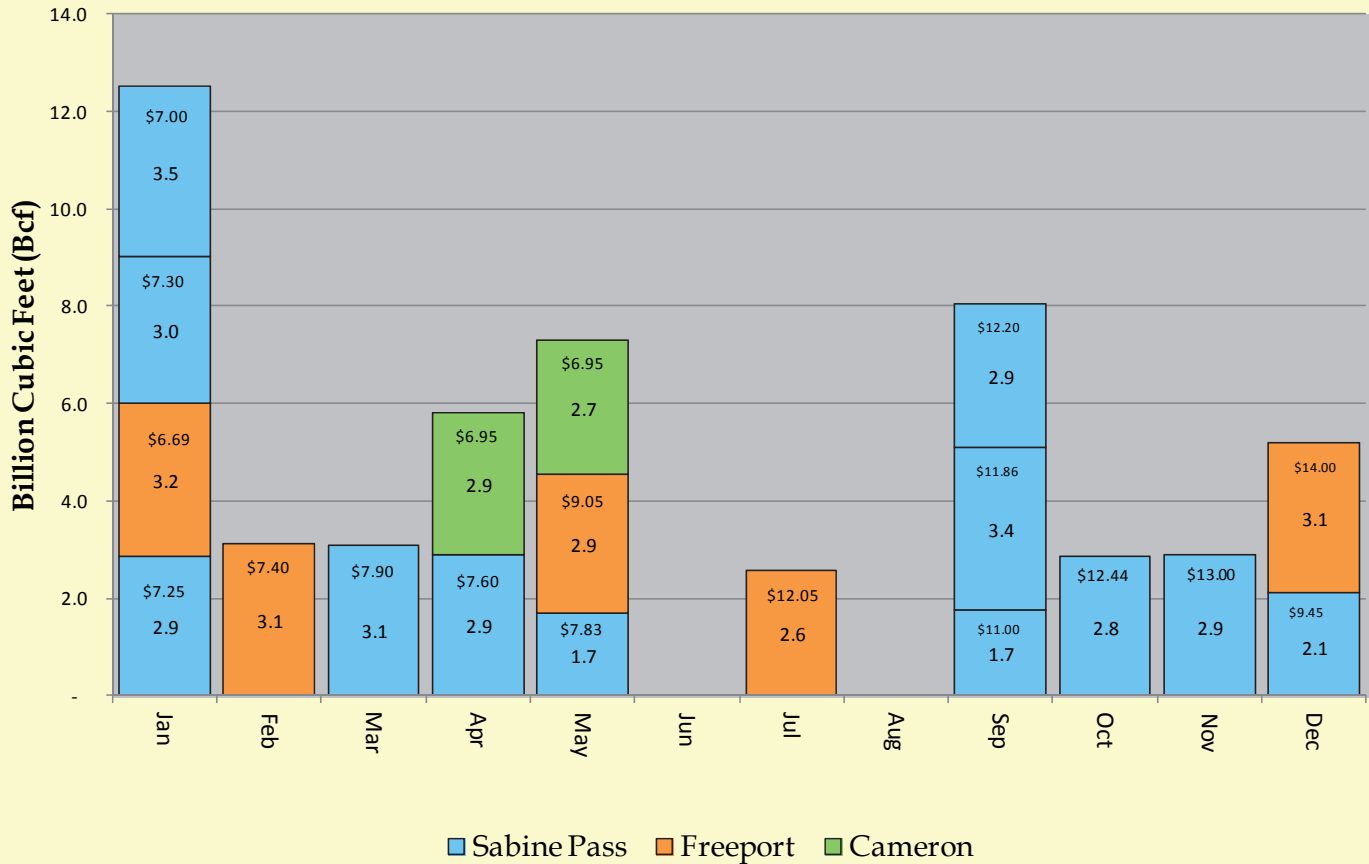


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
United Kingdom	2.9												(3 Bcf)
Spain	3.0			2.9									(6 Bcf)
Chile											2.9		(9 Bcf)
South Korea	3.2			2.9								3.1	(3 Bcf)
Japan					2.7								(13 Bcf)
India	3.5	3.1	3.1		2.9								(6 Bcf)
China									3.4	2.8			(3 Bcf)
Brazil					1.7		2.6		4.7			2.1	(11 Bcf)

- India and Brazil each received re-exported LNG from the U.S. in four different months of 2011. South Korea received cargoes in three different months, and the other five countries in one or two months each.

LNG Re-Exports from the United States, 2011

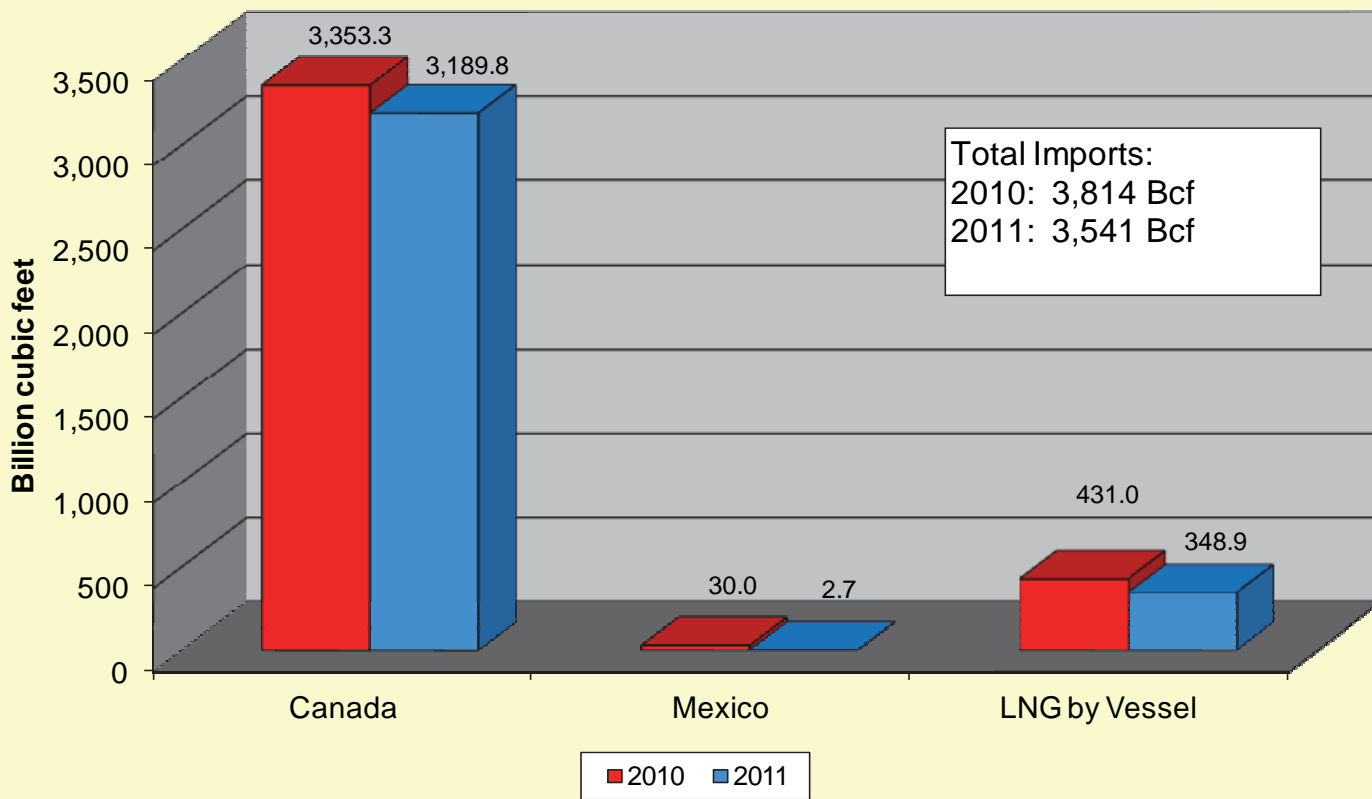
By Month, Export Terminal, Cargo Volume & Cargo Price



- Sabine Pass, Freeport, and Cameron all participated in re-exports in 2011. They were the only three terminals associated with authorizations to re-export in 2011. Sabine Pass handled the most re-export cargos (12), followed by Freeport (5) and Cameron (2).
- Re-exports occurred in 10 of the 12 months in 2011. In most months, only one terminal was active in re-export. In May, however, a cargo was re-exported from each of the three terminals.
- The lowest re-export price (all are on an FOB basis, which does not include shipping) was \$6.69 per MMBtu. Prices ranged up to \$14.00 per MMBtu.

