Non-compliance of the 4th PCI List with EU Law and the Paris Agreement

"Making the right or the wrong choice now may have a lasting impact on the quality and adequacy of the European Union's gas infrastructure and markets, on the value provided to consumers and to the public at large, and possibly facilitate or hamper the attainment of the climate goals of the European Union in the long run."

European Agency for the Coordination of Energy Regulators (ACER) in Opinion on gas PCIs no. 19/2019



Non-compliance of the 4th PCI List with EU Law and the Paris Agreement 29 January 2020



Executive Summary

On 10-13 February, the European Parliament will examine the Fourth Project of Common Interest list (4th PCI List) submitted by the European Commission. ClientEarth calls on the European Parliament to object to the 4th PCI List on the grounds that it breaches EU laws, is inconsistent with the Paris agreement, and jeopardises the response to the climate emergency declared recently by the European Institutions.

In short, not only would European Union support for investment in gas projects be inconsistent with the emission reductions required by the Paris Agreement, the Green New Deal and the Climate Emergency declaration of the Parliament, such support would also create a risk of stranded assets, the costs of which would ultimately be borne by the European taxpayer.

Rejecting the current 4th PCI List will give greater leverage to the European Parliament to request a new PCI List exclusively focusing on sustainable and non-carbon intensive PCIs.

* * *

1. The methodology and procedure followed to adopt the 4th PCI list is not compliant with the TEN-E Regulation.

The European Agency for the Coordination of Energy Regulators (**ACER**) is one of the regulators in charge of monitoring compliance of the PCI process with the TEN-E Regulation. ACER's opinion on the gas projects of the 4th PCI list1 clearly shows shortcomings in the PCI adoption procedure and raises doubts on its compliance with the TEN-E Regulation.2

More specifically, the methodology used to assess candidates for PCI status is not fully compatible with the TEN-E Regulation, in part because **benefits are analysed using non-monetised indicators**. Moreover, ENTSO-G₃ assigned "a positive sustainability benefit to each and every candidate project" based on highly dubious assumptions. In this regard, **ACER rightly notes** that "not using the sustainability assessment and not suggesting any alternative, is suboptimal", further notes in diplomatic terms that **none of the PCI projects contribute to sustainability and meeting the climate change policy goals**, and concludes that "the absence of a sound assessment of the projects' contribution to sustainability leads to great uncertainty and doubts about the viability (or even the need) for the projects in the long run."⁴

Despite the paucity of data made available to the public concerning the cost-benefit analysis, it is possible to infer from data publicized by ACER that a large number of projects obtained PCI status even though some financial data with regards to major economic indicators 5 provided to national regulators was considered not "credible" by ACER. Also, ACER

ACER Opinion No. 19/2019 of 25 September 2019 on the draft regional lists of proposed gas projects of common interest 2019, see in particular recital (29), available <u>here</u>

In fact, ACER has repeatedly and insistently criticised the process surrounding the adoption and monitoring of PCI lists

European Network of Transmission System Operators for Gas ("ENTSO-G"), a private body mainly composed of TSOs

⁴ See ACER Opinion recital (28)

IRR, NPV, CAPEX, and OPEX. For instance, at least 20 out of 32 PCIs did not provide to NRAs NPV and/or IRR, and at least 13 did not provide consistent OPEX figures. There is no public indication that the lack of credibility of the data provided by the project proponents has been remedied to since the ACER Opinion was published in September 2019.



highlights that some **calculations could not be reproduced** by the members of Regional Groups.

- 2. The 4th PCI List is inconsistent with EU treaties and is incompatible with the climate emergency declaration of the European Parliament, the Green New Deal proposed by the European Commission, and the Paris Agreement.
- 3. Each gas project on the 4th PCI List that is implemented locks in fossil fuel infrastructure, jeopardizes efforts to achieve the 2050 decarbonisation target, creates stranded assets, and diverts limited European taxpayer money from truly climate ambitious projects.

Putting aside the major environmental concerns over increased natural gas infrastructure capacity in Europe, support for PCIs is doubly problematic for the European taxpayer: first, PCIs are major investments partly financed through Union funds; a freshly published independent report confirms that most of the 32 gas PCI projects are unnecessary and a waste of money. Second, the costs of PCIs which have entered operation are borne by the relevant transmission system operators (TSO), which in turn derive their revenues from network tariffs on network users.

