

Minutes of the 4th Meeting of Gas and Oil Group on the PECE/PMI

<i>From:</i>	09:00 – 15:00
<i>Date:</i>	23 May 2018
<i>Participants:</i>	Members of the PECE/PMI Gas and Oil Group (TSOs, CP Ministries, Regulators, ENTSOG, COM, ECS, REKK)
<i>Place:</i>	4 Am Hof, Vienna, ECS Premises
<i>Subject:</i>	4th Gas and Oil PECE/PMI Meeting Complying the Draft Preliminary PECE/PMI List for Gas and Oil Projects to be forwarded to the PHLG as Decision Making Body of the Group

I. Introduction

Violeta Kogalniceanu from Energy Community Secretariat opened the meeting, explaining that the scope of the meeting is to agree on the draft preliminary list of projects for which a PECE/PMI label is proposed; this will serve as basis for the Decision for adoption by the Ministerial Council. The list will be made available for endorsement to the PHLG.

Following the decision of the PHLG, the Ministerial Council of the Energy Community will take a decision at their meeting in November. At this meeting the Ministerial Council will, according to the Regulation, take a decision on the projects which receive the PECE and PMI label and make a recommendation to treat the PMI projects in the same way as the PECEs.

Adam Szolyak (European Commission) explained that in this process the Commission is representing the EU. With the 4th meeting of the Gas Group the technical part of the process will be closed. In the next – political – part the Commission will obtain the mandate from the European Council order to be able to represent the position of EU Member States for the Ministerial Council Decision

Ádám Balogh, from Energy Community Secretariat reports on the results of the public consultation. All projects, which were submitted, were put on public consultation. The Regulation foresees and encourages having more transparency and stakeholder involvement. Comments by stakeholders were expected between 5 April and 5 May. Feedback has been received only on the oil project Druzha by 3 stakeholders from Ukraine (2) and Georgia (1) who provided their support to the project.

Ádám Balogh presented the proposed list of PECE and PMIs to introduce the methodological discussion (see the finalised version at the end of the document).

II. Outline of Assessment Methodology

Borbála Tóth from REKK provided an outline of the assessment methodology developed by REKK and DNV GL, that was already discussed and agreed with the Gas and Oil Group at the last meeting on 14 February 2018.

Q: (from Albania – Prof. Dhima): Prof. Dhima welcomed the approach to split the evaluation and ranking of projects to projects in already established markets and projects that introduce gas to new countries. Nevertheless he pointed out that the methodology is not fully applicable for countries like Albania, Kosovo*, Montenegro with new, not yet established gas markets.

A: Borbála Tóth (REKK): As discussed and presented during the previous meetings, the applied CBA methodology is actually overestimating the benefits realized in the mentioned countries, due to the fact that the model treats the new gas demand as brand new energy demand in the country. New markets have also other reference scenarios, so these projects cannot be compared to those in other markets.

Clustering was carried out as agreed at the previous meeting (e.g. for AGRI, Whitestream, Trans- Caspian and the reverse flow project on Trans-Balkan (also considering the sections from Turkey to Bulgaria and from Bulgaria to Romania).

The methodological results of the electricity and gas model coupling (so-called “deep iteration”) were presented as well. The EGMM gas model was feeding gas prices into the EEMM electricity model, which returned gas consumption values into EGMM. For electricity projects, the iteration did not change the CBA results, but in gas the effect of the coupling of the two models on the gas consumption did significantly change the results of many projects. This is particularly the case for newly gasified markets for which a decisive share of the new demand is expected to come from the power sector. Since a coupling of both models provided unstable results for the small and fragmented markets in the region of the Energy Community that

are planned to be gasified, the iteration is not helping to improve more reliable and robust results. For a larger region, and assessments that do not focus on country level results the iteration might be useful, but for this assessment the use of iteration is not further considered in the base case assessment, but presented as a sensitivity.

a. Reference Scenario

The reference scenario – describing the future development of the natural gas markets without the implementation of the proposed projects – was introduced in depth, showing the country level natural gas prices and their increase throughout the modelled period (2020-2050). In 2020 Serbia, Romania and Bulgaria show lower price levels than neighbouring countries; a steady price increase in the future is however observable. WB6 countries tend to be more expensive than the rest of Europe in 2020. Former Yugoslav Republic of Macedonia is an outlier, as there are infrastructure bottlenecks in the reference scenario. Also, the supply structure for the modelled countries was shown to the Group.

III. Assessment Results

Borbála Tóth from REKK and Daniel Grote from DNV GL presented the assessment results (including the results of the sensitivity analysis). It was pointed out that the assessment results for newly gasified markets cannot be compared to those of established gas markets.

