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BELGIUM

6 November 2020

Dear Honourable Member of the BUDG-ECON Joint Committee

Recovery and Resilience Facility funding for gas projects

We refer to the European Union's Proposal for a Regulation of the European Parliament and of the Council establishing a Recovery and Resilience Facility (**RRF**). We understand that a BUDG-ECON Joint Committee vote is due to occur on Monday 9 November, which will determine whether RRF funds can be used for fossil fuel investments (including gas) or whether such a decision can be deliberated on in a plenary session.

We appreciate that Member States are urgently seeking access to recovery funds during this health and economic crisis. However, the €672.5 RRF is such a significant funding instrument that its compatibility with the EU's climate laws will be imperative, and must be assured.

Specifically, allowing the RRF to fund fossil fuel projects, including gas, would be inconsistent with the emission reductions and clean energy investment required by parties to the Paris Agreement and the European Green Deal. It would put Member States and the RRF in clear breach of EU legal obligations as set out in this letter.

We write to put Member States on notice of these obligations, and urge decision-makers to exclude access to RRF funds for gas-reliant projects.

I. Legal obligations of Member States in designing the RRF

The relevant legal obligations of Member States create a clear imperative to exclude support for gas and other fossil fuel-reliant projects from the RRF:

1. The Paris Agreement provides for greenhouse gas emission reductions and financial flows consistent with limiting global temperature rise to well below 2 degrees. The EU is a party to the Paris Agreement and has repeatedly committed to reducing emissions and facilitating the clean energy investments required by that Agreement.

2. Member States are legally obliged to act consistently with, and in support of, the commitments given by the EU on their behalf in the Paris Agreement. This obligation derives from the principle of sincere cooperation set out in Article 4(3) of the Treaty on European Union (**TEU**). It includes taking such measures as are necessary to ensure the fulfilment of other obligations arising under the Treaties, including in relation to the RRF.

3. Given its legal basis under Article 175 of the Treaty on the Functioning of the European Union (**TFEU**),[1] the RRF must not prejudice the measures decided upon within the framework of other EU policies. Such measures include those forming part of the European Green Deal, including the European Climate Law (currently under development) to ensure net zero emissions by 2050.

4. Article 3(3) TEU requires that the EU work to a high level of protection and improvement of the quality of the environment. Articles 7 and 11 of the TFEU require that environmental protection and sustainable development are integrated in all policies and activities of the EU.

II. Incompatibility of ongoing RRF support for gas projects with Member States and the EU legal obligations

The effect of the legal obligations summarised above is to require the EU and Member States to ensure investment is sustainable, which requires excluding RRF support for further gas-reliant energy projects and associated greenhouse gas emissions.

The EU Commission has accepted 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. In October 2020, EU Member States agreed to support the Commission's proposal to commit to net zero emissions by 2050, a target that the EU will implement in law.

On the Commission's long-term modelling, the share of gas in the energy mix falls to below 20% by 2030 and to around 3% in 2050 in Paris-compliant 1.5°C scenarios.[2] Yet, under the current proposed terms for access to RRF funding, no exclusion applies for fossil fuels, including gas. This means that limited public funding should not continue to be channelled into gas-reliant energy projects with operational lifespans of decades.

Compliance with the Paris Agreement goals requires that all new generation capacity is sustainable. Even "abated" gas-fired power plants – which are not currently commercially proven – are directly linked to significant upstream emissions of methane, an extremely potent greenhouse gas, during extraction, processing and transmission.[3] A recent report by Oil Change International concluded, based on IPCC, IEA and Bloomberg data, that gas cannot be regarded as a bridging fuel because it is highly polluting and unnecessary.[4]

Ongoing investment in gas projects entails stranded asset risk, given the emission reductions required by the Paris Agreement. A 2020 report by consultants Artelys found that already existing gas supply infrastructure in 2030 is resilient to a wide range of potential extreme supply disruptions, including year-long disruptions of Russian supply via Ukraine and Belarus and

[1] Proposal for a Regulation of the European Parliament and of the Council establishing a Recovery and Resilience Facility COM/2020/408 final.
[2] European Commission, Communication 28 November 2018, Figure 2.
[3] International Energy Agency, "The Role of Gas in Today's Energy Transitions" (2019), https://webstore.iea.org/download/direct/2819?filename=theroleofgas.pdf at p. 70.
[4] Oil Change International, "Burning the gas 'bridge fuel' myth: Why gas is not clean, cheap, or necessary", May 2019, http://priceofoil.org/content/uploads/2019/05/gasBridgeMyth_webFINAL.pdf.

