

Greece – North Macedonia gas interconnector update



The planned pipeline would cross the river Vardar in North Macedonia. Photo: CEE Bankwatch Network

Introduction

In April 2024, the Board of Directors at the European Bank for Reconstruction and Development (EBRD) approved a EUR 98 million loan for the ‘*Regional Gasification Project*’ in North Macedonia.¹ The project document provided to the Board by EBRD staff lists several supposed benefits:²

- diversification of gas supply,
- decarbonisation (!),
- reduction of air pollution and greenhouse gas emissions (GHG),
- gasifying the centre and southwest of the country, and
- carrying gas to Serbia and other countries in the region.

¹ European Bank for Reconstruction and Development, [Regional Gasification Project](#), EBRD, 10 February 2024.

² Or at least the redacted version available to the public: EBRD, [Board Report: Regional Gasification Project Board Report \(redacted\)](#), EBRD, published 15 May 2024.

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Yet it fails to adequately justify these claims or answer key questions. It also uses creative modelling to claim that gasification would be better than 100 per cent renewables. Six months after the EBRD's approval, major holes remain in the Bank's rationale for supporting the project.

Meanwhile in North Macedonia, further delays to the construction of the interconnector from Greece have been reported³ and the State Audit Office⁴ has criticised the slow implementation of the country's gasification plan, making it unlikely that even the new timelines are realistic.

This briefing takes an updated look at several questions that either remain largely unanswered or for which contradictory or unconvincing information has been provided, namely:

- When would the interconnector be completed?
- What would the interconnector's capacity be?
- Why is its planned capacity so large?
- What would the gas be used for?
- How much of the gas is meant to be transported beyond North Macedonia?
- How can we be sure that the pipeline would only transport non-Russian gas?
- What guarantees are there that a switch to hydrogen will really happen?
- What are the project alternatives and why is the gasification option superior?

Based on these, we conclude that the arguments in favour of the project are still not supported by convincing evidence and that the claimed benefits are highly unlikely to materialise.

Although the loan has been approved and signed, the EBRD and EIB must cancel their involvement in the project and instead support North Macedonia to continue its solar and wind expansion, ensure its electricity grid is fit for the task, realise its energy savings potential, and increase the use of heat pumps, geothermal⁵ and solar thermal for heating.

To support decarbonisation of industry, where electrification is not possible, pilot projects for renewable hydrogen production close to the points of consumption could be considered, using additional or surplus solar and wind capacity, to avoid competing with other electricity users.

³ Brendan A'Hearn, '[Greece-North Macedonia gas link delayed by 22 months](#)', *Argus*, 18 October 2024.

⁴ North Macedonia State Audit Office, [КОНЕЧЕН ИЗВЕШТАЈ ЗА ИЗВРШЕНА РЕВИЗИЈА НА УСОГЛАСЕНОСТ НА ТЕМА РАЗВОЈ НА СИСТЕМОТ ЗА ГАСИФИКАЦИЈА ВО РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА](#), *State Audit Office*, March 2024.

⁵ With recovery of gases where applicable, and with reinjection of the water.

When would the interconnector be completed?

The EBRD Board appears to have received answers to this question in the Board document,⁶ but the public has not. All the *Baseline*, *Target* and *Due date* information on page 13–14 has been redacted. Hiding such basic information on a public sector project is a strange and unnecessary move that makes it look like the Bank does not believe in its own project timelines.

This also makes it difficult to assess the document's other claims, such as the idea that benefits from wider gasification would be realised earlier than those of electrification in an alternative scenario. That very much depends on whether the gasification timeline is realistic.

Based on the experience with gas pipelines in North Macedonia so far (see below), we can expect very slow construction and commissioning. Just recently, a new delay was reported for the Greece to North Macedonia interconnector.⁷

NOMAGAS does not have a 10-year network development plan (TYNDP),⁸ but in the draft TYNDP published by its Greek counterpart DESFA in September 2024,⁹ the interconnector was expected to start operating in December 2025, with full commercial operations in January 2026.

But a tender published by NOMAGAS on 16 October 2024 for the construction of the North Macedonia section of the pipeline expects works to take 34 months.¹⁰ The deadline for bids is 20 November, so assuming the contract is awarded in December, this would mean construction would finish only in October 2027, and by the time operation starts, the delay would be nearly two years compared to DESFA's target of starting commercial operations on the line in January 2026.

However, based on previous experience in North Macedonia, we expect commissioning to take much longer. A State Audit Office report on gasification published earlier this year found that none of the main gas pipelines built in the last ten years are operational yet.¹¹ The construction and commissioning period has already exceeded eight years in one case, and is nearing this in two more cases. If the interconnector takes this long to commission, it would come online only in 2032.

⁶ EBRD, [Board Report: Regional Gasification Project Board Report \(redacted\)](#), 13-14.

⁷ Brendan A'Hearn, '[Greece-North Macedonia gas link delayed by 22 months](#)', *Argus*, 18 October 2024.