To implement each gas PCI, finite public and private funding is channelled into a capital intensive project financed on the assumption that it will be operated for decades to come. However, the Commission's own modelling makes clear that existing natural gas infrastructure will have limited to no use in 1.5°C compatible scenarios, rendering new natural gas infrastructure even more superfluous.

4. The TEN-E Regulation, which is the legal basis of PCI lists and calls for inclusion of gas and oil PCIs, is inconsistent with the principles of EU law, the climate emergency declaration of the European Parliament, and the Green New Deal.

The Commission diagnoses that "the regulatory framework for energy infrastructure, including the TEN-E Regulation, will need to be reviewed to ensure consistency with the climate neutrality objective" (Green New Deal, page 6). European Parliament approval of the PCI list would mean that new gas infrastructure incompatible with EU objectives would be promoted and funded by the EU on the basis of an instrument which the European Commission regards as inconsistent with overriding climate objectives.

5. Natural gas is not a "bridge fuel".

There is a growing body of literature warning decision-makers that greenhouse gas emissions figures for natural gas are underestimated because methane leaks are consistently underestimated and underreported.

And even if methane leaks were minimised, the remaining carbon budget does not allow for an increase in natural gas consumption, including in the scenario where natural gas replaces coal.8

* * *

Artelys, An updated analysis on gas supply security in the EU energy transition, 20 January 2020, available here

See Oil Change International, "Burning the gas 'bridge fuel' myth: Why gas is not clean, cheap, or necessary", May 2019, available here

Indeed, on the Commission's long-term modelling, the share of gas in the energy mix decreases from above 20% as of 2016 to below 20% by 2030 and falls to around 3% in 2050 in 1.5°C scenarios. See Communication from the European Commission of 28 November 2018 (COM(2018) 773), available here



Executive Summary	2
1 What are Projects of Common Interest? Why is it an important topic?	5
2 Why should the European Parliament reject the 4th PCI List?	6
2.1 The procedure followed to adopt the PCI list is not compliant with the TEN-E Regulation	6
2.1.1 Preliminary note on scope of ACER comments	7
2.1.2 Analysis of 2019 ACER Opinion and TEN-E Regulation requirements	8
Other concerns regarding failure of project promotors to provide mandator10	y
2.2 The TEN-E Regulation, the legal basis of the 4th PCI List, is inconsistent with the EU climate objectives	
2.2.1 Climate emergency declared by the European Parliament	11
2.2.2 The European Green Deal	12
2.3 Gas PCIs are not in line with the European Union's decarbonisation objectives	12
2.3.1 Legal obligations of the European Union and its institutions	12
2.3.2 Incompatibility of support for natural gas projects with the European Union legal obligations	
2.3.3 Alternative gases are unlikely to provide sufficient volumes to justify extension of gas networks	14
3 What would happen should the 4th PCI List be rejected?	15



1 What are Projects of Common Interest? Why is it an important topic?

The rules applicable to the identification of Project of Common Interests ("**PCI**") and to the favourable legal regime they become entitled to once part of a PCI list mainly derives from the 2013 TEN-E Regulation.9

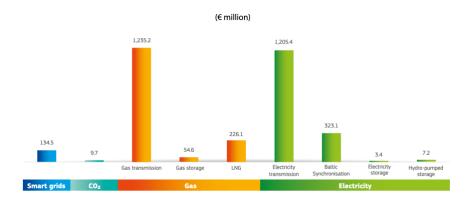
PCIs are essentially midstream projects relating to transmission, storage and import of electricity, gas, as well as more marginally relating to oil, carbon dioxide and smart grid projects.

The European Commission describes PCIs as "key infrastructure projects aimed at completing the European energy market in order to help the EU achieve its energy policy and climate objectives: affordable, secure and sustainable energy for all citizens, as well as the long-term decarbonisation of the economy in accordance with the Paris Agreement." 10

ClientEarth considers that this description is misleading as it is highly questionable whether gas PCIs are contributing to long-term decarbonisation and whether they are even compatible with the Paris Agreement (see section 2.3.2 below).

Under EU law, PCIs benefit from a favourable permitting regime and are eligible for funding from the European Union, including in particular from the Connecting Europe Facility ("**CEF**") and the European Investment Bank ("**EIB**").

