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To: European Ombudsman

Complaint to the European Ombudsman - Failure of the European Investment Bank (EIB) to ensure proper climate impact assessment for Trans Adriatic Pipeline (TAP) and Trans Anatolian Natural Gas Pipeline (TANAP) projects

Introduction and project context

1. The European Investment Bank (EIB) approved loans to the Trans Adriatic Pipeline (TAP) Project on 6th February 2018 and the Trans Anatolian Natural Gas Pipeline (TANAP) on 15th March 2018. Both projects are considered by the bank as parts of the Southern Gas Corridor which in addition comprises the Shah Deniz gas field and the South Caucasus Pipeline with its expansion through Azerbaijan and Georgia to Turkey.¹

¹ http://www.eib.org/en/infocentre/press/news/topical_briefs/2018-february-01/southern-gas-corridor-trans-adriatic-pipeline-tap.htm?f=search&media=search

2. The Southern Gas Corridor has also been included in the list of Projects of Common Interest in the Commission Delegated Regulation (EU) 2018/540 of 23 November 2017 and is defined wider than in the EIB's definition.² The investments financed by the bank are part of the PCI project (the 3rd/4th PCI list) number 7.1 which comprises “*dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a³ of new sources of gas from the Caspian Region, crossing Azerbaijan, Georgia and Turkey and reaching EU markets in Greece and Italy, and including the following PCIs:*

- *Gas pipeline to the EU from Turkmenistan and Azerbaijan, via Georgia and Turkey, [currently known as the combination of ‘Trans-Caspian Gas Pipeline’ (TCP), ‘South-Caucasus Pipeline Future Expansion’ (SCPFEX) and ‘Trans Anatolia Natural Gas Pipeline’ (TANAP)]*
- *Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as ‘Trans-Adriatic Pipeline’ (TAP)], including metering and regulating station and compressor station at Nea Messimvria”*

3. Article 309 of the Treaty on the Functioning of the European Union (TFEU) states as follows:

The task of the European Investment Bank shall be to contribute, by having recourse to the capital market and utilising its own resources, to the balanced and steady development of the internal market in the interest of the Union. For this purpose the Bank shall, operating on a non-profit-making basis, grant loans and give guarantees which facilitate the financing of the following projects in all sectors of the economy:

....

(c) projects of common interest to several Member States which are of such a size or nature that they cannot be entirely financed by the various means available in the individual Member States.

4. Reference to the concept of projects of common interest is also made in Article 171 TFEU, which deals with trans-European Networks and which requests the Union to “*establish a series of guidelines covering the objectives, priorities and broad lines of measures envisaged in the sphere of trans-European networks; these guidelines shall identify projects of common interest* ». In our view the use of the term “project of common interest” in Article 309 of the

² https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.090.01.0038.01.ENG&toc=OJ:L:2018:090:TOC

³ 10 bcm/a means 10 billion cubic meters annually

TFEU is intended to be interpreted in the same manner as in Article 171 – i.e. in the sphere of trans-European networks in the areas of transport, telecommunications and energy infrastructures. Therefore projects approved by the bank, namely TAP and TANAP, should be considered in the framework of Commission Delegated Regulation (EU) 2018/540 as components of the PCI project number 7.1 for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Azerbaijan, Georgia and Turkey and reaching EU markets in Greece and Italy.

5. Article 11 of the TFEU establishes that environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development. The EIB's Statement of Environmental and Social Principle and Standards (Statement) draws from the Treaty environmental principles and requires that environmental considerations be appropriately weighed in the projects it finances. In particular the Statement adopts the precautionary principle requiring environmental damage to be rectified at source (EIB's Statement point 23-30).

6. The EIB's Statement, in points 75-82, endorses the findings in the assessment reports of the UN Intergovernmental Panel on Climate Change (IPCC), and accepts that projects it finances today have a role in determining the concentrations of GHGs in the atmosphere for several decades to come and therefore, the extent of climate change in the future. It also commits the EIB to align its activities with the EU's climate change policy. Furthermore, it requires that project's promoters estimate expected project GHG emissions. For projects that produce significant quantities of GHG emissions, the EIB incorporates the costs of such emissions into the financial and economic analyses that inform its financing decision.

7. This complaint concerns the European Investment Bank's (EIB) failure to ensure proper climate impact assessment for Trans Adriatic Pipeline (TAP) and Trans Anatolian Natural Gas Pipeline (TANAP) projects. The Complainants have lodged a complaint to the EIB Complaints Mechanism about this failure. The Complaints Mechanism has not provided a satisfactory response in relation to these allegations, which is the reason for this complaint⁴. In the Complainants' view the EIB CM did not consider the essence of allegations thus they found it appropriate to lodge the same complaint to the European Ombudsman.

⁴ The Complaints Mechanism's Conclusion Report dated 10 July 2020, Annex 2

8. The explanation of the values and units used is the following:

10 bcm annually – refers to the initial capacity of TAP in the EIB’s Environmental and Social Data Sheets (ESDS), in billion cubic meters annually

20 bcm annually – refers to the maximal design capacity for TAP, in billion cubic meters annually

24 bcm annually – refers to the design capacity of TANAP in the second stage of the project, in billion cubic meters annually

31 bcm annually – refers to the nominal capacity of TANAP, 31 bcm annually in high-flow case for the third stage of the project, in billion cubic meters annually

16 Gm³ annually – refers to the initial capacity of TANAP in the EIB’s ESDS 16, in billion cubic meters annually

The complainants request the European Ombudsman to assess the following issues:

Allegation 1: Irregularities in the Environmental and Social Impact Assessments (ESIAs). The EIB failed to require project promoters to provide climate impact assessments for TAP and TANAP projects within their entire area of influence.