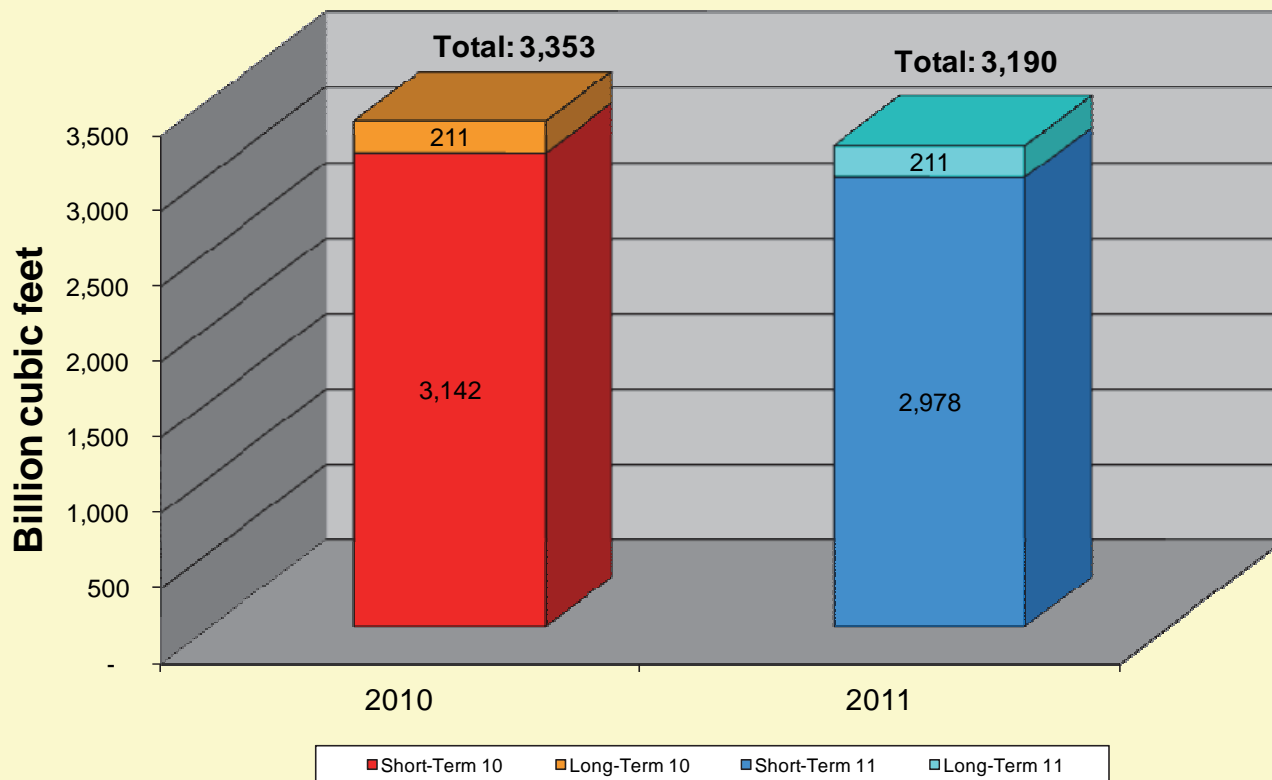
2011 vs. 2010

Natural Gas Imports by Source



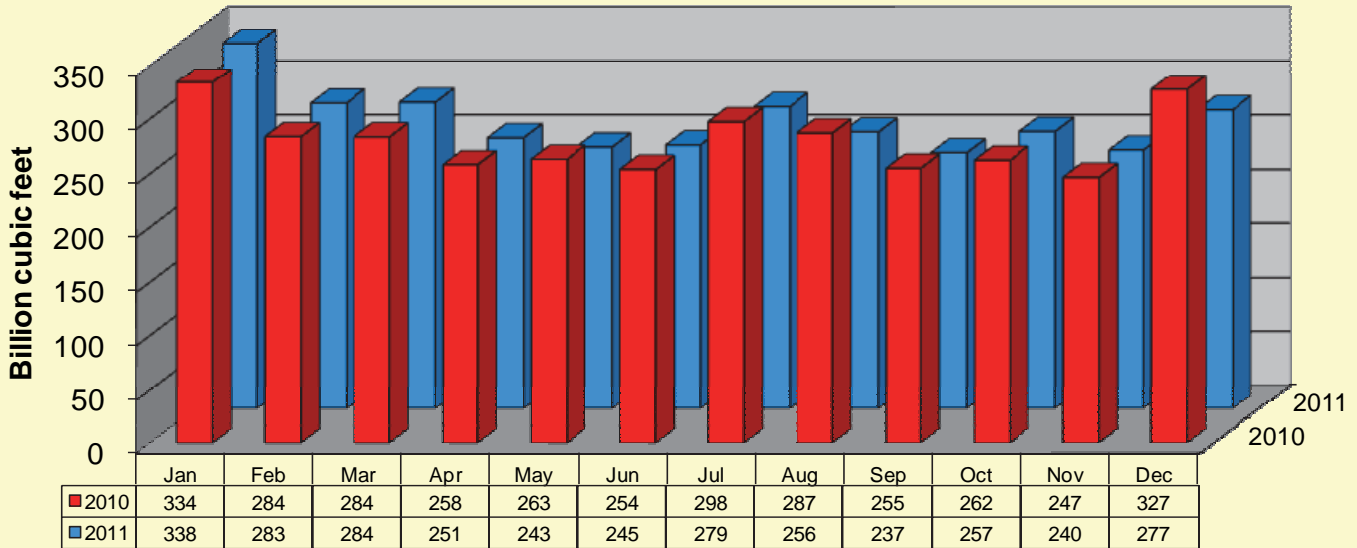
- In 2011, as in previous years, Canada was the leading source for imports into the U.S., followed by LNG by vessel, and Mexico.
- Total imports were lower in 2011 than 2010. Imports from Canada were slightly lower. LNG imports decreased by about 82 Bcf, due to low domestic gas prices, growing re-export activity, and strong interest in future domestic liquefaction and export. Imports from Mexico dropped from an already low level to only 2.7 Bcf in 2011.

Imports from Canada by Type



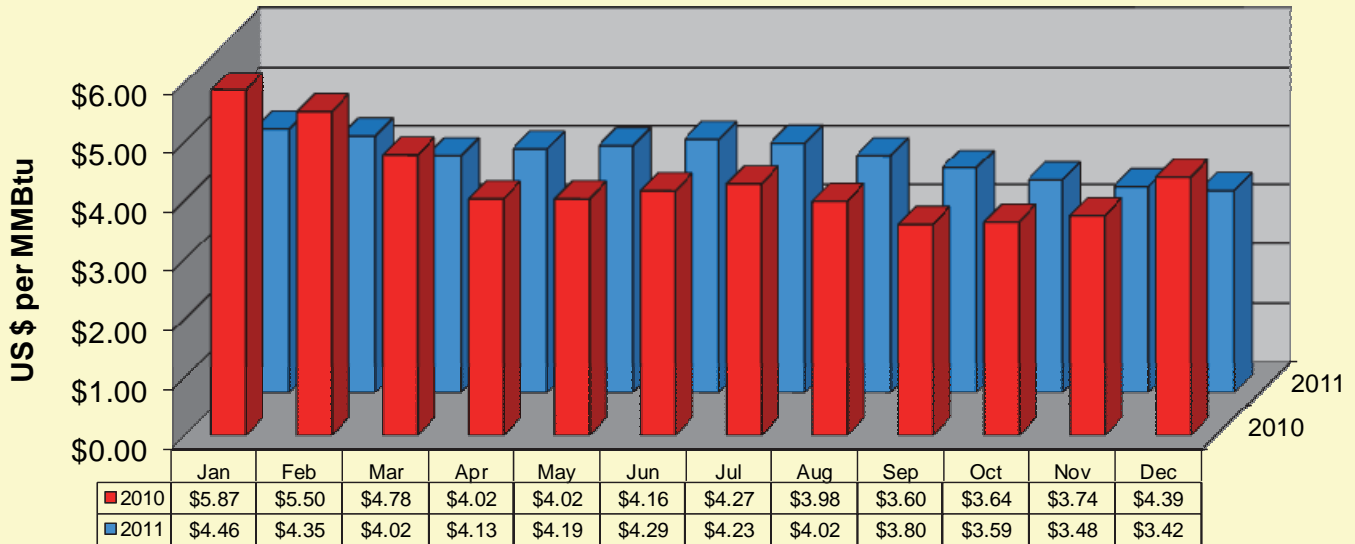
- Short-term imports from Canada were somewhat lower (by 164 Bcf) in 2011 than the previous year, accounting for all of the drop in Canadian imports.
- Long-term imports from Canada were the same in both years.

Imports to Canada by Month



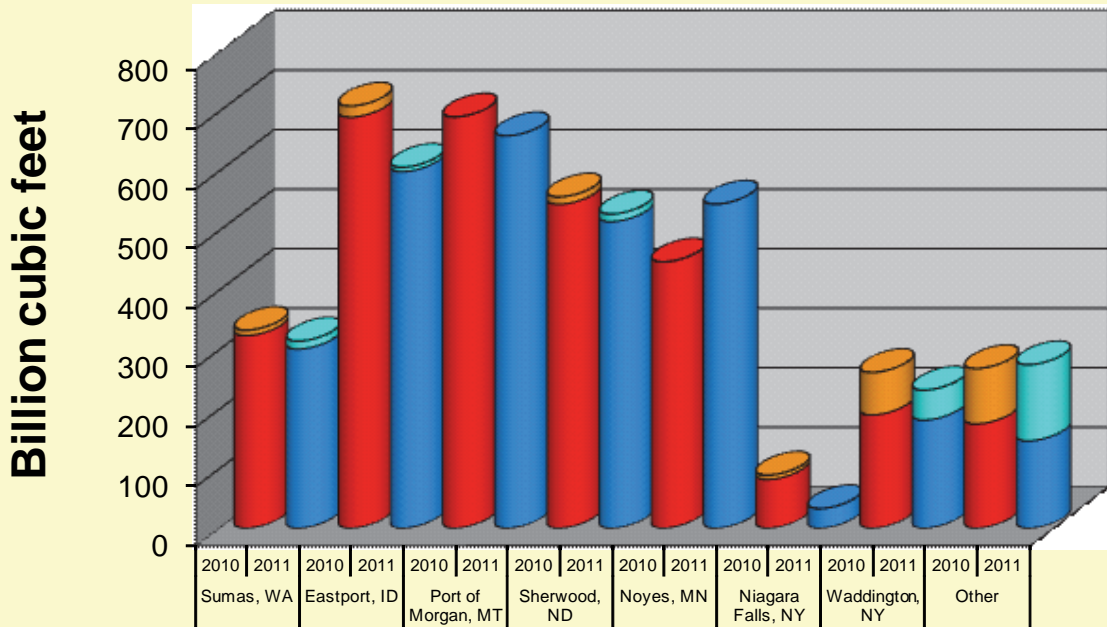
- The drop in annual imports from 2010 was spread out over the course of the year. Import volumes in 2011 were lower in almost every month than in the corresponding month of 2010.