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Algerian supply.[5] Given EU gas infrastructure overcapacity, new gas infrastructure projects are not required for security of supply.[6]

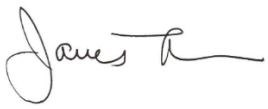
The scale of the energy transformation necessary for the EU to comply with its legal obligations is considerable. The €672.5 billion RRF will play a critical role in setting Member States on the path of consistent emissions reductions. The continued funding of gas-reliant projects would divert resources from projects that will maximise the necessary emission reductions and would prolong dangerously high emission levels that do not correspond to any specific energy needs.

The current proposed RRF law does not provide sufficient safeguards to ensure fossil fuel developments are avoided; requirements for allocation of funding to support climate objectives can be undermined when even larger proportions can be spent subverting those objectives. A more credible attempt to protect the EU's climate targets consistent with the principles of sustainable development is to exclude fossil fuel projects from accessing RRF funding. We regard fossil fuel funding from the RRF as incompatible with the commitments of the EU and in breach of Member States' undertakings in Article 4(3) of the TEU. It would also contravene the requirement that funding allocated under Article 175 of the TFEU must not prejudice other policies, including the European Green Deal.

III. Conclusion

We urge EU decision-makers to exclude fossil fuel projects, including gas, from accessing RRF funding. Further public investment in gas-reliant energy projects is legally unjustifiable. Funding new gas infrastructure with recovery stimulus funding would risk locking in high emissions infrastructure for decades. In addition to the breach of Member States' legal obligations described above, this would expose the EU to ongoing litigation risk. We urge decision-makers to take this opportunity to exclude fossil fuels from accessing consistent with the policies and interests of the EU.

Yours faithfully



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[5] Artelys, "An updated analysis on gas supply security in the EU energy transition", 2020, https://www.artelys.com/wp-content/uploads/2020/01/Artelys-GasSecurityOfSupply-UpdatedAnalysis.pdf.
[6] European Political Strategy Centre, Nord Stream 2 - Divide et Impera Again?, https://ec.europa.eu/epsc/sites/epsc/files/epsc_-_nord_stream_-_divide_et_impera_again.pdf, page 5.

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Annexure: Detailed Legal Analysis[7]

This Annexure provides comments on the international legal obligations of the EU Member States with analysis showing that RRF funding for gas is incompatible with these obligations.

1 The draft law

1. The express objective of the Proposal for a Regulation of the European Parliament and of the Council establishing a Recovery and Resilience Facility (the **Proposal**) is:

   "to promote the Union's economic, social and territorial cohesion by improving the resilience and adjustment capacity of the Member States, mitigating the social and economic impact of the crisis, and supporting the green and digital transitions aimed at achieving a climate neutral Europe by 2050, thereby contributing to restoring the growth potential of the economies of the Member States in the aftermath of the COVID-19 crisis, fostering employment creation and promoting sustainable growth."

2. We understand the reference to "climate neutral Europe" can be interpreted as "emissions neutral Europe". Despite including an express objective of supporting such an objective, the Proposal does not include necessary measures to meet this objective. There are recital references to mainstreaming climate actions and facilitating budget expenditure to support climate objectives.[8] There is also a requirement that the Commission assess how proposed recovery plans contribute to green transitions.[9] However, none of these provisions amounts to clear requirements that expenditure be compliant with the EU's climate targets.

2 Applicable legal framework

3. We set out below the relevant legal obligations of Member States and the EU. In summary:

   a. The EU has committed to reduce its greenhouse gas emissions in order to meet its obligations to limit global temperature rise under the Paris Agreement.

   b. The RRF is required to facilitate the EU's performance of those commitments.

   c. The Treaties establish further specific objectives and requirements for the protection of the environment. The RRF, which is legislatively based in the TFEU, is required to act in furtherance of these objectives and consistently with these requirements.

