



WOC 1 Progress Report

Marcos de Freitas Sugaya

IGU WOC 1 & PGC A Meeting

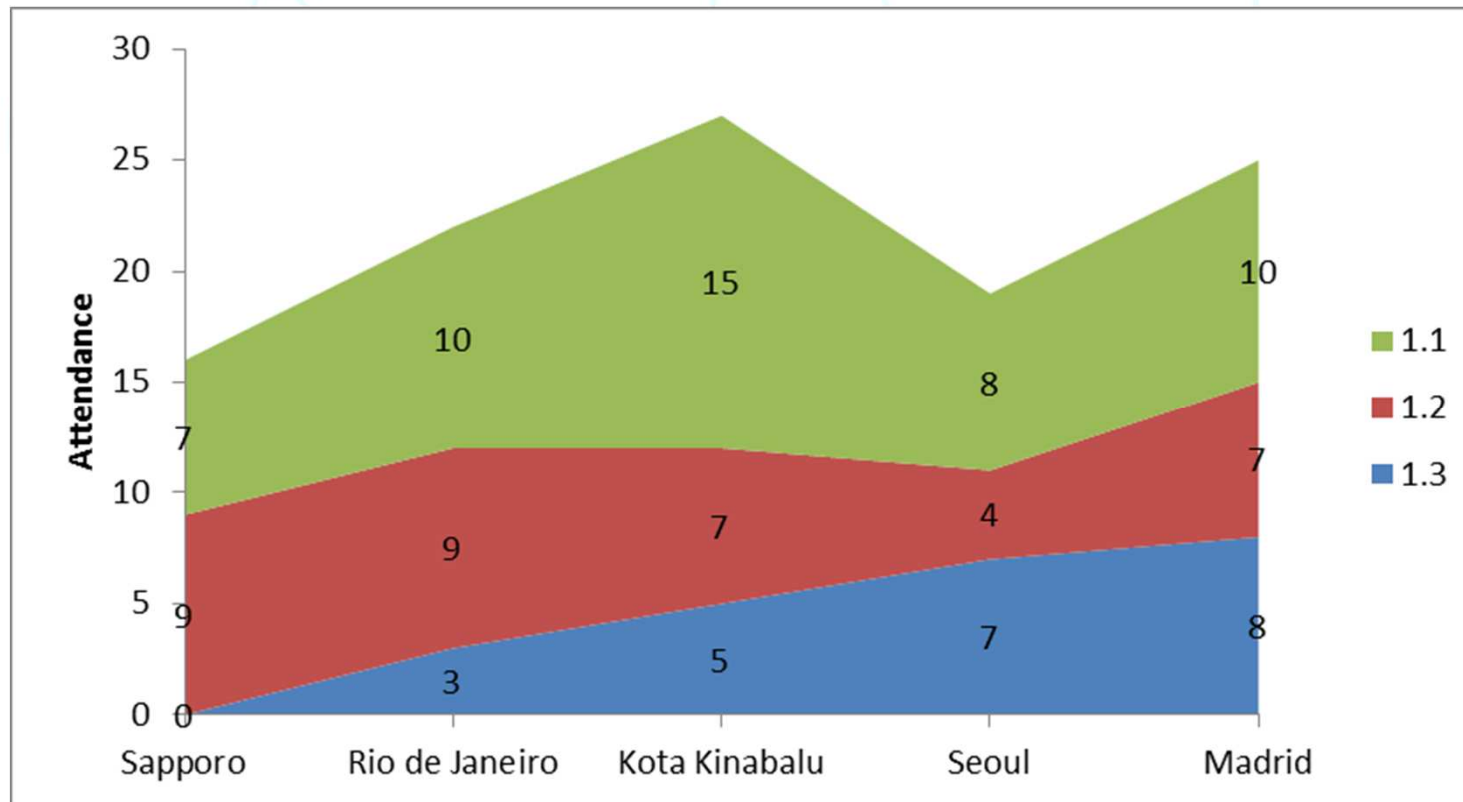
Yamburg, Russian Federation

4 February 2015



Membership and attendance

- 94 members from 29 countries
- 33 delegates and guests attended last meeting



1st meeting - Sapporo



2nd meeting – Rio de Janeiro

R&D Workshop



Visit to Petrobras R&D Centre



Brazilian barbecue



Visit to the FSRU Exquisite



3rd meeting – Kota Kinabalu



4th meeting – Seoul



5th meeting – Madrid



6th meeting – Yamburg



Strategic panel

Day	Topic	Chairmen/speakers
Tue 2nd June 15:15-16:45 Notre Dame	Gas flaring and venting reduction	Bjorn Hamso (World Bank) and Kandeh Yumkella (UNIDO)
1	North America	To be defined by Jay Copan
2	Russian Federation	Vsevolod Cherepanov (Gazprom)
3	Middle East	To be defined by NIGC
4	Asia	To be defined by Petronas
5	Europe	To be defined by Total

