The EBRD must not support further fossil gas lock-in for North Macedonia

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The EBRD is currently considering financing for the Greece-North Macedonia gas interconnector. However, not only would this further lock North Macedonia into fossil gas use and contradict its commitments to decarbonise by 2050 under the Green Agenda for the Western Balkans, but basic legal requirements on public consultation have not been followed. The EBRD's attempts to patch this up cannot compensate for this fact.

An over-dimensioned project that doesn't correspond to regional realities

This pipeline will not only lock North Macedonia into fossil gas use for the foreseeable future, but it is designed to enable gas to get into countries where it is currently unavailable, such as Kosovo. Kosovo currently does not have any

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gas-related infrastructure, nor does its recently adopted energy strategy[1] plan for it. The strategy rightly assesses the time needed to build any gas infrastructure at 7-9 years, yet even now it is too late in terms of climate ambition to start using gas. This means that cash-strapped North Macedonia would need to bear the cost on its own for a project designed (unreasonably so) for regional use. It would also mean that if the asset is left stranded, the cost for it would be borne by Macedonian taxpayers.

Environmental assessment consultations did not fulfil national or EU requirements

In January 2021, the North Macedonia authorities quietly approved the environmental impact assessment for the interconnector, but without organising the legally mandatory public commenting period. Even though North Macedonia is bound to hold such consultations by both the Aarhus Convention and the Energy Community Treaty, the EBRD did not require the authorities to repeat the process in line with national and EU legislation.

Rightly identifying that the initial study had not met its standards, in October 2022 the EBRD published eight environmental and social studies on the Greece – North Macedonia fossil gas pipeline for public consultation, with a commenting period of 120 days. Following this, a 'public' consultation was held on 21 March 2023. However, there was no publicly available information or call for this consultation – only selected people were invited.

Furthermore, although the event was generally welcome due to giving an overview of a rather complicated project procedure, it was confusing considering it was not part of any national permitting process, as the event happened more than 2 years after the project received an environmental permit, and it was unclear what timelines and legal framework can be assigned to it.

One gas pipeline separated into three projects

For reasons unexplained, the pipeline is separated into three sections[2] with different procedures applied to them by the national authorities, even though they are in essence inseparable, due to forming a single gas ring around the country. The consultations on the environmental and social impact assessments (ESIAs) were completely done by the EBRD only after everything had already been approved on the national level regarding the environmental impacts.

As a result, what we face at present is:

1) a project which has different procedures applied to its parts, creating unclarity in the process; and

2) a lack of legally mandatory Strategic Environmental Assessment (SEA) on North Macedonia's National Energy and Climate Plan. An SEA was drafted but had only a few lines of unsubstantiated

[1] Ministry of Economy of Republic of Kosovo, Energy Strategy of the Republic of Kosovo 2022-2031, *Ministry of Economy of Republic of Kosovo*, 18, accessed 29 April 2023.

[2] European Bank for Reconstruction and Development, Regional Gasification Project, *European Bank for Reconstruction and Development*, accessed 29 April 2023.

PR claims on this project, despite the fact it would supply the entire territory of the country with fossil gas, and potentially even other countries. Moreover, the SEA process was never completed.

Considering the magnitude of the project, its impacts on the energy sectors of North Macedonia and of the region, the climate impacts of using the fossil gas that will flow through a project of that scale[3] and the sheer cost of the gasification project,[4] it is entirely unacceptable for national authorities to apply such an unclear and lax approach to it.

This unclarity also applies to who and how will monitor the implementation of the mitigation measures listed in the ESIAs, considering the national institutions neither requested, nor approved them. While through the loan agreement and state guarantee the authorities take over the responsibility to monitor the implementation of the project according to EBRD standards, it is unclear how this will be implemented, what will happen if it is not and who will hold whom accountable if the mitigation measures are not implemented.

The EBRD's previous experience in North Macedonia, e.g. with the Demir Kapija – Smokvica highway, has shown that the Bank is in reality unable to ensure that mitigation measures are properly implemented in countries with poor environmental governance.

A gas pipeline without emissions

The ESIA fails to provide an adequate assessment of the project's climate impact, and does not even assess whether it fulfils the Bank's own flawed gas criteria from its Energy Strategy and its flawed Paris Alignment criteria.