⁸ North Macedonia State Audit Office, [КОНЕЧЕН ИЗВЕШТАЈ ЗА ИЗВРШЕНА РЕВИЗИЈА НА УСОГЛАСЕНОСТ НА ТЕМА РАЗВОЈ НА СИСТЕМОТ ЗА ГАСИФИКАЦИЈА ВО РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА](#), 2.

⁹ DESFA, [Draft Development Plan of the National Natural Gas System 2024 – 2033](#), DESFA, September 2024.

¹⁰ Tenders Electronic Daily, [624846-2024 - Competition. North Macedonia: Construction work for gas pipelines](#), *EU Tenders*, 16 October 2024.

¹¹ North Macedonia State Audit Office, [КОНЕЧЕН ИЗВЕШТАЈ ЗА ИЗВРШЕНА РЕВИЗИЈА НА УСОГЛАСЕНОСТ НА ТЕМА РАЗВОЈ НА СИСТЕМОТ ЗА ГАСИФИКАЦИЈА ВО РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА](#).

North Macedonia State Audit Office slams tardy gas network expansion

Earlier this year, the State Audit Office examined the implementation of the country's gasification plans.¹² Regrettably, several annexes that appear to include more details have not been published, raising transparency concerns, but the main findings include the following:

- *'In the past period, the utilization of the main [Deve Bair to Skopje] gas pipeline has been insufficient, and there is no formally established distribution network in the towns. Consumers are directly connected to the transmission network, and natural gas is used only in industry and public buildings, but not in households.'*¹³
- *'With the audit, we found that after 13 years, the construction of the main gas pipelines is not fully completed, and some pipelines are still not put into operation. Specifically, from 2014 to 2023, contracts and annexes to the contracts, as well as agreements for unforeseen and additional works, were concluded for the construction of the main gas pipelines LOT 1-61 km, LOT 1-36 km, LOT 2, and LOT 5, amounting [to] approximately 156.4 million euros. Although most of them are built, they are still not in operation. The reasons for this situation include weaknesses in registering ownership rights of the linear infrastructure facilities and slow resolution of expropriation cases, for which approximately 2 million euros were paid out between 2018 and 2022.'*¹⁴
- *'In Article 89 of the contracts for the construction of LOT 1 – 36 km, LOT 2 and LOT 5, a guarantee period of 5 years for the built gas pipeline is determined, which starts to run from the moment of handover. Taking into account that the warranty period for LOT 1 – 36 km began to run from 2019, and the gas pipeline is not yet in use, this does not allow adequate protection of the facilities in case of failure after they are put into use. During a field inspection, we determined that part of the GMRS¹⁵ and block stations are in an unmaintained and neglected state and maintenance activities are needed, as well as that they are not provided with physical or video surveillance, which may affect the mobilisation of additional financial resources during their commissioning.'*¹⁶
- *'(...) weaknesses were identified in monitoring the implementation of contracts for the construction and supervision of the main gas pipelines, as well as in the maintenance of the gas pipeline network.'*¹⁷

Although the annex with details about the construction timelines has not been published, publicly available information shows that none of the projects built in the last ten years is operating yet.

¹² Ibid.

¹³ State Audit Office, [Annual Report on Performed Audits and Operation of the State Audit Office 2023](#), State Audit Office, 2024, 169ff.

¹⁴ Ibid.

¹⁵ Gas metering and pressure regulation station.

¹⁶ North Macedonia State Audit Office, [КОНЕЧЕН ИЗВЕШТАЈ ЗА ИЗВРШЕНА РЕВИЗИЈА НА УСОГЛАСЕНОСТ НА ТЕМА РАЗВОЈ НА СИСТЕМОТ ЗА ГАСИФИКАЦИЈА ВО РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА](#), 22.

¹⁷ State Audit Office, [Annual Report on Performed Audits and Operation of the State Audit Office 2023](#), 169ff.

Pipeline no., length and name	Length	Construction start	Construction completed	Operating?	Period since start of construction
LOT 1 – 61 km Klechovce to Valve Station 5	61 km	1Q 2015	June 2016 ¹⁸	No ¹⁹	8 years, 4 months
Lot 1 – 36 km Valve station 5 (Stip) – Negotino	36 km	June 2016	2019 ²⁰	No ²¹	5 years
Lot 2 – 92 km Negotino (Kavardarci) to Bitola	92 km	February 2017 ²²	November 2022. ²³	No ²⁴	7 years, 9 months
Lot 5 - 78 km. Skopje – Tetovo – Gostivar	78 km	December 2016 ²⁵	Unclear	No ²⁶	7 years, 10 months
Lot 5 - 34 km Gostivar – Kichevo	34 km	Construction approved ²⁷	N/A	No	N/A

Although we disagree with the Auditors' overall support for gasification, their report shows just how slowly implementation is going in reality. Their assessment of the current state of the transmission network that has already been built also raises questions of whether it can ever be safely put into operation.

This implicitly confirms that gas cannot act as a transition fuel. Globally, we need to halve greenhouse gas emissions by 2030, and continue with sharp cuts after that.²⁸ New gas infrastructure is inherently incompatible with this, as the idea that it would be switched to renewable hydrogen is highly unrealistic (see below).

