

## **ZEP Advisory Council Meeting #22**

### **Minutes of meeting**

Date and time: 10 March 2010, 09.00 – 16.00 hrs.

Venue: Ellington hotel, Nürnberger Straße 50-55, 10789 Berlin

Status: draft

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The list of attendees is attached as annex 1.

### **1 Opening**

Gardiner Hill opened the meeting, welcomed in particular the Chinese delegation and thanked the host, Vattenfall for accommodating the ZEP AC meeting,

On behalf of Vattenfall Niels Peter Christensen presented Vattenfall's roadmap for CCS in Germany.

Gardiner Hill explained the agenda for the meeting, added an item proposed by Jesse Scott regarding the High Level Group, to be discussed after lunch, and proposed to move the infrastructure item of taskforce D&I to before lunch. With these changes the agenda was accepted by the AC members. The AC members also accepted the minutes of AC#21.

Robert van der Lande reviewed the decisions of AC#21 and concluded that all decisions have been dealt with or are being followed up.

Gardiner Hill announced that for the taskforce Public Communication two new chairs have been selected by that taskforce: Anne Karin Saether (Bellona) and Dan Meredith (E.ON). Both are supported by the CG. The AC accepted these nominations. He also introduced the candidates for the three open seats of the AC: Stan Dessens, Vicente Cortes, Ales Laciok and Ireneusz Pyka. AC members were asked to submit the voting form to the secretariat at lunch.

### **2 CCS developments**

Heinz Bergmann summarized the the NER300 decision and comitology process. EC and MS agreed a final proposal at the Climate Change Committee on 2 February 2010, that considers most of ZEP's and other stakeholders' concerns. ZEP CG proposes to contact the EIB for a dialogue about the further process and to present ZEP's recommendations. Scott Brockett was present at CG and basically agreed if this happens on a neutral and transparent way.

In the discussion that follows it is confirmed that the decision includes upfront payment and that it is a 2-stage selection process, of which the 1<sup>st</sup> stage is the member state selection and the 2<sup>nd</sup> stage the selection

by EC. The final ranking of the 2<sup>nd</sup> stage will be carried out by the EIB. The Call for Proposal will be released in June / July after which companies will have to submit their offers to their member state.

Jesse Scott noted that also non-ZEP members have been influential in the final decision, notably Scottish Power. ZEP could invite them to join ZEP.

The following was decided:

- The ZEP TWG NER300 (lead David Gye) will discuss the further procedure and contact EIB with the objective to initiate a dialogue timely before the call for proposals.

Regarding EEPR (recovery package) Kai Tullius announced that 3 contracts have been signed, the remaining three to be signed shortly. A report about the implementation of the EEPR is to be ready in April 2010.

Regarding the project network

- Kai Tullius noted that the project network is about sharing: participants must give and take. The deployment of the project network takes longer than expected but this is necessary for a sound basis. The legal framework (contracts between participants) is now nearing completion, the network is expected to be opened at the end of March.
- The network is funded temporarily, until the end of 2011. The EC announced that it will open an FP7 call in July / August for its secretariat in 2012.

Regarding the EII Kai Tullius noted the following:

- The EII is rooted in the SET plan. This SET plan is the main driver for CCS: had CCS not been included in the SET plan CCS would not have received the funding that is now expected. The SET plan is now gaining momentum.
- EC presented a draft CCS EII Implementation Plan 2010-12 at the last ZEP AC meeting. A ZEP TWG EII (lead Gardiner Hill) commented the paper and also gave detailed recommendations concerning the CCS technology roadmap in the SET plan.
- A decision to include the launch of the CCS-EII in the first "wave" was not taken on 5 March. The member states decide. Kai notes however that there is at the EC still dissatisfaction about the implementation plan for the CCS-EII and that it needs to be improved. The implementation plan for CCS is not yet convincing, it lacks proper indicators and a story. Other EII's find themselves in a smaller environment which makes EII's easy to develop and implement. The development of the CCS implementation plan is a responsibility of the EC who might in the next weeks turn again to ZEP with key questions such as
  - o What are the aims for the next years?
  - o What operating schedule is possible?
  - o What needs to be done (additionally) to achieve commercial viability asap?

The following was decided:

- ZEP is to give additional guidance to the EC regarding the technology roadmap and the implementation plan.
- ZEP TWG EII will work closely with EC.
- ZEP is to stay engaged with the SET plan.

### 3 Reporting on workshop ZEP-China

Gardiner Hill summarised the workshop as follows.

- He sensed willingness of ZEP and the EC to continue the dialogue
- He noted that in particular the efficiency penalty is seen by the Chinese delegation as a roadblock.

