Addendum to the Memorandum of Understanding between

the United Nations Economic Commission for Europe

the Central Mining Institute of Katowice, Poland, PGNiG, PIG-PIB

Whereas, the United Nations Economic Commission for Europe (hereinafter referred to as "UNECE"), the Central Mining Institute of Katowice (hereinafter referred to as "GIG", Polish Oil and Gas Company (hereinafter referred to as "PGNiG"), Polish Geological Institute — National Research Institute (hereinafter referred to as "PIG-PIB"), referring to the acronym of its Polish name Państwowy Instytut Geologiczny — Państwowy Instytut Badawczy), entered into a Memorandum of Understanding dated as of October 30, 2015 (hereinafter referred to as "MoU").

Whereas, Oil and Gas Institute – National Research Institute (hereinafter referred to as "INiG-PIB", referring to the acronym of its Polish name Instytut Nafty i Gazu – Państwowy Instytut Badawczy), as an institution under the Polish Ministry of Energy, is a leading research and development organization in the field of assessment of hydrocarbon resources, exploration prospects for oil and natural gas, exploitation of the resources, including gas from unconventional deposits and coal mine methane, storage, transportation, distribution and use of natural gas, crude oil and petroleum products, the protection of the environment in the oil and gas industry, quality assessment of hydrocarbon fuels and biofuels.

Whereas, pre-mining drainage, capture and use of methane may significantly decrease the total greenhouse gas emission, mitigate climate change, and improve mine safety and productivity.

Whereas, UNECE, GIG, PGNiG and PIG-PIB recognize the benefits of extending their mutual collaboration to the area of pre-mining drainage, capture and use of methane and extending the participants to the MoU on parties concerned with the exploration, appraisal, development and consecutive extraction of coal mine methane.

Whereas, INiG-PIB agree with the goals and provisions of the Memorandum of Understanding.

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NOW THEREFORE, UNECE, GIG, PGNiG, PIG-PIB (hereinafter referred to as "the Parties"), represented by the Director of Sustainable Energy Division in the case of UNECE, the Director-General in the case of GIG, the President of the Management Board and the Vice-President of the Management Board in the case of PGNiG, the Director of the Upper Silesian Branch in the case of PIG-PIB and the Deputy Director in the case of INiG-PIB have agreed to make the following additions to the MoU:

Article I New participants

1.1. Following the mutual agreement of the Parties, INiG-PIB join the present Memorandum of Understanding and accept to be bound by its terms.

Article II Extension of the collaboration

2.1. All objectives and responsibilities of GIG, PGNiG and PIG-PIB concerning the ICE-CMM shall apply to INiG-PIB as well. GIG, PGNiG, PIG-PIB and INiG-PIB shall agree to the funding principles of the ICE-CMM.

Article III Extension of the MoU Focal Points and addresses for notices

3.1 The new parties to the present MOU will designate MoU Focal Points, as indicated below, to plan and develop activities under the present MoU and its Annex and ensure its proper implementation:

INIG-PIB

Associate Professor Piotr Such, Deputy Director for Prospecting of Hydrocarbons Deposits Oil and Gas Institute – National Research Institute ul. Lubicz 25A, 31-503 Kraków, Poland Telephone: (+48) 12 6177614, 12 4210033

Fax: (+48) 12 4303885 e-mail: office@inig.pl

3.2 Any notices required by MoU shall be given in writing and delivered to the following addresses:

INIG-PIB

Associate Professor Piotr Such,
Deputy Director for Prospecting of Hydrocarbons Deposits
Oil and Gas Institute – National Research Institute
ul. Lubicz 25A, 31-503 Kraków, Poland

Telephone: (+48) 12 6177614, 12 4210033 Fax: (+48) 12 4303885

e-mail: office@inig.pl

Article IV General provisions

- 4.1 Entry into force and duration: This Annex shall enter into force upon signature by all Parties and remain in effect until such time as the Memorandum of Understanding expires, is terminated, extended or amended.
- 4.2 All the terms and conditions and the objectives of the Parties laid down in the Memorandum of Understanding shall remain in full force unless modified by this Annex.

Article V

5.1. The presents Addendum will become an integral part of the original MOU.

IN WITNESS WHEREOF, the Parties have signed this Annex to the MoU in six (6) originals in the English language on the dates set forth below:

| For GIG | For UNECE |
|--|--|
| Signature: | Signature: |
| Mr. Jan Bondaruk Deputy Director-General | Mr. Christian Friis Bach Executive Secretary |
| Date: 14.11.2016 | Date: 25/11 2016 |
| | |
| For PGNiG | |
| Signature: | |
| Mr. Piotr Woźniak President | s es |
| Date: 5.12.2016 | |
| Signature: <u>5.12.2016</u> | |
| Mr. Łukasz Kroplewski Vice-president for Development Date: | |
| For INiG-PIB Signature: | 2 |
| Mr. Piotr Such | |
| Deputy Director for Prospecting of Hydrocarbons Deposits | |
| Date: 2.12 2016 | a a |
| For PIG-PIB | |
| Signature: | |
| Mr. Janusz Jureczka Head of PIG-PIB's Upper Silesia Branch | |

Date: