



GAS AND THE EUROPEAN INVESTMENT BANK

WHY NEW GAS INFRASTRUCTURE
INVESTMENT IS INCOMPATIBLE
WITH CLIMATE GOALS

This report was written by Bronwen Tucker and Alex Doukas (both of Oil Change International). It was copy edited by Kaela Bamberger.

See www.priceofoil.org/eib-and-gas for the report and its complete online appendix

The authors are grateful for feedback from the following reviewers:

Lisa Fischer of E3G, Frida Kieninger of Food & Water Europe, Antoine Simon of Friends of the Earth Europe, Xavier Sol of Counter Balance, and Lorne Stockman and Greg Muttitt of Oil Change International.

Design: paul@hellopaul.com

Cover image: Gas flare on top of a flare stack at Preemraff oil refinery in Lysekil, Sweden

©W. Carter (CC0 1.0)

Back cover image: Construction of the Trans Adriatic Pipeline in Albania ©Albinfo June 2019 (CC BY 4.0)

Published by Oil Change International (www.priceofoil.org)

Oil Change International is a research, communications, and advocacy organization focused on exposing the true costs of fossil fuels and facilitating the coming transition towards clean energy.

Oil Change International
714 G Street SE Suite #202
Washington, DC 20003 U.S.
www.priceofoil.org

CONTENTS

EXECUTIVE SUMMARY	2
THE EIB'S ROLE IN A WARMING WORLD	4
NEW GAS INFRASTRUCTURE IS NOT IN THE 'COMMON INTEREST'	5
NONE OF THE EU'S FUTURE ENERGY SCENARIOS ANTICIPATE AN EXPANDED ROLE FOR GASEOUS ENERGY CARRIERS	6
THE VAST MAJORITY OF INVESTMENT ASSOCIATED WITH THE EU PROJECTS OF COMMON INTEREST (PCI) LIST IS FOR PROJECTS DIRECTLY TIED TO UPSTREAM FOSSIL GAS SOURCES	8
CONCLUSIONS AND RECOMMENDATIONS	10

EXECUTIVE SUMMARY

The European Investment Bank (EIB), the world's largest multilateral lender, is currently reviewing its Energy Lending Policy. As the financial arm of the EU, the EIB has a mandate to act in the public interest. It also influences norms in the private finance community and plays an outsized role in financing energy infrastructure across Europe and around the world. In this way, the 2019 energy lending review represents an important opportunity to set a new standard for aligning finance with the Paris Agreement.

The EIB's last energy lending review in 2013 ushered in an ambitious increase in lending for energy efficiency and renewable energy and ended direct financing of coal, but it also maintained finance for fossil gas infrastructure as a central priority. Since 2013, evidence that supports the need for more ambitious climate action has mounted. The recent Intergovernmental Panel on Climate Change (IPCC) Special Report on 1.5 degrees Celsius (°C) is clear in establishing that greenhouse gas emissions must decline rapidly, falling 45 percent from 2010 levels by 2030, and reaching net zero by 2050 in order to stay within 1.5°C of warming.¹ Building new, long-lived fossil gas infrastructure that will expand or lock in extraction is inconsistent with the climate goals in the Paris Agreement: just the oil, gas, and coal reserves in already-operating fields and mines would exceed the Paris Agreement's limits.²

Put another way, **even optimistic scenarios for a 1.5°C-compatible pathway show there is no room for gas to grow if we are to have a safe climate future.**

In 2018, EIB President Werner Hoyer announced a commitment for all of the Bank's operations to be aligned with the Paris Agreement by 2020.³ The Bank's Energy Lending Policy discussion document also recognizes this, stating that "reaching the goals of the Paris Agreement requires the EU to eliminate nearly all greenhouse gas emissions by 2050. It follows that by the middle of the century, if not earlier, fossil fuels such as coal, crude oil and even natural gas will no longer be used to any significant extent [...]"⁴ However, the document also signals that the Bank may not intend to eliminate its financing for new gas infrastructure projects.

The EIB and industry actors have used many arguments to justify continued fossil gas finance in the EU. Some of the key arguments have included:

- ⊙ that fossil gas can be an effective "bridge" fuel to ease the energy transition.⁵
- ⊙ that expanded fossil gas infrastructure in the EU in the near term could be needed for non-fossil gas distribution in future zero-carbon energy scenarios.⁶

- ⊙ that the EIB should prioritize support for gas projects on the Projects of Common Interest (PCI) list because they have been selected by the European Commission as regional priorities for supply and market integration.⁷

These arguments run counter to the well-established research on fossil and non-fossil gas that we review in brief in this report. This report finds:

- ⊙ Fossil gas cannot act as a "bridge" fuel because further development of gas reserves is incompatible with carbon budget limits and more effective and affordable renewable alternatives already exist.
- ⊙ The various kinds of non-fossil gas are limited in their potential to be fully decarbonised, technologically feasible, and cost-effective. This means they are suited to play a limited, medium-term role in decarbonising hard-to-electrify sectors like heavy industry, as opposed to being deployed for mass distribution. Certain kinds require different transmission infrastructure to current fossil-gas, meaning entirely new or heavily retrofitted pipelines would be needed rather than a simple conversion.
- ⊙ Carbon capture and storage (CCS) technologies that the arguments for fossil and non-fossil gas expansion rely on remain unproven at scale and prohibitively costly.