As can be seen from the CEF infographic describing the total amounts expended to PCIs as of May 2019,11 the majority of funding is channelled in approximately equal amounts to gas transmission and electricity transmission PCIs, with marginal amounts going to other types of PCIs. As of May 2019, a total of 3.2 billion euros had been expended in total for PCIs.



- Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009 as amended ("TEN-E Regulation")
- See memorandum available here
- See CEF energy brochure for 2019, available here

Non-compliance of the 4th PCI List with EU Law and the Paris Agreement 29 January 2020



Under the 2019 EIB Energy Lending Policy, PCIs identified on the 4th PCI list are eligible for EIB funding. 12 As of 12 September 2019, the EIB reported to EIB directors that its services are formally appraising 9 gas PCIs, "for an aggregated total investment cost of 2344 MEUR and potential EIB support of 1075 MEUR". 13

Even putting aside the major environmental concerns ensuing from increasing the capacity of natural gas infrastructures in Europe, PCIs are doubly problematic for the European taxpayer.

First, they are major investments which are partly financed through Union funds.

Second, once PCIs are operational, the relevant transmission system operators ("**TSO**") bear their costs, being recalled that TSOs derive their revenues of the network tariffs applicable to network users.14

2 Why should the European Parliament reject the 4th PCI List?

2.1 The procedure followed to adopt the PCI list is not compliant with the TEN-E Regulation

The TEN-E Regulation binds the different entities which are in charge of filtering through and selecting the candidate projects to PCI status. These entities are inter alia the TSOs, ENTSO-E/ENTSO-G, the Regional Groups, the NRAs, Agency for the cooperation of Energy Regulators ("ACER"), and the European Commission.

There are obvious conflicts of interests when ENTSO-E/G ascertains whether candidates to PCI status should be included in regional lists. Indeed, its main members, the TSOs, have vested interests in expending the number of infrastructures that they operate as their (regulated) revenue is based on the costs they incur and the assets they operate. Moreover, the TSOs and the project sponsors may not provide the relevant data for the proper assessment of the proposed projects to the regulators in charge of reviewing the application of TEN-E Regulation.

Projects should only be included on the final PCI list if they satisfy the requirements set forth by the TEN-E Regulation. ACER is tasked amongst other to check the consistency in applying the criteria set forth in the TEN-E Regulation, the cost-benefit analysis methodology, the cross-border relevance of PCIs. In accordance with the TEN-E Regulation, the outcome is consolidated in an opinion that ACER publishes on the regional PCI lists. 15 Like other regulators in charge of reviewing the correct application of the TEN-E Regulation, ACER's work in assessing the projects is jeopardised by the lack of project data provided by the TSOs and project sponsors.

- See p. 39 of the EIB Energy Lending Policy
- See Background document for EIB Directors (Annex 3) circulated in October 2019 in relation to the draft Energy Lending Policy (finally approved on 14 November 2019 and available here)
- See Article 12(1) of the TEN-E Regulation
- See paragraph (2)(12) of Annex III of the TEN-E Regulation

Non-compliance of the 4th PCI List with EU Law and the Paris Agreement 29 January 2020



ACER in its 2019 opinion on draft regional lists of proposed gas PCIs (the "**ACER Opinion**"), $_{16}$ is **particularly critical** of the process which led to the preparation of the regional lists used to prepare the $_{4th}$ PCI list.

This **criticism is only apparent through a close reading of the ACER Opinion**, as some praise is given to factors which are either irrelevant or so basic that they should not deserve to be mentioned. Further, the actual obligations under the TEN-E Regulations are pointed out in some instances in ACER's recommendations.₁₇

An analysis solely based on the ACER Opinion and the TEN-E Regulation makes clear that the validity of the procedure which led to the preparation of the PCI list is highly questionable.

2.1.1 Preliminary note on scope of ACER comments

The ACER Opinion relates to the draft regional lists of proposed gas PCIs for the 4th PCI list, and not to the final 4th PCI List.18 The ACER Opinion is inter alia based on the assessments made by the NRAs with regards to these draft regional lists. The number of projects reviewed by ACER is therefore much higher than the number of projects included in the final 4th PCI List (56 projects in total in the draft regional lists, 39 having been reviewed by NRAs and 32 in the final 4th PCI List). As explained in section 2.1.2 below, ACER is particularly critical of the data provided to support candidates to PCI status.

