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CEE Bankwatch Network input to the Energy Community PECIs and PMIs consultation 2020

Gas projects

GAS_01 Northern Gas Interconnection Pipeline of Bosnia and Herzegovina -Croatia (Slobodnica (HR) – Brod (BiH) - Zenica)

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The goal of the project is to diversify gas routes and supply sources for Bosnia and Herzegovina, which would encourage the use of gas by making it seem more attractive and less vulnerable to supply disruptions.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas extraction and transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year Global Warming Potential (GWP), considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the EU PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us belond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades.*"

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. In the short term it may seem so, but overall, gas is an imported fuel that is by nature insecure compared to freely available domestic renewable energy sources. BIH has significant energy savings potential, which would be a much more cost-effective and long-term way to contribute to increasing security of supply.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Around 40 percent of Bosnia and Herzegovina's electricity is generated from hydropower, and together with the country's relatively high level of interconnection and small population, this forms a good basis for balancing intermittent renewables, without a need to rely on gas. Regarding heating, wood biomass is already widespread, and although it needs to be used much more efficiently, replacing it with gas will rather decrease than increase the use of renewable energy.

Additional investment in gas infrastructure is more likely to serve as a distraction from investments in renewable energy, energy savings and solutions like heat pumps than to support them.

Q6: *Is, in your view, the project contributing to diversifying gas supply sources or routes?*

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_02 Western Gas Interconnection Pipeline BiH - HR (Licka Jesenica - Trzac - Bosanska Krupa with branches to Bihac and Velika Kladusa)

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The goal of the project is to enable gasification of this part of Croatia and part of Una-Sana Canton. This will expand, not reduce, the use of fossil fuels in these areas, at a time when EU countries like the Netherlands are developing plans to phase out the use of gas.

For heating, more efficient use of biomass or increased use of heat pumps would be a much more appropriate solution.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us belond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us belond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries,*

cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades."

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. Our estimate is that it will largely replace locally available biomass with an external resource, which is inherently less stable in supply. While biomass can contribute to overcutting of forests, PM pollution and other issues, using it more efficiently would improve the situation and it can be complemented by other sources of renewable energy, so there is no real need to introduce gas into this area.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: *Is, in your view, the project supporting better integration of renewable energy in the market?*

(Yes/ No/ I don't know. Motivate your answer)

No. Regarding heating, biomass is already widespread, and although it needs to be used much more efficiently, replacing it with gas will rather decrease than increase the use of renewable energy.

Additional investment in gas infrastructure is more likely to serve as a distraction from investments in renewable energy, energy savings and solutions like heat pumps than to support them.

Q6: *Is, in your view, the project contributing to diversifying gas supply sources or routes?*

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of

decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_03 Southern Gas Interconnection Pipeline Bosnia and Herzegovina - Croatia (Zagvozd-Posusje-Novi Travnik) with a main branch to Mostar

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The goal of the project is to diversify gas routes and supply sources for Bosnia and Herzegovina, which would encourage the use of gas by making it seem more attractive and less vulnerable to supply disruptions.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us belond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades."

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. In the short term it may seem so, but overall, gas is an imported fuel that is by nature insecure compared to freely available domestic renewable energy sources. BIH has significant energy savings potential, which would be a much more cost-effective and long-term way to contribute to increasing security of supply.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Rather the opposite. Around 40 percent of Bosnia and Herzegovina's electricity is generated from hydropower, and together with the country's relatively high level of interconnection and small population, this forms a good basis for balancing intermittent renewables, without a need to rely on gas. Regarding heating, biomass is already widespread, and although it needs to be used much more efficiently, replacing it with gas will rather decrease than increase the use of renewable energy.

Additional investment in gas infrastructure is more likely to serve as a distraction from investments in renewable energy, energy savings and solutions like heat pumps than to support them.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_04B Gas interconnection Greece - North Macedonia

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The goal of the project is to diversify gas routes and supply sources for North Macedonia, which has the potential to decrease its price for final consumers and would encourage the use of gas by making it seem more attractive and less vulnerable to supply disruptions.