On behalf of the Chinese delegation Peng Sizhen added:

- The workshop was a good start of the dialogue and could lead to further cooperation
- China is with respect to CCS a developing country. Its strategy for reducing CO<sub>2</sub> emissions has 3 branches: energy efficiency, renewable energies and CCS. The latter is new to China and is being investigated. Thus far, the Chinese have limited themselves mainly to R&D, many challenges remain.
- The Chinese delegation proposes to stay in touch and look for opportunities to engage.

### 4 GCCSI

Stacey Matthews presented an overview of GCCSI. The discussion that followed focused on GCCSI's position towards other global bodies such as CSLF. Stacey remarked that GCCSI contributes to capacity building, that technology is not at the core of GCCSI's expertise and that it maintains excellent relations with other global institutes.

### 5 Special theme on CO<sub>2</sub> storage

#### 5.1 Michael Donnermeyer

Michael Donnermeyer of IZ Klima explained the position of CCS in the German climate policy. One of the key problems at the moment is that there is no law on storage of CO<sub>2</sub>, which puts much on hold. In his presentation he highlights the results of a CCS acceptance survey among German civilians

Dessens: the messenger may be more important than the message. He argues for coalition building between messengers.

Appert remarks that CCS acceptance surveys need to be available on a global basis and require regular updating. And CCS should not be just about clean coal: it needs to be linked to other industrial sectors and technologies. Hauge confirms that a holistic approach to CCS (wider than clean coal) is crucial to win the debate and notes that a delay of CCS in Germany will affect the other member states. Professor Schellnhuber (Potsdam Institute for Climate Impact Research, PIK) argued in favor of a carbon negative strategy, Hauge asks whether there are partners to be found in Germany that could jointly take this further.

#### 5.2 Niels Peter Christensen

Niels Peter Christensen gives an assessment of the European capacity for storage of CO<sub>2</sub> and the options for Germany.

David White, referring to slide 6 of Niels Peter's presentation expects that the top of the pyramid (the practical capacity) benefits from a big learning curve and that it will grow. He notes that no one explored saline aquifers and that this could have much potential. In response to Dirk Goldschmidt's question Niels

Peter confirms that this might require injecting water or dumping salt water, however this is not unusual, it is common practice for the extraction of oil as well.

Bernhard Fischer flags a recent political discussion in Germany about a supposed competition between CCS and geothermal energy. In his view there is no such competition and he asks the geologists to confirm and send messages to politicians. Niels Peter confirms and sees possibilities in some cases to make it work together.

## 6 High Level Group

On 15 December 2009 the EC / DG Enterprise and Industry sent a letter to ZEP in which it announced that it would set up a High Level Expert Group (HLG) to assess the competitive situation of nanotechnology, micro- and nano-electronics, advanced materials, biotechnology and photonics. It will also analyse the issues related to advanced manufacturing and CCS. The aim of the HLG is to help ensure that public policy in Europe provides a supportive environment for key enabling technologies.

ZEP was asked to propose at least two suitable candidates at CEO/board member level that would participate in their personal capacity (not as representative of ZEP). The candidates should ideally be leading individuals at CEO/board member or equivalent level who understand the interface between R&D and industrial development.

Jesse Scott questioned the late reply of ZEP to this letter, the procedures that ZEP followed for proposing candidates and the absence of information to date regarding the outcome.

The reply of Robert van der Lande was as follows

- Due to several causes the letter was indeed answered in a very late stage. In our reply to the request we provided candidates in the space that was requested by the commission. For the capture side and research institutes we proposed Klaus Dieter Rennert, Olivier Appert, Mr. Vortmeyer and Mr. Soothill. For the storage side we proposed the CTO's of BP and Shell and the Senior vice president scientific development of Total.
- The procedure followed was chosen because of the lack of time. It contained the following steps:
  - o For the capture side technologies the CEO's that are member of the ZEP AC were approached with the request whether they were available. This led to the candidacy of Mr. Rennert and, suggested by Mr. Suess, Mr. Vortmeyer.
  - o For the storage side technologies, since there are no such CEO's, an email was sent to all relevant companies with a representative in the AC. This led to the candidacy of representatives of BP, Shell and Total.
  - o In a discussion afterwards, after the deadline was passed, Alstom also asked Soothill to be nominated which was done by the secretariat.
- Regarding the outcome the ZEP secretariat will contact the EC to obtain the information.

When assessing this procedure it was:

- Concluded that, even though there was a lack of time, the democratic and transparent procedures should have been followed and that the procedures in this particular case had broken down.
- Decided that full clarity about the procedure and the outcome will be given to all AC members
- Decided that the secretariat will approach the EC to see whether ZEP's interests are properly represented and whether there still is room for a candidate that is properly selected
- Decided that in the future, even in time constrained situations, procedures should be followed.