European Investment Bank in Luxembourg ©Gwenael Piaser (CC BY-NC-SA 2.0)

We also investigate the more EU-specific justifications the EIB and industry proponents have made for continued gas finance in this briefing and find:

1. **None of the European Commission's climate action scenarios anticipate an expanded role for gaseous energy carriers.** All eight scenarios developed by the European Commission for its new long-term strategy for decarbonisation predict a reduced role for gas in final energy demand in 2050, and those scenarios that the Commission describes as in line with a 1.5°C future see a demand of about half to two-thirds of current levels,⁸ with demand for fossil gas specifically at about a tenth of current levels. These scenarios are likely liberal in their projections for gas levels as many rely on unproven CCS technology (see **Box 3**).⁹ This means EIB finance for new gas infrastructure cannot be justified on the basis that future non-fossil gas transmission could simply use extra capacity built today.

2. **The vast majority of investment associated with the EU Projects of Common Interest (PCI) list is for projects directly tied to upstream fossil gas sources.** This means these projects are not likely to be used as non-fossil gas carriers in future as the Bank has argued is an impetus for building them. We find that 72 percent — EUR 32.5 billion — of the total investment required for the current 3rd gas PCI list is for projects that are direct connections to upstream imports to the EU grid and thus exceedingly unlikely to be compatible with non-fossil gas sources. Initial analysis of the gas candidates on the 4th PCI list to be released in late 2019 suggests they are similarly oriented to upstream importation to the grid. It is worth noting again that for the reasons laid out in **Box 2**, a fossil gas project that is not spatially tied to upstream oil and gas import is still not necessarily likely to be adaptable to carry non-fossil gas.

There is no room for further financing of fossil gas or any other fossil fuel projects by the EIB. This report calls for the new Energy Lending Policy to reflect this reality. The EIB cannot claim to uphold its commitment to align its finance with the Paris Agreement if it continues to finance fossil gas projects, regardless of whether they are designated as PCIs.

THE EIB'S ROLE IN A WARMING WORLD

The Public Consultation on the EIB Energy Lending Policy states “reaching the goals of the Paris Agreement requires the EU to eliminate nearly all greenhouse gas emissions by 2050. It follows that by the middle of the century, if not earlier, fossil fuels such as coal, crude oil and even natural gas will no longer be used to any significant extent[...].”¹⁰ Continuing to use relatively scarce public money to support fossil fuel infrastructure under an updated EIB Energy Lending Policy would be imprudent in the context of the need for a “radical transformation of energy systems,” which the consultation document establishes.

The IPCC Special Report on Global Warming of 1.5°C makes it clear that even higher ambition than is laid out by the EIB will be needed: the report states that to have the best chance of limiting warming to 1.5°C, greenhouse gas emissions must decline rapidly, falling 45 percent from 2010 levels by 2030, and reaching net zero by 2050. If we divide these efforts along any metric of fairness relative to historical responsibility and means to transition, the EU would need to reach zero emissions much earlier than other countries.¹¹ This

will require a wholesale transformation of the economy alongside the rapid managed decline of fossil fuel production, including fossil gas. The reasons fossil gas cannot be used as a transition fuel are detailed in **Box 1** below.

In order to be in line with the Paris Agreement and its central finance goal of “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development,” financial institutions have an obligation at minimum to ensure their energy investments are not contributing to further carbon lock-in. The public finance that the EIB provides is particularly critical because it helps shape broader investment community norms and mobilizes private investment through concessional finance and its high capacity to evaluate projects.¹²

We have already seen leadership beyond disclosure and coal finance restrictions from many of the EIB's peers in public finance. Most notably, in 2017, the World Bank Group committed to end its finance for upstream oil and gas-related activities by the end of 2019, and the Swedish development finance institution Swedfund announced it would no longer finance

fossil fuels of any kind.¹³ As the EIB serves country clients whose levels of wealth are much higher than most of the World Bank Group's and Swedfund's primary clients, the EIB's new Energy Lending Policy needs to be even more ambitious than these policies in order to be Paris-aligned.

The EIB's Energy Lending Policy was last revised in 2013, when it shifted to significantly increase the mix of energy efficiency and renewable energy projects funded and effectively ended almost all allowances for financing coal through an emissions performance standard and shadow carbon price. However, the criteria specified a continued and “critical” role for the Bank to invest in “gas networks and indigenous hydrocarbon production and refining... to ensure access to secure supplies of oil and gas at competitive prices.”¹⁴ The EIB's Ex-Post Evaluation of Lending 2013-2017 shows that the goal of gas network investment was indeed pursued with enthusiasm.¹⁵ Between 2013 and 2018, the EIB contributed EUR 14.23 billion to fossil gas projects, 10.23 billion of which was for midstream transmission, distribution, and storage projects.¹⁶ There was no direct finance for coal in this time period, and loans for oil projects were EUR 0.31 billion.