2.1 The Paris Agreement

4. The 2015 Paris Agreement provides for the parties to it to take steps to limit global temperature rise. Article 2(1) relevantly provides:

[7] This draws from earlier analysis contained in the Annex to the correspondence between ClientEarth and the European Investment Bank dated 7 November 2019, available at: https://www.documents.clientearth.org/wp-content/uploads/library/2019-11-12-clientearth-letter-to-eib-board-of-directors-fossil-fuel-lending-policy-ce-en.pdf.
[8] Recitals 11 and 16.
[9] Article 16.

"1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

(a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;

…

(c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."

5. The EU has repeatedly committed to making the emission reductions required by the Paris Agreement.[10] In a Communication published by the European Commission (the **Communication**)[11] the EU's policy in fulfilling the Paris Agreement was described in clear terms (p.4):

"The EU has been at the forefront of addressing the root causes of climate change and strengthening a concerted global response in the framework of the Paris Agreement. The Paris Agreement, ratified by 181 parties, requires strong and swift global action to reduce greenhouse gas emissions, with the objective to hold global temperature increase to well below 2°C and to pursue efforts to limit it to 1.5°C."

6. The EU (through the Council and the Commission) has also submitted Nationally Determined Contributions pursuant to the UNFCCC on behalf of the Union and each of its Member States.[12]

2.2 EU Treaty provisions on the environment and human health

7. Various provisions of the Treaties also establish the need for the EU to ensure high levels of environmental protection:

a. Article 11 TFEU states:

"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."

[10] For example, Regulation (EU) 2018/842 of the European Parliament and of the Council expressly describes the emission reductions measures it enacts as "contributing to climate action to meet commitments under the Paris Agreement."

[11] 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", COM(2018) 773 final (28 November 2018).

[12] See eg the Submission by Latvia (in its capacity holding the Presidency of the Council) and the European Commission dated 6 March 2015.

b. Article 191(1) TFEU refers to the protection and preservation of the environment and human health, the prudent and rational use of natural resources, and in particular to combating climate change:

> *"1. Union policy on the environment shall contribute to pursuit of the following objectives:*
>
> *- preserving, protecting and improving the quality of the environment,*
>
> *- protecting human health,*
>
> *- prudent and rational utilisation of natural resources,*
>
> *- promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change."*

c. Article 191(2) TFEU then also establishes that Union policy on the environment must be based on the precautionary principle:

> *"2. Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay."*
>
> *According to the EU Court of Justice "the precautionary principle can be defined as a general principle of Community law requiring the competent authorities to take appropriate measures to prevent specific potential risks to public health, safety and the environment, by giving precedence to the requirements related to the protection of those interests over economic interests."*[13]

2.3 Obligations for RRF funding to not prejudice EU policies

8. Given its legal basis under Article 175 of the TFEU,[14] the RRF must not prejudice the measures decided upon within the framework of other EU policies. Such measures include those forming part of the European Green Deal, including the European Climate Law (as currently under development) to ensure net zero emissions by 2050.

2.4 Obligations of Member States

9. The EU's commitments under the Paris Agreement are of particular salience for Member States. Each Member State bears important obligations in this regard pursuant to the principle of "sincere cooperation" as set out in Article 4(3) TEU:

> *"Pursuant to the principle of sincere cooperation, the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Treaties.*

[13] Case T-74/00 *Artegodan v Commission* para 184.
[14] Proposal for a Regulation of the European Parliament and of the Council establishing a Recovery and Resilience Facility COM/2020/408 final.

> *The Member States shall take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union.*
>
> *The Member States shall facilitate the achievement of the Union's tasks and refrain from any measure which could jeopardise the attainment of the Union's objectives."*

10. The Court of Justice has explained this duty (formerly in Article 5 of the Treaty of Rome) in terms of "the solidarity which is at the basis of… the whole of the Community system in accordance with the undertaking provided for in [ex] Article 5 of the Treaty [now Article 4(3) TFEU].": see Cases 6 & 11/69 *Commission v France*, para 16.

11. On its face, Article 4(3) TEU requires the Member States to act so as to ensure that the obligations entered into by the EU internationally are fulfilled.