¹⁸ NOMAGAS, Section "Klechovce – Valve station 5", *NOMAGAS*, 29 March 2023.

¹⁹ Lokalno.mk, 'Интервју со идната министерка за енергетика Сања Божиновска: Корупцијата е една од главните причини зошто досега немало инвестиции во нови енергетски капацитети', *Lokalno.mk*, 21 June 2024.

²⁰ NOMAGAS, *Section Valve station 5 (Stip)-Negotino*, *NOMAGAS*, 29 March 2023.

²¹ Energy, Water Services and Municipal Waste Management Services Regulatory Commission of the Republic of North Macedonia (ERC), *Annual Report 2023*, *ERC*, 2024, 101-102.

²² NOMAGAS, *Section "Negotino (Kavardarci) - Bitola"*, *NOMAGAS*, 30 March 2023.

²³ NOMAGAS, 'Last pipe welding on LOT 2 Negotino – Bitola', *NOMAGAS*, 30 November 2022.

²⁴ ERC, *Annual Report 2023*, 101-102.

²⁵ NOMAGAS, *Section „Skopje - Tetovo - Gostivar“*, *NOMAGAS*, 30 March 2023.

²⁶ ERC, *Annual Report 2023*, 101-102.

²⁷ NOMAGAS, *Gasification Map*, *NOMAGAS*, accessed 12 November 2024.

²⁸ Kate Abnett and Simon Jessop, 'U.N. climate chief says two years to save the planet', *Reuters*, 10 April 2024.

What would the interconnector's capacity be?

Neither North Macedonia's National Energy and Climate Plan²⁹ nor the environmental impact assessment for the interconnector³⁰ specify the project's capacity. In 2023, 1.5 billion cubic metres (bcm) was mentioned by one of the companies involved.³¹ This is more than three times as much as the 426 million normal cubic metres consumed by North Macedonia in 2021, the country's highest annual gas consumption so far.³²

Considering that the existing pipeline from Bulgaria has a capacity of 0.8 bcm annually³³ and will also continue to operate, this capacity already raised a considerable risk – either of stranded assets or of large-scale gas lock-in. But the capacity figures cited since then are even larger.

The EBRD's project summary document mentions an overall import capacity increase to 3.6 bcm annually – so a capacity of 2.8 bcm, more than six times as much as North Macedonia's 2021 consumption.³⁴ A recent tender notice reduced this to 1.8 billion bcm,³⁵ but this is still more than four times as much as North Macedonia's highest ever consumption. The Board document states that wider use of gas is 'required for energy transition', but this is not true. It relies on flawed modelling scenarios, as explained below.

Why is its planned capacity so large?

The Board document³⁶ gives little explanation on how the capacity was defined, except the vague reference to energy transition mentioned above. It also alludes to transporting gas further to Serbia, but gives no more information on how much is needed, why, and why the newly-built pipeline from Bulgaria to Serbia is insufficient. It also does not explain whether the Greece to North Macedonia interconnector will still be economically viable if the additional interconnector with Serbia is not built.

Moreover, key information on the existing pipeline from Bulgaria is redacted in the Board document. It mentions that the existing pipeline is booked until 2030 for Russian gas, and states that '*In 2022, Bulgarian and Macedonian gas TSOs agreed to increase the capacity of the interconnection by 20% to allow for some level of diversification. However, the Bulgarian TSO did not increase or allocated the capacity to other gas suppliers and Russian gas remained to be the sole supply option.*'

But since the next part is [REDACTED], it's not clear whether it discusses North Macedonia's 2023 moves to free itself from Russian gas³⁷ and what the prospects for further similar moves are, rather than building a

²⁹ Ministry of Economy, North Macedonia, [National Energy and Climate Plan](#), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, January 2022.

³⁰ EBRD, [ESIA: Regional Gasification Project](#), EBRD, 11 October 2022.

³¹ DESFA, '[DESFA awarded with supervision contract of the construction of the North Macedonia part of the Gas Interconnector Greece-North Macedonia](#)', DESFA, 28 September 2023.

³² ERC, [Annual Report 2022](#), ERC, 2023.

³³ EBRD, [Project Summary Document: Regional Gasification Project](#).

³⁴ Ibid.

³⁵ Tenders Electronic Daily, [624846-2024 - Competition, North Macedonia: Construction work for gas pipelines](#), EU Tenders, 16 October 2024.

³⁶ EBRD, [Board Report: Regional Gasification Project Board Report \(redacted\)](#).

³⁷ Dragana Petrushevska, '[N. Macedonia cuts Russian gas reliance with Bulgaria's Graystone deal](#)', SEENews, 7 December 2023.

large and expensive new pipeline. After all, as explained above, it is quite possible that the pipeline from Greece will not even be finished by 2030.