Box 1: Gas is not a bridge fuel¹⁷

- 1. Gas breaks the carbon budget.** Burning the economically recoverable oil, gas, and coal in already-developed extraction projects will take the world far beyond safe climate limits. This means that the further development of untapped gas reserves is inconsistent with the climate goals in the Paris Agreement. Our past research has shown the potential carbon emissions from the world's already operating fossil fuel fields and mines are enough to risk breaching 2°C of average warming. If coal mines are excluded, the potential emissions from oil and gas fields alone would still take us beyond 1.5°C.
- 2. Coal-to-gas switching is not a solution.** Climate goals require the energy sector to be decarbonised by mid-century. Replacing coal plants with new gas plants will not cut emissions by nearly enough, even if methane leakage is kept to a minimum.
- 3. Low-cost renewables are better suited to displace coal and gas.** Rapid cost improvements have allowed wind and solar to disrupt the business model for gas in the power sector. They are poised to play an increasing role in replacing retiring fossil fuel capacity.
- 4. Gas is not essential for grid stability.** Wind and solar require balancing, but battery storage is fast becoming competitive with gas plants designed for this purpose (known as “peakers”). Wind and solar plants that are coupled with battery storage are also becoming a competitive dispatchable source of energy. A combination of demand response, battery storage, and transmission are best suited to manage high levels of wind and solar on a grid.
- 5. New gas infrastructure locks in emissions.** Investments in gas pipelines, LNG terminals, and compressor stations are economically predicated on them operating for 40 or more years. Given the barriers to closing down infrastructure ahead of its expected economic lifespan, it is critical to stop building new infrastructure now.



Flooding in Staines-upon-Thames during the historic 2014 UK flood event, which many studies have attributed in part to climate change.
©Marcin Cajzer (CC BY 3.0)

NEW GAS INFRASTRUCTURE IS NOT IN THE 'COMMON INTEREST'

The Projects of Common Interest (PCI) list is updated every two years and contains projects the European Commission has identified as fulfilling upcoming energy security needs and improving connectivity between the energy systems of EU countries. Proponents of projects on the list benefit from accelerated permits, a streamlined single authority for environmental assessments, lower administrative costs, preferential access to various forms of EU subsidies, and higher private investor visibility and confidence.¹⁸ It is worth noting that EIB financing for gas PCIs has fluctuated over time and the majority of EIB's finance for gas infrastructure 2013-2017 was *not* for PCIs, but for other gas projects. However, the EIB said multiple times in their 2019 consultation document that they will continue to prioritize funding for PCIs.¹⁹

The process through which PCIs are selected raises questions about the extent to which they live up to their label of being in the common interest.

Current climate-related criteria for the EIB to select its projects include an emissions performance standard for power generation of 550 g CO₂/kWh and an internal carbon price, but these are not stringent enough to be in line with the EU's responsibilities under the Paris Agreement or prevent carbon lock-in.^a Further, the background models, needs assessments, and projections that the European Commission and Member States rely on to select PCIs are made by ENTSO-G, an industry association representing the large European gas transmission system operators who have a commercial interest in extending the use of fossil gas in the EU. These operators own three-quarters of the projects on the 2017 PCI list and also have considerable direct access to the PCI selection process.²⁰ This means (pending an adequate shift in the PCI selection process) that it is imperative that the EIB Energy Lending Policy should include a rigorous assessment to ensure any projects they fund, including PCI projects, are Paris-aligned.

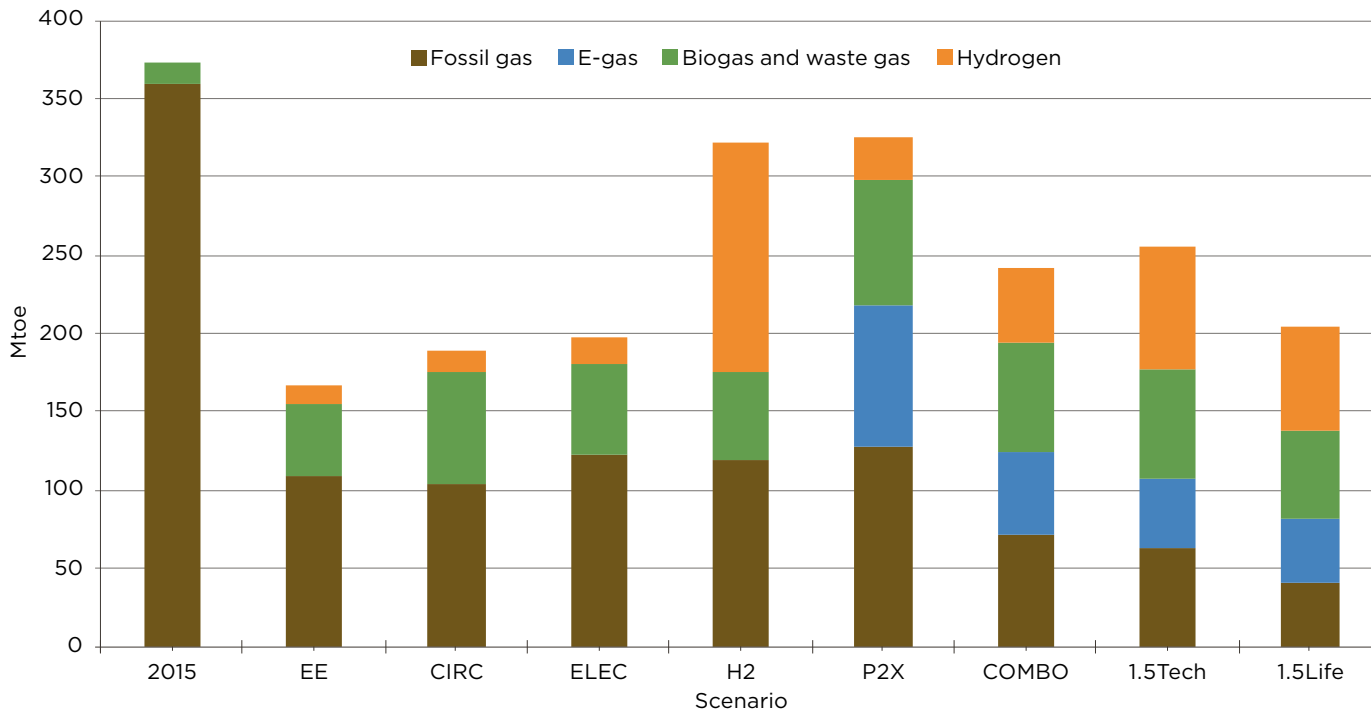
The central argument given for continued gas projects on the PCI list, and for

