

# $\frac{\textbf{TECHNOLOGY PLATFORM FOR ZERO EMISSION FOSSIL FUEL POWER}}{\underline{\textbf{PLANTS}}}$

## DRAFT MINUTES OF THE 10<sup>TH</sup> MEETING OF THE ADVISORY COUNCIL

BRUSSELS, 14<sup>TH</sup> MARCH 2007

#### ZEP\_AC#10\_14 March 07\_minutes



#### **AC PRESENT:**

Pietro Barbucci Enel replaces Gennaro De Michele

Jozef Dubinski Central Mining Institute

John Michael Farley Doosan Babcock energy replaces lain Miller

Roberto Garosi ANSALDO ENERGIA S.p.A.

Dirk Goldschmidt Siemens AG. replaces Michael Süss

Kurt Häge Vattenfall Europe AG Frederic Hauge The Bellona Foundation

Gardiner Hill BP plc. François Jackow Air Liquide

Jürg Kruhl E.ON Energie A.G. replaces Bernhard Fisher

Philippe Lacour-Gayet Schlumberger
Johannes Lambertz RWE Power AG

Harry Lampenius Foster Wheeler Power Group Europe, EPPSA

John Ludden British Geol. Survey

Luc De Marliave TOTAL replaces Jean Michel Gires Alexandre Rojey IFP replaces Olivier Appert

Santiago Sabugal Garcia ENDESA

Charles Soothill ALSTOM Power Itd

Graeme Sweeney Shell Arve Thorvik STATOIL

Antonio Valero Fundación CIRCE

#### **AC** APOLOGIES:

Olivier Appert IFP replaced by Alexandre Rojey

Niels Peter Christensen GEUS
Gennaro De Michele Enel GEM replaced by Pietro Barbucci
Bernhard Fischer E.ON. Energie A.G. replaced by Jürg Kruhl

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Jean Michel Gires Total S.A. replaced by Luc de Marliave
lain Miller Doosan Babcock replaced by John Michael Farley

Hakon Mosbech Vattenfall Nordic
Michael Süss Siemens AG

Siemens AG replaced by Dirk Goldschmidt

#### **ZEP** SECRETARIAT

Hans Modder Marten Slagter

#### **COMMISSION:**

Pierre Dechamps DG RES
Raffaele Liberali DG RES
Vassilios Kougionas DG RES
Jan Panek DG TREN
Wiktor Raldow DG RES
Thomas H A Schneider DG TREN

#### **OBSERVERS:**

Heinz Bergmann RWE Power AG Paal Frisvold Bellona Europe

François Giger EDF

Udo Kremer EUnited Turbines
Brian Morris Mirror Group
Nick Otter ALSTOM Power
Trygve Riis Mirror Group



Hermione st. Leger Mirjam Stegmann

Statoil

## 1. Opening

#### 1.1. Introduction

The Chairman opens the meeting, and welcomes everyone, especially Mr. Liberali and the members of the mirror group. As almost four months have passed since the last AC meeting on the 23<sup>rd</sup> November 2006, the chairman gave a short summary of the state of the platform, especially addressing the following topics:

- Recently established new Taskforces on Technology, Demonstration and Implementation, Public Communication, and Policy and Regulation.
- The need to create greater visibility through development of a 'ZEP Flagship Programme'.
- The letter to the President of the European Council, Angela Merkel.
- Further activities in connection with the German Council Presidency.
  - Speech/ hearing of Prof. Häge about CCS in the German Bundestag.
- Overview of the important milestones/events passed and ahead:
  - 10 January: Launch of Commission Communication on 'An Energy Policy for Europe'
  - 23 January: Formation of Taskforces
  - 9 February: FP7 Energy calls kick-off in Krakow
  - 27 February: CO2-net meeting in Zagreb
  - 7 March: G8 Clean Coal Conference in Leipzig (ZEP presentation by Prof. Häge)
  - 9 March: EU Spring Council
  - 27 March: CSLF Event ('Overcoming Barriers to CCS Deployment)
  - 29 March: EC hearing of ETP ZEP
  - May: Finalisation of FP7 Energy Work Programme 2008
  - 12 June: AC #11 in Potzdam
  - 13 June: ZEP/GFZ event 'Underground storage of CO2 in Ketzin/Potsdam'
  - 3 October: ZEP General Assembly in Paris
  - 2nd half 2007: impact assessment report on enabling of the CCS legal framework
  - Late 2007:publication of EU Strategic Energy Technology Plan (SET)

In addition to the introduction of the chairman, Nick Otter summarized the outcomes and activities performed by the Co-ordination Group and Taskforces (as outlined in the attached presentation).

