

Truth and lies at El Musel

A story of hypocrisy and Spain's addiction
to US liquefied gas



GREENPEACE



Energy Justice
investigations

GREENPEACE

A report by Greenpeace Spain
November 2023

Authors

Amadeo Ghiotto
and Conrado García del Vado

Editor

Lauren Kemp

Designed by

Kyle McKibbin
and Noemí Alonso Moreno

Cover image
by Pedro Armestre / Greenpeace

Greenpeace is an independent campaigning organization that uses peaceful protest and creative communication to expose global environmental problems and to promote solutions that are essential to a green and peaceful future.



Executive summary	4
Introduction	7
Part 1: the Spanish gas system	8
Spain's gas supply strategy	8
Spanish gas - A brief outline	9
The boom of US liquified gas imports to Spain	10
A fracking mess	13
Government hypocrisy	15
Spain's regasification capacity	15
Trends in gas consumption: and the "European solidarity sationale"	17
Continued presence of Russian gas in the Spanish market	19
Part 2: Enagás and its fossil profits	20
Shaping Spain's fossil fueled energy future	20
The company where revolving doors are commonplace	21
Gas oversupply in Spain: Enagás and regulatory imbalance	22
Enagás' false solutions: more and new gases to feed a phantom demand - The Hydrogen Trojan Horse	24
Where is the money coming from? Who's paying?	24
Profits for Enagás and its shareholders; costs paid by the Spanish public	26
Part 3: Enagás' profits, at the expense of communities in Spain and the US	29
El Musel and the failed promises of Asturias' reindustrialization	29
The US connection - El Musel as a store for US fracked gas?	30
Fracked US gas breaking the soil, the air, and the health of its citizens	33
From the fracking fields to the toxic Gulf Coast	35
The silent pollution - Natural gas is not "natural"	37
Conclusions	38
Demands for Europe	39
Change the system	39
Phase out gas	40
Demands for the US	42
Annex: testimony from US communities	43

Executive summary

One of the impacts of the Russia/Ukraine war has been reduced gas supplies to Europe. This created a rare opportunity. Transforming Europe into a major market for US liquified gas had been a strategic objective for several years¹ and so, within weeks of the invasion US President Biden promised to fill the gas gap initially by rerouting supplies from Asia to Europe.²

The European oil and gas industry also seized their chance. Up until the Russian invasion, Europe was pushing the need for an energy transition in response to climate change and the need to move away from fossil fuel energy sources. But suddenly they adopted the “Shock Doctrine” philosophy³, using the fear among politicians of threats to gas supplies caused by the war, the oil and gas industry changed the narrative espousing the need for “energy security”. To satisfy this there was a need to massively expand the infrastructure to take the gas offered by the US. Across Europe, the gas industry rapidly developed new proposals and resurrected old ones.

This move was eagerly taken up in Spain by two companies. Enagás S.A., a gas company that owns and operates the national gas grid, and Endesa S.A. the multinational electric and gas utility company which is a majority-owned subsidiary of the Italian company, Enel.

They claimed:

1. US liquified gas and new infrastructure are necessary for Spain and its neighbour countries to satisfy the future gas demand and secure energy for Europe.⁴
2. The boom of US liquified gas would help phase out Russian gas imports to Spain.⁵

As part of this infrastructure expansion, Enagás opened an existing regasification terminal, El Musel in Gijón, Asturias, a region in north-western Spain that has suffered industrial decline and unemployment, partly because of unfulfilled promises. El Musel, which was built in 2012, but never used - until this year; it has already taken shipments of US liquified gas⁶. It is one of seven regasification terminals in Spain, all of which are under-used because Spain has more gas than it needs.

The contract with Enagás for the extra gas capacity in El Musel went to Endesa.⁷ This means they can use this terminal to bring US liquified gas to Europe. In 2014 Endesa signed two contracts with US company, Cheniere Energy Inc for a total of 2.25 million tonnes (3.06 bcm)⁸. The contracts last until 2039⁹ and started delivering in 2019¹⁰. This forms the backbone of Endesa’s gas portfolio, with their gas tankers being used for their cross Atlantic trade.¹¹ These add to the already apparent boom of US liquified gas trade to Spain.

- 1 **Offshore Energy**, Europe gets first Sabine Pass LNG export cargo, (2016) <https://www.offshore-energy.biz/europe-gets-first-sabine-pass-lng-export-cargo/>
- 2 **The White House**, Remarks by President Biden and European Commission President Ursula von der Leyen in Joint Press Statement (2022) <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/03/25/remarks-by-president-biden-and-european-commission-president-ursula-von-der-leyen-in-joint-press-statement/>
- 3 **Naomi Klein**, About the Book <https://naomiklein.org/the-shock-doctrine/>
- 4 **Enagás**, Enagás and Reganosa create an energy hub in the northwest of the Iberian Peninsula (2023) <https://www.enagas.es/en/press-room/news-room/press-releases/completed-transaction-enagas-reganosa/>
- 5 **La Moncloa**, Teresa Ribera: "Irun's increased interconnection capacity will strengthen Europe's security of supply" (2022) https://www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2022/20220922_gas-supply.aspx
- 6 **La Voz de Asturias** Llegada del «Cool Racer» a Gijón, el primer metanero para la regasificadora de El Musel (2023) <https://www.lavozdeasturias.es/noticia/asturias/2023/07/01/llegada-cool-racer-gijon-primer-metanero-regasificadora-musel/00031688210856685917865.htm>
- 7 **Endesa**, El Musel LNG plant has received the first commercial shipment (2023) <https://www.endesa.com/en/press/press-room/news/customers/musel-lng-plant-received-first-commercial-shipment>
- 8 **Converted using BP**, Approximate conversion factors (2022) <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-approximate-conversion-factors.pdf>
- 9 **Cheniere Energy**, Cheniere and Endesa Sign 20-Year LNG Sale and Purchase Agreement (2014) <https://lngir.cheniere.com/news-events/press-releases/detail/119/cheniere-and-endesa-sign-20-year-lng-sale-and-purchase>
- 10 **Endesa**, Informative Dossier: Endesa's first LNG carrier to guarantee the shipment of its purchases of two billion m3 per year in the US (2019) Converted using BP, Approximate conversion factors (2022) [https://www.endesa.com/content/dam/endesa-com/endesa-en/home/prensa/noticias/documentos/2019/03/en_1903-dossier-metanero-endesa-para-transporte-gnl-\(003\)v2.pdf](https://www.endesa.com/content/dam/endesa-com/endesa-en/home/prensa/noticias/documentos/2019/03/en_1903-dossier-metanero-endesa-para-transporte-gnl-(003)v2.pdf)
- 11 **Endesa**, Endesa will charter its second LNG carrier to guarantee the maritime transport of its LNG acquisitions after 2021 (2019) <https://www.endesa.com/en/press/press-room/news/energy-sector/endesa-will-charter-its-second-lng-carrier>

Investigations by Greenpeace Spain reveal that the rationale used to justify the opening of El Musel and expanding the gas infrastructure do not stand up to scrutiny. Firstly, satisfying the ‘future gas demand for Europe’ is not possible as Spain only has two low volume pipelines connecting to France (two others go to Portugal). Secondly, as in Spain, there is an over-capacity of gas across Europe and, thirdly, many EU countries are building their own regasification facilities.¹²

The claim of “helping to phase out Russian gas imports” is also false. Spain is currently the largest EU importer of Russian liquified gas, thus keeping the Russian war coffers filled with fossil fuel profits.¹³

A third argument proposes that this will help the industrial renaissance of the Asturias region. This is false because ‘business as usual’ is both unjust and unsustainable. The people and communities of Asturias deserve a just transition to a reliable alternative to fossil fuels. This can be achieved using initiatives like energy-efficient renovations and the installation of renewable energy sources which create more jobs than those in fossil fuels and would boost the region’s economy¹⁴. The shift would help achieve the goal of sustainable self-sufficiency in electricity through renewables¹⁵, resulting in reduced emissions and an improved quality of life for Asturian citizens. This is possible with support from both the central and regional governments, in the form of appropriate tax policies and training.

The reality is that Enagás is using the “energy crisis” simply to add more infrastructure to its portfolio and shore up profits and shareholder payouts while locking Spain into decades of gas dependency.

According to an investigation by elDiario.es reported in Euractiv¹⁶, Spanish gas is the second most expensive in Europe, due to the following costs:

1. Maintenance of the regasification plant of El Musel in Gijon, northern Spain, which has never been used (€23.6m in 2019).
2. Compensation to Algerian company Sonatrach for price revisions (€33m a year from 2015)
3. Accumulated system deficit since 2014 (more than €100m in 2019).
4. A debt of €1,350m for the failed Castor gas storage facility.

Another reason that Enagás is so eager to ‘invest’ in El Musel and new infrastructure is that the company does not actually pay for these investments. Rather, the tolls and charges for using the gas system (pipelines, storage and regasification facilities) are paid for by the State in the ‘regulated market’ - that is by Spanish consumers. In 2022 the company reported that ‘regulated income’ accounted for 99.3% of their total €957 million revenue¹⁷.

Ultimately this means that the more Enagás builds, the more revenue it receives from the Spanish State, even unused infrastructure is profitable. Enagás has increased its payout to shareholders year on year. In 2013 it was 24%, which has risen to 46% or €450 million in 2022, despite falling revenue.¹⁸ This is money that comes from the Spanish people, goes to the Spanish Government and ends up in the pockets of shareholders scattered across the globe. A total of €3.651 billion in the last 10 years.¹⁹

¹² IEEFA, Over half of Europe’s LNG infrastructure assets could be left unused by 2030 (2023) <https://ieefa.org/articles/over-half-europes-lng-infrastructure-assets-could-be-left-unused-2030>

¹³ Global Witness, EU imports of Russian LNG have jumped by 40% since the invasion of Ukraine (2023) <https://www.globalwitness.org/en/press-releases/eu-imports-russian-lng-have-jumped-40-invasion-ukraine/>

¹⁴ Greenpeace Spain, La recuperación económica con renovables (2014) <http://archivo-es.greenpeace.org/espana/es/Informes-2014/Octubre/La-recuperacion-economica-con-renovables/>

¹⁵ Greenpeace Spain, Informes Renovables 2050 (2007) <https://archivo-es.greenpeace.org/espana/es/reports/informes-renovables-2050/>

¹⁶ F. Simon, Spain’s ‘luxurious’ gas infrastructure under the spotlight (2023) <https://www.euractiv.com/section/climate-environment/news/spains-luxurious-gas-infrastructure-under-the-spotlight/>

¹⁷ Enagás, Annual Report 2022 (2023) p331 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

¹⁸ See Part 2, Table 6, data from Annual Reports of Enagás 2013-2022

¹⁹ See Part 2, Table 6, data from Annual Reports of Enagás 2013-2022



Regasification plant of El Musel in Gijón.

© Pedro Armestre / Greenpeace

Liquefied gas threatens the climate and destroys the hope of sustainability. Allowing and encouraging its import from the US is hugely hypocritical of the government and corporations. The imported gas comes from fracking - a process that has been banned in Spain²⁰ and across Europe²¹ because it severely impacts the environment and the people and communities who live and work among the fracking fields.

The shift away from energy transition puts us all on a suicide path with more frequent and extreme weather events. Urgent calls from scientists, the UN and even the International Energy Authority (IEA), have made it clear that we must end reliance on fossil fuels to ensure a safe

future and there is no need for investment in new coal, oil and gas on a net zero pathway.²²

Enagás, and many other oil and gas companies, continue to try and achieve the impossible by expanding fossil fuel infrastructure at the same time as “decarbonising”. They propose a vague time in the future where gas infrastructure could be used to transport hydrogen.²³ This is a mirage. The technical and economic viability of hydrogen transportation through such pipelines is questionable and there are no concrete plans to generate the requisite quantities of “green” hydrogen from renewable sources.

The oil and gas industry together with weak governments want to take us in the opposite direction. The opening of El Musel is a clear example of exactly what we should not be doing.

²⁰ Boletín Oficial del Estado, Artículo 9. Exploración, investigación y explotación de hidrocarburos (2021) <https://www.boe.es/buscar/act.php?id=BOE-A-2021-8447>

²¹ Greenpeace, Who Profits from War p55 (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf#page=55>

²² IEA, Net Zero by 2050 (2021) <https://www.iea.org/reports/net-zero-by-2050>

²³ Enagás, Enagás boosts the development of renewable hydrogen in Spain (2023) <https://www.enagas.es/en/press-room/news-room/press-releases/2023-01-19-np-dia-hidrogeno-enagas/>

Introduction

In June this year, the El Musel fossil gas regasification plant in Gijón, Spain was given authorization to open after 10 years of being mothballed²⁴. Gijón is in Asturias, a region in northern Spain that has suffered industrial decline and unemployment, partly as a consequence of unfulfilled promises²⁵. The plant, built in 2012, had never been used²⁶ - until this year.

Greenpeace Spain has investigated the real story behind El Musel. This report exposes the history of broken promises and shines a light on the huge company profits largely paid for by the Spanish people with the complicity of the Government.

A review of imports, including from Russia, and the US, shows that Spain already has an over-capacity of gas. Spanish policy makers have been using the “European solidarity rationale” to justify US liquified gas imports through Spain, but the EU also has a gas surplus as well as a fall in demand.

This report is part of a series of Greenpeace investigations into the influence of the gas industry, with two previous studies published on Belgium²⁷ and France²⁸. It exposes the fact that, not only is the El Musel plant not needed or wanted, but it is also an example of how the oil and gas industry –together with complicit governments– has hood-winked the Spanish administration and many others across Europe, into allowing a massive hike in building and re-opening fossil gas infrastructure. These companies use the Russia/Ukraine war to switch the political narrative from the need for an energy transition to energy security - this is another false narrative.

Fossil gas imports come from a number of countries, but the US leads the lobbying effort. As the war began,

the US told Europe to open up to US gas - particularly the liquified gas rapidly being expanded in the fracking fields of the US.

The real drive behind this infrastructure expansion is the massive profits for the oil and gas industry and locking us all into a fossil fuel future –a future already torn by climate disasters– extreme floods, fires, droughts, with human and wildlife casualties numbered in the millions.

Fossil fuels often come with promises of short-term prosperity, but Asturias, Spain, and the world deserve better. Sustainable alternatives, driven by renewable energy sources can contribute to a safer future for both the planet and its inhabitants

All the voices of climate science²⁹, the UN³⁰ and even the International Energy Authority (IEA)³¹, agree that we must end reliance on fossil fuels to ensure a safe future. The oil and gas industry together with weak governments want to take us in the opposite direction. The opening of El Musel is a clear example of this.

As UN Secretary-General António Guterres³² has rightly pointed out:

“Countries must progressively phase out fossil fuels, moving to leave oil, coal, and gas in the ground where they belong”.

- 24 Enagás, Open Season for Logistic Services at El Musel LNG Terminal (2023) <https://www.enagas.es/en/energy-transition/gas-network/infrastructure-supply-capacity-allocation/asignacion-capacidad-el-musel/>
- 25 La Nueva España, Promesas frente a realidad: la inversión presupuestada para Asturias y la ejecutada (2022) <https://www.lne.es/asturias/2022/06/02/promesas-frente-realidad-inversion-presupuesta-66800433.html>
- 26 Boletín Oficial del Estado, Disposición transitoria tercera del Real Decreto-ley 13/2012, de 30 de marzo https://www.boe.es/diario_boe/txt.php?id=BOE-A-2023-13747
- 27 Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c566i-who-profits-from-war.pdf>
- 28 Greenpeace France, Floating LNG terminal in Le Havre (2023) <https://cdn.greenpeace.fr/site/uploads/2023/07/REPORT-LNG-LE-HAVRE-TERMINAL.pdf>
- 29 IPCC, The evidence is clear: the time for action is now. We can halve emissions by 2030. (2022) <https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/>
- 30 United Nations, Guterres calls for phasing out fossil fuels to avoid climate ‘catastrophe’ (2023) <https://news.un.org/en/story/2023/06/1137747>
- 31 IEA, Medium-Term Gas Report 2023 (2023) <https://www.iea.org/reports/medium-term-gas-report-2023>
- 32 United Nations, Guterres calls for phasing out fossil fuels to avoid climate ‘catastrophe’ (2023) <https://news.un.org/en/story/2023/06/1137747>

Part I: the Spanish gas system

In 2022, after the start of the Russia/Ukraine war and subsequent energy crisis due to reduced gas supplies from Russia, the oil and gas industry started to shift the political narrative from the much-needed energy transition to that of energy security. This gave gas infrastructure owners a central role in announcements of the gas buildout in Europe. Often, these were old infrastructure proposals with a new name or, as in the case of El Musel, mothballed infrastructures and given a new lease on a fossil-fueled future life.³³

Enagás S.A., a Spanish energy company and a European transmission system operator that owns and operates Spain's national gas grid, quickly took up the "energy security" narrative in their communications arguing that:

1. US liquified gas and new infrastructure is necessary for Spain and neighbouring countries to satisfy the future gas demand and secure energy for Europe.³⁴
2. The boom of US liquified gas would help phase out Russian gas imports to Spain.³⁵

Local policy makers in Asturias have defended the plans, seeing it as part of an industrial renaissance in the region³⁶ that has suffered industrial decline and unemployment partly as a result of previous promises not being fulfilled. But this ignores the fact that the people and communities of Asturias deserve better - a just transition by developing and supporting a reliable alternative to fossil fuels creating employment and boosting the local economy.

Greenpeace Spain investigations reveal that these claims are false. In fact Enagás is using the "energy crisis" simply to add more infrastructure to its portfolio

that would lock Spain into decades of gas dependency and is simply being used to shore up its profits and shareholder payouts.

Spain's gas supply strategy

According to data from Eurostat³⁷, in 2022, Spain imported 39.7 bcm (billion cubic metres) of gas made up of 28.4 bcm of liquified gas and 11.3 bcm of pipeline gas. In 2021 the total was 37 bcm - 20.2 bcm of liquified gas and 16.8 bcm of pipeline gas.

Greenpeace International research³⁸ reported that liquified gas imports increased substantially across Europe. In 2021, 76.7 bcm of regasified liquid gas was piped into the European gas grid, rising to 132.7 bcm in 2022; an increase of 73% in one year.