EIB financing of these projects, is their contribution to the EU's energy security. However, these energy security assessments fail to factor in climate change risks from extreme weather events, the local conflict and environmental safety impacts of many of the fossil gas sources pursued, or low-carbon investments as alternatives.²¹ If these variables are considered adequately, investments in renewable energy and energy efficiency in the EU are stronger investments in energy security. This is further underlined in the context that the EIB's consultation document notes, which is that the security of gas supply is a significantly diminished concern and multiple sources of supply are already available for nearly all Member States.²²

The PCI list will be updated again in late 2019, and 112 candidates for the 2019 gas PCI list have been identified. Pending a complete shift away from the selection of gas projects as PCIs that many civil society observers and members of the public are calling for this updated PCI list will pose the same climate risks as its predecessors.²³

^a While the EIB should simply stop financing gas infrastructure for the reasons discussed throughout this report, they could additionally consider that the European Bank for Reconstruction and Development (EBRD) has decided, in parallel to their energy sector strategy review in 2018, that they would consider scope 3 emissions in their shadow carbon pricing methodology for midstream gas infrastructure.

Figure 1: Gas as an energy carrier in EU future energy scenarios, relative to 2015 levels (Mtoe), incl. % of 2015 levels.



Source: Oil Change International analysis using data from European Commission (November 2018).²⁷

NONE OF THE EU'S FUTURE ENERGY SCENARIOS ANTICIPATE AN EXPANDED ROLE FOR GASEOUS ENERGY CARRIERS

In September 2018, EIB President Werner Hoyer announced a commitment for all EIB operations to be Paris-aligned by 2020;²⁴ in 2019, he also said, "The EIB is accelerating progress toward full alignment with the Paris targets and commitments. We want to move decisively in the direction of phasing out all fossil energy."²⁵ Given its mandate as the EU's public lender, the eight climate action scenarios laid out in the European Commission's proposed long-term vision should inform what Paris-alignment looks like for the EIB and its choice to support new gas infrastructure.

The IPCC Special Report has already laid out the case for taking action to limit warming to 1.5°C. It is thus most prudent to consider the two energy future scenarios for the EU that the Commission's long-term vision describes as being aligned with a 1.5°C pathway (the 1.5TECH and 1.5LIFE scenarios).

The EIB has at times claimed that additional gas infrastructure investment is necessary because it could support non-fossil forms of gas.²⁶ However, as displayed in **Figure 1**, even when considering *all* gaseous energy carriers in

the 1.5°C scenarios in the Commission's proposed long-term vision (not only fossil gas, but also hydrogen, biogas, and e-gas), the amount of energy delivered would be half to two-thirds of 2015 levels by 2050 (55 percent of 2015 levels in the 1.5LIFE scenario, and 69 percent of 2015 levels in the 1.5TECH scenario). It is important to note the limited potential of non-fossil gas to reach the levels outlined in many of the gas-heavy EU scenarios, as well as their ability to be zero-emissions, expanded on in **Box 2**. In light of this analysis, even those EIB investments that extend the life of existing networks may be counter-productive.

This suggests that 1.5°C-aligned pathways would see a radically reduced demand for gas transportation infrastructure compared to current levels and indicates that the EIB should not support further gas infrastructure.

Looking across the other six climate action scenarios in the Commission's proposed long term vision, gas as an energy carrier in 2050 ranges from between -45 percent and 69 percent of 2015 levels, except for two scenarios which rely heavily on hydrogen and e-gas energy carriers, equivalent to 86 percent and 87 percent of energy delivered through gas in 2050 relative to 2015 levels respectively (see **Figure 1**, above).

Transporting hydrogen at ratios of above 20 percent relative to the volume of fossil gas in a pipeline (and in some cases even at lower concentrations) would likely require different steel than is used in today's fossil gas pipelines, due to the corrosion hydrogen causes to steel over time.²⁸ Given the extensive existing natural gas transmission capacity, newly-constructed assets would likely become stranded in any climate action scenario which aligned with the Paris Agreement's aims.

For the reasons of site-specificity and different materials requirements outlined above, a scenario where fossil gas infrastructure can simply be converted to take advantage of renewable sources of hydrogen is implausible.

Even the most radically optimistic scenario for gaseous energy carriers in the Commission's long-term vision pathways would still see a significantly reduced role for gas of all types compared to current levels. This strongly suggests that if the EIB is serious about its commitment to align with the aims of the Paris Agreement, it should no longer finance additional gas infrastructure.