#### CG#11 : Frankfurt Workshop 5th December 2007

- Agreement on how to organise to address implementation of SRA/SDD
- Open process of requesting Eols of individuals to be involved
- Use of ZEP Newsletter
- Selection of `acting` co-leads to take initiative forward

#### CG#12 : Brussels 23rd January 2007

- Agreement of make-up of Taskforces
- Identification of key actions to be addressed
- Setting of Taskforce meetings

#### CG#13 : Berlin 5th March 2007

- Definition of initial action plans
- Need further development but aim is to have an `integrated plan`

In conclusion, Nick Otter assessed the impact of the ZEP and what now needed to be done:

- Raised ZEP to highest level in EU with some success.
- Increased visibility and acceptance of `clean fossil` issue.



Now important for ETP ZEP to deliver → AC support is needed.

#### 1.2. Adoption of Agenda

The agenda was accepted with the following changes in the order to accommodate Mr Liberali's availability for the pre-lunch session only:

- Agenda point 5 (Discussion Flagship Programme) was treated after agenda point 1.
- The presentation about the future role of the Mirror Group (as scheduled under point 8) was treated immediately afterwards.

## 1.3. Minutes of Advisory Council #9, 23<sup>rd</sup> November 2006

The minutes of the last AC meeting have been slightly revised in comparison to the minutes that were sent immediately after the meeting. This regards a rephrasing of the speech and comments of Mr Liberali. As there were no comments or additions to the minutes, the minutes of the last AC-meeting were approved.

## 5. Discussion Flagship Programme

A small interim Taskforce was established to draft a proposal, comprising Gardiner Hill, Graeme Sweeney, Arve Thorvik, Johannes Heithoff, Nick Otter with involvement of Robert van der Lande and consultation of Vassilios Kougionas.

Gardiner Hill outlined the ZEP Flagship Programme, as proposed by the interim Taskforce for the Flagship Programme (see annex 7) stressing it was still work in progress. Following that, Graeme Sweeney explained why 10-12 demos were required.

In response to the presentation about the Flagship Programme, a lively discussion ensued. Various AC members suggested points not to be left out, amongst others: covering of the full value chain, consider technologies but also volumes of demos to include, pay attention to retrofit, consider needs from world perspective i.e. include many types of coal. Mr Liberali indicated that merely packaging of already considered activities is not the way to go. According to Mr. Liberali a Flagship Programme should be a coherent set of activities to have impact, be convincing/gain public acceptance and represent a global vision and includes the research component needed. He suggested that it could be wise to consider cooperation with other ETPs such as the Steel and EuMAT ETPs and the Hydrogen ETP.

Mr. Liberali questioned the approach to the number of demo plants. Impact should be leading to create a real Flagship Programme and in this respect he stresses that it is important to keep to the core of the technology, thus not to try to demonstrate all technology options. On a side note he indicated not to see where public acceptance was addressed. Philippe Lacour-Gayet responded immediately that this a prime objective of his taskforce `Public Communications`; if this was not obvious enough, the taskforce name could be changed to `Public Acceptance and Communications`.

In the end, the plan for a ZEP Flagship Programme and the Taskforce for a Flagship Programme were put up for vote and accepted. This taskforce will integrate all comments made and update the plan. It was accepted that there will be a need for a strong co-ordination role and so the taskforce would need to embrace the CG lead and the Secretariat, plus keeping close contact with Commission.

