

## MINUTES OF THE BOARD MEETING BERLIN, GERMANY, 16 APRIL 2012

### Present:

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Bernard Quoix, President (BQ)	TOTAL
Catherine Goy, Vice President (CG)	E.ON UK
Andy Williams (AW)	Wood Group
Gary Lock (GL)	Frazer Nash Consultancy
Giovanni Cerri (GC)	University Roma TRE
Herwart Hönen, Treasurer (HH)	RWTH Aachen
Jacques Maunand (JM)	EDF
Pericles Pilidis (PP)	Cranfield University
Uwe Kaltwasser (UK)	MTU
Christer Björkqvist (CB)	ETN
Julie Linde Kjeldsen (JK)	ETN

### *Invited Observers:*

André Mom, President Emeritus (AM)	ETN
Jürgen Jacoby (JJ)	Vattenfall
Robert Rijdsdijk (RR)	Shell

### *Apologies:*

Jonathan Clarke (JC)	Shell
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### Content:

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1. Welcome
2. Review and approval of the MoM The Hague, the Netherlands, February 2012
3. Review of Action List from the MoM The Hague, the Netherlands, February 2012
4. Review of ETN Activities Update
5. ETN Budget and Finances (2012-2013)
6. IGTC-12 Agenda and Speakers
7. ETN Communications Strategy – ETN Website, Newsletters and Information tools
8. Annual General Meeting and Workshop 2012
9. Upcoming ETN events and Board meetings 2012
10. Closing of the Board Meeting

Annex: Review of Action list from previous Board meeting (The Hague, the Netherlands, February 2012)

## **1. Welcome**

B. Quoix opened the meeting and welcomed the Board members and the invited observers R. Rijsdijk, Shell and J. Jacoby, Vattenfall. J. Clarke sent his apologies for not being able to join the Board meeting.

## **2. Review and Approval of the MoM The Hague, the Netherlands, February 2012**

The Board unanimously approved the February 2012 Board Meeting minutes, following minor clarifications concerning membership goals for 2012.

## **3. Review of Action List from the MoM The Hague, the Netherlands, February 2012**

See below and Annex.

One general comment made by A. Williams was that *Completed* actions should be deleted from the Action List and Annex, and *Ongoing* actions should have an indicative completion date.

### **Gas Briefing Paper:**

The Board discussed the large amount of submitted comments by Fabrice Chopin (EDF) on the ETN Briefing Paper on Gas. To resolve the outstanding issues A. Mom suggested a face-to-face meeting. The Board pointed out that as the problems raised by EDF are of a political (not technical) nature, it was suggested that A. Mom should have a preliminary teleconference with EDF, and then prepare suggestions on how to resolve any issues prior to the meeting. The attendees of the meetings should be J. Maunand, A. Mom, Fabrice Chopin and Dieter Krapp (original author of paper)

C. Björkqvist suggested that it should be made clear in the paper that it is based on the current political policy outlooks and promises made by the EU Heads of State and Government, that the EU will aim for a near zero emissions power generation by 2050. The paper this way would discuss a scenario rather than favouring one technology. C. Goy also suggested reworking the paper, so that it also recognises the role of other technologies, however with emphasis on the role that gas turbines can play in decarbonising the European energy system more quickly.

Other Users' (e.g. GDF Suez and Vattenfall) position on the paper would also be an instructive, hence they should be contacted for comments prior to the meeting with EDF.

The themes of the gas briefing paper could also be discussed during the upcoming High Level User meeting, in October 2012.

**Action:** A. Mom to gather positions on the Gas briefing paper of other Users (e.g. GDF Suez and Vattenfall).

A. Mom to discuss with Fabrice Chopin the background of EDF's concerns on the Gas briefing paper.

A. Mom to prepare potential resolutions to the concerns of EDF on the Gas briefing paper, before setting up a meeting with EDF and Dieter Krapp.

#### Membership:

Turbocare: they have been contacted, but as of yet no reply has been received. A. Mom to contact Frits De Jong's to discuss further. C. Björkqvist to contact Helge Reymann.