In Spain, liquified gas imports increased by 40% but pipeline gas fell by 33%. Overall, Spain imported 7.3% more gas in 2022 compared to 2021.³⁹

For decades, Algerian pipelines have been Spain's main source of gas. The increasing diplomatic troubles between Spain and Algeria⁴⁰, coupled with the European Energy crisis, resulted in a massive increase in liquified gas imports. Where such imports accounted for just over half in 2021, it accounted for 72% of the total gas imports in 2022, and 73% in the first half of 2023.⁴¹

³³ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

³⁴ Enagás, Enagás and Reganosa create an energy hub in the northwest of the Iberian Peninsula (2023) <https://www.enagas.es/en/press-room/news-room/press-releases/completed-transaction-Enagas-reganosa/>

³⁵ La Moncloa, Teresa Ribera: "Irun's increased interconnection capacity will strengthen Europe's security of supply" (2022) https://www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2022/20220922_gas-supply.aspx

³⁶ See [Part 3 section 1](#)

³⁷ Eurostat, Monthly gas statistics (2023) <https://ec.europa.eu/eurostat/databrowser/bookmark/bde23438-659b-4d0f-90c2-cb0ab77028d5?lang=en>

³⁸ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

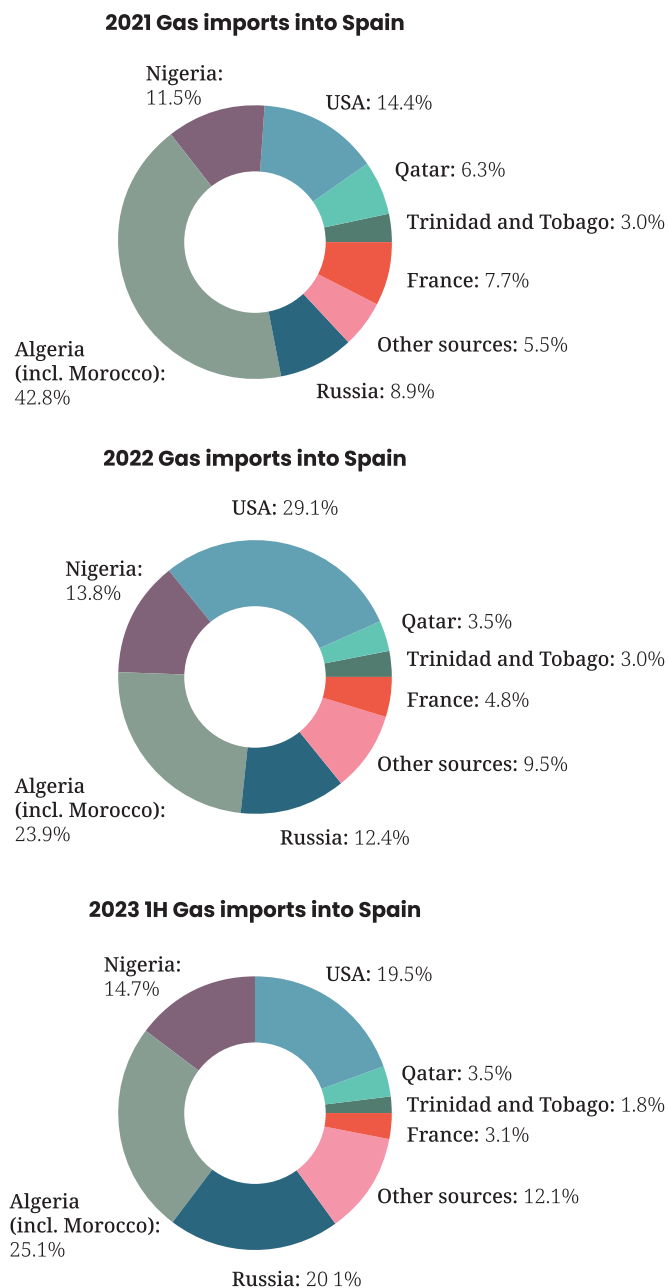
³⁹ Eurostat, Monthly gas statistics (2023) <https://ec.europa.eu/eurostat/databrowser/bookmark/bde23438-659b-4d0f-90c2-cb0ab77028d5?lang=en>

⁴⁰ France 24, Algeria suspends Spain co-operation treaty over Western Sahara dispute (2022) <https://www.france24.com/en/africa/20220608-algeria-suspends-spain-co-operation-treaty-over-western-sahara-dispute>

⁴¹ Eurostat, Monthly gas statistics (2023) <https://ec.europa.eu/eurostat/databrowser/bookmark/bde23438-659b-4d0f-90c2-cb0ab77028d5?lang=en>

Figure 1. Gas imports into Spain

Sources: Greenpeace Spain, data from Eurostat



Spanish gas – A brief outline

Spain has a network of international gas connections, fostering energy trade with neighbours such as Algeria, Morocco, France, and Portugal. In these pipelines and interconnections, two conduits link Spain to North Africa: the Medgaz Pipeline and the Maghreb-Europe Gas Pipeline (MEG).

The Medgaz Pipeline⁴² crosses the Mediterranean transporting Algerian gas to Spain.

The Maghreb-Europe Gas Pipeline had served to supply gas imports from Algeria through Morocco and eventually to Tarifa in southern Spain.⁴³ After relations between Algeria and Morocco soured in November 2021, this supply stopped.⁴⁴

Spain's energy pipeline connections also extend to its European neighbours. Two low-volume pipelines cross the Pyrenees into France, facilitating cross-border gas trade, and two underutilised pipelines linking Portugal and Spain.⁴⁵

In 2022 Spain had a massively under-used liquefied gas capacity having seven liquefied gas terminals (including El Musel) but only low volume pipelines from Spain to France and the rest of Europe.⁴⁶

So why is Spain, for the benefit of Enagás and Endesa and the oil and gas industry, opening up another liquefied gas terminal when it already has an over-abundance and no way of piping the gas to the rest of Europe? And, equally, who is paying for this?

Table 1 shows the gas imports into Spain from January 2021 up until the first half of 2023. Where Algeria was the first and most important gas supplier in 2021, the United States took up that role in 2022 with an avalanche of liquefied gas imports from the gas terminals on the Gulf Coast, thereby accounting for a third of all gas imports into Spain in 2022.

⁴² Global Energy Monitor, Medgaz Gas Pipeline https://www.gem.wiki/Medgaz_Gas_Pipeline

⁴³ Global Energy Monitor, Maghreb-Europe Gas Pipeline https://www.gem.wiki/Maghreb-Europe_Gas_Pipeline

⁴⁴ Ana Maria Jaller-Makarewicz, Gas in Spain: Still oversupplied and overcompensated (2022) <https://ieefa.org/resources/gas-spain-still-oversupplied-and-overcompensated>

⁴⁵ Enagás, 2022 Spanish Gas System Report (2022) <https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-sistema-gasista/2022-Spanish-Gas-System-Report.pdf>

⁴⁶ AP News, Spain, Portugal emerge as 'energy island' in Europe's crisis (2022) <https://apnews.com/article/russia-ukraine-business-europe-spain-portugal-e303d123755295d223bff8b304b5c0cd>

Table 1. Import of gas to Spain 2021 – 2023

Source: Eurostat

TIME/ MCM (million cubic metres)	1H 2021	2H 2021	1H 2022	2H 2022	1H 2023
GEO (Labels)					
France	1042.221	1802.289	532.2	1374.26	565.116
Other sources	775.882	1242.622	1747.978	2008.117	2205.428
Russia	1977.844	1315.601	2136.174	2762.203	3659.722
Algeria (incl Moroccan pipeline)	8452.944	7378.583	4986.507	4486.154	4574.284
Nigeria	1866.954	2374.903	2799.379	2690.917	2684.038
USA	1693.279	3627.022	6951.693	4599.45	3551.833
Qatar	1079.805	1247.842	471.775	900.586	630.607
Trinidad and Tobago	799.758	291.625	526.319	680.621	335.661
Total LNG	8839.481		14753.393		13338.999
Total Pipeline	8849.206		5398.632		4867.69
Total	17688.687		20152.025		18206.68

The boom of US liquified gas imports to Spain

In 2021, Europe overtook Asia as the main market for US liquified gas. By January 2022, 44% of liquified gas came to Europe from the US. Shortages of gas, exacerbated by reduced Russian pipeline deliveries, led to a spike of purchases on the “spot market” during the winter of 2021-2022. These cargoes came at a high cost compared to pipeline gas, which was a major contributor to energy-driven inflation in the EU according to Investigate Europe.⁴⁷

According to Eurostat, the makeup of Spain’s gas suppliers has radically shifted during last year. The most striking difference has been the US rising to become Spain’s top gas supplier in 2022.⁴⁸

Liquified gas shipped to Spain from the US made up around one-third of the gas imported in Spain in 2022, peaking in March 2022 when it accounted for 43% of the gas imports that month. These massive amounts made the US the largest source of gas for Spain in 2022.

In the first half of 2023 this has dropped to a fifth of all imports.

When the opening process of El Musel got underway, it did so at a time when the Russian invasion of Ukraine in February 2022 and the European Union sanctions suggested that the plant could serve as a hub to ensure Europe’s energy security.⁴⁹

In this context, several energy companies rushed to sign long-term contracts with US gas suppliers. Although the arrival of US liquified gas decreased somewhat in 2023 compared to the record year of 2022, the current consumption levels are much higher than before the war. It’s clear that Spain’s energy future could potentially be tied to US fracked gas in the coming years.

In Enagás’s request for opening El Musel, the company argued that the plant’s main purpose would be “to provide LNG logistics services outside the regulated access system”⁵⁰ and that it would inject the technically required gas into the network to prevent accidents due to the prolonged storage of large quantities of liquified

⁴⁷ Investigate Europe, LNG fever: European firms sign mega-contracts as US shale gas imports boom (2023) <https://www.investigate-europe.eu/en/posts/lng-fever-mega-contracts-shale-gas-imports-us>

⁴⁸ See [figure 1](#)

⁴⁹ Concha Raso, La regasificadora de El Musel arrancará a principios de 2023 (2022) <https://revistas.eleconomista.es/energia/2022/diciembre/la-regasificadora-de-el-musel-arrancara-a-principios-de-2023-112912292>

⁵⁰ CNMC, Memoria justificativa de la resolución de la CNMC por la que se establece un régimen económico singular y de carácter temporal para la planta de regasificación de El Musel (2022) <https://www.cnmc.es/sites/default/files/4551976.pdf>

gas. In other words, they intended to use the facility as a storage space and then send the liquified gas to different destinations without the need for regasification. However, to date this has not happened and all the gas that has arrived at the plant has been injected daily into the national network.⁵¹

Endesa secured a new agreement with Enagás to gain access to additional gas capacity at the El Musel facility.⁵² This move enabled them to establish the terminal as a gateway for importing liquified gas from the US into the European market. In 2014, Endesa signed two long-term contracts with Cheniere Energy Inc. totaling 2.25 million tons (3.06 bcm)⁵³ of liquified gas originating from the US⁵⁴. The deliveries under these contracts started in 2019 and have since formed a key element of Endesa's gas portfolio. Their fleet of gas tankers is exclusively

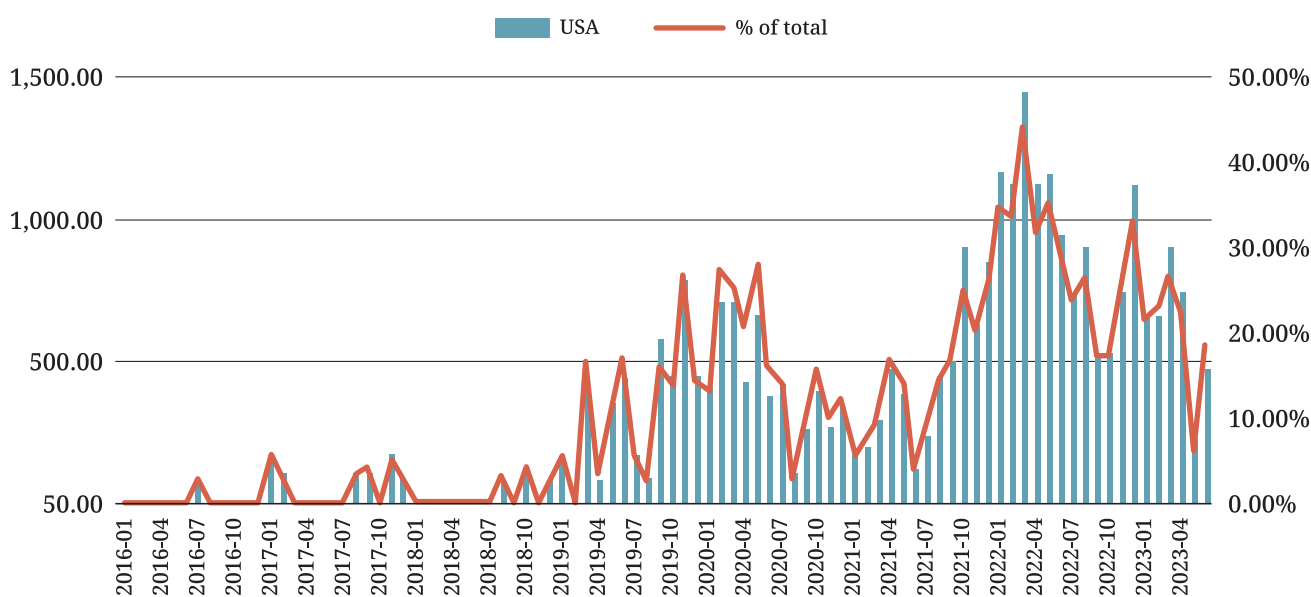
dedicated to facilitating cross-Atlantic trade, underscoring the company's commitment to the import of US gas. These agreements last until 2039, further contributing to the ongoing surge in US gas⁵⁵ trade with Spain.

There was a surge in US liquefied gas imports into Spain in 2022 totalling 11.55 bcm. To put this into perspective, Spain's US liquefied gas imports stood at 5.3 bcm in 2021, 5 bcm in 2020, 4.1 bcm in 2019, and a mere 0.3 bcm in 2018.⁵⁶

Spain became Europe's second-largest importer of US liquefied gas in 2022 (France was the largest). Europe imported a staggering 68.96 bcm of US liquefied gas in 2022.⁵⁷ Spain contributed 17%, that was a 117% surge compared to the preceding year. When compared with 2017, the 2022 figures reveal a 1422% escalation in volume.

Figure 2. Import of US liquified gas and percentage of total gas imports to Spain 2016 - 2023

Source: Greenpeace Spain, data from Eurostat



51 Enagás, Seguimiento diario del Sistema (2023) <https://www.enagas.es/es/gestion-tecnica-sistema/energy-data/parametros-fisicos/capacidades-tecnicas-flujos-fisicos/seguimiento-diario-sistema/>

52 Endesa, El Musel LNG plant has received the first commercial shipment (2023) <https://www.endesa.com/en/press/press-room/news/customers/musel-lng-plant-received-first-commercial-shipment>

53 Converted using BP, Approximate conversion factors (2022) <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-approximate-conversion-factors.pdf>

54 Cheniere Energy, Cheniere and Endesa Sign 20-Year LNG Sale and Purchase Agreement (2014) <https://ingir.cheniere.com/news-events/press-releases/detail/119/cheniere-and-endesa-sign-20-year-lng-sale-and-purchase>

55 Endesa, Endesa will charter its second LNG carrier to guarantee the maritime transport of its LNG acquisitions after 2021 (2019) <https://www.endesa.com/en/press/press-room/news/energy-sector/endesa-will-charter-its-second-lng-carrier>

56 See Table 2

57 Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

Table 2. Imports of US LNG to Spain 2017 – 2022Source: Eurostat⁵⁸

TIME	2017	2018	2019	2020	2021	2022
USA (in mcm)	759.00	298.00	4,103.00	5,082.00	5,320.30	11,551.14
% of total imports	2.19%	0.86%	11.03%	15.64%	14.39%	29.11%
Increase from the year before		-60.74%	1276.85%	23.86%	4.69%	117.11%
Increase from 2017		-60.74%	440.58%	569.57%	600.96%	1421.89%
Total gas imports (in mcm)	34,622.00	34,817.00	37,190.00	32,489.00	36,969.17	39,675.03

The transformation of Europe into a major market for US liquified gas has been a strategic objective for several years.⁵⁹ Exports began during the Obama era, and expanded under Trump.⁶⁰ Greenpeace International research⁶¹ showed how the EU embraced a US fossil fueled future, with the Naturgy Energy Group signing the first liquified gas contracts in 2011, leading to the first shipments arriving in Spain in 2016.⁶² This new policy was ratified at the 2018 Energy Council between the US and the European Commission, with US President Trump and EC President Juncker agreeing to strengthen energy cooperation.⁶³

The prospect of a disruption in Russian gas exports to the EU propelled this initiative forward when, in March 2022, US President Joe Biden declared that an extra 15 bcm of liquified gas would be rerouted

and supplied to the EU. This would be followed by an additional 50 bcm over the period until 2030.⁶⁴ The liquified gas hubs of Spain, France, Belgium, and the Netherlands have become the supplier for Germany, which, until 2022, relied heavily on Russian pipeline imports.⁶⁵

The Spanish companies behind this trade include Naturgy Energy, Endesa, Iberdrola, and Repsol, who were among the first European companies importing US liquified gas to Spain.⁶⁶ The long term contracts potentially lock Spanish consumers into fossil gas up until 2042. This is in sharp contrast to the climate protection pathways⁶⁷ consistent with keeping the average global temperature increase to below 1.5°C (2.7°F) that shows Europe must phase out gas consumption by 2035.

⁵⁸ Eurostat, Imports of natural gas by partner country

<https://ec.europa.eu/eurostat/databrowser/bookmark/e7023c55-d2cb-4b82-9e95-e6ec7a90637f?lang=en>

⁵⁹ Offshore Energy, Europe gets first Sabine Pass LNG export cargo (2016)

<https://www.offshore-energy.biz/europe-gets-first-sabine-pass-lng-export-cargo/>

⁶⁰ Jie Jenny Zou, How Washington unleashed fossil-fuel exports and sold out on climate (2018)

<https://www.texastribune.org/2018/10/16/how-washington-unleashed-fossil-fuel-exports-and-sold-out-climate/>

⁶¹ Greenpeace International, Who Profits from War (2023)

<https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

⁶² Reganosa, Spain Receives at Reganosa's Terminal the first Ship with LNG from US (2016)

<https://www.reganosa.com/en/spain-receives-reganosa%C2%B4s-terminal-first-ship-lng-us>

⁶³ EU Commission, EU-U.S. Joint Statement of 25 July: European Union imports of U.S. Liquefied Natural Gas (LNG) are on the rise (2018)

https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4920

⁶⁴ The White House, Remarks by President Biden and European Commission President Ursula von der Leyen in Joint Press Statement (2022)

<https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/03/25/remarks-by-president-biden-and-european-commission-president-ursula-von-der-leyen-in-joint-press-statement/>

⁶⁵ World Economic Forum, Germany takes new steps to tackle the energy crisis (2022)

<https://www.weforum.org/agenda/2022/08/energy-crisis-germany-europe>

⁶⁶ From Table 3, data from Bloomberg terminal

⁶⁷ Climate Action Tracker <https://climateactiontracker.org/countries/eu/>

Table 3. US liquified gas contracts with Spanish energy companies

Source: Extract from Bloomberg

Buyer	Seller	Export project	Contract Volume (bcm) ⁶⁸	Adjusted start year	Adjusted end year
Naturgy Energy Group	Cheniere Energy	Sabine Pass (Train 2)	4.75	2017	2037
Endesa (Enel)	Cheniere Energy	Corpus Christi (Train 1)	2.0	2019	2039
Endesa (Enel)	Cheniere Energy	Corpus Christi (Train 1)	0.95	2019	2039
Iberdrola/Pavilion Energy	Cheniere Energy	Corpus Christi (Train 1 & 2)	1.1	2019	2040
Naturgy Energy Group	Cheniere Energy	Corpus Christi (Train 2)	2.0	2020	2040
Repsol	Venture Global LNG	Calcasieu Pass	1.4	2023	2042

A fracking mess

The shiploads of liquified gas coming to Spain and the rest of Europe from the US comes from hydraulic fracturing –better known as ‘fracking’– see [box](#). A process that severely impacts the environment and the people who live and work among the fracking fields. Fracking has been widely banned across Europe.⁶⁹ It is, therefore, the height of hypocrisy for governments in the EU to allow and encourage the import of fracked gas from the US.

Figure 3. The status of the legality of fracking in Europe

Source: Greenpeace International and DW Research



What is fracking?

