



# The southern gas interconnection from Croatia to Bosnia and Herzegovina

# A stranded asset in the making



Photo: CEE Bankwatch Network

## **Key points**

- Gas makes up only around 3 per cent of Bosnia and Herzegovina's (BiH) energy supply.
- It therefore makes no sense to make massive investments into new fossil fuel infrastructure which will take years to build and have to be phased out almost as soon as it is completed due to the need to decarbonise by 2050 at the latest.
- The planned southern gas interconnection between BiH and Croatia would have a capacity six times larger than BiH's current gas consumption.
- A previous gas pipeline in the Central Bosnia Canton financed by the European Bank for Reconstruction and Development (EBRD) was built more than a decade ago but has never been used, due to lack of economic viability. A similar fate likely awaits the southern gas interconnection, if built.

For more information

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- Expropriation has not started and no financing has been secured. Together with difficult terrain, it is unlikely the pipeline would be built in less than a decade much too late to help FBiH with diversifying away from Russian gas.
- In fact, the Republika Srpska authorities will agree to it only if FBiH agrees to a new eastern interconnection as well, thus extending Russia's gas exports to BiH.
- The European Commission and EBRD have already confirmed they will not finance the project, and the European Investment Bank (EIB) no longer finances fossil fuels. The project runs a high risk of diverting time and money away from more economically sound and realistic solutions.
- The EU must assist BiH to find more sustainable and quicker-to-implement solutions such as small and large-scale heat pumps. For the few larger industries that currently use gas, tailored renewable solutions need to be found, based on the plants' long-term prospects of operation.

#### Introduction

In light of increased activity around the southern gas interconnection between Croatia and Bosnia and Herzegovina (BiH) in recent months, this briefing aims to examine the evidence presented in favour of the pipeline so far.

Starting with a brief overview of gas in BiH, it critically evaluates the publicly available information about the project, and questions the project from an environmental, economic and strategic point of view.

Considering the need to rapidly move away from fossil fuels, it aims to prevent more public funds being diverted towards the project and open a conversation about viable alternatives for existing and potential gas customers in BiH.

# Bosnia and Herzegovina's low gas dependence – a strength that must be maintained

Bosnia and Herzegovina (BiH) has traditionally relied on a combination of coal and hydropower for its electricity supply, and wood, coal and electricity for its heating. Gas makes up less than 3 per cent of the country's energy supply, giving BiH a strong starting position to jump straight from coal to a 100 per cent renewable economy.

The country's only connection to international gas networks is through a link with Serbia via the Republika Srpska entity. BiH currently imports gas only from Russia with a pipeline capacity of 0.65 to 0.75 bcm<sup>2</sup> entering near Zvornik in the northeast of the country.

In 2022, BiH consumed 0.247 bcm of gas.<sup>3</sup> Consumption 'in the energy sector' was 0.063 bcm (presumably Sarajevo district heating system), 0.044 bcm in non-ferrous metals (presumably Alumina Zvornik), in iron

<sup>&</sup>lt;sup>1</sup> 2022 figures. International Energy Agency, <u>Bosnia and Herzegovina</u>, *International Energy Agency*, accessed 1 February 2025.

<sup>&</sup>lt;sup>2</sup> On its <u>website</u>, BH Gas says 750 million cubic metres (m³) but the interconnector's <u>Environmental and Social Impact Assessment</u> says this is theoretical and the real capacity is max. 650 million m³ (page 47).

<sup>&</sup>lt;sup>3</sup> Agency for Statistics of Bosnia and Herzegovina, <u>First release</u>, <u>Energy Statistics</u>, <u>Natural Gas</u>, Agency for Statistics of Bosnia and Herzegovina, 1 December 2023.





and steel 0.029 bcm (presumably ArcelorMittal in Zenica), food and tobacco processing 0.01 bcm and households 0.059 bcm, with the remainder scattered across various sectors.

The Environmental and Social Impact Assessment (ESIA) for the planned gas interconnection claims that the current capacity of 0.65 bcm is insufficient during the winter period when peak demand occurs. <sup>4</sup> The pipeline was finished in 1979 and undoubtedly decisions are overdue on whether to replace it or move away from gas.

But neither BiH as a state, nor either of its entities, has up-to-date energy strategies in place, so decision-making on major energy investments is done largely ad-hoc. The Framework Energy Strategy until 2035 was adopted at the state level in 2018<sup>5</sup> as a formality in order to unlock EU funding, but does not decide on any particular development scenario and is not oriented towards decarbonisation by 2050. It is also completely outdated, as it contains a number of new coal plants which will not be built.