Prices of Canadian Imports by Month



- In the first quarter and in December, average prices of imports from Canada were much higher in 2010 than in 2011.

Imports from Canada by Entry Point

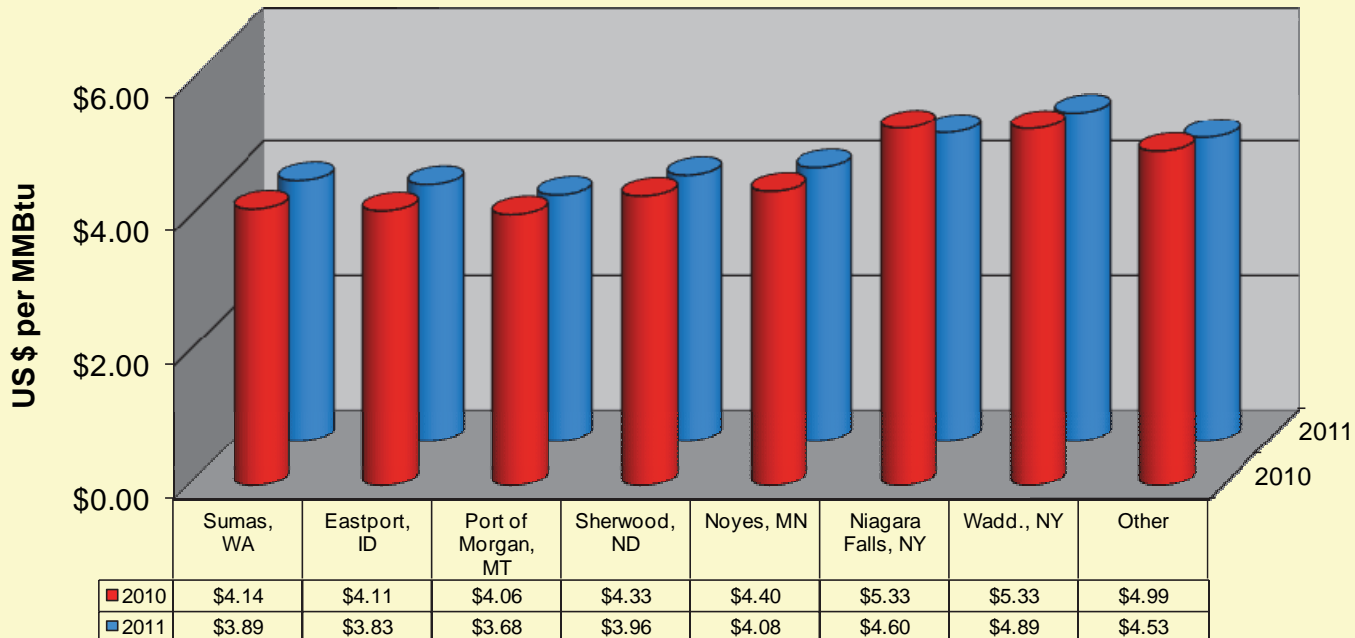


■ Short-Term 10 ■ Long-Term 10 ■ Short-Term 11 ■ Long-Term 11

		Sumas, WA	Eastport, ID	Port of Morgan, MT	Sherwood, ND	Noyes, MN	Niagara Falls, NY	Waddington, NY	Other
2010	Short-Term	323.5	690.3	690.5	544.0	447.1	81.8	190.1	175.2
	Long-Term	8.9	18.5	0.0	12.3	0.0	7.2	71.3	92.7
	Total	332.4	708.8	690.5	556.2	447.1	89.0	261.4	268.0
2011	Short-Term	300.8	598.8	658.9	514.8	544.1	32.8	181.5	146.6
	Long-Term	13.3	7.3	0.0	12.7	0.0	0.0	50.3	127.9
	Total	314.1	606.1	658.9	527.5	544.1	32.8	231.8	274.5

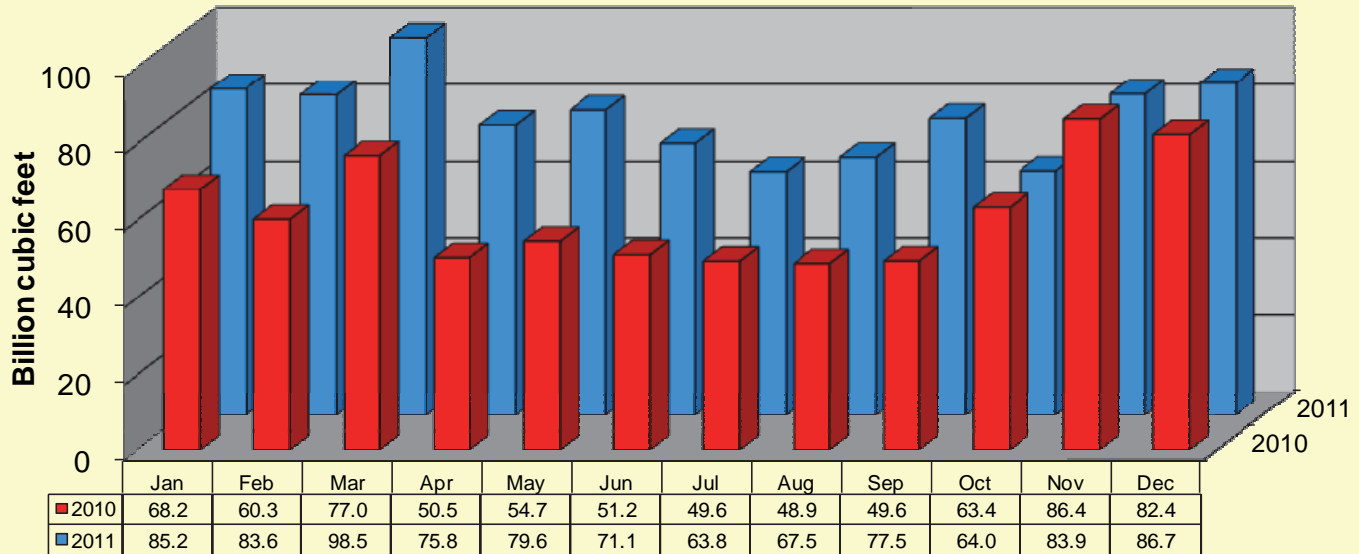
- Volumes at most of the major import points featured above were somewhat lower than the 2010 volumes. Imports were higher at Noyes, Minnesota, and collectively just slightly higher at the smaller points not featured above.
- Short-term imports dominated long-term flows at all entry points, but some points had more significant long-term traffic than others. Of those featured above, Waddington had the greatest percentage of long-term imports (nearly 22%) in 2011, as did other, smaller entry points (over 46%), collectively. Port of Morgan, Noyes, and Niagara Falls had none.

Prices of Candian Imports by Entry Point



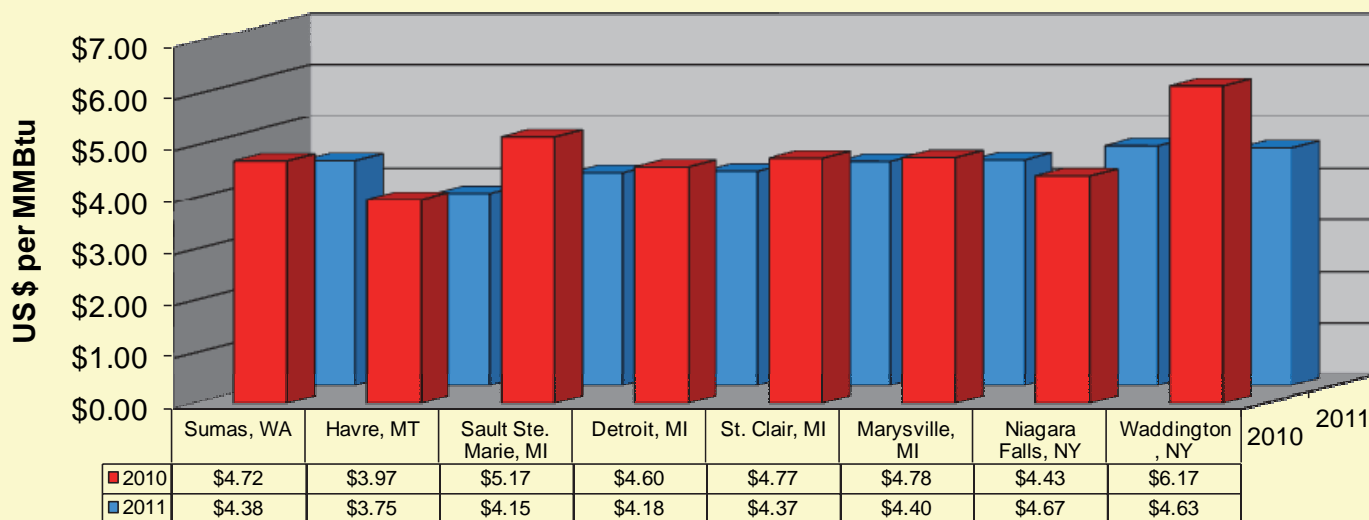
- Annual average prices were lower in 2011 than in 2010 at each entry point shown.