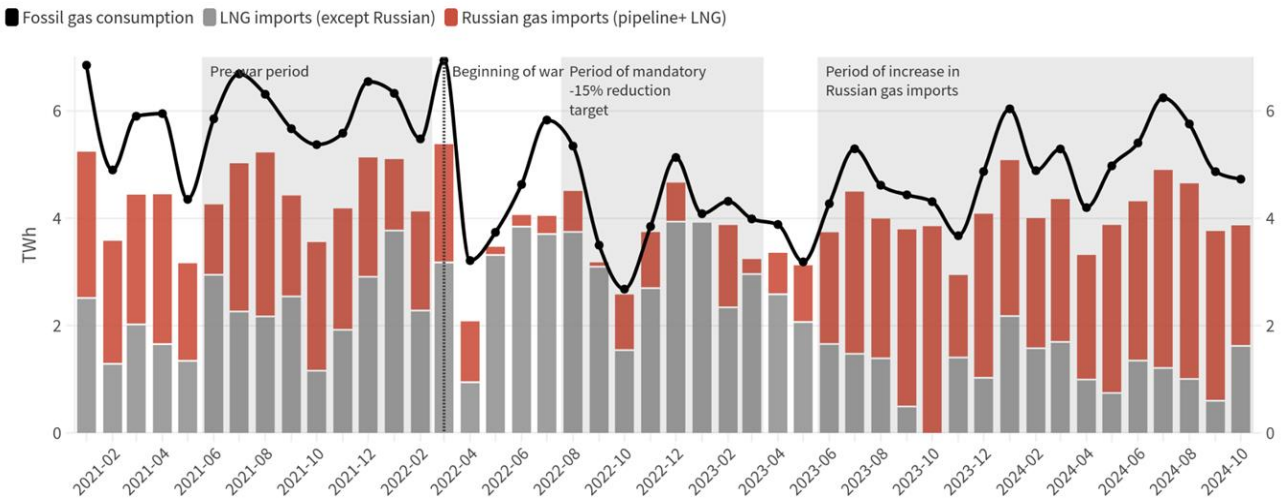
Thus it remains unclear to the public why this additional capacity is not being used and why a large new pipeline needs to be built instead.

How can we be sure that the pipeline would only transport non-Russian gas?

The Greece to North Macedonia interconnector is frequently cited as being necessary due to North Macedonia’s dependence on a single supply route that is currently dominated by Russian gas. According to p. 30 of the Board document, Russian gas piped via Turkstream made up 41 per cent of Greece’s gas imports in 2021, but will make up only 5 per cent in 2030 and 2040. These figures do not include Russian liquified gas (LNG), as LNG is marked as ‘global’.

In reality, however, in the last year, the share of Russian gas in Greece has rebounded to equal and even exceed pre-war levels.³⁸ This has at times included significant levels of Russian LNG but in recent months mainly piped gas, due to its lower price.³⁹ In the first ten months of 2024, Russian gas in total reached at least 59 per cent of total gas imports into the country.⁴⁰

Evolution of Russian gas imports



Source: DESFA, Eurostat

Source: [The Green Tank](#).⁴¹

Even where gas does not come directly from Russia, it may come indirectly. Concerns have been raised that as well as its own problematic human rights and corruption record,⁴² Azerbaijan has been importing Russian

³⁸ The Green Tank, [Trends in fossil gas consumption & imports – October 2024](#), *The Green Tank*, 12 November 2024.

³⁹ Chryssa Liaggou, [‘Russian gas prices take LNG imports off market’](#), *Ekathimerini*, 4 May 2024.

⁴⁰ The Green Tank, [Trends in fossil gas consumption & imports – October 2024](#), *The Green Tank*, 12 November 2024.

⁴¹ Ibid.

⁴² See for example Emma Burrows, [‘Azerbaijan accused of ramping up repression of critics ahead of hosting UN climate summit’](#), *AP News*, 12 November 2024.

gas for domestic use in order to free up additional volumes to supply to the EU via the TAP pipeline, potentially undermining the impact of EU sanctions on Russia.⁴³ Given the difficulties of tracking such transactions, ultimately, only phasing out gas can ensure that the EU and accession countries do not contribute to Russia's war chest.

How much of the gas is meant to be transported beyond North Macedonia?

The Board document several times mentions the possibility of transporting gas to Serbia, without specifying quantities or providing any explanation why it is needed.

There is currently no gas pipeline from North Macedonia to Serbia, although one is being developed – apparently with support from the EBRD.⁴⁴ Considering an EU-funded gas pipeline from Bulgaria to Serbia was completed in 2023 with the explicit purpose of allowing Serbia to access more non-Russian gas,⁴⁵ it is not clear why yet another gas pipeline is needed.

Nor is it clear what happens if it is not built. Almost all the information provided on the Regional Gasification Project, including the Board document scenarios, the environmental impact assessment and the Paris alignment assessment centre on North Macedonia. This would be reasonable if clear scenarios were provided with and without further transmission to Serbia. But as it stands, it is unclear whether the planned capacity figures of 1.8 to 2.8 bcm include Serbia and whether the Greece to North Macedonia is economically feasible if the pipeline onwards to Serbia is not built.