Strategic panel

Day	Topic	Chairmen/speakers
Thu 4th June 15:15-16:45 Notre Dame	Unconventional gas	Denis Krambeck Dinelli (Petrobras) and Gabriela Rosello (Total Austral)
1	South America	Ernesto Anadon (IAPG)
2	North America	John Smith
3	Europe	Jozsef Toth (WPC)
4	Asia	Liu Yuzhang (CNPC)
5	Africa	John Smith

Thematic and interactive sessions

Session	Oral	Interactive
WOC 1.1	Technological advances in gas exploration and production	Technological advances in gas exploration and production
WOC 1.2	Natural gas available everywhere? An assessment of global resources and reserves	Natural gas available everywhere? An assessment of global resources and reserves
WOC 1.3	Fiscal regimes for the production of conventional and unconventional gas	Technological advances in gas exploration and production
WOC 1.4	Technologies for the monetization of gas reserves	Technologies for the monetization of gas reserves
WOC 1.5	Gas on gas competition and upstream investment	Advances in gas processing technologies

WGC Thematic session 1.5

Gas on gas competition and upstream investment

Chaired by Marcos Sugaya (Petrobras) and Daniel Johnston (Daniel Johnston & Co)

Objectives:

Over the last years a significant growth has been observed in the use of hub pricing mechanisms in lieu of the traditional long term contracts indexed in oil, and this is transferring market risks to the portfolio of gas producers. Could this significantly affect new upstream investment? Hub pricing is not a synonym of cheaper gas, and in the long term consumers could meet a completely different scenario.

Topics of interest include

- Gas pricing mechanism background;
- Tendencies in gas pricing for upstream investments;
- Price requirements for the production of unconventional gas;
- Upstream costs and project financing;
- Case studies on the production of gas.

Session form:

Contributions selected from the call for papers and invited guests.

Thematic session 1.5

Day	Topic	Chairmen/speakers
Wed 3rd June 8:30-10:00 Tour Eiffel (500)	WOC 1.5 Gas on gas competition and upstream investment	Marcos de Freitas Sugaya (Petrobras) and Daniel Johnston (Daniel Johnston & Co)
1	The future ain't what it used to be: Gas price reopeners: The European experience	Michael Polkinghorne (White & Case)
2	Hub based pricing set to grow in world gas markets	Gauri Jauhar (IHS)
3	The importance of pricing on major LNG investment decisions	Philip Graham (Citi)
4	Gas infrastructure development - A tool to maintain Norwegian gas position in the future European Mix?	John Kristian Okland (Gassco)
5	On the Mexican reform and the expectations of upstream investors	Daniel Johnston (Daniel Johnston & Co)
6	-	-

WGC Thematic session 1.3

Fiscal regimes for the production of conventional and unconventional gas

Chaired by Daniel Johnston (Daniel Johnston & Co) and Marcos Sugaya (Petrobras)

Objectives:

Gas projects have different characteristics when compared with their oil counterparts, so a distinctive treatment is required from regulators, government authorities and stakeholders.

Topics of interest include

Regulations, business models and fiscal incentives for the production of conventional and unconventional gas;

Reasons and causes for the unconventional gas revolution;

Incentives for the production of gas at remote locations or challenging conditions;

Fiscal regimes to sustain the production of gas in marginal, mature or tail end fields;

Gas rent and production sharing.

Session form:

Presentation and discussion of case studies performed by invited speakers, committee members and authors selected from the call for papers.