9. EIB’s Environmental and Social Practices Handbook (Handbook) requires the project promoter identify, describe and assess both adverse and positive, direct, indirect and induced environmental and social impacts, cumulative and in-combination impact/effects associated with the operation, its ancillary or associated facilities and the project area of influence (point 5 “Assessment”, page 13). The project area of influence has been defined in the Handbook as areas, individuals and communities impacted beyond the footprint of the project or activity by cumulative impacts from further planned development of the project or other sources of similar impacts in the geographical area, any existing project or condition, and other project-related developments that can realistically be expected at the time due diligence is undertaken.

10. The Handbook also requires that all operations located in the EU, Candidate and potential Candidate countries, which are likely to have significant effects on the environment, human health and well-being and may interfere with human rights, will be subjected to an assessment according to the EU EIA Directive 2011/92/EU. In addition if applicable the EIA may be complemented by other assessments in line with relevant EU legislation and best international

practice and under the umbrella of the ESIA, such as a **climate change impact assessment** (point 7-9 Handbook). The consideration of the impact of projects on the climate is related to the Handbook's requirement that all operations (of the Bank) comply with the United Nations Framework Convention on Climate Change (UNFCCC) and its UNFCCC's Kyoto Protocol (point 7).

11. The UNFCCC from 1992 and the UNFCCC's Kyoto Protocol from 1997 acknowledge that human activities have been increasing the atmospheric concentration of greenhouse gases and call for the Parties to the convention to adopt policies and measures to combat this process and to protect the climate for the present and future generations. The Convention requests the parties to take precautionary measures to anticipate, prevent or minimize the cause of climate change and mitigate its adverse effects. The Parties of this Convention commit to take climate change considerations into account in their relevant social, economic and environmental policies and actions **and employ appropriate methods, for example impact assessments**, with the view to minimizing adverse effects (article 4 of the Convention). In the Kyoto Protocol, the implementing Parties committed to, implement policies and measures to limit and/or reduce methane emissions in the distribution of energy (article 2.1a). Parties to the Protocol also agreed that global warming potentials of emissions shall be those accepted by the Intergovernmental Panel on Climate Change and that they shall be regularly reviewed (article 5 of the Protocol).

12. Therefore, both TAP and TANAP should be subject to climate impact assessments, which should have been required by the EIB, in order to anticipate the level of greenhouse gas emissions that will be triggered by the realization and operation of these infrastructure projects. Such assessments should also identify and assess the significance of the project climate impacts and should propose possible mitigation measures to prevent or minimize the level of greenhouse gases emissions and - in case they are unavoidable – to compensate them.

13. Both TAP and TANAP projects are integral parts of the Southern Gas Corridor as dedicated and scalable infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region. There are other projects included in the Southern Gas Corridor – which should have been considered during EIB's due diligence process - as described above in points 1 and 2.

14. Therefore the assessment of the climate impact of TAP and TANAP, including estimations of GHG emissions, should take into account the entire Southern Gas Corridor to account for all emissions of greenhouse gasses related to the extraction, transportation and use of fossil gas, in order to properly incorporate the cost of such emissions into the financial and economic analyses that informs the bank's financing, in line with the EIB's Statement.

15. For the Trans Adriatic Pipeline, the Environmental and Social Impact Assessment (ESIA) was divided into three separate parts; Greek, Albanian and Italian. ESIA's for the Greek and Albanian sections of TAP include assessments of the impacts of the respective TAP sections on the climate. These assessments include calculations of greenhouse gasses emissions into the air within the boundaries of the respective countries: **Greece:** Greenhouse Gas Emissions are calculated in the Integrated ESIA Greece, Section 8 Assessment of Impacts and Mitigation Measures (page 32-34).⁵ The calculation was based on the assumption that the project runs on the maximum capacity of the pipeline, 20 billion of cubic meters (bcm) of gas annually. It included emissions from the two compressor stations (combustion and venting activities). Fugitive emissions were considered negligible and therefore not included in the final calculations. It was calculated that in total the project will emit approximately 958,826 tons CO_{2equivalent}/year, within the boundaries of Greece.

Albania: Greenhouse Gas Emissions are calculated in the ESIA Albania Section 8 - Assessment of Impacts and Mitigation Measures (page 130)⁶. The calculation was based on the assumption that the project runs on the maximum capacity of the pipeline, 20 billion of cubic meters (bcm) of gas annually. It included emissions from the two compressor stations (combustion and venting activities). It was calculated that in total the project will emit approximately 706,000 tons CO_{2 equivalent}/year, within the boundaries of Albania.

Italy: the ESIA for Italy did not calculate greenhouse gasses emissions, considering the impacts as insignificant (see ESIA Italy - Section 8 Assessment of Impacts and Mitigation Measures⁷). The ESIA Italy has failed to comply with the EIB's requirements for climate impact assessment.

