



No Upside: The U.S. LNG Buildout Faces Price Resistance From China

Chinese Gas Importers Were Losing Money on LNG Imports Even Before the COVID-19 Crisis

Executive Summary

An unprecedented global market crisis has thrown the U.S. liquefied natural gas (LNG) industry into disarray. Falling global gas demand, collapsing international gas prices, and a mounting gas supply glut in both Europe and Asia have triggered a wave of canceled U.S. LNG shipments that will leave the nation's liquefaction fleet operating at well under half capacity for the rest of the summer. Meanwhile, the massive buildout of the U.S. LNG industry has stalled out, as new buyers sit on the sidelines, avoiding signing new long-term supply contracts that would give proposed LNG projects the financial guarantees needed to move forward.

Despite the gloom over the U.S. LNG industry, some companies remain hopeful for a market rebound led by China—which, until recently, was the world's fastest growing LNG consumer. But an analysis of China's natural gas industry reveals an unwelcome reality for U.S. exporters: A China-led rebound for the U.S. LNG industry will face stiff price resistance from Chinese buyers.

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The finances of PetroChina, the Asian nation's largest state-owned natural gas company and its top gas importer, reveal the company realized substantial losses from gas imports every year from 2015 through 2019. To justify expansion of imports, China would likely need to secure long-term LNG supplies at prices well under \$7/MMBtu. Those prices would leave U.S. LNG exports out of the money in many market conditions and would certainly limit any upside profits for U.S. exports. Low citygate gas prices in China similarly limit the profitability of U.S. LNG exports to China. These forces—along with other structural and infrastructure constraints in China and globally—will create substantial headwinds for a China-led resurgence for the U.S. LNG industry.

Moving forward, U.S. LNG developers would be wise to pay close attention to the cost and price pressures that bedevil Asian gas markets. Bullish demand projections for LNG demand in China and Southeast Asia tend to ignore the price sensitivity of these markets, as well as the many logistical, economic, and political obstacles to the development of LNG and gas infrastructure. The most optimistic LNG demand scenarios are simply unrecognizable to experienced analysts of the Chinese energy

sector. A sober and realistic assessment of Asian gas markets will be essential to prevent further overbuild of U.S. LNG facilities.

U.S. LNG in Crisis

The U.S. liquefied natural gas (LNG) industry is suffering through a worse-than-worst-case scenario: An international market collapse on a scale that seemed inconceivable when the country's first export facility was put into service just over four years ago.

Even before the coronavirus crisis, global LNG prices were plumbing multi-year lows.¹ By early 2020, analysts were forced to admit that the global LNG market had tipped into oversupply, as rising output from new plants in the U.S., Russia, Australia, Malaysia, and Cameroon collided with tepid demand growth, particularly in China, previously the world's fastest-growing LNG importer.^{2,3,4,5}

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The COVID-19 pandemic sent the teetering global LNG market careening into disarray. Shrinking economic output and industrial shutdowns have cratered global gas consumption, creating an unprecedented global LNG glut.⁶ By May, spot LNG prices in both Asia and Europe had fallen below the cost of U.S. gas feedstocks, pushing U.S. exports deep into the red and causing widespread cancellations of LNG export cargoes.⁷

Global LNG prices have regained some ground since then, yet Asian LNG month-ahead futures prices still languish below \$3/MMBtu—down from more than \$15/MMBtu when the U.S. LNG plants were first on the drawing board.^{8,9} LNG has now earned the ignoble recognition as the worst-performing global energy commodity during the pandemic, with sustained price drops that have outpaced

¹ S&P Global Platts. [Analysis: LNG, oil spot price divergence stokes uncertainty over forward deals, hedging](#). March 25, 2019. S&P Global Platts. [Commodity Tracker: 6 charts to watch this week](#). September 9, 2019.

² Hellenic Shipping News. [LNG oversupply, lower prices to persist in 2020](#). January 6, 2020.

³ International Gas Union. [2020 World LNG Report](#). April 2020.

⁴ Petroleum Economist. [Chinese LNG demand growth tapers off](#). January 2, 2020.

⁵ The Oxford Institute for Energy Studies. [China: Growing import volumes of LNG highlight China's rising energy import dependency](#). June 2019.

⁶ S&P Global Market Intelligence. [LNG glut to persist years longer than previously thought, industry group says](#). April 28, 2020.

⁷ Reuters. [LNG buyers cancel cargoes as U.S. natgas becomes most expensive in world](#). May 6, 2020.

⁸ CME Group. [LNG Japan/Korea Marker \(Platts\) Futures Settlements](#). Retrieved July 24, 2020.

⁹ IEE Japan. [Present LNG prices after high oil price period](#). March 2017.

even those of oil and coal.¹⁰

The U.S. LNG industry has borne the brunt of the global demand collapse. Although the globe's top two LNG producers, Qatar and Australia, held output steady during the market rout, demand for LNG from the U.S. imploded.¹¹ LNG contracts in the U.S. give buyers the flexibility to cancel unwanted cargoes, provided they still pay the contracted liquefaction fees. As global prices fell, international buyers took advantage of that flexibility, cancelling a reported 25 U.S. LNG cargoes in June,¹² followed by an estimated 45 cargoes in both July and August.^{13,14} By early June, gas feedstock purchases by U.S. LNG plants had fallen to 13-month lows, with nearly 60 percent of the nation's gas liquefaction capacity sitting idle.¹⁵ By mid-June, gas deliveries to the Sabine Pass LNG plant, the nation's largest, had fallen to a 16-month low.¹⁶ As of late June, three multibillion-dollar LNG facilities—Sabine Pass, Corpus Christi, and Freeport—were using a small fraction of their capacity.¹⁷ For most of July, the Freeport LNG plant has been completely idle. Cheniere Energy Partners, the owner of Sabine Pass and the largest player in the U.S. LNG industry, will likely collect most of its revenues in July and August from contractual penalties for cancelled shipments, rather than from actual LNG sales.

As global demand collapsed and prices fell, the planned U.S. LNG buildout stalled. The U.S. Federal Energy Regulatory Commission has approved 15 LNG projects that are not yet under construction,¹⁸ and at least six additional projects are on the drawing board.¹⁹ Investors have already backed away from some of these projects; others face delays as LNG buyers have failed to materialize.²⁰ A senior executive at France's Total S.A., a major purchaser of U.S. LNG, described the global LNG glut as "more intense than could have been reasonably expected."²¹ Massive oversupply and low prices have convinced many buyers to source LNG from the spot market, rather than taking on new long-term purchasing commitments. As long as LNG buyers stay on the sidelines and avoid new long-term contracts, the U.S. LNG

¹⁰ Reuters. [Spot LNG, the worst-performing energy commodity, faces more price pain](#). June 3, 2020.

¹¹ S&P Global Platts. [Emerging US LNG Price Dynamics Amidst a Pandemic](#). June 18, 2020.

¹² Argus Media. [Up to 25 US LNG cargoes may be cancelled](#). April 28, 2020.

¹³ S&P Global Platts. [US LNG cargo cancellations mount for July as weakened global demand persists](#). May 21, 2020.

¹⁴ Reuters. [Buyers of U.S. LNG to cancel 40-45 cargoes for August loading: sources](#). June 22, 2020.

¹⁵ Reuters. [Coronavirus demand destruction cuts U.S. LNG exports to 13-month low](#). June 2, 2020.

¹⁶ S&P Global Platts. [US LNG feedgas drop may mean higher than reported June cargo cancellations](#). June 15 2020.

¹⁷ S&P Global Platts. [Emerging US LNG Price Dynamics Amidst a Pandemic](#). June 18, 2020.

¹⁸ U.S. Federal Energy Regulatory Commission. [North American LNG Export Terminals: Approved, Not Yet Built](#). May 29, 2020.

¹⁹ U.S. Federal Energy Regulatory Commission. [North American LNG Export Terminals: Proposed](#). May 29, 2020.

