

BRIEFING September 2022

# A WARTIME WINDFALL

## How US LNG exporters are making the most of Russia's war in Ukraine

**Since Putin invaded Ukraine and played havoc with European fossil fuel supplies, American companies exporting liquified natural gas (LNG) have had a bonanza.**

Seeing an opportunity in the crisis, the US LNG industry seems to have had no qualms capitalizing on the conflict: buoyed by significant financial gains, they are lobbying relentlessly to build out fossil gas infrastructure, at the expense of the global climate and communities in the US, Europe and beyond.<sup>1</sup> Invoking Russia's weaponization of gas, Cheniere Energy, Inc. - the largest US LNG exporter - even went so far as to request a federal exemption from pollution standards that aim to protect predominantly poor and minority communities along the Gulf Coast from cancer-causing substances.

While the industry hopes to use the shock of the war to cement its long-term profits, companies' immediate financial gains are already a fact: As prices spiked globally in the first half of this year, Cheniere has seen returns from the short-term sale of gas more than quadruple. And since Russia invaded Ukraine on 24 February 2022, two other major US LNG exporters to Europe, Freeport LNG and Sempra Infrastructure (Sempra)<sup>2</sup>, reported a three-fold and almost eight-fold jump in revenue from the continent, respectively.

Despite this, the Biden administration appears to have given Cheniere and other LNG exporters privileged access to a joint US-EU taskforce on energy security that aims to shape Europe's energy future as it pivots away from dependence on Russia.

It is no surprise that the fossil fuel industry tries to lock the world into long-term reliance on its climate-wrecking fuels. They have delayed and blocked climate action for decades.<sup>3</sup>

Yet, it is unacceptable for a US president that claims to see "climate change as a clear and present danger to the United States"<sup>4</sup> to continue to give the industry a seat at the table as wildfires, droughts and flooding are threatening people and territory on both sides of the Atlantic and across the globe.<sup>5</sup>

To devise a genuine path to energy security, President Biden should:

- > cease granting political access to fossil fuel companies
- > draw expertise from the energy efficiency and renewable energy industry instead
- > phase out rather than expand fossil gas exports in line with US commitments under the Paris Agreement, and
- > strengthen protections for frontline communities.

Since the fall of 2021, Europe’s gas prices have increased rapidly as Russia deliberately curtailed supply to its European neighbors in an already tight global gas market.<sup>6</sup> Since Putin’s invasion of Ukraine in February 2022, a combination of Western sanctions and Russian delivery stops have helped drive prices even higher.<sup>7</sup>

Europe’s benchmark wholesale gas price, the Dutch Title Transfer Facility (TTF) reached an all-time high of more than €200 per Megawatt hour (MWh) in March 2022 and climbed to over €320/MWh in August 2022, up from an average of €17/MWh in March 2021.

Knock-on effects on the US market let the benchmark Henry Hub (HH) price reach \$9.38 per million British thermal units (MMBtu) in August; its highest value since 2008.

#### Putin’s war drives record gas prices in Europe and the US

The benchmark wholesale gas price in Europe is the Dutch Title Transfer Facility (TTF). In the USA, it is the Henry Hub natural gas spot price (HH). Values are shown in USD per million British thermal units (MMBtu).

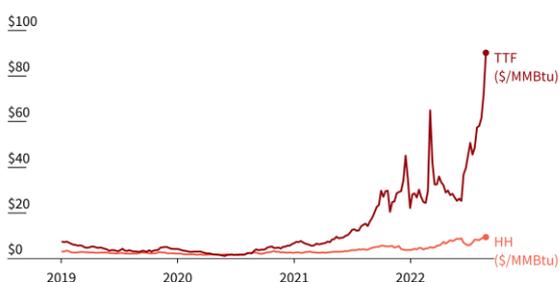


Chart: Global Witness • Source: Refinitiv Eikon

The effect has been a major shift in global energy markets. Data by think tank Bruegel shows the magnitude: from January to August 2022, total Russian gas imports to Europe had dropped by more than 40% compared to the same period the previous year, while LNG imports predominantly from the US and Qatar increased by over 60%.<sup>8</sup>

Putin’s war puts the spotlight on this volatility of fossil fuel markets and the violence linked to hydrocarbons.<sup>9</sup> And it should be a wake-up call to accelerate the energy transition away from Russia’s and all other fossil fuels. Yet, it is also too apparent that the current crisis is made worse by decades of delayed decarbonization: a delay the US oil and gas industry has long lobbied for.<sup>10</sup>

## AN INDUSTRY CAPITALIZING ON CONFLICT

And the lobbying continues. American fossil fuel companies clearly see Russia’s invasion of Ukraine as an opportunity to secure a profitable future for their industry.<sup>11</sup>