⁵ https://www.tap-ag.com/assets/07.reference_documents/english/esias/greece/ESIA_Greece_Section_8_Assessment_of_Impacts_and_Mitigation_Measures.pdf

⁶ https://www.tap-ag.com/assets/07.reference_documents/english/esias/albania/AAL00-ERM-641-Y-TAE-1010_03--ESIA_Albania_SECTION_8_-_Assessment_of_Impacts_and_Mitigation_Measures.pdf

⁷ https://www.tap-ag.com/assets/07.reference_documents/english/esias/italy/030-Section-8---Assessment-of-Impacts-and-Mitigation-Measures.pdf

15. The project promoter, Trans Adriatic Pipeline AG, did not provide information on the projects expected greenhouse gasses emissions for the entire area of influence of TAP which should be understood as the entire Southern Gas Corridor starting from the extraction site Shah Deniz. The ESIA has not accounted for the greenhouse gas emissions from burning the transported fuel in the intended installations such as power plants.

Therefore the promoter Trans Adriatic Pipeline AG failed to identify, describe and assess both adverse and positive, direct, indirect and induced environmental and social impacts, cumulative and in-combination impact/effects associated with the operation, its ancillary or associated facilities and the project area of influence in line with the point 5 “Assessment” of the EIB’s Handbook by failing to provide proper and accurate climate impact assessment as required by the EIB’s Statement.

16. For TANAP, emissions of greenhouse gasses were calculated in the ESIA Chapter 8.⁸ Calculations included the construction, operation and decommissioning phases and, similarly to TAP’s impact calculations, emissions from the compressor stations (venting and combustion activities) were accounted for for a capacity of the pipeline of 24 bcm annually.⁹ In addition, methane leakages from compressor stations, pipeline and metering stations were also taken into account. It was calculated that in total the project when operational will emit approximately 1,956,049 tons CO₂_{equivalent}/year within the boundaries of Turkey. Emissions during the construction will reach 78,883 tons CO₂_{equivalent}/year whereas during the decommissioning 7,888 tons CO₂_{equivalent}/year.

The TANAP ESIA’s greenhouse gasses emissions assessment does not take into account the cumulative global impacts of the project on climate in relation to the development of infrastructure necessary for gas extraction and transportation through the other sections of Southern Gas Corridor as described in point 2 of this complaint. The ESIA has not accounted for the greenhouse gasses emissions from burning the transported fuel in the intended installations such as power plants.

Therefore the promoter TANAP Dogalgaz Iletim AS failed to identify, describe and assess both adverse and positive, direct, indirect and induced environmental and social impacts, cumulative and in-combination impact/effects associated with the operation, its

⁸ <https://www.tanap.com/reference-documents/>

⁹ ESIA covers stages 1 and 2 when the pipeline reaches the capacity of 24 bcm, however its nominal design capacity is 31 bcm, see TANAP ESIA Chapter 2, page 19

ancillary or associated facilities and the project area of influence in line with the point 5 “Assessment” of the EIB’s Handbook by failing to provide proper and accurate climate impact assessment as required by the EIB’s Statement.

17. Both ESIA’s for TAP and TANAP underestimated their cumulative impact on climate related to the emissions of greenhouse gasses by calculating and reporting on emissions only within the boundaries of individual states, ignoring the other components of the Southern Gas Corridor, including emissions from the gas extraction phase and not accounting from the final use of the gas. As a result, proper estimation of greenhouse gas emissions from the entire network of infrastructure called the Southern Gas Corridor has not been conducted and the climate impact of this project remains unknown. At a minimum, additional estimations of greenhouse gas emissions should be conducted for gas extraction, including Shah Deniz gas field, combustion and transportation through all the pipelines which are components of the Southern Gas Corridor, namely the Trans-Caspian Gas Pipeline (TCP) and the South-Caucasus Pipeline Future Expansion (SCPX).

18. The EIB CM found these allegations ungrounded. In its conclusions report, it argued that with regard to TAP, a Cumulative Impact Assessment (CIA) and an Associated Facilities Assessment (AFA) which provided GHG emissions estimates and climate change considerations for the remaining SGC projects (i.e. SD2, SCPX and TANAP) were published on the TAP’s website (International Financial Institutions Supplementary Information Package). According to the EIB CM, for the TANAP section, the EIB performed an assessment of the GHG emissions from other SGC projects during its due diligence process.

However, these analyses do not comply with the bank’s requirements. Instead of being integrated into the ESIA’s processes in order to meaningfully inform decision-making, constituting a comprehensive source of information for designing mitigation and compensation measures in a reference to international commitments of each party and country concerned, especially under the United Nation Framework Convention on Climate Change, they were fragmented and in reality did not serve the purpose of identifying and assessing the significance of the project climate impact.

The EIA Directive that set the standard for the content of the project’s environmental assessments requires that an environmental impact assessment identifies, describes and assesses in an appropriate manner, in the light of each individual case (...), the direct and indirect effects of a project on the following factors: a) (...); b) soil, water, air, climate and the

landscape; (...) It also requires that the characteristics of projects must be considered having regard to the cumulation with other projects.