Fracking, or hydraulic fracturing, involves drilling deep into the Earth and injecting water, sand, and chemicals under high pressure to extract oil and gas.⁷⁰ However, it’s linked to a significant increase in atmospheric methane levels, which is over 86 times more climate-damaging than CO₂.⁷¹ Fracking also potentially pollutes drinking water supplies, generates toxic wastewater, harms communities, and poses public health risks. Due to environmental concerns, states across Europe have widely banned fracking.⁷²

“European countries have outlawed fracking because they saw the effects of it and the effects largely were earthquakes, polluted and contaminated underground water sources, aquifers and springs. All of these were adversely affecting what people need. You need water more than you need oil because you certainly can’t drink oil.”⁷³

John Beard 2023

⁶⁸ Converted using BP, Approximate conversion factors (2022) <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-approximate-conversion-factors.pdf>

⁶⁹ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

⁷⁰ Romain Coetmellec, 9 Ways Fracking Is The Worst — Climate Change Is Top Of The List (2021) <https://www.foodandwaterwatch.org/2021/10/15/9-ways-fracking-is-the-worst-climate-change-is-top-of-the-list/>

⁷¹ Stephen Leaghy, Fracking boom tied to methane spike in Earth’s atmosphere (2019) <https://www.nationalgeographic.com/environment/article/fracking-boom-tied-to-methane-spike-in-earths-atmosphere>

⁷² Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

⁷³ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

While EU policy makers applauded the US liquified gas supply to Europe in 2022 this came at a heavy price to communities in Texas, Pennsylvania, Louisiana, West Virginia, and many others.⁷⁴

In 2022, US gas production consisted of 87% fracked gas from shale and compact reservoir gas⁷⁵, and while tracking the exact quantities from the different gas wells to the terminals is difficult, Greenpeace was able to find evidence in official documents such as environmental permits or filings at the US Department of Energy. These show that the US

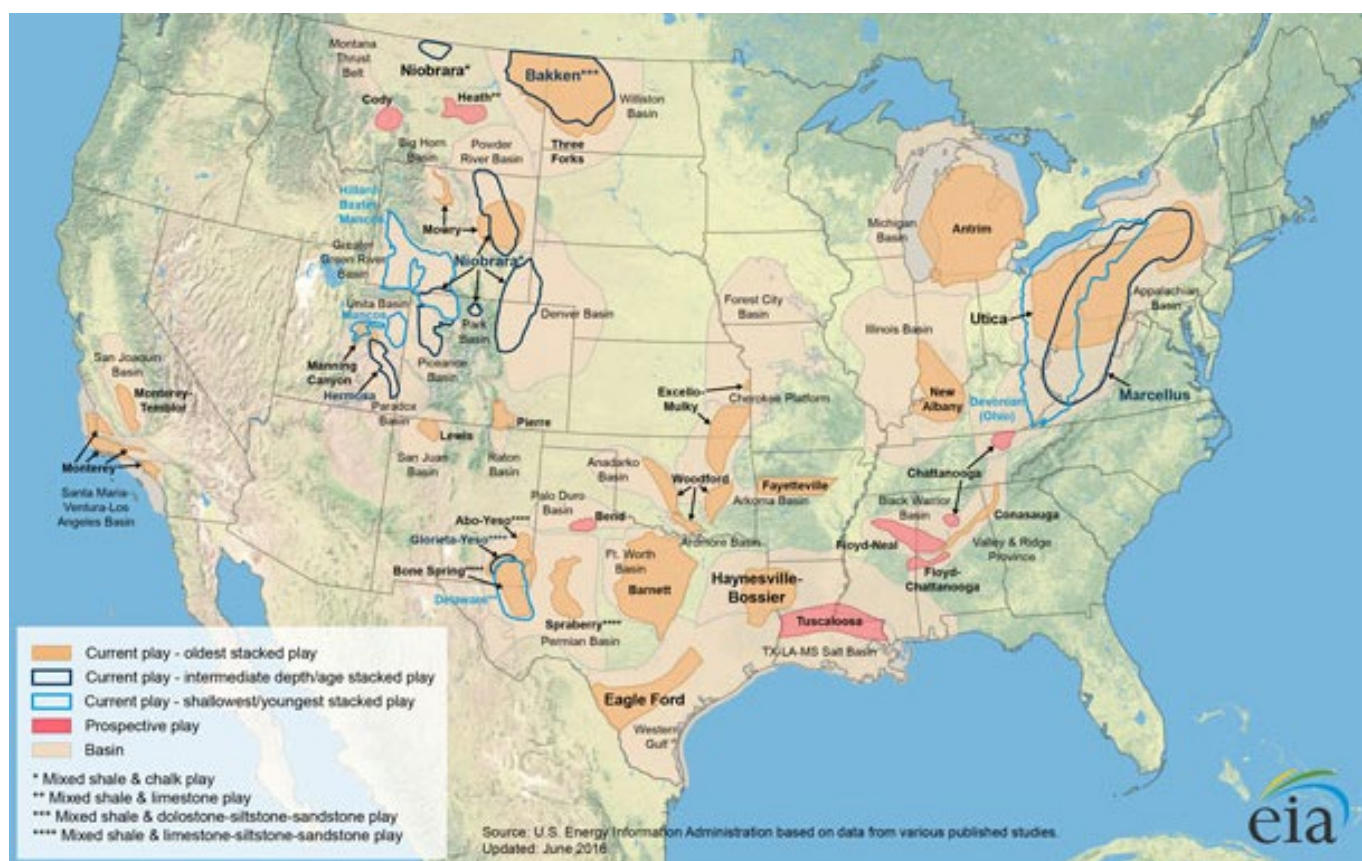
liquified gas terminals supplying Spain, originated from the environmentally devastating gas fields of the Permian Basin, Marcellus, Eagle Ford, and many others.⁷⁶

Part 3 dives deeper into these connections and the impacts on communities living in “sacrifice zones”⁷⁷ of the fracked territories and the Gulf Coast.

The US Energy Information Agency expects shale gas extraction to grow the coming decades⁷⁸, in part thanks to the European lust for US liquified gas.

Figure 4. The major shale gas fields in the US

Source: EIA



74 Investigate Europe, LNG fever: European firms sign mega-contracts as US shale gas imports boom (2023) <https://www.investigate-europe.eu/en/posts/lng-fever-mega-contracts-shale-gas-imports-us>

75 EIA, Natural gas explained <https://www.eia.gov/energyexplained/natural-gas/where-our-natural-gas-comes-from.php>

76 See Part 3

77 Greenpeace USA, Fossil Fuel Racism (2021) <https://www.greenpeace.org/usa/reports/fossil-fuel-racism/>

78 EIA, Natural gas explained <https://www.eia.gov/energyexplained/natural-gas/where-our-natural-gas-comes-from.php>

Government hypocrisy

According to the Spanish fossil fuel trade group Aciep, Spain has its own shale gas reserves⁷⁹ mostly located in the Basque Country and Cantabria region. Oil and gas companies would be eager to tear the ground apart, fracking to extract the gas. Fossil fuel companies would like to extract this gas valued at around €700 billion through fracking, tearing the ground apart in the process.⁸⁰ The fact that the Spanish government is leaving this gas in the ground shows that Spanish policy makers know about the impact fracking would have on its communities.

Indeed, because the process needs a huge amount of water, as well as the threat of earthquakes, methane leaks, and other devastating effects⁸¹, the regional government of Cantabria banned fracking in 2013.⁸² Subsequently, the Spanish National Government banned fracking throughout Spain in 2021.⁸³ In a country that already suffers severe droughts in summer⁸⁴ Spain cannot afford to waste precious drinking water to extract shale gas.

By recognising the devastating impacts of fracking at home, and banning the practice, but allowing, and increasing, US fracked gas imports, the Spanish government joins the list of hypocritical EU governments that externalise the impact of their fossil fuel consumption outside their borders.⁸⁵

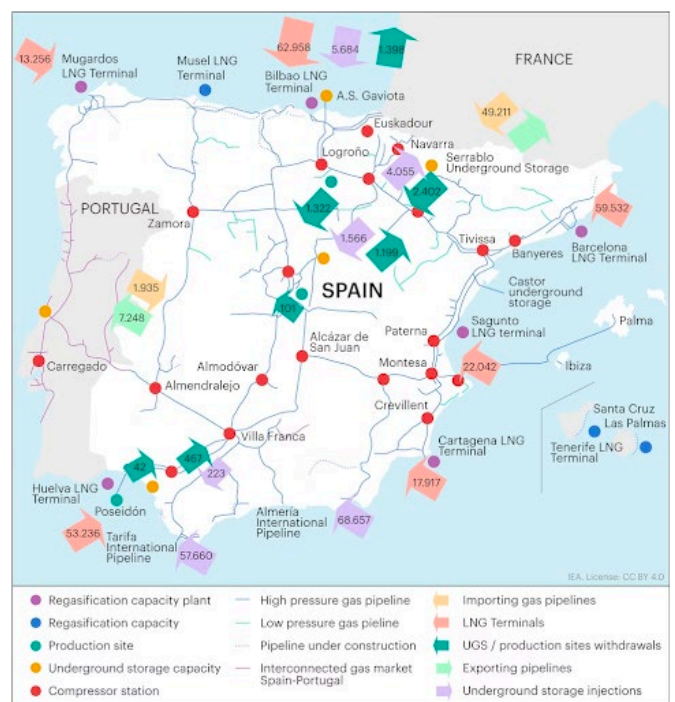
Since the Climate Change and Energy Transition Law entered into force on May 20th 2021⁸⁶, US fracked gas imports more than doubled between May 2021 -May 2022 compared to the same period the year before.⁸⁷

Spain's regasification capacity

Spain maintains a prominent presence within the European gas landscape with seven liquified gas terminals - including El Musel. The gas infrastructure network includes 25 fuel storage facilities, eight berths, and the ability to accommodate ships up to 270,000 cubic metres.⁸⁸

Figure 5. Regasification Capacity in Spain

Source: IEA



⁷⁹ Manuel Planelles, Spain's fracking bubble bursts (2017) https://english.elpais.com/elpais/2017/03/14/inenglish/1489505343_720028.html

⁸⁰ Ibidem

⁸¹ BBC, What is fracking and why is it controversial? (2022) <https://www.bbc.com/news/uk-14432401>

⁸² Euractiv, Shale-rich Spanish region votes to ban fracking (2013) <https://www.euractiv.com/section/energy/news/shale-rich-spanish-region-votes-to-ban-fracking/>

⁸³ David Sánchez and Frida Kieninger, Spanish Climate Law: Another Nail in the Coffin for Fracking in Europe (2021) <https://www.foodandwater europe.org/blogs/spanish-climate-law-another-nail-in-the-coffin-for-fracking-in-europe/>

⁸⁴ France 24, 'The country is becoming a desert': Drought-struck Spain is running out of water (2023) <https://www.france24.com/en/europe/20230513-the-country-is-becoming-a-desert-drought-struck-spain-is-running-out-of-water>

⁸⁵ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

⁸⁶ IEA, Climate change and energy transition law (2022) <https://www.iea.org/policies/13323-climate-change-and-energy-transition-law>

⁸⁷ Calculations from Greenpeace, data from Eurostat <https://ec.europa.eu/eurostat/databrowser/bookmark/e7023c55-d2cb-4b82-9e95-e6ec7a90637f?lang=en>

⁸⁸ IEA, Spain Natural Gas Security Policy (2022) <https://www.iea.org/articles/spain-natural-gas-security-policy>

Spain leads in regasification capacity, contributing about one-third of the EU's aggregate capacity.⁸⁹ The main terminals are: Barcelona, Cartagena, and Huelva; the others: are in El Musel, Bilbao, Sagunto⁹⁰, and Mugarodos.⁹¹

However, despite their contribution to Europe's total liquified gas import capacity, they are massively under-used. According to the IEA⁹² the utilisation rate of Spain's regasification capacity averaged 21% between 2012 and 2018; only increasing to 36% in 2019.

The Institute for Energy Economics and Financial Analysis (IEEFA), a US based think tank, suggested that the underutilization pattern is due to how Enagás has planned and operated.⁹³

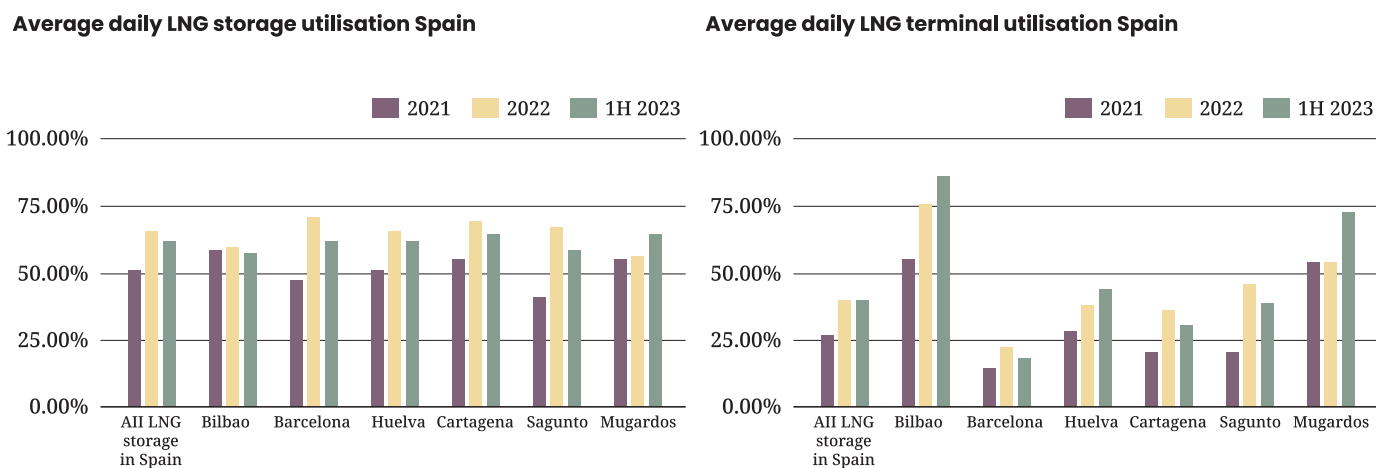
Enagás justified its huge investments in regasification terminals, pipelines, and storage facilities on the false premise of the need to enhance the "security and diversity of supply"⁹⁴. But the investments have yielded

low utilisation rates for the infrastructure assets despite having some of the highest gas tariffs in Europe.⁹⁵ The decline in gas demand in Spain since 2008 has compounded the issue, with the result that Spanish consumers bear the financial burden of a massively underused energy infrastructure.⁹⁶

Because of this underused capacity, the El Musel terminal is not officially offering a regasification service, but aims to serve as a logistical hub for other European terminals, specialising in liquified gas storage, unloading, and loading.⁹⁷ How this can be delivered is a big question. Greenpeace Spain gathered data from Gas Infrastructure Europe (the lobby group for the gas infrastructure operators of Europe) which showed that the storage capacities of the Spanish regasification terminals have also been underutilised for years. However, despite a lack of official plans for regasification at El Musel, the terminal has in fact been regasifying imports and releasing the gas to the grid.⁹⁸

Figure 6. Average daily liquified gas storage and regasification utilisation in Spain

Source: Greenpeace, data from GIE



⁸⁹ GlobalData Energy, Spain leads Europe's operational LNG regasification capacity (2022) <https://www.offshore-technology.com/comment/spain-lng-regasification/>

⁹⁰ Enagás, Our regasification terminals <https://www.enagas.es/en/energy-transition/gas-network/energy-infrastructure/regasification-plants/>

⁹¹ Global Energy Monitor, Mugarodos LNG Terminal https://www.gem.wiki/Mugarodos_LNG_Terminal

⁹² IEA, Spain Natural Gas Security Policy (2022) <https://www.iea.org/articles/spain-natural-gas-security-policy>

⁹³ Ana Maria Jaller-Makarewicz, Gas in Spain: Still oversupplied and overcompensated (2022) <https://ieefa.org/resources/gas-spain-still-oversupplied-and-overcompensated>

⁹⁴ Enagás, Annual Report 2022 (2023) p18 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

⁹⁵ See Figure 6 and 9

⁹⁶ Ibidem

⁹⁷ Enagás, El Musel LNG terminal receives Administrative Authorisation for its start-up (2023) <https://www.enagas.es/en/press-room/news-room/press-releases/musel-administrative-authorisation/>

⁹⁸ Enagás, Seguimiento diario del Sistema (2023) <https://www.enagas.es/es/gestion-tecnica-sistema/energy-data/parametros-fisicos/capacidades-tecnicas-flujos-fisicos/seguimiento-diario-sistema/>

The average daily utilisation of the six operational liquified gas storage terminals in Spain was only 51% in 2021. It grew to 66% in 2022, but dropped to 62% in the first half of 2023.

This means that even in the booming liquified gas year of 2022, the Spanish terminals had plenty of liquid storage left. And this does not take into account the gas storage capacity that Enagás operates inland.⁹⁹

For terminal utilisation across the regasification terminals in Spain, the numbers are even more striking. The average daily regasification utilisation in 2021 of the terminals was only 27% in 2021, and 40% in 2022 and the first half of 2023 according to calculations done with data from Gas Infrastructure Europe.¹⁰⁰

The energy infrastructure policy pursued in Spain over the past decade has been supported by a substantial influx of public money. However, these investments appear disconnected from both present and anticipated energy demands. Essentially there is a complete mismatch between the demand and the huge oversupply.

Trends in gas consumption: and the “European solidarity rationale”

Teresa Ribera, the Spanish minister for the Ecological Transition, in September 2022 said that “Spain is showing solidarity. And it wants to contribute, because it can, to strengthening Europe’s security of supply.” She viewed the El Musel plant in Gijón as having an “essential” role in Europe’s energy security.¹⁰¹ This narrative, just like Enagás’ justification for opening the El Musel terminal,¹⁰² ignores two major trends:

1. Gas consumption in Spain and across the EU is down, and will continue to fall in the coming years.¹⁰³
2. A number of EU nations have proposed, and/or are building regasification terminals of their own so do not need the extra capacity from Spain.¹⁰⁴

Table 4a. Averages daily storage capacity in the Spanish LNG terminals

Source: Greenpeace Spain, data from GIE

Average daily storage %	2021	2022	1H 2023
All LNG storage in Spain	50.84%	65.93%	62.16%
Bilbao	59.04%	60.40%	58.24%
Barcelona	47.65%	71.18%	62.11%
Huelva	51.02%	63.22%	64.37%
Cartagena	55.34%	69.47%	64.64%
Sagunto	41.71%	67.61%	59.16%
Mugaridos	55.51%	56.29%	64.76%

Table 4b. Average daily regasification utilisation in the Spanish LNG terminals

Source: Greenpeace Spain, data from GIE

Average daily regasification utilisation %	2021	2022	1H 2023
All LNG utilisation in Spain	27.16%	40.33%	40.46%
Bilbao	55.30%	76.37%	87.45%
Barcelona	15.04%	22.63%	18.60%
Huelva	29.58%	39.10%	44.51%
Cartagena	21.22%	36.98%	30.93%
Sagunto	21.54%	46.16%	39.22%
Mugaridos	54.88%	55.00%	73.60%

⁹⁹ Enagás, Our underground storage facilities <https://www.enagas.es/en/energy-transition/gas-network/energy-infrastructure/underground-storage-facilities/>

¹⁰⁰ Gas Infrastructure Europe <https://www.gie.eu/>

¹⁰¹ La Moncloa, Teresa Ribera: “Irun’s increased interconnection capacity will strengthen Europe’s security of supply” (2022) https://www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2022/20220922_gas-supply.aspx

¹⁰² Enagás, The Gijón Regasification Terminal could contribute up to 8 bcm of LNG capacity per year to Europe’s security of supply (2022) <https://www.enagas.es/en/press-room/news-room/press-releases/visita-planta-regasificacion-el-musel/>

¹⁰³ IEA, Spain Natural Gas Security Policy (2022) <https://www.iea.org/articles/spain-natural-gas-security-policy>

¹⁰⁴ IEEFA, Over half of Europe’s LNG infrastructure assets could be left unused by 2030 (2023) <https://ieefa.org/articles/over-half-europes-lng-infrastructure-assets-could-be-left-unused-2030>

A Greenpeace report earlier this year showed clearly that the buildout of new gas infrastructure was not needed, was hugely expensive and seriously undermined EU's sustainable energy future and climate ambitions.¹⁰⁵ It would cause a fossil fuel lock-in across Europe.