12. The case law of the Court of Justice in any event makes clear that the principle of sincere cooperation is engaged where the EU acts in international relations. Where (as under the Paris Agreement) the EU has engaged in conduct in the sphere of external affairs, and has developed a common concerted strategy, individual Member States will have duties of "action and abstention": see Case C-246/07 *Commission v Sweden*. A Member State which takes action (or fails to act) in a manner incompatible with the common position of the Union will breach these duties. As the Grand Chamber of the Court of Justice observed in that case (at para 104):

> *"Such a situation is likely to compromise the principle of unity in the international representation of the Union and its Member States and weaken their negotiating power with regard to the other parties to the Convention concerned."*

13. Accordingly, Member States are obliged to ensure that they act consistently with and in support of the commitments made by the EU at an international level.

14. The scope of the principle of sincere cooperation extends beyond ensuring fulfilment of the EU's international commitments. The principle also requires Member States to take such measures as are necessary to ensure the fulfilment of any other obligations arising under the Treaties.

3 Incompatibility of gas funding with the legal obligations

15. The legal framework creates clear requirements that the RRF not be used to further gas extraction, distribution or infrastructure development. These requirements have two complementary aspects:

    a. First, there are direct requirements to reduce emissions, in particular from fossil fuels (and to dedicate funding to clean energy sources) stemming from the Paris Agreement and Treaty provisions on the protection of the environment and human health;

    b. Second, it is also clear that further financing of gas-related projects would lead to the creation of stranded assets, which would contravene the objectives of the RRF to support the green transition while contributing to growth potential of the EU and promoting sustainable growth.

3.1 Duties to reduce emissions and fossil fuel usage and to drive investment in clean energy usage

16. In order for the EU to meet its commitments under the Paris Agreement, the share of energy generated by gas must fall very significantly from its present levels. The Commission has accepted that gas usage must fall to a fraction of its current level by 2050; significant increases in investment to meet energy needs without greenhouse emissions are also required.

17. ***Reduction of gas usage*.** The Commission's November 2018 Communication observed that nearly all greenhouse gas emissions must be eliminated by 2050, and set out the reasoning in detail. In October 2020, EU Member States agreed to support the Commission's proposal to commit to net zero emissions by 2050, a target that will be implemented in law. The 2018 Communication notes that significantly more ambitious action is required beyond the policies already in place to meet the Paris Agreement temperature goals, to which the EU has committed (Section 2, p.5):

    "The policies put in place today will have a continued impact after 2030 and will therefore already go a long way, with projected emissions reductions of around 60% by 2050. This is, however, not sufficient for the EU to contribute to the Paris Agreement's temperature goals."

18. As to the energy sector, the Communication envisages net-zero emissions (Section 3, p.6):

    "The transition towards a net-zero greenhouse gas economy gives energy a central role as it is today responsible for more than 75% of the EU's greenhouse gas emissions. In all options analysed, the energy system moves towards net-zero greenhouse gas emissions. It relies on a secure and sustainable energy supply underpinned by a market-based and pan-European approach."

19. As regards gas and energy, the key points arising from the analysis of these future scenarios are set out in Figure 2 of the Communication.