Exports to Canada by Month



- With the exception of November, exports to Canada were higher in every month in 2011 than they were in the corresponding month of 2010.
- During the first three calendar quarters, 2011 volumes were substantially higher – as much as 56% over the corresponding month in the previous year. In the fourth quarter, export volumes were much closer, due to a surge in exports during that period of 2010.

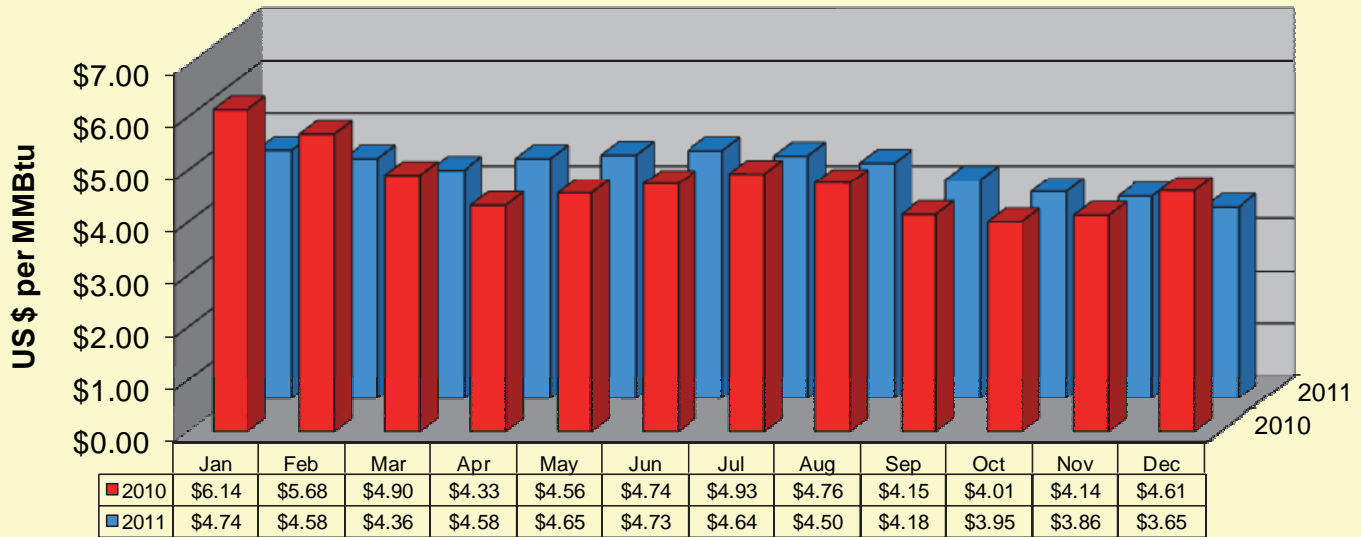
Price of Exports to Canada for Selected Exit Points



Note: These selected export points handle 99% of US gas exports to Canada.

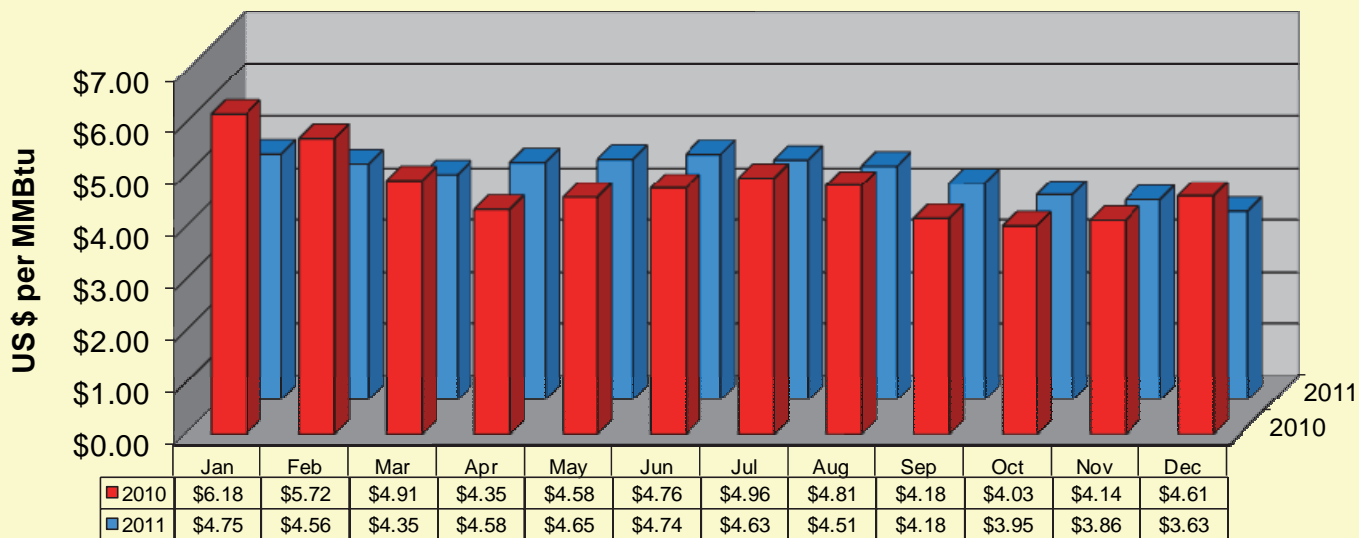
- Annual average export prices at most of the major exit points featured above were moderately lower in 2011 than in 2010.
- Export prices were down by almost 20% at Sault Ste. Marie and down by 25% at Waddington.
- The average price for 2011 was higher (by about 5%) only at Niagara Falls.

Prices of Exports to Canada by Month



- Average monthly prices of exports to Canada were lower for most of the year than the corresponding months in 2010, with the exception of April, May and September, when they were only slightly higher. The difference was largest in January, February, and December, when prices were lower by about \$1.00 per MMBtu.

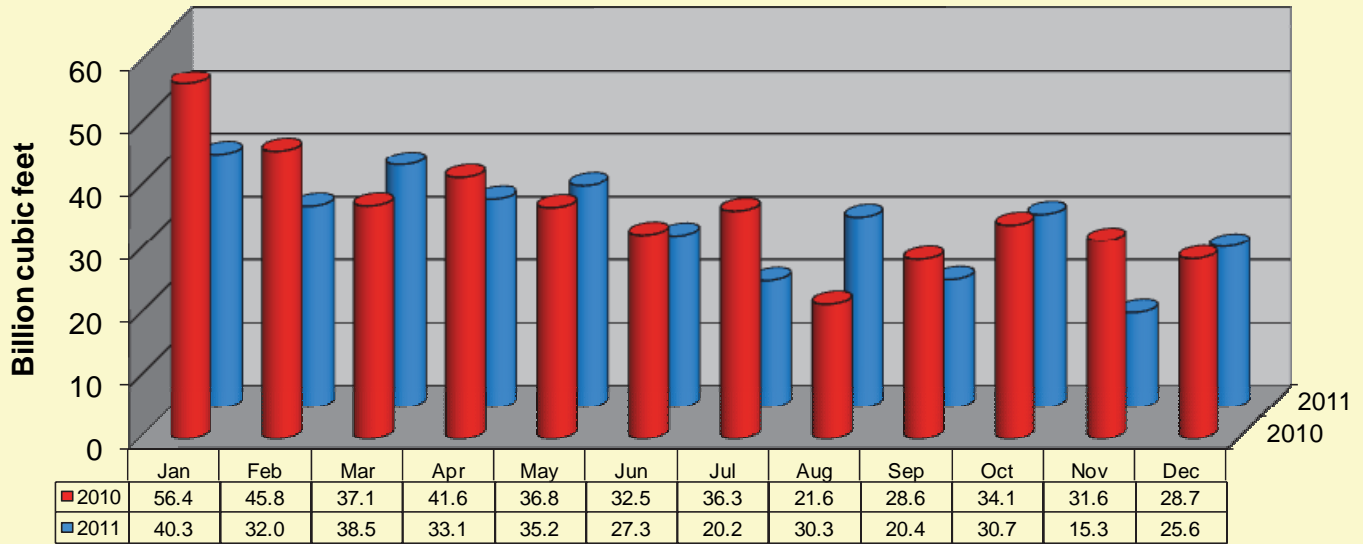
St. Clair, MI Export Prices



Note: The St. Clair export point handles nearly 80% of US gas exports to Canada.