Even if the EU gas demand remains at 2022 levels, the regasification terminals currently planned would potentially introduce far more capacity than needed. This would result in expensive gas expansion infrastructure remaining under-utilised, potentially becoming stranded assets. IEEFA has projected a scenario in which over half of Europe's liquified gas infrastructure assets could languish unused by 2030.¹⁰⁶

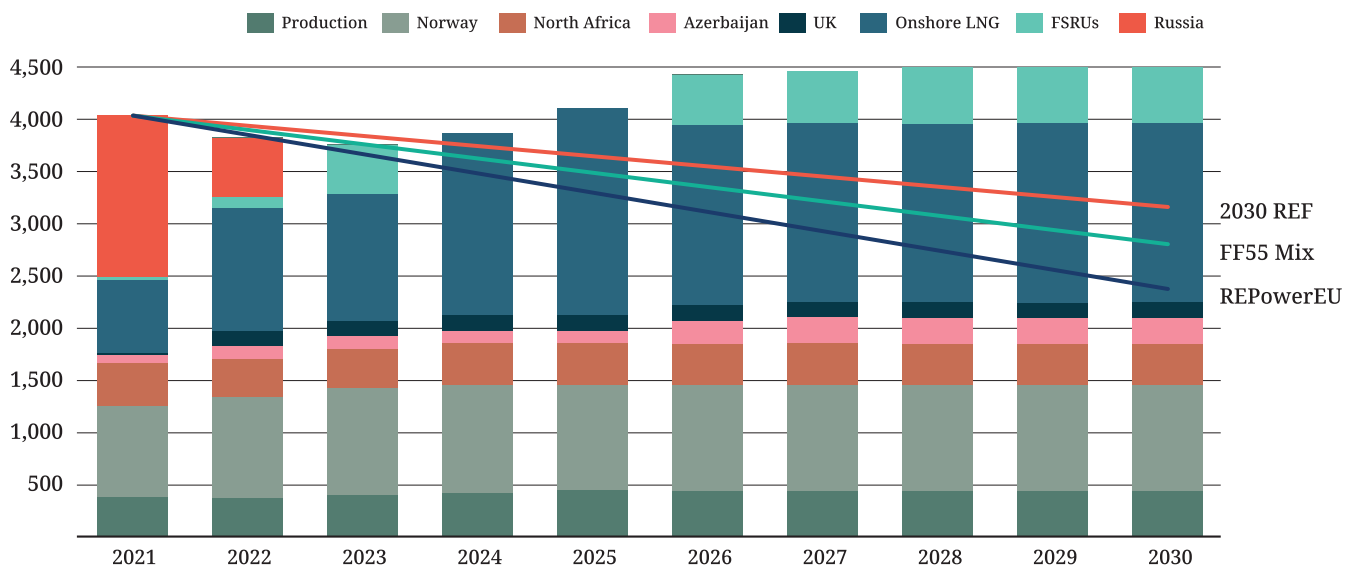
The German Federal Ministry for Economic Affairs and Climate Action also anticipates substantial overcapacity

in the planned gas terminals in Germany.¹⁰⁷ At the same time, the Ministry anticipates a declining gas consumption, projected to fall from 96 bcm in 2021 to around 70 bcm in 2030 and 20 bcm in 2040 to align with climate targets.¹⁰⁸

Furthermore, Bruegel, a prominent European economic think tank, envisions a scenario where, by 2030, the decline in gas demand could be so significant that a substantial portion of the continent's liquified gas import infrastructure will be redundant, due to having access to sufficient gas through pipelines. Transporting gas through pipelines is more cost-effective and less carbon-intensive than the transport of liquified gas. Consequently, nations embarking on an ambitious spending spree to construct new gas import terminals could find themselves saddled with expensive stranded assets.¹⁰⁹

Figure 7. Decline in EU gas demand by 2030

Source: Bruegel



¹⁰⁵ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

¹⁰⁶ IEEFA, Over half of Europe's LNG infrastructure assets could be left unused by 2030 (2023) <https://ieefa.org/articles/over-half-europes-lng-infrastructure-assets-could-be-left-unused-2030>

¹⁰⁷ Mathias Koch, (2022) <https://twitter.com/MathiasKoch183/status/1603719898034749440>

¹⁰⁸ Ibidem

¹⁰⁹ Ben McWilliams, Giovanni Sgaravatti, Simone Tagliapietra and Georg Zachmann, A grand bargain to steer through the European Union's energy crisis (2022) https://www.bruegel.org/sites/default/files/2022-09/PC%2014%202022_2.pdf

Continued presence of Russian gas in the Spanish market

The boom of US fracked gas imports into Spain was framed as essential to Europe's security of supply, and to contribute to the phase out of Russian fossil fuels as laid out in the REPowerEU plan.¹¹⁰ This narrative was confirmed by Minister Teresa Ribera who in September 2022 visited the French-Spanish gas pipeline: *"We want to once again express our willingness to contribute to the energy emergency that central and northern Europe is experiencing due to Putin's blackmail, using the regasification infrastructures that Spain already has for the benefit of all European countries"*. This same sentiment is reflected in the 2022 Annual Report of Enagás that included as one of its main lines of action: *"the ambitious goal of reducing, until its eventual elimination, dependence on Russian gas"*.¹¹¹

The reality is that Spain has *not* decreased its Russian gas imports. On the contrary, this year, Spain has been the largest EU importer of Russian liquified gas. In doing so, it is keeping the Yamal liquified gas profits high, and the Russian war coffers filled with fossil fuel profits.

In fact, the EU-wide bloc is set to import record volumes of Russian liquified gas. Global Witness reviewed industry data showing that Spain was the second largest Russian gas importer, behind China.¹¹² According to estimates by the NGO 'Razom We Stand' these volumes represent approximately US\$20 billion in revenue, since the full-scale invasion of Ukraine.¹¹³ Data gathered from Eurostat, showed Russia is the second largest gas exporter to Spain in the first half of 2023, accounting for a fifth of all gas imports. This represents a rise of 70% compared to the same period in 2022, nearly double the volumes imported in that period in 2021.

These numbers go against the EU goals stated in the REPowerEU plans to *"transform Europe's energy system: ending the EU's dependence on Russian fossil fuels, and tackling the climate crisis"*.¹¹⁴ The boom of US fracked gas imports did not stop Russian gas from entering Spain, but added to the increasing volumes of gas coming into Spain and the EU.

Table 5. Russian gas imports into Spain 2021 - 2023

Source: Calculations by Greenpeace, data from Eurostat

TIME/ MCM (million cubic metres)	2021	2022	2023-06	1H 2021	1H 2022	2023-06
Russia	3293.445	4898.377	3659.722	1977.844	2136.174	3659.722
% of total imports	8.91%	12.35%	20.10%	11.18%	10.60%	20.10%
Increase from the year before		48.73%			8.01%	71.32%
Total gas imports	36969.174	39675.032	18206.689	17688.687	20152.025	18206.689

¹¹⁰ EU Commission, REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition* (2022) https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131

¹¹¹ Enagás, Annual Report 2022 (2023) https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

¹¹² Global Witness, EU imports of Russian LNG have jumped by 40% since the invasion of Ukraine (2023) <https://www.globalwitness.org/en/press-releases/eu-imports-russian-lng-have-jumped-40-invasion-ukraine/>

¹¹³ Razom We Stand, EU'S \$20 billion Russian LNG Import Saga: Spain, Belgium, France <https://razomwestand.org/en/article/eus-20-billion-russian-lng-import-saga-spain-belgium-france>

¹¹⁴ EU Commission, REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition* (2022) https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131

Part 2: Enagás and its fossil profits

Shaping Spain's fossil fueled energy future

Although Enagás is one of the most significant players in the Spanish energy sector¹¹⁵, and plays a key role in shaping the nation's energy future including the costs of gas to the public, it often operates under the radar.

Enagás primarily focuses on the regasification of liquified gas arriving by ship, the transport of gas through pipelines, and storage in strategic facilities to ensure a consistent supply. These activities, which are regulated by law, provide a public service for which the public pay as part of their energy bills.¹¹⁶ Additionally, the company constructs and manages such gas infrastructure as it deems necessary, making the buildout of infrastructure a significant economic driver within the Enagás group.

Enagás has been the Technical System Operator (TSO) for Spain's gas system since 2000.¹¹⁷ It performs these

functions independently of the rest of the company's activities through another subsidiary, Enagás GTS.¹¹⁸ Its role as gas infrastructure operator is to coordinate the transport of gas through Spain, from the LNG terminals and pipelines to industry and consumers. In return for these services, Enagás receives regulated payments from the Spanish Government.¹¹⁹

Enagás, originally founded in 1972 as “Empresa Nacional del Gas,” aimed to establish the infrastructure to make fossil gas an alternative to coal when gas usage was expanding across Europe. The company remained in public hands until 1994 when the government, led by Felipe González, sold 91% of the shares to Gas Natural (now Naturgy), a smaller company that paid a third of the estimated market price. Three years later, Gas Natural acquired the remaining shares, becoming the owner of the gas monopoly in Spain.¹²⁰

In subsequent years, Gas Natural was compelled to reduce its stake in Enagás to 5% and eventually

The Enagás Group is composed of seven companies, with involvement in various projects through third parties. It currently either wholly or partially owns six of the seven regasification plants in Spain¹²¹.

- 75% of El Musel (the remaining 25% is owned by Reganosa).
- 50% of the Bilbao regasification plant (the other 50% is owned by the Basque Government).
- 100% of the Barcelona regasification plant, the largest in Spain.
- 72.5% of the Sagunto regasification plant, with Osaka Gas (20%) and Oman Oil (7.5%).
- 100% of the Cartagena/Escombreras regasification plant.
- 100% of the Huelva regasification plant.

Enagás also boasts a network of over 11,000km of gas pipelines, three underground storage facilities (Gaviota in Bizkaia, Yela in Guadalajara, and Serrablo in Huelva), and participates in various projects and facilities beyond Spain, including the US, Mexico, Greece, Albania, Italy, Peru, and Chile. This includes shares in the contentious Trans Adriatic Pipeline¹²², 10%¹²³ in the consortium HEH, which is constructing a regasification plant in Germany, and an indirect stake of 30.2% in the U.S. gas transporter Tallgrass.¹²⁴

¹¹⁵ Ana María Jaller-Makarewicz, Capacidad y remuneración aún excesivas en el sector del gas español (2022) <https://ieefa.org/resources/capacidad-y-remuneracion-aun-excesivas-en-el-sector-del-gas-espanol>

¹¹⁶ BOE, Ley de Hidrocarburos <https://boe.es/buscar/act.php?id=BOE-A-1998-23284>

¹¹⁷ Enagás, The GTS <https://www.enagas.es/en/technical-management-system/general-information/the-gts/>

¹¹⁸ Enagás, Quiénes somos <https://www.enagas.es/es/conocenos/quienes-somos/grupo-enagas/>

¹¹⁹ Ana María Jaller-Makarewicz, Gas in Spain: Still oversupplied and overcompensated (2022) <https://ieefa.org/resources/gas-spain-still-oversupplied-and-overcompensated>

¹²⁰ La Marea, Breve historia de la privatización de Enagás (2017) <https://www.yoibextigo.lamarea.com/informe/enagas/que-es/breve-historia-privatizacion-de-enagas/>

¹²¹ Enagás, Grupo Enagás <https://www.enagas.es/es/conocenos/quienes-somos/grupo-enagas/>

¹²² Banktrack, Trans Adriatic Pipeline (TAP) https://www.banktrack.org/project/transadriatic_pipeline

¹²³ Enagas, Annual report 2022 (2023) https://www.enagas.es/content/dam/enagas/es/ficheros/sala-de-comunicacion/publicaciones/informe-anual/Informe_Anual_2022_Enagas.pdf

¹²⁴ Enagás, Enagás teams up with Blackstone to invest in US energy company Tallgrass Energy (2019) https://www.enagas.es/en/press-room/news-room/press-releases/enagas_blackstone_tallgrass_energy_en/

completely exit the company, in compliance with European regulations aimed at preventing monopolies within the European Union. This 5% limit, which still exists today, has been incorporated into the Hydrocarbons Sector Law to ensure the system's independence.¹²⁵

As of today, the governmental holding SEPI (Sociedad Estatal de Participaciones Industriales) holds most of Enagás' shares, guiding the company's direction thanks to the Hydrocarbons Sector Law. This legislation also grants SEPI political control of the company, ensuring that no one, other than the Spanish government, can hold more than 3% of voting rights and prohibiting agreements among shareholders for joint action. Furthermore, the law specifies that the "executive director of Enagás GTS shall be appointed and removed by the company's board of directors with the approval of the Minister of Industry, Tourism, and Commerce".¹²⁶

The company where revolving doors are commonplace

The company's board of directors operates a 'revolving door'¹²⁷ for old political figures and individuals closely associated with political parties. For example, the current President, Antonio Llardén, appointed by former Prime Minister Zapatero, held high-ranking positions in the government of Felipe González. Additionally, the CEO, Arturo Gonzalo Aizpiri, is close to the Minister of Ecological Transition, Teresa Ribera¹²⁸. They worked together during Zapatero's government.

He was serving as Director-General of Environmental Policy in the Ministry of Public Works, Transport, and Environment, where Teresa Ribera also held several positions between 1996 and 2004.

The board¹²⁹ also features well-known names like former People's Party (PP) Minister Ana Palacio, former Socialist Minister José Montilla, former Minister under the Spanish Socialist Workers' Party (PSOE) José Blanco, and Cristóbal Gallego Castillo (nominated by Podemos).¹³⁰ It also includes Manuel Gabriel González Ramos, who served as the Government Delegate in Castilla-La Mancha under the PSOE and Santiago Ferrer Costa and Bartolomé Lora Toro, who were appointed by SEPI (State Industrial Holding Company).

Other politically connected individuals that have passed through the company include: the former CEO Marcelino Oreja Arburúa, a former PP Deputy and cousin of former PP Minister Jaime Mayor Oreja; former PP Minister Isabel Tocino, Antonio Hernández Mancha, the President of People's Alliance (AP, the predecessor of PP), and Joseba Andoni Aurrekoetxea, representing the Basque Nationalist Party, among others. On top of their other salaries, they take home payments of around €160,000 annually.^{131, 132}

Enagás has four lobbyists registered¹³³ in the European Union's lobby register, who hold regular official meetings. Additionally, the company is part of various European gas lobbying groups, such as the European Network of Transmission System Operators (ENTSOG)¹³⁴, that lobbies on behalf of gas companies in the EU.

¹²⁵ BOE, Ley de Hidrocarburos <https://boe.es/buscar/act.php?id=BOE-A-1998-23284>

¹²⁶ Enagás, Texto Refundido De Estatutos Sociales De Enagás, S.A. https://www.enagas.es/content/dam/enagas/es/ficheros/accionistas-e-inversores/gobierno-corporativo/estatutos/Enagas_Doc.1_Modificacion%20Estatutos.pdf

¹²⁷ La Marea, Las puertas giratorias de Enagás: récord de consejeros del PP (2017) <https://www.yoibextigo.lamarea.com/informe/enagas/quienes-son/puertas-giratorias-enagas/>

¹²⁸ Cinco Días, Un miembro de la tribu de Ribera para controlar Enagás (2022) https://cincodias.elpais.com/cincodias/2022/02/18/opinion/1645201477_563350.html

¹²⁹ Enagás, Board of Directors, Regulations and Committees <https://www.enagas.es/en/investor-relations/corporate-governance/board-of-directors-regulations-committees/>

¹³⁰ Vozpópuli, Podemos flirta con las puertas giratorias: así es el asesor que han enchufado en Enagás (2020) https://www.vozpopuli.com/economia_y_finanzas/cristobal-gallego-podemos-enagas_0_1359165461.html

¹³¹ La Marea, Las puertas giratorias de Enagás: récord de consejeros del PP (2017) <https://www.yoibextigo.lamarea.com/informe/enagas/quienes-son/puertas-giratorias-enagas/>

¹³² Enagás, Annual Report 2022 (2023) and other years https://www.enagas.es/content/dam/enagas/es/ficheros/sala-de-comunicacion/publicaciones/informe-anual/Informe_Anual_2022_Enagas.pdf <https://www.enagas.es/en/press-room/publications/annual-report/>

¹³³ EU Lobby Register, Enagás <https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=905001612275-82>

¹³⁴ La Marea, Miembro oficial de una veintena de grupos de presión (2017) <https://www.yoibextigo.lamarea.com/informe/enagas/lobby-y-comunicacion/el-discreto-lobby-de-enagas/>



Gas oversupply in Spain: Enagás and regulatory imbalance

The oversupply of gas infrastructure and its consequences, exposes a stark disparity between Enagás, as the Transmission System Operator (TSO), and the interests of consumers. Hence the regulatory mechanisms have inadvertently fueled this imbalance, exacerbating the financial burden on Spanish households and businesses. Essentially, the rate-of-return regulation encouraged Enagás to overinvest in gas infrastructure, and therefore increasing the costs to consumers at the same time and increasing the returns for Enagás shareholders according to analysis by IEEFA.¹³⁵

US and Spanish activists protesting in front of Enagás' headquarters in Madrid.

© Conrado García del Vado / Greenpeace

Enagás has profited massively in recent years, not driven by surging consumer gas demand but by a regulatory framework that ensures a fixed rate of return on the company's gas infrastructure investments.

Irrespective of whether or not the investments align with the nation's needs, Enagás has cited "security and diversity of supply" as its rationale for expanding liquefied gas regasification terminals, natural gas pipelines, and gas storage facilities¹³⁶. An expansion that

¹³⁵ Ana Maria Jaller-Makarewicz, IEEFA Gas in Spain: Still oversupplied and overcompensated (2022) <https://ieefa.org/resources/gas-spain-still-oversupplied-and-overcompensated>

¹³⁶ IEEFA, Overcapacity and investment fever push costs to Spanish consumers, yet Enagás profits (2021) <https://ieefa.org/articles/ieefa-europe-overcapacity-and-investment-fever-push-costs-spanish-consumers-yet-enagas>

has resulted in a staggeringly low rate of use for these gas assets, coupled with some of Europe's highest gas bills.

Enagás' annual income is derived from both regulated and non-regulated activities. Its regulated income is determined by the use of its assets and payments from the State. The company's 2022 Annual Report stated that the regulated income accounted for 99.3% of their total 2022 €957 million revenue.¹³⁷

Gas tariffs - tolls and charges for using the gas system (pipelines, storage and regasification facilities) - in the regulated market are set by the Ministry of Energy and the CNMC (Comisión Nacional de los Mercados y la Competencia). These regulated returns include a set return on investment costs made by Enagás on the infrastructure built across Spain¹³⁸. This means that the more Enagás builds, the more revenue it receives from the Spanish State. It makes even unused infrastructure a profitable deal for Enagás and its shareholders.

According to IEEFA¹³⁹, during the previous regulatory period this return on investment costs (RD) constituted 67% of Enagás' total revenue. In other words, building underutilised infrastructure comprises the largest share of Enagás' revenue in recent years.

This regulatory system has resulted in a pronounced oversupply of gas infrastructure, largely unjustifiable in the face of limited demand. To say that this excess infrastructure is justified as essential for "security and diversification of supply" has enabled Enagás to shift the financial burden of this surplus onto consumers.

Over the past decade, numerous regasification terminals have been proposed, but given the incongruity between

supply and demand, their construction remains contentious.¹⁴⁰ The El Musel terminal is a shining example of this gas infrastructure building mania that simply increases the amount of unused infrastructure at great cost to the public.

The glaring disconnect between Enagás' investment decisions and the genuine needs of the nation is clear. Essentially, Spain's regulatory policies have encouraged excessive investment in gas infrastructure that is not needed. The burden of these unjustified costs has fallen on consumers, while gas demand continues to fall.