²⁰ Gasworld. [Financial prospects falter for LNG projects](#). June 1, 2020.

²¹ S&P Global Platts. [US LNG feedgas drop may mean higher than reported June cargo cancellations](#). June 15, 2020.

buildout will remain in low gear, with only projects that were already under construction moving forward.

A China-led Rebound?

Despite the depths of today's downturn, market observers still hold out hope for an LNG industry resurgence. Construction delays, they argue, will quickly lead to LNG shortages as global LNG growth resumes, causing an LNG price rebound that could allow the U.S. LNG industry to resume its planned buildout.²²

These long-term growth projections hinge on strong demand from China.²³ The U.S. LNG industry in particular had pinned high hopes on the Chinese market, projecting that the U.S. could become the country's top LNG supplier.²⁴ China's April 2020 decision to lift LNG tariffs and resume U.S. LNG imports further inflated hopes of a China-led rebound for U.S. LNG exports.²⁵

Yet an IEEFA analysis of the Chinese gas industry suggests the U.S. LNG industry will likely face unexpectedly stiff headwinds in selling LNG to China. This analysis ignores potential international trade conflicts, and instead relies solely on the internal dynamics of China's gas market. **Long before the COVID-19 crisis hit, Chinese gas companies were losing money on LNG imports.**

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Moving forward, China's gas utilities will likely need to cap the price for LNG purchases at roughly US\$7/MMBtu to make a profit on imports. At that price, China offers scant hope for the robust and sustained export profits hoped for by the U.S. LNG industry.

Structural shifts in the Chinese gas market—such as growing pipeline deliveries from central Asia, domestic gas pipeline and infrastructure constraints, slowing economic growth, and an overhang of excess coal and renewable power—will likely put further downward pressure on gas prices, limiting the long-term upside for a U.S. LNG boom.

²² Reuters. [Gas industry sees strong demand post-COVID, LNG shortfall by mid-decade](#). June 24, 2020.

²³ McKinsey. [Global gas & LNG outlook to 2035](#). September 4, 2019. Also: Shell. [Shell LNG Outlook 2020](#). February 2020. Also: S&P Global Platts. [Opportunities and challenges of China's LNG expansion](#). March 2018.

²⁴ Financial Post. [Trade deal could propel U.S. to top of China's LNG supplier list](#). June 12, 2019.

²⁵ S&P Global Platts. [US-China tensions cast shadow over bilateral LNG trade](#). June 12, 2020.

U.S. LNG Pricing in Brief

There are currently 20 commercial-scale LNG trains (plants) in the United States, spread across six facilities and all put into service since the beginning of 2016. Together, these LNG plants boast a capacity of nearly 62 million tons per year (MTPA), enough to consume just over 8 billion cubic feet (BCF) of feedstock gas daily, or more than 8 percent of the nation's peak gas output.²⁶ Four more LNG trains are nearly ready to begin operation, with additional trains still under construction. If recent projections hold, U.S. liquefaction capacity could surpass 87 MTPA by the end of 2023.

The leading U.S. LNG company, Cheniere Energy, owns and operates the Corpus Christi and Sabine Pass LNG liquefaction and export facilities, comprising seven operating LNG trains that represent just over half of all U.S. liquefaction capacity. Cheniere's business model relies on long-term supply contracts that require buyers to pay for liquefaction capacity, even if they never actually take delivery of LNG. These contracts have provided stable revenues that have protected of the stock of both Cheniere Energy and its subsidiary, Cheniere Energy Partners, from a stock price collapse, despite widespread cancellations of LNG cargoes from the company's liquefaction plants.²⁷

Committed buyers of Cheniere's LNG include a mix of overseas gas and electric utilities, as well as large multinational oil and gas companies such as Total and Shell, which act as intermediaries by reselling LNG in destination markets. Under the standard Cheniere contract structure, buyers must pay a fixed liquefaction fee, ranging from \$2.25/MMBtu to \$3.50/MMBtu, for all contracted volumes. In addition to liquefaction fees—which buyers must pay regardless of whether they take delivery of cargoes—buyers also must pay for gas feedstock costs at prevailing benchmark gas prices, plus a 15 percent markup.²⁸ Buyers also pay to ship LNG to destination markets. Shipping costs vary with both fuel prices and ship charter rates, and ship hire rates can swing dramatically, spiking during times of high demand.²⁹