Box 2: Limitations of 'non-fossil', 'decarbonised', and 'renewable' gas²⁹

While non-fossil forms of gas could play a limited, medium-term role in decarbonising hard-to-electrify sectors like heavy industry, this would still require reducing overall gas use to serve climate goals and a greatly reduced need for gas transmission networks. Furthermore, the terms “non-fossil”, “decarbonised,” and “renewable” gas are all somewhat misleading. The industry uses them to refer to a variety of production processes and end products – including some still derived from fossil gas – all with differing implications for future pollution, cost, land-use, feasibility, and infrastructure. These include the following:

1. **Hydrogen:** Hydrogen can be produced via steam methane reformation (SMR) during the combustion of fossil fuels, or via power-to-gas pyrolysis from renewable electricity. However, power-to-gas is prohibitively expensive and there are significant limitations to the CCS technology that would be needed to make hydrogen from SMR emissions-free. Another limitation is that fossil gas infrastructure is not suitable for the transportation of hydrogen at high concentrations because it is a smaller molecule than methane **and would require significant adaptation or reconstruction to be used for this purpose.** Methanation of hydrogen for transport is again not compatible with decarbonisation.

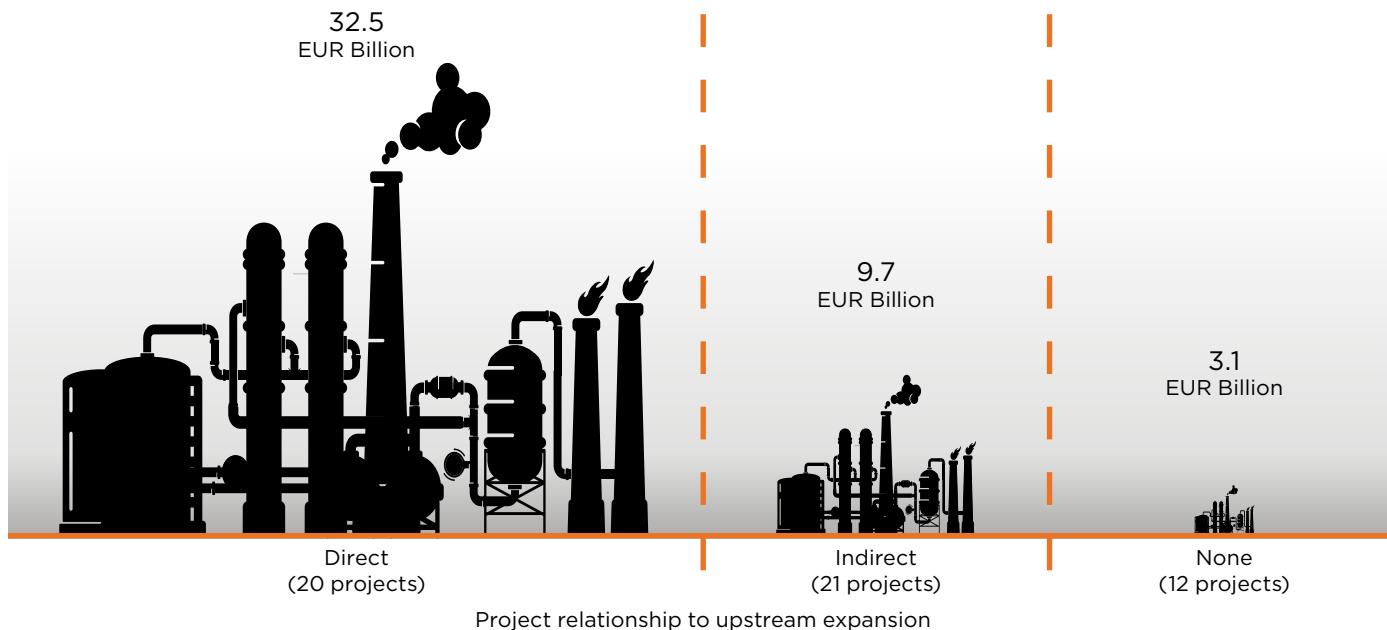
2. **Biogas and biomethane:** Biogas is produced through the anaerobic digestion of organic matter, and biomethane is the “upgraded” form of biogas. They have varying emissions and land-use profiles that are project-specific. Based on current estimates, domestic biogas potential across Europe is not more than 20 percent of current gas consumption. Both still emit CO₂ when burned and can leak from pipelines and other infrastructure like fossil gas.

3. **Fossil gas with carbon capture and storage:** Stripping CO₂ from fossil gas via CCS should not be considered “renewable,” but some proponents categorize it as such. Existing large-scale CCS cannot achieve zero emissions with fossil gas (it can only capture up to 90 percent of emissions of a given project).

All three of these forms of gas would still require CCS to be truly decarbonised, and **Box 3** below outlines the limitations of relying on this technology. As this section explains, even if decarbonised or renewable gas developed at the potential outlined in the EC’s scenarios, the gas network will not face a further increase in utilization rates. Thus, further investment in the expansion of this network is not prudent.



Figure 2: PCI investment cost by project relationship to upstream expansion (EUR Billion).



Source: Oil Change International analysis using data from European Network of Transmission System Operators for Gas (ENTSOG) and European Commission. See the online appendix for details on each project.^b

THE VAST MAJORITY OF INVESTMENT ASSOCIATED WITH THE EU PROJECTS OF COMMON INTEREST (PCI) LIST IS FOR PROJECTS DIRECTLY TIED TO UPSTREAM FOSSIL GAS SOURCES.