Because the opinion relates to a larger body of projects and because ACER uses its own references to refer to projects, it is not possible to confirm whether specific criticism in the ACER Opinion relates to a project included in the final 4th PCI List. It is however possible to draw general conclusions from data made available by ACER.

- ACER Opinion No. 19/2019 of 25 September 2019 on the draft regional lists of proposed gas projects of common interest 2019
- For instance while ACER provides that it "recommends" in recital 20 that "an assessment of the infrastructure needs be retained in the Regional Groups and improvements for the assessment of needs be designed for the future rounds of PCI selection", it is however clear from a combined reading of Articles 4(1) and 3(3) of the TEN-E Regulation that the Regional Groups have an obligation to carry out such assessment of the infrastructure needs.
- The TEN-E Regulation does not require that ACER issues an opinion on the final PCI list.



(Corridor name)		Total number of popies	West by ACER Section 1981 ACI list	Supplies of the supplies of th	2000 St. S.	Specifice.	Societics, multiple souts (C)	Economics (2)	Callette and callette	10M) : 100 de 10	Party
NSI West	3	9	number of projects on regional lists which provided credible data	3	3	2	2	2	2	2	
NSI East	18	24		11	8	11	17	8	17	13	
SGC	6	8		4	4	4	6	2	6	6	
BEMIP	5	15		4	4	4	5	0	5	5	
Total	32	56		22/56	19 /56	21/56	30/56	12 /56	29 /56	26 /56	
minimum	numbe	r/percer	4th PCIList, mage of PCIs dible data for:	10 31.3%	13	-	6.3%	20 62.5%	3 9.4%	6 18.8%	

This table consolidates the information provided by ACER in Annex 3 of the ACER Opinion regarding all the projects on regional lists on the one hand and compares it with the number of projects on the final 4th PCI List. In this table, figures by corridor are for the projects in the regional list deemed "credible" by NRAs reviewing the applications. The data was deemed not credible if it fell into the following categories: "inconsistent", "no data provided", "unable to assess".

It is possible to deduce from this data that out of 32 gas PCIs, at the minimum 10 gas projects included in the final 4th PCI list did not provide credible "consistent CAPEX figures", 20 projects did not provide credible "economic performance indicators", etc.

These findings should be particularly concerning as there is no public indication that the lack of credibility of the data provided by the project proponents has been remedied to since the ACER Opinion was published in September 2019.

2.1.2 Analysis of 2019 ACER Opinion and TEN-E Regulation requirements

Without aiming at exhaustively covering all the content of the ACER Opinion, it is noteworthy that:

- Monetary costs and benefits not discounted - Monetary value of costs and benefits not available for all PCIs - While ACER nominally commend the "high level of consistency" of the methodology as applied to assess the infrastructure needs and the PCIs per se, it notes in the same paragraph severe concerns, including the fact that monetary benefits and costs are not discounted, which make it impossible to



calculate whether the benefits of a project exceeds its costs over its lifetime. 19 These concerns are not project specific but relates to the methodology used to assess them.

In a number of instances, the monetary costs and benefits are not provided at all.

As noted in the annex 1 to the ACER Opinion, "assessing the benefits by only using non-monetised indicators essentially makes it impossible to demonstrate that a given project's benefits exceed its costs." "No substantive assessment of the fulfilment of this criterion [benefits exceeding the costs] can be carried out without a comparison of the project's monetarised benefits and its costs" 20

More importantly, the "PCI assessment methodology used for the scoring and the ranking of the candidate projects only used non-monetised indicators".21 In other words, the so-called 'cost-benefits analysis' (CBA) is carried out without using monetary indicators!

It appears from these remarks of ACER that cost-benefit analysis methodology used by the Regional Groups may not be compliant with the requirements of Article 4(1)(b) of the TEN-E Regulation. Under this provision, it is necessary to ascertain whether a PCI's overall benefits outweigh its costs, "including in the longer term". In the absence of discounted costs and benefits analysis it appears extremely difficult to legally satisfy this condition.

- ACER notes that the methodology used does not include an "assessment of alternative ways for resolving a specific need [...] rather than building new infrastructure".22 Such methodology is therefore contrary to the precautionary principle which is an overarching principle of EU law (Article 191(2) of the TFEU).23
- Analysis of sustainability is not compliant with the TEN-E Regulation ACER notes in diplomatic terms the fact that none of the PCI projects contribute to sustainability and meeting the climate change policy goals.24

Remarkably, ACER remarks how ENTSO-G assigned "a positive sustainability benefit to each and every candidate project" and notes that this would be correct only under the assumptions that gas will substitute more polluting fuels, and that total volume of gas consumed is within the policy targets range.