The multi-criteria analysis conducted by DNV GL, was therefore applied separately for markets with existing gas consumption and newly gasified countries. Also, the relative ranking of assessed projects was conducted and presented separately for both groups of countries.

The assessment results presented by REKK and DNV GL reflect the socio-economic net benefit for the Contracting Parties of the Energy Community and the neighbouring EU countries for all groups of stakeholders due to the implementation of a specific project. As such, the results are likely to differ from assessment results estimated in evaluations conducted on national level (or a different regional scope) or for a different set of stakeholders (such as assessments of the financial viability of a project conducted by the investor). Evaluations conducted in the past may also be based on different assumptions and input data available at that point in time.

Oil project evaluation:

Borbála Tóth discussed the evaluation of the two oil projects. No market modelling was performed for oil pipelines, evaluation was based on the Regulation and the questionnaire submitted. Cost verification found that the cost is lower than the benchmark cost for project 1. “Brownfield” investment for project 2 is also lower than the benchmark. Project 1 is a mature investment, while project 2 is still in a preparatory phase.

Comments and questions on the assessment results:

Q: Mr Kamran Huseynov (SOCAR): According to slide 21, TANAP and SCPX are included in the reference and can only be ranked by TOOT methodology, which makes it impossible to compare to other projects in the assessment. Why is this the case? Is this the correct approach?

A: Borbála Tóth (REKK): This is a relevant question. As we know, TANAP is much more mature than other projects (i.e. close to completion), and it will be commissioned by the time other projects come online. We decided at the previous meetings that the project would be part of the reference scenario. Being part of the reference scenario, the Consultant cannot use the PINT methodology. Still, the Consultant had to measure the benefits created by TANAP, and this is why the TOOT methodology was used: TANAP was taken out, and the Consultant checked how much loss TANAP would create if it would not be realised. A lot of benefits would then not be created if TANAP would not be put into operation. Investment cost was considered as a sunk cost. For this reason, the application of the CBA is problematic. To show the importance of the pipeline, TANAP scores 10 for market integration and price convergence.

Q: Mr Kamran Huseynov (SOCAR): Thank you for your answer, but we TANAP is not on the PECI/PMI list. Is this intentional?

A: Ádám Balogh (EnC Secretariat): TANAP was intended to be on the list, and the table presented at the beginning of the meeting was incorrect (editorial mistake); ECS corrected the mistake and included TANAP.

Q: Giorgi Vashakmadze (Georgia): the answers revealed that the issues are really complex. The whole assessment about , PECI and PMI reveals that TANAP should be built. If TANAP is not built, there is significant impact on the gas market integration of the EnC..

Trans-Caspian pipeline should not be clustered with SCP(f)X. There is currently no ‘national champion’ behind Whitestream. But if there is a demand and a potential to supply, any prudent investor would invest. We must eliminate the wrong assumption of a bottleneck for Whitestream, as Georgia and Azerbaijan are cooperating on the upstream side, and Trans-Balkan pipeline and BRUA will be there on the demand side.

A1: Borbála Tóth (REKK): I see your point, we raised the very same question beforehand at the 2nd and the 3rd meeting. Without more data than those submitted with the SCP(f)X, the Consultant used in the assessment 5bcm/y,

as it could not assume anything more in order to conduct our assessment – a more consistent capacity submission would have been key to a better assessment, and this was discussed with EnC Secretariat. The project simulation of Whitestream shows that the project could not fulfil its benefit potential in the assessment due to the bottleneck of SCP(f)X 5 bcm capacity.

A2: Ádám Balogh (EnC Secretariat): compared to previous meetings, we received more inputs. ECS discussed the capacity issue with SOCAR, the Commission, and the Consultant with the intent to solve the situation, after the confirmation of DG Energy, it was agreed to use the SCP(f)X project as submitted to ENTSG TYNDP 2017 and to the EU PCI list (5bcm/y). Whitestream could have scored better if the submission was better prepared. Under the Eastern Partnership assessment for Projects of Eastern Partnership Interest would also be open for new submissions, and ECS welcomes any new projects.

A3 Ádám Szolyák (European Commission): The role of Commission is to ensure that there is consistency in the process. The methodology was agreed upon with the Group, and the process has strict deadlines. The EnC Secretariat showed goodwill and helped the project proposal by looking into ENTSG TYNDP 2017 submissions. It is an important project from strategic and political level but maturity seems to be an issue.