At the time of writing in March 2025, BiH has not adopted its Integrated Energy and Climate Plan (NECP), but Bankwatch has informally obtained an advanced draft.<sup>6</sup> It is relatively cautious about BiH's gas plans, and does not plan any gas power plants, but plans at least one more gas interconnection, <sup>7</sup> without specifying whether it is referring to the southern gas interconnection or the eastern one planned by Republika Srpska.<sup>8</sup> Altogether, it expects spending of BAM 958.4 million (around EUR 479 million) on gas-related measures until 2030 – BAM 234.7 million in FBiH and BAM 723.7 million in Republika Srpska, which suggests both may be included.

In addition, since late 2024 FBiH's Minister of Energy, Vedran Lakić, has been energetically promoting gasification among various cantonal authorities, for reasons which remain unclear. In addition to the southern interconnection, he has been promoting the long-dormant western and northern ones as well, despite the low likelihood of their realisation and the fact they are not planned in the draft NECP. FBiH is also planning a new energy strategy. Although the NECP, with its 2030 perspective, is now too short-term for infrastructure planning, the announcement of another strategy raises concerns that the NECP may just have been done as a formality, while the real planning will take place elsewhere.

All in all, the need for new gas infrastructure in BiH is far from proven and cannot be said to be part of any coherent strategy, let alone one that is compatible with decarbonisation by 2050 at the latest.

<sup>&</sup>lt;sup>4</sup> Dvokut Ecro and Institut za građevinarstvo "IG", <u>Studija uticaja na okoliš i procjene socijalnog uticaja za projekat gasovoda Južna interkonekcija</u>, *B-H Gas*, 47, January 2021.

<sup>&</sup>lt;sup>5</sup> Bosnia and Herzegovina Council of Ministers, <u>Framework Energy Strategy of Bosnia and Herzegovina until 2035</u>, adopted by the BiH Council of Ministers August 2018.

<sup>&</sup>lt;sup>6</sup> Integrirani energetski i klimatski plan Bosne i Hercegovine za period do 2030. godine, Verzija 8.6, July 2024.

<sup>&</sup>lt;sup>7</sup> Measures 3-1.2.1-1 and 3-3.2-2.

<sup>&</sup>lt;sup>8</sup> It also plans studies on the construction of new gas transmission and distribution infrastructure and, if the results are favourable, plans for gasification of unspecified 'consumption centres'.

<sup>&</sup>lt;sup>9</sup> For more, see Pippa Gallop, 'Against all logic, Bosnia and Herzegovina's Federal government ramps up fossil gas ambitions', CEE Bankwatch Network, 14 January 2025.

<sup>&</sup>lt;sup>10</sup> Federation of Bosnia and Herzegovina government, <u>Pokrenut proces izrade Energetske strategije FBiH 2025-2035.</u>, *Federation of Bosnia and Herzegovina government*, 30 December 2024.





#### The southern gas interconnection story so far

The Croatia to BiH southern gas interconnection is planned by Croatia's state-owned gas transmission system operator Plinacro d.o.o. and the FBiH-owned operator BH-Gas. It aims to bring liquified gas (LNG) from the Krk LNG terminal in Croatia, and potentially Azeri gas via the Ionian Adriatic Pipeline, if it is ever built.

The interconnection would run from Dugopolje in Croatia, via Zagvozd, Imotski, Posušje (BiH), Tomislavgrad, Bugojno to Novi Travnik, with a branch to Mostar. At Novi Travnik, it would join an already existing section of pipeline. The interconnection's anticipated capacity is up to 1.5 billion cubic metres (bcm) per year, <sup>11</sup> around six times as much as BiH consumed in 2022.

The Croatian sections would be 74 kilometres (km) long in total, and the BiH sections 169 km, with the highest point 1715 metres above sea level.

According to the project's environmental and social assessment, the aim of the Southern Interconnection Gas Pipeline is to establish a new supply route that will ensure a diverse, safe and reliable supply of gas to the Federation of BiH, cover both existing and new consumers, gasify the Herzegovina region, and provide potential industrial consumers with gas.<sup>12</sup>

In other words, it does not aim solely at replacing Russian gas, but also expanding the use of fossil gas in BiH, as explained in more detail below.