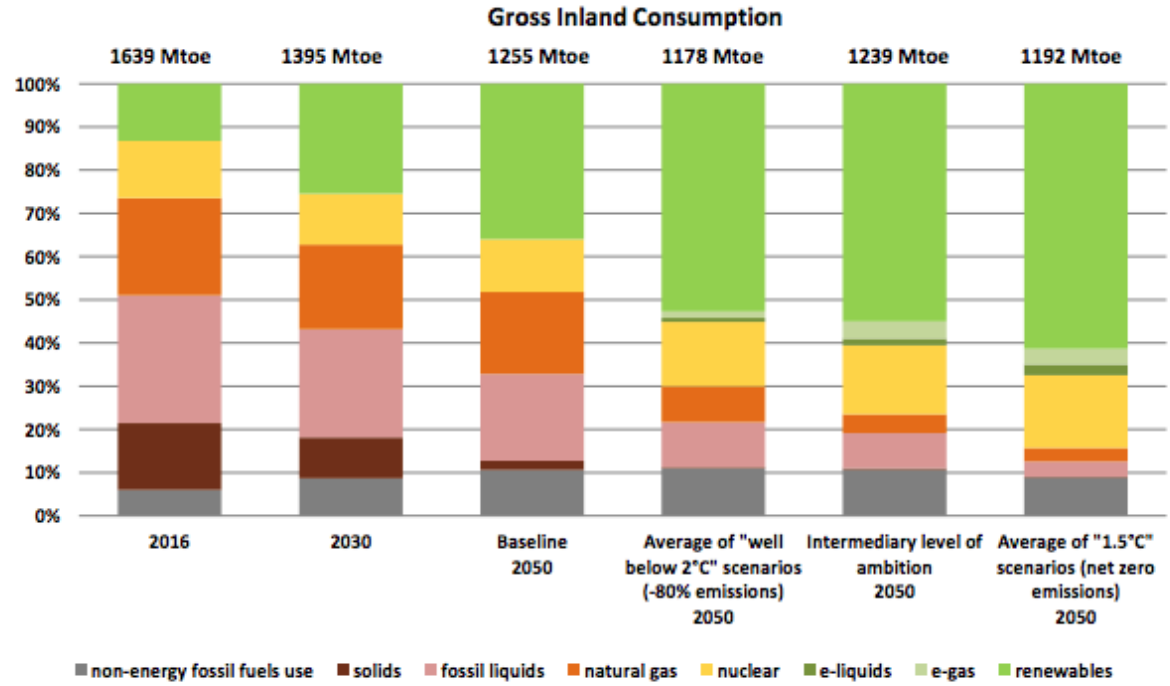

Figure 2. Fuel mix in Gross Inland Consumption

20. This graph shows the different mixes of fuel supporting inland energy consumption at present, and in a range of different scenarios analysed as means of complying with the Paris Agreement (see p.9):

    a. As at 2016, energy from gas accounts for in excess of 20% of gross energy consumption;

    b. This is projected to fall by 2030 to below 20%;[15]

    c. As of 2050, gas consumption is projected under different scenarios:

        i. Under the "baseline" scenario (ie, without the further climate action required by the Paris Agreement), gas consumption would continue to have a similar share as projected in 2030;

        ii. Under the scenario of action to meet the "well below 2C" scenario, involving overall emissions reductions in the order of 80%, the share of gas falls well below 10% of the total;

        iii. At an "intermediary level ambition", the share of gas is projected to be lower still, to around 4% of the total;

        iv. Across an average of scenarios to meet the target for a 1.5C scenario, the share of gas is projected at around 3% of the total.

21. These figures are further explained in the in-depth analysis accompanying the Communication (page 69 – emphasis added):

[15] And even then, of a lower total volume of energy consumption: 1395 Mtoe, as opposed to 1639 Mtoe in 2016.

> *"The share of natural gas (excluding non-energy uses) decreases slowly from 21% in 2015 to 20% in 2030, and then by 2050 more sharply in the decarbonisation to between 7%-9% in the 80% GHG reduction scenarios, and 3%-4% in the stronger reduction cases. Importantly, natural gas is, in several scenarios (P2X, COMBO, 1.5TECH and 1.5LIFE), partially substituted by e-gas, which then represents 4%-6% of the gross inland consumption in 2050."*

22. The Commission's In-Depth Analysis then adds (page 69):

> *"Overall, the decreasing roles of fossil oil and natural gas in the energy mix will contribute to improving the security of energy supply of the EU."*

23. ***Financing for energy and efficiency in a net-zero emissions economy.*** Having set out in clear terms the need for a steep reduction in the role of gas, the Communication also addresses the need for increased investment in the energy system in order to meet a net-zero target by 2050 (see p.16):

> *"Modernising and decarbonising the EU's economy will stimulate significant additional investment. Today around 2% of GDP is invested in our energy system and related infrastructure. This would have to increase to 2.8% (or around € 520-575 billion annually) in order to achieve a net-zero greenhouse gas economy. This means considerable additional investments compared to the baseline, in the range of € 175 to 290 billion a year. This is also in-line with the IPCC special report that estimated that between 2016 and 2035 investments are needed in the energy system representing about 2.5% of world GDP."*

