

ETN Monthly News Summary – October 2016

8th INTERNATIONAL GAS TURBINE CONFERENCE

On 12 and 13 October 2016 in Brussels, the 8th edition of the International Gas Turbine Conference (IGTC-16) gathered senior managers, policy-makers and researchers from the whole value chain to debate the future of the gas turbine technology. 169 participants from 27 different countries and 6 continents joined to attend the 4 keynote sessions and the 8 technical sessions spread over the two days of this event. Speakers from the European Commission, the US Department of Energy, the International Energy Agency, users from both power generation and oil & gas sectors, executives from the main OEMs, universities and consultancies took the floor. They presented their works and thoughts about the international outlook and markets, the policy trends and the main technology developments to expect. Others focused on much more technical aspects regarding distributed generation, materials, combustion and fuel flexibility, low carbon cycles or flexible operations (amongst others). The high quality of the works presented was prized by many.

The attendees also enjoyed a gala cocktail sponsored by MTU Maintenance, and a gala dinner sponsored by Mitsubishi Hitachi Power Systems in the beautiful Colonial Palace in Tervuren. A presentation by Filip Muyllaert ignited discussions about "How to lead in a world of unpredictability".

The proceedings and the photos of the event are available on ETN's website, with a restricted access: **only ETN members and the registered attendees have the chance to access them**. For that, log in on the website and <u>click here!</u>

We look forward to welcome you to the next edition, in 2018!

Feedback quotes of IGTC-16:

"The ETN conference is the ideal place to get an update, from several perspectives, on the GT industry in Europe. The users, the technology providers, the policy makers and the service providers, they all get a forum to discuss their views."

Pascal Decoussemaeker, Product Manager O&M, MYA Product Line, GE Power Services

"That is the perfect size and format to get significant positive interaction between all key industry stakeholders: OEMs, Customers, and Governments. I will join again at IGTC18!"

Tom Scarinci, Senior Vice-president for Aeroderivative Gas Turbines, Siemens Canada

"I enjoyed meeting such a wide range of experts across the value chain at the IGTC-16- this conference serves as a valuable exchange platform for the rest of the community."

Tomi Motoi, International Energy Agency

HIGH-LEVEL USER MEETING 2016

On the eve of the International Gas Turbine Conference on 11 October 2016, ETN held a High Level User Meeting in its office in Brussels. Major players of the Oil & Gas and Power sectors participated to explore ways to increase collaboration and to agree on which projects the User



Community should focus on. Representatives from Statoil, Shell, Total, EDF, Enel, ENGIE and Uniper were present.

ETN R&D RECOMMENDATION REPORT 2016

The second edition of the biennial R&D Recommendation Report was published at the occasion of the IGTC-16, prepared by the Project Board of ETN. This document comes up with proposals for further technology research and developments based on the interpretation of users' needs and the future energy and emission targets. This is another major input of ETN to the future of the technology and hence needs to have the largest possible circulation. A copy of the report was handed out to all the participants of the IGTC-16 but you can also find the report online, following this link.

This report is a living document; your comments and suggestions will be taken into consideration! You can address them to tb@etn-gasturbine.eu

USER MEETINGS

ETN pursues its actions for users and has seen developments for both of its ongoing user groups.

Industrial RB211:

Siemens has agreed in collaborating with ETN in the setup of an Industrial RB211 User Group. A joint statement has been agreed and published by both parties. ETN will start its collection process by sending out a questionnaire to users of this engine in November in preparation for the User Group Meeting that will take place in May 2017.

LM2500:

The date for the next LM2500 User Group Meeting has been fixed for 14 and 15 June 2017 and will once again take place at Shell's facilities in Amsterdam. Currently, the User Group is exploring collaborative opportunities to address key technical and operational issues.

<u>Sponsorship opportunities</u> are available for service providers and suppliers in support to the LM2500 or the industrial RB211 user groups. If you are interested in this or in taking part to the User Groups and meetings at large, please email Ignacio Lescano il@etn-gasturbine.eu

ETN PROJECTS

Air Filtration Project:

The Air Filtration working group will hold its next meeting in Brussels on 16 November 2016. As a member of the ISO Technical Committee 142 "Cleaning equipment for air and other gases", ETN's working group is providing inputs to the drafting of the following ISO29461 documents:

- Part 2 "Cleanable (Pulse jet) filter systems"
- Part 5 "Marine and Offshore environment filter systems"
- Part 6 "Cartridge testing method"

More information here

ETN's Air Filtration Project

With the Air Filtration Project, ETN aims at the development of an ISO standard that would ultimately enable a 3 year operation of gas turbine without any air filtration issue. It should also provide users with one single point of reference for the state-of-the-art technology.



EU POLICY UPDATE

Horizon 2020 Consultation

The European Commission has launched a public stakeholder consultation for an interim evaluation of Horizon 2020. This consultation is opened to all EU citizens, with a special attention to inputs from researchers, entrepreneurs, innovators and all types of organisations that have participated in Horizon 2020. The consultation will last until 15 January 2017 and will consist in a questionnaire available online. You can find more information and submit your contribution on the website of the European Commission.

Horizon 2020

Horizon 2020 is a Research and Innovation programme of the EU.

