

Minutes ZEP Advisory Council 61

Attendance

| Agata | Zmijewska | DG CLIMA | On behalf of Maria Velkova | |
|-----------|--------------|------------------------------|--|--|
| Vassilios | Kougionas | DG RTD | | |
| Peter | Horvath | DG ENER | | |
| Graeme | Sweeney | Chair of ZEP | Chair | |
| Kim | Bye Bruun | Shell | Proxy for Mr John MacArthur from Shell | |
| Mehmet | Onal | Shell | | |
| Lamberto | Eldering | Equinor | | |
| Filip | Neele | TNO | | |
| Eric | Deconnick | Arcelormittal | | |
| Ward | Goldthorpe | Sustainable Decision limited | | |
| Martijn | Van de Sande | RVO | | |
| Johanna | Lehne | E3G | | |
| Damien | Dallemagne | CO2 Value Europe | | |
| Stefan | Gielis | CO2 Value Europe | | |
| Ståle | Aakenes | Gassnova | | |
| Angus | Gillespie | GCCCI | | |
| Jonathan | Pearce | BGS | | |
| Irma | Paceviciute | Equinor | Proxy for Anne Cavendish from Equinor | |
| Brian | Murphy | Ervia | | |
| Nils | Røkke | SINTEF | | |
| Robin | Clowes | Exxon Mobil | | |
| Antonella | Sopranzetti | Exxon Mobil | | |
| Arthur | Heberle | Hitachi | | |
| Jonas | Helseth | Bellona | Proxy Frederic Hauge/Rob van der Meer | |
| Roman | Berenblyum | NORCE Research | Presenter for ECOBASE | |
| François | Régis Mouton | IOGP | Presenter for IOGP | |
| Kamila | Piotrowska | IOGP | Presenter for IOGP | |
| Liliana | Guevara | Trinomics | Presenter for CCUS Project Networks | |
| Pierre | Herben | SPIRE | Presenter for SPIRE | |
| Per-Olof | Granström | CCSA | Secretariat | |
| Giorgia | Bozzini | CCSA | Secretariat | |
| Luke | Warren | CCSA | Proxy for Stuart Haszeldine from SCCS | |



Item 1: Introduction

GS welcomed all participants. He noted that a new agenda is available and asked the AC for approval. The agenda was adopted.

AC60 minutes were approved. GS asks the AC to approve the draft minutes of ACEC October and November meetings. The minutes are adopted.

Item 2: Secretariat update

LW refers to the actions from AC60 meeting in September. He highlights that there is ongoing discussions with DG CLIMA about the sustainable criteria in the Innovation Fund and the Clean Hydrogen Partnership. He notes that this should be consistent with the Sustainable Taxonomy. LW also updates the AC regarding the comment to Horizon Europe's public consultation about climate change mitigation/CCUS and the Network Technology meeting in Brussels and work on pipeline network.

LW gives some updates on personnel issues. He informs the AC that John Mc Arthur (Shell) will step down and Ms Syrie Crouch has been nominated to become Shell's new AC representative. He gives the floor to KBB, who highlights that he will step down from Shell's AC representation and co-chair of NWPE. He shares details about Syrie Crouch's professional background. KBB introduces Mehmet Onal (Shell) as new member of NWPE.

Following a secret-ballot vote, GS informs the AC that Syrie Crouch has been elected unanimously. On behalf of the AC, GS thanks John Mc Arthur and KBB for their service.

Continuing with the personnel updates, LW welcomes GB to the ZEP secretariat.

LW moves on to the 2019 budget. Following up from previous AC meetings, he highlights that outstanding invoices have been paid and settled. He refers underspending in Public Affairs because of changes in the EU institutions and suggests carry over to 2020. LW notes that ZEP has generated a surplus of 50K € in 2019, in line with AC58 decisions to create ZEP budget reserves.

LW shows the 2020 budget and invites the AC to adopt the proposal. GS notes no objections; therefore, the budget is adopted.

LW shares 2020 dates for AC and ACEC meetings, which were also circulated as preread. GS asks AC members to have a look at the dates and get back to the ZEP secretariat within a week, should there be any requests for changes.