Since 2017, an FBiH government conclusion designated the project as being 'of strategic importance for BiH', <sup>13</sup> however the decision was not preceded by any publicly-available or consulted analysis.

In 2020, the project was recommended as a Project of Mutual Interest between the Energy Community and EU by the Energy Community Ministerial Council.<sup>14</sup> However, with the adoption of the list of PMIs under the new TEN-E Regulation in 2023,<sup>15</sup> this recommendation is no longer valid.

In 2021 an environmental impact assessment (EIA) process was carried out for the project, <sup>16</sup> with the resulting environmental permit issued in June 2021. <sup>17</sup> It is currently subject to a legal challenge by the Aarhus Centre in Sarajevo.

A draft law on the southern gas interconnection<sup>18</sup> was approved by the first house of the FBiH parliament – the House of Representatives – in December 2021 but didn't make it past the second house, the House of

<sup>&</sup>lt;sup>11</sup> Plinacro, <u>Southern Interconnection Croatia/BiH</u>, *Plinacro*, accessed 12 January 2025.

<sup>&</sup>lt;sup>12</sup> Dvokut Ecro and Institut za građevinarstvo "IG", <u>Studija uticaja na okoliš i procjene socijalnog uticaja za projekat gasovoda Južna interkonekcija</u>, 30.

<sup>&</sup>lt;sup>13</sup> Federation of Bosnia and Herzegovina government, <u>106. sjednica Vlade FBiH</u>, Federation of Bosnia and Herzegovina government, <u>15 June</u> 2017.

<sup>&</sup>lt;sup>14</sup> Energy Community, <u>2020 PCI / PMI selection</u>, *Energy Community*, accessed 13 January 2025.

<sup>&</sup>lt;sup>15</sup> European Commission, <u>Commission Delegated Regulation (EU) 2024/1041 of 28 November 2023 amending Regulation (EU) 2022/869 of the European Parliament and of the Council as regards the Union list of projects of common interest and projects of mutual interest, OJ L, 2024/1041, EUR-Lex, 8 April 2024.</u>

<sup>&</sup>lt;sup>16</sup> The Environmental impact assessment study can be found <u>here</u>.

<sup>&</sup>lt;sup>17</sup> Federal Ministry of Environment and Tourism, <u>Decision no. UPI 05/2-02-19-5-43/21 SC</u>, Federal Ministry of Environment and Tourism, 16 June 2021.

<sup>&</sup>lt;sup>18</sup> Parliament of the Federation of Bosnia and Herzegovina, House of Peoples, <u>Nacrt zakona o plinovodu "Južna interkonekcija Bosna i Hercegovina i Republika Hrvatska", broj: 02-02-1909/20 od 23.10.2020. godine Prijedlog zakona o plinovodu "Južna interkonekcija Bosna i Hercegovina i</u>





Peoples. Eventually it was withdrawn from the agenda in May 2023<sup>19</sup> due to insistence by Croat politicians that a new company should be set up to manage the project, jointly owned by the county/cantonal authorities where the pipeline would pass, together with the Federation of BiH, which would increase the influence of Croat-dominated local authorities on decision-making.

The project has been heavily pushed by the United States (U.S.) administration, presumably due to its interests in increasing LNG sales. In early December 2024 it was reported that a meeting organised by the U.S. ambassador, without the Croat HDZ party, had resulted in agreement to get the law into the Federal parliament by the end of the year.<sup>20</sup> Indeed, the law was passed by the House of Representatives on 12 December 2024<sup>21</sup> and the House of Peoples on 16 January 2025,<sup>22</sup> having managed to secure enough votes without HDZ.

The law stipulates BH-Gas as the project promoter, sets out conditions for expropriation, and sets extremely short deadlines for the competent authorities to issue permits.<sup>23</sup>

It also contains a problematic provision stating that the environmental permit for the project will remain valid until the construction permit is issued.<sup>24</sup>

Usually an environmental permit is valid for five years, and the competent authority reviews it based on a request by the project promoter, otherwise it expires. The authority has the right to change or annul the permit based on certain conditions, <sup>25</sup> for example changes in the Best Available Techniques for a certain technology. A frequent problem in BiH has also been that so many years pass between environmental impact assessments and construction that the assessments do not fulfil current legal requirements, nor reflect the actual situation on the ground.