<u>Decision D10.1: Gardiner Hill, Graeme Sweeney, Arve Thorvik, Johannes Heithoff are appointed members of the Taskforce ZEP Flagship Programme</u>

#### Decision D10.2: Acceptance of the plan for a ZEP Flagship Programme



## 8.1 Mirror Group

The current structure of the Mirror Group is felt not satisfactory in realising its objectives now and in the future. Consequently its chair, Brian Morris proposed a new structure and name for the 'Mirror Group', aimed at better involvement of high level policy representatives from all Member States. He reviewed some options and indicated to prefer the most far-going option to continue with the current MG members (FENCO representatives, predominantly 'policy implementers') to cover the 'technical' area, whereas complementary 'policy making' members would have to be recruited to cover the 'policy areas'.

To further underline the important role of such a restructured Mirror Group, Brian Morris proposed to change the name to "ZEP Member States Co-ordination Group" or "ZEP Government Group" in short.

Philippe Lacour-Gayet suggested the CSLF delegations as a source of potential new candidates. Trygve Riis underlined the need for to new ZEP Government Group to be perceived as important in order to get the right political levels interested in participating. One means to convey such a message, could be a joint kick-off meeting with the AC.

Mr Raldow commented that this issue with the MG was not restricted to ETP ZEP, but rather a universal one. To cope with the general problem, the Commission considered (for example) having a single MG for all Energy related ETPs. In response, AC members phrased doubts about such an approach given that in the bigger countries different Energy technologies were different people's responsibilities.

Brian Morris was asked to keep liaising with the EC on the subject. However for now, the AC repeatedly stressing the importance of active involvement from the policy side, adopted option C. It was agreed that a letter (signed by Chairman Häge and Brian Morris) would be distributed among the Member States' Energy Ministers asking them to delegate a high level policy representative to the new 'Mirror Group'. To build ETP ZEP's case, it was suggested to make a strong link in the letter to the recent Spring Council's outcomes. Furthermore, the ZEP Government Group should stay in touch with the EC to avoid conflicting views.

<u>Decision D10.3: Adoption of a new arrangement of the Mirror Group according to option C and renaming to "ZEP Government Group"</u>

Action A10.1: Distribution of letters to all relevant Energy Ministers to ask for high level policy representatives in the 'Mirror Group'

## 2. Composition of Advisory Council

#### 2.1. Current imbalances

Nick Otter presented the results of the review of AC members after 18 months of membership. He stressed that it is not only about attendance of meetings, but also about input to AC meetings and work performed for the ZEP Platform.

#### 2.2. Responses to letters and applications

Nick Otter elaborated on the letters that were sent to the AC members who are considered as insufficiently involved and the responses to these letters. In addition, he provided an overview of the proposed new candidates.



#### 2.3. Decision on AC membership

The Chairman introduced the discussion about AC membership. He stressed that from the start of the Platform, it was intended to have high level industry representatives in the AC. All AC members agreed that it is important to have only high level representatives in the AC. Mr. Kougionas underlined the requirement of the AC to be composed of high levels persons, functioning on a personal title, with appropriate sectorial and geographical balance.

The AC members requested to step down and their proposed replacing candidates:

- Mr. de Michele will step down and asks that his seat be given to Mr. Barbucci. Mr. Barbucci was put up for vote and unanimously accepted by the AC.
- Mr. lain Miller proposes to withdraw and asks that his seat be given to Mike Farley who already regularly replaced Mr. Miller. Mr. Farley was put up for vote and accepted.
- Mr. Jackow would like to discuss with the AC whether he should continue to be an AC member or if another senior member of Air Liquide should be there to ensure a higher level of direct participation. The AC indicated that it is important to have Mr. Jackow as a high level representative on board of the AC for another 18 months. If Mr. Jackow is not able to attend, Mr. Queille will replace him. Mr. Jackow was unanimously re-elected by the AC.
- Mr. Gires proposed to be replaced by Mr. De Marliave as new AC member. The AC accepted Mr. De Marliave as new AC member.

## <u>Decision D10.4: Barbucci, Farley and De Marliave are appointed as new AC members, replacing their predecessors.</u>

Concerning new additional AC candidates, stronger NGO involvement was essentially unanimously considered crucial. Also, a financial expert, a technological academic and a representative from a coal supplier were considered important.

Some AC members expressed their concern about the current national imbalance of the AC composition, as only nine nationalities are involved and some important industrial countries are missing. Other AC members mentioned other missing capability areas, e.g. geology or CO2 chemistry. Both aspects were acknowledged but eventually did not prevail over the four initial areas.