24. The Commission acknowledges that the EU and Member States have a leading role in guiding financing. This is consistent with Article 2(1)(c) of the Paris Agreement which, as noted above, requires the contracting parties to, make "finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development." The Communication is explicit as to the role to be played by the EU and Member States on investment and its relationship to private investment (p.17):

> *"Private business and households will be responsible for the vast majority of these investments. To foster such investment, it is crucial for the European Union and Member States to offer clear, long-term signals to guide investors, to avoid stranded assets, to raise sustainable finance and to direct it to clean innovation efforts most productively. Providing a vision will entrench the direction of where financial and capital flows need to go. In this perspective, transparent stakeholder engagement in planning for a low-carbon future is indispensable."*

25. Under the EU's Clean Energy Package, a target of 32% renewables has been agreed. In a 2016 Communication to EU bodies, the Commission has stated that (p.4):[16]

[16] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank: Clean Energy for All Europeans, COM(2016) 860 final (30 November 2016).

"In order to reach the EU's 2030 climate and energy targets, about €379 billion investments are needed annually over the 2020-2030 period: mostly in energy efficiency, renewable energy sources and infrastructure."

26. The RRF would self-evidently play a key role in contributing to this required funding. Lending to gas projects would divert funds that are needed for that purpose.

27. In summary, fulfilment of the commitments given in the Paris Agreement and realisation of the broader policy objectives of the EU:

    a. will clearly necessitate very significant reductions in the use of gas – even under the minimum standard set by the Paris Agreement of limiting any temperature increase to "well below" 2°C; and

    b. will necessitate significant increases in investment in alternative energy sources and related measures, in which the EU and Member States must play a leading role to guide private investors, and direct finance to clean energy activities most productively.

28. These duties under the Paris Agreement are reinforced by Articles 11 and 191 TFEU. The principles established by those provisions must be interpreted and applied in light of the commitments made under the Paris Agreement and the detailed analysis undertaken by the Commission and other bodies indicating that very significant reductions in fossil fuel usage, including gas, are required to meet the temperature goals set by that Agreement and to have a realistic chance of avoiding greater and dangerous temperature increases.

29. ***Practical effect of the legal framework.*** Given the enormous challenge of reducing gas usage and developing a clean energy system, on any realistic view of the RRF's functions these legal duties require the RRF and EU Member States to curtail the funding of gas-related activities and to do so forthwith.

30. The RRF's main objective is to promote EU cohesion by improving resilience and adjustment capacity of Member States. While a very substantial undertaking, the RRF has finite resources to apply towards energy projects. Any funding allocated to projects that increase the use of fossil fuels is funding that cannot be used to develop renewable energy or other methods of reducing energy consumption, to assist Member States adjust to the decarbonisation agenda.

31. Funding maintenance of gas-related projects, even in the short term, would also be incompatible with the RRF and Member States' duties. While the Commission has made clear that CO2 emissions must fall to net zero by 2050, it is clear that more urgent action is required well before that time and that the maintenance or expansion of gas-related activities is inconsistent with this requirement:

    a. The IPCC has reported that under most of the modelling it has conducted, for temperatures not to exceed 1.5°C, CO2 emissions must by 2030 fall by at least 45% as compared with 2010 levels, and net zero by 2050.[17] The EU Commission has proposed emissions cuts of at least 55% by 2030.

[17] See IPCC Summary for Policymakers (2018), Global Warming of 1.5C: An IPCC Special Report on the impacts of global warming of 1.5C above pre-industrial levels and related global greenhouse gas

b. Moreover, the EU is in reality obliged to reach net-zero emissions earlier than 2050. The Paris Agreement requires contracting parties to implement it (Article 2(2)), "to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances." Given the EU's relatively high share of the historical emissions budget, and its high degree of economic and technical capability today, the EU bears a duty to reach zero emissions ahead of other parties.

32. To the extent it may be suggested that gas can be substituted for other fossil fuels and thereby achieve a lower level of CO2 emissions, this would be misplaced. Compelling evidence shows that in addition to CO2 emissions between the extraction and the combustion of gas, there are substantial leakages of methane. These methane emissions through leaks are typically disregarded or under-estimated but they lead to material increases in overall greenhouse gas emissions, even compared with the coal-sourced energy systems they may replace. For example:

    a. A detailed study for the European Commission in 2015 found (p.112):[18]

    "Another source of gas 'consumption' during transport is leakage. Methane, the principal ingredient of natural gas, is a powerful greenhouse gas; therefore leaks may have a significant environmental effect.

    "For international gas pipelines, the major environmental impact comes from the gas combustion to run the compressor stations. The impact is larger with increased distance. Some of the critical points in the transmission process for gas consumption are turbine compressors that burn natural gas at compressor stations along the way, electric motors and gas engines, power generation, and leaks of methane gas – fugitive emissions – during transmission. Fugitive emissions are a major component of GHG emissions from natural gas systems, however they are often difficult to accurately identify."

    b. The study for the Commission noted most supply chains would involve leaks of up to 1.5% of the total volume. Given that methane has a global warming potential of 25, the report described the effect of these leaks as "quite significant".[19]

    c. Further research complementing the Commission's findings has confirmed that the methane emissions in the supply of gas exceed 1.5% of the total volume and that the replacement of coal units with gas units most likely results overall in an aggregate increase in greenhouse gas emissions. These effects are under-estimated by the International Energy Agency, among others.[20] As a report prepared by Traber and Fell as regards electricity generation, on the basis of a review and synthesis of this research (pp.11-12) observes:

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emission pathways in context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, para C.1 (p.12).

[18] Study for DG Energy, on Actual GHG Data for Diesel, Petrol, Kerosene and Natural Gas (July 2015). Work order: ENER/C2/2013-643.

[19] See section 4.3.4 of the Study.

[20] See Traber and Fell, "Natural Gas Makes No Contribution to Climate Protection", Energy Watch Group (September 2019).

"Figure 3 below shows the substantial negative climate effect when replacing electricity generation in existing coal-fired power plants with electricity generation in new natural gas power plants. The estimated increase of GHG emissions of this switch is +41%. While this is partly a result of the fact that new natural gas applications are sourced from rather expensive and emission-intensive resources, it also becomes clear that with the hypothetic use of global average gas, no savings can be reached either."

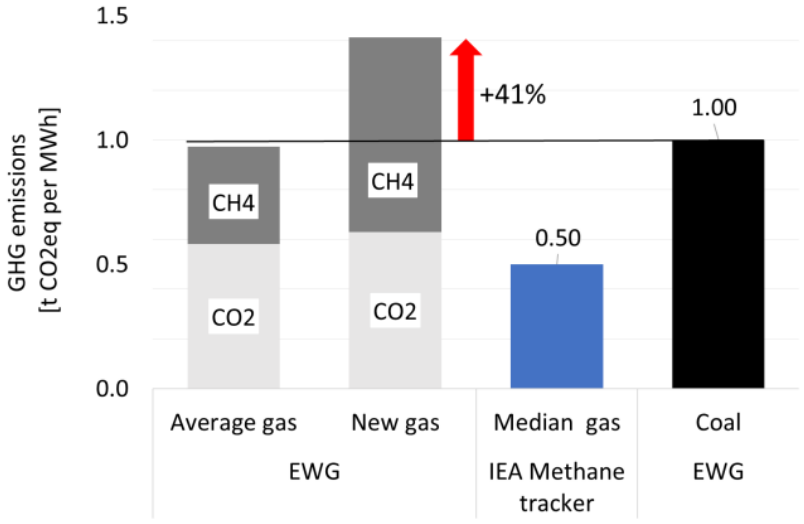

Figure 3: Greenhouse gas emissions from fossil sources and additional emissions from the switch from coal to new natural gas for electricity generation: Additional methane emissions more than offset any CO_2 savings. Source: Own calculation, IEA Methane tracker.

33. It would therefore be misguided to proceed on the basis that gas can provide a short-term "bridge" to reducing greenhouse emissions over the longer term. Any funding directed to gas is funding that is unavailable for energy efficiency projects and renewable energy projects producing no or much lower emissions, and the assumption that gas actually does in aggregate produce lower emissions is highly contested. Given the need to proceed in accordance with precautionary principle as expressed in Article 191(2) TFEU, further public investment in gas-related activities cannot be justified.

3.2 Funding of gas-related activities would be incompatible with RRF objectives

34. As set out above, the RRF objectives include improving the resilience and adjustment capacity of Member States, supporting the green transition, contributing to restoring growth potential of the EU, and promoting sustainable growth.