The day Russian troops launched their unprovoked attack, the American Petroleum Institute (API) – a prominent industry lobby group that counts Cheniere and Sempra as its members – seized the moment to request the White House expand fossil fuel extraction and infrastructure:



Dan Brouillette, President of Sempra and former Trump Energy Secretary put it bluntly: "I wonder if this might be Europe’s 9/11 moment, when people come together and address some of the policy issues, some of the regulatory issues."<sup>12</sup>

After the COVID pandemic slowed demand and stymied a number of proposed US export projects, the industry hopes for a war-induced LNG renaissance.<sup>13</sup>

Cheniere seems confident that past regulatory issues are now under control. In a recent investor call, talk was all about “reinforc[ing] the critical role of natural gas in [Europe’s] energy mix for the long-term”. CEO Jack Fusco briefly sent “thoughts and prayers [to] the people of Ukraine and broader Europe”, before segueing into how “governments the world over” now see “the

relevance and criticality ... of LNG and natural gas as a reliable, flexible and cleaner burning fuel".<sup>14</sup>

Asked about Cheniere's relationship with regulators and policymakers, Fusco said he was "very comfortable that Cheniere will grow for many, many years hereafter", that "the EU has been very, very helpful" and "we're getting what we need" from US regulators.<sup>14</sup>

This echoes the optimism of the Executive Chairman of the Board of Tellurian – a major US LNG company about to join the lucrative export market. In an April interview with the Financial Times, Charif Souki said "People who didn't want to associate with us six months ago are changing their minds." "We were 'hydrocarbons'. We were 'dirty', and natural gas was 'as bad as coal'. Now we are 'green' again."<sup>15</sup>

## CHENIERE QUADRUPLES SHORT-TERM GAINS

There is, of course, a clear reason why US LNG companies believe the crisis in Ukraine presents an opportunity: as war has raged, their balance sheets are looking much better.

A major beneficiary of the spike in fossil gas trade between Europe and the US has been Cheniere. Global Witness estimated the company's financial performance and found that since Russia invaded Ukraine, the company has enjoyed major financial gains.

Cheniere does not publish profit figures for LNG sold to Europe. However, its financial statements do show how much gas it has sold and how much revenue it earned from the sale. It is also possible to estimate how much Cheniere pays for the gas it cools and then resells.

Based on this data, Global Witness estimated how much more money the company has made for gas sold during the war. These so-called "netbacks" are a good proxy for Cheniere's financial performance, because they estimate whether the company is making more for every unit of gas it sells, not just whether it is shipping more gas to

Europe. See annex I for more details about this method.

The results are telling. For all of Cheniere's LNG sales the company's netbacks more than doubled in the first half of 2022 in comparison to the same period the previous year; they jumped from \$3.89 per thousand cubic feet of gas sold (MCF) to \$8.06/MCF.

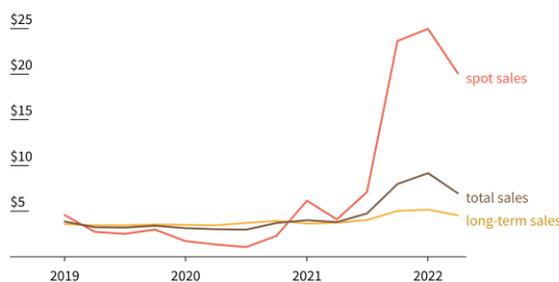
This increase is driven by Cheniere's sales under both long-term contracts, where buyers agree to purchase Cheniere's gas over long periods (typically at US Henry Hub prices plus a margin), and short-term sales on so-called global spot markets, which are as volatile as the global economy.

Particularly remarkable are Cheniere's netbacks from selling LNG on the spot market, in the context of Europe's record high gas price and the knock-on effects of the war across global markets.

During the first half of 2022, Cheniere's netbacks from short-term sales increased more than four-fold relative to the same period in 2021: from \$5.11/MCF in the first half of 2021 to a staggering \$22.54/MCF in the first half of this year.

### Cheniere's netbacks have skyrocketed

In the wake of Putin's aggression, returns from the spot market have increased from \$4 per million cubic feet (MCF) of gas sold to as high as \$25. Values are shown in USD per MCF.



Source: Cheniere

This jump enabled Cheniere to increase the cash it earns from its LNG operations by \$3.8 billion, compared to the first half of 2021.

In August 2022, Cheniere reported profits well beyond market expectations and saw its earnings outlook for the full year increase by almost \$3 billion.<sup>16</sup>

---

In a recent investor call, Cheniere states that 75% of all LNG cargoes produced this year went to Europe.<sup>14</sup>

The company does not publish how much of these European sales were under short-term versus long-term contracts, which typically make up the bulk of its gains. But the fact that netbacks from short-term sales have increased so drastically demonstrates the importance of these deals – deals sweetened by the impact of the war – to the company’s bottom line.