What would the gas be used for within North Macedonia?

At a meeting in early 2023, Bank staff told us this is subject to a highly complex analysis that the public doesn't have access to. Contrary to the principle of informed public participation in decision-making on environmental matters as enshrined in the Aarhus Convention,⁴⁶ they said a summary would appear in the project Board document published *after* project approval.

No wonder they were keen to keep their assumptions under wraps, as the gasification scenario presented in the Board document raises more questions than answers.

The graph below, Figure 3, is supposed to illustrate future gas consumption, which would roughly double until 2040,⁴⁷ and then rapidly tail off, miraculously resulting in decarbonisation by 2050.

⁴³ Peter van Dalen, [Parliamentary question - P-003854/2022: Increased gas exports from Russia to Azerbaijan](#), *European Parliament*, 28 November 2022.

⁴⁴ Western Balkans Investment Framework (WBIF), '[Support project for preparing the gas interconnection between North Macedonia and Serbia launched](#)', *WBIF*, 21 November 2023.

⁴⁵ WBIF, '[Serbia – Bulgaria gas pipeline opened to diversify energy supplies](#)', *WBIF*, 12 December 2023.

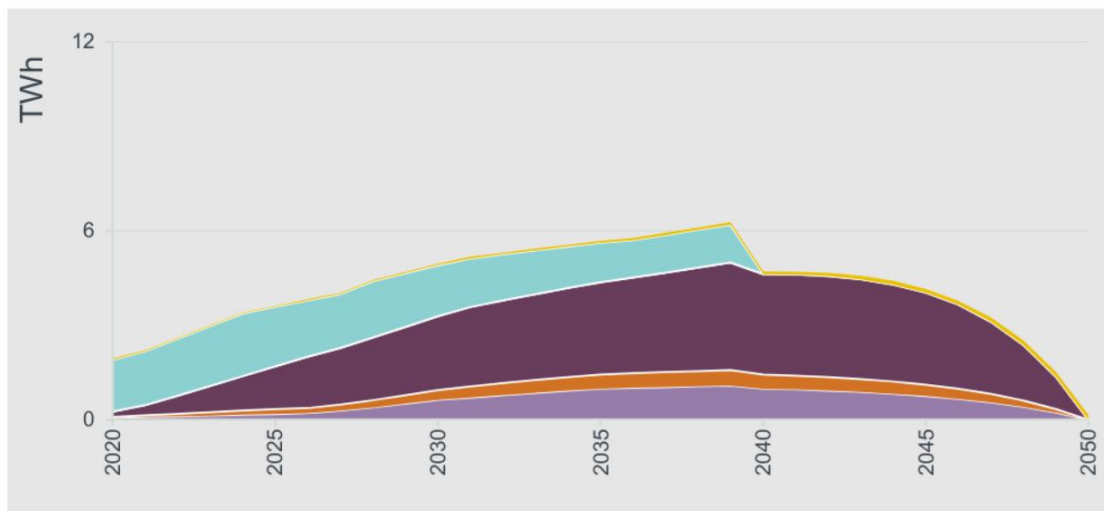
⁴⁶ United Nations Economic Commission for Europe (UNECE), [Convention on access to information, public participation in decision-making and access to justice in environmental matters](#), *UNECE*, 25 June 1998.

⁴⁷ It appears to show a tripling of consumption, but the starting point shown for 2020 – around 2 TWh – is inaccurate. The existing system transmitted around 4.5 terawatt hours (TWh) in 2021, just over 3 in 2022 and 3.9 in 2023. Figures for 2020 are not available in TWh, but graphs in the Regulatory Commission's reports show that it was between the 2022 and 2023 figures – far above 2 TWh. Considering North Macedonia is not a transit country and has no significant gas storage capacity, this should more or less equal consumption. Source: ERC, [Annual Report 2023](#), 98, 99.

Industry

Industry is expected to be by far the largest consumer. The scenario description explains that a rapid decline in consumption would take place between 2040 and 2050 because heavy industry would switch to imported hydrogen. No more details are provided about the likelihood of this taking place, and why the hydrogen would have to be imported instead of domestically produced.