Six applications for AC membership were distributed before the meeting:

- 1. Prof. Alfons Kather, Hamburg University of Technology, Germany
- 2. David Gye, Director, Morgan Stanley & Co Ltd., UK
- 3. Mr. Jannes J. Verwer, Advisor to various organisations, Netherlands
- 4. Mr. Gertjan Lankhorst, CEO GasTerra, Netherlands
- 5. Dr. Fotios E. Karagiannis, Dir. of CEO's office, PPC, Greece
- 6. Mr. Martin Cmiral, Head of Environmental Agenda Department, CEZ, Czech Republic

As it turned out to be difficult to reach consensus about the adoption of new AC candidates, it was agreed to get consensus about the desired capabilities/ profiles of the new candidates. The following expertise fields/ profiles were agreed, put up for vote and accepted (in declining order):

- 1. NGO representative (16 votes)
- 2. Technological academic (11 votes)
- 3. Financial expertise/ 'banker' (10 votes)
- 4. Coal supplier (4 votes)

Mr. Kougionas underlined that this approach only covers the sectorial balance requirement and that geographical balance and personal competence need to be carefully considered. In addition, the executive committee was nominated to select and discuss with new AC candidates for the prioritised areas their potential involvement.



In order to agree on the enlargement of the AC, a number of 25, 26 and 27 AC members was put up for vote. An AC consisting of 27 members was elected by the majority (12 votes).

The executive committee was nominated to select candidates for the 3 prioritised areas, Prof. Kather and Mr. Gye remain candidates. Besides CAN also national environmental organisations like Greenpeace in Germany shall be possible candidates for AC membership.

The ZEP secretariat will prepare letters for the chairman

- to Climate Action Network asking to nominate another high level representative after Kirsten Macey stepped down as AC member
- to Mr. Verwer, Mr. Lankhorst, Dr. Karagiannis and Mr. Cmiral informing that their application doesn't match up with the actual AC decision on further members and that a general replacement of the AC is scheduled for mid 2008.

<u>Decision D10.5: 'NGO', ' 'technological academic' and 'Banker' are accepted</u> (in that order) as the profiles/ expertise of new AC members.

Decision D10.6: Enlargement of the AC to 27 members was accepted

<u>Decision D10.7: The Executive Committee is mandated to select new AC candidates.</u>

Action A10.2: Letter to CAN asking for further AC membership.

Action A10.3: Letters to 4 applicants for AC membership.

### 3. Composition of Executive Committee

The chairman recommended that the team of vice chairs should be reinforced, preferably by a representative of an NGO, in order to have a balanced executive committee. He announced that Frederic Hauge is happy to assume the role of vice chair. The AC unanimously elected Frederic Hauge as vice chair.

#### Decision D10.8: Appointment of Frederic Hauge as vice chair

## 4. Discussion on Progress of Taskforces

Nick Otter re-introduced the Taskforces, the process through which they have been formed over the past months and the way the Taskforces will work towards an integrated action plan. Each of the Taskforces presented its action plan, followed by a discussion with the AC. The AC approved the proposed Taskforce members and the (co-)chairs and gave feedback to the action plans.

Greame Sweeney stressed that knowledge management is important, that the Taskforce on `Demonstration and Implementation` has set up a specific subgroup for this and suggested that this Subgroup could work for all TFs.

The Taskforce Public Communication lacks co-chairs, Philippe Lacour-Gayet proposed Beate Christensen from Bellona as one co-chair. In addition, he requested the mandate to select another co-chair with a background in public communication. The AC elected Beate Christensen as co-chair and mandated Philippe Lacour-Gayet to select another co-chair. AC members are requested to propose candidates in the coming two weeks.



<u>Decision D10.9: Acceptance of all proposed / 'acting' Taskforce members and chairs, and mandate to proceed with Taskforces' activities in accordance with the developed action plans</u>

<u>Decision D10.10: Mandate for Philippe Lacour-Gayet to choose another cochair from the nominees.</u>

#### Action A10.4: Nominate co-leads for Public Communication Taskforce

# 6. EC Inter-Service Task Force on Sustainable Power Generation

The EC has formed the EC Inter-Service Task Force on Sustainable Power Generation, co leaded by DG TREN and DG RES. This Taskforce will remain internal to the Commission with ETP ZEP being consulted on a very regular basis. It was proposed to use the Flagship Program Taskforce for this dialogue.