The EIB's own Handbook lists several guiding principles for ESIA which should be considered in the EIB's project due diligence process. The very first principle clarifies that the assessment is not restricted to "site-specific" environmental and social impacts and risks but takes into account the project's ancillary/associated infrastructure and area of influence.¹⁰ Therefore the EIB's staff should have noticed that TAP's and TANAP's ESIA's were inconsistent with the above requirements and requested the promoter to correct them.

The Handbook also requires that the EIB's staff must make certain that climate change and biodiversity impacts have been integrated into the EIA/ESIA process.¹¹ Projects like TAP and TANAP which were identified as Projects of Common Interest should strictly comply with these minimum standards.

Despite the fact that these additional assessments have been produced for the purpose of providing them to the EIB, which may seem to satisfy the requirements, they were neither part of ESIA's processes nor were integrated in the EIB's project's due diligence. The results of these assessments were not accepted by the EIB who conducted its own carbon footprint assessment ignoring the outcomes of ESIA's and significantly underestimating the amount of greenhouse gas emissions from the project.

Allegation 2. ESIA's failed to cumulatively assess fugitive emissions of greenhouse gases.

19. Methane which atmospheric residence time is 12 years is the main component of natural gas. Given methane's Global Warming Potential (GWP), of 86 in a 20 year time span in comparison to carbon dioxide, it is important to evaluate the fugitive emissions produced along fossil gas transmission infrastructure in order to properly assess the infrastructure's impact on the climate.

20. Fugitive emissions are defined by the IPCC as all greenhouse gas emissions from gas systems except contributions from fuel combustion. These comprise emissions from venting, flaring and all other fugitive sources associated with the exploration, production, processing, transmission, storage and distribution of natural gas.¹²

¹⁰ EIB Environmental and Social Handbook, version 2014, point 120, page 123

¹¹ EIB Environmental and Social Handbook, point 172, page 130

¹² 2006 IPCC Guidelines for National Greenhouse Gas Inventories , Volume 2 Energy

21. Both ESIA's for TAP and TANAP underestimated their impact on the climate by not accounting for possible fugitive greenhouse gas emissions. Fugitive emissions (such as from the wells of the Shah Deniz gas field, piping connectors, compressor seals, meter or regulator stations or block valve stations) were entirely ignored. It is worth noting that the EIB's carbon footprint assessment, in contrast to ESIA's, accounted for the fugitive emissions. Thus the EIB should have requested the borrowers to correct the climate impact assessments.

22. The EIB-CM replied that at the time when ESIA's were produced, there were no specific requirements outlining the methodology to be used for calculating the fugitive GHG emissions of projects and that TANAP's ESIA includes calculation of fugitive and venting emissions. It also noted that the EIB's carbon footprint assessments for TAP and TANAP included the contributions of fugitive emissions related to SD2 and SCPX projects, thus covering all the infrastructures of the SGC as required by the EIB Standard 4.

23. However, in our complaint we did not argue that the ESIA's used the wrong methodology but that fugitive emissions were not calculated for the entire project and associated facilities. World Research Institute's common techniques for emissions estimations which the EIB CM referred to, in its 2013 report on the U.S gas system, concluded that fugitive methane emissions occur at every stage of the natural gas life cycle and represent a significant source of global warming pollution in the U.S.¹³ It was widely known that fugitive emissions occur along the pipeline and that methane which is the biggest component of natural gas has a significant global warming potential. Indeed TANAP's ESIA includes calculation of fugitive and venting emissions reflecting on that stage of knowledge, however they were limited to the TANAP section of the Southern Gas Corridor. The TAP's ESIA's did not include such calculations beyond, as noted above, the assessment of emissions from compressor stations on the pipeline itself. As a result, fugitive emissions from TAP, TANAP and remaining associated facilities were not fully taken into account in the process of environmental assessment.

The EIB's own carbon footprint assessment may not be treated as a replacement for ESIA. In addition, it was also wrongly conducted, as described in the allegation 3 below.

¹³ *Clearing the Air. Reducing Upstream Greenhouse Gas Emissions from U.S. Natural Gas Systems*; WRI, April 2013, page 2

Allegation 3: The EIB failed to conduct an accurate greenhouse gasses emission assessment for its loans for the Southern Gas Corridor

24. The EIB has committed to assess and report on the carbon footprint of EIB financed investment projects, based on the emission calculation methodology it has developed. The most recent methodology was released on 3rd April 2014. The methodology intends to measure greenhouse gas (GHG) emissions from certain projects financed by the bank in order to inform its wider economic appraisal. It is considered as “work in progress” that is subject to periodic review and revision in the light of experience gained and as knowledge of climate change issues evolves.¹⁴ The methodology is based upon the internationally recognised IPCC Guidelines and the WRI GHG Protocol.¹⁵ One of the guiding principles of the methodology is conservativeness, meaning that the EIB should use conservative assumptions, values, and procedures which are those that are more likely to overestimate absolute emissions and underestimate negative relative emissions (against the established baseline).

25. Both TAP and TANAP were subject to EIB’s GHG assessment. However the result of this assessment is inaccurate and contravenes the principle of conservativeness. As a result the final estimations of the level of greenhouse gasses emissions were underestimated.

26. One reason which contributed to underestimation of greenhouse gas emissions from TAP and TANAP was that the Bank used an outdated global warming potential indicator for methane - which is the main component of fossil gas.

