



## Minutes of meeting

### 5<sup>th</sup> Meeting of WOC 1, Triennium 2012-2015

Repsol Campus, Madrid, 23-26 September 2014

## 1. Venue and attendance

The 5<sup>th</sup> meeting of WOC 1 in the current IGU triennium was held in the modern Campus Repsol, a building complex that was one of the first of its size to receive platinum certification from the Leadership in Energy & Environmental Design programme (LEED), the premier mark for achievement in green building technology (<http://www.archdaily.com/484152/campus-repsol-rafael-de-la-hoz>).

A total of 33 IGU delegates and authorities from 12 countries attended this meeting, including Mr. Víctor Peón, the Executive Director of the Repsol Gas and Power Division, Mr. Georges Liens, the Chairman of the Coordination Committee of the IGU, and Ms. Marta Margarit, the Secretary General of the Spanish Gas Association Sedigas (Table 1).

Table 1. Attendees.

Country	Given names	Family names	Organization	Group
Argentina	Andrés Gabriel	Weissfeld	TENARIS	1.2
Argentina	Fernando Jorge	Bado	Tenaris Confab Brasil	1.2
Bolivia	Alvaro	Ríos	Drillinginfo	1.1
Brazil	Marcos	De Freitas Sugaya	Petrobras	1.3
Brazil	Denis	Krambeck Dinelli	Petrobras	1.2
China	Suping	Zhao	CNPC	1.1
China	XIAOHUA	Liu	CNPC	1.1
France	Liliane	Wietzerbin	GDF	1.3
France	Georges	LIENS	Storengy (GDF Suez)	CC
France	Bernard	Seiller	Total	1.2
Korea	Kyung Sick	Park	KOGAS	1.3
Korea	Taehyeong	Lee	KOGAS	1.3
Korea	Seungho	Lee	KOGAS	1.1
Malaysia	Adif	Zulkifli	PETRONAS	1.1
Malaysia	Rashidah	Karim	PETRONAS	1.1
Malaysia	Zainal Abidin	Zainuddin	PETRONAS	1.1
Malaysia	Im Xaxanuhani	Zulkifli	PETRONAS	1.1
Malaysia	Mohd Redhani	Abdul Rahman	PETRONAS	1.2
Poland	Pawel	Jagosiak	PGNIG SA	1.3
Portugal	Nuno	Moreira da Cruz	Galp	ext
Russia	Alexey	Semenov	Gazprom	1.3
Russia	Ekaterina	Litvinova	Gazprom	1.1
Russia	Boris	Sharipov	Gazprom	1.1
Russia	Andrey	Knyazev	Gazprom	1.1
Russia	Gulnaz	Kolokolova	Gazprom dobycha	CC
Russia	Marina	Borisova	Gazprom dobycha	CC
Spain	Miguel	Gil	Galp	ext
Spain	Virginia	Zubillaga	Repsol	1.3
Spain	Carmem	Garcia	Repsol	CC
Spain	Guadalupe	Vargas	Repsol	1.3
Spain	Victor	Peon	Repsol	host
Spain	Marta	Margarit	Sedigas	CC
Thailand	Naruepon	Lecksiwilai	PTTEP	1.2



## 2. Opening plenary session

Ms. Marta Margarit, Secretary General, briefly described the important role played by Sedigas in the defense of natural gas businesses in Spain. Following the recent European trend, the Spanish demand decreased 8% in 2013, because of a significant decrease in the demand of gas for power. This represents only 17% of the total demand, however, in all other segments the consumption has grown, and one important reason for that is the excellent infrastructure available in Spain, which much could add to the security of supply in Europe if the Midcat interconnection project were completed. Other key issues for the Spanish gas industry encompass the effect of the 3<sup>rd</sup> Energy Package on the Spanish transmission system and the development of an Iberian gas hub.

Mr. Victor Peon, Executive Director, Repsol Gas & Power, emphasized the importance of natural gas for his company, as the production represents nearly two thirds of the total hydrocarbons. Repsol is also the largest consumer of natural gas in Spain, but it has made significant discoveries overseas, standing now in a comfortable position in terms of reserves and resources.

Mr. Georges Liens, Chairman, Coordination Committee, IGU, required the selection of contributions to the WGC to nominate six contributions for each thematic and interactive session, plus two additional for a reserve list. The strategic panel on unconventional gas is already in good terms, but WOC 1 should work closely with the World Bank to define the contents of the strategic panel on gas flaring and venting reduction, which is still open. A record number of 1467 abstracts were received this year, which is about twice the number of the previous WGC. The busiest session by far was the one proposed by SG 1.1 on technological advances in gas exploration and production, which received 155 applications. In total WOC 1 received 280 applications for its five oral panels and five interactive sessions. The revision of abstracts must be concluded by the 9<sup>th</sup> of November.

Mr. Denis Dinelli, Chairman, WOC 1, summarized the progress and the pending issues to be tackled by each of the study groups that form WOC 1. He asked for volunteers to chair the five interactive sessions that WOC 1 will have at the Paris WGC, and reminded the attendance on the criteria established in the last meeting in Seoul to rank the abstracts received by the committee.