Maersk: U. Kaltwasser will meet with Bo Pedersen and discuss ETN membership.

ExxonMobil: B. Quoix has been in contact with Stan Eptigrove, who showed interest and requested more information.

Gasunie: R. Rijdsdijk contacted them but did not receive a positive respond. No further action for foreseeable future, but possibly revisit potential of recruiting them in the future.

BP: B. Quoix still pending further action to contact BP representatives in Houston, US.

ENI: R. Rijdsdijk to follow up with J. Clarke to discuss any progress made, and possible future actions.

**Action:** A. Mom to contact Frits De Jong of Turbocare.

**Action:** C. Björkqvist to contact Helge Reymann.

**Action:** U. Kaltwasser to meet with Bo Pedersen of Maersk to discuss ETN membership.

**Action:** B. Quoix to follow up with Stan Eptigrove of ExxonMobil.

**Action:** B. Quoix to contact BP representatives in Houston, US.

**Action:** R. Rijdsdijk to discuss next steps with J. Clarke with regard to ENI membership.

#### TopCycle:

A. Mom informed that the initiation process of the TopCycle feasibility study is progressing well. The contracts for the project partners are currently being drafted. A large portion of the budget has already been committed by the members, both in cash and in kind. Additional funding by supporting members is still required though. C. Björkqvist will have a meeting with Swedish Government representatives to discuss potential support from them, as well as future R&D funding related to the technical issues. In order to be the coordinator of the financial aspects of the feasibility study, as well as for future industry funded initiatives, ETN will change its legal status to be able to receive money, and obtain a VAT number.

**Action:** C. Björkqvist to hold meeting with representatives of the Swedish government, and to progress with recruiting project partners and funding, as well as to establish contracts.

**Action:** C. Björkqvist and H. Hönen to have a meeting with ETN's accountant and tax lawyer to discuss the required changes to ETN's legal status, in order permit ETN to receive money, and obtain a VAT number.

#### Back-up of ETN files on computer:

The Board discussed the possibility of cloud computing. It was decided that it will not be implemented at the ETN Office at the present time, given that this technology is still undergoing rapid development and progress. In the meantime, ETN should use a mirror server, for example in C. Björkqvist's home, which is updated regularly to ensure the safety of ETN's work.

**Action:** C. Björkqvist to install mirror server in external location.

#### IMechE Conference:

IMechE has organised a Gas Turbine User Group on 23-24 October 2012, and it was raised by the Board members that this may interfere with the biennial International Gas Turbine Conference organised by ETN in Brussels, Belgium, on the dates of 17-18 October in 2012. It was suggested that this should be pointed out to the IMechE representatives, in order to avoid this clash of dates, as well as in the future.

**Action:** C. Goy to contact IMechE through her colleague Martyn Adams and discuss the clash in dates.

#### **4. Review of ETN Activities Update**

U. Kaltwasser shortly briefed the Board members on the current status of MTU. The ETN member's name is MTU Maintenance. MTU Maintenance is a subsidiary of MTU Aero Engines, which is involved in gas turbine related activities. MTU Aero Engines (and with it MTU Maintenance) is a publicly held company listed on the Frankfurt Stock Exchange under the name 'MTU.' MTU Aero Engines shares its name with MTU Friedrichshafen, which is concerned with diesel and other piston engines. MTU Friedrichshafen is today controlled by Rolls Royce and Daimler and is no longer linked to MTU Aero Engines.

Regarding the policy events attended by ETN, A. Williams raised a question about the description of natural gas as a 'bridging fuel', by G. Oettinger, EU Energy Commissioner. Referring to gas as a 'bridging fuel' is popular in Brussels, given the focus on Renewable Energy Sources (RES). However, the position of the European Commission is that gas will play a crucial role in decarbonisation in the short- and medium-term, as well as potentially in the longer-term, if CCS can become commercially available and deployed at industrial scale.

