

## **ZEP Advisory Council Meeting #21**

## Minutes of meeting

Date and time: 13 January 2010, 10.30 – 17.00 hrs.

Venue: Centre Borschette Brussels

Status: approved by Sweeney/Bergmann, sent to AC

The list of attendees of AC#21 is attached as annex 1.

## 1 Opening

Chairman opened the meeting, summarized the agenda items and gave his view that 2010 will be a year in which ZEP will need to strengthen its focus on technology, storage and public communications.

In the opening the agenda for the meeting was adopted, with the order of agenda items 2 and 3 changed because of the late arrival of Hauge, held up in traffic.

The minutes of AC 20 were adopted with the remark that it was agreed that the TFT will develop a new activity, focused on the CO2 purity range (experience so far, parameters to be evaluated and activities to be considered in the demo project program), from the technical perspective and taking the whole CO2 chain into consideration (capture + transport + storage) (this agreement to be confirmed)

The decisions of AC 20 were presented, it was concluded that they are all dealt with and don't need further action

Chairman summarized the procedure for voting for the new candidates for the ZEP AC and asked all AC members to fill in the ballot form and hand it to the secretary at lunch.



## 2 The long term R&D plan

Niels Peter Christensen presented the draft plan. Generally the AC expressed a strong appreciation for the plan and commended the high quality of the work.

The discussion that followed focused on:

- a further articulation of the key messages and recommendations,
- the persons or organisations to whom they are addressed. Which levels? (EC, member states, public / private research) Who should action the recommendations? Reply of TFT is that the LT R&D plan is being discussed with the EC (DG TREN & DG RTD) and that it will also be distributed to the Member States. TFT will step up the interaction with the Government Group.
- The estimation of the need for funding. Reply of TFT is that 2 years ago a rough cost estimate was made and that for the next AC meeting this estimate will be reviewed and updated.
- The tone of the message. There is a risk that the LT R&D plan is perceived as a message that R&D is still needed to solve performance & safety problems of the present CCS demos. It is important that when communicating messages about CCS, the need for demos and RTD is explained in terms of scale-up, integration etc and does not portrait CCS as experimental when it comes to safety end environment

The following topics were discussed:

- research on social acceptance (reply: was considered in the work but may need further consideration later, with involvement of the taskforce Public Communication)
- research on issues such as earth tremors, earth lifting or subsidence (related to the injection of CO2) (reply: was fully covered in current work)
- a description of what we have already achieved with R&D over the past 5 years (Reply: TFT will look into the this item during 2010)
- the impact of R&D investments on the competitive position of Europe (Reply: TFT will look into the this item during 2010)
- a remark on the relatively low % of subsidy for CCS medium sized pilot projects (Reply: this is part of current work and a very important point )

The Long term R&D plan was endorsed by the ZEP AC.

The AC requested a presentation at the next AC to cover:

- The cost of the programme; progress on estimates
- a view as to those parts best pursued internationally, regionally, and nationally,
- the EU's competitive position,
- a strategy to ensure that the advice will be influential in setting the forward agenda in the SET plan and the Framework Programme



### 3 The ZEP environment

## 3.1 After Copenhagen

Frederic Hauge gave his view on what happened in Copenhagen.

- On the one hand there is a lot of frustration, not only amongst NGO's about not reaching a binding agreement. Any agreement in the future will need a positive vote in the US senate which might take years, global introduction of cap and trade systems is further away than before and consequently there are dangers for the CO2 price. It has proven very difficult to include CCS in the CDM-system.
- On the other hand there is also a more positive view. Copenhagen probably initiated a game change. Situations will be avoided in which, like in Copenhagen, countries are able to hijack negotiations. We might head for a future in which heads of state set targets before the COP meeting that will then be left to negotiators in COP meetings to fill in. It also made clear that a closer dialogue is needed between the US and the EU. The US negotiation team, in comparison with earlier COP meetings, was extremely effective and professional.
- There are new discussions emerging for which ZEP needs to prepare itself:
  - o what to do if the cap&trade system won't deliver the solution?
  - Sectorial and regional approaches, coalitions of the willing, in the absence of an agreed global approach
- The ZEP side event was very successful. Pachauri delivered a very important message on which ZEP should build. In particular the message to go carbon-negative, the 5<sup>th</sup> IPCC assessment report will include this issue.
- Regarding CCS at COP15 there was an ongoing discussion about
  - Safety of storage
  - CCS versus renewables.
  - The remaining problems of CCS, in particular the long term liability of storage

Frederic observed that the IPCC expressed a need for scientific research to back up the choices that need to be made. ZEP is in a unique position to help the IPCC with this and it should be a major focus of ZEP for the next few years.