Under the pretext of enhancing security and diversifying supply, Enagás has fostered a substantial surplus of underutilised gas infrastructure. This surplus has translated into higher costs for consumers, already struggling with persistently high bills, despite the unnecessary nature of these investments. This strategy boosts returns for Enagás shareholders, to the detriment of Spain's gas consumers.¹⁴¹

Following the Russian invasion of Ukraine, gas operators swiftly mobilised an intense lobbying campaign that exploited the public and political fear and disorientation around energy supply threatened by the invasion; an example of what Naomi Klein terms the "shock doctrine".¹⁴²

Gas infrastructure operators such as Enagás were driving the market by shifting the narrative from 'energy transition' to 'energy security'.¹⁴³ As stated in its 2022 Annual Report, Enagás' strategy is to diversify its energy sources, to phase out its dependence on Russian gas.¹⁴⁴ As seen earlier, this claim is not true.

¹³⁷ Enagás, Annual Report 2022 (2023) P331 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

¹³⁸ Enagás, National Regulation <https://www.enagas.es/en/about-us/regulatory-framework/national-regulation/#accordion-4f2cfdfa8c-item-f67697b53f>

¹³⁹ Ana Maria Jaller-Makarewicz, Gas in Spain: Still oversupplied and overcompensated (2022) <https://ieefa.org/resources/gas-spain-still-oversupplied-and-overcompensated>

¹⁴⁰ CAN Europe, Gas Is No Solution Campaign <https://caneurope.org/achievements/gas-is-no-solution-campaign/>

¹⁴¹ Ana Maria Jaller-Makarewicz, Gas in Spain: Still oversupplied and overcompensated (2022) <https://ieefa.org/resources/gas-spain-still-oversupplied-and-overcompensated>

¹⁴² Naomi Klein, About the Book <https://naomiklein.org/the-shock-doctrine/>

¹⁴³ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

¹⁴⁴ Enagás, Annual Report 2022 (2023) P18 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

Enagás' false solutions: more and new gases to feed a phantom demand – The Hydrogen Trojan Horse

In its strategic blueprint for 2022 to 2030 produced in July 2022, Enagás unveiled a plan they said was designed to tackle the crucial issues of “supply security” and “decarbonization”. This plan envisions substantial investments in both gas and hydrogen infrastructure.¹⁴⁵

Enagás announced in this strategic plan a total of €1.15 billion in new fossil gas investments between 2022 and 2026, including the RePowerEU interconnection pipelines with Portugal, France, and Italy. In the second part of their future plans between 2027 and 2030, they announced another €1.68 billion in fossil gas investments. These investments in fossil fuels add up to €2.83 billion - about 60% of its planned investments between 2022-2030¹⁴⁶. Although they talk about ‘energy transition’, the reality and practice remains focussed on expanding fossil fuels. The re-opening of the El Musel liquified gas terminal is just one of their shining examples - despite the *talk* of ‘transition’ they continue fossil fuel ‘business as usual’.

Spanish gas demand peaked at 40.37bcm in 2008, and fell to 26 bcm in 2014 before rising slightly.¹⁴⁷ It is clear that an oversupplied Spain has no need for new infrastructure especially in a EU Green Deal future where gas demand is expected to decrease.

In their future plans to build more infrastructure, Enagás sees hydrogen as playing a key role.¹⁴⁸ By shifting its discourse to hydrogen, and using the same energy security and decarbonisation frame¹⁴⁹ Enagás seeks to justify continued investment in new and

potentially unnecessary infrastructure. Essentially the company is to guarantee a regulated revenue, regardless of whether this comes at the expense of consumers.

Where is the money coming from? Who's paying?

According to the Corporate Europe Observatory and others, EU Covid-19 recovery funds are disproportionately going to oil and gas firms across Europe, including Spain. When reviewing the allocation of these funds, they found that Spanish fossil companies were going to benefit most from the Spanish recovery plan.

First: the Renewable Hydrogen Roadmap, the Spanish governmental hydrogen strategy, has a budget of €1.6 billion, a figure that stands at 50% higher than the allocated budget for the enhancement of the national healthcare system.¹⁵⁰ Additionally, enterprises have the opportunity to secure funding for their hydrogen projects from a sizable pool of €17.8 billion. It's worth noting that this funding pool, while not exclusively earmarked for hydrogen initiatives, remains accessible.¹⁵¹

Second: Endesa, Naturgy, and Iberdrola have each proposed projects for the Spanish recovery plan, amounting to €53 billion. If these projects come to fruition, they would represent a significant portion, exceeding 70%, of the total Spanish recovery funds.¹⁵²

Last: the formulation of the spending plan has been crafted without the involvement of civil society, raising concerns. The resulting plan bears a striking resemblance to the initial draft put forth by the country's primary business advocacy group, highlighting potential biases in its development.¹⁵³

¹⁴⁵ Enagás, 2022 - 2030 Strategic Plan (2022) https://www.enagas.es/content/dam/enagas/en/files/accionistas-e-inversores/informacion-economico-financiera/informes-resultados-presentaciones/informacion-publica-periodica/PPT_Enagas_PlanEstrategico_vDef_EN.pdf

¹⁴⁶ Ibidem p14

¹⁴⁷ IEA, Spain Natural Gas Security Policy (2022) <https://www.iea.org/articles/spain-natural-gas-security-policy>

¹⁴⁸ Enagás, Annual Report 2022 (2023) P18 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

¹⁴⁹ Greenpeace International, Who Profits from War (2023) <https://www.greenpeace.org/static/planet4-international-stateless/2023/04/b48c5661-who-profits-from-war.pdf>

¹⁵⁰ International Trade Administration, Spain Renewable Hydrogen Roadmap (2020) <https://www.trade.gov/market-intelligence/spain-renewable-hydrogen-roadmap>

¹⁵¹ Corporate Europe Observatory, Hijacking the Recovery (2021) <https://corporateeurope.org/sites/default/files/2021-07/Report%20Layout%20Eng.pdf>

¹⁵² Ibidem

¹⁵³ Ibidem

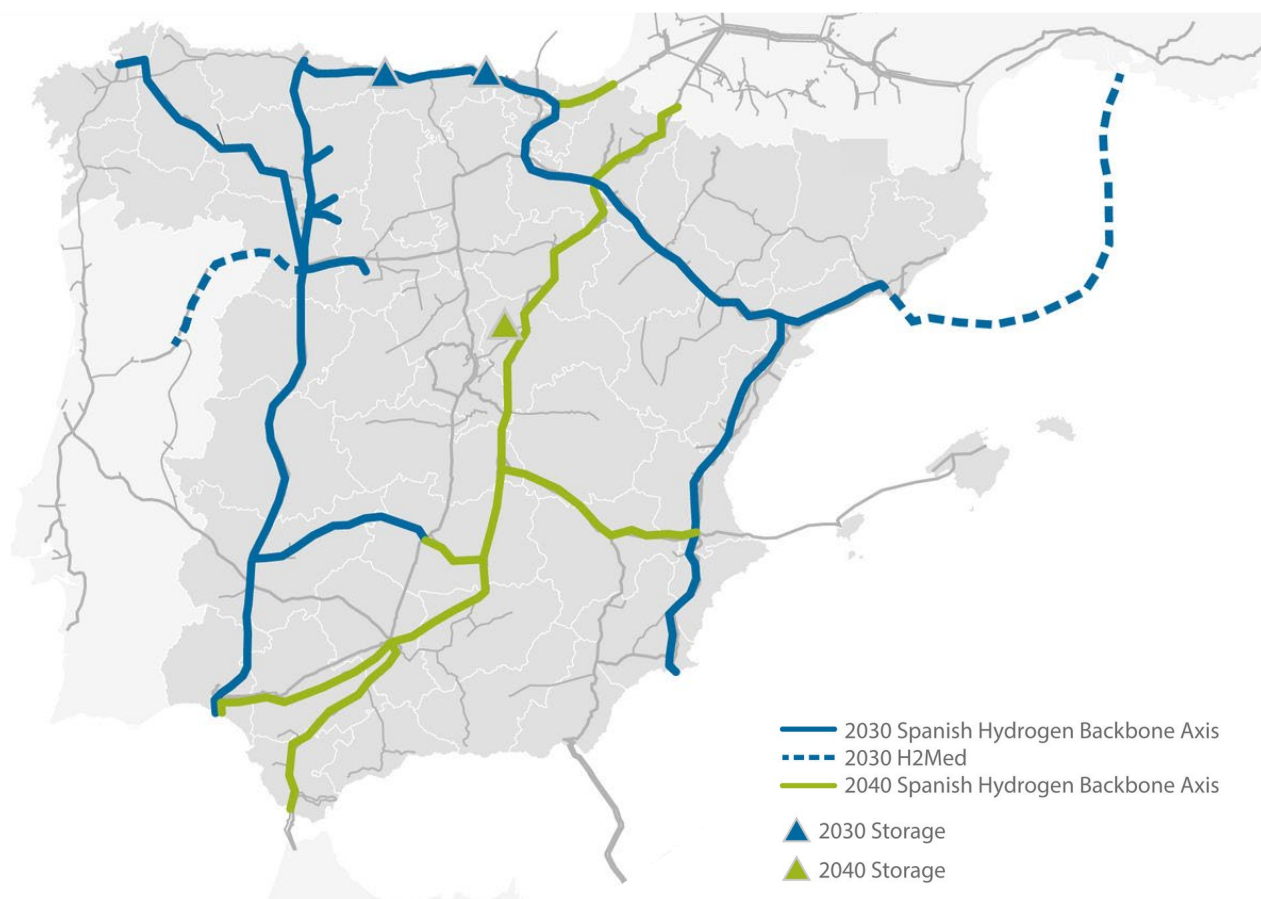
A closer look at Enagás' proposed hydrogen infrastructure, the so-called "Spanish hydrogen backbone" and H2Med, suggests it is a new name for an old idea. Together, these infrastructures aim to transport up to 2 million tonnes of so-called "green hydrogen" produced in Spain and Portugal to Europe¹⁵⁴, which Enagás calls "the starting point for positioning Spain as Europe's leading hydrogen hub".¹⁵⁵ However, although its name suggests this is a hydrogen project, H2MED will start transporting gas to Germany and Central Europe via France. It is a fossil gas pipeline in disguise to lock us

into fossil gas for decades. Who knows when, or more likely, if the intended retrofit will happen in order for H2MED to transport hydrogen?¹⁵⁶

The entire idea for this new infrastructure was based on a failed plan for a fossil gas pipeline called MidCat, which was first proposed earlier this decade, but rejected as it was deemed to be financially unfeasible and not needed¹⁵⁷. The Ukrainian war has provided Enagás and the Spanish government with an excuse to revive the idea.¹⁵⁸

Figure 8. Basic hydrogen infrastructure proposed by Enagás for Spain in 2030 and 2040

Source: Enagás¹⁵⁹



¹⁵⁴ Enagás, A transmission network to supply hydrogen <https://www.enagas.es/en/energy-transition/gas-network/energy-infrastructure/hydrogen-transmission/>

¹⁵⁵ Enagás, Annual Report 2022 (2023) P27 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

¹⁵⁶ Ana María Jaller-Makarewicz, A gas pipeline in disguise? Known unknowns about H2Med (2022) <https://ieefa.org/resources/gas-pipeline-disguise-known-unknowns-about-h2med>

¹⁵⁷ Global Energy Monitor, Midi-Catalonia Pipeline https://www.gem.wiki/Midi-Catalonia_Pipeline

¹⁵⁸ Activos, PSOE, PP y Cs pactan impulsar el gasoducto Midcat con Francia y usarlo para hidrógeno verde (2022) <https://www.epe.es/es/activos/20220511/psoe-pp-cs-impulsar-midcat-francia-hidrogeno-verde-13644202>

¹⁵⁹ Enagás, A transmission network to supply hydrogen <https://www.enagas.es/en/energy-transition/gas-network/energy-infrastructure/hydrogen-transmission/>

Under this strategy, Enagás also aspires to be a Hydrogen Network Operator (HNO). The investments made in pursuit of this goal will secure Enagás a consistent stream of regulated revenues. This raises a significant concern that decisions within this framework may once again be primarily influenced by profit-driven motives rather than genuine technical system necessities. In their 2022 Annual Report, they assure its readers that most of the investments in their strategic plan guarantee a secure return on investment as part of the Spanish gas regulation¹⁶⁰. In other words, even if these investments result in useless fossil infrastructure, Enagás and its shareholders will secure a return because the Spanish public will have to pay.

In fact even in the unlikely event that H2Med was one day to transport renewable hydrogen, the development of this infrastructure does not come without significant associated risks, including:

- becoming another stranded asset. The current production levels of green hydrogen and the uncertainty about the future demand of gas in Europe do not justify the construction of this project.¹⁶¹
- those associated with long-distance hydrogen transport from a climate, technical, economical and energy efficiency perspective. The transport of hydrogen, as well as its storage, is currently a major challenge. The small size and low density of its molecules make hydrogen highly dispersible, increasing the risk of leakage - emissions from hydrogen leaks have a global warming potential of 100 years. Add the fact that renewable hydrogen is an inefficient energy carrier, it will always be more feasible, efficient and cheaper to transport electricity than hydrogen.¹⁶²
- the risk of hindering a just energy and ecological transition. Large-scale production of renewable hydrogen for exports, as proposed by Enagás, would

imply overproduction of renewable electricity at an unsustainable scale, raising the possibility of high land occupation and low social acceptance by communities.¹⁶³

For all of that, it is key to prioritise the local production and consumption of green hydrogen, as well as limiting its use as much as possible to those essential industrial sectors that are difficult to decarbonise and to the transport sector, when direct electrification is not possible.

Profits for Enagás and its shareholders; costs paid by the Spanish public

In 2022, despite the global challenges that included mounting inflation, climate-related catastrophes, and wars, the fossil fuel industry announced huge record profits. Triggered by Russia's invasion of Ukraine, which boosted gas prices and historic profits for oil and gas producers. The global oil and gas industry's profits in 2022 jumped to US\$4 trillion, according to Fatih Birol, Head of the IEA.¹⁶⁴

While the public grappled with soaring energy expenses, US gas companies emerged as major winners in Europe's supply turmoil.¹⁶⁵ The year 2022 was indeed a milestone for US liquified gas companies, marked by record-breaking exports to the EU, record-high prices, and an unprecedented number of deals signed.¹⁶⁶

Reuters reported that prominent US gas enterprises, including the largest exporter, Cheniere Energy Inc, have reaped substantial rewards, as a result of getting a number of long-term liquified gas supply contracts agreed. Cheniere, for example, disclosed a doubling of its revenues from 2021 to 2022¹⁶⁷. Similarly, other major

¹⁶⁰ Enagás, Annual Report 2022 (2023) P21

https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

¹⁶¹ Ana Maria Jaller-Makarewicz, A gas pipeline in disguise? Known unknowns about H2Med (2022)

<https://ieefa.org/resources/gas-pipeline-disguise-known-unknowns-about-h2med>

¹⁶² Greenpeace and Fundación renovables, Desmontando el hidrógeno: H2Med, coartada para una falsa transición energética (2023)

<https://es.greenpeace.org/es/sala-de-prensa/documentos/desmontando-el-hidrogeno-h2med-coartada-para-una-falsa-transicion-energetica/>

¹⁶³ Ibidem

¹⁶⁴ Reuters, Oil and gas industry earned \$4 trillion last year, says IEA chief (2023)

<https://www.reuters.com/business/energy/oil-gas-industry-earned-4-trillion-last-year-says-iea-chief-2023-02-14/>

¹⁶⁵ Reuters, US LNG exporters emerge big winners in Europe natgas crisis (2022)

<https://www.reuters.com/business/energy/us-lng-exporters-emerge-big-winners-europe-natgas-crisis-2022-03-09/>

¹⁶⁶ Ibidem

¹⁶⁷ Cheniere, Cheniere Reports Fourth Quarter and Full Year 2022 Results

<https://ingir.cheniere.com/news-events/press-releases/detail/273/cheniere-reports-fourth-quarter-and-full-year-2022-results>

players such as Sempra Energy boasted a notable uptick in net profits compared to 2021.¹⁶⁸

Financially, Enagás has not been as successful as some other fossil fuel companies. Gas demand in Spain peaked in 2008¹⁶⁹ impacting their financial results. Enagás' share price peaked in 2014, at €26.2 per share, falling to €15.5 at the end of 2022¹⁷⁰. Its revenue has also declined from €1.26 billion in 2013, to €0.97 billion in 2022; a decline of 23% over 10 years.

As seen in the [table 6](#), in 2013, 24% of the revenue was paid to shareholders as dividends. During the last ten years, when revenue and profits decreased, even more was paid out to shareholders, who in 2022 received €450 million in dividends, or 46% of the total revenues that year. While the stock decreased, shareholders were rewarded with a growing dividend year on year, taking an increasing amount of the total revenue. Essentially this is money from the Spanish people to the Spanish Government that ended up in the pockets of investors scattered across the globe. A total of €3.651 billion in the last 10 years.

A substantial portion of the huge profits from surging energy costs is clearly finding its way directly into the pockets of shareholders, primarily in the form of

dividends. Despite the oil and gas sector's proclamations of taking substantive steps to combat the climate crisis and pivot their business models, the lion's share of their colossal profits has come from expanding fossil fuel lock-in and gone to enriching their shareholders.

US liquified gas production is booming, and shareholders know it. And while Enagás has not seen record profits like those of the US gas exporters, the last 10 years has been increasingly profitable for their shareholders, and increasingly costly for the Spanish tax payer.