#### **5. ETN Budget and Finances (2012-2013)**

H. Hönen presented the financial report for 2011-2012, as well as for the upcoming 2012-2013 period.

The finances are strong, especially due to the growth in ETN membership, resulting in 60,000 euro surplus added to the reserves. H. Hönen proposed to establish a Project Development Budget for the upcoming years, to set aside part of the surplus profits from previous years, in order to help progress new initiatives within the ETN project development structure. This was accepted by the ETN Board.

The future outlook for ETN's budget and finances is also positive, however further growth will depend on whether the two new Project Proposals are granted EU-funding. If both projects are successful, ETN will have a higher income, but also higher costs for the office, with additional staff (a technical officer and a part-time accountant) required, as well as upgrading the office and computer facilities. If none, or only one, of the EU-funded projects is successful there will still be an overall positive balance, however only by a small amount.

**Action:** H. Hönen to circulate a final budget for the upcoming year prior to the July 2012 ETN Board meeting, based on the approval or non-approval of the two EU-funded project applications.

## **6. IGTC-12 Agenda and Speakers**

The upcoming International Gas Turbine Conference was discussed. C. Björkqvist announced that Richard Denis (DOE) and Pierre Dechamps (European Commission) have confirmed their attendance.

The urgency of recruiting additional speakers was stressed by the Board members. It was suggested that an OEM representative from a Brussels Office (e.g. Alstom, GE or RR) could be invited to present their view. R. Rijdsdijk and J. Jacoby both have contacts at Mitsubishi, who could potentially be interesting speakers as well.

**Action:** C. Björkqvist to contact Fatih Birol (IEA), Mitsubishi contacts, as well as other potential speakers at the IGTC-12.

## **7. ETN Communications Strategy – ETN Website, Newsletters and Information tools**

C. Björkqvist presented the new Communications strategy. The new strategy complements the new internal structure of ETN and the new project development process. It also has a stronger focus on external communications, and foresees the development of targeted communication to the individual groups of stakeholders in the ETN membership in the future.

Regarding the new **ETN public Quarterly Newsletter**, the Board asked for the list of ETN contacts who will receive the Quarterly Newsletter in the future, in order to review it at the upcoming Board meeting in July 2012.

The means of circulating information regarding new **ETN project initiatives** was also discussed. Initiatives for new ETN projects will have a designated webpage on the ETN website, where project leaders can post up-to-date information. Information on the initiative, with a link to this page, will be disseminated to the ETN membership through the Monthly Newsletter, as well as by a dedicated email. If a member wishes to receive further information on the initiative, or to become an active member of the project, they can register on a dedicated mailing list.

It was agreed that the list of upcoming ETN events should be presented to the ETN Board. Moreover, ETN members should have access to a short summary of these events, published on the ETN website.

*With regard to the Young Engineers Forum, it was decided that it was too costly, however the possibility will be revisited in the future. In the meantime, young engineers can register to receive the ETN Quarterly Newsletter.*

**Action:** C. Björkqvist to present a list of the ETN external contacts to receive the ETN public Quarterly Newsletter.

## **8. Annual General Meeting and Workshop 2012**

The AGM and Workshop taking place on the following days was discussed.

J. Maunand said that the key message of the meetings should be that ETN members should become thoroughly involved with ETN activities in order to benefit their own organisation, as well as the ETN members in general. C. Goy stressed the importance of making participation in ETN activities simple and easy, and suggested that the benefits of

ETN membership should be presented to the general assembly, through the success stories of the H<sub>2</sub>-IGCC project, and the two new EU-funded project proposals, HYCOSOL and OMSoP.

The future role of the Technical Committees was discussed and the following roles were highlighted as their strength:

- Highlight R&D needs
- Explore and inspire new ideas – ‘ideas generator sessions’
- Technology watch
- Exchange of experiences and best practices
- Expert groups which can be consulted

### **9. Upcoming ETN meetings, Board meetings and events attended 2012**

H <sub>2</sub> -IGCC meeting	9-11 May 2012	Venice, Italy
NexTurbine 2012	22-25 May 2012	Shanghai, China
GT Course	4-8 June 2012	Pau, France
ASME	11-15 June 2012	Copenhagen, Denmark
PowerGen	12-14 June 2012	Cologne, Germany
Board meeting	10-11 July 2012	Baden, Switzerland
High-Level User Meeting	16 October 2012	Brussels, Belgium
IGTC-12	17-18 October 2012	Brussels, Belgium
Board meeting	6-7 December 2012	London, UK
H <sub>2</sub> -IGCC meeting	10-11 December 2012	Berlin, Germany