In less diplomatic terms, ACER notes that "not using the sustainability assessment and not suggesting any alternative, is suboptimal". It concludes: "the absence of a sound assessment of the projects' contribution to sustainability leads to **great uncertainty**

- "Even though the assessment is based on TYNDP 2018 project-specific CBA (PS-CBA) data—
 the Project information contained therein has several shortcomings. Specifically [...]: the
 monetary benefits provided are expressed on a yearly basis and not discounted; [...] nonavailability of discounted values applies to costs, in particular regarding operational expenditure."
 ACER Opinion page 5 et seq.
- See annex 1.4 of the Acer Opinion
- See recital (24) of ACER Opinion
- See recital (22) of ACER Opinion
- Note also that the concept that Member States shall implement measures designed to remedy market failures and regulatory distortions as an efficient mean to alleviate interconnectivity issues is an important part of the Energy Markets Regulation (see article 20 of the Energy Regulation).
- See recital (28) of ACER Opinion: "contribution [...] is not quite clear"



and doubts about the viability (or even the need) for the projects in the long run".25

While the TEN-E Regulation does not require that each PCI "contribute[s] significantly to [...] sustainability" 26 it is however necessary to satisfy the requirements of Annex IV.3.d which provides that "Sustainability shall be measured as the contribution of a project to reduce emissions, to support the back-up of renewable electricity generation or power-to-gas and biogas transportation, taking into account expected changes in climatic conditions."

The fact that ENTSO-G assigns "a positive sustainability benefit to each and every candidate project" is obviously not compliant with the requirements of Annex IV.3.d.

- The final recital of the ACER Opinion is worth quoting in full: "ACER reiterates its recommendation provided in previous PCI selection processes, namely that the final assessments of candidate projects should be based on a PCI assessment methodology that takes into consideration cost data, monetised benefits, Economic Performance Indicators, the results of ACER's PCI monitoring reports and NRA project assessments" as it appears clearly that the methodology used to assess the PCI is entirely unsatisfactory.
- **Impossible to reproduce some of the calculations** ACER recommends "*more transparency*" as the calculations carried out by the Joint Research Centre "*could not be reproduced by the members of the Regional Group*".27
- ACER notes that the recommendations of ACER and the NRAs were not much taken into account28

In view of the above, it is difficult to comprehend how ACER can find that the draft 4th PCI List "generally meets the objectives of the TEN-E Regulation." Further, and as demonstrated above, it appears that the procedure used to prepare the PCI List does not satisfy the *requirements* of the TEN-E Regulation.

2.1.3 Other concerns regarding failure of project promotors to provide mandatory data

It is noteworthy that the issues raised by ACER in the ACER Opinion are not isolated but systematic. Indeed, the project promoters of PCIs included on the 3rd PCI list provided lacking data to ACER during the monitoring phase of the PCI list, even though the TEN-E Regulation clearly provides that ACER should monitor the evolution of the projects on PCI lists. For instance, in a 2019 report, 29 ACER notes that:

- "The assessment of the benefits of the gas PCIs again faced serious difficulties."30
- See recital (29) of ACER Opinion
- 26 Article 4(b)(iv) of the TEN-E Regulation
- See recital (11) of ACER Opinion
- See recital (13) of ACER Opinion, "level of acceptance [...] below their expectations".
- Consolidated Report on the Progress of Electricity and Gas PCIs of 27 June 2019, available here ("ACER Progress Report")
- 30 See page 5 of the ACER Progress Report



- "The estimated monetised value of benefits was provided only for 6 PCIs [out of 53 gas PCIs], the same number of projects as in the 2018 monitoring exercise. Similarly, project life-cycle cost data are missing or incomplete for 74 investment items (out of 93) which represents 68% of the PCIs.
- Since all PCIs are subject to CBA already at the stage of preparing the PCI list, the lack of any estimate of the value of a project's expected life cycle costs and benefits casts fundamental doubts on the projects merits."31

2.2 The TEN-E Regulation, the legal basis of the 4th PCI List, is inconsistent with the EU climate objectives

2.2.1 Climate emergency declared by the European Parliament

We also highlight that on 28 November 2019, the **European Parliament declared a climate emergency**.32 In its resolution, the European Parliament inter alia:

- "2. Urges the new Commission to fully assess the climate and environmental impact of all relevant legislative and budgetary proposals, and ensure that they are all fully aligned with the objective of limiting global warming to under 1,5 °C, and that they are not contributing to biodiversity loss;"
- "4. Urges the new Commission to address the inconsistencies of current Union policies on the climate and environment emergency, in particular through a farreaching reform of its agricultural, trade, transport, energy and infrastructure investment policies;"

The point 4 of the resolution can be seen as a reference to the known inconsistencies between the objectives of the TEN-E Regulation (building inter alia more fossil fuel infrastructures) and the overarching objective of the EU, in accordance with the Paris Agreement, which is to reduce greenhouse gases emissions in order to reach carbon neutrality in 2050.

Further, and as demonstrated in section 2.3.2 below, the European Commission submitted to the European Parliament a 4th PCI list which is clearly inconsistent with the climate and environmental emergency. In order to be coherent with its own admonitions to the European Commission, the European Parliament should object to a list which is inconsistent, even if the TEN-E Regulation is still in force.

- See page 30 of the ACER Progress Report. There is a footnote to this sentence clarifying that "the Agency provided an opportunity to the project promoters to mark cost and benefit data as confidential, should promoters wish to do so. Nevertheless, very few promoters provided information about benefits and most also did not provide data for life cycle costs."
- Resolution of 28 November 2019 on the climate and environment emergency (2019/2930(RSP))



2.2.2 The European Green Deal

In the European Commission's communication *The European Green Deal* from December 2019,33 which received support from the European Parliament through a resolution voted on 15 January 2020, the European Commission emphasized that "the regulatory framework for energy infrastructure, including the TEN-E Regulation, will need to be reviewed to ensure consistency with the climate neutrality objective."34

This is an even clearer acknowledgment of the inadequacy of the TEN-E Regulation than the one contained in the Climate Emergency declaration of the European Parliament.

The European Commission does not mention that natural gas will be a 'bridging fuel" in order to achieve the net zero ambition by 2050.

The Commission refers to the need to support "decarbonised gas", a concept which is attractive but does so far not seem realistically achievable (see section 2.3.3 of this memorandum regarding anticipated availability of alternative gases in the future). In this respect, the European Commission notes that:

- "A power sector must be developed that is based largely on renewable sources, complemented by the rapid phasing out of coal and decarbonising gas."
- "In parallel, the decarbonisation of the gas sector will be facilitated, including via enhancing support for the development of decarbonised gases, via a forward-looking design for a competitive decarbonised gas market, and by addressing the issue of energy-related methane emissions."35

2.3 Gas PCIs are not in line with the European Union's decarbonisation objectives

2.3.1 Legal obligations of the European Union and its institutions

Legal obligations of the European Union create a clear imperative for the European Parliament to consider the nefarious environmental effects of investing billions of euros in natural gas projects:

- The Paris Agreement provides for greenhouse gas emission reductions and requests its signatories to "(c) mak[e] finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."36
 - The EU is a party to the Paris Agreement and has repeatedly committed to making the emission reductions and facilitating the clean energy investment required by that Agreement. In accordance with Article 216(2) of the TFEU, international agreements commitments are binding upon the European Union's institutions.
- Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, *The Green New Deal*, 11 December 2019, COM(2019) 640
- See Green New Deal, page 6
- See page 6 of the Green New Deal
- See Article 2(1)(c) of the Paris Agreement



- Article 3 of the TEU provides that the internal market shall "work for the sustainable development" and shall inter alia contribute to a "high level of protection and improvement of the quality of the environment". Similarly, under Article 11 of the TFEU, "environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development." Article 191 of the TFEU further details the environmental policy, including in particular the precautionary principle.
- Under Article 194 of the TFEU, the "need to preserve and improve the environment" is an overarching principle of the Union energy policy. It is listed above the goals relating to the functioning of the energy market, security of supply and energy efficiency and the promotion of interconnections.

2.3.2 Incompatibility of support for natural gas projects with the European Union legal obligations

The effect of the legal obligations summarised in section 2.3.1 above is to require the European Union to curtail support for further gas-reliant energy projects and associated greenhouse gas emissions.

In short, reaching the Paris Agreement goals would require that all new generation capacity be renewable and a steep reduction in natural gas consumption.