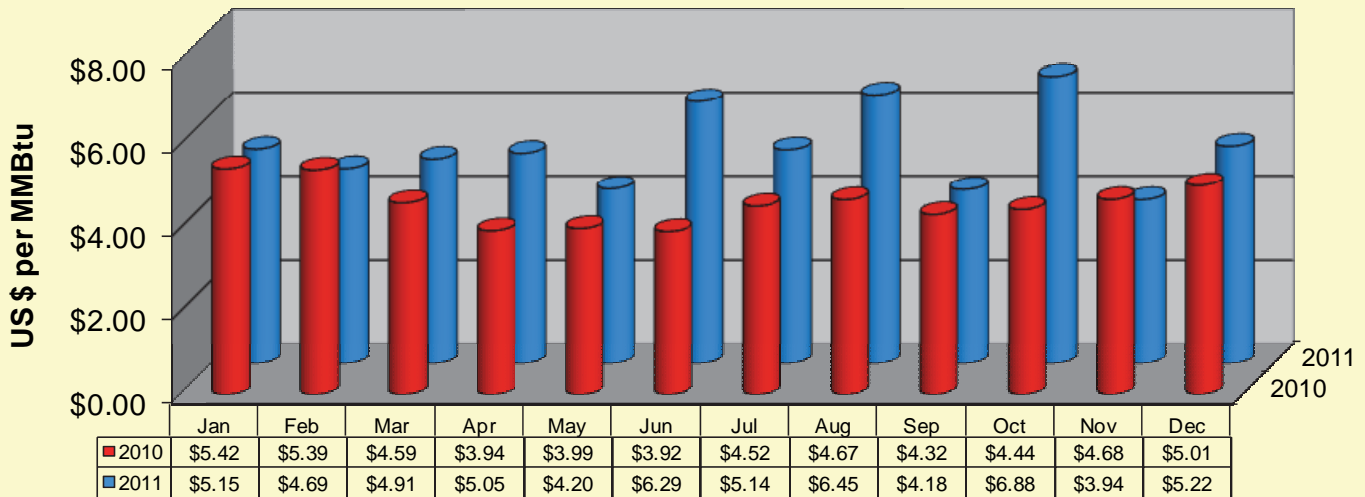
- St. Clair dominates U.S. exports to Canada, handling nearly 80% of those flows.
- As with prices of exports to Canada overall, average prices of exports to Canada through the St. Clair, Michigan exit point were lower in most months of 2011 than the corresponding months in 2010.

LNG Imports by Month



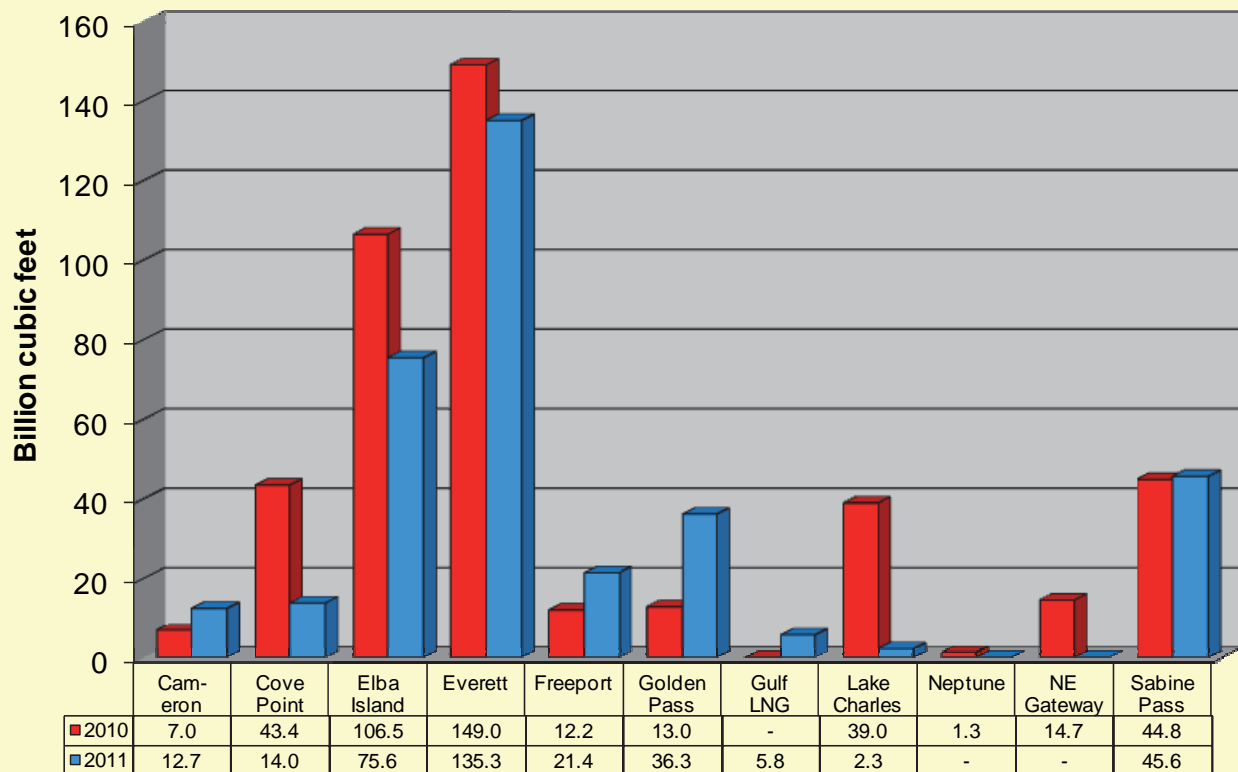
- LNG imports were lower in 2011 than in 2010 in most months, except in March and August, when imports were higher in 2011.

Prices of LNG Imports by Month



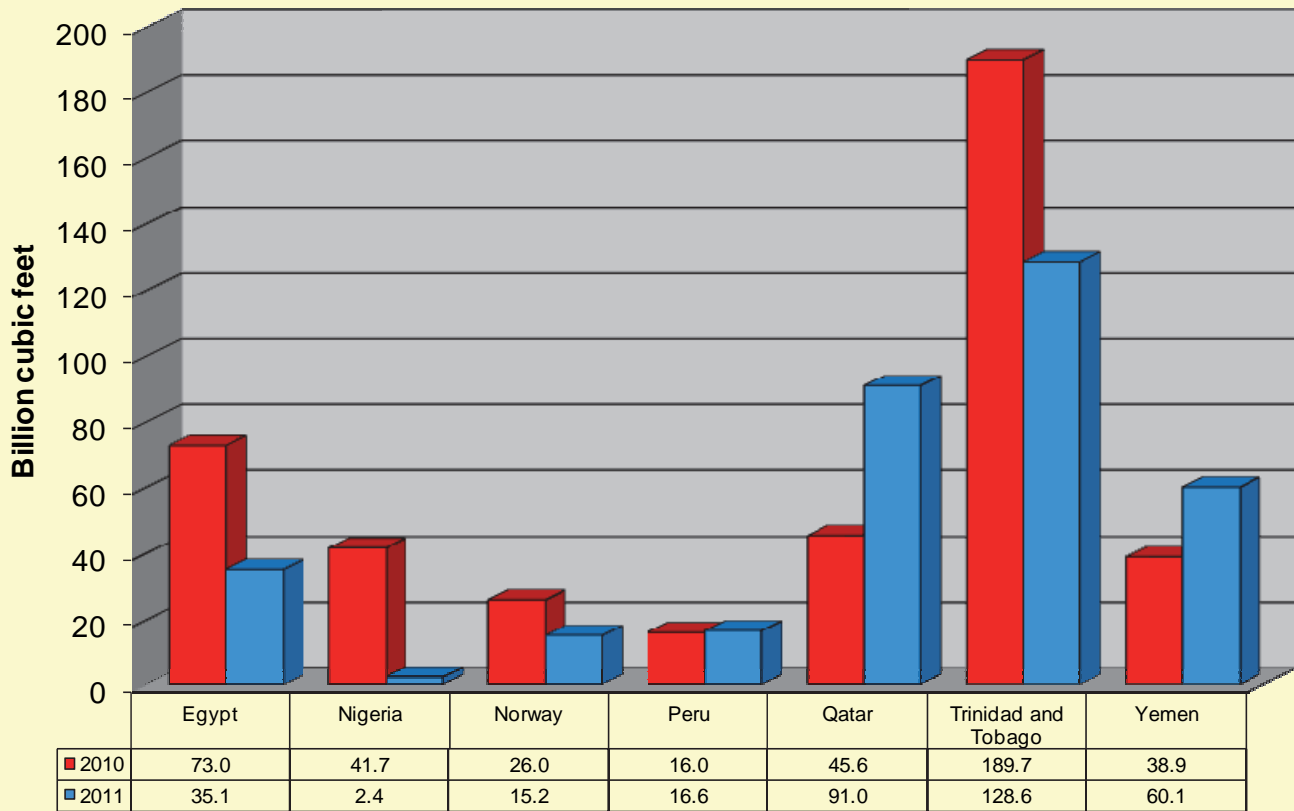
- Average monthly LNG import prices were higher in some months and lower in others in 2011, compared to the corresponding months in 2010. The differences were as small as \$0.21 per MMBtu and as high as \$2.37 per MMBtu.