Figure 3 – Expected gas use TWh across key end use sectors



Source: [The EBRD](#)⁴⁸

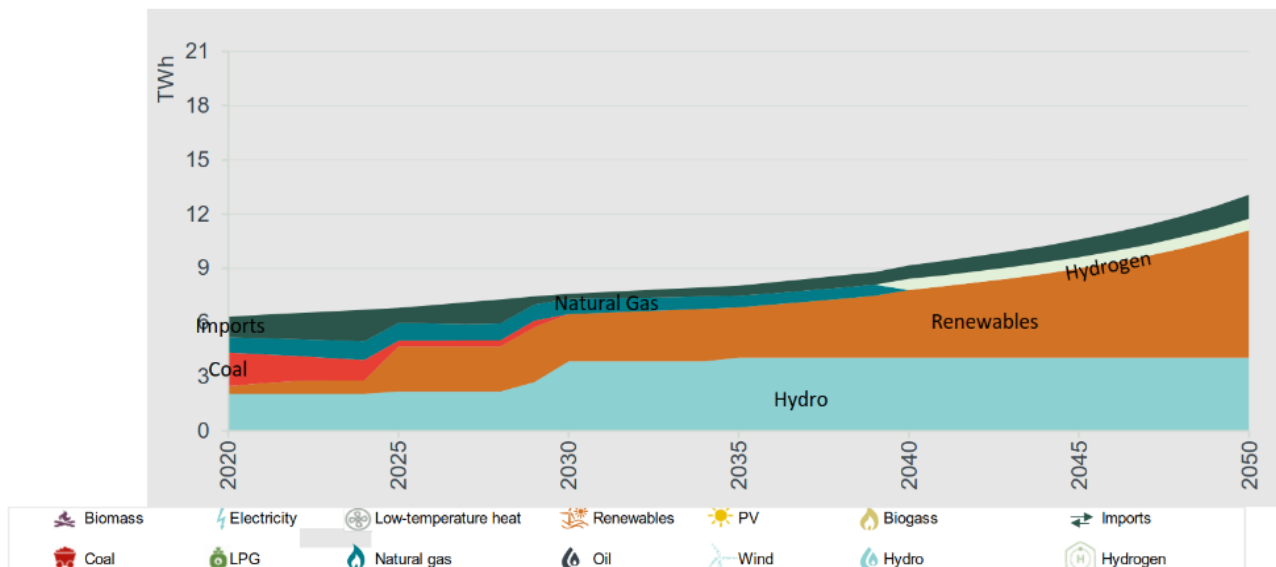
If the ultimate goal is for heavy industry to use renewable hydrogen, it is not clear why the gas phase has not been cut out altogether. Could the EBRD and EIB not finance an electrolyser demonstration project together with additional renewable energy to run it?

Electricity generation

The next largest consumer is expected to be the power sector. Little explanation of the assumptions is provided, but Annex 3 of the Board document states that gasification would, among others, ‘substitute coal for power generation including the closure of the existing coal fired Thermal Power Plants (TPP) in Bitola and Oslomej (see Figure 5)’. This is strange, as the graph below does not appear to show any expansion of gas power, with coal appearing to be replaced by renewables.

⁴⁸ EBRD, [Board Report: Regional Gasification Project Board Report \(redacted\)](#), 24.

Figure 5 – Power generation (TWh) in Gas expansion and net zero 2050 scenario



Source: [The EBRD](#)⁴⁹

As well as the graph not matching the text of the Board document, it is also not explained why the EBRD text takes for granted government plans to build significant new gas-fired power capacity, which go far beyond what is planned in the country's NECP or energy strategy.⁵⁰

Although the new government has not specified its exact plans for the power sector yet, it clearly shares its predecessors' ambitions to expand gas power.⁵¹ Just a few days ago, new projects for gas combined heat and power plants in several cities were announced as well.⁵²

Perhaps the most noticeable feature of Figure 3 is that the power sector's gas consumption halts abruptly in 2040. Figure 5 shows that this is due to replacement by hydrogen. Again, this is unrealistic. North Macedonia has no policies, plans or publicly available analyses on the use of renewable hydrogen, but it will always be relatively scarce and expensive due to its energy-intensive production process, and therefore unsuitable for the power and heating sectors where more efficient and economic alternatives exist.

Households and commercial facilities

According to the EBRD's modelling, the remainder of gas consumption would be from households and commercial facilities. The only precise indicator for the project relates to this: *'the Project will (...) introduce*

⁴⁹ EBRD, [Board Report: Regional Gasification Project Board Report \(redacted\)](#), 25.

⁵⁰ For details, see Ana Colovic Lesoska, Pippa Gallop, [North Macedonia must ditch its unrealistic gas plans and cut to a clean energy future](#), *Eko-svest* and *CEE Bankwatch Network*, 15 February 2024.

⁵¹ Vesna Damcevska, ['REK Bitola još mora disati. tranzicija energije će potrajati'](#), *Slobodan Pecat*, 1 November 2024.

⁵² 360stepeni, ['Мицкоски најави изградба на когенеративни центри за затоплување на домовите како решение за загадувањето на воздухот'](#), *360stepeni*, 12 November 2024.

services to 5,000 new customers in Kicevo and 12,000 in the Veles region'. However, this is completely unrealistic. It has taken 13 years to connect 534 customers so far.⁵³

A study by the REKK consultancy has also found that if households and other users pay for network development costs, the network tariffs would be so high that none of them would switch to gas.⁵⁴

So it is extremely unlikely that North Macedonia is going to build gas transmission and distribution pipelines, connect 17,000 new customers to the network, gasify its industrial sector and then transition again to electrification and renewable hydrogen by 2050. Yet that is exactly what the gas scenario requires.

What guarantees are there that a switch to hydrogen will really happen?

The idea that the Greece to North Macedonia interconnector will transport hydrogen from 2040 onwards is purely hypothetical and serves mainly as a way to avoid genuine debate about the risks of gas infrastructure lock-in or stranded assets.