Cheniere's two Gulf Coast competitors, Cameron LNG and Freeport LNG, operate as tolling facilities, meaning LNG buyers secure their own natural gas feedstocks rather than purchasing feedstocks from the terminal operators. But their cost structure is otherwise similar to Cheniere's: Buyers sign long-term contracts requiring them to pay fixed liquefaction fees of roughly \$3/MMBtu, regardless of whether they take delivery of cargoes, and buyers also pay transportation fees to ship LNG to destination markets.

²⁶ U.S. Energy Information Administration. [U.S. Dry Natural Gas Production](#). Accessed July 2020.

²⁷ S&P Global Platts. [US LNG feedgas drop may mean higher than reported June cargo cancellations](#). June 15, 2020.

²⁸ See, *inter alia*: Cheniere Energy Inc. [2019 Annual Report](#). Page 7. February 2019.

²⁹ Oxford Institute for Energy Studies. [The LNG Shipping Forecast: costs rebounding, outlook uncertain](#). March 2018.

In short, the total cost of delivering gas from export terminals on the Gulf of Mexico to East Asia hinges on three factors: Feedstock costs, liquefaction fees and shipping costs. At today's prices—roughly \$2/MMBtu for the gas feedstocks, \$3/MMBtu for liquefaction, and \$1/MMBtu for transportation—buyers must receive about \$6/MMBtu from end users to recoup the full costs of shipping U.S. LNG to Asia.³⁰

But today's U.S. LNG costs are at unusually low levels, as rock-bottom U.S. gas prices have driven feedstock costs near historic lows, even as decreasing international demand for LNG ships has lowered transportation costs. Under the market conditions that prevailed prior to the COVID-19 crisis, the total cost of producing LNG in the Gulf Coast and shipping it to Asia frequently exceeded \$7/MMBtu, sometimes climbing much higher when U.S. gas prices spiked.³¹

When considering whether to take delivery of LNG cargoes, long-term contract holders treat the guaranteed liquefaction fees as sunk costs, paying attention only to whether sales will cover the variable costs, including fossil gas feedstocks and LNG shipping. But when entering new contracts, LNG buyers must be confident that prices paid by their buyers will cover both fixed and variable costs. If Asian LNG buyers balk at high prices, then the U.S. LNG industry will face headwinds in attracting new buyers, which will constrain expansion of the industry.

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PetroChina: A Window into China's Gas Industry

PetroChina (857 HK) is China's leading gas company, producing roughly 60 percent of China's domestic gas supply from 2015 through 2019. (See Table 1.) PetroChina also accounts for all of the country's pipeline gas imports, and for roughly one-tenth of the country's LNG imports. Because of its dominant position in the Chinese gas market, PetroChina presents a useful window into the dynamics of LNG pricing in east Asia.

PetroChina has earned reasonable profits from domestically produced natural gas, which accounted for an estimated 56% of gas supply in 2019.³² From 2015 through 2019, costs for PetroChina's domestically produced gas ranged from \$5/MMBtu to

³⁰ Natural Gas Intel. [NGI's LNG Insight: Methodology & How to Read Guide](#). June 2020. Note that in May 2020, estimated shipping costs from the Sabine Pass liquefaction plant in Louisiana to Japan and Korea were estimated at \$0.98/MMBtu to \$1.55/MMBtu for August 2020 through June 2021.

³¹ See, *inter alia*, Morgan Stanley. [Natural Gas: Fueling Global Disruption](#). July 22, 2019.

³² IHS Markit. [The low oil price environment: Shifting China's 2020 gas cost curve](#). April 20, 2020.

\$6.50/MMBtu, while the company's average sales revenues ranged from \$5.80/MMBtu to \$7.70/MMBtu, yielding profits in every year (See Table 2).