## 7 New AC members

Stan Dessens, Ales Laciok and Cortes were elected as new members of ZEP AC. The chairman congratulated and also invited Ireneusz Pyka to participate ZEP AC as observer.

## 8 Taskforce Public Communications

A delegation from "One young World", sponsored by ZEP, reported on how CCS was perceived by their peers at a conference of 8-10 February 2010 and gave their thoughts on how to better communicate the CCS message.

The taskforce Public Communications, Klaus Willnow, presented the public communications plan 2010-2012. A summary of the discussion that followed:

- The funding of the public communications plan is linked to the funding of the public communications director. There is not yet clarity about the results of that fund raising campaign.
- Some consider the ZEP communications report to be insufficiently informative. The storyline should be improved.
- Some have concerns about the contents of the plan:
  - o A request was made to invest more in using and disseminating communications material of ZEP members (Piggy-backing on ZEP companies). It is expected that they have a lot to share.
  - o Attention is asked for development of modules for education.
  - o The plan is insufficiently built around the strengths of ZEP knowledge.
  - o The plan should not only take into account what the ZEP members can do for the ZEP public communication but also what the ZEP public communication plan can do for the ZEP members.
- Klaus Willnow thanked for the comments, remarked that the present public communications plan was developed by the taskforce public communications and that many of the ZEP companies took part in shaping the proposed plan. Bernhard Fischer invited companies that don't agree with the public communications strategy to actively participate in the taskforce and commit themselves to the process of strategy development.

The public communications plan 2011-2012 was put up for a vote: 16 AC members voted in favour, 5 AC members abstained. The public communications plan 2011 – 2012 was therefore accepted.

## 9 Taskforce Policy & Regulation

Paal Frisvold presented an action plan and a policy statement to the AC.

- Dessens suggested to position CCS next to renewables. E.g. “it is now clear that CO<sub>2</sub> Capture and Storage (CCS) has a critical role to play *in addition to renewables*”
- Fischer noted that the policy statement contains parts that were literally copied from an IEA statement. A part of that (the reference to 100 commercial scale CCS projects) is not functional in this ZEP statement. It is decided to keep it, it should be referenced. Frederic Hauge suggests to invite the IEA for the next AC meeting to debate the statement.
- Pietro Barbucci noted that the statement merely asks for CCS to be equally treated to renewables and that it therefore is justified.

The action plan and ZEP Statement on CCS and international finance mechanisms were unanimously accepted by the ZEP AC.

## 10 Taskforce demonstration and Implementation

### 10.1 Infrastructure issues

Nicolas Ximenez presented the views of the taskforce on the open issues and recommendations for the establishment of a CCS Infrastructure.

In the discussion that followed attention was asked for MRV (Mitigation efforts measured, reported and verified), and the easing of the administrative burdens by linking it to ETS.

The document was accepted by the AC, it will be further detailed and shared with stakeholder organizations outside ZEP.

### 10.2 Carbon negative strategy

Hauge and Frisvold outlined the proposed carbon negative strategy.

In general the strategy received broad support.

- Heitzmann: Air Liquide has a lot to share on this topic.
- Kakaras: the Biofuels platform is huge compared to ZEP, has a population that is very different to ZEP and lacks some internal communications structures.

Frederic Hauge proposed to set up a taskforce consisting of members of both platforms. This proposal was accepted.

## 11 Taskforce Technology

Niels Peter Christensen presented the summary of the long term R&D plan that was accepted at the previous AC meeting. AC agreed to the summary.

- Some members asked for attention for R&D on softer issues such as public acceptance. Taskforce Technology recognizes such research as very important but was not qualified to include it in the plan and refers it to the taskforce public communication
- Nicolas Ximenez asked for attention for funding streams for demo's larger than lab scale: the next generation pilots. It was agreed by many that this is an important issue that doesn't yet get sufficient attention.

## 12 Decisions

D22.1: The ZEP TWG NER300 (lead David Gye) will discuss the further procedure and contact EIB with the objective to initiate a dialogue timely before the call for proposals.

D22.2: regarding the CCS EII:

- ZEP is to give additional guidance to the EC regarding the technology roadmap and the implementation plan.
- ZEP TWG EII will work closely with EC.
- ZEP is to stay engaged with the SET plan.

D22.3: regarding the High Level group:

- clarity about the procedure and the outcome will be given to all AC members
- the secretariat will approach the EC to see whether ZEP's interests are properly represented and whether there still is room for a candidate that is properly selected
- in the future, even in time constrained situations, procedures should be followed.

D22.4: New AC members:

- Stan Dessens, Ales Laciok and Cortes were elected as new members of ZEP AC.