The new provision therefore threatens to restrict the competent authority's ability to require an adequate level of environmental protection, even if the project takes ten more years to start construction.

This may sound like an exaggeration, but the project still faces numerous challenges. First, it needs to be agreed on by the state-level Council of Ministers, which is far from simple at the best of times. It also requires

Republika Hrvatska", broj: 02-02-1909/20 od 19.11. 2021. godine (Povučen), Parliament of the Federation of Bosnia and Herzegovina, House of Peoples, accessed 13 January 2025.

<sup>&</sup>lt;sup>19</sup> Avdo Avdić, '<u>Kako je Trojka prevarila Blinkena: Nikšićeva Vlada povukla Zakon o južnoj interkonekciji, Konaković u Vijeću ministara odobrio rusku interkonekciju, a južnu ostavio na čekanju. Sada sve ovisi o Dodiku!', *Istraga.ba*, 18 January 2024.</u>

<sup>&</sup>lt;sup>20</sup> Klix.ba, '<u>Kad Murphy "postroji" vlast i opoziciju: Južna interkonekcija do kraja decembra u proceduri', Klix.ba, 4 December 2025.</u>

<sup>&</sup>lt;sup>21</sup> Predstavnički dom, <u>Zapisnik s 15. redovne sjednice Predstavničkog doma Parlamenta Federacije BiH, održane 12.12.2024. godine</u>, *Predstavnički dom*, 17 December 2024.

<sup>&</sup>lt;sup>22</sup> Parliament of the Federation of Bosnia and Herzegovina, House of Peoples, <u>Dom naroda Parlamenta Federacije BIH usvojio Prijedlog zakona o plinovodu "Južna interkonekcija Bosna i Hercegovina i Republika Hrvatska"</u>, *Parliament of the Federation of Bosnia and Herzegovina, House of Peoples*, 17 January 2025.

<sup>&</sup>lt;sup>23</sup> Official Gazette of the Federation of Bosnia and Herzegovina, <u>Zakon o gasovodu "Južna Interkonekcija Bosna i Hercegovina i Republika Hrvatska"</u>, Official Gazette of the Federation of Bosnia and Herzegovina, 10/25, 10 February 2025.

<sup>&</sup>lt;sup>24</sup> Article 9(3): 'Okolinska dozvola iz stava (2) ovog člana, izuzetno od odredbi člana 82. stav (5) Zakona o zaštiti okoliša, važi do izdavanja odobrenja za građenje u skladu sa članom 12. ovog Zakona.'

<sup>&</sup>lt;sup>25</sup> Official Gazette of the Federation of Bosnia and Herzegovina, Articles 93-97, <u>Zakon o zaštiti okoliša</u>, *Official Gazette of the Federation of Bosnia and Herzegovina*, br. 15/2021.





Croatia's active participation, which may prove difficult when HDZ was outvoted in the law on the project. It also needs to secure financing.

#### Costs and potential sources of financing

The FBiH government estimates the BiH section of the southern interconnection's costs at BAM 199 million or around EUR 100 million, <sup>26</sup> but this is unrealistically low.

For one, this figure appears to be derived from a 2013 pre-feasibility study.<sup>27</sup> It's impossible that costs have not increased in the last 12 years, especially taking into account recent inflation.

Second, it only includes the costs of making the existing pipeline section from Sarajevo to Zenica bidirectional, without other rehabilitation costs.<sup>28</sup>

And third, the North Macedonia section of the interconnector from Greece, which is more advanced, is currently estimated at EUR 84 million just for construction.<sup>29</sup> But at 66 km long, it is more than 2.5 times shorter, and is on much easier terrain.

The U.S. Agency for International Development (USAID), the Western Balkans Investment Framework (WBIF) and EU Connecta provided funds for the preparation of a pre-feasibility study, feasibility study and environmental documentation for the pipeline.<sup>30</sup> The WBIF website,<sup>31</sup> as well as the EBRD's procurement pages,<sup>32</sup> suggest an EBRD loan and WBIF grant for construction, but recent reports suggest the EBRD is not actively involved in the project at the moment.<sup>33</sup> In response to an enquiry by Bankwatch, in March 2025 the EBRD also confirmed that it is not considering financing the project.<sup>34</sup> The European Commission has also confirmed during a meeting with Bankwatch that it will not finance the pipeline.<sup>35</sup> Considering that the EIB has for several years no longer directly financed fossil fuel projects, and that the EU and the European public banks have been the main sources of financing for new gas pipelines in the region in recent years, this dramatically decreases the chances of the project being built.