As preparation for the dialogue with the Chinese delegation at the AC meeting in March ZEP ought to reflect on what the offer to the Chinese should be that might engage them.

### The following was agreed:

- ZEP won't issue an official view on COP15 since it is not likely to have any impact.
- ZEP, (TFP&R and TFPC) will update its earlier view on Copenhagen and propose ZEP actions. This
  will be discussed at the next AC meeting
- enter the discussion regarding CCS in CDM.
- Open a dialogue with the biofuels platform in order to develop carbon negative initiatives. TFD&I is asked to develop a proposal for cooperation, to be discussed at the next AC meeting



Bellona will develop a discussion paper to ZEP on the need of IPCC for R&D and what ZEP should do. This is to be discussed at the next AC meeting. AC members that have comments or advice to Bellona on the subject are asked to send this to Paal Frisvold.

### 3.2 Reports of 3 Demo projects

Presentations were given by

- David Hone (Shell) on the developments of the Barendrecht storage field
- Johannes Lambertz (RWE) on the RWE projects, in particular Hürth
- Niels Peter Christensen (Vattenfall) on the CCS project Jänschwalde

In addition Luc de Marliave gave a short overview of the Lacq project in the south of France

In the discussion of these examples it was suggested that ZEP could play a role in the public dialogue and that ZEP could also initiate a debate on the re-use of CO2

### 3.3 NER300

The summary paper that was distributed as a pre-read was developed by David Gye. Since everyone should be familiar with its contents it was not further discussed at the AC meeting. Graeme noted that the EC is now in the process of developing a new proposal but that ZEP doesn't yet avail of that. The discussion focused on:

- The need to communicate the key recommendations. There is a strong view of i.a. Pietro Barbucci and Dirk Goldschmidt that the current proposal will not deliver the required de-risking of CCS
- The need for a decision of CCC on 2 February. If on February 2<sup>nd</sup> no agreement is reached on the demo-programme the alignment might expire.

Jesse Scott notes that a solution needs to be sought at a high political level.

It was decided:

- to develop a short message on the urgence to reach a decision on 2 February by 14Jan10 including the 4 main ZEP recommendations:
  - flexibility in the way the CCS portfolio is assembled.
  - limitation of 50% of public funding should be recast to permit funding of up to 50% of relevant costs,
  - Projects must perform if they are to earn allocations from NER 300; this requirement needs to be subject to force majeure relief
  - Similar force majeure relief should apply to the achievement of the "drop-dead" dates for project award.
- to send this message to the AC members and urge them to bring this actively under the attention of the high levels of their administration
- to set up a telephone conference with Delbeke (DG TREN) in order to bring ZEP's view to his attention.
- That the ZEP ACEC is mandated to respond directly to any EC revised position for Feb 2 CCC



### 3.4 The project network

Heinz Bergmann reported on a meeting that a ZEP delegation (he, Jesse Scott and Philippe Paelinck) had with DG TREN at which DG TREN outlined its plans for cooperation of ZEP with the Project Network. At this meeting the ZEP delegation reached an agreement in principle on the modus for cooperation that was described by Heinz in his presentation.

The AC agreed with the proposed cooperation.

### 3.5 The EEPR

Robert van der Lande informed the AC on recent developments of the EEPR

## 4 AC membership

The ballot forms that were handed in by the AC members were processed during lunch. After lunch Graeme Sweeney announced the results. The four AC candidates with the most votes were:

- Klaus Dieter Rennert, Hitachi Europe
- Rose de Lannoy, GdF Suez
- Vesa Maso, Fortum
- Mart van Bracht, TNO Geological Survey of the NL.