The current gas infrastructure is mainly used by the CHPs in Skopje with around 80% of the imported natural gas used by them. Most of the main gas corridors between other cities are currently under construction, the secondary supply network in settlements is mostly at the feasibility study stage and connections to households are virtually non-existent, which means that the gasification will have no impact as a transition fuel in the next few years when it could be most useful.

The total investments needed for all this are estimated at around EUR 350 million, and if households are expected to massively switch to gas for heating and cooking, their investments for internal infrastructure and household appliances will most probably reach the same amount. All this sums up to a lot of time, resources and finances wasted during a time when all these should be directed toward renewables and energy efficiency.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. While it may increase the security of gas supply, it does not increase the overall security of energy supply. North Macedonia's gas supply is 100% imported and increased use of gas will increase dependence on import for energy. The North Macedonia Energy Strategy foresees a significant increase of net import in final energy consumption that at some point reaches up to 70% and this is in large part driven by the planned increased use of natural gas. NMK has significant energy savings potential and huge untapped solar potential, which would be a much more cost-effective and long-term way to contribute to increasing security of supply.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

No. Most of the main gas corridors in North Macedonia will remain controlled by a single state-owned operator, with the exception of the pipeline from the Bulgarian border to Skopje.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Gas accounted for only around 7% of primary energy consumption in the last few years in North Macedonia. Even with the potential closure of the coal-fired power plants, the ambitious gasification plan for the country will significantly change this and may lead to an increased contribution of fossil fuels to final energy consumption.

Additional investment in gas infrastructure, even when it is only for diversification of supply sources, is more likely to serve as a distraction from investments in renewable energy, energy savings and solutions like heat pumps than to support them.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_08 Gas Interconnector Serbia - Romania

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. In order to reach EU decarbonisation targets, financial investments in both Romania and Serbia need to be steered towards projects that support a sustainable and clean energy transition.

Natural gas cannot be considered a suitable transition fuel for various reasons, the most relevant being the high level of methane emissions throughout the gas infrastructure chain and the high cost of production.

Moreover, investing in natural gas infrastructure will hinder the decarbonisation process, as the lifetime of the installations extends over several decades. For the transition to sustainable and clean energy sources to make significant progress, investments need to be in line with the Paris Agreement and to contribute to binding energy and climate objectives that both countries will be required to reach in the coming decades.

Q2: Is, in your view, the project contributing to regional market integration?

(Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. According to official documents from the Romanian TSO, Transgaz, the bi-directional interconnection gas pipeline between Romania and Serbia will be implemented only after the international BRUA gas pipeline is finished and the natural gas reserves from the Black Sea are put into production. Given Romania's unstable fiscal legislation regarding the natural gas sector, the investments in the Black Sea's gas fields are now either delayed or uncertain if they will be implemented.

As a consequence, the procedure for reservation of transport capacity in the BRUA pipeline Phase II project, which consists of increasing the gas transport capacity from 1.75 to 4.44 billion cubic metres so the exploited Black Sea gas can reach the European market, has failed on the ground that gas demand has not reached the expected level in order to make the investment economically viable and feasible. Successful capacity allocation was a prerequisite for starting the implementation of the project.

Taking the above into consideration and the fact that a high proportion of future Black Sea natural gas production is currently being reconsidered by investors, the implementation of the proposed project may become redundant and it will not contribute to increasing the security of supply.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. In order to reach renewable and decarbonisation targets and for the 2050 climate neutrality target to become a reality, investments in fossil fuels must be stopped. Investing in the construction of another natural gas pipeline only translates into large amounts of money being shifted away from sustainable investments in renewables deployment and energy efficiency measures.