Given the heavy U.S. involvement in promoting the project, it could be expected that the U.S. Development Finance Corporation would support it. But it remains to be seen how the new U.S. regime's policies towards

<sup>&</sup>lt;sup>26</sup> Federation of Bosnia and Herzegovina Ministry of Finance, <u>Program javnih investicija Federacije Bosne i Hercegovine 2025.-2027. godina,</u> Federation of Bosnia and Herzegovina Ministry of Finance, October 2024.

<sup>&</sup>lt;sup>27</sup> Mott MacDonald Connecta Consortium, <u>Financial Viability Analysis and Cost Benefit Analysis for the Interconnection Pipeline BiH – HR (Zagvozd – Posusje – Novi Travnik with a branch to Mostar), Final Report, *Mott MacDonald*, 26, May 2018.</u>

<sup>&</sup>lt;sup>28</sup> Ibid., 36.

<sup>&</sup>lt;sup>29</sup> Brendan A'Hearn, <u>Greece-North Macedonia gas link delayed by 22 months</u>, *Argus*, 18 October 2024.

<sup>&</sup>lt;sup>30</sup> Western Balkans Investment Framework, <u>Bosnia and Herzegovina - Croatia South Gas Interconnection</u>, *Western Balkans Investment Framework*, accessed 13 January 2025.

<sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> European Bank for Reconstruction and Development, <u>Bosnia And Herzegovina: Technical and socio-environmental Due Diligence, EBRD Contract Award Notice</u>, European Bank for Reconstruction and Development, 4 November 2020.

<sup>&</sup>lt;sup>33</sup> Hrvatski medijski servis, <u>HMS saznaje: EIB i EBRD neće financirati projekt Južne plinske interkonekcije</u>, *Hrvatski medijski servis*, 16 January 2025.

<sup>&</sup>lt;sup>34</sup> EBRD, email response to enquiry sent by Bankwatch on 17 March 2025, 21 March 2025.

<sup>&</sup>lt;sup>35</sup> Meeting between Bankwatch representatives and the European Commission, 19 March 2025.





the Balkans will play out. On one hand the U.S. has an interest in selling its LNG, but on the other, BiH will never be a large gas market and it's unclear whether it will be a priority.

#### Previous failed attempt to gasify Central Bosnia Canton – lessons learned?

The EBRD has good reason to be cautious about the southern interconnection, after previous bad experience in FBiH. In 2009, the Bank provided a loan for the gasification of Central Bosnia canton, <sup>36</sup> which involved the construction of a pipeline from Zenica to Travnik that would form the first leg of the southern interconnector. The pipeline was completed in 2013 but never got an operating permit. It was plagued with problems around expropriation and other issues.<sup>37</sup>

From discussions with local authorities during a site visit by Bankwatch staff in December 2024, gas is not being considered as a viable option for the future. Despite a few factories operating around Novi Travnik and Kiseljak, it appears there are simply not enough large consumers in the area to make it pay off. This also appears to be a major issue for the planned new interconnection.

#### Who would use the gas?

An EU-funded feasibility study was completed in May 2018<sup>38</sup> – almost seven years ago – and its expectations on future demand are informed by even older analyses dating back to 2000, 2006 and 2009.<sup>39</sup>

The whole study looks like a relic from a bygone era, presenting gas as something desirable, whose consumption should be increased, rather than a fossil fuel whose use needs to end within the next two decades.

It promises to reverse decreases in gas consumption<sup>40</sup> in the areas already connected to the gas network (mainly Sarajevo):

'The Project Interconnector is expected to increase gas consumption at these areas since it will provide availability and reliability of supply and therefore will overcome some of the issues that lead to a decrease in the use of gas during the last years, while at the same time attract new users.

In fact, better solutions have already been proposed for Sarajevo. In 2022, a promising-sounding 36-megawatt heat pump project was announced, to potentially be financed by the European Bank for Reconstruction and Development (EBRD).<sup>41</sup> But it has hardly been mentioned in public during the last year or so, and it is not clear why.

<sup>&</sup>lt;sup>36</sup> European Bank for Reconstruction and Development, <u>Gasification of Central Bosnia Canton</u>, European Bank for Reconstruction and Development, 22 May 2009.