Item 3: Commission updates

The AC received presentations from;

- Agata Zmijewska (AZ) DG CLIMA
- Peter Horvath (PH) DG ENERGY
- Vassilios Kougionas (VK) DG RESEARCH

DG CLIMA

AZ (DG CLIMA) gives an update on the latest reports published by the European Commission on implementation of the CCS Directive, published in November 2019. The reports show the latest progress on the European Commission and Member States' sides. All reports are available online. DG CLIMA notes positive signs from member states regarding the application of CCS, although some countries have assessed that CCS is not economically feasible. However, there will be a chance for MSs to join in the future.

Regarding the Innovation Fund, she recaps on the several workshops held by DG CLIMA in 2019 to work on modalities to design the first call of the Innovation Fund. Mid-2020 is expected date for launch of the first call of the Innovation Fund. DG CLIMA is currently busy with design of selection criteria. She refers that the Innovation Fund Expert Group Meeting will take place in Brussels on 18 December.

DG ENERGY (PH)

PH informs that there will be one call for Co-funded Partnerships (likely to be a 7-year call) in the first call of Horizon Europe. Flexibility will be applied to member states which want to join later.

The Clean Energy Transition Partnership is carried out under the SET-Plan and it will happen with the support of Member States. The call will be published at the end of 2020 and submission deadline is 2021. The work on EGD is ongoing and no further specifications are available at this point. He refers that at their last meeting, the previous European Commission had approved a list of PCIs and the emphasis has now moved on electricity.

NR asks whether it is clear if the taxonomy will apply on PCIs. PH replies that sustainable taxonomy will not apply to the current list of PCIs and that application methods are not clarified yet.

DG RESEARCH

VK notes that DG RTD is aligning with Von der Leyen's ambitions for more investments in R&I to achieve the EGD. DG RTD is working with DG ENER on how to integrate CCS in the Horizon Europe and establish new partnerships under the Clean Energy Transition Partnership. The discussions include all technologies included in SET-Plan.



In early 2020, DG RTD will try to link existing framework with member states and various funds. For Horizon 2020, two calls will open in 2020: one on CCS industry and a second one on CCU storage pilot. VK refers that DG RTD is also aiming at bilateral cooperation on R&I, for instance with China.

GS asks DG RTD to share timetables of the upcoming calls for the Clean Transition Partnership. VK refers timelines are being developed. He refers that different technologies of SET-Plan will be involved and that member states are coordinating.

Action: GS suggests chair of IWG9 should be briefed by commission before the commission releases the details of the new Clean Energy Transition Partnership under the Horizon Europe. It is still an internal EC issue but from what we understand there will be a call within this partnership already in 2020-2021. In order for IWG9 to give input to this process, the consortium will need to prepare for a document for the SCG meeting in February.

Item 4: Overview of EU policy development. ZEP and the EGD: updated ZEP objectives and messages

PG informs the AC about the latest policy developments at the EU level. He refers that there are many developments connected to the European Green Deal and the upcoming communication from the European Commission on 11 December. He reminds that the European Council is taking place on 12-13 December and Long-Term Strategies will be discussed during the meeting. He provides an overview on the next deadlines on the European agenda for the next months.

In terms of policy developments, PG highlights that the EP adopted a CCS positive resolution ahead of COP25, that the EP has declared a climate emergency during November's Plenary, and recalls that the EIB has announced plans for a new lending policy.

PG moves onto the new ZEP objectives and core messages, highlighting that there is potential for ZEP to be involved in the political economy and to promote a positive message about CCS. He recalls the decisions of AC60 and shares the outcomes of the ACEC meeting held on 12 November. In that occasion, the ACEC updated ZEP's objectives and core messages, which were shared in the pre-reads with the AC. He explains that, based on a new set of objectives, ZEP has developed some messages (umbrella and supporting). He informs that the ZEP secretariat is working on proof points.