## **FREPORT LNG TRIPLES REVENUE FROM WAR-TORN EUROPE**

Cheniere is not the only US LNG exporter that has benefitted from the war in Ukraine. Another major exporter to Europe is Freeport LNG.

Unlike Cheniere, Freeport LNG is not publicly traded, so there is less transparency about its past financial performance. It also does not export the gas itself but sells its liquefaction capacity, the process by which gas is cooled to a liquid state before being moved onto cargo ships, as a service to third parties that then trade the gas.<sup>17</sup> This means Freeport’s profits are insulated from volatile spot markets, where most of the wartime windfall is made.

However, based on monthly data submitted by the company to the US Department of Energy (DoE), Global Witness was able to estimate the company’s revenue from LNG sales to Europe since the beginning of the war. See annex II for a detailed methodology.

In the period from 24 February to 31 July 2022 (the last date for which data is available), Freeport’s revenue from sales to European countries tripled compared to the same period the previous year: from \$491 million to more than \$1.4 billion.

And that even though Freeport had to shut its export terminal after an explosion on 8 June 2022, effectively exporting no gas over the summer. It aims to re-open the terminal in November 2022.<sup>18</sup>

Global Witness calculations show that 40% of Freeport’s revenue gains are driven by the increase in prices and 60% by the increase in volumes shipped to Europe.

The company reported that it was able to charge over 54% more for the gas it liquefied, with average weighted prices jumping from \$6.44 per million British thermal units (MMBtu) for the period in 2021 to \$9.90 in 2022.

Compared to the previous year, the total volume of gas Freeport sold to Europe since Feb 24 increased by over 80%, to 142 billion cubic feet (BCF): a staggering jump mirroring Europe’s crisis.

## **EIGHT-FOLD JUMP IN REVENUE FOR SEMPRA’S LNG TERMINAL**

Sempra Infrastructure is majority owner of the Cameron LNG terminal and another US exporter with stakes in the European market.<sup>19</sup>

Its business model is similar to Freeport’s: the company sells liquefaction services to LNG traders that turn the piped, gaseous fossil fuel into shippable LNG.

Based again on data submitted by Sempra to the DoE, Global Witness calculated an almost eight-fold increase in revenue from LNG sales to Europe since the beginning of the war. While Cameron LNG brought a revenue of \$2.1 billion from 24 February to 31 July 2022, it only grossed \$270 million during the same period in 2021.

Since 2021, export volumes from Sempra’s terminal to the European market tripled and average weighted prices roughly doubled; to 150 BCF and \$13.19/MMBtu respectively. Hence, the revenue increase is driven substantially by both the quantity of gas sold (72%) and higher prices (28%), a logical consequence of the turmoil in Europe.

### Freeport and Semptra's European revenue spiked during Ukraine war

From 24 Feb - 31 July 2022, both LNG exporters saw massive gains from exports to Europe compared to the same period the previous year.



Calculations are estimates based on data submitted to the U.S. Department of Energy (DoE).  
Chart: Global Witness • Source: U.S. DoE

## PROFITS FUEL THE “MADNESS” OF LNG EXPANSION

Unsurprisingly, the US LNG industry is seeking to use its financial tailwind as an impetus for expansion.<sup>20</sup> “You can be certain we are pursuing growth”, said Cheniere’s chief executive in August, as the company announced plans to expand export capacity by over 30 million tons at its terminals in Louisiana and Texas.<sup>21</sup> And Cheniere is not alone. A total of 24 new LNG projects are currently being planned or constructed and risk increasing US greenhouse gas emissions by more than 90 million tons per year. That is equivalent to 20 coal-fired power stations, warns a report by the Environmental Integrity Project.<sup>22</sup>

Asked to respond to its expansion plans, Cheniere framed them as the company “doing everything [it] can to increase supply to bring prices down.”

The picture is mixed in Europe. EU regulators celebrate the short-term supply of US LNG at this moment of crisis and additional import infrastructure is being planned.<sup>23</sup> Yet, there is an awareness of the dual risk new fossil fuel projects pose, either by worsening climate change or by becoming a stranded asset if Europe meets its climate targets. Especially as renewable alternatives are available, cleaner, less volatile, and substantially cheaper than fossil gas.<sup>24</sup> Hence, the EU already plans to reduce gas demand by more than 30% by 2030, so that “LNG export projects aimed primarily at the EU market may

never recover the capital invested in building LNG infrastructure.”<sup>25</sup>

It is this economic short-sightedness and the high human and environmental costs of climate change that make the U.N. Secretary General call any new investments in fossil fuel infrastructure “moral and economic madness”.<sup>26</sup>

## A WINDFALL FOR SOME, A HARD FALL FOR OTHERS

Diverting European markets to US LNG and expanding LNG infrastructure rather than accelerating the clean energy transition comes with substantial risks to people in the US, Europe and beyond.