But the high prices that PetroChina paid for imported gas actually hurt the company's bottom line. In every year, the price that PetroChina paid for imported gas exceeded the average price received from end consumers. PetroChina stopped breaking out its LNG purchases from other imports in 2017, but prior to that year, the company paid far more for LNG imports than for pipeline gas imports from central Asia, suggesting that LNG imports were among PetroChina's more expensive gas purchases.

Table 1: PetroChina Oil and Gas Production, 2015-2019

| | Unit | 2015 | 2016 | 2017 | 2018 | 2019 |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| Production | | | | | | |
| Domestic crude oil | m bbl | 806.5 | 763.8 | 743.1 | 733.7 | 739.7 |
| Overseas crude oil | m bbl | 165.7 | 156.9 | 143.9 | 156.6 | 169.6 |
| Total crude oil | m bbl | 972.2 | 920.7 | 887 | 890.3 | 909.3 |
| | | | | | | |
| Domestic natural gas output | bcm | 82.2 | 85.1 | 89.2 | 94.1 | 102.8 |
| Overseas natural gas output | bcm | 6.4 | 7.5 | 7.7 | 8 | 7.8 |
| Total natural gas output | bcm | 88.6 | 92.7 | 96.9 | 102.1 | 102.1 |
| | | | | | | |
| Total China domestic gas | bcm | 135.1 | 137.1 | 148.7 | 159.4 | 178.1 |
| PetroChina domestic gas share | % | 60.8 | 62.1 | 60 | 59 | 57.7 |

Source: IEEFA, derived from PetroChina financial statements.

**Table 2: PetroChina Gas Revenues, Costs, Profits and Export Losses,
2015-2019**

| | Unit | 2015 | 2016 | 2017 | 2018 | 2019 |
|-------------------------------------|---------------|-------|-------|-------|-------|-------|
| PetroChina | | | | | | |
| Natural gas revenues | US\$ / mm BTU | 7.72 | 5.79 | 6.41 | 7.24 | 6.67 |
| Domestic gas production costs | US\$ / mm BTU | 6.49 | 5.02 | 5.47 | 6.24 | 5.7 |
| Purchase price for imported gas | US\$ / mm BTU | 10.31 | 7.78 | 8.92 | 9.66 | 8.94 |
| Overall cost for natural gas | US\$ / mm BTU | 6.94 | 5.37 | 6.07 | 6.73 | 6.22 |
| | | | | | | |
| Gas import costs - Central Asia | US\$ / mm BTU | 8.87 | 6.42 | | | |
| Gas import costs - LNG | US\$ / mm BTU | 16.14 | 11.53 | | | |
| Gas import costs - Myanmar | US\$ / mm BTU | 12.68 | 12.87 | | | |
| Gas import costs - Total imports | US\$ / mm BTU | 10.31 | 7.78 | 8.92 | 9.66 | 8.94 |
| | | | | | | |
| Total gas segment operating profit | US\$ bn | 4.56 | 2.69 | 2.32 | 3.86 | 3.78 |
| Estimated profits from domestic gas | US\$ bn | 7.18 | 4.93 | 6.42 | 7.62 | 8.22 |
| Estimated loss from imported gas | US\$ bn | -2.62 | -2.24 | -3.55 | -3.76 | -4.45 |

Source: IEEFA, derived from PetroChina financial statements.

PetroChina's financial results suggest that LNG plays a niche role in the company's gas portfolio. As a state-owned enterprise, PetroChina may be willing to import high-cost gas from both Myanmar and Central Asia for geostrategic reasons, as a means to strengthen China's economic ties to neighbors. It may also make some LNG purchases to supplement supplies when demand spikes. Yet to justify a wholesale expansion of LNG purchases on economic grounds, the company would need to secure ample LNG supplies at prices low enough to guarantee profitable sales to end consumers—meaning that the prices paid by consumers would need to cover the costs of imports, plus any regasification and transportation costs within China.