## 3. Study group sessions

### 3.1. SG 1.1 E&P Technology

The meeting started with the opening remarks by Mr Adif Zulkifli, Vice President Malaysian Petroleum Management (PETRONAS) and Study Group 1.1 leader. He welcomed everyone to the 5<sup>th</sup> IGU WOC 1 meeting in Madrid and apologized for being unable to attend the 3<sup>rd</sup> and 4<sup>th</sup> meetings in Kota Kinabalu and Seoul, due to work commitments. He went through the SG 1.1 meeting agenda by recapping the last arrangements and putting emphasis on the rating of contributions for the WGC.



Ms Ekaterina Litvinova (Gazprom) shared a presentation entitled *Latest Major Achievements of Gazprom in Exploration, Production and Development*. In 2013 her company launched two offshore projects and in October the first gas was extracted from the Kirinskoye field, where Russia's first subsea production facility is installed. Two months later Gazprom pioneered the development of the Russian Arctic shelf as the first oil from the Prirazlomnoye field was produced. Gazprom's presence in the liquefied natural gas market kicked off with two new LNG plant projects in the Primorye and Leningrad regions. Proactive work continued in the international markets with the company starting the construction of the Bulgarian and Serbian sections of the South Stream pipeline and launching the production of gas in Vietnam. Gazprom allocated record investments in the gasification of Russian regions, completed the construction of Russia's most advanced combined cycle thermal power plant in Adler, commissioned its twenty second underground gas storage facility in Kaliningradskoye and switched all its refineries to Euro 5 fuels production ahead of schedule.

Mr Zainal Abidin Zainuddin (Petronas) continued with a presentation entitled *Petronas' Unconventional Journey*, including a case study on unconventionals that will be further developed in the triennial report of the group. He highlighted operational challenges such as subsurface, logistic and water handling and the importance of technological innovation that can lead to cost and productivity breakthroughs.

Ms Rashidah Karim (Petronas) continued with the content and topics that she has covered in the group report, based on the contributions received so far. She explained that some topics need to be eliminated, since some of the study group members were unable to contribute. She wrote down two case studies from presentations performed by colleagues from Gazprom and Petronas in previous meetings. Members from CNPC and KOGAS have also agreed to share materials that will be included in the report.

### **3.2. SG 1.2 Assessment of Reserves and Resources**

The United States Geological Survey (USGS) is currently performing its first global assessment of undiscovered unconventional gas resources. Mr. Andres Weissfeld will contact Dr. Schenk at the USGS to find out if partial results would be available, and Mr. Alvaro Rios will also support the elaboration of the group report with materials on unconventionals.

### **3.3. SG 1.3 Gas rent and Mineral Property Rights**

Mr. Alexey Semenov kindly prepared a presentation on the key elements of the unconventional gas revolution in North America, which will be transposed to the group report in due time. Mr. Taehyeong Lee and Mr. Kyunsick Park have also prepared an interesting written contribution on Tanzania to this report.

## **4. Selection of contributions to the World Gas Conference of 2015**

All 291 contributions received by the committee were rated by at least three delegates each, and the best were forwarded to the session chairmen, for final selection. The results will



be sent to the coordination committee by no later than the 10<sup>th</sup> of October on a preliminary basis, and by the 9<sup>th</sup> of November on a definitive basis.

## 5. Final plenary

Mr. Alvaro Rios, Partner, DrillingInfo, defended the importance of predictive modelling to the grading of areas for the production of unconventional, and the value of information sharing for the optimization of results. These were key to the development of the unconventional industry in the USA. Some interesting results were also presented on the Vaca Muerta play in Argentina, where data from more than 10,000 well logs are available and can be used to determine sweet spots and predict production.

Ms. Gulnaz Kolokolova (Gazprom dobycha Yamburg) and Ms. Marina Borisova (JSC Gazprom) presented on the last meeting of WOC 1 in the current IGU triennium, whose details are described further ahead.

## 6. Technical visit

In the last day delegates visited the Technology Centre of Repsol, which is often recognised as a benchmark for energy research and innovation in Europe ([http://www.repsol.com/es\\_en/corporacion/conocer-repsol/canal-tecnologia/ctr\\_investigadores/visita-virtual-ctr](http://www.repsol.com/es_en/corporacion/conocer-repsol/canal-tecnologia/ctr_investigadores/visita-virtual-ctr)).

## 7. Next meeting

The last meeting of WOC 1 in the current IGU triennium will take place in Yamburg, 3-6 February 2014. Delegates are strongly advised to arrive in Moscow with at least one day of anticipation. All flights to, from and within Siberia will be provided by Gazprom as a courtesy, but the attendants must cover for all of the other travelling expenses, including the flights to and from Moscow and their hotel bills and meals. As an entry permit to the region requires three months to be processed by the local authorities, it is important that all potential attendants send a scanned imaged of their passports by no later than the 31<sup>st</sup> of October to [g.kolokolova@yamburg.gazprom.ru](mailto:g.kolokolova@yamburg.gazprom.ru) and [m.borisova@gazprom.ru](mailto:m.borisova@gazprom.ru).