## 7. ETP-ZEP meetings

#### CO2-SINK project in Potsdam/Ketzin

ZEP/GFZ event 'Underground storage of CO2 in Ketzin/Potsdam' on 13 June 2007 with a scientific workshop in the morning in Potsdam and an event in preparation for the start of CO2 storage in the afternoon in Ketzin and

the AC meeting in Potsdam on 12 June 2007.

#### **General Assembly 2007 Paris**

Alexandre Rojey presented the current status of the organisation of the GA 2007 on 3<sup>rd</sup> October 2007 in Paris:

- The GA 07 will be a one day event on October the 3rd, in advance of a two day international symposium on "Capture and Geological Storage of CO2" being organised by IFP, ADEME and others.
- Parallel to the GA, a workshop on CO2 geological storage is organised by CO2GeoNet.
- The GA will be concluded by a joint buffet hosted by ETP-ZEP, CO2GeoNet, and the organisers of the symposium.
- Aim is to organise these three events in the same venue: Salon Hoche.
- It is expected that more than 400 people will attend the GA, with the ZEP Flagship Programme as the central theme of the GA.
- Policy officials from France, Portugal and the UK will be requested to give a presentation and/or perspectives.

#### 8. Miscellaneous

Dirk Goldschmidt pointed at a Polish research letter that was quite negative about CCS. He questioned what ETP ZEP should do, how to respond. It was proposed to give this letter to the Public Communication Taskforce and ask them to use this letter as a test case for the public campaign.

Nick Otter had been approached by the UK government requesting engagement of Chinese and Indian industry observers through 'hearing observer' status for AC meetings. There was no objection to this, but probably would be more appropriate at meetings like the GA rather than 'normal' working AC and other meetings.

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The chairman announced that the EC had invited the ETP ZEP for a hearing ('Hearing of the ETP ZEP') as to its views on the recently announced (agreed at the EU Spring Council) on the development of the EU Strategic Energy Technology [SET] Plan. This would be on 29<sup>th</sup> March 2007 at 1400 in Brussels. The following persons will represent the platform: Kurt Häge, Olivier Appert, Arve Thorvik, Nick Otter, Paal Frisvold and supported by the Secretariat.

## 9. Close of meeting

The next meeting of the Advisory Council will take place in Potsdam on 12th June 2007 starting at 1100 and finishing at 1700. Venue will be announced together with the agenda.

The chairman closed the meeting.



## **DECISION REGISTER 14th March 2007**

<u>Decision D10.1: Gardiner Hill, Graeme Sweeney, Arve Thorvik, Johannes Heithoff are appointed members of the Taskforce ZEP Flagship Programme</u>

<u>Decision D10.2: Acceptance of the plan for a ZEP Flagship Programme</u>

<u>Decision D10.3: Adoption of a new arrangement of the Mirror Group according to option C and renaming to "ZEP Government Group"</u>

<u>Decision D10.4: Barbucci, Farley, Jackow and De Marliave are appointed as</u> new AC members, replacing their predecessors.

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Decision D10.6: Enlargement of the AC to 27 members was accepted

<u>Decision D10.7: The executive committee is mandated to select new AC candidates.</u>

**Decision D10.8: Appointment of Frederic Hauge as vice chair** 

<u>Decision D10.9: Acceptance of all proposed / 'acting' Taskforce members and chairs, and mandate to proceed with Taskforces' activities in accordance with the developed action plans</u>

<u>Decision D10.10: Mandate for Philippe Lacour-Gayet to choose another cochair from the nominees.</u>

## **ACTION REGISTER 14th March 2007**

Action A10.1: Distribute a letter to all relevant energy ministers to ask for high level policy representatives in the Mirror Group

Action A10.2: Letter to CAN asking for further AC membership.

Action A10.3: Letters to 4 applicants for AC membership.

Action A10.4: Nominate co-leads for Public Communication Taskforce