Q: Maia Makharashvili (Georgia): Thank you for the explanation. We are ready and open to provide data for an updated evaluation. We will prepare some additional information during the day and try to clarify better this issue.

A: Ádám Balogh (EnC): ECS takes note that Georgia and the project promoter may be in the position to provide additional data, but it would not be fair to other Project Promoters to open the evaluation again once the call for project took place and the project assessment simulation was fully carried out. ECS has to guard the integrity of the process; this is why the PECL assessment, just like the PCI assessment, is a rolling, bi-annual process, to give the chance to new projects to accede to the list.

Q: Prof Dhima Stavri (AL, Ministry of Infrastructure and Energy): In case of UGS Dumrea, did you consider that TAP will be in place?

A: Borbála Tóth (REKK): Yes, TAP, TANAP and IGB were part of the reference scenario (see slide 76 for all infrastructure elements in the reference)

Q: Alija Karcic (BiH, BH gas): I would like to ask for some explanation on gas prices assessment. According to the Consultant gas prices Bosnia and Herzegovina is showed as very expensive compared to prices in the region. In reality, BiH has currently a much lower gas price than many European countries. What source of gas did the Consultant use for assessment?

A: Borbála Tóth (REKK): The model calibration was done on the 2016 reference prices, and in that year gas wholesale price levels in BiH were indeed lower. The gas consumption forecast provided to us by BiH however shows a significant volume increase, which causes an increase of the gas prices. High prices and high consumption are indeed positively influencing the assessment results for gas interconnection projects. High demand forecasts cause high wholesale price levels, in which case a new investment brings more benefits and shows higher NPV and B/C ratio. BiH submitted three projects. If we have a look at the TOOT results: if BiH builds all three projects, then taking one project out of the model, does not affect the results: i.e. one project may be beneficial, all three represents over-built capacity

A: Violeta Kogalniceanu (EnC Secretariat): In all previous meetings we had the discussion about data quality and consistency; when a country forecasts that the gas consumption will 'triple' in a few years because it is in the country energy strategy, this has an impact on the price, especially in countries with small infrastructure network.

Q: Mr Kamran Huseynov (SOCAR): AGRI LNG was grouped with TCP and SCP(f)X. Results show a negative NPV – this means that costs are higher than benefits. This is obvious, if you cluster three projects, the costs will be high. If you consider AGRI project without TCP and without SCP(f)X, NPV could be positive?

A: Borbála Tóth (REKK): TCP and SCP(f)X have been evaluated in a separate cluster, which showed positive net benefits (GAS_22). Only when adding AGRI, the cluster turned the NPV to negative.

Q: Mr Goran Nikolovski (Ministry of Economy, FYR of Macedonia): Ministry of Economy in Macedonia is pleased with methodology used to assess the projects. We agree that newly gasified markets should be assessed differently. The methodology is sound and the Ministry thanks ECS and the Consultant for the good work

Remark by Prof Dhima Stavri (AL, Ministry of Infrastructure and Energy): We would like to emphasize the different situation of the newly gasified countries. It should be necessary to present to PHLG the suggestion to review to the Regulation 347, as newly gasified countries require the application of a different methodology. We would like to emphasize the high interest and regional importance of UGS Dumrea, which is not classified as a PECL project for PECL/PMI List 2018. This has happened due to the applied methodology which is not considered appropriate by the Albanian Ministry, for the cases of newly gasified countries. We will continue to present this situation and this project at the next meeting of the PHLG and to the Ministerial Council of the Energy Community for discussion and final decision.

Detailed project results and discussion:

Borbála Tóth (REKK) presented the detailed results by projects and showed how to interpret the slides. The same logic and presentation of results was used for all projects. The tables present the changes compared to reference in Consumer surplus, producer surplus, TSO profits, trader profits. Investment cost is presented as a one-time investment. NPV is discounted with a 4% discount rate. Results are presented for EnC+ neighbouring EU MS. Regional benefit change is presented on regional EnC and hosting countries level.

Daniel Grote (DNV GL) presented the project specific MCA slides, showing the change of all the four indicators due to the implementation of the specific project, the score for each indicator, the total score and the relative rank of the project. An additional figure shows how the specific project scores in relation to all other projects for the same indicator.

Q: Zarko Djuranovic (Montenegro Bonus): Can we have a look at IAP detailed results?

A: IAP results: most benefits appear in AL and ME due to the fact that these are newly gasified markets. Consumer benefits are high, because in the reference scenario there is no gas demand. HR is showing a negative NPV, whereas ME and AL showed strongly positive NPVs.

Q: Giorgi Vashakmadze (Georgia): what is the source of gas for IAP?

A: Borbála Tóth (REKK): TAP and TANAP are included in the reference case. No gas from Turkmenistan is in place. The project promoter confirmed us that TAP is supporting the IAP project. There is third-party access (TPA) on TAP, regulators along the route issued license accordingly. Backhaul is allowed, no destination clause was applied. Gas re-traded from TAP could be transported via IAP bought e.g. in Italy, sourcing is possible from GR LNG.

Q: (Albgaz): On slide 54 presents that Kosovo* is not affected by IAP commissioning. If ALKOGAP is there, why not?

A: Borbála Tóth (REKK): Results on slide 54 refers to the IAP pipeline only. ALKOGAP results are presented on slide 48. In case of ALKOGAP, we assumed to the pipeline will be connected to TAP. In the sensitivity analysis, we analysed ALKOGAP with IAP connection as well.

Comment from Ukraine: reverse flow Hungary-Ukraine – Ukraine finished all works for this project, it is very important and produce a physical supply for Ukraine. The project can provide not only trade between Hungary and Ukraine, but connection to Slovakian markets and HR LNG. Work has already started, we have the support of FGSZ. It should be put it on PMI list.

A: Peter Kotek (REKK) presented the detailed results of this project. Investment cost are considerably high, ca. doubled from previous submission; assessed benefits are however low. As there are other routes for Ukraine to receive gas, utilization of the pipeline for gas transport from Hungary to Ukraine is expected to be low. Results are confirmed by the different scenarios applied in the sensitivity analysis.

Péter Kotek from REKK explained the structure of the Excel sheet with detailed project specific CBA results that will be provided to each project promoter. Also, a reference paper explaining the mathematical formulation of the gas market model will be provided (Energy Journal article by REKK).

IV. Hosting countries opinion on projects

Discussion on the 'Gas interconnector Serbia-Montenegro (Nis-Pristina (Kosovo*) section' project, in particular on the process for the documentation for support of the project by Kosovo*, which is required for the project to be eligible.

Remark by Kosovo*: Kosovo* representatives noted that in accordance with Regulation 347, as a legal and binding instrument to be implemented by the Contracting Parties of the Energy Community, the party initiating such an initiative in the Energy Community should in advance obtain a consent or agreement from the other neighboring party involved in the project. This was explained even previously in the minutes of the February meeting (as comment by Kosovo* to the MoM) and according to reports so far, Kosovo* has not received such a request from the Serbian side. It was also emphasized that the group participating in this meeting is only a technical group with no decision-making power, therefore, in order to initiate such projects, the initiating party should submit a formal request to Kosovo*'s decision-making institutions.

Kosovo* representatives also emphasized that the initiative by the Serbian side (for GAS_12) should not be included in the preliminary list of PECL 2018 projects for submission to PHLG level because it would be disrespectful to the other Contracting Party and it would be a violation of Regulation 347.

Remark by Serbia (Srbijagas and MoME): On the last meeting in February it was defined that: Kosovo* should send a consent letter to Serbia and to the Secretariat. This is also defined in the MoM from that meeting. On the meeting in February there was no comments from Kosovo*. Therefore the comments from Kosovo* on that MoM that they need a request from Serbia cannot be a part of that MoM. Until this meeting we had no knowledge about a need for clarification.

We understood that Kosovo* would provide consent and no further action is needed from Serbia. We recognize the results and agree that this project would be beneficiary for the region.

The representative of Serbia (MoME) kindly asked to make corrections in the Reports in order to interpret correctly Kosovo*, and also notice that the title of the project ALKOGAP should be changed into gas interconnector since it is a regional project (instead of gas pipeline) and in accordance with all other projects of gas interconnection in this process.

Ádám Balogh (EnC): ECS had an open window for project submission by all CPs, and after that in the February Group meeting, the issue was discussed. This discussion regarded the need for a letter of consent from Kosovo*, and an eventual project name change, if jointly agreed by Serbian and Kosovo* representatives, to reflect the submitted routing of the project. The modalities to acquire the letter of consent was left to the governments concerned, and is not within the mandate of the Group to discuss these. ECS's understanding is that, based on the results, the project would be eligible for PECEI label, but due to the fact that the project was submitted by one of the parties only, it is not eligible, unless the consent of the other party is received in the form of an official letter.

Ádám Szolyák (EU Commission): All cross border projects require strong cooperation. Any early sign of non-cooperation is also an indication of the lack of maturity of the project. The Commission understands that the circumstances may be challenging, but this problem should be solved bilaterally.