According to the EIB’s methodology, the 100 year global warming potential of methane is 21, which is based on the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories Reporting Instructions. However, the IPCC reflecting the development of climate science modified the accepted global warming potential value for methane, which was found more potent in causing global warming than initially thought. In 2007, in its Fourth Assessment Report („The physical science basis”), the IPCC Working Group presented new global warming potential values for methane, for both 20 and 100 year timescales, which were 72 and 25 respectively.¹⁶ Then in 2013 in the IPCC Fifth Assessment Report, these

¹⁴ Methodologies for the Assessment of Project GHG Emissions and Emission Variations, Version 10.1, page 2

¹⁵ IPCC guidelines for National Greenhouse Gas Inventories and World Resource Institute The GHG Protocol Corporate Accounting and Reporting Standard

¹⁶ Fourth Assessment Report (AR4), Working Group 1, the physical science basis, IPCC, 2007, page 33, https://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4_wg1_full_report.pdf

values were again increased up to 86 and 34 respectively.¹⁷ In this context, the reason for applying in the EIB's methodology methane (and possibly other gases) global warming potential values dating back to the 1996 IPCC document - and consequently ignoring the development of climate science and subsequent IPCC reports on that matter - is entirely incomprehensible. In our view such an approach contradicts the principle of conservativeness which requires the bank to use assumptions and values which are those that are more likely to overestimate absolute emissions and underestimate negative relative emissions.

27. The EIB CM rejected this accusation. It did so by citing section 5.2 of its own response, where it dismisses another allegation against the bank. In section 5.2 it acknowledges the failure of the ESIA of both TAP and TANAP to use the correct GWP potential for methane *'which was lower than the recommended value at the time (25) by the IPCC 4th Assessment Report'*. The EIB CM goes on to describe this discrepancy when dealing with the complaint about the bank's own failure to adequately assess the carbon footprint of the Southern Gas Corridor as *'marginal errors'*. However, the *'marginal errors'* ascribed to the TAP and TANAP ESIA's cannot automatically be applied to the EIB's own carbon footprint assessment.

The calculations that the EIB CM makes in section 5.2 apply only to the TAP and TANAP ESIA, not automatically to the EIB's own carbon footprint assessment. No assessment is made by the EIB CM of the flaws of the EIB's carbon footprint exercise. This is an error in itself. It is an additional error to dismiss these non-assessed errors as *'marginal'*.

28. The soundness of the EIB loan is also questionable on the grounds that the project has not been subject to a comprehensive climate impact assessment which would account for all direct and indirect emissions from this project and emissions accumulated over its operational lifetime of 50 years and their cumulative impact on the climate.

29. The EIB has also underestimated greenhouse gases emissions from TAP and TANAP by applying incorrect technical parameters for both projects, particularly by not accounting for the real design capacity of the pipelines.

¹⁷ Fifth Assessment Report (AR5), Working Group 1, the physical science basis, IPCC, 2013, page 714, table 8.7, http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf

a) According to the TANAP Environmental and Social Data Sheets (ESDS) ¹⁸ dated 15 March 2018, “*when fully operational and running at full capacity, TANAP will transport 16 Gm³ of natural gas per annum*”. This assumption finds no grounds in the available ESIA and the official technical description of the project. The project overview and technical description can easily be found in the ESIA. Chapter 1 of the TANAP ESIA explains all the design assumptions for TANAP and these are among others:

For the onshore pipeline section:

- Diameter: 56 inches to the Eskişehir Compressor Station and 48 inches from Eskişehir Compressor Station to the Turkey/Greece border; 30 inches from Eskişehir Compressor Station to the BOTAŞ system tie-in point.
- Total pipe length: 1805 km
- Onshore length: 1787 km
- Lateral line from Eskişehir Compressor Station to BOTAŞ system: 30 km
- **Nominal capacity: 31 bcm annually in high-flow case**
- Design Pressure: 95.5 barg
- Main design according to ASME B31.8, 2012

For the offshore pipeline section:

- Looping at Marmara Sea crossing
- Diameter: 2 x 36 inches
- Length: 18 km, approximately.

It also informs about the 7 compressor stations which will be installed in the following stages of the project in order to fulfill the pressure requirements and about 3 metering stations.

The ESIA also explains that TANAP has been designed for three stages of operation when the initial capacity of 16 bcm annually (First Stage) is expected to expand to 24 bcm annually by 2023 (Second Stage) and to 31 bcm annually by 2026 (Third Stage), upon construction of the required additional compressor stations. Chapter 2 of the ESIA also explains that the ESIA report includes phases 1 and 2 and that phase 3 compressors stations will be subject to a separate ESIA report and process when the decision for the realisation of these compressor

¹⁸ Environmental and Social Data Sheet which is published on the EIB’s website contains a summary of the Bank’s environmental and social appraisal of project

stations are taken. Therefore GHG emissions calculations in the ESIA included emissions from the compressor stations and venting activities for a capacity of 24 bcm annually.

In this context, the EIB's assumption under its carbon footprint assessment that, when running at full capacity, TANAP will transport 16 Gm³ of natural gas per annum is fundamentally wrong and it only describes the volume of gas which will be transported through the pipeline in the first stage of operation and not the nominal design capacity or the maximum capacity of TANAP within the scope of the conducted ESIA.