The European Commission recognized that reaching the goals of the Paris Agreement will require the elimination of nearly all greenhouse gas emissions by 2050, with a steep reduction in the role of gas and increased clean energy investment. All Member States but one support the Commission's proposal to commit to net-zero emissions by 2050. On the Commission's long-term modelling, the share of gas in the energy mix decreases from above 20% as of 2016 to below 20% by 2030 and falls to around 3% in 2050 in 1.5°C scenarios.37 The EIB considers that "investment needs for gas networks in the period till 2040 are projected to fall to just 2% of the total EU energy investment needs".38

To the contrary, to implement each gas PCI, finite public and private funding will be channelled into a capital intensive project, financed on the assumption that it will be operated for decades to come, while the Commission's own modelling makes clear that existing natural gas infrastructures will have limited to no use in 1.5°C compatible scenarios, and even more so in the case of new natural gas infrastructures.

- European Commission, Communication 28 November 2018, Figure 2, available here. (COM(2018) 773 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, A Clean Planet for all, A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy) (the "Commission Communication"). See also page 69 of the Communication
- See page 5 of Introductory Speech by VP McDowell, background document for EIB Directors circulated in October 2019 in relation to the draft Energy Lending Policy (finally approved on 14 November 2019 and available here)



A number of reports conclude that **natural gas cannot be regarded as a bridging fuel**. Indeed, it is misplaced to hold that natural gas can be substituted for other fossil fuels and achieve a lower level of CO₂ emissions. In effect, in addition to CO₂ emissions during the combustion stage, substantial leaks of methane (CH₄) occur along the lifecycle of natural gas. Methane is an extremely potent greenhouse gas, which has 84 times the global warming potential of CO₂ over a 20-year period₃₉. These **methane leaks are under-estimated and under-reported but they lead to material increases in overall greenhouse gas emissions**,₄₀ and **can result in higher emissions of greenhouse gas emissions per unit of energy from natural gas than if produced than coal.₄₁**

Even in the case where gas producers were able to maintain gas leakage to a minimum, which is not the case as of today, the remaining carbon budget is insufficient to allow for the construction of new gas plants. This is the conclusion of Oil Change International in its recent report, which was based on IPCC, IEA and Bloomberg data.42

Given the need to proceed in accordance with precautionary principle as expressed in Article 191(2) of the TFEU, further public investment in natural gas-related activities cannot be justified.

Ongoing investment in natural gas projects also entails **stranded asset risk**, given the emission reductions required by the Paris Agreement. Taking under consideration the EU infrastructure overcapacity, new gas infrastructure projects are not required for security of supply.43 Actually, reducing reliance on natural gas imports will increase the security of supply of the European Union.

2.3.3 Alternative gases are unlikely to provide sufficient volumes to justify extension of gas networks

It is highly doubtful that an increase in the use of so-called alternative gases could take up the excess capacity left by a decline in natural gas:

- First, the Commission Communication itself contemplates only a relatively small proportion of the energy fuel mix being derived from "e-gas" in 2050; in the order of 5%.44
- Second, other economic analysis is to a similar effect. Eurostat figures for 2018 indicate that gross EU consumption of natural gas in 2018 amounted to
- See IPCC, AR5 Chapter 8, Anthropogenic and Natural Radiative Forcing, page 731, available
- See study from MIT "The uncertain role of natural gas in the transition to clean energy" where MIT scientist find that challenges in measuring and mitigating leakage of methane, a powerful greenhouse gas, prove pivotal. Available here.
- See Traber and Fell, "Natural Gas Makes No Contribution to Climate Protection", Energy Watch Group (September 2019) finding that in the case of new gas, emissions are 41% higher than coal.
- Oil Change International, "Burning the gas 'bridge fuel' myth: Why gas is not clean, cheap, or necessary", May 2019, available <u>here</u>
- European Political Strategy Centre, *Nord Stream 2 Divide et Impera Again?*, available <u>here</u>, page 5.
- See page 9 of the Commission Communication



18,168.77 petajoules ("**PJ**").₄₅ Research conducted on behalf of major gas suppliers indicated that under optimal conditions, the supply of renewable methane in 2050 would reach 1170 TWh, ₄₆ which is the equivalent of around 4,212 PJ. The International Council on Clean Transportation, by contrast, estimated the potential renewable methane supply at 36 billion m₃ p.a., the equivalent of 1,432.8 PJ.₄₇ Even under the higher of these estimates, the supply of 'clean' gas (and hence the usage at the existing level of gas infrastructure) would be significantly lower than at present.