In the US, which is set to become the world’s largest LNG exporter on President Biden’s watch, it is predominantly communities of color along the Gulf Coast that bear the brunt of the economic, environmental and health impacts of fossil gas extraction and export.<sup>27</sup> In the wake of the war in Ukraine, Cheniere even went so far as to request federal administrators exempt it from limits on emissions of cancer-causing pollutants that predominantly impact poor and minority communities.<sup>28</sup> As we went to press, federal regulators denied the request, citing public health concerns, and Cheniere acknowledged that “the steps needed to come into full compliance will not result in a material financial or operational impact and that we will be able to continue to reliably supply LNG to customers and countries around the world.”<sup>29</sup>

In Texas, struggling urban school districts stand to lose if Cheniere’s recent applications for property tax breaks on a planned expansion of Corpus Christi terminal get approved.<sup>30</sup> Already, Cheniere and Freeport topped the list of beneficiaries in Texas with more than \$55 million each in subsidies per year. And Texas is not alone: similar tax breaks in Louisiana saved Cheniere \$3.9 billion between 2010 and 2017.<sup>31</sup> Money the state of Louisiana could have certainly needed, ranking 48<sup>th</sup> out of

---

the 50 states and the District of Columbia overall for educational opportunities and performance.<sup>32</sup>

In Europe, substituting dependency on Russia by moving to alternative suppliers would do little to protect people from notoriously high and volatile fossil gas prices.<sup>33</sup> Already, about 80 million Europeans live in energy poverty; that is almost 18% of the population.<sup>34</sup>

Globally, the UN Development Program estimates that 71 million people in developing countries have been pushed into poverty within three months of the war as “a direct consequence of global food and energy prices surges”.<sup>35</sup> Price surges that spurred the biggest-ever profits for the oil and gas industry, a windfall the UN Secretary General called “immoral” as it occurs “on the backs of the poorest people and communities and at a massive cost to the climate”.<sup>36</sup>

## **BIDEN’S TASK FORCE A CORPORATE CAPTURE?**

Given these risks, it is remarkable that President Biden appears to have given the US LNG industry preferential access to a new joint US-EU task force on energy security.

The task force was set up by President Biden and the European Commission President Ursula von der Leyen as a response to the war and aims to reduce Europe’s dependence on Russian fossil fuels.<sup>37</sup>

Little is known about the participants in this transatlantic effort, beyond a vague picture of corporate capture. Beyond government representatives, the only acknowledged private-sector participants are three LNG export companies that have financially benefited from Europe’s crisis: Cheniere, Freeport LNG and Sempra Infrastructure.

Cheniere’s chief executive reported in an investor call in May that the company is an “active participant” in the task force,<sup>14</sup> Freeport LNG disclosed its participation to the Federal Energy

Regulatory Commission and Sempra’s Director of Global Government Affairs explained that they are “part of a coalition of LNG companies...to help propel the goals of the US-EU task force.”<sup>38</sup>

Global Witness calculated that Cheniere, Freeport and Sempra together account for over 85% of US shipments to the European markets this year.

The large growth in revenue from US LNG shipments to Europe, the opportunistic messaging by the US LNG industry and the lack of public accountability of the transatlantic task force that Cheniere, Freeport and Sempra claim to participate in, raise an important question: Could the task force be a diplomatic vehicle to promote the interests of US fossil fuel companies on the European market?

In May 2022, Global Witness warned the Biden administration that the lack of transparency about the participants in the task force may be illegal and risk undue influence by those intent on continuing to extract dangerous fossil fuels.<sup>39</sup> The task force is also the subject of a pending Freedom of Information request filed by Friends of the Earth.<sup>40</sup>

Asked to respond to the above allegations, Cheniere did not comment on the company’s financial gain from the impact of the war but reiterated its narrative that “Cheniere and [our] customers have played a vital role in Europe’s energy security during this critical and tragic time”. The company pointed at its ability to reroute cargoes to Europe to make up for Europe’s shortfall in fossil gas supply through “the flexibility and availability of LNG from Cheniere, and the fact that approximately 90% of our LNG is contracted long-term.” Cheniere’s own 2022 financial statements show 83% of sales were under long-term contract, and 17% under short-term sales.

Cheniere did not deny its involvement in the joint task force or its request to be exempt from federal pollution regulation.

---

Global Witness also reached out to Sempra Infrastructure, which declined to comment, and to Freeport LNG, which did not respond.

## **A FORCE FOR GENUINE ENERGY SECURITY**

The US LNG export industry has not only seen substantial financial gains through the geopolitical crisis in Europe. It has also not shied away from invoking the war in Ukraine to secure a long-term future for fossil gas in Europe and the US.