As a result of the incorrectly assumed pipeline capacity, the EIB's carbon footprint assessment estimated that absolute direct greenhouse gasses emissions from TANAP would be 758,000 tons CO₂equivalent/year, whereas the TANAP ESIA calculated 1,956,049 tons CO₂equivalent/year. The EIB's carbon footprint has underestimated the project's direct GHG emissions by at least 2.5 times in comparison to the calculations included in the ESIA (even if these calculations do not even include emissions from the end use combustion of transported gas and fugitive emissions).

b) According to the EIB's ESDS for TAP, the TAP, when fully operational and running at full capacity, will transport 10 Gm³ of natural gas per annum. This assumption finds no grounds in the available ESIA and official project technical description. The ESIA for Greece explains that:

- *„The Greek section of the TAP will be equipped with two compressor stations. For the 10 bcm case one compressor station in the broader area of Kipoi (GCS00) is foreseen of approximately 30-45 MW (2 operating and 1 spare compressors of 15 MW, each).(…) Furthermore an additional compressor station located in the vicinity of Serres (GCS01)(…) is foreseen in the 20 bcm case”.*¹⁹
- *„Pipeline transportation capacity may be increased from an initial throughput of 10 bcm/year (….) to 20 bcm/year of natural gas.”*²⁰
- *“The pipeline will have a design pressure of 95 barg (bars above atmospheric pressure), which will be sufficient for the TAP capacity base case of 10 bcm/year as*

¹⁹ ESIA Greece, section 4, page 7-8

²⁰ ESIA Greece, section 4, page 9

well as for the potential future extension of the TAP System capacity to 20 bcm/year.”²¹

In other sections the ESIA outlined impacts and mitigation measures for a volume of 20 bcm/year, for example in the *Residual impacts* section (8.2.3.3).

The ESIA for Albania also adopted a similar approach and impacts have been assessed for the 20bcm/year pipeline capacity. In this context, the EIB’s assumption for carbon footprint assessment that, when running at full capacity, TAP will transport 10 Gm³ of natural gas per annum is fundamentally wrong and it only describes the volume of gas which will be transported through the pipeline in the first stage of operation and not the maximum volume for which the pipeline was designed.

As a result of the incorrectly assumed pipeline capacity, the EIB’s carbon footprint assessment estimated that absolute direct greenhouse gasses emissions as a result of TAP would be 476,000 tons CO₂equivalent/year whereas TAP ESIA calculated 1,664,826 tons CO₂equivalent/year (Greek and Albanian sections). The EIB’s carbon footprint has underestimated the project’s direct greenhouse gas emissions by almost 3.5 times.

c) According to the information from the European Commission’s webpage²² the EU aims to increase Southern Gas Corridor’s initial flow of 10 bcm „to 80 to 100 bcm of gas per year in the future” supplying it from the Caspian Region, the Middle East and the East Mediterranean. Although the current technical design of the project does not allow for transportation of such an amount of fuel, this indicates that the EU aims to import more than 10 bcm of gas annually. The current technical parameters of the project allow for importing at least twice as much of gas to the EU.

d) TAP and TANAP downstream emissions (from end use combustion) have also been wrongly calculated. The EIB’s Carbon Footprint Assessment calculation from 22 February 2018, section 3, calculated that consumers will use 638,400 TJ of energy from gas annually which corresponds to 16 bcm annually. The EIB’s calculation is based on the wrong assumption of TAP and TANAP capacity as described in points a) b) and c) above.

30. The EIB CM found these allegations ungrounded.

²¹ ESIA Greece, section 4, page 19

²² Gas and oil supply routes, <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies/gas-and-oil-supply-routes>

The EIB CM concluded that the “Project” was defined by the EIB as stage 1 of TAP and TANAP and only if financed by the EIB all future extensions or upgrades of the project will be subject to further assessments as well as updates of carbon footprint assessments.

We cannot agree with this argumentation. The projects have been clearly defined in the TAP and TANAP’s ESIA’s and described by clear technical parameters. The projects’ development consents were granted for the very specific parameters as defined in the projects’ documentations. These technical parameters allow the TAP and TANAP to function at the maximum of their volume capacity without making “extensions and upgrades” to the pipelines. What the EIB CM describes as “Stage 2” concerns a situation when natural gas will be further compressed, so that its bigger volume may be transported through both pipelines. This situation will not require any “extensions and upgrades” of both TAP and TANAP which are functionally ready to transport that amount of gas. Therefore, it was entirely arbitrary and it has no grounds in the Projects’ technical parameters, that the EIB’s carbon footprint assessment be limited only to the so called “Stage 1” of the projects. Phrases “Stage 1” and “Stage 2” only refer to assumptions related to transportation of the amount of gas over time and thus may not serve as a basis for environmental assessments.

31. The EIB’s carbon footprint assessment has failed to comply with the Methodologies for the Assessment of Project GHG Emissions and Emission Variations (Methodologies) as regards the established baseline emissions scenario for calculating project relative emissions. The methodologies explain that the baseline scenario must propose a likely alternative to the proposed project which is credible in terms of economic and regulatory requirements.

It shall be noted that in the case of TAP and TANAP, direct emissions take place along the pipeline route, and the majority are related to compressor stations. These emissions are to a large extent located outside the EU. According to the TAP ESIA, Greece is the only EU country for which GHG emissions have been calculated. Emissions from other parts of the Southern Gas Corridor take place outside the EU, in Azerbaijan, Georgia, Turkey and Albania. In case of Scope 3 emissions (other indirect emissions), they will occur in Turkey (from the combustion of 6 bcm of gas annually) and in the EU (from the combustion of up to 20 bcm of gas annually).

Emissions from the Southern Gas Corridor will be regulated in the framework of the UNFCCC. For example emissions in Greece and Turkey will be reported in their National Inventory Submissions and will be subject to emissions’ cuts as committed by those states. In Albania,

those emissions will be reported in the National Communications under the UNFCCC. GHG emissions will be tackled by Nationally Determined Contributions which embody efforts by each country to reduce national emissions and adapt to the impacts of climate change.

Therefore the Southern Gas Corridor's emissions will have to be dealt with by the respective states in the boundaries of which the pipeline is located. These emissions will feature on their GHG balance sheet.

On the other hand, there will be countries which might avoid emissions or limit their level (only if the gas from the Southern Gas Corridor will indeed replace the use of gas from other sources), for example those which will limit gas imports through LNG terminals (or LNG export), gas extraction or transportation through other pipelines (e.g in Ukraine) and which will take certain emissions off the GHG balance sheets.²³

According to the EIB's carbon footprint assessment for TAP and TANAP, relative emissions calculation assumes that a simple replacement of new emissions in several transit countries with avoided emissions in other countries (in the EU, US or Ukraine) will take place and that the outcome of this operation will be zero emissions.

However, there is no evidence of such a mechanism under the UNFCCC (which the EIB committed to comply with) which would allow transit countries of the Southern Gas Corridor pipelines to account for emissions reductions from avoided gas transportation in other states. The EIB's relative emissions calculation and baseline choice have been based on far-reaching simplification and speculation. Given the lack of regulatory framework for such a swap and particularly in the context of the Southern Gas Corridor, the established baseline emissions scenario for calculating the project's relative emissions fails to be credible in terms of regulatory requirements.

32. The CM concludes that the bank's carbon footprint assessment replaces the climate impact assessments not delivered by the projects promoters in the ESIA's (see for example point 5.1.11 of the CM Report). The EIB's carbon footprint assessment concludes that the projects will not lead to any negative climate impacts because they will not lead to an increase of GHG emissions. This conclusion was based on the adoption of a specific project alternative baseline. The EIB's methodology requires that the baseline is credible technically and in terms of economic and regulatory requirements and that the baseline scenario proposes

²³ EIB's GHG Footprint Assessment assumed that alternative to Southern Gas Corridor would be Russian gas imports through Nord Stream 2, Ukrainian transit pipelines or US LNG

the likely alternative. The Complainants raised the concern that the chosen baseline did not meet these requirements. For TAP and TANAP, the choice of the baseline has been based on far-reaching simplification and speculation. We conclude that it is not credible in terms of regulatory framework, as explained below.

The CM concluded that for the TAP sections located within the EU, the gas to be supplied via the SGC is not intended to meet additional gas demand, but to diversify the source of gas supplies. SGC's deliveries to Turkey are expected to either replace other gas or displace more carbon intensive fuels such as coal.

However, no environmental assessment, including carbon emissions assessment, can be based merely on vague "intentions" and "expectations", even if the methodology acknowledges the fact that the relative emissions assessment is theoretical. Therefore the methodology explains that the baseline for calculating relative emissions is in general based on a combination of best available technology and least cost principles.²⁴ It further explains that the choice of baseline should normally be approached in the same way as the expected alternative scenario is determined for the project economic analysis.

The Economic Appraisal of Investment Projects at the EIB presents the way in which possible alternative should be selected for the investment projects under the sector "Gas grids, terminals and storage":

The analysis should consider possible alternatives, including:

- Within the same infrastructure; for instance: alternative routes for gas pipelines, different materials for distribution networks (steel, polyethylene, etc.); different locations and/or capacities for LNG terminals and underground gas storage;
- Possible realistic alternatives for producing the energy required; for instance, launching actions and policies aimed at energy saving instead of increasing the natural gas import capacity; use of other primary (oil, coal) or secondary (electricity, heat) fuels instead of gas; mixed use alternatives; inter-fuel competition, etc.).²⁵

In the carbon footprint assessments for TAP and TANAP, the EIB did not analyze the projects against baselines which would be based on the first type of alternative "within the same

²⁴ Methodologies for the Assessment of Project GHG Emissions and Emission Variations, Version 10.1, April 2014