Setting aside the projected fall in demand for gas carrying capacity across all EU scenarios, we can further test the argument that constructing new gas infrastructure in the near term could be of utility for future sources of non-fossil gas by looking at the project level. This section will show a substantial majority of investment costs (72%) associated with the 2017 gas PCI list can be attributed to projects directly linked to upstream fossil gas sources. A further 21 percent of costs were for projects indirectly linked to upstream fossil gas sources.

It is difficult to envision a scenario in which fossil gas infrastructure sited to increase takeaway capacity from upstream oil and gas activity becomes widely useable for the distribution of non-fossil gas. The possible exceptions to this spatial mismatch are fossil gas with CCS and hydrogen gas via steam methane reforming. However, for these to be in line with the Paris Agreement there would need to be a considerable change in the prospects for CCS and methane abatement in the gas industry, as well as

the non-fossil gas technologies themselves (see **Box 2** and **Box 3**).

It is also important to reiterate that the other potential mainstream sources of non-fossil gas – biogas/biomethane and hydrogen via pyrolysis – have shown little potential and are not on a promising path to viability with respect to carbon neutrality, technical feasibility, cost, or overall environmental sustainability.³⁰ Additionally, there is no consensus on what kinds are most likely to succeed or which sectors would need them, meaning that there is little clarity on how infrastructure needs might be distributed. **Box 2** elaborates on these limitations.

The 2017 PCIs list has 57 listed fossil gas expansion projects for a total of EUR 45.3 billion in project investment costs. **Figure 2** shows that over four-fifths of this was for projects directly linked to fossil gas expansion by investment cost.

See the online appendix accompanying this report for a summary table of projects and sources.

We defined projects with a “direct” link as those that would facilitate increased takeaway from specific LNG terminals or gas fields by directly connecting them to the existing EU network, or were part of LNG terminals directly. Projects with an “indirect” link were those that

would facilitate increased takeaway from specific upstream or LNG terminal sites by increasing capacity on the EU network and were justified by proponents on this basis. Projects with no link were those not explicitly connected to upstream expansion or justified on this basis, or primarily for underground storage. Our full methodology is included in the **online appendix** accompanying this report.^b

If we consider this according to the number of projects, 20 (35%) were directly linked to upstream expansion, 21 (37%) were indirectly linked to upstream expansion, and 12 (21%) were not linked to upstream expansion. The high average investment cost of the directly linked projects relative to the other categories reflects a larger volume and distance required of many projects designed to import gas to the EU grid. It is also worth noting that the European Commission merged projects on the 2017 list that were separate on the 2015 one, creating the illusion that there was a reduction in the number of gas projects and underscoring that the quantity of projects on its own is not necessarily meaningful as a metric.³¹

The projects directly linked to upstream fossil gas include many that the EIB has directly financed, such as the Trans Adriatic Pipeline and the Trans Anatolian Pipeline. Both pipelines are part of the Southern Gas Corridor and designed to

^b An appendix with details on each project and its classification is available online at <http://priceofoil.org/gas-and-the-eib>

bring gas from Caspian gas fields, and both rank in the ten largest PCIs on the list with respect to capacity for imports and investment cost.

It is possible that potential non-fossil gas sources could make use of some of these infrastructure projects, but this would only be the case by coincidence, and not by design. This analysis clearly shows that the bulk of capital expenditure associated with the PCI list is for projects located at the edges of the EU network for the purposes of importing large volumes of fossil gas to the main grid. It is important to underscore again that while smaller volume gas projects distributed throughout the grid would be better candidates to be utilized as non-fossil gas carriers – there will still likely be little Paris-compatible demand even for these going forward.³² This is because, as **Box 2** and the preceding section show, there are limitations in non-fossil gas potential and there is already gas-carrying capacity in excess of what is expected to be needed. Rather, this analysis should highlight that the kinds of gas projects on the PCI list are *particularly* misaligned with the EU's climate goals and premise that new fossil gas infrastructure can be used for non-fossil transportation.

We did not consider the 112 gas projects that have been put forward as candidates for the 2019 list in this analysis due to the lack of robust information on their geographies and supplies. However, it is worth noting that all but 36 are continuations of projects or parts of

projects from the 2017 list and thus they are not likely to have a dramatically different orientation.³³ Furthermore, no project proponents for either the 2017 or 2019 list noted conversion to non-fossil gas transmission as a potential avenue for their projects.

Box 3: Carbon Capture and Storage³⁴

Most CCS pilot projects to date have proved more costly and less effective than hoped, and many analysts now consider that wind and solar power are likely to remain less expensive than CCS, even as CCS technology improves.

In its own long-term strategy for climate action released in 2018, the European Commission made clear that CCS should only be seen as a fallback option to “tackle remaining CO2 emissions” after all other options are exhausted. They noted that “CCS was previously seen as a major decarbonisation option for the power sector and energy intensive industries. Today this potential appears lower, considering the rapid deployment of renewable energy

technologies, as well as other options to reduce emissions in industrial sectors, and issues concerning social acceptance of the technology itself.”³⁵

If CCS can ultimately be deployed reliably, affordably and without harm, it might provide a welcome means of further lowering emissions and/or offsetting hard-to-eliminate emissions, such as in heavy industry. However, it would not be prudent to rely on an uncertain technology, because if it does not prove itself to be effective, the worst effects of climate change will be locked in for years to come. A precautionary approach would not assume that CCS will be available at a significant scale.