Q6: *Is, in your view, the project contributing to diversifying gas supply sources or routes?*

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_09 Gas Interconnector Bulgaria - Serbia

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The goal of the project is to diversify gas routes and supply sources for Serbia, which would encourage the use of gas by making it seem more attractive and less vulnerable to supply disruptions.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades."

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No.

In the short term it may seem so, but overall, gas is an imported fuel that is by nature insecure compared to freely available domestic renewable energy sources. Serbia has significant energy savings potential, which would be a much more cost-effective and long-term way to contribute to increasing security of supply.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Additional investment in gas infrastructure is more likely to serve as a distraction from investments in renewable energy and energy savings than to support them. Regarding heating, gas is likely to partly displace existing biomass use, whereas using biomass more efficiently and complementing it with solar thermal and heat pumps would better promote the efficient use of renewable energy.

Regarding electricity, intermittent renewable energy is not likely to be better integrated by the use of gas in Serbia because according to the results of the <u>SEERMAP project</u>, gas for electricity generation will be largely uncompetitive in the coming decades.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_10 Gas Interconnector Serbia - Croatia

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The goal of the project is to diversify gas routes and supply sources for Serbia, which would encourage the use of gas by making it seem more attractive and less vulnerable to supply disruptions.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades.*"

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. In the short term it may seem so, but overall, gas is an imported fuel that is by nature insecure compared to freely available domestic renewable energy sources. Serbia has significant energy savings potential, which would be a much more cost-effective and long-term way to contribute to increasing security of supply.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Additional investment in gas infrastructure is more likely to serve as a distraction from investments in renewable energy and energy savings than to support them. Regarding heating, gas is likely to partly displace existing biomass use, whereas using biomass more efficiently and complementing it with solar thermal and heat pumps would better promote the efficient use of renewable energy.

Regarding electricity, intermittent renewable energy is not likely to be better integrated by the use of gas in Serbia because according to the results of the <u>SEERMAP project</u>, gas for electricity generation will be largely uncompetitive in the coming decades.

Q6: *Is, in your view, the project contributing to diversifying gas supply sources or routes?*

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_11 Gas interconnection Serbia - North Macedonia

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The goal of the project is to connect two major gas pipelines from the countries, which has the potential to decrease its price for final consumers and would encourage the use of gas by making it seem more attractive and less vulnerable to supply disruptions.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades.*"

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. While it may increase the security of gas supply, it does not increase the overall security of energy supply. North Macedonia's and Serbia's gas supply is 100% imported and their increased use of gas will increase dependence on import for energy.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

No. It will only connect existing (or planned) pipelines of the already existing operators.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Gas accounted for only around 7% of primary energy consumption in the last few years in North Macedonia. Even with the potential closure of the coal-fired power plants, the ambitious gasification plan for the country will significantly change this and might lead to increased contribution of fossil fuels to the final energy consumption.

Intermittent renewable energy is not likely to be better integrated by the use of gas because according to the results of the <u>SEERMAP project</u>, gas for electricity generation will be largely uncompetitive in the coming decades.

Additional investment in gas infrastructure, even when it is only for diversification of supply sources, is more likely to serve as a distraction from investments in renewable energy, energy savings and solutions like heat pumps than to support them.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_13 ALKOGAP

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The project is the exact opposite of decarbonisation, as it would facilitate the gasification of Kosovo, which has until now not used significant amounts of gas. Working together with Albania can make decarbonisation significantly easier for Kosovo due to Albania's high share of hydropower, which lessens the need for Kosovo to build its own dispatchable sources. In addition, Kosovo has very high potential for reducing energy losses, high potential for renewable

energy sources. Investing in gasification crowds out investments in other urgent priorities such as reducing distribution losses, insulating housing, heat pumps etc. and must be avoided.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades.*"

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. The project would increase Kosovo's import dependency. Given its own resources for solar, wind and energy efficiency, gas would be an expensive distraction, not making a significant contribution to security of supply.

Q4: Is, in your view, the project increasing competition in the market?

(Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. It would make much more sense to use Albania's existing hydropower infrastructure to balance intermittent renewables in Kosovo, rather than becoming reliant on an imported and by nature insecure energy source to do so.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_16 Ionian Adriatic Pipeline (IAP)

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The project is the exact opposite of decarbonisation, as it would facilitate the gasification of Montenegro and Albania, which have until now not used significant amounts of gas. Both countries are in a strong position for leapfrogging towards decarbonisation because they have small populations, very high potential for reducing energy losses, high potential for renewable energy sources, and large shares of electricity generation from existing hydropower plants, which can help to balance intermittent renewables. Investing in gasification crowds out investments in other urgent priorities such as reducing distribution losses, insulating housing, heat pumps etc. and must be avoided.

Moreover, the benefits of gas compared to coal in climate terms have been largely overestimated by underestimating methane emissions. Bankwatch and ODG's 2018 study Smoke and Mirrors showed how the emissions of the TAP pipeline had been underestimated, including by the financial institutions that financed the project. Such issues would also apply to the IAP given its connection to the TAP pipeline.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us belond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades.*"

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. The project would increase Montenegro and Albania's import dependency. Given their own resources for solar, wind, energy efficiency and existing hydropower plants, gas would be an expensive distraction, not making a significant contribution to security of supply.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know. But even if it is, this is not in a good way, as its feasibility study concludes that its feasibility is marginal and shows that it is in partial competition with the LNG terminal at Krk in Croatia, which is currently under construction. We need to underline that we also oppose the LNG terminal, but if it is already being built then it makes no sense at all to build a project that is in competition with it.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Both Montenegro and Albania have high shares of existing hydropower generation which, on its own, is highly climate-vulnerable and insufficient, but it can ensure integration of a high share of variable renewables into the market with no need for the addition of gas.

The IAP would in fact work against an increase of renewables in Montenegro as the feasibility study found that it is on the margin of economic feasibility, and its viability would only be likely under several conditions, including:

1) Gasification efforts of distribution customers in Albania, Montenegro and BiH along the IAP route are expedited and in place within five years of IAP operation, and

2) Gas to power developments in Montenegro and Croatia to reach a minimum of additional capacity of 1,500 MW within five years of the operation of the pipeline.

This means that efforts to promote the pipeline would have to be accompanied by the promotion of additional gas power generation and distribution networks, which is exactly the opposite of ensuring a higher share of renewable energy in a situation where the countries already have good interconnection and a high share of existing hydropower.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_19 White Stream

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The project is the exact opposite of decarbonisation, as it would increase the dependence of Georgia on natural gas, which is already problematic, taking into account that <u>natural gas</u>

intensity is already high. It would also support more over-reliance of Georgia on gas, despite the fact that almost 100% of gas consumed is imported. Additional investments in fossil fuel infrastructure will steer away all efforts needed for a transition to a clean energy system. Increasing dependency on fossil gas while ignoring the considerable CO_2 and methane emissions will not only risk the achievement of all climate objectives, but it will also redirect significant expenditure that could be used to mitigate the existing climate crisis. Achieving net-zero emissions in the EU requires a climate-proof and sustainable infrastructure and the financial flows need to be aligned to this objective.

In addition, similarly to the Southern Gas Corridor project, we oppose the project on moral grounds. The EU must not make deals with countries where human rights violations are so blatant and frequent.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. The project would increase the dependency of Georgia and Romania. Georgia is in the group of countries with the highest risk and low resilience, for both domestic and external factors, when it comes to natural gas. The main reason is that the country is almost 100% dependent on imports for natural gas. Results for political stability and diversity of suppliers show high risk and low resilience respectively, suggesting that Georgia is highly susceptible in the case of a physical interruption of supply.