Discussion on whether to provide TCP the PECEI (rather than the PMI status) given its PCI status, and whether this could only be provided for the whole cluster or also for TCP as standalone project.

Ádám Szolyák (EU Commission): If the project cluster would be renamed or submitted as separate projects, it would not be eligible for the PECEI label, which is linked to the PCI label that has been provided to the cluster.

EnC made the proposal to consider TCP-SCP(f)X-TANAP projects PECEI as part of the Southern Gas Corridor. The label would be based on the PCI status, which provides the eligibility for *each project* in the corridor to receive the PECEI label. This will be submitted accordingly on the draft preliminary list to the PHLG, with a wording as close to the PCI list definition point 7.1, as possible. This proposal was accepted by the Group.

V. Group's No-objection on the Draft Preliminary Oil and Gas PECEI/PMI List

Ádám Balogh, from Energy Community Secretariat presented the updated proposal again by explaining the results of the discussion of the day and the changes this means to the initially proposed Draft Preliminary List of the morning session.

Group members had no objections and the European Commission also supported the proposed list.

Violeta Kogalniceanu explained the next steps: The final report of REKK and DNV GL on their assessment methodology and results will be sent to the Group members. The version distributed to the Group may contain confidential data. A condensed version excluding sensitive information will be made available via the EnC website at a later stage. Each project promoter will furthermore receive detailed assessment results on their own project(s) in Excel.

Violeta Kogalniceanu emphasized that not only a decision is needed on the projects receiving the PECEI / PMI label, but also the implementation of the Regulation 347/2013 by the Contracting Parties of the Energy Community is important, otherwise infringement procedure could be started against CPs. In addition, also the implementation of the infrastructure projects is key.

Ádám Balogh further emphasized that project promoters will have to upload their progress on the implementation of the project for which the PECEI/PMI label has been given via the ECS PLIMA Transparency Platform once a decision on the final list of projects is taken by the Ministerial Council in November. ECS will contact the promoters with questionnaires regarding the required data.

Vienna, 23 May 2018

PECI - Gas		
Project Code	Project Name	Comment
GAS_09	Gas Interconnector Bulgaria - Serbia (IBS)	
GAS_11	Gas Interconnector Serbia-FYR of Macedonia	
GAS_25	Trans-Balkan Corridor Bi-directional Flow between Moldova and Ukraine	
Gas_20&21&22	PECI Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of natural gas from new sources from the Caspian Region, crossing Azerbaijan, Georgia and Turkey and reaching EnC markets in Georgia and Albania (via Trans-Adriatic Pipeline), including the following PECIs: - Cluster of Trans-Caspian Pipeline and South Caucasus Pipeline (further) Expansion (Gas_22); Cluster of Trans-Anatolia Pipeline and South Caucasus Pipeline Expansion (Gas_20-21)	Corridor approach as in PCI (with similar project description), as the eligibility criteria for PECE is met by the fact that the corridor is PCI in the EU.
GAS_13	Albania-Kosovo* Gas Pipeline (ALKOGAP)	

PMI - Gas		
Project Code	Project Name	Comment
GAS_01	Interconnection Pipeline BiH-HR - North (Slobodnica-Brod-Zenica)	
GAS_02	Interconnection Pipeline BiH-HR - West (Licka Jesenica-Trzac-Bosanska Krupa)	
GAS_03	Interconnector BiH-HR - South (Ploce-Mostar-Sarajevo Zagvozd-Posusje-Travnik)	
GAS_04_B	Gas Interconnection Greece-FYR of Macedonia (IGF)	
GAS_08	Gas Interconnector Serbia-Romania	
GAS_10	Gas Interconnector Serbia-Croatia	
GAS_14	Gas interconnection Poland-Ukraine	
GAS_18	Romania - Moldova Gas Interconnector (Ungheni - Chisinau)	
GAS_23	Whitestream Gas Pipeline as assessed together with TCP + SCP(f)X*	PMI label conditional on the Capacity and Investment confirmation by the Government of Azerbaijan by a Consent Letter to ECS and Georgia before 6 June 2018.
GAS_16	Ionian Adriatic Pipeline (IAP)	

PECI Status conditional to agreement between SER and KOS*		
GAS_12	Gas Interconnector Serbia Montenegro - Section Niš (Doljevac) - Priština	

PECI - Oil		
Project Code	Project Name	Comment
OIL_01	Brody – Adamowo oil pipeline	

PMI - Oil		
Project Code	Project Name	Comment
OIL_02	Transportation of different crudes of oil via Southern Druzhba pipeline	