Friday, August 6, 2021

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Home / 2021 / July / 27 / US LNG Exports Hit New Record High!

NATURAL GAS

# **US LNG Exports Hit New Record High!**

● 1 week ago ● David Middleton ● 32 Comments

Guest "And the year is only half over!" by David Middleton

# **GC** JULY 27, 2021

### U.S. liquefied natural gas exports grew to record highs in the first half of 2021

U.S. exports of liquefied natural gas (LNG) continued to grow in the first six months of 2021, averaging 9.6 billion cubic feet per day (Bcf/d). This average marks an increase of 42%, or 2.8 Bcf/d, compared with the same period in 2020 (according to the U.S. Department of Energy's LNG Monthly reports and our estimates for June 2021, based on shipping data from Bloomberg Finance L.P.). During the summer months of 2020, U.S. LNG exports fell to record lows, but they set consecutive record highs in November and December.

U.S. LNG exports increased in the first half of this year as international natural gas and LNG spot prices increased in Asia and Europe due to cold weather. Rising global LNG demand once COVID-19 restrictions began to ease, as well as continuous unplanned outages at LNG export facilities in several countries (including Australia, Malaysia, Nigeria, Algeria, Norway, and Trinidad and Tobago), also contributed to increased U.S. LNG exports.

In Asia, colder-than-normal winter temperatures led to increased demand for spot LNG imports. Natural gas demand in the spring continued to rise amid low post-winter inventories, which contributed to unseasonably high natural gas prices. The high prices prompted a higher demand for more flexible LNG supplies, particularly from the United States.

In Europe, <u>natural gas storage inventories</u> were also low following a cold winter. Increasingly hot temperatures in May and June and greater natural gas demand from the electric power sector contributed to high natural gas spot prices. Europe's natural gas spot prices have historically been lower than prices in Asia; however, this year, Europe's natural gas prices are tracking Asia's spot LNG prices more closely to attract flexible LNG supplies from around the world to refill storage inventories.

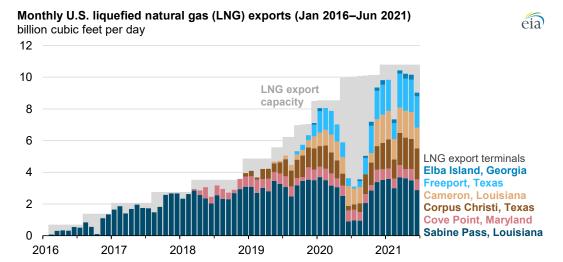
The U.S. Henry Hub natural gas benchmark and U.S. LNG spot market prices have been lower than prices for international natural gas and spot LNG this year. This price difference has supported record volumes of U.S. LNG exports. U.S. LNG exports also increased because of new export capacity added in 2020. The final liquefaction units were commissioned at <u>Freeport</u>, <u>Cameron</u>, and <u>Corpus Christi LNG</u>, and the remaining small-scale units were placed in service at <u>Flba Island LNG</u>. The new units increased total U.S. LNG export capacity by a combined 2.7 Bcf/d for a total peak capacity of 10.8 Bcf/d.

Similar to 2020, Asia remained the top destination for U.S. LNG exports from January through May in 2021, accounting for 46% of the total. Asia was followed by Europe, which had a five-month average share of 37%. Exports to Latin America also increased, particularly to Brazil, which is experiencing its worst drought in more than 90 years.

In June, U.S. LNG exports declined slightly, mainly as a result of maintenance on several pipelines that deliver natural gas to U.S. LNG export facilities. Yet, we expect LNG exports to remain at high levels in the remaining months of this year in our <a href="Short-Term Energy Outlook">Short-Term Energy Outlook</a>.

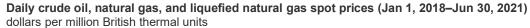
Principal contributor: Victoria Zaretskaya

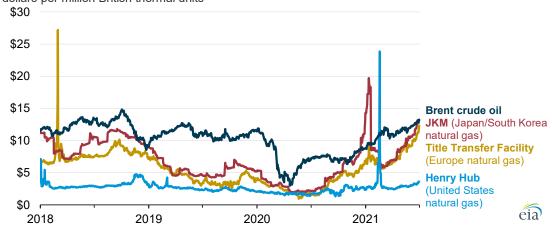
<u>EIA</u>



**Source:** Graph by the U.S. Energy Information Administration (EIA), based on data from the U.S. Department of Energy's <u>LNG Monthly</u>, EIA's estimates for June 2021, and EIA's <u>Liquefaction Capacity Table</u>

LNG prices in Europe and Asia are now actually on par with Brent crude oil...

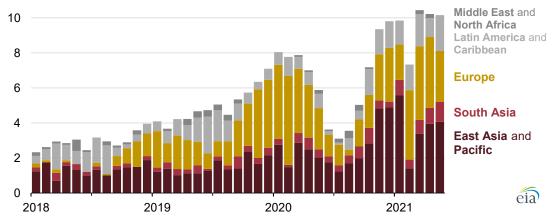




Source: Graph by the U.S. Energy Information Administration, based on data from Bloomberg Finance, L.P.

The export market is diverse and growing...

Monthly U.S. liquefied natural gas exports by destination region (Jan 2018–May 2021) billion cubic feet per day



Source: Graph by the U.S. Energy Information Administration, based on data from the U.S. Department of Energy's LNG Monthly reports

Frac on!

# In other bad news for SJW's, CJW's & Frac'tards



CC Jul 25, 2021

### Carbon-Neutral LNG: Another Reason Why Natural Gas Could Win 'The Energy Transition'

Energy

I cover oil, gas, power, LNG markets, linking to human development.

#### Demand For Natural Gas Can Only Grow

Now at 375 Bcf/d, the reality of the world's energy situation is that natural gas demand is set to grow substantially in the years ahead.

Any serious low-carbon outlook has gas as a foundational resource. Experts at McKinsey model "resilient" gas demand through 2050, even in an accelerated transition scenario to meet climate change goals.

The world is simply too poor, too fast-growing, and too energy-starved for this not to be true: more practically, the U.S. Department of Energy forecasts a 40-45% jump in global gas consumption. The International Energy Agency's (IEA) new climate road map assumes that energy demand will be 8% lower in 2050 than today but serve an economy twice as big and a population with over 2 billion more people.

[...]

#### The Growth In Carbon-Neutral LNG

Nowhere is this constant evolution of the gas industry more evident than in the sale of liquefied natural gas via cargo ship (LNG), the key to the industry's global future. In fact, net-zero companies like Shell and BP have been planning to double their LNG portfolios to meet climate targets.

Started over the past two years, there have been around 15 carbon-neutral LNG cargoes, "creating a framework for real emissions reductions," per experts at Columbia University. Tighter restrictions on GHGs will bring even more carbon-neutral LNG. The carbon-neutral LNG market is on track to quadruple this year, with even China recently getting in on the act.

As for U.S. LNG exports in particular, experts at Rice University report that the global demand surge, non-oil-linked pricing, and the perpetual hunt for supply diversification will keep us integral to the market. Quietly, U.S. LNG exports have been hitting records under President Biden even in the lower demand time of summer (~10 Bcf/d).

[...]

Forbes

The "around 15 carbon-neutral LNG cargoes" were CO<sub>2</sub>-neutered through the purchase of "nature-based" offsets...



### Cheniere delivers its first carbon-neutral LNG cargo to Shell

**BUSINESS DEVELOPMENTS & PROJECTS** 

May 5, 2021, by Adnan Bajic

U.S. LNG export project developer Cheniere has supplied a carbon-neutral cargo to Shell from its Sabine Pass LNG facility in Louisiana.

[...]

Cheniere noted in its statement that the carbon-neutral LNG cargo was delivered to Europe in early April.

Offsets used were bought from Shell's global portfolio of nature-based projects with Cheniere purchasing the portion attributable to estimated CO2e emissions associated with activities upstream of the FOB delivery point, including production and liquefaction.

[...]

Offshore Energy

Although, in the not to distant future, Cheniere and other Gulf Coast emitters will be able to geologically sequester their CO<sub>2</sub> emissions. Like it or not, it's already moving forward on the Gulf Coast...

# Panther Gulf Coast CO2 Pipeline Project

- -Utilizes existing onshore and offshore large diameter 16" pipelines
- -Utilizes 13+ acre onshore site as needed for dehy, compression, pumps, etc...
- -CO2 flow capacity in gas phase is estimated at 3-3.5 million tons annually (mta)
- -Higher CO2 flow rate capacity available in dense phase (1,100+ psig)
- -Northern terminus is very close to Golden Pass LNG, Sempra PALNG and Cheniere LNG sites
- -Potential to connect to multiple onshore and offshore CO2 sequestration sites in Texas and Louisiana
- -Texas state water portion is in proximity to two large offshore CO2 sequestration areas identified by Bureau of Economic Geology (BEG) for the University of Texas at Austin (UT-Austin). The studies presented highlight the prolific CO2 storage potential for two separate Texas state water offshore fields known as High Island Large Block 10 (HI 10L) & High Island Large Block 24 (HI 24L)
- -Favorable and flexible transport rates since utilizing existing assets

**Panther Companies** 

#### And in the Mid-Continent



# Carbon-capture pipelines offer climate aid; activists wary

By STEPHEN GROVES

July 24, 2021

SIOUX FALLS, S.D. (AP) - Two companies seeking to build thousands of miles of pipeline across the Midwest are promising the effort will aid rather than hinder the fight against climate change, though some environmental groups remain skeptical.

The pipelines would stretch from North Dakota to Illinois, potentially transforming the Corn Belt into one of the world's largest corridors for a technology called carbon capture and storage.

[...]

AP News

And even the Peoples Republic of Califironia...



### Moniz-led group unveils CCS road map

A threatening question hangs over California's 412,000 oil and gas industry workers: Will their jobs evaporate as the state pursues its path-breaking conversion to carbon-free energy by 2045?

One answer would come from the creation of an entirely new industry in the state – the capture and underground storage of carbon dioxide emissions from gas-fired power plants and manufacturing operations, according to a report issued yesterday.

The proposal to make California a center of carbon capture and storage (CCS) development was issued yesterday by researchers from Stanford University and the Energy Futures Initiative, a think tank led by former Obama administration Energy Secretary Ernest Moniz.

Under their plan, a significant share of the state's gas-fired power plants, tagged for elimination under the 2045 zero-carbon goal, would remain in operation to back up wind and solar generation — but their CO2 emissions would be captured and transported by pipeline to be pumped underground. From that start, CCS could be extended to remove CO2 emissions from other major California industries that also burn gas.

But CCS is sharply opposed by some climate and clean energy activists who see it as a backdoor strategy by the oil and gas industry to hold on to a large share of future electricity generation, limiting the ascendancy of wind and solar power, electric vehicles, and battery storage.

[...]

Stanford Earth







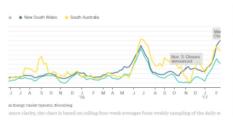
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Can the U.S. Become the Saudi Arabia of Natural Gas?
April 28, 2017

April 28, 2017 In "natural gas"



The Resurgence of the American Coal Industry, Part Deux: An Unexpected Ally April 10, 2017

April 10, 2017 In "Coal"



Summer Natural Gas Prices Reach 7-yr High! July 22, 2021 In "Oil and Gas"

Tags: CCS, ccus, EIA, LNG exports



#### **32 COMMENTS**





Oldest ▼

## Steve Case

① July 27, 2021 10:29 am

Meanwhile California cities continue the ban natural gas hook-ups in new construction. Well, so far anyway, can disconnects on the sale of homes be far behind? And you can be sure that mandatory disconnects are on the horizon.







**David Middleton** 

Reply to Steve Case

① July 27, 2021 10:36 am

"Newsom Announces Sweepstakes Where 5 Lucky Winners Get To Move Out Of California"



https://babylonbee.com/news/newsom-announces-sweepstakes-where-5-lucky-winners-get-to-moveout-of-california?fbclid=lwAR07LKdZ8rmUp5Kp6Stbm3llK4mkhhfopAks7Ydo8LdBGluAGoT-umBf7V0



Reply

# Steve Case

Reply to Steve Case

() July 27, 2021 10:40 am

Supposed to be reply to rbabcock below

Truck of tanks (H-Tanks? dunno) explodes You Tube

🗹 Last edited 9 days ago by Steve Case

+ 0 − → Reply

# Jeff Corbin

Reply to Steve Case

① July 27, 2021 11:39 am

Not sure I'd want a NG hook up in Shakytown California. Just like I wouldn't want propane tanks living Paradise California or even Malibu. This is of course and convenient excuse for a greenie like Newsom

7 of 13

#### rbabcock

() July 27, 2021 10:31 am

We were out fishing in the southern Chesapeake Bay and watched a LNG tanker coming from Cove Point MD going south in the ship's channel. The word out is stay a good distance away from these. The chance of them going boom is very remote, but if they ever do it will be impressive.. to say the least.