These candidates were therefore admitted to the ZEP Advisory Council. Chairman congratulated them on behalf of the AC and also expressed his appreciation to the other candidates for their participation in the process and invited them to attend future AC meetings as observer.

## 5 CCS in Japan

A presentation on the subject was given by Mr. Kanzawa. (ZEP has asked mr. Kanzawa to make the presentation available to ZEP and is awaiting answer). In the following discussion ZEP expressed its interest in sharing knowledge and in the topic of ocean storage.

# **6 Government Group**

Peer Hoth presented an overview of the progress and problems of the implementation of the CCS directive in a number of member states. The information was appreciated by many.



#### **Taskforce Policy & Regulation** 7

Kristofer Hetland informed the AC on the request of the EC to ZEP to provide input into its proposal to give member states guidance for the implementation of the CCS directive.

There are important issues here for which ZEP would like to develop concrete proposals. Kristofer notes however that there is insufficient support of ZEP members to develop these proposals.

Chairman therefore invites all AC members to provide the requested support (man power) to Kristofer.

### **Public communications**

#### 8.1 **Debriefing COP15**

Eric Drosin debriefed the AC about the activities deployed at COP 15. He added that the ZEP investment amounted to 160 k€.

The AC concluded that in general ZEP's COP15 side event was successful. It is however premature to decide on similar activities at COP16 in Mexico.

## 8.2 Public communications plan and public communications director

Klaus Willnow and Eric Drosin presented the results of public communications activities in the past 2 years, the plan for 2010-2012 and the proposal for continuation of activities of the public communications director.

In the discussion that followed the appreciation for the work in the field of public communications was widely expressed and it was generally acknowledged that the public communications activities need to be continued and stepped up to a level of min 500 k€/vear.

Specific remarks and suggestions that were made:

- Public communications contracts and expenditures must be compliant with the high standards set by the sponsors, in particular (but not only) Siemens. The ZEP secretariat will assist and monitor.
- GCCSI is also in the very short term rolling out a large pubic communications programme and would like to coordinate
- Hauge asked attention for effectiveness. He found the investment in Pachauri very worthwhile, but had doubts about the banners at the airport.
- Hauge asked for a future strategy. This should contain:
  - An early agreement on the ZEP-messages for GA2010 and 2011
  - An early "plan de campagne". ZEP should assign a study to underpin such a message that could be presented at the GA
  - A reflection on the future role and products of ZEP
- Fischer asked for the public communications plan to focus on decision makers, because ZEP does not have the abilities to change the perception of the public at large. This view was later on



supported by others. He also asked for a focus on coordination, rather than doing everything ourselves.

 White noted that development of content is very expensive and that ZEP should play on its strength: networking. He encouraged ZEP to strengthen the community of public communication departments and closely work together with them. That would make it easier for public communications departments to recognise the added value of ZEP and provide sponsorship.

The following was decided:

- Approval of contract extension for Communications Director from 01 July 2010 to 31 Dec. 2012 incl. budget proposal for operating costs
- Approval of procedure so that Communications Plan 2011-12 can be approved at next AC meeting in March

## 9 European Industrial Initiative

Kalliope Kalesi of DG TREN presented the draft CCS EII implementation plan 2010-2012.

The EII will in the future be the forum for a dialogue between industry, member states and the EC. Several EII's will be launched, CCS is the only EII for which a technology platform is now being considered to participate. ZEP would not be the only party. It is also conceivable that organisations such as Eurelectric could participate. Organisations outside the power sector will also be considered, such as from the steel sector. Gijs Vriesman announced that the Hydrogen & Fuel cells JTI is also interested in participating.

The timeline is:

- Finalisation of the implementation plan 2010-2012. ZEP is asked to submit its comments on 19 January COB at the latest.
- Sherpa's meeting on 10 or 11 February 2010 (date tbc) on which the draft implementation plan will be discussed. ZEP will still have the opportunity to propose more detailed comments after the Sherpa's meeting on the CCS EI
- 5 March: Validation of the proposed outline of the Implementation Plans
- Launch of the first European Industrial Initiatives:
  - o Drafting of launching 'Agreements' (by EC) deadline end April 2010
  - Launch event ES and BE Presidencies 3-4 June /15-16 November 2010

Chairman said he believes ZEP can fulfil this role. It is conceivable that ZEP would establish a representative delegation that participates in the EII on ZEP's behalf.