LNG Imports by Receiving Terminal



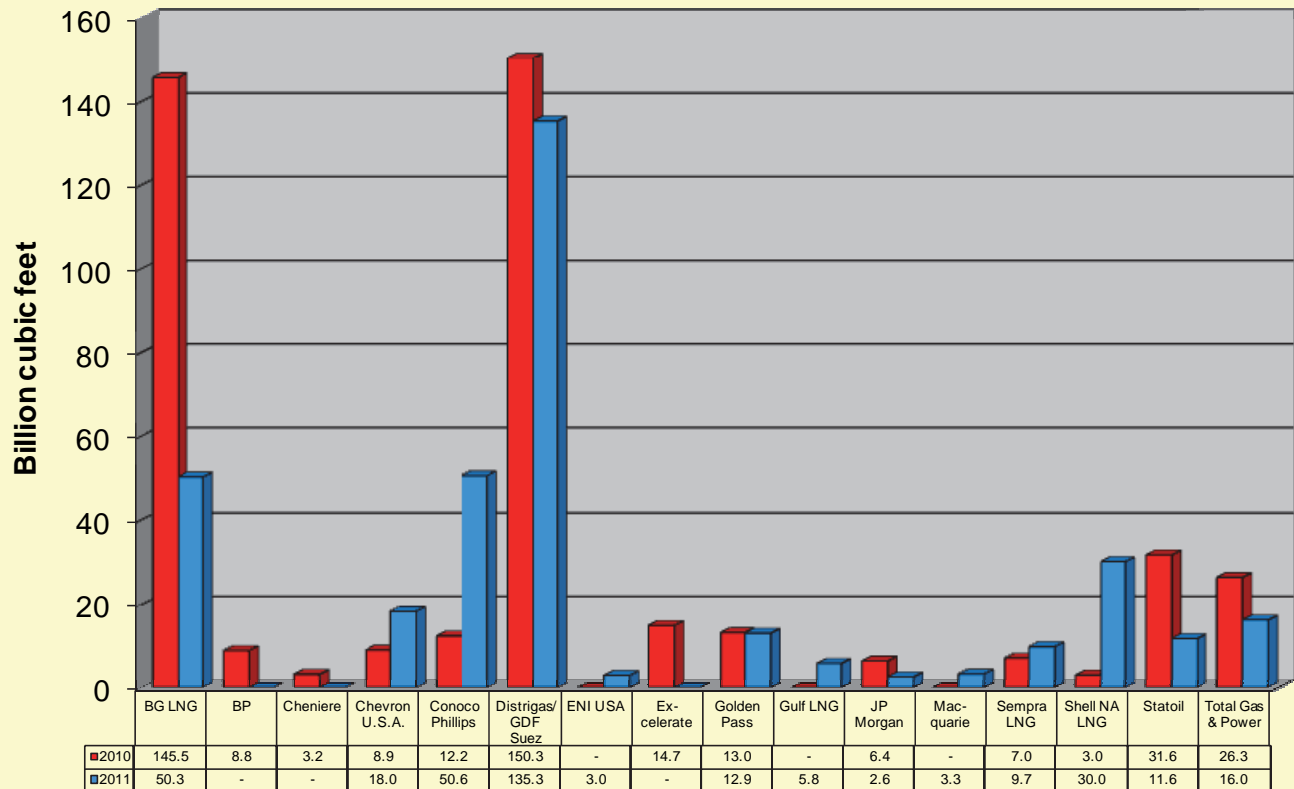
- Although total LNG imports were lower in 2011 than in 2010, some terminals experienced an increase in volume, and some a decrease. One new terminal, Gulf LNG, started operations in 2011.

LNG Imports by Country of Origin



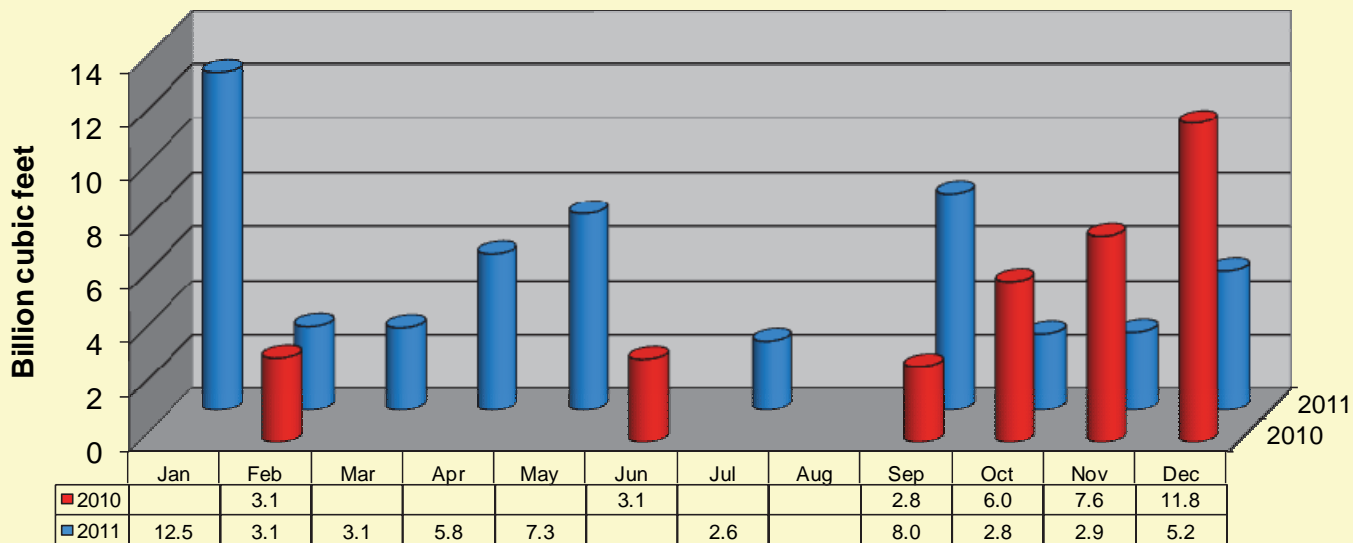
- Imports decreased between 2010 and 2011 from the major supplier, Trinidad and Tobago, as well as from Egypt, Nigeria, and Norway. This accounted for the overall drop in LNG imports. Imports from Qatar, Peru, and Yemen increased, however.

LNG Imports by Company



- In both 2010 and 2011, 13 companies imported LNG. Although Distrigas/GDF Suez and BG LNG were again leaders in LNG imports, both experienced a drop-off in activity from 2010 to 2011. BG LNG's decrease in imports was very large – about 95 Bcf.

LNG Re-Exports by Month

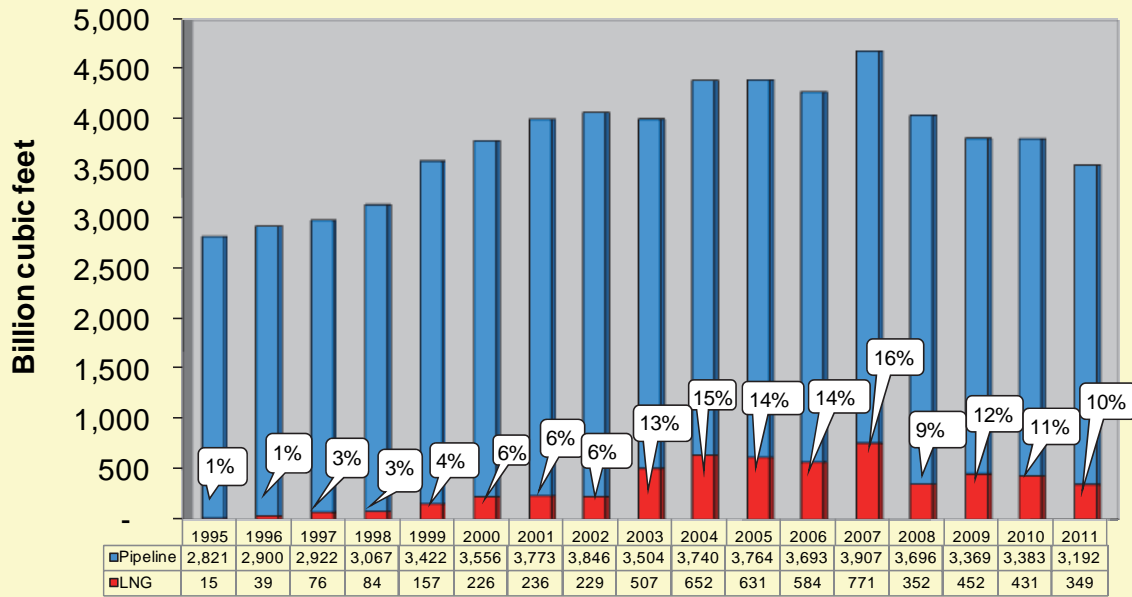


*LNG re-exports are exports of foreign-source LNG that was previously imported into the U.S.

- LNG re-exports, which began at the end of 2009, increased in 2011 compared to 2010. Total activity was higher in 2011 and more consistent throughout the year. This growing activity is consistent with the increasing interest in exporting domestically produced LNG from the U.S.