Given the prices that PetroChina received from its domestic consumers in recent years, the firm would likely seek to cap LNG import prices at well under \$7/MMBtu to justify a major expansion of its LNG imports. For example, given PetroChina's average 2018 gas revenues of \$7.24/MMBtu and LNG regasification costs conservatively estimated at \$1/MMBtu, substantial U.S. LNG purchases would only compete with domestically produced Chinese gas at prices below \$6.25/MMBtu. Of course, PetroChina may import LNG at higher prices to meet demand when pipeline supplies are constrained. Yet the company is unlikely to make substantial long-term commitments to purchase large additional LNG volumes unless it can secure long-term pricing well under \$7/MMBtu.

Chinese Citygate Gas Price Regulation Limits the Upside for U.S. LNG

To assess China's emerging gas market structure, IEEFA looked at gas pricing in seven key Chinese cities with access both to LNG terminals and gas imported via pipeline. Roughly a year before the global coronavirus crisis sent global energy markets into a tailspin, citygate (wholesale) prices in these urban areas ranged from \$7.73 to \$8.57 (See Table 3).

Table 3: Representative Citygate Prices, Seven Chinese Cities

| US\$/ mm BTU | LNG Terminal | Pipeline | Citygate Gas Price, 1-Apr-19 |
|--------------|-----------------------------------|-----------------------|------------------------------|
| Shanghai | Shanghai, Yangshan | Central Asia | 8.57 |
| Guangdong | Shenzhen, Zhuhai, Donghai, Dapeng | Central Asia, Myanmar | 8.57 |
| Zhejiang | Ningbo, Zhoushan | Central Asia | 8.53 |
| Jiangsu | Rudong, Qidong | Central Asia | 8.49 |
| Guangxi | Fangchenggang, Beihai | Central Asia, Myanmar | 7.86 |
| Tianjin | Binhai, Tianjin Floating Terminal | Central Asia | 7.82 |
| Hebei | Caofeidian | Central Asia | 7.73 |

Source: Company presentations and annual reports; IEEFA estimates.

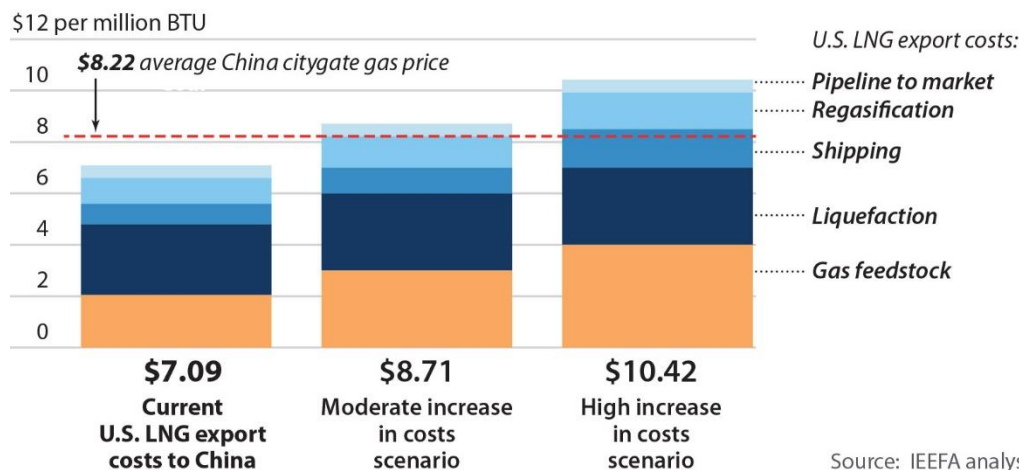
Factoring in U.S. benchmark gas prices, gas purchase markups, liquefaction fees, and shipping, the total cost of delivering LNG from the Gulf of Mexico to a Chinese LNG import terminal in April of last year was roughly \$7/MMBtu. Adding in a conservative estimate of \$1/MMBtu for regasification and transportation to the citygate, IEEFA estimates final costs of roughly \$8/MMBtu for LNG imported from the U.S. and delivered to the citygate.³³ Thus, in three of the seven cities examined, the full cost of U.S. LNG imports exceeded citygate prices. In the remaining four cities, citygate prices only slightly exceeded the cost of U.S. LNG, offering minimal economic margins for U.S. imports. Given recent U.S. gas feedstock and shipping costs, U.S. LNG imports barely price into the Chinese gas markets; and even modest increases in gas or shipping costs could render U.S. LNG imports entirely uneconomic. (See Figure 1.)