Communication goal: To demonstrate to policymakers, legislators and other stakeholders

that the implementation of CCS and CCU technologies at scale now, is essential to achieve net-zero GHG emissions in Europe by 2050

Umbrella message: The urgent deployment of CCS and CCU is essential to achieve net-zero

GHG emissions by 2050 and to produce large-scale clean hydrogen,

whilst making Europe an attractive region for clean investment

Supporting message 1: Europe cannot reach net-zero emissions without CCS and CCU

(CCS and CCU is an essential technology to enable Europe to reach

net-zero)

Supporting message 2: The urgent development of CO2 transport and storage infrastructure is

vital to unlocking the benefits of CCS and CCU across industry, heat and power, and to enable climate positive solutions (negative

emissions)

Supporting message 3:CCS and CCU enable a Just Transition for Europe's citizens and industries, making EU regions attractive for clean investment

Supporting message 4:Incentive mechanisms are needed to ensure the urgent roll-out of CCS to achieve EU climate goals

Supporting message 5:CCS enables production of large-scale clean hydrogen, which is critical for the transition to low carbon industrial, transport and heating sectors

PG refers that 2 comments were unresolved and opens the floor for discussion:

- 1. "Urgent deployment of CCU";
- 2. CCS and CCU are essential technologies to enable Europe to reach net-zero.

PG hands over to GS, who opens the floor for comments. Angus Gillespie (GCCSI) comments that consistency in messaging is important: with a new sustainable taxonomy coming in, the communication around CCS needs to be consistent. He looks forward to receiving the proof points.

Wald Goldthorne (Sustainable Decision limited) notes that the communication from policy makers have not focused enough on market results and many economic opportunities that CCS allows and asks the ZEP secretariat to incorporate this point in the new narrative.

DD (CO2VE) hopes to see CCU technologies included in the messages. He reminds importance of deploying CCU to meet 2030 targets and asks for it to be included in the messages. GS notes that the word "now" is key in the messages and stronger than 2030.

JH reminds that no scientific basis is currently available about the role of CCU for meeting 2030 climate targets. It is therefore decided that DD is to get back to the ACEC



before 21st January 2020 with scientific evidence to support his claims and a text proposal for ZEP messages.

Action: GS asks DD to provide input and supporting evidence regarding the proposed amendments to the messages by January 21st 2020 at the latest.

GS reminds that this document is a living one and if AC is okay with reconsideration in due course, that is a possibility and asks for proposals. A discussion follows.

Ståle Aakenes (Gassnova) notes that negative emissions and bioenergy for the future are missing in the message, as well as a reference to hard-to-abate emissions. GS states that he asked the NWT to look into climate positive solutions as part of their 2020 programme, as well as DAC and residual emissions.

The working version is adopted. Any comments that arises will need to be handled by mid-January, as ZEP will be hosting a conference on 28 January 2020 in the European Parliament.

Under the same agenda item, PG illustrates the new plans for outreach and communication activities, explaining that the many events happening at the European level call for an increased ZEP budget and level of outreach. He draws the attention of the AC to a new budget proposal for 2020, with more financial resources allocated to the ZEP secretariat to allow for an additional staff member and more outreach activities. LE asks if the plan applies to 2020, PG confirms. KBB asks if membership fees will be increased, PG confirms they will not be increased.

GS asks the AC to adopt the new budget proposal. The proposal is adopted unanimously.

Item 5: SET-Plan Action 9

LW updates the AC on the latest developments on SET-Plan Action9. The work involves 11 countries and a number of activities. The underlying principle is to get better coordination in order to achieve 10 CCUS targets for CCS and CCU, improving storage, CCU, energy transition and large PCIs. IWG9 supports the deployment of commercial CCS projects as a key priority, although targets need review.

LW elaborates on regional clusters and informs that it is not clear yet where regional clusters will be, although much focus is around the North Sea area. LW replies on questions about timeline of the SET-Plan and informs that IWG9 are still waiting for feedback on the recommendations they had previously shared with the Commission.

He concludes the presentation by giving an overview of the upcoming IWG9 commitments.



Item 6: Guest Presentation: CCS and CCU in the EU Industrial Strategy

Peter Handley could not attend the AC meeting, due to a last-minute engagement. The agenda item is not discussed.

Item 7: Guest Presentation: SPIRE Industrial Roadmap

Pierre Herben presents SPIRE, a project gathering more than 150 members from 20 countries, active 8 sectors and with a budget of 900 Million €. He highlights that the project focusses on cross-sectorial issues and R&I, with a focus on 2050 targets.

Item 8: Guest Presentation: The EcoBase Project

Roman Berenblyum presents the EcoBase project (an ACT project). He argues that CCS needs a boost worldwide. EOR has potential to boost CCS. He highlights that Turkey and Romania are two key countries for the project.