²⁵ The Economic Appraisal of Investment Projects; March 2013, page 121

infrastructure". It should have therefore identified other realistic alternative for producing the energy required without increasing gas import capacity or instead of using gas. The choice of the baseline is a two steps process, in which the proposed scenario is subject to verification of its credibility. It should meet three conditions: external costs are internalised through public policy (carbon tax; emissions trading scheme etc) and the financial rate of return of the baseline scenario should not differ significantly from the economic rate of return (ERR); the baseline alternative must comply with legal requirements; and finally the baseline alternative could not assume to continue using existing assets beyond their economic life.²⁶ The baseline scenario used for calculating carbon emissions from TAP and TANAP simply does not meet the above criteria. Russia's gas fields (as alternative to Shah Deniz 2) were considered as more emissive and not in compliance with the best available technology requirement. No evidence was provided that external costs were internalized in case of the chosen alternative and that its financial rate of return is similar to its ERR. The same would apply for the pipeline imports from the Ukraine's gas system. Also the baseline scenario assumes the use of existing assets (both Russia's existing gas fields and Ukraine's gas pipelines) beyond their economic life. Thus, only an alternative supply of natural gas was considered as an alternative to gas use in the EU, which also does not comply with the suggested ways in which baseline alternative should be sought, such as energy efficiency, other fuels or inter-fuel competition. The EIB did not consider any baseline using other sources of energy than natural gas or energy efficiency. What the EIB proposed was a typical "before and after" the investment scenario which is not the baseline which is required by the EIB's methodologies.²⁷

In conclusion, the alternative baselines against which relative carbon emissions were calculated were proposed in violation of the requirements of the Methodologies for the Assessment of Project GHG Emissions.

Allegation 4: The project fails to comply with requirements under EIB's Environmental Standards in the EU and Enlargement Countries and with the provisions of the United Nation Framework Convention on Climate Change (UNFCCC).

²⁶ Methodologies for the Assessment of Project GHG Emissions, page 14

²⁷ Methodologies..., "This baseline definition differs in general from an evaluation of emissions 'before and after' the investment", page 14

33. The EIB's Environmental Standards in the EU and Enlargement Countries require that provisions under the Environment Impact Assessment (EIA) Directive are respected, in particular:

- An EIA should be carried out if a project is likely to have a significant impact on the environment; for an Annex II project according to the EIA Directive, the decision not to carry out an EIA should be justified.
- Any residual impacts should be suitably mitigated, compensated and/or offset.²⁸

34. In addition, the EIB's Handbook requires that all operations (of the Bank) comply with the provisions of the UNFCCC.²⁹

35. The ESIA for Albania concluded that *“the predicted GHG emissions from the TAP Project (with both CS stations in the 20 BCM case) will thus account for about 7% of the annual total GHG emissions of the country (compared against 2010 estimates). The impacts of the TAP Project on the GHG balance of Albania will thus be significant.”*³⁰

The significance of TAP's impact on Albania's GHG balance is even more evident if we take into account emissions in the energy sector only. The Third National Communication of the Republic of Albania on Climate Change under the UNFCCC anticipates that in 2019 energy sector emissions will achieve approximately 500,000 tons CO₂equivalent/year. That year direct emissions from the TAP project will reach approximately 353,000 tons CO₂equivalent/year (assuming half of the emissions calculated by the ESIA under a 20 bcm/a scenario). When TAP will reach the capacity of 20 bcm annually in 2023, when the second phase of TANAP is expected to start operation, anticipated energy sector emissions in the National Communication of Albania will reach approximately 710,000 tons CO₂equivalent/year, while TAP related emissions will reach 706,000 tons CO₂ equivalent/year.³¹

36. Mitigation measures for this significant impact have largely been ignored or have only been described generally in the ESIA and a detailed assessment of their feasibility and cost has not been conducted. For example one of the potential mitigation measures, adding a steam

²⁸ EIB Statement of Environmental and Social Principles and Standards

²⁹ EIB's Environmental and Social Practices Handbook, point 7

³⁰ TAP ESIA Albania, Section 8.6.4.1.2, Assessment of Impacts and Mitigation Measures, page 130

³¹ Third National Communication of the Republic of Albania on Climate Change under the UN Convention on Climate Change, Tirana, June 2016, page 205, Figure 5.17

cycle to use excess heat in gas turbines, has been rejected as it would not fit “TAP AG’s operation philosophy”³². The ESIA has not proposed any suitable compensation measures or offset which is required by the EIB standard as described above. Thus the project does not comply with the EIB’s standard requiring impacts to be suitably mitigated, compensated and/or offset.

37. Following decision 1/CP.19 and decision 1/CP.20 of the UNFCCC, Albania has presented its Intended Nationally Determined Contribution in which it committed to reduce carbon dioxide emissions compared to the baseline in the period of 2016 to 2030 by 11.5%. With TAP being one of the biggest single source of significant carbon dioxide emissions, apparently not accounted in the Third National Communication, it is doubtful if Albania will be able to achieve its commitment without additional measures. Therefore the project is not compatible with the UNFCCC because it seriously threatens the achievement of Albania’s emissions reductions objective.

38. These considerations lead to the conclusion that the project is not compatible with the Paris Agreement. The Agreement aims to enhance the UNFCCC by, among others, making the financial flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. The EIB’s loan to TAP and TANAP is not consistent with the low GHG emissions pathway because it undermines Albania’s ability to achieve the emissions reductions objective committed under the UNFCCC.

List of annexes

Annex 1. Summary of a complaint to European Ombudsman Southern Gas Corridor Climate Assessment

Annex 2. Complaints Mechanism’s Conclusion Report, 10 July 2020

³² TAP ESIA Albania, Section 8.6.4.1.2, page 131