³³ U.S. Energy Information Administration. [Natural Gas Weekly Update](#). September 6, 2017. Note, however, that in one instance IEEFA staff received a quote for LNG regasification costs of \$1.22-\$1.43/MMBtu, plus \$0.49 cents for pipeline transportation from regasification terminals to the city gate. Accordingly, we take the \$1/MMBtu gasification fee quoted by EIA as a lower bound estimate.

Figure 1: U.S. LNG Import Costs Versus Chinese Citygate Gas Prices

LNG Imports to China Face Stiff Price Resistance

China's appetite for U.S. LNG hinges not just on cheap gas, but low costs for shipping, regasification, and transporting the gas via pipeline to city markets too. Even moderate increases in these costs could make U.S. LNG uncompetitive vs. cheaper imports and domestic gas.



China's citygate prices are set by government regulation, though China's economic management agency is considering a move to market pricing in cities with ample gas supplies.³⁴ But a move to market pricing could put U.S. LNG at an even greater disadvantage to cheaper domestic and imported pipeline gas, and to international LNG competitors such as Qatar and Australia that benefit from lower cost structures and cheaper shipping. Meanwhile, Chinese regulators have moved to reduce domestic gas prices during the coronavirus crisis, further undermining the profitability of U.S. LNG exports.³⁵

Conclusion

The global COVID-19 crisis has exposed fundamental weaknesses in the business model of the U.S. LNG industry. As global gas prices and demand have collapsed, international buyers have taken advantage of the flexibility of U.S. LNG contracts to cancel cargoes, leaving most of the nation's liquefaction capacity idle for the summer. Despite the global LNG glut, the buildout of U.S. LNG infrastructure continues, with four new plants slated to come online through the end of the year. Meanwhile, major new LNG projects are moving forward in Canada, Mozambique, and Qatar, among other locales. This new construction will likely add to the global oversupply of LNG.

³⁴ Florence School of Regulation. [China, still the most interesting gas market worldwide?](#) May 5, 2020.

³⁵ S&P Global Platts. [China's regulator lowers domestic natural gas prices amid coronavirus outbreak.](#) February 24, 2020.

Hopes for a new round of LNG construction to serve the Chinese gas market face abundant risks and headwinds. Although U.S. benchmark gas prices remain low, the total cost of LNG from the U.S. isn't low enough to overcome significant Chinese price resistance.

Put simply, the price that U.S. LNG companies need to justify building new plants is likely higher than the price that Chinese LNG buyers would be willing to pay. Even if China expands its gas use, the Asian giant will likely find cheaper sources of gas than U.S. imports, including domestically produced gas, pipeline imports, and lower-cost global LNG suppliers.

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Under some market conditions there may be a Goldilocks zone—a “just-right” price range that could allow modest profits for both U.S. LNG exporters and Chinese LNG importers. But that zone is narrow even at the best of times. And a host of factors—a global LNG supply glut, rising international LNG competition, the development of China's domestic gas industry, shifts in China's gas price regulations, and new market trends favoring electrification—are all acting in concert to boost China's resistance to uncompetitively priced LNG imports.

If the U.S. LNG industry had been looking to China to reignite its LNG boom, it should start looking elsewhere. The bull argument for U.S. LNG isn't defined just by abundant U.S. supply. Instead, it must squarely meet the reality of price sensitive Asian buyers that are still struggling to make the economics of gas distribution and power work. That won't be an easy task in the post COVID-19 world, with Qatar and Australia poised to set new long-term pricing norms that could leave U.S. LNG producers out in the cold.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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