Item 9: Guest Presentation: Overview of NECPs

Kamila Piotroswska (IOGP) presents some slides on NECPs and how CCS is reflected in the national plans. She highlights that Member States are due to submit their NECPs by December 2019, which will later receive feedback from the European Commission. She notes that some Member States will not be able to submit NECPs in time. IOGP has published an assessment of NECPs highlighting the role of CCS and blue hydrogen.

Item 10: Guest Presentation: CCUS Projects Network

Liliana Guevara Opinska (Trinomics) presents the CCUS Projects Network. The project started in January 2019 at the initiative of DG ENER to share best practices among existing and emerging CCUS projects. The network seeks to maximise support to CCUS through cooperation with ZEP and SET-Plan IWG9 project.

DG ENER asks ZEP, CCUS Project Network and SET-Plan to work together on potential overlaps between projects in order to facilitate the coordination and communication of projects.

Item 11a: Network Policy & Economics update

LE recaps on the priorities of the Network Policy and Economics. A consultant has been appointed by the Commission to design the first call of Innovation Fund. LE shares



updates on Long Term Strategies, PCIs and TEN-E framework, informs about the London Protocol ratification and gives updates about Sustainable Taxonomy.

He informs that the next meeting will be held in February 2020. He updates on upcoming deadlines and consultations in 2020. He explains that the TWG on PCIs was initiated to gather support on the projects, but the work of the TWG is now covered by the SET-Plan and IWG9. On behalf of the Chairs of the Network, he proposes to shut down the TWG PCIs. The AC agrees unanimously.

Item 11b: Network Technology update

FN and AH inform about the conclusions of the NWT meeting on 28 November 2019 in Brussels. They give feedback on the presentation of the study "Hydrogen for Europe" by SINTEF. A TWG Hydrogen draft Terms of Reference (ToR) was circulated as a preread, a finalised version of the document establishing the TWG should be expected by January 2020. AH provided updates on CCUS sink factors network. The paper is meant to be a pre-assessment on real mitigation effects. AH notes that GS has tasked the NWT to work on climate positive solutions/negative emissions. GS notes that LCA (life-cycle analysis) were not included in the initial document, but it seems that a perspective on LCA will need to be agreed upon by the NWT. FN informs that he secured Robert de Kerk as co-chair for the new TWG Hydrogen.

The chairs inform that work is ongoing on collaboration across CCS chain and update about the status of the report. In March there will be another report on WS2. WS3 is ongoing, as the table of contents was approved during the last NWT meeting. A draft should be ready by the AC62. NWT is also working on the document on the costs of storage, following up from previous Twitter communications. It will be a short assessment of current range of costs for CCS projects. The text is circulated in the network for comments, but it will be ready shortly.

Action: share final document on costs of storage with the European Commission once finalised.

Item 12: External Relations Group

JH updates about the latest activity, namely the launch of a newly designed ZEP website. He asks for feedback and invites members to share relevant context (written and visual) with the ZEP secretariat for upload. JH informs about a meeting with MEP Chris Davies on 20 November 2019. ZEP was invited to brief Chris Davies ahead of his meeting with Frans Timmermans and his chief of cabinet. PG reports about an interesting event organised by BioEnergy Europe, where ZEP was asked to speak. He provides updates on the upcoming key happenings and communication activities from the secretariat, and he highlights the upcoming conference in the EP on 28 January 2020, hosted by Tom Berendsen (EPP, NED).



Johanna Lehne calls on the importance for the CCS community to feed into the EP own-initiative reports on Industrial transition.

Item 13: Any Other Business (AOB)

No items are noted. The meeting is closed at 16.30

| Act | ions | Owner | Deadline |
|-----|---|-----------------|------------------------|
| 2 | Send comments regarding 2020 meeting dates | ZEP Secretariat | End of January 2020 |
| 3 | IWG9 chairs to prepare input to Clean Energy Transition Partnership process with a strategy document (SCG meeting) | ZEP secretariat | February 2020 |
| 5 | Provide summarised proof points and new text for umbrella messages and first supporting message by January 21 st 2020. | CO2VE | 21 January 2020 |
| 12 | Share final document on costs of storage with the European Commission once finalised | Secretariat | End of January 2020 |