If the Biden administration wants to truly support its European allies in their quest for energy security, it needs to stop listening to an industry that has little regard for the health and safety of American communities or climate-vulnerable communities across the globe. The US is already on track to fulfil the emergency targets for short-term LNG supplies agreed with Europe,<sup>41</sup> and Europe has no need to expand its LNG import infrastructure to provide for its population this winter.<sup>42</sup>

In the 21<sup>st</sup> century, a transatlantic cooperation on energy security that does not make a farce of the term must remove all influence by the fossil fuel industry and instead draw expertise from those at the heart of transitioning energy systems: industry experts in energy efficiency, insulation, sustainable heating and renewables, as well as civil society organizations that work on climate policy, environmental justice and energy poverty.

Domestically, the US needs to phase-out fossil gas exports and deliver a just transition for workers and communities that upholds US commitments under the Paris Agreement.

In the first instance, this means US regulators need to ensure that Cheniere fully complies with an air pollution rule designed to protect people from breathing carcinogenic formaldehyde. They also need to reconsider the premature reopening of the Freeport LNG terminal after the June explosion, and at a minimum, consult with the

local community and strengthen the relevant safety regulations.

More broadly, no new LNG export projects should be approved by federal regulators, and approvals for projects that have not started construction need to be revoked. Critically, Congress must oppose Senator Manchin's backroom deal that purports to reform permitting, but in reality would ram through LNG pipelines, terminals, and other harmful fossil fuel infrastructure at the expense of already overburdened frontline communities.<sup>43</sup> Finally, a windfall tax on oil and gas companies, as proposed in Congress, can provide funds to protect Americans from the worsening cost-of-living crisis.<sup>44</sup>

It is time to confront the reality that long-term energy security in the US and Europe has long been under threat by an oil and gas industry that denies and delays any meaningful climate action to ensure its profits keep on rolling in. We need to protect democratic policymakers from their undue influence and ensure a comprehensive gas phaseout now.

---

## ANNEX I METHOD TO CALCULATE CHENIERE'S NETBACKS

Cheniere does not publish profit figures for LNG sold to Europe. However, it is possible to calculate a reasonable proxy for the company's financial gains based on a simplified version of the company's netbacks.

Netbacks are an oil and gas industry specific calculation used to assess a company's financial performance over time. They represent the revenue generated from the sale of oil and gas minus specific costs required to bring the product to market. They are typically shown as revenue per unit of output, so in Cheniere's case as USD per thousand cubic feet (Mcf) of gas sold.

$$\text{Netback}(\$/\text{Mcf}) = \text{Revenue} / \text{Volumes} - \text{Cost of Gas}$$

Cheniere publishes details about the total revenue earned in each quarter and total volumes of LNG sold globally in its quarterly financial reports. It also shows how volumes and revenue differ between sales under long-term contracts and short-term deals. To simplify the analysis, we used the US Henry Hub (HH) spot market price as a proxy of the production cost to Cheniere, because for every unit of gas Cheniere liquefies, it must buy US piped gas as feedstock.<sup>45</sup> We did not account for realised loss on financial derivatives, royalties, transportation, or other costs.

Global Witness estimate total netbacks by dividing the revenue earned or lost from long-term contracts (SPAs), short term sales and any purchased LNG by the total volumes sold, and then subtracting the estimated HH price of fossil gas for the month. Netbacks from long-term contracts and short-term sales were calculated by using only the revenues and volumes Cheniere reported under these two categories, and again subtracting the estimated HH cost for gas feedstock.

Global Witness calculated netbacks for the first half of 2022 to reflect the impact of the war on Cheniere's performance. Even though Putin invaded Ukraine only on 24 February 2022, this slightly larger window is justified because, as a precursor and in preparation for the invasion, Russia already started to artificially curtail gas supply to the European market in late 2021. This increased demand and prices for U.S. LNG imports to Europe.

Comparing these netbacks from the first half of 2022 to the same period in 2021 allows us to estimate the degree to which Cheniere has benefited from the impact of the war on the global gas market:

- > Total netbacks show the combined impact of short-term sales on spot markets at conflict-induced high prices and long-term contracted sales that provide lower, but more stable returns.
- > The increase in netbacks from long-term contracted sales reflects the knock-on effect the war in Europe has had on the US wholesale gas price, Henry Hub, which increased by almost \$5 since January 2022. This is because Cheniere's contracts typically charge Henry Hub prices plus a 15% markup, increasing Cheniere's returns as Henry Hub prices rise.
- > The increase in netbacks from short-term sales reflect the much larger effect the war has had on the European benchmark wholesale gas price, the so-called Dutch Title Transfer Facility (TTF), and the knock-on effect on other spot markets. The TTF is currently the highest price available and therefore the most competitive for LNG exporters. Short-term sales of flexible cargos are hence likely to sell to Europe rather than Asia or other regions.