In the case of other major European gas infrastructure operators such as the Belgian company Fluxys and Italy's SNAM, the percentage of revenue being paid out as dividends to shareholders is noticeably lower than in the case of Enagás. For example in 2022 Enagás paid out 46.38% of revenue as dividends to shareholders compared to just 11.24% for Fluxys¹⁷¹ and 24.64% for SNAM.¹⁷²

The €3.651 billion handed out to shareholders in the last ten years by Enagás equate to the levelized cost of generating 117 TWh of onshore wind energy, calculated at USD 0.033/kWh (0.031 EUR) according to the International Renewable energy Agency (IRENA).¹⁷³

Table 6. Revenue, profits, and dividends from Enagás 2013–2022

Source: Greenpeace Spain, Data from Enagás' Annual Reports

Financial indicators	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year difference
Total revenue	1,261.90	1,223.80	1,221.60	1,218.30	1,384.60	1,342.20	1,054.00	1,153.00	991.20	970.30	-23.11%
Net profit	403.2	406.5	412.7	417.2	490.8	442.6	442.6	444	403.8	375.8	-6.80%
Dividends in mil (€)	302.4	310.4	315.1	331.4	348.1	354.8	371.3	426.7	441.4	450	48.81%
Dividends as porcentaje of Revenue	23.96%	25.36%	25.79%	27.20%	25.14%	26.43%	35.23%	37.01%	44.53%	46.38%	93.53%
Share price (31 Dec €)	19	26.2	26	24.1	23.9	23.6	22.7	18	20.4	15.5	-18.42%
Dividend	1.3	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.7	1.72	32.31%
Market Cap	4534.8	6251.3	6207.1	5759.4	5698.6	5636.5	5967.7	4706.7	5344.6	4067.5	-10.30%

¹⁶⁸ Sempra, Sempra Reports Fourth Quarter 2022 Business Results <https://www.sempra.com/sempra-reports-fourth-quarter-2022-business-results>

¹⁶⁹ IEA, Spain Natural Gas Security Policy (2022) <https://www.iea.org/articles/spain-natural-gas-security-policy>

¹⁷⁰ Enagás, Annual Report 2022 (2023) PI71 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

¹⁷¹ Fluxys, Annual Report 2022 (2023) <https://www.fluxys.com/en/about-us/fluxys-group/annual-report>

¹⁷² SNAM, Annual Report 2022 (2023) <https://www.snam.it/en/investor-relations.html>

¹⁷³ International Renewable Energy Agency (IRENA), Renewable Power Generation Costs in 2021 (2022) <https://www.irena.org/publications/2022/Jul/Renewable-Power-Generation-Costs-in-2021>

This equates to nearly half of Spain's total electricity consumption in 2020.¹⁷⁴

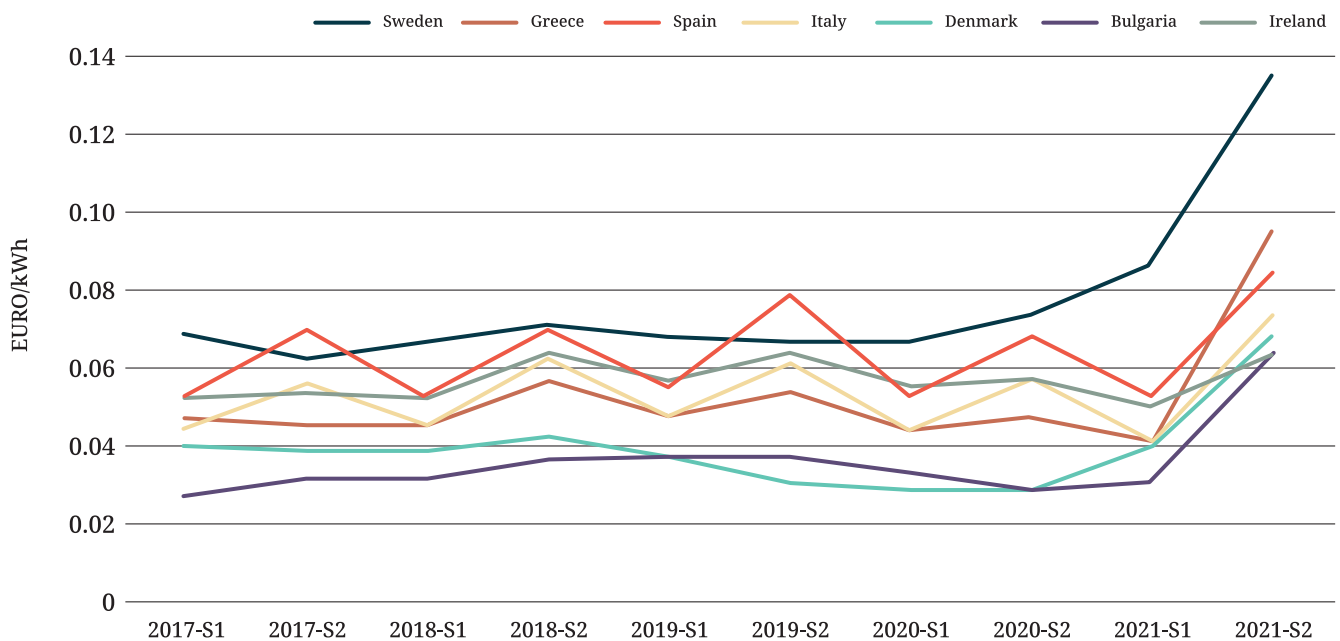
Rather than being channelled into renewable energy, this money went to shareholders¹⁷⁵; people like Amancio Ortega, Spain's richest man, the asset managers Blackrock and Vanguard; the UAE (United Arab Emirates) investment funds, pension funds across the globe, and some of the biggest banks in the world.¹⁷⁶

According to data retrieved from the Refinitiv data portal, only 14% of the institutional shareholders are Spanish¹⁷⁷, the rest of this capital has flown out to every corner of the globe.

While shareholders have profited immensely, Spanish consumers have historically paid more for their gas consumption than those in any other European country. IEEFA calculated that 39% of the costs for gas in Spain correspond to the network costs paid to Enagás. This puts Spain at the top of the EU ranking¹⁷⁸. That means Spaniards pay the highest percentage of their gas bill in the EU for transmission of their gas. Added to that, when looking at the gas prices for household consumers per kWh, the total costs, the Spanish households have consistently paid more than other South European nations such as Portugal, Greece, and Italy (see [figure 2](#)).¹⁷⁹

Figure 9. Household gas prices for Consumers in Europe (€/kWh)

Source: IEEFA and Eurostat



174 IEA, Spain <https://www.iea.org/countries/spain>

175 From information retrieved from the Refinitiv data portal 6 October 2023.

176 Refinitiv Terminal

177 Ibidem

178 Ana Maria Jaller-Makarewicz, Gas in Spain: Oversupplied and Overcompensated (2021) https://ieefa.org/wp-content/uploads/2021/09/Gas-in-Spain-Oversupplied-and-Overcompensated_September-2021.pdf

179 Ana Maria Jaller-Makarewicz, Gas in Spain: Still oversupplied and overcompensated (2022) <https://ieefa.org/resources/gas-spain-still-oversupplied-and-overcompensated>

Part 3: Enagás' profits, at the expense of communities in Spain and the US

El Musel and the failed promises of Asturias' reindustrialization

The full story behind El Musel, which has greatly benefited Enagás at a cost of €380 million to Spanish citizens¹⁸⁰, began over 20 years ago. In the early 2000s the region of Asturias was facing high unemployment. The region's industries, particularly coal mining and metallurgy¹⁸¹ were in decline. The then-regional president, Vicente Álvarez Areces (who died in 2019), saw the 2004 election of the Socialist Party to the central government as an opportunity to attract investments to his homeland and improve employment prospects.¹⁸²

Vicente Alvarez and his team devised¹⁸³ an ambitious plan to revitalise the industry through the expansion of the El Musel port in Gijón and of natural gas to replace coal. The idea was to make Asturias an energy hub for self-sufficiency and exports of surplus energy.

The idea of creating an “energy pole”¹⁸⁴ included the El Musel plant in the port, which ultimately turned out to be the only major installation built. Other initial plans included a fossil gas power plant, two biodiesel production plants, and a wind farm on the northern dike.¹⁸⁵

But it didn't stop there; the intention was to build up to seven new gas power plants, including in El Musel¹⁸⁶

(behind which was HC Energía, a subsidiary of the EDP Group)¹⁸⁷. Another was in Soto de Ribera, two in Nubledo, one in Pereda, and two more in Lada. These would have had a combined capacity of 3260 MW¹⁸⁸.

The plan envisioned using the El Musel plant, with two tanks, each with a capacity of 150,000 m³, as a reception and distribution centre for gas to the gas power plants in the region¹⁸⁹. In 2006, Enagás, entrusted by the government¹⁹⁰, initiated administrative procedures and encountered both legal and cost-related problems, as well as delays.

The construction was completed in 2012, but the government mothballed the plant due to a lack of gas demand and it never became operational¹⁹¹. The courts, meanwhile, declared the installation illegal¹⁹², due to a law prohibiting the installation of potentially hazardous industries within a distance less than 2000 metres from inhabited areas, El Musel was situated just 1800 metres from a neighbourhood in Gijón. But this did not significantly affect Enagás, which since then¹⁹³ has been getting around €25 million a year for hibernation of the plant. In 2018, Enagás initiated a new process to request the plant's opening. In 2022, it received environmental authorization that concluded in 2023 with the required permits.¹⁹⁴

With the recent opening of El Musel as a gas storage facility, the CNMC (National Commission of Markets and

-
- 180** CNMC, Memoria justificativa de la resolución de la CNMC por la que se establece un régimen económico singular y de carácter temporal para la planta de regasificación de El Musel (2022) <https://www.cnmc.es/sites/default/files/4551976.pdf>
- 181** La Marea, Asturias: la reconversión eterna (2023) <https://www.lamarea.com/2023/01/23/asturias-la-reconversion-eterna/>
- 182** El Comercio, Vicente Álvarez Areces, empeñado en transformar Asturias (2019) <https://www.elcomercio.es/politica/vicente-alvarez-areces-empenado-transformar-asturias-20190118001007-ntvo.html>
- 183** El Comercio, Vicente Álvarez Areces, empeñado en transformar Asturias (2019) <https://www.elcomercio.es/politica/vicente-alvarez-areces-empenado-transformar-asturias-20190118001007-ntvo.html>
- 184** Europa Press, El PP compara el “fracaso” de los proyectos energéticos de El Musel con el escándalo político del ‘petromocho’ (2010) <https://www.20minutos.es/noticia/685318/0/>
- 185** La Nueva España, La gelidez del «polo energético» (2009) <https://www.lne.es/gijon/2009/12/21/gelidez-polo-energetico-21420972.html>
- 186** Europa Press, El PP compara el “fracaso” de los proyectos energéticos de El Musel con el escándalo político del ‘petromocho’ (2010) <https://www.20minutos.es/noticia/685318/0/>
- 187** Europa Press / 20 Minutos Asturias, El Principado asegura que la inversión de Hc Energía en El Musel “se va a ejecutar cuando el sector recupere el vigor” (2010) <https://www.20minutos.es/noticia/844769/0/>
- 188** Coordinadora Ecoloxista, Vicente Álvarez Areces vuelve a mentir a Europa No hay racionalidad en las térmicas asturianas (2008) <https://coordinadoraecoloxista.org/vicente-alvarez-areces-vuelve-mentir-europa-no-hay-racionalidad-en-las-termicas-asturianas/>
- 189** El Comercio, Enagás invertirá 377 millones en la construcción de la planta regasificadora de El Musel (2009) <https://www.elcomercio.es/20090921/economia/areces-reivindico-importancia-musel-200909211613.html>
- 190** Enagás, Adjudicada a Enagás la nueva planta de regasificación de El Musel (2006) <https://www.enagas.es/content/dam/enagas/es/ficheros/sala-de-comunicacion/actualidad/notas-de-prensa/2006/Regasificadora%20El%20Musel%2015%2011%2006.pdf>
- 191** Offshore Energy, Enagas: Musel LNG Terminal to be Mothballed After Completion, Spain (2012) <https://www.offshore-energy.biz/enagas-musel-lng-terminal-to-be-mothballed-after-completion-spain/>
- 192** El Comercio, El Supremo confirma la ilegalidad de la obra de la regasificadora de El Musel (2016) <https://www.elcomercio.es/economia/201603/01/tribunal-supremo-anula-regasificadora-20160301210237.html>
- 193** CNMC, Memoria justificativa de la resolución de la CNMC por la que se establece un régimen económico singular y de carácter temporal para la planta de regasificación de El Musel (2022) <https://www.cnmc.es/sites/default/files/4551976.pdf>
- 194** Enagás, La planta de GNL de El Musel recibe la Autorización Administrativa para su puesta en marcha (2023) <https://www.enagas.es/es/sala-comunicacion/actualidad/notas-prensa/musel-autorizacion-administrativa/>

Competition) has set the cost at €25.3million in the first year of operation, €24.2million in the second year, €22.9 million in the third year and so on for over fifty years until the debt is repaid in full¹⁹⁵. These costs are to be borne by the gas system –in other words– the public.^{196, 197}

Essentially, until this year, with the commissioning of the facility and the award of logistics services to Endesa¹⁹⁸, the debt incurred with Enagás for the plant's original construction had not started to be amortised, meaning that all the money already paid (estimated at nearly €300 million)¹⁹⁹ has not contributed to reducing the gas system's debt that is paid by the public through their gas bills.

Throughout these years, the Spanish gas system has not needed this plant, in fact, the other six existing plants have hardly surpassed 50% of their regasification capacity.²⁰⁰ This prompted the Spanish Environmentalist NGO Ecologistas en Acción to file a new complaint, asserting that the plant should never have been built.²⁰¹ Moreover, the pretext for opening the facility as a strategic storage unit to ensure European energy security has not materialised and is not expected to happen. Currently, the plant stores gas from fracking in the United States, which is slowly fed into the gas network with no public plans for redirection.²⁰²

Since the beginning of the construction of the regasification plant, there has been opposition from environmental and social groups in Gijón²⁰³. They view it as a danger to the local population, as it is located less

than two kilometres away from residential areas (this proximity led to it being declared illegal in 2013²⁰⁴). Furthermore, they deem it unnecessary in terms of gas security supply and argue that it has not contributed to the revitalization of the region's industry.

It does not have to be like this. An alternative to fossil fuels in Asturias should be a commitment to renewable energy. Initiatives like energy-efficient renovations and the installation of renewable energy sources would create jobs and boost the region's economy.²⁰⁵ This shift could also help achieve the goal of complete electricity self-sufficiency through renewables²⁰⁶, resulting in reduced emissions and an improved quality of life for the Asturian citizens. However, achieving this requires a dedicated effort from both the central and regional governments, involving various aspects such as tax policies and workforce training.

The US connection – El Musel as a store for US fracked gas?

While it is impossible to track the exact quantities from different gas wells to the gas terminals, Greenpeace Spain was able to find evidence in official documents such as environmental permits or filings at the US Department of Energy. These show that the US gas terminals supplying Spain are in turn supplied by the environmentally devastating and socially destructive²⁰⁷ gas fields of the Permian Basin, Marcellus, Eagle Ford,

-
- 195** CNMC, Memoria justificativa de la resolución de la CNMC por la que se establece un régimen económico singular y de carácter temporal para la planta de regasificación de El Musel (2022) <https://www.cnmc.es/sites/default/files/4551976.pdf>
- 196** CNMC, Memoria justificativa de la resolución de la CNMC por la que se establece un régimen económico singular y de carácter temporal para la planta de regasificación de El Musel (2022) <https://www.cnmc.es/sites/default/files/4551976.pdf>
- 197** CNMC, La CNMC aprueba un régimen económico singular y temporal para el uso de la planta de Gas Natural Licuado de El Musel, actualmente hibernada (2023) https://www.cnmc.es/sites/default/files/editor_contenidos/Notas%20de%20prensa/2023/20230217_NP_Retribucion_ElMusel.pdf
- 198** Enagás, Enagás awards Endesa the contract for logistics services for the El Musel terminal (2023) <https://www.enagas.es/en/press-room/news-room/press-releases/contract-logistics-services-musel/>
- 199** Ecologistas en Acción, Las finanzas del gas. Desvelando la cara oculta de Enagás (2022) <https://www.ecologistasenaccion.org/278301/informe-las-finanzas-del-gas-desvelando-la-cara-oculta-de-enagas/>
- 200** IEA, Spain Natural Gas Security Policy (2022) <https://www.iea.org/articles/spain-natural-gas-security-policy>
- 201** LNE, Ecologistas en Acción recurre la autorización de la regasificadora de El Musel por ocultar documentación durante la información pública (2022) <https://www.lne.es/gijon/2022/08/05/ecologistas-accion-recurren-autorizacion-regasificadora-73093168.html>
- 202** See [part 3, section on the US connection](#)
- 203** La Voz de Asturias, La regasificadora de El Musel será una «pieza clave» para la transición energética, defiende el Principado (2023) <https://www.lavozdeasturias.es/noticia/asturias/2023/07/01/regasificadora-musel-sera-pieza-clave-transicion-energetica-defiende-principado/00031688206385839659746.htm>
- 204** El Comercio, El Supremo confirma la ilegalidad de la obra de la regasificadora de El Musel (2016) <https://www.elcomercio.es/economia/201603/01/tribunal-supremo-anula-regasificadora-2016030120237.html>
- 205** Greenpeace Spain, La recuperación económica con renovables (2014) <http://archivo-es.greenpeace.org/espana/es/Informes-2014/Octubre/La-recuperacion-economica-con-renovables/>
- 206** Greenpeace Spain, Informes Renovables 2050 (2007) <https://archivo-es.greenpeace.org/espana/es/reports/informes-renovables-2050/>
- 207** Physicians for Social Responsibility, Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking and Associated Gas and Oil Infrastructure (2023) <https://psr.org/resources/fracking-compendium-9/>



and many others. These terminals were actually built with the export of fracked gas in mind.²⁰⁸

Other sources, like filings of long term supply contracts at the US Department of Energy, tie the specific terminals to energy suppliers who own gas wells exclusively in shale gas fields²⁰⁹. However, under these contracts, suppliers are required to provide the terminals with an agreed volume, unspecified from the source. In our reporting of the gas fields where the US terminals source their gas we only used the gasfields mentioned in their environmental permits. Except for Corpus Christi, where the CEO recently said that 100% of the feed gas for Corpus Christi was coming from the Permian Basin.²¹⁰

Grace Dahlia tanker at Cheniere LNG facility in the Gulf Coast, USA. © Tim Aubry / Greenpeace

All that being said, in 2022, total US gas production consisted of 87% shale and compact reservoir gas, which are extracted by means of hydraulic fracturing.²¹¹ This means that US gas is synonymous with fracked gas. The impact of fracking is felt in every community where there are fracking wells, regardless of where they are located.

²⁰⁸ As detailed in the FECM filings of the LNG terminals <https://www.energy.gov/fecm/articles/summary-lng-export-applications-lower-48-states>

²⁰⁹ List of long term contracts here <https://www.energy.gov/fecm/articles/sabine-pass-lng-terminal>
<https://www.energy.gov/fecm/articles/cameron-terminal>
<https://www.energy.gov/fecm/articles/corpus-christi-liquefaction-terminal>
<https://www.energy.gov/fecm/articles/cove-point-lng-terminal>
<https://www.energy.gov/fecm/articles/southern-lng-company-llc-elba-island-terminal>
<https://www.energy.gov/fecm/articles/calcasieu-pass-terminal>
<https://www.energy.gov/fecm/articles/freeport-lng-terminal>

²¹⁰ SA Transcripts, Cheniere Energy, Inc. (LNG) CEO Jack Fusco on Q3 2021 Results - Earnings Call Transcript (2021) <https://seekingalpha.com/article/4465539-cheniere-energy-inc-lng-ceo-jack-fusco-on-q3-2021-results-earnings-call-transcript>

²¹¹ EIA, Natural gas explained <https://www.eia.gov/energyexplained/natural-gas/where-our-natural-gas-comes-from.php>

Table 7. Imports of US liquified gas by terminal

Source: Refinitiv, and environmental applications where cited

LNG imports by US Terminal	Total mcm gas 2021-2022-2023 1H	% of Total	Sources of feed gas mentioned in environmental permits
Calcasieu Pass	1030.32	4.62%	Barnett Shale, Haynesville/Bossier Shale, Marcellus Shale ²¹²
Corpus Christi	6825.17	30.62%	Permian Basin ²¹³
Cove Point	1947.21	8.74%	Marcellus Shale ²¹⁴
Freeport	990.47	4.44%	Barnett Shale, Eagle Ford Shale, Granite Wash Shale, Permian Basin ²¹⁵
Cameron	3240.91	14.54%	Texas and Louisiana producing regions (unspecified), Barnett Shale, Haynesville/Bossier Shale, Eagle Ford Shale ²¹⁶
Sabine Pass	7720.05	34.63%	Barnett Shale, Haynesville/Bossier Shale, Eagle Ford, Fayetteville, Woodford
Elba Island	537.82	2.41%	Southern Natural Gas Pipeline (unspecified) ²¹⁷
Total USA	22291.95	100.00%	

There is a long list of energy companies involved in this fracking business²¹⁸, with 83 different companies that have long term supply contracts to terminals. These range from some of the largest fossil fuel companies such as Chevron and ConocoPhillips, to smaller local players. These also include some European fossil giants such as BP, Shell, Equinor, Engie, and EDF, as well as the Spanish oil and gas company Repsol, which operates fracking gas wells in the Pennsylvanian Marcellus Shale field²¹⁹, and in Eagle Ford Shale, South Texas.²²⁰

As noted earlier, the Eurostat data shows that US liquified gas plays a key role in the Spanish energy mix, and was the largest gas source for Spain in 2022 accounting for

29% of total gas imports, the second largest in 2021 with 14%, and in the first half of 2023, the third largest with 19.5% of total imports. With the opening of the El Musel terminal, the role of US gas is formalised as a key pillar of the Spanish energy mix, with only US LNG being imported to El Musel so far. With all the consequences that entails for the communities across the US, that daily suffer the impacts of fossil fuel extraction.