Shell LNG Tanker *Cardissa* in Rotterdam, Netherlands ©Kees Torn (CC BY-SA 2.0)



CONCLUSIONS AND RECOMMENDATIONS

With the upcoming energy lending review, the EIB has an opportunity to seize climate leadership, and show the world what a serious response to this challenge looks like.

In its Public Consultation document for the energy lending review, the EIB asserts that “the objectives of the Paris Agreement will not be possible without significant efforts outside Europe and the EU intends to be exemplary in order to play a leading role in climate mitigation.”³⁶ This is correct, and it means that the EIB must explicitly commit to a rapid and complete shift away from fossil gas and oil toward zero-emission development, in line with the Paris Agreement’s ambition to limit warming to below 1.5°C.

What is clear is that there is no 2°C or 1.5°C scenario out of the eight put forward by the European Commission where gas of any kind grows as a share of the energy mix.

Some have maintained that the EIB should continue to support gas projects so long as they have been included in the list of PCIs. However, even if we consider the 1.5°C scenario that is most optimistic for the future of gas, the vast majority of gas projects on the current PCI list would be off the table. If the EU’s emissions don’t meet the criteria for a 1.5°C pathway, it stands in violation of its commitment to the Paris Agreement. This is even without considering that this scenario relies heavily on both unproven CCS and “non-fossil” gas technologies.

There is very little in the PCI list that the EIB can support if it is serious about climate action. To be truly aligned with the Paris Agreement’s aims and to demonstrate leadership in sustainable finance, EIB should no longer finance projects associated with fossil gas, regardless of whether they are included in the PCI list.

*Paris during historic 2016 flooding, which studies have attributed in part to climate change.
©Guilhem Vellut (CC BY 2.0)*