Romania is already preparing to increase its natural gas supply by putting into production the Black Sea gas fields, which will also reach the European market once the BRUA pipeline is commissioned. Taking into consideration that the reservation for transport capacity for BRUA pipeline Phase II has failed on the ground that gas demand did not reach the expected level in order to make the investment economically viable and feasible, it is clear that another route for diversifying the supply sources of natural gas is unnecessary and represents a financial liability, given the large amount of financing involved in its implementation.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

No. In Georgia around 75% of energy consumption comes from oil and gas that is all imported. The project agreement considers that 10% of the pumped gas would go as a benefit to Georgian State. That would increase the dependence of Georgian supply on the same source, Azerbaijan, even if it also comes from Turkmenistan in the case of White Stream 2. Natural gas supply in Georgia is almost 100% from external sources. There is no gas storage facility and winter peak demand is solely dependent on importers and importing infrastructure resilience.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Georgia has a high share of existing hydropower generation that could already support significant integration of renewable energy.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_22 SCPFX

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The project is the opposite of decarbonisation as it would increase gas consumption, rather than decreasing the consumption of gas and oil.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. Turkey <u>receives</u> around 53% of gas from Russia and 14% from Azerbaijan, and in theory according to the country energy policy, it is planned to "*shift from an energy sector based mainly on imported natural gas to an integrated energy industry based on local resources such as coal and renewables, a move strongly supported by the government*". In other words, Turkey is implementing a "national energy and strategic mining policy." However, in addition to TANAP (under development 2018-2019), the construction of the <u>Blue Stream pipeline</u> continues, under

a 25 year contract with Gazprom Russia to increase the gas supply, for an additional 16 billion cubic metres annually.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market? (Yes/ No/ I don't know. Motivate your answer)

No. Turkish energy generation already has a high share of gas and hydropower, so there is no need for additional capacity to balance intermittent renewables.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_25 Trans-Balkan Corridor Bidirectional Flow between Moldova and Ukraine

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The project consists of upgrading gas infrastructure which was built to transport gas between Romania and Russia in the 1970s, but its current expansion relies heavily on the completion of LNG terminals in Turkey and Greece and on the commissioning of offshore gas projects in the Black Sea by Romania. Definitely, increasing the gas production and transport capacity will not contribute to the 2050 goal of decarbonisation.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. The project is highly controversial, as it is in political competition with TurkStream. While traditionally, this pipeline was used to transport Russian gas via Ukraine to Bulgaria and Turkey, since the beginning of 2020, Ukraine announced it was only delivering gas to Moldova and Romania. It appears now as an oversized transit capacity for a reduced distribution. Even though Ukraine and Russia have reached a new five-year agreement for gas transit, the heated relationships between the two countries question the potential "security of supply". In addition, as of January 2020 it is reported that Romania is only importing gas through T1 (Russian gas via the Black Sea, bypassing Ukraine), so this interconnector one works one way in reality, not in reverse-flow.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know. In theory yes, historically this interconnection has been a monopoly by Gazprom and now it would allow intake of gas coming from various production fields. But in reality, the Black Sea offshore projects in Romania are not moving forward given the legislative uncertainties and price fluctuations (some of the licence holders and concessionaires, eg. ExxonMobil, are considering selling their concessions). Under these circumstances, it is difficult to imagine how the project's aim of "facilitating export of natural gas from Romania to CEE Region" would materialise, given that Romania's internal gas supply is currently not enough to meet domestic demand.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. There is absolutely no link between gas infrastructure development and renewable energy integration. Availability of gas is a deterrent to upscaling RES projects. Using gas for electricity generation will become increasingly expensive and uncompetitive, while in the heating sector it comes with the burden of building additional infrastructure which is costly, takes a long time and could potentially become unused as the prices for heat pumps and solar thermal keep dropping.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_26 Gas Interconnection North Macedonia - Kosovo

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. The project is the exact opposite of decarbonisation, as it would facilitate the gasification of Kosovo, which has until now not used significant amounts of gas. Kosovo is in a strong position for leapfrogging towards decarbonisation because it has a small population, very high potential for reducing energy losses and high potential for renewable energy sources, and can join with Albania to use existing hydropower for balancing. Investing in gasification crowds out investments in other urgent priorities such as reducing distribution losses, insulating housing, heat pumps etc. and must be avoided.