It does not assess whether the GHG emissions of the gas interconnector are consistent with North Macedonia's Enhanced Nationally Determined Contribution,[5] which pledges to reduce national emissions to 6.06 $MtCO_2eq$ by 2030. Even if it is, to date, total aggregated country commitments to reducing GHG emissions, typically only extending to 2030, are insufficient to meet the goals of the Paris Agreement. As a result, the review of NDCs (including the Long-Term Strategies and other policy plans underpinning them) is a necessary minimum step, but not sufficient in and of itself to determine Paris alignment.

The downstream emissions of the pipeline are approximately 3 million MtCO2eq/year.[6] As such, these emissions constitute 50 per cent of the target emission level of 6.058 million $MtCO_2eq$/year by 2030 in North

[3] Ministry of Economy of Republic of North Macedonia, Energy Development Strategy of North Macedonia until 2040, *Ministry of Economy of Republic of North Macedonia*, 2019. Macedonian version of document, p. 60 mentions the pipeline capacity needs to be at least twice the annual demand, which was 650 million Nm^3 or 521ktoe in 2017.

[4] Ibid., p. 24 quotes the price of the network at EUR 323.1 million and the interconnections at EUR 83.2 million, although that cannot be the entire cost considering that the use of gas downstream (distribution network, power plants) and measures added with the ESIAs are not calculated, which will increase this amount significantly.

[5] Ministry of Environment and Physical Planning of Republic of North Macedonia, Enhanced Nationally Determined Contribution, *Ministry of Environment and Physical Planning of Republic of North Macedonia*, 2021.

[6] The initial EIA and ESIA on the interconnection provide an assessment of only the direct greenhouse gas emissions associated with construction and operation of the pipeline, ignoring upstream and downstream emissions.
Still, the information provided enables us to calculate the magnitude of these downstream emissions. On average, the combustion of 1 cubic foot of natural gas under standard conditions generates emissions of 0.0551 kilograms of CO_2. There are 35.3 cubic feet per cubic metre. Therefore, the combustion of 1 cubic metre of natural gas under standard conditions generates emissions of approximately 2 kilograms (0.002 tonnes [Mt] of CO_2. If the gas interconnector increases use of natural gas in North Macedonia by 1.5 billion cubic metres per year, then such use would result in approximately 3 million $MtCO_2$ per year.

Macedonia's Enhanced NDC. There is a substantial possibility that EBRD funding of the interconnector would undermine the target emission level of 6.058 million $MtCO_2eq$/year by 2030.

Furthermore, it is reasonable to assume that in the following years the Republic of North Macedonia would adopt more ambitious targets as part of further updated NDCs. If the interconnector continues to generate 3 million $MtCO_2eq$/year of emissions, it becomes increasingly less likely that such emissions would be consistent with future NDCs and other long-term strategies of the Republic of North Macedonia.

The Energy Development Strategy of North Macedonia until 2040[7] states that the growth of gas demand is mainly driven by electricity and heat plants. The plans quote between 230 and 265 MW of new gas plants and CHP altogether, depending on the scenario. However, any departures from the green scenario which is the basis for the National Energy and Climate Plan[8] (NECP) will result in North Macedonia not meeting its ambitious climate goals.

Gas lock-in and crowding out of transformational investments

The ESIAs do not demonstrate that the projects in question will displace the more carbon-intensive sources, as they do not contain any real discussion on how the gas will be used – just vague formulations about 'households', 'industry' etc. In fact, they do not assess at all whether the project fits the EBRD's gas investments criteria from its Energy Strategy.

The project will also necessarily either result in carbon lock-in or stranded assets. Introducing a new gas import pipeline entails significant new investments to set up further distribution networks or major users such as gas power plants. Such installations or networks will not easily be replaced once finally set up, as many EU countries are now finding – and this is the very definition of carbon lock-in. On the other hand, if fewer than predicted facilities end up using the gas due to high prices or other reasons then the project will become a stranded asset.

Moreover, North Macedonia is a small economy with very limited opportunities to take out public sector loans. Increasing public sector debt for a fossil fuel project seriously diminishes the country's abilities to take out loans for much-needed investments into the energy transition.

Bold claims on air pollution, but without any evidence

The EBRD claims[9] that there will be reductions in air pollution '*by diverting energy generation towards cleaner fuels in populated industrial areas of the country*'. But the ESIA nowhere explains the Bank's assumptions in this regard, nor have EBRD staff been willing to elaborate in correspondence or during meetings.