Endnotes

- 1 Intergovernmental Panel on Climate Change, *Special Report on the impacts of global warming of 1.5°C: Summary for Policymakers*, October 2018, p. 16, https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf.
- 2 Greg Muttitt, *The Sky's Limit: Why the Paris climate goals require a managed decline of fossil fuel production*, Oil Change International, September 2016, <http://priceofoil.org/the-skys-limit-report>.
- 3 "EIB President Werner Hoyer announces major progress on tackling climate change globally at the One Planet Summit in New York," European Investment Bank, 25 September 2018, <https://www.eib.org/en/press/all/2018-233-eib-president-werner-hoyer-announces-major-progress-on-tackling-climate-change-globally-at-the-one-planet-summit-in-new-york.htm>.
- 4 European Investment Bank, "Public consultation on the EIB Energy Lending Policy," 8 January 2019, p. 38, https://www.eib.org/attachments/consultations/public_consultation_energy_lending_policy_en.pdf.
- 5 See for example the Gas for Climate group, <https://gasforclimate2050.eu>; EIB, "Public consultation," p. 38.
- 6 EIB, "Public consultation," p.37; Patrick Lavery, International Flame Research Foundation, "'Green' and 'blue' hydrogen for a low-carbon European economy?," 1 October 2018, <https://ifrf.net/ifrf-blog/green-and-blue-hydrogen-for-a-low-carbon-european-economy/>; Federal Ministry Republic of Austria Sustainability and Tourism, "The Hydrogen Initiative," 18 September 2018, <https://www.eu2018.at/latest-news/news/09-18-informal-meeting-of-energy-ministers.html>.
- 7 Arthur Nelsen, "EIB hints that it will fund energy infrastructure shortfall," Euractiv, 13 November 2013, <https://www.euractiv.com/section/eu-priorities-2020/news/eib-hints-that-it-will-fund-energy-infrastructure-shortfall/>; EIB, "Public consultation," p.37.
- 8 European Commission, "A Clean Planet for All: A European Long-Term Strategic Vision for a Prosperous, Modern, Competitive and Climate Neutral Economy," November 2018, <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2050-long-term-strategy>.
- 9 European Commission, "A Clean Planet for All," p. 61.
- 10 EIB, "Public consultation."
- 11 Christian Holz, Sivan Kartha, and Tom Athanasiou, "Fairly sharing 1.5: national fair shares of a 1.5 C-compliant global mitigation effort." *International Environmental Agreements: Politics, Law and Economics* 18(1), 2018, pp. 117-134, [10.1007/s10784-017-9371-z](https://doi.org/10.1007/s10784-017-9371-z).
- 12 UK Parliament, "European Union Committee Brexit: Energy Security 10th Report of Session 2017-19 HL Paper 63 Chapter 7: Investment," 29 January 2018, https://publications.parliament.uk/pa/ld201719/ldselect/ldeucom/63/6310.htm#_idTextAnchor074; European Investment Bank, "The Bank of the European Union - The EIB, 1958-2008," February 2013, <https://www.eib.org/en/infocentre/publications/all/the-bank-of-the-european-union-1958-2008.htm>.
- 13 World Bank Group, "World Bank Group Announcements at One Planet Summit," 12 December 2017, <https://www.worldbank.org/en/news/press-release/2017/12/12/world-bank-group-announcements-at-one-planet-summit>; Swedfund, "Swedfund's Position Paper on Climate Change," 27 October 2017, <https://www.swedfund.se/media/2015/swedfunds-position-paper-on-climate-2017-10-27.pdf>.
- 14 European Investment Bank, "EIB and Energy: Delivering Growth, Security and Sustainability - EIB's Screening and Assessment Criteria for Energy Projects," pp. VI and 25, 25 July 2013, <https://www.eib.org/en/infocentre/publications/all/eib-energy-lending-criteria.htm>.
- 15 European Investment Bank, "Ex-post evaluation of the EIB's Energy Lending Criteria, 2013-2017," 15 February 2019, <https://www.eib.org/en/infocentre/publications/all/evaluation-elc.htm>.
- 16 Data from Oil Change International's Shift the Subsidies Database <http://priceofoil.org/shift-the-subsidies/>; Anna Roggenbuck, *Energy Doublethink: Contradictions at the EU bank in combating climate change*, Bankwatch, September 2018, <https://bankwatch.org/european-investment-bank-energy-lending-2013-2017>.
- 17 Adapted from Lorne Stockman, *Burning the Gas 'Bridge Fuel' Myth: Why gas is not clean, cheap, or necessary*, Oil Change International, May 2019, <http://priceofoil.org/gas-is-not-a-bridge-fuel/>.
- 18 UK Parliament, "European Union Committee Brexit: Energy Security 10th Report of Session 2017-19 HL Paper 63 Chapter 7: Investment," 29 January 2018, https://publications.parliament.uk/pa/ld201719/ldselect/ldeucom/63/6310.htm#_idTextAnchor074.
- 19 EIB, "Public consultation"; European Investment Bank, "Special Task Force (Member States, Commission, EIB) on Investment in the EU," December 2014, https://www.eib.org/attachments/efsi_special_task_force_report_on_investment_in_the_eu_en.pdf.
- 20 *Hiding in plain sight: How the gas lobby is at the heart of EU energy policy*, Fossil Free Europe, Friends of the Earth Europe, 11 May 2017, <https://www.foeeurope.org/hiding-plain-sight-gas-lobby-energy-policy-110517>.
- 21 Joseph Dutton, Lisa Fischer, and Jonathan Gaventa, *Infrastructure for a changing energy system: the next generation of policies for the European Union*, E3G, 11 December 2017, <https://www.e3g.org/library/infrastructure-for-a-changing-energy-system-the-next-generation-of-policies>.
- 22 EIB, "Public consultation," p. 37.
- 23 Friends of the Earth Europe *et al.*, "Gas candidates for the 4th list of Projects of Common Interest," To the European Commission Directorate-General for Energy, 29 May 2019, <https://cloud.foeeurope.org/index.php/s/bbLbtS7ZSSrLwaT>.
- 24 European Investment Bank, "EIB President Werner Hoyer announces major progress on tackling climate change globally at the One Planet Summit in New York," 25 September 2018, <https://www.eib.org/en/press/all/2018-233-eib-president-werner-hoyer-announces-major-progress-on-tackling-climate-change-globally-at-the-one-planet-summit-in-new-york.htm>.
- 25 European Investment Bank, "EIB President joins Pope and other leaders from around globe in calling for more action to fight climate change," 28 May 2019, <https://www.eib.org/en/press/news/president-joins-pope-call-for-more-action-to-fight-climate-change.htm>.
- 26 EIB, "Public consultation" p. 39.
- 27 Author's analysis based on data from *Figure 31: Total gas consumption per gas type and Figure 33: Consumption of Gaseous Fuels* in "Supplementary information: In-depth analysis in support of the commission communication com(2018) 773: A Clean Planet for all A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy", pp.83 and 85, European Commission, 28 November 2018, https://ec.europa.eu/clima/sites/clima/files/strategies/2050/docs/long-term_analysis_in_depth_analysis_figures_en.pdf.
- 28 M.W. Melania, O. Antonia, and M. Penev, *Blending Hydrogen into Natural Gas Pipeline Networks: A Review of Key Issues*, National Renewable Energy Laboratory, U.S. Department of Energy, 2013, <https://www.nrel.gov/docs/fy13osti/51995.pdf>.
- 29 Adapted from Lisa Fischer, *Renewable and decarbonised gas: options for a zero-emissions society*, E3G, June 2018, <https://www.e3g.org/library/renewable-and-decarbonised-gas-options-for-a-zero-emissions-society>; Stockman, *Gas Myth*.
- 30 Fischer, *Renewable and decarbonised gas*.
- 31 EIB, "Public consultation."
- 32 Fischer, *Renewable and decarbonised gas*.
- 33 European Commission, "Consultation on the list of candidate Projects of Common Interest in gas infrastructure," 26 February 2019, https://ec.europa.eu/info/consultations/consultation-list-candidate-projects-common-interest-gas-infrastructure_en.
- 34 Greg Muttitt, Anna Markova and Matthew Crighton, *Sea Change: Climate Emergency, Jobs and Managing the Phase-Out of UK Oil and Gas Extraction*, Oil Change International, Platform, and Friends of the Earth Scotland, 15 May 2019, <http://priceofoil.org/2019/05/15/sea-change-report/>.
- 35 European Commission, "A Clean Planet for all - A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy," 28 November 2018, p. 15, https://ec.europa.eu/clima/policies/strategies/2050_en.
- 36 EIB, "Public consultation," p. 9.





Oil Change International
714 G Street SE, Suite 202
Washington, DC 20003
www.priceofoil.org