<sup>&</sup>lt;sup>37</sup> Marija Augustinović, <u>U BiH zaboravljen plinovod vrijedan više od 20 miliona eura, *Radio Slobodna Evropa*, 1 June 2022.</u>

<sup>&</sup>lt;sup>38</sup> Mott MacDonald Connecta Consortium, <u>Financial Viability Analysis and Cost Benefit Analysis for the Interconnection Pipeline BiH – HR (Zagvozd – Posusje – Novi Travnik with a branch to Mostar), Final Report.</u>

<sup>&</sup>lt;sup>39</sup> Ibid., 27-29.

<sup>&</sup>lt;sup>40</sup> Gas use peaked in 2021 in Sarajevo but decreased in 2022 and 2023. Radio Sarajevo, <u>Potrošnja gasa u Kantonu Sarajevo u 2023. smanjena u odnosu na prethodne godine</u>, *Radio Sarajevo*, 17 December 2023.

<sup>41</sup> Vladimir Spasić, <u>Sarajevo Canton greenlights introduction of heating pumps in district heating</u>, *Balkan Green Energy News*, 17 July 2023.





The study is also wildly optimistic about the number and speed of new connections in the Busovača, Vitez, Novi Travnik, Travnik, Bugojno, Kiseljak, Kreševo, Fojnica and Zenica areas. It expected 70 per cent of households, commercial and industry users to switch to gas within 15, 10 and 5 years respectively, irrespective of the fact that the pipeline to Novi Travnik has not yet attracted any customers more than a decade after its completion.

The consumption forecasts in Herzegovina are adapted from a 2009 study<sup>42</sup> but it is not really clear what assumptions are made. Mostar is the only significant city along the route, but a whole distribution network would have to be built from scratch. And for most commercial customers in the region, quicker solutions such as solar have become much more cost-effective in recent years, so any assumptions made in 2009 or even in 2018 are very outdated by now.

Settlements like Tomislavgrad, Grude and Široki Brijeg are unlikely to yield industrial gas consumers in the coming years. And the feasibility study – rightly – does not include any gas power plants in its calculations.

The only clue as to who could be considered prospective major consumers in Herzegovina is the fact that the pipeline branch would end right next to the Aluminij Mostar complex. However, the plant's future and consumption forecasts are highly uncertain. It closed in 2019 due to electricity debts, and the main part of the complex, the electrolysis plant, is still in disuse today.

In late 2020, operation of a smaller part of the plant, the foundry facility, was re-started under lease by the M.T. Abraham Group from Israel, followed the next year by anode production. These use compressed gas (CNG), but in relatively modest quantities.<sup>43</sup>

In 2023, the M.T. Abraham's Chairman stated that the southern gas interconnection would enable the restart of the electricity-intensive electrolysis plant, and estimated (unrealistically) that the pipeline could be completed in the next three to five years.<sup>44</sup> The company has also mentioned building a gas power plant,<sup>45</sup> but this makes no sense.

The complex is sited within a few kilometres of the existing hydropower plants on the river Neretva and Herzegovina is the centre of the country's solar and wind development. Although aluminium electrolysis clearly requires an uninterrupted electricity supply, a gas power plant would be a very expensive way to ensure this, especially with storage technologies becoming more widespread and affordable.

### Other weaknesses in the feasibility study

Even with the feasibility study's optimistic expectations on household and industry connections, it only expects 543.26 million cubic metres to be transported through the southern interconnection by 2049, raising the question of why the capacity is currently planned at 1.5 bcm.

<sup>&</sup>lt;sup>42</sup> Ibid., 28.

<sup>&</sup>lt;sup>43</sup> Exact data is extremely hard to find, but the request for an environmental permit for the foundry plant states that in just under two months in late 2020, 158 m³ was used. ZagrebInspekt, <u>Zahtjev za izdavanje</u> <u>okolišne dozvole - Netehnički sažetak</u>, *Aluminij Industries*, March 2021.

<sup>&</sup>lt;sup>44</sup> Daria Sito-sucic, 'Israeli-owned Aluminij to sign green deals worth \$141 million with Glencore, Duferco', Reuters, 4 May 2023.

<sup>&</sup>lt;sup>45</sup> M.T. Abraham, Gas Supply, M.T. Abraham, accessed 4 March 2025.





Due to seasonal variations, some excess capacity is needed, but there is no reason for the pipeline to be three times as large as the projected demand, particularly when such demand seems unlikely to materialise.