> Reply

#### **David Middleton**

Reply to rbabcock

① July 27, 2021 10:42 am

Funny thing... Cove Point was originally constructed as an LNG import terminal to import gas from Algeria. Now it exports US natural gas, mostly from the Marcellus, overseas.

https://marcellusdrilling.com/2019/11/cove-point-Ing-in-maryland-loads-milestone-100th-commercialship/

+ 3 -Reply

#### rbabcock

Reply to David Middleton

( July 27, 2021 12:12 pm

After it was built and imports stopped, it became a great fishing spot. You could go right up to the pilings and catch stripers and other types of fish. When they decided to convert it to an export terminal it became a restricted area that was aggressively enforced. Coming around the corner from Solomons going north put you crossing the corner of the restricted area and many a captain got the riot act read to them if they strayed into it. With the advent of chart plotters this became less of an issue.

+ 1 -Reply

### Chuck no longer in Houston

Reply to rbabcock

( July 28, 2021 3:32 pm

I am blown away by the navigation equipment available today. I grew up sailing with my dad in Galveston Bay and off the gulf coast (60s 70s). I remember making a trip from Galveston to Port Aransas navigating by offshore platforms. One night we missed a platform. At that point nothing to do but head mostly south. At first light, sailed to with shouting distance of one. Saw a worker above and dad yelled "where's Port O'conner?" and the guy just pointed off to the northwest. Good times, with some scary moments.

+ 2 -Reply

#### Oldseadog

Reply to rbabcock

( July 27, 2021 10:51 am

LNG/LPG tankers are among the safest vessels in service at the moment, although port authorities worlwide submit to local pressure groups and insist that the gas carriers are treated as being far more dangerous than they really are.

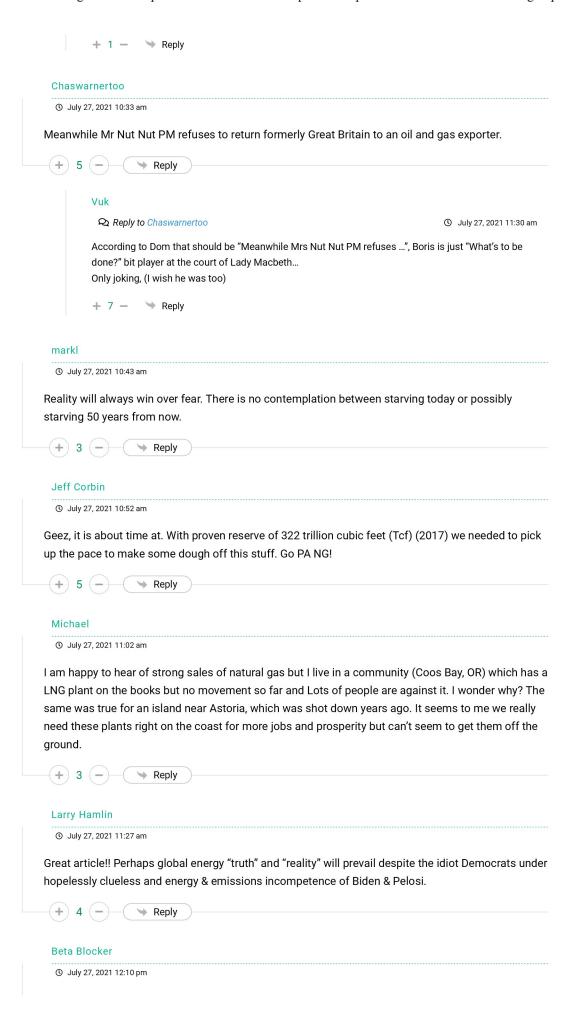
+ 6 -Reply

### Jeff Corbin

① July 27, 2021 11:41 am

We need to get as many of those puppies into the Black sea as possible... Central Asia is the on the last great economic frontiers.