The following was decided:

- AC endorsed the direction as presented by DG TREN.
- Given the significant set of actions and input to the EC required before the next AC the ACEC is mandated to respond on behalf of ZEP using the recommendations of the WG led by Gardiner Hill whilst requesting the Chair to consult with them electronically on matters of significance.



 Chair also noted willingness of ZEP to evolve its constitution to enable it to be Industry's vehicle for the EII.

The agreed procedure for ZEP is as follows:

- AC members will be sent the draft implementation plan and be asked to send comments to the WG EII (Gardiner Hill / ZEP secretariat) a.s.a.p.
- Gardiner Hill, because of his absence at the AC meeting, will be asked to give his view on the draft implementation plan
- The working group EII, chaired by Gardiner Hill, will, on the basis of Gardiner's starting point, discuss and write down its proposed comments and will send this to ACEC for approval. In case of controversial issues also AC members will be involved.

## 10 Taskforce demonstration and Implementation

Johannes Heithoff gave the presentation on the requirements for a Final Investment Decisions for demonstration projects that was developed by TFD&I and asked for endorsement. Philippe Paelinck was asked to present it at the SFFWG (Sustainable Fossil Fuel WG) meeting of DG TREN on 15Jan10 . The following discussion is summarised as follows:

- In the Netherlands a similar critical path analysis was performed, with similar findings
- The presentation in its present form might lead to the belief that the deadline of 2015 can no longer be met and that therefore the race is over. This is not the case. Because there is a spread in the duration of projects it is better to write that the window is now closing and that the risk is increasing that projects won't meet the deadline.
- A key factor is the availability of a legal framework in the countries that will host a demonstration project. In some countries such as Germany the legal framework is delayed. These countries face a competitive disadvantage.

### It was decided that

- a team consisting of David Gye, Philippe Paelinck and Hermione St. Leger reformulate the messages of the presentation;
- the AC will be asked by email to approve the revised presentation;
- Philippe will inform the SFFWG that the view presented is a draft, still to be confirmed by the ZEP AC.

### 11 Outlook AC22

Robert van der Lande and Niels Peter Christensen informed the AC members of the plans for the AC meeting of 10 March in Berlin.

For the organisation of the meeting a team was formed with the following members:

- Niels Peter Christensen
- Nicolas Ximenez



- Francois Kalaydjian
- Robert van der Lande

## 12 Decision register

D21.1: the Long term R&D plan is endorsed by the ZEP AC. TFT will give a presentation at the next AC to cover:

- The cost of the programme,
- A view as to those parts best pursued internationally, regionally, and nationally,
- The EU's competitive position,
- The programme to ensure that the advice will be influential in setting the forward agenda in the SET plan and the Framework Programme

D21.2: the following actions will be undertaken as a follow up on COP15:

- ZEP (TFP&R and TFPC) will update its earlier view on Copenhagen and propose ZEP actions. This update will be discussed at the next AC meeting
- ZEP will contribute to the discussion regarding CCS in CDM.
- ZEP will open a dialogue with the biofuels platform in order to develop carbon negative initiatives. TFD&I will develop a proposal for cooperation, to be discussed at the next AC meeting
- Bellona will develop a discussion paper for ZEP on the need of IPCC for R&D and what ZEP should do. This is to be discussed at the next AC meeting. AC members that have comments or advice to Bellona on the subject are asked to send this to Paal Frisvold.

D21.3: ZEP will take the following actions regarding NER300:

- develop a short message on the 4 ZEP recommendations on NER300 and the urgence to reach a decision on 2 February by 14Jan10,
- o send this message to the AC members and urge them to bring this actively under the attention of the high levels of their administration
- o discuss this with Delbeke (DG TREN) in order to bring ZEP's view to his attention.
- The ZEP ACEC is mandated to respond directly to any EC revised position for Feb 2 CCC

D21.4: ZEP AC agrees with the proposed cooperation with the project network

D21.5: Four AC candidates have been accepted as AC member:

European Technology Platform for Zero Emission Fossil Fuel Power Plants info@zero-emissionplatform.eu



- Klaus Dieter Rennert
- Rose de Lannoy
- Vesa Maso
- Mart van Bracht.