D22.5: TFCOM:

- The public communications plan 2011-2012 was put up for a vote: 16 AC members voted in favour, 5 AC members abstained. The public communications plan 2011 – 2012 was therefore accepted.
- Invite the IEA for the next AC meeting to debate their view on CCS.
- For the taskforce Public Communication two new chairs have been selected by that taskforce: Anne Karin Saether (Bellona) and Dan Meredith (E.ON). The AC approves the selection.

D22.6: TFP&R: The action plan and ZEP Statement on CCS and international finance mechanisms are unanimously accepted by the ZEP AC.

D22.7: TFD&I:

- The document on infrastructure issues was accepted by the AC, it will be further detailed and shared with stakeholder organizations outside ZEP.
- The proposal of Frederic Hauge to set up a taskforce consisting of members of both platforms is accepted.

D22.8: TFTech: The AC agreed the summary of the long term R&D plan.



## Annex 1, attendees

AC#22 attendance		
Meeting name	Surname	Invitation accepted
AC22	Bolea Agüero	Y, One Young World
AC22	Kuettel	Y, One Young World
AC22	VALERO DELGADO	Y, One Young World
AC22	Delattre	Y, observer, NZEC team
AC22	Habay	Y, observer, NZEC team
AC22	Zakkour	Y, observer, NZEC team
AC22	KUNITOMO	Y, observer, Japanese Ministry of trade, economy and industry
AC22	Kusuda	Y, observer, Japan, RITE
AC22	Matthews Krsteski	Y, observer, GCCSI
AC22	du Breil de Pontbriand	Y, observer, DG AIDCO
AC22	van den Bossche	Y, observer, DG AIDCO
AC22	Gao Lin	Y, observer, chinese delegation
AC22	Li Fengqi	Y, observer, chinese delegation
AC22	Li Tingting	Y, observer, chinese delegation
AC22	Li Xiaochun	Y, observer, chinese delegation
AC22	Liu Yang	Y, observer, chinese delegation
AC22	Ma Yan	Y, observer, chinese delegation
AC22	Peng Sizhen	Y, observer, chinese delegation
AC22	Sun Chengyong	Y, observer, chinese delegation
AC22	Wang Aiqing	Y, observer, chinese delegation
AC22	Wang Zelin	Y, observer, chinese delegation
AC22	Xing Jijun	Y, observer, chinese delegation
AC22	Xu Jun	Y, observer, chinese delegation
AC22	Zhang Jiutian	Y, observer, chinese delegation
AC22	Zhou Longchao	Y, observer, chinese delegation
AC22	Luca	Y, observer Shell
AC22	de Wolff	Y, observer KEMA
AC22	Zelinger	Y, observer
AC22	Hoth	Y, GG

AC#22 attendance		
Meeting name	Surname	Invitation accepted
AC22	Marin	Y, EC
AC22	Tullius	Y, EC
AC22	Dessens	Y, candidate AC member
AC22	Pyka	Y, candidate AC member
AC22	Mozer	Y, AC, replaces Zadroga
AC22	Goldschmidt	Y, AC, replaces Suess
AC22	Brautsch	Y, AC, replaces Soothill
AC22	Alvarez	Y, AC
AC22	Appert	Y, AC
AC22	Barbucci	Y, AC
AC22	Christensen	Y, AC
AC22	Constantin	Y, AC
AC22	De Lannoy	Y, AC
AC22	De Marliave	Y, AC
AC22	Fischer	Y, AC
AC22	Giger	Y, AC
AC22	Gye	Y, AC
AC22	Hauge	Y, AC
AC22	Heitzmann	Y, AC
AC22	Hill	Y, AC
AC22	Kakaras	Y, AC
AC22	Kather	Y, AC
AC22	Lambertz	Y, AC
AC22	Martinez Jubitero	Y, AC
AC22	Rennert	Y, AC
AC22	Røkke	Y, AC
AC22	Sundset	Y, AC
AC22	van Bracht	Y, AC
AC22	White	Y, AC
AC22	Bergmann	Y
AC22	bloemer	Y
AC22	Bruidegom	Y
AC22	Drosin	Y

AC#22 attendance		
Meeting name	Surname	Invitation accepted
AC22	Frisvold	Y
AC22	Hetland	Y
AC22	Korshøj	Y
AC22	Rödén	Y
AC22	st. Leger	Y
AC22	van der Lande	Y
AC22	Willnow	Y
AC22	Heithoff	N, at the IEA GHG R&D ExCo Meeting in Spain 10. - 11.03.2010.
AC22	Gasteiger	N
AC22	Holland Lloyd	N
AC22	Hone	N
AC22	Johnston	N
AC22	Kalaydjian	N
AC22	Maso	N
AC22	Paelinck	N
AC22	Pegler	N
AC22	Soothill	N
AC22	Sweeney	N