8 of 13

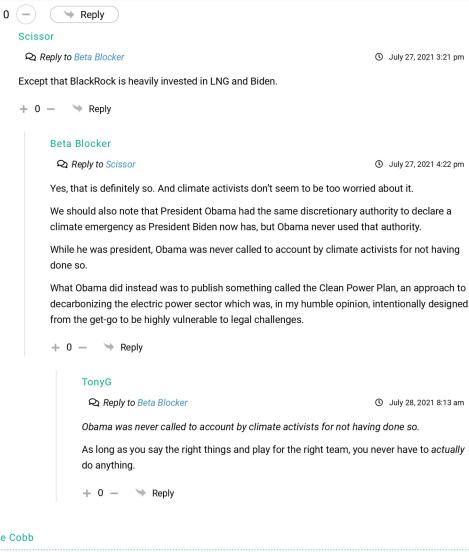


By hook or by crook, the Biden administration could shut down the export of LNG if it was determined to do so.

For example, the EPA could arbitrarily raise the emission control standards now being applied to the liquefaction process to levels impossible to attain. Or, using another tactic - one which is nakedly coercive - Biden could issue an executive order declaring a climate emergency and then use powers already granted to him under national security law to block the export of LNG from our shores.

For those who honestly count themselves as sincere climate activists, a fundamental question still remains to be answered.

Will the Biden administration stop playing its rhetorical games in giving mostly virtue-signaling lip service to the climate activist's agenda, and will the administration start using the legal authority it now has at its disposal to go all out in cutting US production and consumption of fossil fuels?



### **Bruce Cobb**

① July 27, 2021 12:41 pm

Other than the scambolic RE industry, I can't think of anything more scambolic than the proposed CCS industry. It's simply a way to make money off the backs of ratepayers and taxpayers, providing nothing of any value whatsoever.



# navy bob

① July 27, 2021 1:04 pm

It's been obvious for a long time that natural gas is the fuel of the future. It's clean, abundant and cheap, and gas-fired electric power plants are comparatively quick and inexpensive to build The shipping industry is already building gas-burning tankers and cargo ships, with even a few gas-fired fuel cell ships on the drawing boards. The economics, logistics and simplicity are overwhelmingly in gas's favor, and eco-loons will eventually find ways to rationalize it as an ally in the "fight" against climate change. I predict "carbon-neutral hydrocarbons" will be just the beginning of a long line of oxymoronic euphemisms they'll come up with to accept the inevitable.

https://wattsupwiththat.com/2021/07/27/us-lng-exports-hit-new-record-high/



#### H. D. Hoese

() July 27, 2021 3:12 pm

"Offsets used were bought from Shell's global portfolio of nature-based projects.." What is the definition of a nature-based project? My sample size is too small, but haven't been impressed with Shell's portfolio. Mitigation is now an old idea, includes a mixture of what one might call (or not) value. There are restoration books around will check the index. Common complaint is lack of adequate follow-up.

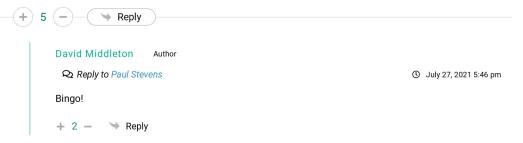


#### Paul Stevens

① July 27, 2021 5:32 pm

"But CCS is sharply opposed by some climate and clean energy activists who see it as a backdoor strategy by the oil and gas industry to hold on to a large share of future electricity generation, limiting the ascendancy of wind and solar power, electric vehicles, and battery storage."

Exposing that their position isn't about reducing CO2 emissions. Their concern here is in leaving energy provision out of a central controlling authority's hands. And allowing people to make decisions about their lifestyles. It's why they have always opposed nuclear power as well.



#### Doonman

() July 27, 2021 7:51 pm

But CCS is sharply opposed by some climate and clean energy activists who see it as a backdoor strategy by the oil and gas industry to hold on to a large share of future electricity generation, limiting the ascendancy of wind and solar power, electric vehicles, and battery storage.

Why would they care? Oh, that's right, the oil and gas industry is evil. So its not about fighting climate



② 2 hours ago ② Guest Blogger

• 6 hours ago • Charles Rotter

OPINION SCIENCE

Science Journal Demands "Hate Crime" Laws to Shield Scientists from Public Criticism

10 hours ago Eric Worrall

**CLIMATE COMMUNICATIONS** 

**Debate: Is Global Warming an Emergency** 

14 hours ago Charles Rotter