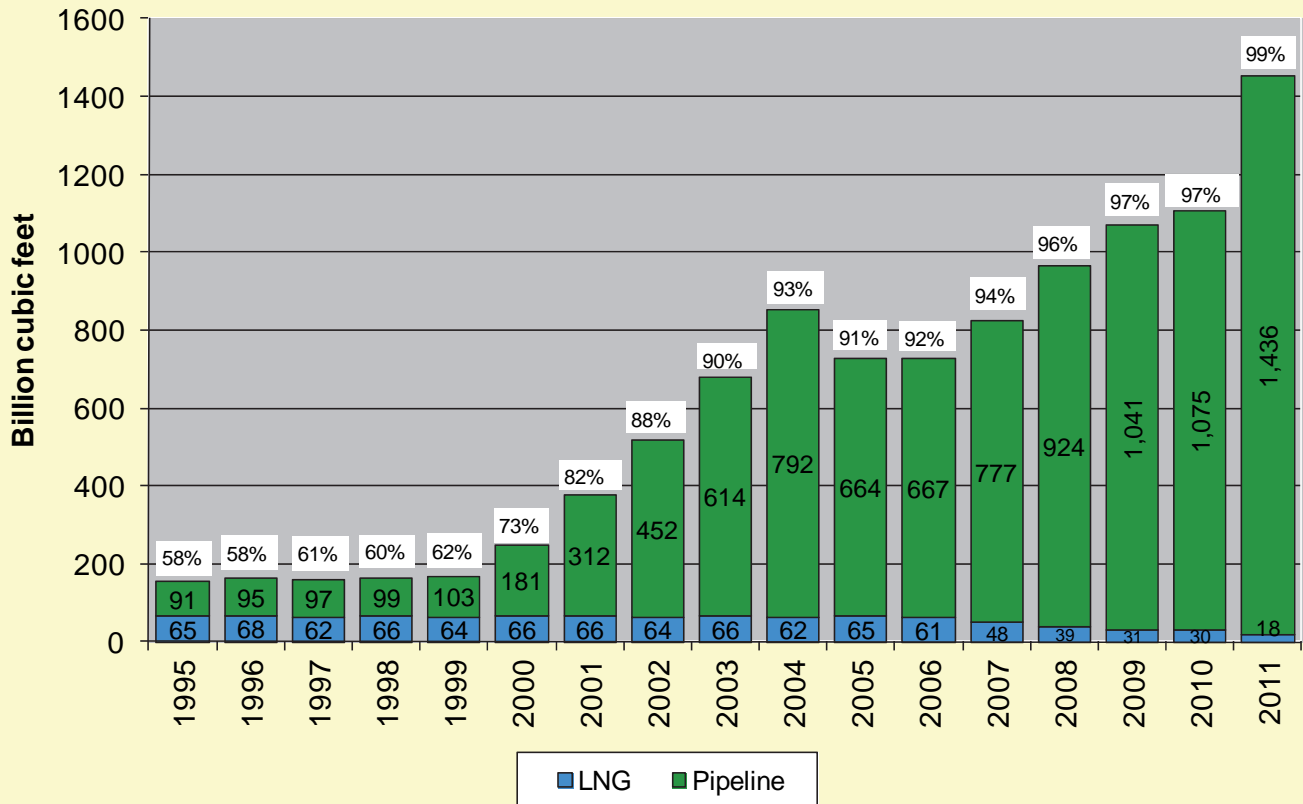
Long-Term Trend Analysis

Imports, Pipeline vs LNG & LNG as Percentage of Imports



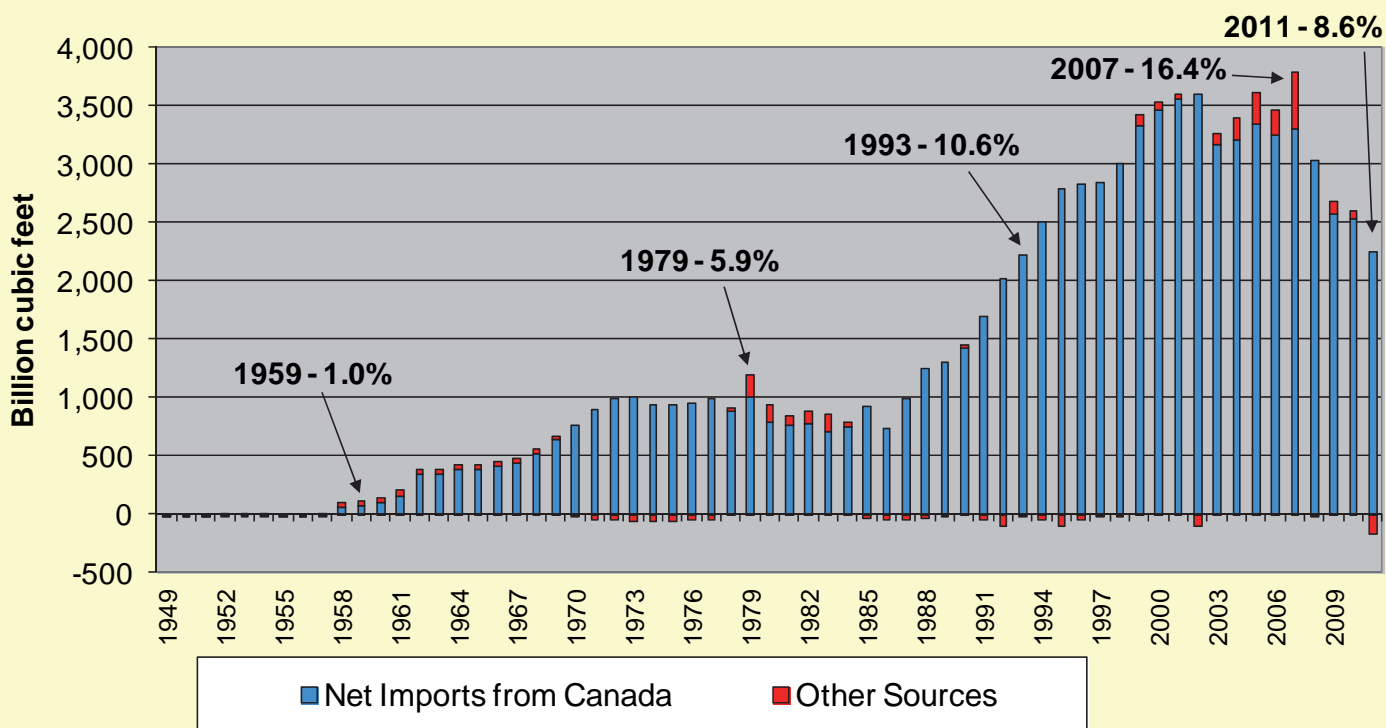
- In 2011, LNG represented just 10% of U.S. natural gas imports. This figure was slightly lower than in 2010. It maintains a recent trend of lower LNG import percentage compared with the peak years of 2003 to 2007. With substantially increased domestic production from shale formations and much lower prices in North America than elsewhere, the downward trend may continue.

Exports, Pipeline vs Domestic LNG & Pipeline Exports as Percentage of Total



- Only a small percentage of exports of domestically produced natural gas is in the form of LNG. Most LNG has been exported from Alaska, and a small amount is sent to Mexico by truck.
- Pipeline volumes now constitute about 99% of all exports due to diminishing volumes of LNG sent out from Kenai, Alaska.

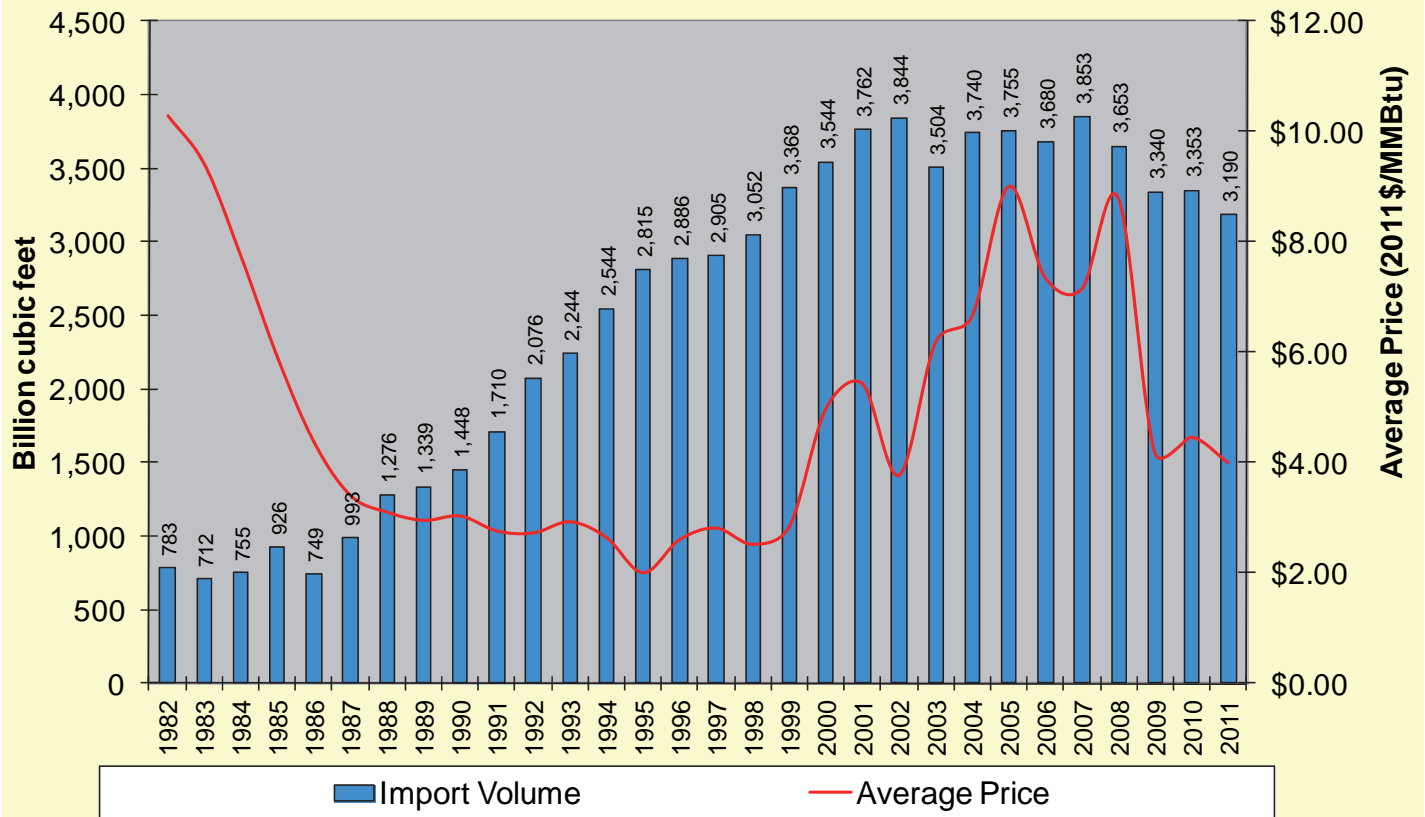
Net Imports from Canada and Other Sources & Imports as Percentage of US Gas Consumption, Selected Years



Sources: Energy Information Administration, Annual Energy Review 2010, Table 6.3, "Natural Gas Imports, Exports, and Net Imports, 1949-2010"; and Office of Fossil Energy, Office of Natural Gas Regulatory Activities.