With about 80 billion € available between 2014 and 2020, it is the largest R&D programme ever devised by the Union and it aims at implementing the **Innovation Union**, which is one leg of the EU strategy for growth entitled **Europe 2020**. Its goal is to secure European competitiveness by emphasising "excellent science, industrial leadership and tackling societal challenges".

Industrial Emissions Directive

As reported in last month's News Summary, ETN sits at the forum created by the Article 13 of the Industrial Emissions Directive (IED) in order to prepare the Best Available Technology Reference Documents (BREFs), which are the technical documents guiding the application of the legislative text. A meeting took place in Brussels on 20 October 2016 for the BREF concerning the large combustions plants. A member of ETN's IED Committee, Tomas Alvarez (Endesa), was present on behalf of the organisation. His report of the meeting is available on the page of the IED Committee on ETN website. If you wish to have more information, please contact Thibault Boutherin: tb@etn-gasturbine.eu

EU Strategy for LNG and gas storage

The European Parliament has adopted on 25 October 2016 the <u>EU strategy for liquefied natural gas (LNG) and gas storage</u>, stating that it "must make energy supplies more secure, cut carbon emissions and deliver affordable prices". The plan is to reduce EU's dependency from too few suppliers (firstly Russia), especially in the case of the Central and Eastern European member-states, who mostly rely on one single supplier. It also aims to review and increase the use of existing infrastructures and to pursue its effort in trade and diplomacy towards "a rule-based, transparent and well-functioning global gas market". This strategy has however been criticised by opponents for allowing more imports of fracked shale gas (mainly from the USA).

COP 21

Following its ratification by the EU, the **Paris Agreement** will come into force on 4 November 2016, ahead of the forthcoming COP22 in Marrakech, which will take place from 7 until 18 November with the slogan "the hyphen between decision and action" (www.cop22.ma). The EU is likely to go beyond its 2020 commitments, potentially reaching up to 30% reduction of emissions! In the same time, the two largest polluters in the world, namely the USA and China, have finally undertaken voluntary policy to meet their targets. A study of the International Energy Agency pointed that the EU may slow its pace in terms of **deployment of renewables** and that after a 62% growth between 2009 and 2015, the renewable capacity of the EU should only grow by 23% over the 5 next years. However, one should not oversight that both China and USA are



starting from much farther behind than the EU and have a lot to catch up to reach the European level. In addition, the USA is also investing in gas technology R&D programmes (with a high-share of shale gas), which the Union is not doing, whereas RES alone for the time being cannot be the only solution if one wants to grant security of supply and reliable power generation. Lastly, the EU's expected performance by 2020 is already more than the target set for 2030. Within the EU, leaders will be Germany, France, UK and Poland.

Brexit

During a summit earlier this month in Brussels, British Prime Minister Theresa May has confirmed her intention to trigger the Article 50 of the Lisbon Treaty in March 2017, opening the negotiations for **Brexit**. After the hard stance of her opening speech at the Conservative Party conference in Birmingham (2-5 October 2016), Mrs May have repeatedly expressed her desire to find a solution that would be good for both the UK <u>and</u> for the EU. She also stressed UK's will to act as a fully member-state until Brexit's completion. The chore question will be whether the UK stays within the Single market (consequently accepting the freedom for the EU citizens to settle and work in the country without restriction) or leaves it, with potential devastating outcomes for the British economy.

CALL FOR PROPOSALS

LCE-28-2017 - Highly flexible and efficient fossil fuel power plants:

The proposal should focus on solutions starting from TRL 3 and reaching TRL 4-6 (technology demonstrated in relevant environment). The objective is to increase the flexibility of the plants' components and/or of the turbomachinery needed to better integrate the RES into the grid. The funding rate is 100%. The deadline is 5 January 2017.

More information <u>here</u>

Material Database:

ETN is considering the creation of a material platform collecting data for gas turbines and share information amongst its members. This project is still in the phase of reflexion, but anyone who could be interested in such a platform and has suggestion can contact Ugo Simeoni: us@etn-gasturbine.eu

PLEASE NOTE THE FOLLOWING EVENTS

ETN internal meetings:

- ➤ Board meeting: 15 November 2016, Brussels, Belgium
- > ETN Air Filtration Meeting: 16-17 November 2016 Brussels, Belgium
- AGM 2017: April/May 2017, tbd
- > Industrial RB211 User Meeting: May 2017, tbd
- LM 2500 User Meeting: 14 and 15 June 2017, Amsterdam, Netherlands

Other meetings and conferences:

- > SGT5-2000E Users Conference: 1-3 November 2016, Rome (organised by GTUsers.com)
- ➤ <u>GT26 User Conference:</u> 29 November 1 December 2016, Madrid (organised by GTUsers.com)
- Power Generation Gas Turbine User Group: 6-7 December 2016, Birmingham (Supporting partner discount to all ETN members)
- > Global Power and Propulsion Society's Inaugural Forum: 16-18 January 2017, Zürich
- > 12th European Turbomachinery Conference: 3-7 April 2017, Stockholm



ETN's News Summary is distributed internally to ETN members at the end of each month. ETN's Quarterly Newsletter is circulated to members and external contacts every quarter. The next edition will be January-March 2017.