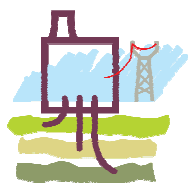


**TECHNOLOGY PLATFORM FOR ZERO EMISSION FOSSIL FUEL POWER  
PLANTS**

**DRAFT MINUTES OF THE 19<sup>TH</sup> MEETING OF THE ADVISORY  
COUNCIL**

**BRUSSELS, 1 JULY 2009**

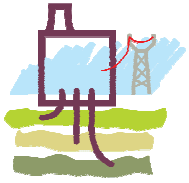


## Z E P      Zero Emission Fossil Fuel Power Plants

The meeting was attended by the following people:

AC#19 attendance		
Meeting name	Surname	Invitation accepted
AC19	Al Soof	Y, OPEC
AC19	Vickers	Y, observer Shell, member of TPCOM
AC19	Bosoaga	Y, observer Mott MacDonald
AC19	de Wolff	Y, observer KEMA
AC19	Höwener	Y, observer Fenco
AC19	Böger	Y, observer EUTurbines
AC19	Zelinger	Y, observer EUTurbines
AC19	Alecu	Y, observer coalplant romania
AC19	Chapman	Y, observer CCSA
AC19	Cussagnet	Y, observer British Gas
AC19	Schneider	Y, observer
AC19	Brockett	Y, COM, only in morning
AC19	Liberali	Y, COM, only in morning
AC19	Kougionas	Y, COM
AC19	Mozer	Y, AC, replaces Zadroga
AC19	Goldschmidt	Y, AC, replaces Suess
AC19	Cieutat	Y, AC, replaces Martha Heitzmann
AC19	Dessens	Y, AC, replaces Lubbers
AC19	Hotta	Y, AC, replaces Lampenius
AC19	Stangeland	Y, AC, replaces Hauge
AC19	Czop	Y, AC, replaces Giger
AC19	Radgen	Y, AC, replaces Fischer
AC19	Pyka	Y, AC, replaces Dubinsky
AC19	Ricard	Y, AC, replaces de Marliave
AC19	Becker	Y, AC, replaces Cordoba
AC19	Cavalheiro	Y, AC, replaces Barbucci
AC19	Alonso Martinez	Y, AC, replaces Alvarez
AC19	Appert	Y, AC
AC19	Christensen	Y, AC
AC19	Constantin	Y, AC
AC19	Gye	Y, AC
AC19	Hill	Y, AC
AC19	Kakaras	Y, AC
AC19	Kather	Y, AC
AC19	Kumar	Y, AC
AC19	Lambertz	Y, AC
AC19	Ludden	Y, AC
AC19	Mabey	Y, AC
AC19	Martinez Jubitero	Y, AC
AC19	Soothill	Y, AC
AC19	Sundset	Y, AC
AC19	Sweeney	Y, AC





**Z E P      Zero Emission Fossil Fuel Power Plants**

AC#19 attendance		
Meeting name	Surname	Invitation accepted
AC19	Valero Capilla	Y, AC
AC19	White	Y, AC
AC19	Bergmann	Y
AC19	Drosin	Y
AC19	Goldschmidt	Y
AC19	Heithoff	Y
AC19	Hetland	Y
AC19	Paelinck	Y
AC19	st. Leger	Y
AC19	van Breda Vriesman	Y
AC19	van der Lande	Y
AC19	Willnow	Y
AC19	Zadroga	N, replaced my Mozer
AC19	Giger	N, replaced by Valerie Czop
AC19	Hauge	N, replaced by Stangeland
AC19	De Marliave	N, replaced by Ricard
AC19	Fischer	N, replaced by Peter Radgen
AC19	Lampenius	N, replaced by Hotta
AC19	Suess	N, replaced by Goldschmidt
AC19	Hauge	N, replaced by Frisvold
AC19	Lubbers	N, replaced by Dessens
AC19	Heitzmann	N, replaced by Cieutat
AC19	Barbucci	N, replaced by Catarina Cavalheiro
AC19	Cordoba	N, replaced by Becker
AC19	Alvarez	N, replaced by Alonso Martinez
AC19	Garosi	N, ill

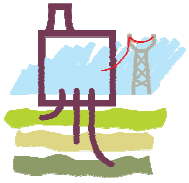
# 1 Opening

## 1.1 Introduction

At the kick off Sweeney apologises for late arrival of knowledge sharing document and highlights the following issues:

- the ACEC telephone conference in which support was expressed for the ZEP objectives proposed by Gardiner Hill (agendapoint 2), the proposed guidelines for a new organization (agendapoint 3) and the setting up of a legal entity.
- the developments in Canada: the Canadian government chose applicants for applicants for 3 CCS initiatives: 800 MW IGCC, a fertilizer project and a CCS project linked to tar sands.
- the need to focus on keeping Europe at the forefront of CCS development by balancing competitive aspects and the need to collaborate.
- his disappointment that in the near past information on non-settled ZEP discussions leaked to the public domain and the press. This undermines the trust we built over the last years.