Hydrogen-readiness is now an excuse for building gas infrastructure in the same way that carbon capture and storage (CCS) readiness was for coal power plants in the early 2000s. The CCS-readiness period resulted in ill-advised coal power units like Šoštanj 6 in Slovenia, which started commercial operation in 2016 but posted a EUR 46 million loss last year.⁵⁵ Without government intervention, the Šoštanj power plant will go into receivership next year.⁵⁶

In the same way that CCS was never economically feasible enough to use for coal power plants, renewable hydrogen will never be cost-effective or widely available enough to replace fossil gas in all the applications it is used for today.

Even where it is needed, e.g. in hard-to-decarbonise industry sectors, renewable hydrogen should be manufactured as close as possible to the point of consumption. So there is no reason to assume that North Macedonia will ever import such a large amount of hydrogen from Greece.

What are the project alternatives and why is the gasification option superior?

The Board document summarises a comparison of three alternative scenarios. However, all of them are flawed: the gasification scenario is made to look artificially better than what is realistic, while the business as usual and electrification scenarios are made to look worse.

Moreover, uncertainty about potential further transportation of gas to Serbia suggests the need to examine various scenarios with or without demand in Serbia, which has not been done.

- 1. Business as usual cannot continue indefinitely.** The Board document implies that without the pipeline, North Macedonia will burn coal way beyond its phase out date – officially 2027, but now slipping towards 2030. But this is clearly false, as its power plants are ancient, have no dust filters

⁵³ ERC, [Annual Report 2023](#), ERC, 2024.

⁵⁴ Péter Kotek et al., [Gasification plans and building heating options in North Macedonia](#), Eko-svest and REKK, January 2024.

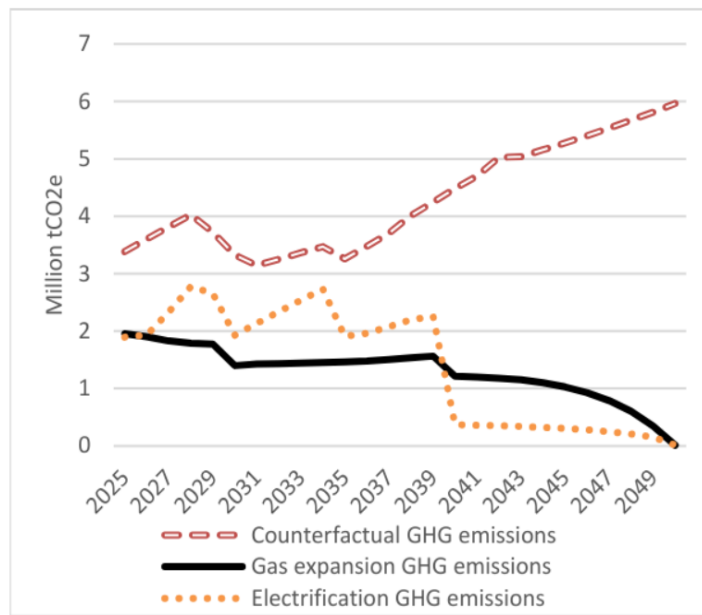
⁵⁵ STA, [‘TEŠ posts nearly EUR 46m loss last year’](#), STA, 3 September 2024.

⁵⁶ STA, [‘Emergency bill in works to prevent TEŠ receivership’](#), STA, 3 September 2024.

or desulphurisation and are increasingly unreliable.⁵⁷ It has few coal reserves left⁵⁸ and has already been importing low-grade lignite in recent years.⁵⁹ Coal is on its way out in North Macedonia – it is only a question of what will replace it.

But not only does the Board document expect a continuation of coal burning; in a ‘counterfactual’ or business as usual scenario, after 2035, it expects that greenhouse gas (GHG) emissions would increase significantly until 2050.

Figure 3 (left) -Comparison of GHG emissions (Scope 1,2 and 3 direct and Upstream) (MtCO_{2e})



Source: [The EBRD](#)⁶⁰

It’s hard to see how this could happen, especially as the population has been declining.⁶¹ The Board document does not explain this, merely claiming that the counterfactual scenario is based on the reference scenario in the Energy Strategy⁶² and the National Energy and Climate Plan.⁶³ But the NECP only shows GHG emissions until 2030 and the Energy Strategy only until 2040, so no such large increase is visible. Nor is any explanation given in these documents that might suggest why emissions increase so much. It is hard to escape the suspicion that the counterfactual scenario has been made to look as bad as possible in order to make gasification look better.

⁵⁷ Ioana Ciuta, Pippa Gallop, Davor Pehchevski, [Comply or Close 2024 update](#), CEE Bankwatch Network, September 2024.

⁵⁸ CEE Bankwatch Network, [The energy sector in North Macedonia](#), CEE Bankwatch Network, updated January 2024.

⁵⁹ Fatos Bytyci and Ognjen Teofilovski, [‘North Macedonia expects a bumpy road in its quest to quit coal’](#), Reuters, 29 November 2023.