---

## ANNEX II METHOD TO CALCULATE FREEPORT AND SEMBRA'S REVENUE

Freeport LNG and Sempra Infrastructure also do not publish profit figures for LNG sold to Europe. However, based on data submitted by both LNG exporters to the U.S. Department of Energy (DoE), Global Witness analysed monthly export volumes, average weighted prices<sup>46</sup>, and destination countries to estimate the revenue both received from European countries.

Revenue (Europe) = Volume (European countries)  
x average weighted price (\$/MMBtu)

To estimate the wartime effect on financial gains, Global Witness compared average weighted prices, volumes shipped, and revenue earned from Europe for the period since the start of the war (i.e., 24. Feb until 31 July 2022, the last date for which data was available) to the same period in 2021. Global Witness also estimated how much of the increase in revenue was driven by price versus quantity of gas sold.

The results illustrated two key points:

- > Both LNG exporters reported a substantial increase in wartime average weighted prices, volumes shipped, and revenue from Europe, compared to the same period in 2021.
- > As a direct consequence of the war, some of this increase is driven by higher prices that LNG exporters can charge, and some by the larger quantities sold to the European market, with both effects playing a strong role.

### A note on the different methods for Cheniere vs Freeport and Sempra

The data LNG exporters submit to DoE fails to disaggregate between short-term sales on the spot market and long-term contracted sales at lower gas prices set before the current crisis.

Cheniere's financial statements reveal that the DoE data closely resembles the returns from long-term contracts but seems to fail to capture their short-term sales. Cheniere is an integrated exporter that sells actively on the spot market, so the DoE data was

an inadequate proxy for their wartime windfall, because Cheniere unsurprisingly saw the biggest gains on the spot market. The netback calculation (above) is hence a more appropriate proxy for Cheniere's wartime financial gain.

Freeport and Sempra Infrastructure work under a more long-term, so-called tolling business model. Instead of engaging in volatile short-term sales, they sell their liquefaction capacity, the process by which gas is cooled to a liquid state before it is moved onto cargo ships, to third parties for a relatively stable toll. Hence, Global Witness takes the DoE data to be an adequate reflection of both companies' financial performance.