So far four tankers have discharged gas at the newly opened El Musel Terminal, of which three came from Corpus Christi, Texas, and 1 from Calcasieu Pass, Louisiana.^{221, 222} All of them coming from vulnerable communities in the US Gulf South.

²¹² Venture Global, Application of Venture Global LNG Calcasieu Pass, LLC P9 (2015) https://www.energy.gov/sites/prod/files/2015/06/f23/15_25_lng.pdf

²¹³ SA Transcripts, Cheniere Energy, Inc. (LNG) CEO Jack Fusco on Q3 2021 Results - Earnings Call Transcript (2021) <https://seekingalpha.com/article/4465539-cheniere-energy-inc-lng-ceo-jack-fusco-on-q3-2021-results-earnings-call-transcript>

²¹⁴ Dominion, Application of Cove Point LNG P5 (2011) https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2011/applications/11-128-LNG.pdf

²¹⁵ Department of Energy, Long Term Export application Freeport LNG (2013) P10 https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2013/orders/ord3282.pdf

²¹⁶ Department of Energy, Long Term Export application Cameron LNG (2014) P13 https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2014/orders/ord3391.pdf

²¹⁷ Southern LNG, Application for Elba Island LNG (2012) P11 https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2012/applications/12_100_lng.pdf

²¹⁸ List of long term contracts here <https://www.energy.gov/feem/articles/sabine-pass-lng-terminal>
<https://www.energy.gov/feem/articles/cameron-terminal>
<https://www.energy.gov/feem/articles/corpus-christi-liquefaction-terminal>
<https://www.energy.gov/feem/articles/cove-point-lng-terminal>
<https://www.energy.gov/feem/articles/southern-lng-company-llc-elba-island-terminal>
<https://www.energy.gov/feem/articles/calcasieu-pass-terminal>
<https://www.energy.gov/feem/articles/freeport-lng-terminal>

²¹⁹ Repsol, Repsol in the United States <https://www.repsol.com/en/about-us/repsol-worldwide/the-america/united-states/index.cshtml>

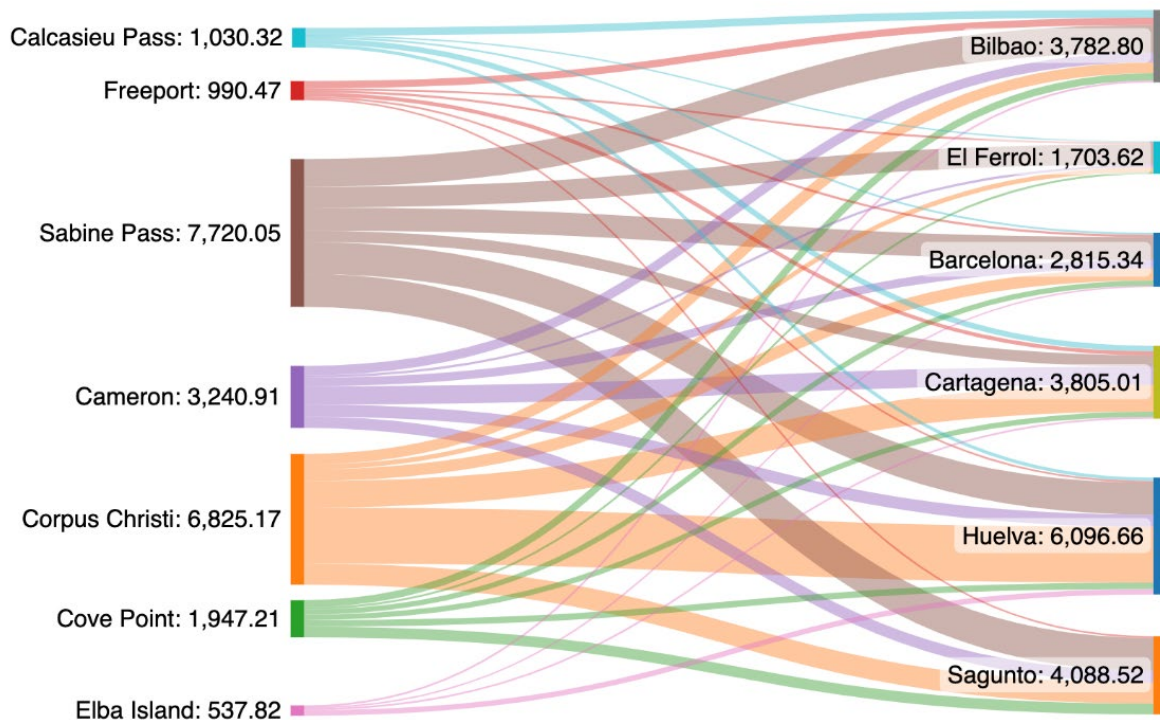
²²⁰ Repsol, Eagle Ford ownership update <https://www.repsol.us/en/owner-relations/eagle-ford-ownership-update/index.cshtml>

²²¹ Refinitiv data portal

²²² Gijón port data <https://gijon.posidoniaport.com/>

Figure 10. US liquified gas imports to Spain, by LNG terminal

Source: data from Refinitiv



Fracked US gas breaking the soil, the air, and the health of its citizens

In its annual report, Enagás says that “Health and safety is one of Enagás’ values”, and that “Enagás promotes safety throughout its supply chain” Furthermore, “Enagás ensures that human rights are upheld where applicable to the context and activities of the company (...) to ensure compliance with human rights in its Human Rights Policy.” And they consider this policy quite a success because “During 2022, and as in the previous two years, Enagás did not find any human rights violations”.²²³

However, in its current supply chain and human right analysis, Enagás does not consider the gas flowing through their pipes and being regasified in their

pipelines as their responsibility. The steel of which the pipe is made is considered in the supply chain analysis, but the fossil fuels flowing through them are not.²²⁴

This is despite the fact that, over the last decade, as fracking oil and natural gas extraction expanded across the US, the detrimental health and environmental consequences of fracking have become more evident. An increasing body of scientific studies and reports solidify the fact that fracking has huge negative impacts on public health and the environment.^{225, 226}

Pollutants found in oil and gas deposits as well as chemicals introduced in the fracking process, include cancer-causing compounds. Moreover, oil and gas operations have affected local and regional air quality,

²²³ Enagás, Annual Report 2022 (2023) P93, P94, P147, and P148 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

²²⁴ Enagás, Annual Report 2022 (2023) P150 and P156 https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-anual/Annual_Report_2022_Enagas.pdf

²²⁵ Fracktracker, The Health & Environmental effects of Fracking <https://www.fracktracker.org/resources/oil-and-gas-101/health-environmental-effects-of-fracking/>

²²⁶ Donaghy et al. Fossil fuel racism in the United States: How phasing out coal, oil, and gas can protect communities (2023) <https://doi.org/10.1016/j.erss.2023.103104>



with highest risks for those residing closest to oil and gas wells.²²⁷ The production of gas can result in the release of air toxics (such as benzene) and criteria pollutants (such as particulate matter), as recent research done by the investigative media outlet Disclose highlighted with TotalEnergies’ fracked gas wells in the USA.²²⁸ Toxins from fracking operations have been linked to serious health issues, including leukaemia, liver damage, eye, nose, and throat irritation, and headaches.²²⁹

A study of over 15 million Medicare beneficiaries found “evidence of a statistically significant higher mortality risk associated with living in proximity to and downwind

Boy with Respiratory Problems in Louisiana.

© Les Stones / Greenpeace

of unconventional oil and gas wells”.²³⁰ Living near an oil well is associated with lower lung function²³¹ and asthma.²³²

Oil and gas activities are also disproportionately impacting Black, Brown, Indigenous and poor communities. A nationwide study in the US found that those that live in historically redlined areas had twice the density of wells as did communities that had higher lending grades.²³³ In a 2023 analysis of more than 2 000

²²⁷ Environmental Health News, Living near fracking wells linked to early death (2022) <https://www.ehn.org/fracking-health-risks-2656482452.html>

²²⁸ Disclose, Shale gas imported into Europe: Totalenergies’ Health and Environmental Scandal in the USA. <https://disclose.ngo/en/article/shale-gas-imported-into-europe-totalenergies-health-and-environmental-scandal-in-the-united-states>

²²⁹ Fracktracker, The Health & Environmental effects of Fracking <https://www.fracktracker.org/resources/oil-and-gas-101/health-environmental-effects-of-fracking/>

²³⁰ Longxiang Li et al, Exposure to unconventional oil and gas development and all-cause mortality in medicare beneficiaries (2022) <https://www.nature.com/articles/s41560-021-00970-y>

²³¹ J.E. Johnston, T. Enebish, S.P. Eckel, S. Navarro, B. Shamasunder. Respiratory health, pulmonary function and local engagement in urban communities near oil development (2021) <https://pubmed.ncbi.nlm.nih.gov/33794173/>

²³² B. Shamasunder, A. Collier-Oxandale, J. Blickley, J. Sadd, M. Chan, S. Navarro, M. Hannigan, N.J. Wong, Community-based health and exposure study around urban oil developments in South Los Angeles (2018) <https://pubmed.ncbi.nlm.nih.gov/29342985/>

²³³ D.J.X. Gonzalez, A. Nardone, A.V. Nguyen, R. Morello-Frosch, J.A. Casey, Historic redlining and the siting of oil and gas wells in the United States (2023) <https://www.nature.com/articles/s41370-022-00434-9>

scientific studies and reports on fracking risks found that there is “no evidence that fracking can be practised in a manner that does not threaten human health directly or without imperilling climate stability upon which human health depends”.²³⁴

Regarding the impacts on the access to water, research by the New York Times on how gas wells are getting bigger in the US, and require increasing volumes of water to fracture bedrock. These are threatening America’s fragile aquifers in already drought stricken areas such as Texas.²³⁵ Additionally, next to water use, the soil can be contaminated with a mixture of chemicals that result in decreased crop production and economic losses for nearby farmers.²³⁶ And lastly, because fracking literally fractures the ground under the communities using this mixture to retrieve the gas, studies show that most earthquakes in the Southern US can be linked to oil and gas operations. While most earthquakes are low-to-moderate, they are increasing since 2009.²³⁷

From the fracking fields to the toxic Gulf Coast

Oil and gas are produced across the US Midwest including the Permian Basin in Texas and New Mexico, but also the Appalachian Basin in Pennsylvania, Ohio and West Virginia. A vast network of pipelines transports much of this gas south to the Gulf Coast for processing and export. Much has been reported about the impacts of these activities on the communities living on the US Gulf Coast.²³⁸

For example, Michael Esealuka, born in Louisiana, has suffered from the impacts of the US fracking gas boom. For the past eight years, she has been involved in labour, climate, and environmental justice struggles. She has

been at the forefront of the struggle against the buildout of oil and gas, petrochemical, and plastic infrastructure. Her testimony of the impact of fracked gas on her community is reproduced below.

Along the Gulf Coast, especially in Texas and Louisiana, there is a concentration of oil refineries, petrochemical plants, and export terminals for both crude oil and liquefied gas. The pollution and its health risks disproportionately affect marginalised communities, including Black, Brown, and Indigenous communities.^c Notably, specific regions, like the infamous “Cancer Alley”²⁴⁰ and the Houston Shipping Channel, have earned a reputation as some of the most heavily polluted areas in the nation, often described as “sacrifice zones”.²⁴¹

“We call our communities sacrifice zones because we’ve been sacrificed to power the world. The two main sacrifice zones in the United States are the Appalachia and Ohio River Valley region and the Gulf South region. Both of these are areas that have been disinvested in over decades or generations.”

Michael Esealuka, 2023

In addition to their substantial emissions of greenhouse gases, gas export terminals cause air pollution and impact local waterways, magnifying local health concerns. This additional burden arises not just from the emissions of these terminals but also from the surge in oil and gas drilling activities and the expansion

²³⁴ **Physicians for Social Responsibility**, Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking and Associated Gas and Oil Infrastructure (2023) <https://psr.org/resources/fracking-compendium/>

²³⁵ **New York Times**, ‘Monster Fracks’ Are Getting Far Bigger. And Far Thirstier. (2023) <https://www.nytimes.com/interactive/2023/09/25/climate/fracking-oil-gas-wells-water.html>

²³⁶ **Fractracker**, The Health & Environmental effects of Fracking <https://www.fractracker.org/resources/oil-and-gas-101/health-environmental-effects-of-fracking/>

²³⁷ **A. Savvaidis, A. Lomax, C. Breton**, Induced Seismicity in the Delaware Basin, West Texas, is Caused by Hydraulic Fracturing and Wastewater Disposal (2020) <https://pubs.geoscienceworld.org/ssa/bssa/article-abstract/110/5/2225/590473/Induced-Seismicity-in-the-Delaware-Basin-West?redirectedFrom=fulltext>

²³⁸ **Greenpeace International**, Who Profits from War (2023) <https://www.greenpeace.org/international/publication/59432/who-profits-from-war/>

²³⁹ **Greenpeace USA**, Fossil Fuel Racism (2021) <https://www.greenpeace.org/usa/reports/fossil-fuel-racism/>

²⁴⁰ **ProPublica**, Welcome to “Cancer Alley,” Where Toxic Air Is About to Get Worse (2019) <https://www.propublica.org/article/welcome-to-cancer-alley-where-toxic-air-is-about-to-get-worse>

²⁴¹ **Climate Reality Project**, Sacrifice Zones 101 <https://www.climate realityproject.org/sacrifice-zones>

of pipeline networks necessary for facilitating these exports. The spectrum of pollutants encompasses many air contaminants, including particulate matter, nitrogen oxides, and cancer-causing substances.²⁴²

“And our communities are daily being poisoned and dying because of this industry. And so that’s what it means to be a sacrifice zone. It’s our mission as climate organisers to end all sacrifice zones because everybody on this planet has the right to breathe clean air, to drink clean water, and to live and thrive in communities.”

Michael Esealuka, 2023

A case of particular concern revolves around Cheniere’s Corpus Christi terminal, which has provided gas for the El Musel terminal. This facility has exceeded its air pollution permit limits hundreds of times since its startup in 2018, according to a Reuters review of regulatory documents.

But instead of tackling these violations, policy makers actually doubled the permitted level of pollutants from the terminal²⁴³. Not surprisingly, the region of Corpus Christi reported a 83% increase in emissions in the first year after the startup of the facility.²⁴⁴

“We have very little political power or representation. And so our communities have been chosen basically as the sites for systems of extraction. So whether that’s the direct extraction of oil and gas from the ground, whether that’s the liquefaction of gas into LNG, or the refining of crude oil into products that can be exported abroad, or the manufacturing of petrochemicals, or the transport of all these materials, we face the entire death cycle of the fossil fuel industry.”

Michael Esealuka, 2023

One of the companies that operate the gas import terminals, which are the main gateways for US liquified gas into Europe, is Enagás. If you could pass on a message to these companies, what would it be?

“I would say that you are committing human rights violations and you’re making the decision not to frack in your own country, but instead to find other poor or more vulnerable areas to frack and to poison communities. And so right now in the Gulf, we’re being told that we need to accept fracking. We need to accept the liquefaction of gas and the export abroad that’s poisoning our communities so that we can help people in Europe stay warm during the winter. It’s just not a fair trade to make. So I would ask people to look in their hearts and really ask themselves, is this something that you really want to be on your conscience? Do you want your grandchildren to ask you why you allowed our communities to be poisoned? And in a process that escalates the climate crisis, that everyone on this planet will have to face the consequence of?”

Michael Esealuka, 2023

²⁴² Environmental Integrity Project, Troubled Waters for LNG: The Covid-19 Recession and Overproduction Derail Dramatic Expansion of LNG Terminals (2020) <https://environmentalintegrity.org/wp-content/uploads/2020/10/LNG-Report-10.5.20-updated.pdf>

²⁴³ Reuters, Insight: Texas repeatedly raises pollution limits for Cheniere LNG plant (2022)

<https://www.reuters.com/business/environment/texas-repeatedly-raises-pollution-limits-cheniere-ing-plant-2022-06-24/>

²⁴⁴ Ibidem

The silent pollution – Natural gas is not “natural”

One public relations success of the fossil gas industry has been its ability to portray itself as less harmful than other fossil fuels such as oil or coal. Furthermore, the label “natural” has contributed to the perception of gas as a cleaner and more environmentally friendly fuel.

The reality is that fossil gas, which is made up of hydrocarbon gases, is no more “natural” than coal or oil, and it is responsible for approximately one-fifth of greenhouse gas emissions. While burning gas releases less CO₂ than coal (per unit of electricity generated),

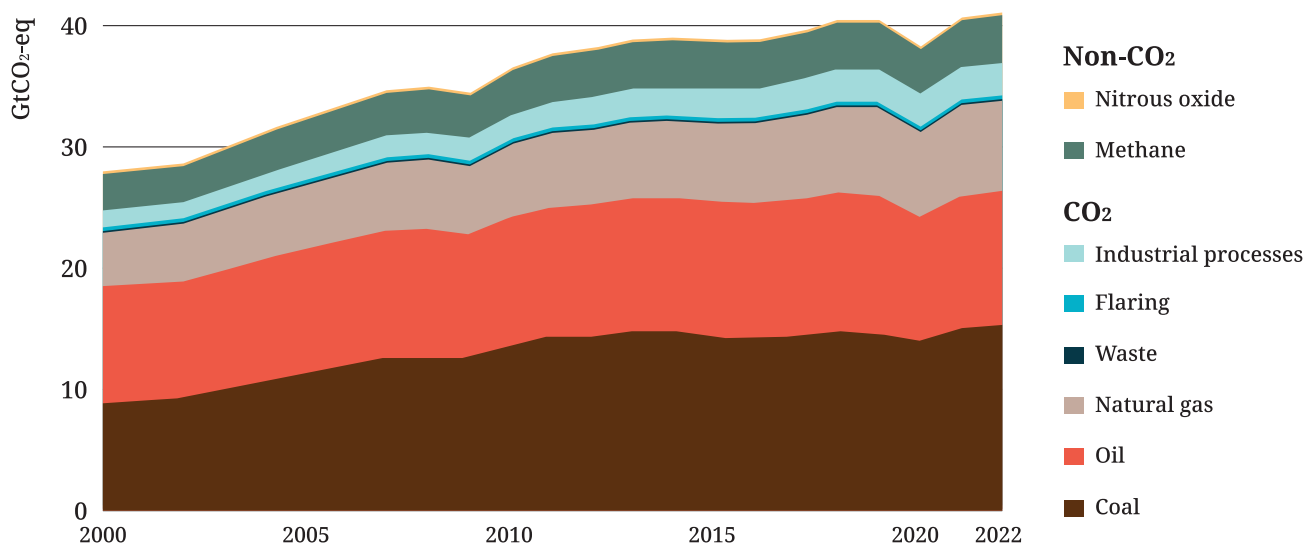
harmful climate-damaging methane leaks occur during the transportation process.²⁴⁵

Methane is the most prominent in fossil gas constituting around 95% of its composition. Methane heats the planet between 28 to 34 times more than CO₂ over a 100 year time frame²⁴⁶, which makes its leaks significantly detrimental to the climate.