Moreover, the benefits of gas compared to coal in climate terms have been largely overestimated by underestimating methane emissions. Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy</u> <u>Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades.*"

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. The project has no impact on energy supply in North Macedonia whatsoever and it will not have a significant impact on Kosovo's energy supply before the end of this decade as it will require additional infrastructure before it is utilized. If Kosovo is to decarbonise the energy sector by 2050, there is no point in starting gasification now and this might turn out to be a stranded asset that has barely any contribution to Kosovo's energy sector.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

No. The project will not diversify gas suppliers in North Macedonia. In Kosovo it is facilitated by the Ministry and will not bring any positive changes in market competition.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. The main goal of the project is to supply gas to Kosovo, so it has no influence on the North Macedonian renewable energy uptake.

Kosovo's electricity is almost completely produced by coal-fired power plants and the use of renewable energy is largely limited to burning biomass for household heating. This means that the country requires huge investments in renewables if it is to meet decarbonisation targets. Starting gasification now will only be a distraction from the required investments to meet those targets. For balancing, it would be cheaper and more effective to use Albania's existing hydropower capacity.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_27 Interconnector Romania - Ukraine

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. This project is a completely new infrastructure development project, entailing the construction of 130 km of pipelines and increase of capacity of existing compression stations. A greenfield gas project at a time when science has been clear that no new CO2-emitting infrastructure should come online if we are to stay within the 1.5 degrees average global temperature increase is nothing but a major <u>defiance of science</u>. It also relies primarily on transporting gas from a yet unexploited gas reserve in the Black Sea.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. The supply on the Ukrainian side has proven unstable in the last 10 years, while on the Romanian side, the project is supposed to export gas extracted from the Neptun Deep offshore field in the Black Sea. The announcement of this project took many experts in Romania by surprise as the gas system operator's priority has always been upgrading the existing interconnector capacity, never building new ones. The idea of the project emerged against the backdrop of the BRUA pipeline becoming BRU, i.e. stopping in Hungary. OMV, one of the concessionaires of Neptun Deep then announced that not all gas extracted from the Black Sea needs to exit Romania through the West. So this interconnection appears more as a backup plan for the company to keep its exports at similar levels, and not driven by a real need for supply in Ukraine.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. This is a major investment - estimated at 125 million EUR - that crowds out the much needed investments in renewables in both countries. In fact, the North of Romania and the South of Ukraine would really benefit from RES capacity, as both regions lack such projects.

The money could be better spent then on electricity interconnectors to balance intermittent RES generation.

Q6: *Is, in your view, the project contributing to diversifying gas supply sources or routes?*

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_28 TANAPX

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. It is the exact opposite of decarbonisation.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades." This

means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

In addition, we oppose the project on moral grounds. The EU must not make any kind of deals with countries where human rights violations are so blatant and frequent.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. In the short term it may seem so, but overall, gas is an imported fuel that is by nature insecure compared to freely available domestic renewable energy sources.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. It is most likely to be competing with renewable energy.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

GAS_29 SCP Georgian Offtake Expansion for EU LNG Swap

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. It is the exact opposite of decarbonisation.

Estimates of exactly how much gas contributes to climate change are continuously being revised upwards, and depend on the Global Warming Potential (GWP) assigned to methane as well as assumptions about the extent of fugitive emissions during gas transportation. One estimate cited in the <u>EBRD's Energy Strategy</u> is that in the best case, gas combustion saves a maximum of 30% of greenhouse gas emissions compared to coal (with a 20 year GWP, considering methane's atmospheric lifetime of around 12 years) - hardly an advantage worth investing hundreds of millions of EUR for.