Another unconvincing aspect of the study, particularly from today's point of view, is the section on security of supply, which claims benefits of nearly EUR 5.9 billion over the project period. This is allegedly due to avoidance of costs of lost energy in case of supply disruption and the avoidance of costs of using more polluting fuels instead.

Whether it was realistic in 2018 or not, today there are more economically feasible options for households and many businesses that do not require the use of more polluting fuels, especially large and small-scale heat pumps for heating, induction stoves for cooking and solar photovoltaics for power. These do not need to wait for a supply crunch to be installed, so security of supply concerns can be prevented if there is political will.

Decarbonisation of steelmaking is more challenging, but gas is not the answer either, due to its price fluctuations. ArcelorMittal Zenica already temporarily stopped production in 2023 due to high gas prices 46 and there is no reason to suppose the situation would be different if the gas came from another direction, especially as LNG is more expensive than piped gas. 47 ArcelorMittal already has an electric arc furnace in Zenica, but it is not used, and its long term plans are unclear.

Even with its relatively high demand forecasts and underestimated capital investment costs of EUR 100 million (see section on costs, above) the feasibility study finds that 'The pipeline branch in BiH generates negative cash flows during the first six years of operations. In order to support the 80:20 Debt to Equity ratio, BH-Gas's capability for loan repayment could be enhanced by the cash flow it generates from its existing operations.' <sup>48</sup> At the same time, the study claimed that the existing pipeline could only operate for maximum of 10 more years ie. 2028, considering the study was finished in mid-2018. This was never going to work, time-wise.

It is highly unlikely that carrying out expropriation, securing financing and the remainder of the permits, and construction on partly difficult terrain – all in two countries – would be completed in less than a decade. This would leave little space for BH-Gas to cross-subsidise the new pipeline from its other income, as the source of that income will be increasingly ancient and unreliable. This was already the case in 2018, and is even more pressing now.

The study also warns that 'a cost overrun exceeding 145% of the initial value (i.e. 100%) would jeopardise the project financial viability'. <sup>49</sup> Considering that the estimate of EUR 100 million is now at least 12 years old (see section on costs), such cost increases are highly likely.

What the study does not analyse is the effect of decarbonisation policies, including carbon pricing and the phase-out of fossil fuels. In fact, it does the opposite, monetising the purported emissions savings from the use of fossil gas, with an outdated carbon price of EUR 10-40 per tonne. <sup>50</sup> But in the next few years, BiH will

<sup>&</sup>lt;sup>46</sup> Poslovni Dnevnik, '<u>ArcelorMittal je privremeno obustavio proizvodnju u Zenici</u>', *Poslovni Dnevnik*, 19 November 2023.

<sup>&</sup>lt;sup>47</sup> Deloitte UK, 'A year on from the energy crisis, where does Europe stand?', Deloitte, 18 September 2023.

<sup>&</sup>lt;sup>48</sup> Ibid., 46.

<sup>&</sup>lt;sup>49</sup> Ibid., 51.

<sup>&</sup>lt;sup>50</sup> Ibid., 54.





have to introduce carbon pricing which will not only apply to coal, but also fossil gas and oil, so expanding the use of gas will carry major disadvantages compared to alternatives like solar, wind, geothermal and heat pumps.

#### **Environmental issues and permitting**

The ESIA for the project, despite being highly detailed in some aspects, misses out the main impact from the pipeline, namely Scope 3 greenhouse gas emissions, or in other words, the emissions from burning the gas that would be transported by the pipeline.

If the pipeline was used at full capacity, such emissions would amount to around three million tonnes of carbon dioxide each year. <sup>51</sup> But in this study, they are not mentioned, even though the pipeline has no purpose if it does not transport gas to be burnt. Only fugitive emissions and other smaller emissions from the functioning of the pipeline itself are included in the calculations, <sup>52</sup> making them seem much smaller than they really are.

The pipeline would pass through several potential Natura 2000 sites: Duvanjsko polje, Kupreško polje, Raduša-Janj-Vukovsko polje and Mostarsko Blato. Rijeka Lištica and Mostarsko Blato are also freshwater Key Biodiversity Areas. <sup>53</sup> With the route in BiH reaching 1715 metres above sea level on the forested mountains above Kupres, and involving 26 river crossings, the construction looks set to be disruptive for biodiversity as well as challenging for the contractors.