According to the latest IPCC report²⁴⁷ from 2022, emissions from gas experienced the most significant growth (around 2.3% annually) in the period leading up to the report. It is expected that emissions from gas combustion and transportation will remain high in the coming years.²⁴⁸

Figure 11. Global energy-related greenhouse gas emissions
Gas is responsible for more than 1/5 of all energy related GHG emissions

Source: IEA²⁴⁹



²⁴⁵ Z. Weller et al, A National Estimate of Methane Leakage from Pipeline Mains in Natural Gas Local Distribution Systems (2020) <https://pubs.acs.org/doi/10.1021/acs.est.0c00437>

²⁴⁶ A. Fischer, Metano: el gas de efecto invernadero 34 veces más potente que el dióxido de carbono (2021)

<https://www.ngenespanol.com/ecologia/metano-el-gas-de-efecto-invernadero-34-veces-mas-potente-que-el-dioxido-de-carbono/>

²⁴⁷ IPCC, Climate Change 2022 Mitigation of Climate Change, (2022) https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf

²⁴⁸ IEA, CO₂ Emissions in 2022 (2023) <https://iea.blob.core.windows.net/assets/3c8fall5-35c4-4474-b237-1b00424c8844/CO2Emissionsin2022.pdf>

²⁴⁹ IEA, CO₂ Emissions in 2022 (2023) P 15 <https://iea.blob.core.windows.net/assets/3c8fall5-35c4-4474-b237-1b00424c8844/CO2Emissionsin2022.pdf>

Conclusions

While we witness the devastating impacts caused by the changing climate, Enagás is driving to make things worse by increasing Spain's dependence on gas. Fueling this dependence are the close ties between political and economic interests. But it is the citizens of Spain who will pay, both financially and environmentally.

As noted by the International Energy Agency; on a net zero pathway²⁵⁰ there is no need for investment in new coal, oil and gas. This is the only pathway to a safer future.

The opening of the El Musel plant and inviting ever more gas imports, particularly from the US, stands in stark contrast to the phasing out of fossil gas consumption by 2035, which Europe needs if it is to meet climate change goals.

Spain's growing reliance on fossil gas imports from US fracked gas is the height of hypocrisy. Fracking is a practice banned in Spain due to its environmental and human impacts .

Even aside from the fact that our survival on reducing and eventually eliminating our reliance on fossil fuels; and ignoring the hypocrisy of importing fracked gas the arguments that Enagás has put forward to justify the opening of El Musel and expanding the gas infrastructure do not stand up to scrutiny.

- The need for energy security? - False - there is an over-abundance of gas in Spain and across Europe.
- Reducing the reliance on imports from Russia? - False - Spain is currently the largest EU importer of Russian liquified gas, keeping the Russian war coffers filled with fossil fuel profits.
- The need for an industrial renaissance in Asturias? - False - a just transition with support for renewable energy sources and efficiency creates more jobs and would boost the economy.
- The need to build infrastructure for Hydrogen? - False - fallacious ideas about the need to turn Spain into a hydrogen hub to supply other European countries are falsely being used to justify building more gas infrastructure; hydrogen only really has a place in the transition if generated locally by

renewable energy and used for sectors that are difficult to decarbonise.

- To enable Spain to be a major gas supplier of gas to the rest of Europe? - False - Spain has only two low volume pipelines connecting to France; Europe has an over-capacity of gas; and many countries are building their own regasification facilities.



Activists blocking LNG gas tanker coming from the USA in Sagunto, Spain.

© Pedro Armestre / Greenpeace

Simply put... Enagás is using the “energy crisis” to add more infrastructure to its portfolio. Locking Spain into decades of gas dependency, and guaranteeing huge profits and payouts for its shareholders. To add insult to injury, the regulatory regime ensures that it is the Spanish people that are paying for these investments but reaping no benefits. This serves to undermine the development of clean renewable energy sources of which Spain has been a leader. Fossil fuels have no part in this.

At a time when there is an urgent need to reverse, not expand, fossil fuels and in light of the devastation to communities and the environment caused by fracking, any attempt at justification is exposed for what it really is - an unconscionable drive for shareholder profits that actively ignores the human, environmental and economic damage caused.

²⁵⁰ IEA, Net Zero by 2050 (2021) <https://www.iea.org/reports/net-zero-by-2050>

Demands for Europe

Change the system

1. Remove fossil fuels from politics, by:

- **Instituting a firewall to end their access to decision-making** including through lobby meetings and seats on expert, advisory, or public research bodies;
- **Ending conflicts of interest**, revolving doors between public office and industry, hirings of industry consultants, and other ways of protecting and facilitating vested interests;
- **Excluding fossil fuel industry representatives** from climate negotiations, government delegations, trade missions, or other positions of co-opted influence.

2. End ENTSOG's lobbying on behalf of the gas industry

ENTSOG - created to ensure, inter alia, "optimal management", has a privileged relationship with European policy-makers and the fact that it has assumed the role of predicting future gas use and proposing the infrastructure projects to meet it presents a clear conflict of interest. ENTSOG has consistently overestimated future gas demand²⁵¹ and projects backed by ENTSOG members have raked in the vast bulk of European public funds for such infrastructure.²⁵²

3. Ensure the independent governance of the future hydrogen by taking it from the hands of ENTSOG

The role of planner of future hydrogen networks should be given to a new structure (ENNOH, European Network for Network Operators of Hydrogen) in charge of developing the very specific features of this new hydrogen infrastructure. Future hydrogen networks will be very different from the current gas ones as their end uses will also be significantly different. Outsourcing the entire responsibility of hydrogen planning to the gas transmission operators (ENTSOG) will bias the outcome in favor of the gas industry's interest and risks resulting in a new conflict of interest.

4. Ensure full transparency of all available data

Especially on the gas flows into, within and out of the EU, including and separating into import, export, re-export and transshipments (including ship-to-ship transfers), as well as on utilisation rates of regasification capacity and trans-border pipeline connections.

Specifically in Spain

Stop the unlimited power of Enagás in policy-making and the planning of gas infrastructure

This locks us into an unsustainable transition path for decades. Part of ENTSOG, Enagás has enjoyed for years a privileged position in predicting the national gas demand, proposing the associated infrastructure and receiving public money to realise and operate those projects. As a result of this conflict of interest, Enagás has a track record of developing unnecessary infrastructure and stranded assets, including the El Musel regasification plant.

Enagás has now taken on a similar leading role regarding the planning, development and operation of hydrogen production and transport infrastructure. Its plans, based on an oversized hydrogen production, ignore the fact that there is no certainty that there will be enough renewable energy to make such production viable. These plans include the development of the H2MED, the so-called Iberian Hydrogen Backbone and the Hydrogen Valleys, which risk ending up suffering the same fate as past stranded projects.

²⁵¹ Corporate Europe Observatory, The Great Gas Lock-in: Industry lobbying behind the EU push for new gas infrastructure (2017) https://corporateeurope.org/sites/default/files/the_great_gas_lock_in_english_.pdf

²⁵² Global Witness, Pipe Down (2020) <https://www.globalwitness.org/en/campaigns/oil-gas-and-mining/pipe-down/>

Phase out gas

1. Set mandatory gas reduction targets at EU and national levels

Gradually increasing the current (still voluntary) target of -15%. In order to reduce energy demand fairly, energy savings must be sought in industrial sectors first, then commercial sectors, and then at the level of wealthy households and individuals.

2. Properly account for the higher lifecycle emissions of LNG compared to pipelined gas

With European LNG imports being responsible for up to four times more CO₂ than pipelined gas, as well as the increased risk of methane leakage in the more complex production chain, failing to do so risks jeopardising climate targets.

3. Pursue an active fossil gas phase-out by 2035

In line with a 1.5°C temperature limit and Europe's historical responsibility for the climate crisis:

- **Put an immediate end to new investments and subsidies to fossil gas.** This includes **cancelling all projects for the construction of new LNG import terminals and expansion of existing terminals** across the EU. Current capacity is being underutilised and EU gas demand is set to fall under climate targets²⁵³ leading to even lower utilisation rates and higher risks of stranded assets²⁵⁴. This also includes stopping the extension of gas distribution networks, ending subsidies for power plants, including capacity mechanisms, and for homes to purchase domestic boilers and gas vehicles, whose sale should instead be banned.
- **Phase out gas imports. No gas supply contract should be allowed to run beyond 2035**, nor create a barrier for the development of renewables. **Start by phasing out imports of gas from Russia, fracking and LNG** (the last two associated with

significantly higher impacts on the environment, human health and /or the climate). In doing so, halt the conclusion of new long-term contracts for the delivery of LNG, and ban the extension of existing contracts.

- **Critically assess hydrogen projections and projects pushed by the fossil fuel industry**, including claims of “hydrogen readiness” and “terminal conversion” (which has been shown to be a technical and financial challenge²⁵⁵) to **avoid hydrogen becoming an excuse for fossil gas lock-in in the coming decades and prioritize renewable hydrogen and its derivatives for hard-to-abate sectors**. Hydrogen is a highly inefficient energy vector and its use comes with associated risks. Therefore, it should only be used as input in industrial processes and in those cases where direct electrification is not possible. Under no circumstances should renewable hydrogen replace natural gas or other fuel demand of buildings or private vehicles.

4. Ban advertising and sponsorship of fossil fuels in the EU

Gas companies succeeded at mainstreaming the idea that fossil gas is a low-carbon alternative necessary for the transition. It is not by coincidence that it is commonly known as “natural gas” and enjoys greater social acceptance than other fuels. Gas companies should not be allowed to continue with a greenwashing strategy that confuses people and shifts public debate away from the real solutions needed to decarbonize our societies.

5. Work proactively to ensure that an agreement on a rapid, just, and equitable global phase out of fossil fuels

In all sectors by 2050 at the latest, in line with a 1.5°C temperature limit, is reached at COP28. The EU should support a full phase-out and refrain from referring to ‘unabated’ fossil fuel phaseout at the negotiations.

²⁵³ Ben McWilliams, Giovanni Sgaravatti, Simone Tagliapietra and Georg Zachmann, A grand bargain to steer through the European Union's energy crisis (2022) https://www.bruegel.org/sites/default/files/2022-09/PC%2014%202022_2.pdf

²⁵⁴ IEEFA, Over half of Europe's LNG infrastructure assets could be left unused by 2030 (2023) <https://ieefa.org/articles/over-half-europes-lng-infrastructure-assets-could-be-left-unused-2030>

²⁵⁵ Fraunhofer, Conversion of LNG Terminals for Liquid Hydrogen or Ammonia (2022) https://www.isi.fraunhofer.de/content/dam/isi/dokumente/cce/2022/Report_Conversion_of_LNG_Terminals_for_Liquid_Hydrogen_or_Ammonia.pdf

Specific demands for Spain

1. Stop burning gas to produce electricity by 2030

Around 38% of the natural gas consumed in Spain is burned to produce electricity²⁵⁶ in 67 combined cycle power plants²⁵⁷ operating across the country. A roadmap is necessary for the progressive decommissioning and dismantling of power plants based on their age and their viability in the electrical system. The closures must go hand in hand with the deployment of a 100% renewable, efficient, smart, democratic and just electricity system and just transition programs for its workers.

2. Stop burning gas in buildings and for industrial processes by 2035

More than 14% of the total gas consumed goes to the residential, commercial and SMEs sector²⁵⁸, through a vast network made of around 8 million connections²⁵⁹, while almost 45% is consumed by an industrial sector²⁶⁰ comprising around 2000 large industrial users²⁶¹. We need a plan to fully decarbonise these two sectors through sufficiency and efficiency measures, electrification and self consumption of renewable energy. This roadmap must prioritise and effectively support the transition of vulnerable households, including those who do not own a property, through financial support schemes to meet their basic energy needs, renovate their homes to improve energy efficiency and install renewables, and through a ban on disconnections.

3. The El Musel regasification plant must cease its activity and a plan for its dismantling must be put in place

Furthermore, the money that the unnecessary plant, which has been declared illegal, has received since 2012, and will continue to receive for five decades until the investments are amortised, must be returned. Hundreds of millions paid by gas consumers, both domestic and industrial - and indirectly also electricity consumers.

4. Postpone investments in H2Med and other oversized hydrogen infrastructure

Aimed at perpetuating the power of the gas industry and the overproduction of hydrogen for exports, which by no means should be the purpose of hydrogen. No new infrastructure should be built before a proper assessment of the energy demand needed to decarbonise hard-to-abate sectors.

256 Enagás, 2022 Spanish Gas System Report (2022) <https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-sistema-gasista/2022-Spanish-Gas-System-Report.pdf>

257 Fundación Renovables, Greenpeace, El papel del gas fósil en España (2021) <https://fundacionrenovables.org/wp-content/uploads/2021/06/El-papel-del-gas-fosil-en-Espana.pdf>

258 Enagás, 2022 Spanish Gas System Report (2022) <https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-sistema-gasista/2022-Spanish-Gas-System-Report.pdf>

259 Sedigas, Informe anual 2021. El gas en España (2022) <https://www.sedigas.es/informe-anual/2021/wp-content/uploads/2022/11/El-gas-en-Espa%C3%Bl-a-Informe-Anual-2021-Sedigas.pdf>

260 Enagás, 2022 Spanish Gas System Report (2022) <https://www.enagas.es/content/dam/enagas/en/files/enagas-communication-room/publications/informe-sistema-gasista/2022-Spanish-Gas-System-Report.pdf>

261 CNMC, Informe de Supervisión del Mercado de Gas Natural en España (2020) <https://www.cnmcs.es/sites/default/files/3085923.pdf>

Demands for the US

The passage of the Inflation Reduction Act (IRA) marks a turning point in the U.S. Climate Policy. For the first time, Congress has acted to curb demand for fossil fuels, but has left fossil supply unconstrained. As a result, the U.S. finds itself in a trap where declining domestic demand coupled with high production could fuel a surge of exports. Long-term gas supply contracts will lock-in both the U.S. and EU into decades of emissions at the expense of our climate and the health and safety of communities.

A more robust climate policy would pair demand-side reductions with policies to phase out fossil fuel production. **US policy makers must take the following steps to align LNG exports with strong climate goals:**

- 1. Reject federal permits for any new infrastructure projects** that would increase greenhouse gas emissions or worsen the climate crisis. This requires that any new pipelines or new LNG export terminals be rejected. As a first test, Biden must reject all permits for the CP2 LNG export terminal²⁶² that is proposed to be built in Louisiana and which is up for approval later this year.
 - 2. Reject federal approval for any LNG export shipments from existing or approved terminals** that are inconsistent with 1.5°C pathways, worsen domestic energy poverty, or pose health threats to nearby communities.
- The Department of Energy (DOE) has the authority to overhaul its “public interest” determination (which governs LNG exports to non-free trade agreement countries) to explicitly consider climate change, environmental justice and energy justice.
 - DOE should hold hearings and take the necessary steps to document that the cumulative lifecycle emissions associated with LNG exports are inconsistent with our climate goals and contrary to the public interest. Where needed, DOE should revoke approvals or set time limits for exports from existing terminals.

- 3. DOE should make public the long-term contracts** signed between LNG sellers and buyers.
- 4. President Biden must wield his global leadership and support ending international public finance for fossil fuels**, including LNG, at the G7, G20 and COP28.

Both Biden and Congress must take further steps to **protect the climate and communities living on the fence lines of the fossil fuel supply chain**. Such policies include:

- 1. Establish a national plan and targets to wind down existing fossil fuel** production and infrastructure.
- 2. Eliminate** federal fossil fuel **subsidies**.
- 3. Ban new fossil fuel leasing and permitting** on public lands and waters, and phase out existing leases.
- 4. Phase out exports of crude oil** and reject federal permits for any new crude oil export terminals.
- 5. Enact regulations to eliminate methane emissions** and flaring from oil and gas facilities.
- 6. Require air and water pollution reductions** in polluted communities by implementing a comprehensive “No Pollution Hotspots” policy.
- 7. Pass the Environmental Justice for All Act** to provide legal remedies to citizens, improve equity mapping tools, expand grant programs, and strengthen consultation with impacted communities.
- 8. Build on the renewable energy incentives** in the IRA **to enact a Green New Deal that will direct trillions of dollars in public investments** to create millions of green union jobs, rectify past injustices, and ensure that energy-dependent workers and communities are left better off through the transition.

²⁶² T. Donaghy, Biden can halt the out of control LNG build out (2023) <https://www.greenpeace.org/usa/biden-can-halt-the-out-of-control-lng-build-out/>

Annex: testimony from US communities



Michael Esealuka. © WWNO²⁶³

So we're here in Brussels with Michael from Louisiana. Can you please introduce yourself and your organization before we get into the questions?

Sure. So, my name is Michael Esealuka. I've been organizing in South Louisiana for the past eight years in labor and climate and environmental justice struggles. Currently, I work for an international movement called Break Free From Plastic. We've got 2900 member organizations in 180 countries. So, we attack the whole plastics lifecycle or death cycle, as we sometimes call it, from extraction to manufacturing to transport and downstream solution. So involved in that is some organizing against LNG. I also live about 40 minutes from an LNG terminal that's currently under construction, which, when it's built, it'll be one of the largest. So, Louisiana and Texas belong to probably the capital of the world of fracking business, the LNG business. However, it's been banned in many countries in Europe for a very long time.

Can you tell us what fracking is and how it impacts your community?

Yeah, so fracking is short for hydraulic fracturing. It's this process where the industry is able to inject materials into, like, shale rock, shale formations deep underground and squeeze out hydrocarbons. And so it's different from conventional extraction. The fossil fuel companies are able to reach layers of shale and extract oil and gas that they otherwise wouldn't be able to get through conventional oil wells and oil and gas wells. And those conventional wells are certainly harmful to communities. They're harmful to our groundwater. Fracking is even worse. So one of the largest shale fields in the country is the Permian Basin. It stretches from West Texas to eastern New Mexico. Because of the output from the Permian Basin, the United States in the past few years has become the largest exporter of fossil fuels in the world. Among this massive boom in exports to Europe a lot of the European energy companies have been involved as well.

²⁶³ WWNO, At Gulf South climate festival, activists push for more action: 'There is a role for everyone' (2022) <https://www.wwno.org/coastal-desk/2022-06-06/more-than-500-attend-gulf-south-environmental-justice-festival-a-lot-more-work-to-be-done>

One of these is Enagás, who operates the Spanish LNG terminals, which are the main gateways for US LNG into Europe. If there's one message that you can say to these companies, what would it be?

I would say that you are committing human rights violations and you're making the decision not to frack in your own country, but instead to find other poor or more vulnerable areas to frack and to poison communities. And so right now in the Gulf, we're being told that we need to accept fracking. We need to accept the liquefaction of gas and the export abroad that's poisoning our communities so that we can help people in Europe stay warm during the winter. It's just not a fair trade to make. So I would ask people to look in their hearts and really ask themselves, is this something that you really want to be on your conscience? Do you want your grandchildren to ask you why you allowed our communities to be poisoned? And in a process that escalates the climate crisis, that everyone on this planet will have to face the consequence?

So these areas where LNG facilities, petrochemical facilities, fracking wells are installed are called sacrifice zones. Could you explain to us what that means?

We call our communities sacrifice zones because we've been sacrificed to power the world. The two main sacrifice zones in the United States are the Appalachia and Ohio River Valley region and the Gulf South region. Both of these are areas that have been disinvested in over decades or generations. They're poor, very working class. We have very little political power or representation. And so our communities have been chosen basically as the sites for systems of extraction. So whether that's the direct extraction of oil and gas from the ground, whether that's the liquefaction of gas into LNG, or the refining of crude oil into products that can be exported abroad, or the manufacturing of petrochemicals, or the transport of all these materials, we face the entire death cycle of the fossil fuel industry. And our communities are daily being poisoned and dying because of this industry. And so that's what it means to be a sacrifice zone. It's our mission as climate organisers to end all sacrifice zones because everybody on this planet has the right to breathe clean air, to drink clean water, and to live and thrive in communities.





enagas

enagas

Regasification plant
of El Musel in Gijón.

© Pedro Armestre / Greenpeace

GREENPEACE



EnergyJustice
investigations