Thematic session 1.3

Day	Topic	Chairmen/speakers
Wed 3rd June 17:00-18:30 Sacre Coeur (150)	WOC 1.3 Fiscal regimes for the production of conventional and unconventional gas	Daniel Johnston (Daniel Johnston & Co) and Marcos de Freitas Sugaya (Petrobras)
1	Global trends in the taxation of unconventional gas resources	Graham Kellas (for Wood Mackenzie)
2	On the protection of tax incentives granted to gas projects	Elisabeth Eljuri (Norton Rose Fulbright)
3		E&Y invited
4	Fiscal solutions for gas exploration and production	Stephanie Khaw (Boston Consulting)
5	The impact of fiscal policies on the final investment decision of E&P companies	Jurjen Bevers (Baker McKenzie)
6	-	-

Thematic session 1.1

Day	Topic	Chairmen/speakers
Thu 4th June 8:30-10:00 Invalides (350)	WOC 1.1 Technological advances in gas exploration and production	Adif Zulkifli (Petronas)
1	Subsea technologies for ultra-deepwater 'subsea-to-beach' gas field development: A critical review of current achievements and future challenges	Francesco Beltrami (Granherne)
2	The evolution of completion practices and reservoir stimulation in the gas fields of the Southern North Sea	Bogdan Bocaneala (Schlumberger)
3	Enabling technologies for high CO ₂ gas field development	Hatarmizi Hassan (Petronas)
4	Contributing to a safe shale gas exploitation: Learnings from the US energy revolution on employee's exposures during gas wells hydraulic fracturing and well stimulation	Charron Michel (Bureau Veritas)
5	The importance of predictive modeling to geologic and engineering grading and information sharing for optimizing results in unconventional hydrocarbon development	Alvaro Rios (DrillingInfo)
6	Application of methanogenesis in coal bed methane reservoirs: A regenerating approach	Priya Sihag (Essar Oil)

Thematic session 1.2

Day	Topic	Chairmen/speakers
Thu 4th June 17:00-18:30 Tour Eiffel (500)	WOC 1.2 Natural gas available everywhere? An assessment of global resources.	Denis Krambeck Dinelli (Petrobras) and Fernando Bado (Tenaris)
1	Exploration hotspots and new frontiers for natural gas	Dominique Janodet (Total)
2	Taking the heat out of the burning-ice debate: Potential and future of gas hydrates	Opoku Danquah (Schlumberger)
3	Perspectives from Western Australia	Lisa Nolan (Government of Western Australia)
4	North American analogs and their use for estimating performance for worldwide unconventional plays	Jerry Eumont (IHS)
5	Strategy to develop Achimov deposits in the Urengoy Region	Sergey Mazanov (Gazprom Dobycha Urengoy)
6	Geologic characteristics of deep reservoirs in the Kelasu Structural Belt, Kuche Depression, Tarim Basin, NW China	Guangzhen Chu (CNPC)

Thematic session 1.4

Day	Topic	Chairmen/speakers
Fri 5th June 8:30-10:00 Louvre (240)	WOC 1.4 Technologies for the monetization of gas reserves	Rashidah Karim (Petronas)
1	GTL for fuels or special products: Different options for monetizing natural gas fields	Ana Carlota Belizario Dos Santos (Petrobras)
2	Gas to liquids: A 40 years journey of technology development and deployment.	Guy De Kort (Shell)
3	What is the FLNG you need ?	Benjamin Mauries (Saipem)
4	Studies on the FPSO application of natural gas to dimethyl ether process	Taekyong Song (Kogas)
5	Monetizing stranded gas resources onshore and offshore: The palette of enabling technologies, their comparative merits and challenges in commercial application	Joe Verghese (Worley Parsons)
6	FLNG: Applying advanced technology to bring more natural gas to market	Alexander Boekhorst (Shell)

Interactive session 1.1a

Day	Topic	Chairman/speakers
Wed 3rd June 13:00-13:45 Room 1	WOC 1.1 Technological advances in gas exploration and production	Mohd Redhani A Rahman (Petronas)
1	Analysis of gas production data via an intelligent model	Mohammad Ali Ahmadi (Petroleum University of Technology)
2	Technology-related restrictions for the use of dispersion systems in gas well construction and supermolecular methods to manage these restrictions	Dmitriy Belskiy (Gazprom)
3	Gas fields in deep offshore with long tie-back: A new challenge for the industry	Riviere Luc (Total)
4	Process design of acid gas removal units for natural gas treatment	Yonggi Mo (Kogas)
5	Advances in gas-liquid segregation with inline separators	Mika Tienhaara (Ascom Separation)
6	Advanced microseismic interpretation reduces uncertainties in an unconventional exploratory well in Northern Mexico	Mauro Weimann (Schlumberger)