---

## ENDNOTES

- <sup>1</sup> Global Witness, Fossil gas, liquefied: What LNG is and why it is a looming climate disaster, available at [Fossil gas, liquefied: What LNG is and why it is a looming climate disaster | Global Witness](https://www.globalwitness.org/en/campaigns/stop-russian-oil/)
- <sup>2</sup> Sempra Energy is a North American energy infrastructure company that provides energy through transmission and distribution utilities in California and Texas. Through its daughter company Sempra Infrastructure, it majority owns and operates the LNG export terminal Cameron LNG in Louisiana.
- <sup>3</sup> In These Times, A brief history of how big oil outplayed us all, available at <https://inthesetimes.com/article/oil-gas-industry-strategy-advertising-seuss-pipeline-climate-change-science>, accessed on 1 August 2022.
- <sup>4</sup> White House, Fact Sheet, available at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/07/20/fact-sheet-president-bidens-executive-actions-on-climate-to-address-extreme-heat-and-boost-offshore-wind/>, accessed on 1 August 2022.
- <sup>5</sup> DW, Climate change: Flooding, drought, fire and heat waves around the world, available at <https://www.dw.com/en/climate-change-flooding-drought-fire-and-heat-waves-around-the-world/g-62382579>, accessed on 6 August 2022.
- <sup>6</sup> IEA, What is behind soaring energy prices and what happens next, available at <https://www.iea.org/commentaries/what-is-behind-soaring-energy-prices-and-what-happens-next>, accessed on 10 May 2022.
- <sup>7</sup> J.P. Morgan, What's next for oil and gas prices as sanctions on Russia intensify, available at <https://www.jpmorgan.com/insights/research/oil-gas-energy-prices>, and Financial Times, European gas price rise accelerates as Russia cuts flows, available at <https://www.ft.com/content/283f2ed2-0334-4507-a4f4-11c80be5991a>
- <sup>8</sup> Bruegel, European natural gas imports, available at <https://www.bruegel.org/dataset/european-natural-gas-imports>, accessed on 15 June 2022.
- <sup>9</sup> Global Witness, Stop Russian oil, available at <https://www.globalwitness.org/en/campaigns/stop-russian-oil/>
- <sup>10</sup> See for instance, Guardian, Half a century of dither and denial – a climate crisis timeline, available at <https://www.theguardian.com/environment/ng-interactive/2019/oct/09/half-century-dither-denial-climate-crisis-timeline>, accessed on 02 June 2022.
- <sup>11</sup> <https://www.globalwitness.org/documents/20419/Gasgate - web version.pdf>
- <sup>12</sup> Kate Aronoff, reporting from CERAWeek 2022, available at <https://twitter.com/KateAronoff/status/1501593523975565314>, accessed on 3 June 2022.
- <sup>13</sup> S.P. Global, LNG Project Tracker: Signs of a US LNG renaissance could kick-start construction, available at <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/lng-project-tracker-signs-of-us-lng-renaissance-could-kick-start-construction-69130430>, accessed on 2 June 2022.
- <sup>14</sup> Seeking Alpha, Cheniere Energy's Q1 2022 earnings call transcript, available at <https://seekingalpha.com/article/4506931-cheniere-energys-lng-ceo-jack-fusco-on-q1-2022-results-earnings-call-transcript>, 15 June 2022.
- <sup>15</sup> Financial Times, Biden and Ukraine: from climate champion to oil price panic, available at <https://www.ft.com/content/048ea270-cdd8-4c77-a8d4-0c67e2f9b921>, accessed on 28 July 2022.
- <sup>16</sup> Reuters, Cheniere Energy posts Q2 profit on strong LNG demand, raises outlook, available at <https://www.reuters.com/business/energy/cheniere-energy-posts-q2-profit-strong-lng-demand-2022-08-04/>, accessed on 4 August 2022.
- <sup>17</sup> Freeport LNG, Our Business, available at <https://freeportlng.com/our-business/gas-liquefaction>, accessed on 18 August 2022.
- <sup>18</sup> Reuters, Freeport LNG expects further delays in resuming Texas plant operations, available at <https://www.reuters.com/business/energy/freeport-lng-expects-further-delays-resuming-texas-plant-operations-2022-08-23/>, accessed on 23 August 2022.
- <sup>19</sup> Sempra Infrastructure, Who we are, available at <https://semprainfrastructure.com/>, accessed on 18 August 2022.
- <sup>20</sup> OCI, American gas lobby spins Ukraine crisis to push for expansion of dirty US LNG, available at <https://priceofoil.org/2022/02/16/american-gas-lobby-spins-ukraine-crisis-to-push-for-expansion-of-dirty-us-lng/>, accessed on 2 March 2022.
- <sup>21</sup> Upstream Energy Explored, Cheniere plans further expansion of US LNG export facilities, available at <https://www.upstreamonline.com/lng/cheniere-plans-further-expansion-of-us-lng-export-facilities/2-1-1272686>, accessed on 5 August 2022.
- <sup>22</sup> Environmental Integrity Project, Boom in LNG could add more than 90 million tons of greenhouse gases a year, available at <https://environmentalintegrity.org/news/boom-in-lng-could-add-more-than-90-million-tons-of-greenhouse-gases-a-year/>, 2 August 2022.
- <sup>23</sup> S.P. Global, Europe's dash for new LNG import infrastructure picks up pace, available at <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/081022-feature-europes-dash-for-new-lng-import-infrastructure-picks-up-pace>, accessed on 15 August 2022.
- <sup>24</sup> IRENA, Renewable power remains cost competitive amid fossil fuel crisis, available at <https://www.irena.org/newsroom/pressreleases/2022/Jul/Renewable-Power-Remains-Cost-Competitive-amid-Fossil-Fuel-Crisis>, accessed on 4 August 2022.
- <sup>25</sup> E3G, Future of EU gas demand, implications for the US LNG export sector, available at <https://www.e3g.org/publications/future-of-eu-gas-demand/>, accessed on 14 April 2022.
- <sup>26</sup> UN Secretary General, Statements and messages, available at <https://press.un.org/en/2022/sgsm21228.doc.htm>, accessed on 14 April 2022.

- 
- <sup>27</sup> Global Witness, President Biden is set to choke the world's climate in fossil gas, available at <https://www.globalwitness.org/en/campaigns/fossil-gas/president-biden-is-set-to-choke-the-worlds-climate-in-fossil-gas/>
- <sup>28</sup> Reuters, Top U.S. LNG producer Cheniere asks Biden admin to drop pollution rule, available at <https://www.reuters.com/business/energy/exclusive-top-us-lng-producer-cheniere-asks-biden-admin-drop-pollution-rule-2022-07-08/>, accessed on 9 August 2022.
- <sup>29</sup> Washington Post, EPA denies Cheniere Energy request for LNG pollution waiver, available at [https://www.washingtonpost.com/politics/epa-denies-cheniere-energy-request-for-lng-pollution-waiver/2022/09/06/c5bebab-2e3c-11ed-bcc6-0874b26ae296\\_story.html](https://www.washingtonpost.com/politics/epa-denies-cheniere-energy-request-for-lng-pollution-waiver/2022/09/06/c5bebab-2e3c-11ed-bcc6-0874b26ae296_story.html), accessed on 7 September 2022.
- <sup>30</sup> The Intercept, Corporate subsidy quietly dies in Texas – topping off bad week for big oil, available at <https://theintercept.com/2021/06/01/texas-subsidies-oil-companies/>, accessed on 1 August 2022.
- <sup>31</sup> Subsidy Tracker, Parent Company Summary, Cheniere Energy, available at <https://subsidytracker.goodjobsfirst.org/parent/cheniere-energy>, accessed on 1 August 2022.
- <sup>32</sup> Education week, Quality Counts 2021: Educational opportunities and performance in Louisiana, available at <https://www.edweek.org/policy-politics/quality-counts-2021-educational-opportunities-and-performance-in-louisiana/2021/01>, accessed on 1 August 2022.
- <sup>33</sup> Global Witness, The EU's 250 billion gas gamble, available at <https://www.globalwitness.org/en/campaigns/fossil-gas/the-eus-250-billion-gas-gamble>.
- <sup>34</sup> EU Fact Check, Mostly false: “More than 30 million Europeans live in energy poverty”, available at <https://eufactcheck.eu/factcheck/mostly-false-more-than-30-million-europeans-live-in-energy-poverty/>, accessed on 14 August 2022.
- <sup>35</sup> UNDP, Global cost-of-living crisis catalyzed by war in Ukraine sending tens of millions into poverty, warns UN Development Programme, available at <https://www.undp.org/press-releases/global-cost-living-crisis-catalyzed-war-ukraine-sending-tens-millions-poverty-warns-un-development-programme>, accessed 8 July 2022.
- <sup>36</sup> UN Secretary General, On the launch of the third brief by the Global Crisis Response Group on Energy, available at <https://www.un.org/sg/en/content/sg/press-encounter/2022-08-03/press-conference-the-secretary-general-and-rebeca-grynspan-secretary-general-of-unctad-%E2%80%93-the-launch-of-the-third-brief-the-global-crisis-response-group-energy>, accessed on 4 August 2022.
- <sup>37</sup> White House, Fact Sheet: United States and European Commission announce task force to reduce dependence on Russian fossil fuels, available at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/25/fact-sheet-united-states-and-european-commission-announce-task-force-to-reduce-dependence-on-russian-fossil-fuels/>, accessed on 26 March 2022.
- <sup>38</sup> Eurogas, Let's talk LNG with Sempra, available at <https://www.youtube.com/watch?v=fg2jY4qKRBI&t=1s>, accessed on 9 July 2022.
- <sup>39</sup> Global Witness, Secretive Biden Energy Task force appears illegal – “reminiscent of Trump”, available at <https://www.globalwitness.org/en/press-releases/secretive-biden-energy-task-force-appears-illegal-reminiscent-of-trump/>.
- <sup>40</sup> FOE, Amos Hochstein: Diplomat or Fossil Fuel lobbyist ?, available at <https://foe.org/news/hochstein-diplomat-or-fossil-fuel-lobbyist/>, accessed on 1 June 2022.
- <sup>41</sup> EURACTIVE, US LNG exports to Europe on track to surpass Biden promise, available at <https://www.euractiv.com/section/energy/news/us-lng-exports-to-europe-on-track-to-surpass-biden-promise/>, accessed on 26 July 2022.
- <sup>42</sup> EU Observer, no new EU gas infrastructure needed despite war, available at <https://euobserver.com/green-economy/154654>, accessed on 5 April 2022.
- <sup>43</sup> Inside Climate News, Senate Democrats Produce a Far-Reaching Climate Bill, But the Price of Compromise with Joe Manchin is Years More Drilling for Oil and Gas, available at <https://insideclimatenews.org/news/28072022/senate-democrats-produce-a-far-reaching-climate-bill-but-the-price-of-compromise-with-joe-manchin-is-years-more-drilling-for-oil-and-gas/>, accessed on 29 July 2022.
- <sup>44</sup> The Hill, Wyden introduces bill to double tax excess oil profits, available at <https://thehill.com/policy/3594920-wyden-introduces-bill-to-double-tax-on-excess-oil-profits>, accessed on 10 August 2022.
- <sup>45</sup> Cheniere's redacted contracts published by the US Securities and Exchange Commission (SEC) indicate HH as “the final settlement price (in USD per MMBtu) for the New York Mercantile Exchange's Henry Hub natural gas futures contract for the Month in which the relevant cargo's Delivery Window is scheduled to begin”. The New York Exchange (NYMEX) specifies that “trading terminates on the 3<sup>rd</sup> last business day of the month prior to the contract month”. Hence, Global Witness took this date's HH daily spot market price as an estimate for the month's costs, and averaged costs over three months to create a simplified, quarterly estimate of HH.
- <sup>46</sup> The DoE weighted average price lists the price at which the LNG exporter sold the LNG cargoes, averaged out across the month and across contracted and uncontracted sales. The DoE states that it “has a confidentiality policy for certain data elements collected on Form FE-746R that allows DOE to publish a monthly volume-weighted average price for each point of LNG import or export, but not a price for each individual imported or exported LNG cargo. For additional information, please see the Federal Register Notice concerning this Information Collection Extension at <https://www.federalregister.gov/documents/2018/08/30/2018-18829/information-collection-extension>”