Diminishing electricity production in coal and heavy oil power plants would bring a reduction in sulphur dioxide and dust emissions, but would make North Macedonia even more dependent on volatile fossil fuel

[7] Ministry of Economy of Republic of North Macedonia, Energy Development Strategy of North Macedonia until 2040, *Ministry of Economy of Republic of North Macedonia*, Macedonian version, 60, 2019.

[8] Ministry of Economy of The Republic of North Macedonia, НАЦИОНАЛЕН ПЛАН ЗА ЕНЕРГИЈА И КЛИМА НА РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА, *Ministry of Economy of The Republic of North Macedonia*, 2022.

[9] European Bank for Reconstruction and Development, Regional Gasification Project,

imports and prolong its carbon lock-in. What is more, the energy strategy adds between 230 and 265 MW in new CHP and gas plants depending on the scenario. This is much less than the current capacity of the plants causing the main pollution in the energy sector, meaning that most of the reduction would come from non-gas plants anyway. Nor does the strategy pinpoint the location for such a plant, making it a vague plan that is difficult to connect to this pipeline, particularly for the general public that does not have the detailed information that development banks have.

On the other hand, if these claims are related to reducing emissions from household heating with firewood, the issue becomes even more problematic.

A feasibility study on the distribution network in all 80 municipalities in North Macedonia commissioned by the EBRD in 2020 estimates capital costs for the very unlikely gasification of households to be between EUR 241 and 745 million, depending on the scenario. This kind of investment would lock the entire country, i.e. each and every household, into use of gas for the next 35 years,[10] thus tying them to an energy source which will only become more expensive in the coming years, because CO_2 pricing will apply to it under the new ETS, but also because of reliance on sometimes unpredictable imports. For this reason, we consider it unlikely that households would really switch from using firewood to fossil gas in large numbers, so decreases in pollution seem similarly unlikely.

This has been confirmed by a recent survey[11] commissioned by Eko-Svest. It is estimated that the cost of gas connection for households would be around EUR 700 EUR. Yet 68 per cent of respondents stated that they would switch to gas only if the cost of the connection is less than EUR 300; 17 per cent said they would switch if it is between EUR 300 and 600 and only 4 per cent said they would switch if it is between EUR 600 and 900. The results show the low economic capacity of the population, and this relates only to the one-time cost of connection, not the cost of using the heating and appliances.

In addition, this approach limits the natural development of alternatives – be they solar heating, small scale district heating grids, individual solar powered inverters, geothermal or any other kind of heating. For cooking, electrical stoves are currently widely spread in the country, so converting cooking to gas would be a huge investment throughout the country, completely disrupting the appliances market and leading it towards a fossil-based solution instead of a renewable-powered one.

The same applies to hot water for domestic use which is currently heated generally by electricity. In creating a distribution network for gas to households, a market for gas boilers will open and inevitably disrupt the already slow penetration of solar hot water production.

So in reality, the switch, if it took place, would at least be partly from electricity to gas, which – depending on the electricity mix – may lead to increases in terms of CO_2 emissions from households, just as the fossil lock-in for the sector will be significant.

[10] The feasibility study sets the lifetime of the distribution network at 35 years.

[11] Center for environmental research and information Eko-svest, Енергија, *Center for environmental research and information Eko-svest*, accessed 29 April 2023.

As things stand at the time of writing in April 2023, plans related to countrywide gasification are apparently facing delays and the ability and interest of households in connecting to a gas network for heating and hot water production purposes is questionable. In fact, while many EU countries are banning the installation of new fossil gas boilers, North Macedonia has just started subsidising them.[12] If households decide to invest in such a huge and expensive change, much more economically viable possibilities are offered by roof top solar energy combined with heat pumps.[13]

To summarise, the gas pipeline was not properly consulted, has significant and largely unassessed CO_2 emissions, will either lock the country into fossil fuel use or create stranded assets, will disrupt the appliances market and hugely undermine the move towards use of renewable energy in households. Considering the number of problems that need to be addressed in relation to this pipeline – and particularly considering those that cannot be addressed, such as the lock-in of funds into fossil fuels - the project should be immediately cancelled and under no circumstances should the EBRD use public funds to support it.

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[12] Vladimir Spasić, 'North Macedonia to subsidize households to switch to natural gas for heating', *Balkan Green Energy News*, 25 April 2023.

[13] Vanja Djinlev, Analysis of alternatives to coal-based district heating for the Bitola region in North Macedonia, *CEE Bankwatch Network*, 2022.