D21.6: AC members will provide assistance to Kristofer Hetland with developing concrete proposals for guidance of member states for the implementation of the CCS directive

### D21.7: Public communications

- The contract for the Communications Director will be extended from 01 July 2010 to 31 Dec. 2012 incl. budget proposal for operating costs
- The procedure for approval of the Communications Plan 2011-12 at next AC meeting is approved

### D21.8: EII:

- AC endorsed the direction as presented by DG TREN.
- Given the significant set of actions and input to the EC required before the next AC the ACEC is mandated to respond on behalf of ZEP using the recommendations of the WG led by Gardiner Hill whilst requesting the Chair to consult with them electronically on matters of significance.

D21.9: The presentation on the requirements for a Final Investment Decisions for demonstration projects will be reformulated and submitted to the AC for approval.

# Annex I, participants

AC#21 attendance				
Meeting name	Surname	Invitation accepted		
AC21	De Lannoy	Y, observer, candidate AC		
AC21	Maso	Y, observer, candidate AC		
AC21	van Bracht	Y, observer, candidate AC		
AC21	van Well	Y, observer, candidate AC		
AC21	Pegler	Y, observer GCCSI		



AC#21 attendance				
Meeting name	Surname	Invitation accepted		
AC21	Böger	Y, observer EUTurbines		
AC21	Cortes-Galeano	Y, observer CIUDEN		
AC21	Bourgeois	Y, observer CGG Veritas		
AC21	Warren	Y, observer CCSA		
AC21	Ekström	Y, observer		
AC21	Kanzawa	Y, observer		
AC21	Kato	Y, observer		
AC21	Hirota	Y, observer		
AC21	Schiller	Y, observer		
AC21	Hoth	Y, GG		
AC21	Tullius	Y, EC, afternoon		
AC21	Kougionas	Y, EC		
AC21	Calvo	Y, AC, replaces Valero Capilla		
AC21	Westgaard	Y, AC, replaces Sundset		
AC21	Goldschmidt	Y, AC, replaces Suess		
AC21	Dessens	Y, AC, replaces Lubbers		
AC21	Cieutat	Y, AC, replaces Heitzmann		
AC21	Pyka	Y, AC, replaces Dubinski		
AC21	Becker	Y, AC, replaces Cordoba		
AC21	Mozer	Y, AC, replaces Zadroga		
AC21	Kalaydjian	Y, AC, replaces Appert		
AC21	Røkke	Y, AC,		
AC21	Christensen	Y, AC, also replaces Hassa		
AC21	Alvarez	Y, AC		
AC21	Barbucci	Y, AC		
AC21	Constantin	Y, AC		



AC#21 attendance				
Meeting name	Surname	Invitation accepted		
AC21	De Marliave	Y, AC		
AC21	Farley	Y, AC		
AC21	Fischer	Y, AC		
AC21	Gasteiger	Y, AC		
AC21	Giger	Y, AC		
AC21	Hauge	Y, AC		
AC21	Hill	Y, AC		
AC21	Kakaras	Y, AC		
AC21	Kumar	Y, AC		
AC21	Lambertz	Y, AC		
AC21	Lampenius	Y, AC		
AC21	Martinez Jubitero	Y, AC		
AC21	Soothill	Y, AC		
AC21	Sweeney	Y, AC		
AC21	Szynol	Y, AC		
AC21	White	Y, AC		
AC21	Bergmann	Υ		
AC21	Diercks	Υ		
AC21	Drosin	Υ		
AC21	Frisvold	Υ		
AC21	Heithoff	Υ		
AC21	Hetland	Υ		
AC21	Hone	Υ		
AC21	Paelinck	Υ		
AC21	Scott	Υ		
AC21	st. Leger	Υ		



AC#21 attendance				
Meeting name	Surname	Invitation accepted		
AC21	van Breda Vriesman	Υ		
AC21	van der Lande	Υ		
AC21	Willnow	Υ		