Interactive session 1.1b

Day	Topic	Chairman/speakers
Fri 5th June 11:20-12:05 Room 2	WOC 1.1 Technological advances in gas processing	Lenny Marlina Omar (Petronas)
1	Achieving high performance in unconventional operations	Todd Blackford (Accenture)
2	POAG 2015 and the reduction of gas flaring at Petrobras	Vitor de Souza Lima (Petrobras)
3	Optimizing well length, fractures configuration and predicting productivity in horizontal wells for tight gas	Dongbo He (CNPC)
4	The outlook for extension of resources at mature gas fields via studying commercial capacity of non-conventional above-cenomanian reservoirs in the area of Gazprom dobycha nadym	Ekaterina Litvinova (Gazprom)
5	Investigation of Pioneering Integrated Modeling Platform in Shale Gas Production in China	Nguyet Tran Ngo (Universiti Teknologi Petronas)
6	A wet gas measurement method using venturi tube	Qiang Zhang (CNPC)

Interactive session 1.2

Day	Topic	Chairmen/speakers
Wed 3rd June 17:00-18:30 Room 2	WOC 1.2 Natural gas available everywhere? An assessment of global resources	Andres Weissfeld (Tenaris)
1	The unconventional revolution	Laurence Gouet (Total)
2	Evaluation of twelve global regions in shale gas resource development	Thierry Rignol (PacWest Consulting)
3	Application of a new tight gas accumulation model to Songliao Basin, Northeast China	Yilong Li (CNPC)
4	Sustainable development for Yamal gas production area: Harmonisation of traditional and industrial environmental management systems	Dmitry Lyugai (Gazprom)
5	Shale and tight gas reservoirs global overview, Algerian case study	Nadia Haddoum-Kherfella (Sonatrach)
6	Perspectives on the US shale gas revolution and lessons for Europe and Asia	Ray Leonard (Hyperdynamics)

Interactive session 1.4

Day	Topic	Chairmen/speakers
Thu 4th June 13:00-13:45 Room 1	Technologies for the monetization of gas reserves	Rashidah Karim (Petronas)
1	Synergies between converted FPSOs and converted FLNGs	Francesco Criminisi (SBM Offshore)
2	Concrete gravity base structure solution for shallow waters LNG	Magnus Egge (Kvaerner Concrete Solutions)
3	Standard-Plus™: An innovative plant solution for faster NGL production	Martina Oberbichler (Linde Engineering)
4	Cylindrical hull for FLNG application	Lars Odeskaug (Sevan Marine)
5	Monetizing high CO ₂ fields with Cryocap NG	Paul Terrien (Air Liquide)
6	Gas-to-liquids: Technology of choice to monetize gas	Albert Van Wyk (Oryx GTL)

Interactive session 1.5

Day	Topic	Chairmen/speakers
Thu 4th June 10:30-11:15 Room 2	Advances in gas processing technologies	Amine Mazouzi (Sonatrach)
1	Gas purification with inorganic membranes	Udo Lubenau (DBI Gas)
2	Application of membrane technologies for helium recovery	Sergey Milovanov (VNIPIgazdobycha)
3	Compact natural gas sweetening contactor	Vann Bush (Gas Technology Institute)
4	New wind for air-cooled lng	Jeremy Provost (Technip)
5	Gas pretreatment intensification of processing and controls for offshore lng installation	Amy Scheffen (UOP)
6	Improved LPG recovery process yields enhanced economics	Kevin Currence (Black & Veatch)

Study group reports

SG 1.1 : Technological advances in the E&P of natural gas



Mr. Adif Zulkifli, Petronas

- Key upstream technologies
 - Production of unconventionals;
 - Protection of the environment;
 - Reduction of flares and vents.

SG 1.2 : Assessment of global reserves and resources



Dr. Mohammed Kaced, Sonatrach

- Identification of exploratory trends and new frontiers for gas;
- The growing role of the independent producers;
- Conventional and unconventional, discovered and undiscovered.

SG 1.3 : Gas rent and mineral property rights



Dr. Marcos Sugaya, Petrobras

- Improve current case studies to reinforce the theses proposed on progressive taxation;
- Develop fiscal models and best practices to encourage the production of unconventionals, taking the USA as a starting point

Спасибо!