35. It is difficult to see how lending for gas-reliant projects could meet these requirements. Even apart from the duties on the EU and the RRF to reduce emissions (addressed above), lending for gas-reliant projects is unlikely to deliver on the above objectives.

36. Investment in gas exposes parties to two intersecting challenges.

37. First, gas infrastructure already provides capacity at a level that exceeds current demand and will continue to do so:

a. A 2017 paper prepared for the European Commission on existing gas infrastructure noted that investment in further pipeline or LNG terminal infrastructure was unnecessary and wasteful (p.5):

> *"According to European Commission assessments, the EU currently has the capacity to import around 700 billion cubic meters per year (490 from pipelines, 197 from liquefied natural gas terminals). In 2015, EU gas imports amounted to 300 billion cubic meters. There is thus an infrastructure overcapacity in the EU as it currently imports less than half the gas that it could when using all existing available infrastructure."*

b. As such, the construction of new infrastructure would create stranded assets (p.6):

> *"the building of Nord Stream 2 will lead to stranded assets in the future, either in the form of the new pipeline itself or of other pipeline investments which would get stranded due to the change in entry points and linked downstream gas flows."*

c. To similar effect, the Commission's 2017 Energy Union report stated that the gas transmission network was largely complete: "The gas grid has become more resilient and nearly all Member States… already have access to two sources of gas." It forecast that under existing projects, all Member States (other than Malta and Cyprus) would have access to three sources of gas by 2022 (Section 2.3, p.7).

38. It is therefore highly doubtful (at best) that investment to increase the capacity of gas infrastructure in the EU would find anything like a corresponding level of demand under current conditions.

39. Second and in any event, demand is also likely to fall significantly. As the Commission has noted in its Communication, gas usage will fall to around 3-4% of total energy needs by 2050 under the trajectories aligning with the Paris Agreement. The Communication notes that energy demand will also fall over the period to 2030; it follows that the overall level of infrastructure required on the supply side will also decline over that period (including in the supply of gas).

40. Given the declining trajectory for demand and the current over-supply of capacity in gas infrastructure, the economic case for further investment in gas is highly questionable. As such, such further financing of gas-related activities would be wasteful and would lead to stranded assets. It could not increase economic productivity in general or contribute to the development of the internal market.

41. It bears emphasis, moreover, that even if the role of non-fossil gases grows in the energy sector, it is highly doubtful that an increase in the use of these forms of gas could take up the excess capacity left by a decline in gas:

a. The Commission's 2018 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%.

b. Other economic analysis is to a similar effect. Eurostat figures for 2018 indicate that gross EU consumption of gas in 2018 amounted to 18,168.77 PJ.[21] Research conducted on behalf of major gas suppliers indicated that under optimal conditions, the supply of renewable methane in 2050 would reach 1170 TWh,[22] 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.[23] Even on the higher of these estimates, the supply of 'clean' gas (and hence the usage of the existing level of gas infrastructure) would be significantly lower than at present.

42. In summary, it is difficult to see how the RRF's objectives can be met for activities involving gas, given these factors. This conclusion is fortified by the Commission's finding in the Communication that (as set out above) a decline in the role of gas "will contribute to improving the security of energy supply of the EU".

3.3 Conclusion

43. We would regard action by Member States to allow RRF funding for gas as incompatible with the commitments of the EU and in breach of Member States' undertakings in Article 4(3) TEU. Such an allowance would also contradict the legislative basis for the RRF, as it would prejudice the EU's flagship climate policy, the European Green Deal. It is also not compliant with the emission reductions required by the Paris Agreement and it poses stranded asset risk of ongoing gas investment.

44. We urge EU decision-makers, representing the EU Member States, to amend the Proposal to exclude funding for fossil fuels, including gas (and gas-derived hydrogen). Further public investment in gas-reliant energy projects cannot be justified.

[21] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Provisional_natural_gas_balance_sheet_by_country_2018_-_table_1.png
[22] Navigant, Gas For Climate, March 2019, section 6.3 (p.77).
[23] International Council on Clean Transportation, Working Paper 2017-26 (October 2018), p.8.