The EU Ombudsman is currently <u>looking into</u> whether the EC has committed maladministration in failing to ensure an adequate climate impact assessment for the PCI fossil fuel project lists chosen so far, and we urge the Energy Community to ensure that a thorough GHG emissions assessment is carried out for any gas projects being seriously considered as PECIs.

Already in 2016 Oil Change International <u>calculated</u> that no more fossil fuel infrastructure can be built if we are to meet the goals of the Paris Agreement. The potential carbon emissions from the oil, gas, and coal in the world's operating fields and mines would already take us beyond 2°C of warming, and even excluding coal, the reserves in currently operating oil and gas fields would take us beyond 1.5°C.

The <u>IEA World Energy Review 2018</u> had similar findings: "*The analysis reviewed all current and under-construction energy infrastructure around the world – such as power plants, refineries, cars and trucks, industrial boilers, and home heaters – and finds those will account for some 95% of all emissions permitted under international climate targets in coming decades.*"

This means there is simply no room for building new fossil fuel infrastructure. All efforts must now go towards sustainable decarbonisation and energy savings.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

No. In the short term it may seem so, but overall, gas is an imported fuel that is by nature insecure compared to freely available domestic renewable energy sources.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q6: Is, in your view, the project contributing to diversifying gas supply sources or routes? (Yes/ No/ I don't know. Motivate your answer)

I don't know. In particular for countries which have historically not been gas dependent, diversifying gas supplies should not be a priority. This is a distraction from the ultimate goal of decarbonisation. Investing in new gas infrastructure threatens to lock in resources into outdated fossil fuel infrastructure and we should not be considering new gas sources now.

Electricity Projects

EL_01 Trans Balkan Corridor

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

I don't know. Our main concern is that care should be taken with the routing as it looks like it goes through the Tara National Park in Serbia.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

EL_07 Mukacheve (Ukraine) – V.Kapusany (Slovakia) OHL rehabilitation

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

I don't know. Perhaps it does if the long term usage of this infrastructure would focus on renewable generated electricity transport. For the time being, the power line on the Ukrainian side is connected to the Burshtyn coal power plant, thus raising question marks about carbon leakage. However, if the Burshtyn power plant shuts down at the end of the "limited lifetime derogation" in 2023, by the time part of this project is meant to be commissioned and if carbon pricing in Ukraine is on a reasonable level to discourage high carbon electricity exports, then the infrastructure could serve for balancing RES intermittencies in the two countries.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

Yes. Ukraine's power grid is expected to adhere to the European Network of Transmission System Operators though this project.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

I don't know. The project is expected to bring an increase in the transfer capacity of UA-SK interconnector by 30%. So while that is not much to qualify as security of supply on its own, it would bring a small contribution.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

I don't know.

EL_09 750 kV Pivdennoukrainska NPP – Isaccea OHL rehabilitation and modernisation

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

I don't know. The last reactor at the South Ukraine nuclear power plant is expected to close in 2033, while two others' renewed operating licenses expire in 2025 and 2030, so if this power line is expected to have a contribution to the 2050 decarbonisation goal, it should be clear that it will reserve capacity for renewable electricity. Already there is an <u>operational wind farm</u> on the Ukrainian side, so intermittency could be balanced through interconnection.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

Yes. Ukraine currently exports electricity only from the Burshtyn Island, disconnected from the main grid, and where production is dominated by coal electricity, so in view of balancing renewable projects (solar PV and wind) expected to increase in capacity in the South Ukraine/ Prymorska region, this project would be welcome.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

Yes. The project would contribute to reducing Ukraine's dependency on Russia and contribute to less carbon intensive imports of electricity from Romania's wind farms near Isaccea.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. It should be made clear that the OHL would be used for connecting current and future RES projects planned in the area and not to export nuclear energy generated in one of the oldest nuclear power plants in Europe, which suffers critical vulnerabilities. Nuclear energy is not renewable, its promoters distract from its vulnerabilities, high costs and unsolved waste issues - see http://stories.bankwatch.org/10things.