The project has obtained some of the necessary permits for its construction in both countries, including the EIA approval in Croatia<sup>54</sup> in August 2014 and FBiH in 2021.<sup>55</sup> However, the BiH permit is currently subject to an administrative lawsuit by the Aarhus Centre in Sarajevo, challenging its approval.

#### Lack of meaningful public consultation

According to the environmental permit,<sup>56</sup> the EIA study was published on 17 March 2021, but the link provided no longer works. The EIA was reportedly available online and in the Ministry in Sarajevo, but the environmental permit does not mention it having been available anywhere along the route of the pipeline.

Due to COVID-19 restrictions, public hearings were held online, on 13 and 14 April 2021. The invitation for the online public hearings was reportedly published in the Dnevni Avaz and Dnevni List newspapers on 27 March 2021, with 32 participants in the first hearing and 28 in the second one. Minutes were reportedly kept, but were not published.

<sup>&</sup>lt;sup>51</sup> See more details on the calculation at: Gligor Radečić and Ana Colovic-Lesoska, <u>The EBRD must not support further fossil gas lock-in for North Macedonia</u>, *CEE Bankwatch Network*, 8 May 2023.

<sup>&</sup>lt;sup>52</sup> Dvokut Ecro and Institut za građevinarstvo "IG", <u>Studija uticaja na okoliš i procjene socijalnog uticaja za projekat gasovoda Južna interkonekcija</u>, 872.

<sup>&</sup>lt;sup>53</sup> Ibid., 402.

<sup>&</sup>lt;sup>54</sup> Ministry of Environment and Nature Protection, <u>Decision UP/I 351-03/13-02/96</u>, Ministry of Environment and Nature Protection, 25 August 2014.

<sup>&</sup>lt;sup>55</sup> Federal Ministry of Environment and Tourism, <u>Decision no. UPI 05/2-02-19-5-43/21 SC</u>, Federal Ministry of Environment and Tourism, 16 June 2021.

<sup>56</sup> Ibid.





The process may have ticked the legally stipulated boxes, but it does not appear to have been successful in informing and consulting local people who may be directly affected by the works and expropriation. In December 2024, Bankwatch staff travelled along the pipeline route and spoke with people from Crniče/Vrbanja near Bugojno, Otinovići near Kupres, Sarajlija and Mandino Selo in Duvanjsko polje and Široki Brijeg. Several of them reported having vaguely heard something in the news about the project, but none of them were aware of any public consultation having happened, nor did any of them know that the route would pass nearby their settlements.

#### **Conclusions**

Based on the evidence available so far, the southern gas interconnection creates a high risk of consuming a disproportionate amount of administrative capacity and public funds at a time when BiH should be decarbonising. Since it depends on gas for just three per cent of its energy supply, BiH must maximise this advantage instead of getting locked in by new fossil fuel infrastructure.

The project is technically and politically challenging to carry out and is at a relatively early stage, having secured no financing, and with expropriation not started yet. This makes it highly unlikely to be finished in less than a decade, even excluding additional works on distribution networks. In the meantime, it would crowd out much-needed and more timely solutions for the energy challenges faced by BiH, like the heat pump system proposed as part of Sarajevo's district heating system.

The project costs have not been updated since 2013, so are vastly underestimated. And the likely number of customers and their consumption has been overestimated, with a lack of transparency about the assumptions made compared to earlier studies. The already built pipeline from Zenica to Novi Travnik serves as a stark reminder that the project may well end up as a stranded asset. Even the project feasibility study fails to justify why a capacity of 1.5 bcm is needed, as its optimistic assumptions add up to just a third of this figure annually.

The feasibility study also lacks updated prices of LNG and construction costs, and was carried out at a time when heat pumps and solar photovoltaics were still a rarity in BiH, so is blind to the fact that gas may be undercut by better alternatives.

Both the feasibility study and EIA fail to take into account emissions from burning the gas transported by the pipeline, which could amount to three million tonnes annually. This has a knock-on effect of underestimating carbon pricing costs, and the need to decarbonise by 2050 at the very latest has not been taken into account at all.

BiH's decision makers must urgently update their thinking with regard to fossil gas and understand that it is a fuel of the past, not the future. The EU in particular must do more to make this clear. If the international community wants to help advance BiH's energy transition, it must say a clear no to new gas interconnectors and invest in its potential for energy savings, heat pumps, geothermal appropriately-sited wind and solar and grids instead.







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