- This long-term view of imports and exports illustrates the continuing dominance of Canada in American natural gas trade. The U.S. has been a net importer of gas from Canada since the late 1950s. The gas trade with Canada dwarfs all other gas exchange combined.
- 2008 saw the reversal of a recent trend in the importance of gas imports, and this has continued in every year since. In 2007, imports reached a peak of 16.4% of annual U.S. gas consumption, based largely on increasing LNG imports. In 2011, net imports were a smaller fraction (8.6%) of U.S. gas consumption than at any time since 1991. An important reason for this was increasing net exports to Mexico, due to a significant jump in exports and an almost complete cessation of imports from that country.

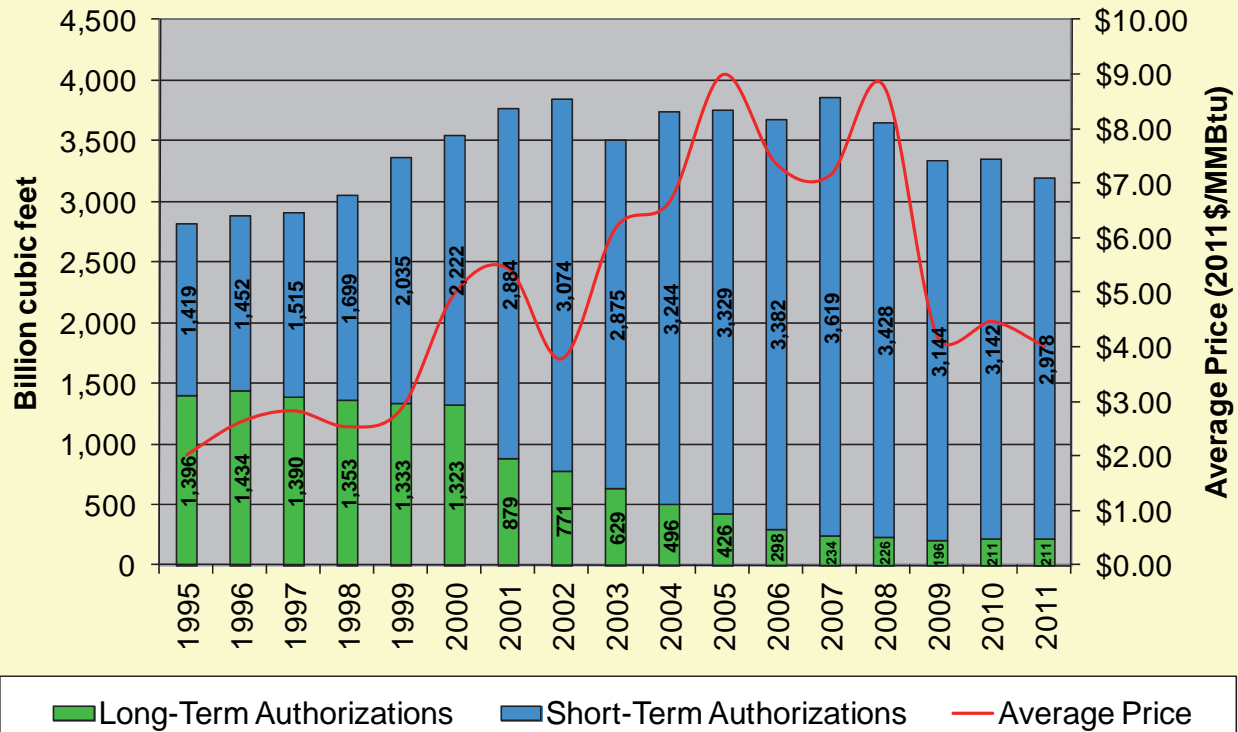
Imports from Canada



- Imports from Canada have grown substantially since the 1980s, reaching an approximate plateau at about the turn of the century, but slowly declining since the peak in 2007. The 2011 import volume was the smallest since 1998, corresponding to the steady increase of U.S. gas production.
- Prices of Canadian imports, in inflation-adjusted dollars, dropped through the 1980s, held roughly constant in the 1990s, and began climbing in the latter part of that decade. There have been up or down swings from year to year, but import prices had remained at an elevated level until 2009, when prices dropped to a level not seen since 2002. 2011 prices dropped slightly compared to 2010.

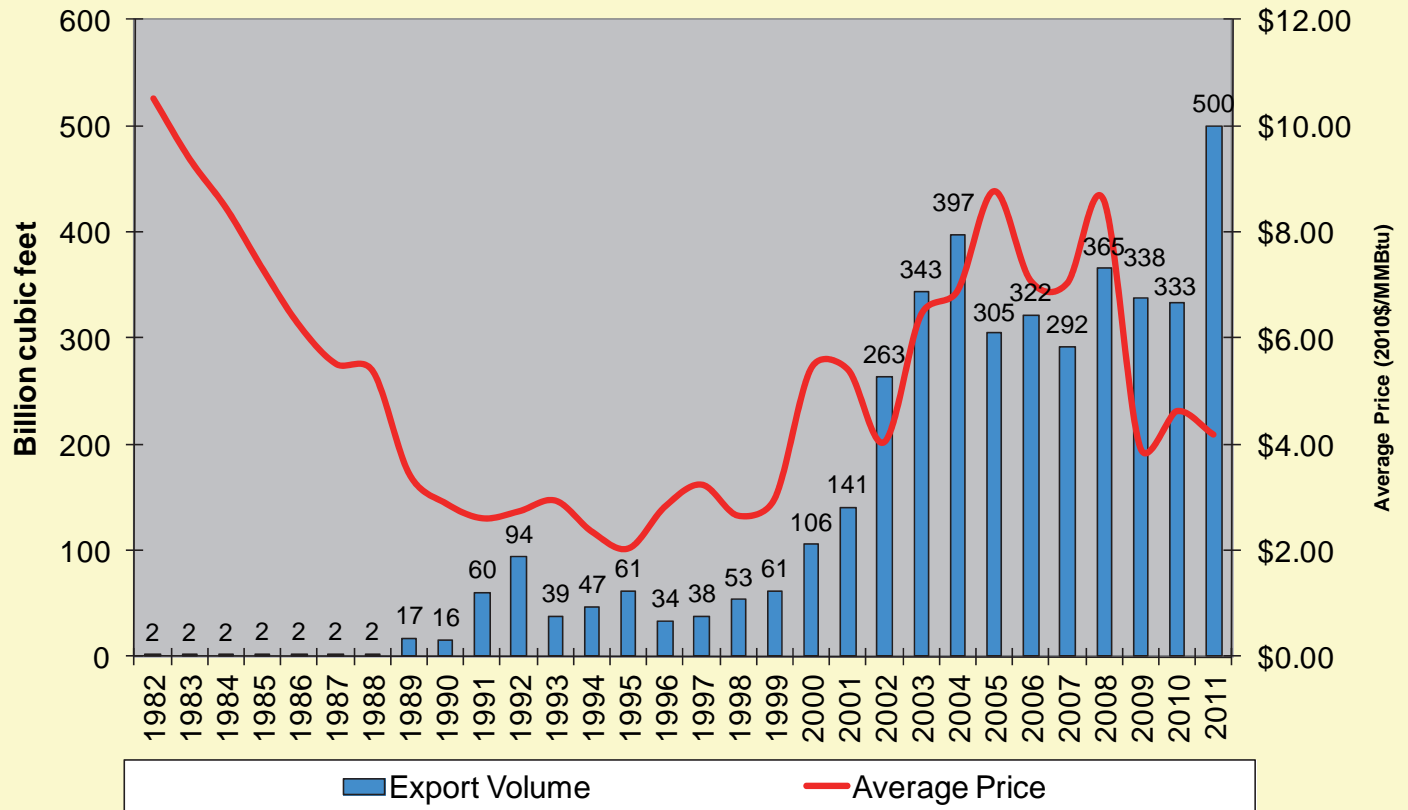
Imports from Canada

Long-Term vs Short-Term Authorizations



- Imports of Canadian natural gas have increasingly been made under short-term authorizations, with the use of long-term authorizations steadily dwindling. However, during an overall drop in imports from Canada, long-term import volumes were up slightly in 2011 compared to the last two years (211.5 Bcf in 2011 vs. 210.9 Bcf in 2010 and 196 Bcf in 2009).

Natural Gas Exports to Mexico



- From a low level in the early 1980s, U.S. exports to Mexico have grown substantially. While showing fairly large increases and decreases from year to year, the overall level of exports remained on the order of 300 Bcf per year, or higher, for the last several years.
- In 2011, annual exports to Mexico reached their highest level ever, at 500 Bcf. (At the same time, imports from Mexico almost disappeared.)