EL_12 North CSE corridor

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

I don't know. The integration of the Cibuk wind farm and Djerdap-Portile de Fier would be compatible with a decarbonisation agenda.

But the question is whether this investment also supports the Kostolac coal power complex (the four units totalling 1 GW installed capacity) which releases 7.37 million tonnes of CO_2 annually (2018 data), with an additional unit planned to be constructed which would generate an additional 2 million tonnes CO_2 /year. For comparison, all of Romania's power plants (totalling 5 GW installed capacity) released 16 million tonnes in the same year. This uptake of coal electricity could be partially mitigated by a carbon pricing mechanism adopted in the Energy Community countries, but this would not eliminate the CO_2 emissions themselves, otherwise balancing renewable intermittency with coal defeats the purpose of decarbonisation. There are plans for wind and solar PV farms at Kostolac, however, so their integration in the transmission lines should be prioritised.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know. But by comparison with some of the other projects, this doesn't appear to be a "priority" considering the planned commissioning date. The interconnector at Djerdap is an entry point to the EU market for 3 Western Balkan countries if connected to EL_01, so the projects are interdependent.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

Yes, but only provided that RES generation is connected and used to balance intermittencies in the two countries.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market? (Yes/ No/ I don't know. Motivate your answer) Yes. The Cibuk wind farm is already operational, so its connection should be prioritised, as should be the other RES generation projects in the pipeline (eg. wind and solar PV farms at Kostolac). The Djerdap-Portile de Fier Hydro plant has been used as baseload capacity for decades, but its reliance may become problematic with increased episodes of prolonged drought.

EL_13 Black Sea Submarine Cable

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

I don't know. The approximate cost of the project is USD 3 billion, therefore a thorough cost benefit analysis is needed. Especially, it would not be advisable if the main goal of the project is to export electricity from proposed Georgian hydropower plants, further increasing Georgia's seasonal imbalance and environmental damage.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

Yes. It would support regional integration with the EU electricity network.

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

I don't know. In theory it has the potential to substitute Russia for electricity imports needed in winter.

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know. Too much depends on prices plus existing PPP contracts in Georgia.

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

I don't know. The information available is not sufficient. In general, the project may help balance the Georgian energy system's seasonal fluctuations, including the output for new renewables, and export excess energy. However, if the project is considered as an electricity export opportunity rather than interconnection that may lead towards increased the construction of hydropower projects in Georgia and accompanying environmental and social problems.

Oil projects

OIL_01 Brody Adamovo oil pipeline project

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. "The initial capacity of the oil pipeline will be 10 MTA. In the future, if larger quantities of crude oil are needed from the Caspian region, the pipeline's capacity can be increased to 20 MTA." This means that investors still plan to expand their oil investments, which is not compatible with decarbonisation.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

I don't know

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Every additional oil pipeline changes the course of money from renewables to fossil fuels. This project crowds out development of renewables and strengthens the position of oil.

OIL_02 Transportation of different crudes of oil via Southern Druzhba pipeline

Q1: Is, in your view, the project needed to support the Energy Community policies, including the aim of decarbonisation of the energy sector by 2050? (Yes/ No/ I don't know. Motivate your answer)

No. By definition oil pipeline investments are not compatible with a decarbonisation agenda.

Q2: Is, in your view, the project contributing to regional market integration? (Yes/ No/ I don't know. Motivate your answer)

I don't know

Q3: Is, in your view, the project contributing to increasing the security of energy supply? (Yes/ No/ I don't know. Motivate your answer)

I don't know

Q4: Is, in your view, the project increasing competition in the market? (Yes/ No/ I don't know. Motivate your answer)

I don't know

Q5: Is, in your view, the project supporting better integration of renewable energy in the market?

(Yes/ No/ I don't know. Motivate your answer)

No. Every additional oil investment changes the course of money from renewables to fossil fuels. This project excludes development of renewables and strengthens the position of oil.