## 1.2 Adoption of agenda

The proposed agenda is adopted.

## 1.3 Adoption of minutes AC#18 meeting

The minutes are adopted. It is confirmed that the taskforce public communications gives regular updates about its activities and developments to sponsors and the AC.

## 1.4 Review decisions AC#18 meeting

The review of the AC18 decisions was accepted. It was agreed that the last AC meeting of 2009 will be held on 16 September 2009, and that the next AC meeting will be held early 2010.

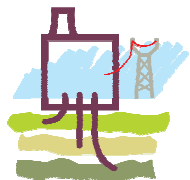
## 2 ZEP future objectives

Gardiner Hill presents the slides of the pre read pack. Comments:

- general remarks:
  - o Kumar asks for attention for the bigger picture. The discussion is not just about the implementation of CCS but needs to be put in the context of the total energy system.
  - o Dessens asks for attention of the potential role of CCS in combination with biofuels as a CO2 sink. It could create additional support.
  - o White: what is the difference with GCCSI? And how do we distinguish from them? Gardiner: we have much more technological depth. GCCSI is primarily a network
  - o Farley: it could be read that ZEP is satisfied with 10-12 demo's and doesn't look beyond 2020. The development of a vision on long term implementation deserves the highest priority. The overall objective should be: the widespread deployment of CCS, and accelerated deployment after 2020, and the development of the next generation technologies. He asks for more attention for the period beyond the start of the demoprogramme in 2015. Hill emphasizes that the demo programme is the first step in this process. Sweeney agrees that the long term view needs to have the highest priority and that this needs to be addressed in the SRA/SDD.
- Slide 2, last bullet: Dessens prefers cooperation above networking with other platforms. Sweeney replies that the actual cooperation is the responsibility of programmes such as SET and the EII. Liberali confirms that cooperation between platforms is crucial. He offers to organize a meeting between platforms. Sweeney accepts that offer.
- Slide 4:
  - o Liberali appreciates that the presentation says that CCS is a key technology rather than the key technology. He also adds that the public communication issue is often approached in a paternalistic way. It should instead be recognized that risk exists, also in the implementation of CCS, and that it needs to be managed.
  - o Radgen asks for clarification of the word "commercial". Sweeney clarifies: we are in a process of derisking CCS. The final question is: does this dog hunt? ZEP is doing all it can to make CCS one of the hunting dogs.
- Slide 10; Mabey remarks that the ZEP contribution to the overall public communication issues are at best modest.

Decision: the presentation on ZEP objectives is adopted and is the final guidance to the rewriting of SRA and SDD.





### 3 ZEP organizational changes

Appert presents the paper distributed as pre-read.

Sweeney asks for comments and approval and specifically regarding the proposal on slide 12, in which it is proposed to drop the requirement on the first page of the Rules of Procedure that the first members of the advisory council shall be appointed for a term of 18 months, which may be extended for a further 18 months.

Decision (with approval of the European Commission):

- The footnote on page 1 of the rules of procedure is removed
- The first members of the ZEP AC are reappointed for a 2<sup>nd</sup> period of 3 years

The following comments were made to the presentation of Olivier Appert:

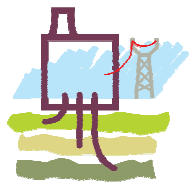
- A general request is made for a complete description of the ZEP organization structure (all bodies), its decision making processes and renewal processes (e.g. chairs taskforces) . The documents discussed under agendapoint 3 (organizational changes) only cover parts of this. Decision: a complete description of the ZEP organization structure (all bodies), its decision making processes and renewal processes will be developed.
- Slide 4 mentions that the SDD is to be updated under the leadership of the taskforce Policy&regulation. At the CG#31 it was decided that the taskforce Demo&Implementation also needs to be involved in this. This should also be reflected by the proposed ToR of that taskforces (see attachment agendapoint 5)
- Slide 6, on which it is proposed to create a TWG on infrastructure: It was decided that the taskforce Demo&Implementation will take the lead with infrastructure and storage issues
- Decision: The existing WG (Olivier Appert/lead, Heinz Bergmann, Vassilios Kougionas, Robert van der Lande, Gardiner Hill) is asked to prepare a proposal for continuity and rotation of AC membership. They also shall propose a refreshment of TF/WG leadership. After discussion in CG the proposals shall be presented at next AC meeting 16 September.
- Care should be taken to balance the work of the secretariat with its budget. The primary task of the ZEP secretariat is to register the events, review the set of opportunities, report to the various bodies and members and support whenever possible.

## 4 The European initiative on CCS

### 4.1 Agendapoint 4.1-4.3: NER 300

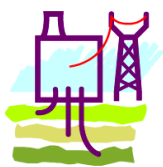
- van der Lande, Gye and Brockett each give a presentation on the NER300.
- Specific remarks of Brockett in his presentation (slide 2):
  - o The current position of the EC on the contents on the non-paper is not fixed but can change dependent on stakeholders and member states view.
  - o The 50% EC-funding limit only pertains to NER and the recovery package, not to the structural funds.
  - o Regarding the division of responsibilities: It is clear that member states agree that the NER funding is a European process. But they themselves also are required to put a lot of funding in as well and push for a bigger MS role. During the negotiations this may be an important topic. The EC now considers options such as asking the Member states to carry out the pre-selection.
  - o Geographical distribution is also likely to play a role in the negotiations with the member states. In the view of the EC the importance of this should not be emphasized too much.

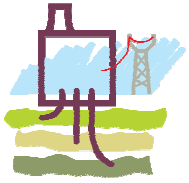




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- Selection process:
  - The EC notes pressure to have more NER calls and to change the balance between the two proposed calls.
  - The EC notes a pressure for acceleration, but MS don't want to accelerate.
  - Some MS want an ex ante split of the funding for CCS and renewable.
  - The EC is willing to take comments on the annex of the non-paper into consideration. This includes the scale of the projects.
- The next steps in the comitology process:
  - The EC is aiming for a vote in the autumn. Then there will be the 3 month scrutiny procedure of the parliament
  - The tendering process could then begin in the beginning of 2010
- Sweeney expresses worries about duplication of work if the MS get a bigger role in the selection process. Brockett: the MS cannot have a role in the final selection process, only earlier in the process.
- The UK could help the EC by giving a good view on the resources needed for the implementation of the NER funding scheme by showing their own resources for the national scheme. Brockett: the Com will set out the resources requirement. This will be discussed by the impact assessment board in July.
- The projects will be assessed against the value that the NER/recovery package gets for its money, as opposed to the total funding. This will encourage all sponsors to maximize their financial contribution.
- Sweeney to Brockett: how can ZEP be of help? Brockett mentions:
  - Zep should give feed back on technical issues
  - Zep could help convince the member states of the EU approach and the role of the member states. ZEP members should engage in a national dialogue
- Mabey: some member states have a strong preference to de-europeanise the NER 300 project. The killer argument they use is that the resources of the EC for implementing the NER 300 scheme are insufficient. He asks the EC to show the credibility, reassurance, that they have the required resources, so that the AC members can use this in their national dialogues.
- Sweeney summarises:
  - ZEP appreciates the work of the commission so far
  - ZEP will consider the support to be given with respect to the questions Brockett asked
  - Key question for bringing the comitology process to a close in the autumn is how to bridge the gap between the positions of the EC and the member states
  - MS have to realize that the CCS demonstration programme has far reaching importance: in the long term it affects the EU global competitive position. If the EU doesn't move fast the USA and China will simply out-invest the EU.
- Decisions:
  - ZEP will respond timely to the non-paper of the commission. The secretariat will distribute a draft paper and ask the AC members for comments. A small group (David Gye/lead, Hermione St. Leger, Heinz Bergmann, Robert van der Lande) will collect the comments and adapt the





draft paper, that shall be distributed to the Commission and member states.

- ZEP will deploy an action to help the member states to understand the need for an EU level programme and to improve the cooperation between Commission and MS at the same time. A temporary working group will be set up to this purpose, reporting to the ACEC

#### **4.2 Agendapoint 4.5: Project network:**

Steinar Thon gave his presentation immediately after the lunch, and before the agenda point 4.4 on knowledge sharing because of his time constraints. He announced that the commission will involve ZEP in the concept definition of the project network by sending a draft paper by 14 July to which ZEP will be asked to reply by the end of July. A network website is under preparation. The 1<sup>st</sup> plenary network meeting is planned for 2-3 December 2009.

#### **4.3 Agendapoint 4.4: Knowledge sharing**

Soothill starts the discussion by explaining that the groups of constituents, in particular the equipment manufacturers and NGO's have conceded a lot in their effort to achieve consensus but that there is not yet agreement on the paper. He highlights the contentious issues and mentions that the key issue preventing consensus is that equipment manufacturers cannot agree to sharing background IP. Soothill, backed by several participants, proposed that the paper be finalized and published showing the positions of the stakeholders on the contentious issues. Not everyone however is willing to publish a paper which shows the disagreement within ZEP and which would include proposals that are absolutely not acceptable for some stakeholder groups within ZEP.