### **10. Closing of the Board meeting**

B. Quoix closed the Board meeting, and thanked J. Jacoby for hosting the meeting.

## **ACTION LIST**

<b>No.</b>	<b>Action</b>	<b>Responsible</b>
1	A. Mom to gather positions on the Gas briefing paper of other Users (e.g. GDF Suez and Vattenfall). A. Mom to discuss with Fabrice Chopin the background of EDF's concerns on the Gas briefing paper. A. Mom to prepare potential resolutions to the concerns of EDF on the Gas briefing paper, before setting up a meeting with EDF and Dieter Krapp.	AM
2	A. Mom to contact Frits De Jong of Turbocare.	AM
3	C. Björkqvist to contact Helge Reymann of Turbocare.	CB
4	U. Kaltwasser to meet with Bo Pedersen of Maersk to discuss ETN membership.	UK
5	B. Quoix to follow up with Stan Eptigrove of ExxonMobil.	BQ
6	B. Quoix to contact BP representatives in Houston, US.	BQ
7	R. Rijdsijk to discuss next steps with J. Clarke with regard to ENI membership.	RR
8	C. Björkqvist to hold meeting with representatives of the Swedish government, and to progress with recruiting project partners and funding, as well as to establish contracts.	CB
9	C. Björkqvist and H. Hönen to have a meeting with ETN's accountant and tax lawyer to discuss the required changes to ETN's legal status, in order permit ETN to receive money, and obtain a VAT number.	CB, HH
10	C. Björkqvist to install mirror server in external location.	CB
11	C. Goy to contact IMechE through her colleague Martyn Adams and discuss the clash in dates.	CG
12	H. Hönen to circulate a final budget for the upcoming year prior to the July 2012 ETN Board meeting, based on the approval or non-approval of the two EU-funded project applications.	HH
13	C. Björkqvist to contact Fatih Birol (IEA), Mitsubishi contacts, as well as other potential speakers at the IGTC-12.	CB
14	C. Björkqvist to present a list of the ETN external contacts to receive the ETN public Quarterly Newsletter.	CB

## **ANNEX**

<b>Actions (from Feb 2012 Board meeting)</b>	<b>Outcome / Next action</b>	<b>Responsible</b>
CB to send membership package to AW to be forwarded to Ronnie Glen at Scottish & Southern Energy.	<i>Pending.</i> CB sent information to Ronnie Glen but no response yet. They have expressed interest in the TopCycle initiative. AW to follow up with him prior to the next Board meeting.	AW, CB
Board members to propose 1 question for OEMs during the IGTC-12 keynote debate, to be sent to the ETN Office before July 2012 Board meeting.	<i>Ongoing.</i> Questions still outstanding from Board members, on the future of GT technology.	All Board Members
UK to contact Mark Axeworth about giving a presentation.	<i>Ongoing.</i> Mark Axeworth cannot attend himself, but his colleague could present at the IGTC-12. CB to contact him with regard to the organization.	UK, CB
Suggest nominee from the Oil & Gas industry for the Project Board.	<i>Ongoing.</i> CB to follow up with Heikke Olteidal from Statoil. Prior to July 2012 Board meeting.	CB
ETN to formulate a transparent strategy with regard to attendance of events where ETN is represented.	<i>Done.</i>	CB
Arrange meeting with EPRI in June 2012 when they are in Europe, to address partnership possibilities, and discuss their representation at the IGTC-12.	<i>Ongoing.</i> Meeting with Rober Steele to be held at ASME in Copenhagen, Denmark in June 2012.	JM, CB
Ensure that payment is received from CNRS.	<i>Ongoing.</i> CB to follow up.	CB
Contact Gasunie about ETN membership.	<i>Suspended.</i> Detailed above in Point 3 of Minutes.	RR