Despite the arguments put forth by the gas industry that gas PCIs will also be useful for transporting alternative gases, it appears clearly that the future supply of such alternative gases will not be sufficient to justify building new infrastructure. Moreover, even if the alternative gases industry was able to (handsomely) exceed production estimations, the existing networks would not be located in the locations where new gases could be produced (biomethane factories, electrolyser connected to (offshore) wind parks, etc). Further, costly upgrades to the existing gas grid will be required to transport hydrogen from locations which are today unknown.

3 What would happen should the 4th PCI List be rejected?

It is unclear whether the 3_{rd} PCI List would continue to be valid if the European Parliament objected to the 4_{th} PCI List.

While Article 3(4) of the TEN-E Regulation provides that "in exercising its power [to adopt delegated act], the Commission shall ensure that the Union list is established every two years [...]" the Commission has first interpreted it in the 2nd and 3rd PCI lists by stating that "the Union list is established every two years, therefore the Union list established by [preceding Commission Delegated Regulation] is no longer valid and should be replaced". 48 In the draft version submitted in 2019 to the Parliament, the European Commission seems to have modified its analysis and does not mention that the 3rd PCI list is "no longer valid". The draft recital now provide that "the list of PCIs is established every two years, thus, it is necessary to replace it."

Notwithstanding the interpretation of the European Commission included in its 2015 and 2017 PCI lists, it appears reasonable to interpret Article 3(4) of the TEN-E Regulation as making the latest adopted PCI list valid until the entry into force of the next PCI list, even if the period exceeds two years.

On a similar note, it is worth emphasizing that the European Parliament can revoke the delegation of power given to the European Commission to adopt PCI lists at any time in accordance with Article 16(3) of the TEN-E Regulation.

- 45 Eurostat data available here
- Navigant, Gas for Climate, March 2019, section 6.3 (p.77), available here
- International Council on Clean Transportation, *The potential for low-carbon renewable methane in heating, power, and transport in the European Union*, Working Paper 2017-26 (October 2018), p.8, available here
- See Recital (10) of Commission Delegated Regulation (EU) 2016/89 of 18 November 2015 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest and Recital (8) of Commission Delegated Regulation (EU) 2018/540 of 23 November 2017 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest

Non-compliance of the 4th PCI List with EU Law and the Paris Agreement 29 January 2020



The lack of clarity combined with the possibility to revoke the delegation provide significant leverage to the European Parliament to request that the European Commission submits for approval a modified 4th PCI List incorporating only electricity PCIs.

Raphael Soffer

Energy Lawyer +32 2 8088 041 ext: 7025 RSoffer@clientearth.org www.clientearth.org

Eleni Diamantopoulou

Energy Markets Litigation Lead +44 (0)30 3050 5964 EDiamantopoulou@clientearth.org www.clientearth.org



ClientEarth is a registered charity that uses the power of the law to protect people and the planet.

ClientEarth is funded by the generous support of philanthropic foundations, institutional donors and engaged individuals.

Beijing

1950 Sunflower Tower No. 37 Maizidianjie Chaoyang District Beijing 100026 China

Berlin

Albrechtstraße 22 10117 Berlin Germany

Brussels

3ème étage Rue du Trône 60 1050 Bruxelles Belgique

London

274 Richmond Road London E8 3QW UK

Madrid

García de Paredes, 76 duplicado, 1º Dcha. 28010 Madrid Spain

Warsaw

ul. Żurawia 45 00-680 Warszawa Polska

ClientEarth is a company limited by guarantee, registered in England and Wales, company number 02863827, registered charity number 1053988, registered office 10 Queen Street Place, London EC4R 1BE, a registered international non-profit organisation in Belgium, ClientEarth AlSBL, enterprise number 0714.925.038, a registered company in Germany, ClientEarth gGmbH, HRB 202487 HB, a registered foundation in Poland, Fundacja ClientEarth Poland, KRS 0000364218, NIP 701025 4208, a registered 501(c)(3) organisation in the US, ClientEarth US, EIN 81-0722756, a registered subsidiary in China, ClientEarth Beijing Representative Office, Registration No. G1110000MA0095H836.