⁶⁰ EBRD, [Board Report: Regional Gasification Project Board Report \(redacted\)](#), 26.

⁶¹ Sinisa Jakov Marusic, [‘North Macedonia Census Reveals Big Drop in Population’](#), Balkan Insight, 30 March 2022.

⁶² North Macedonia Government, [Strategy for Energy Development of the Republic of North Macedonia up to 2040](#), North Macedonia Government, 28 December 2019.

⁶³ Ministry of Economy, North Macedonia, [National Energy and Climate Plan](#), GIZ, January 2022.

- 2. The electrification scenario is weighed down by carbon capture and storage.** Initially, GHG emissions and air pollution *increase* for a few years in the electrification scenario, decreasing later than the gas scenario. It is not clear why.

And CCS is included for industries which cannot be electrified by 2050. This also seems designed to load the dice and make the electrification scenario more expensive, as it is an energy-intensive technology that is not commercially viable. The explanation given is that in the gas scenario, energy-intensive industries could switch to hydrogen imported via the pipeline. But in the electrification scenario, the ones that cannot electrify would have to use CCS because North Macedonia is not expected to manufacture hydrogen of its own.

Assuming that North Macedonia's energy-intensive industries manage to survive during this period, it is quite a leap to suppose that they will switch to highly expensive and scarce imported renewable hydrogen, rather than just continuing to use gas.

But if the EBRD is going to make such optimistic projections, why not expect them to manufacture their own renewable hydrogen by 2050? After all, it makes much more sense to electrolyse it on the spot than to import it.

- 3. The gas scenario requires an unrealistically sudden switch to electrification and hydrogen.**

As discussed above, in the gasification scenario, industry and the power sector in particular would have to make a very sudden move towards electrification and hydrogen between 2040 and 2050. Households and commercial facilities would also need to do so. It is not realistic that this will happen in only one decade, and this has clearly only been added in order to make the gasification scenario look better. Achieving full decarbonisation by 2050 will already be a challenge if major efforts are put into electrification and manufacture of renewable hydrogen right now: there is certainly no time to delay these until 2040.

Conclusion: project benefits remain unlikely to materialise

Six months after the approval of an EBRD loan for the Regional Gasification Project, the supposed project benefits for North Macedonia remain elusive.

- **Diversification of gas supply** may materialise, but it remains unclear whether this will happen before Russia's contract for existing pipeline capacity expires in 2030. Considering the large capacity of the pipeline, the lack of discussion about further action to free up unused capacity in the existing pipeline, and the Board document's openness about increasing North Macedonia's gas consumption, increasing gas imports seems to be the main goal, with diversification more of a side-benefit.
- **Decarbonisation** cannot be done with hydrocarbons. Of all the claimed benefits, the idea that gasification will help decarbonise North Macedonia and **reduce greenhouse gas emissions** more than an electrification scenario is the most improbable.
- **Reduction of air pollution** is frequently cited as a benefit of the project, but it rests largely on unrealistic expectations about connecting 17,000 customers to the gas network. It also ignores the

potential for other solutions such as heat pumps or geothermal district heating that would bring greater pollution reductions.

Although the power sector is currently a major air polluter, the text of the Board document and the graph on gas consumption by sector provide contradictory information on whether new gas power capacity is expected to be built. In any case, other technologies such as solar and wind again bring greater reductions in air pollution.

- **Gasifying the centre and southwest of the country** is a liability, not a benefit at this stage of the climate emergency. Moreover, the experience with the main pipelines built so far shows that construction and commissioning is likely to take at least eight years, let alone the time taken to build the distribution networks. A gas phase-out will likely have to be planned before the works are even complete.
- **Carrying gas to Serbia and other countries in the region** is a theoretical possibility, but no quantities are mentioned and no justification is given. Since a new pipeline would have to be built to Serbia, this remains highly speculative for now, and it is not clear why it would be a benefit considering a pipeline to bring non-Russian gas from Bulgaria was already opened in December 2023. Kosovo, Albania and Montenegro are not currently dependent on gas, so it does not make sense to introduce it – a conclusion which Kosovo has also reached in its energy strategy.⁶⁴

Recommendations

Although the loan for the Regional Gasification Project has been approved and signed, the EBRD and EIB must cancel their involvement, especially in light of the ongoing investigations by the Energy Community Secretariat and the Independent Project Accountability Mechanism (IPAM). Instead of further gas lock-in, the EBRD and EIB should support North Macedonia to continue its solar and wind expansion, ensure its electricity grids are fit for renewables, realise its energy savings potential, and increase the use of heat pumps, geothermal⁶⁵ and solar thermal for heating.

To support the decarbonisation of industry, where electrification is not possible, pilot projects for renewable hydrogen production could be considered, using additional or surplus solar and wind capacity in order to avoid competing with other electricity users.



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⁶⁴ Ministry of Economy, [Energy Strategy of the Republic of Kosovo. 2022-2031](#), Government of Kosovo, adopted March 2023.

⁶⁵ With recovery of gases where applicable, and with reinjection of the water.