Farley: too much emphasis is put on licencing. CCS needs to be rolled out as fast as possible. There are hardly companies to licence to. And there is too little emphasis on knowledge sharing between governments and on storage issues.

White: the discussion on knowledge sharing and the way ZEP handles the differences of opinion sets a precedent for future dialogues. ZEP must draw and formalize lessons from it.

Sweeney concludes as follows:

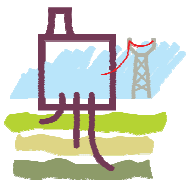
- There is general agreement as to the value of the piece of work
- Decision: in the absence of agreement on a joint version the present version of the knowledge sharing report will be a "non paper". It will not be branded by ZEP nor will it be placed on the ZEP website. The non-paper will still be subject to AC approval.
- Sweeney will after the AC meeting make a last effort to bridge the gap.

### **5 Agendapoint 5: taskforces**

Because of the little time available the discussion of the ToR is taken off the agenda and AC members will be asked by email to give their feed back.

- The agendapoint 5.1, in which the taskforce public communications presents the ZEP Logo, branding and website (information point), is moved to the end of the meeting .
- Regarding agendapoint 5.3: It is decided that Paelinck gets the go ahead for populating the taskforce demo&implementation and asks the ZEP secretariat to set this in motion.
- Decision: The AC members will comment in writing to the ToR of the 4 ZEP taskforces on the basis of the draft papers that have been distributed for AC19. The secretariat shall collect the comments and distribute to TFs. CG shall recommend final proposals for next AC.





## 6 Agendapoint 6: OPEC

Dr. Nimat al Soof gives a presentation on OPEC's view and activities regarding CCS. The following comments were made in the discussion afterwards:

- Sweeney appreciates the possibility of a continued dialogue with OPEC and asks the ZEP secretariat to follow up.
- Soothill is impressed with OPEC's strong interest in CCS.
- Sweeney points at the importance of the CSLF meeting from 12-14 October in London. It's prime role in the lead-up to the COP meeting in Copenhagen will be to communicate the message to the negotiators to not come back from Copenhagen without an agreement with CCS.
- Shell is asked to present the Abu Dabi CCS project at the next AC meeting.

## 7 Agendapoint 7: interaction with other platforms

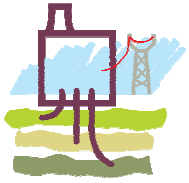
The agendapoint was taken off the agenda because of lack of time.

## 8 DECISION REGISTER AC#18, 10th March 2009

- D19.1 The presentation on ZEP objectives is adopted and is the final guidance to the rewriting of SRA and SDD.
- D19.2 A complete description of the ZEP organization structure (all bodies), its decision making processes and renewal processes will be developed. The existing WG (Olivier Appert/lead, Heinz Bergmann, Vassilios Kougiouas, Robert van der Lande, Gardiner Hill) is asked to prepare a proposal for continuity and rotation of AC membership. They also shall propose a refreshment of TF/WG leadership. After discussion in CG the proposals shall be presented at next AC meeting.
- D19.3 (with approval of the European Commission):
- o The footnote on page 1 of the ZEP rules of procedure is removed
  - o The first members of the ZEP AC are reappointed for a 2<sup>nd</sup> period of 3 years
- D19.4 The taskforce Demo&Implementation will take the lead with infrastructure and storage issues
- D19.5 ZEP will respond timely to the non-paper of the commission. The secretariat will distribute a draft paper and ask the AC members for comments. A small group (David Gye/lead, Hermione St. Leger, Heinz Bergmann, Robert van der Lande) will collect the comments and adapt the draft paper, that shall be distributed to the Commission and member states.
- D19.6 ZEP will deploy an action to help the member states to understand the need for an EU level programme and to improve the cooperation between Commission and MS at the same time.. A temporary working group will be set up to this purpose, reporting to the ACEC.
- D19.7 ZEP will respond to DNV regarding its proposal for the network before the end of July







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D19.8 In the absence of agreement on a joint version the present version of the knowledge sharing report will be a "non paper". It will not be branded by ZEP nor will it be placed on the ZEP website. The non-paper will still be subject to AC approval.

D19.9 Secretariat will recruit members for the taskforce demo&implementation

D19.10 The AC members will comment in writing to the ToR of the 4 ZEP taskforces on the basis of the draft papers that have been distributed for AC19. The secretariat shall collect the comments and distribute to TFs. CG shall recommend final proposals for next AC.

D19.11 BP is asked to present the Abu Dabi CCS project at the next AC meeting

