

**MEETING MINUTES**  
**ZEP 65<sup>th</sup> ADVISORY COUNCIL MEETING**  
16 December 2020, 10:00-13:15 CET  
Virtual meeting

## 1. Introduction and welcome

Chair, **GS**, verifies quorum, opens the meeting and thanks all participants for their attendance and time.

**GS** moves to adopt AC65 meeting agenda – the agenda is adopted. Chair moves to approve draft meeting minutes from AC64 and ACEC meetings from October and November – all minutes are approved.

**GS** moves to proposed ZEP meeting dates for 2021 and notes there had been a small number of requests for changes, but majority could attend. The meeting dates are adopted and the ZEP Secretariat will confirm these dates with Save-the-date calendar invitations.

**GS** moves to results of AC65 vote, noting that elected representatives may participate in this meeting as AC members. **GS** congratulates Jannicke Bjerås, elected for Fortum Oslo Värme. **GS** announces that Robin Clowes for ExxonMobil is elected.

**GS** thanks **Frederic Hauge**, Bellona, who steps down as AC member and for his contribution to ZEP as Vice-Chair. **GS** notes that **JH** is elected as AC member and has been appointed Vice-Chair of the NGO constituency. **GS** thanks **Liz Rogers**, bp for her contribution and will call her to say thanks. Shirley Oliveira has been elected to AC.

## 2. ZEP planning for 2021

**GS** notes this item is for the approval of ZEP's work programme – the basis of ZEP's activities in 2021, and a recommendation regarding the budgetary consequences – for approval by ZEP-C Directors. **POG** takes opportunity to thank all for their support and dedicated work during the year – especially thanking co-chairs and participants in working groups and Networks, **GB** and **MK**. **POG** highlights that ZEP has received a positive response for a 6-month grant extension. With the extension, funds will be available from the current grant agreement to cover May through October. The extra funds of approximately €50,000 needed for November and December – after the extension, have been included in the 2021 ZEP-C budget. This means that the €190,000 of financial reserves, built up in ZEP-C to prepare for the gap, can be kept intact. ZEP is prepared for strong, impactful work next year and a financial buffer going forward.

Giving an overview of the work programme for 2021, **POG** highlights that this will be based on the EU policy agenda. He highlights the further strengthening of ZEP's role, continuing support to the CCUS SET-Plan and intensifying support to market-ready projects. POG gives an overview of the topics on which ZEP intends to work further in 2021, referring to the pre-reads, welcomes the two new ERG co-chairs, and highlights a strong focus on external communication and outreach. He highlights the new Informal Communications Group and invites ZEP members to participate, as this group provides a platform to coordinate activities and exchange information.

**POG** presents the budget, mentions that income for 2020 increased with EBN joining ZEP while the expenditure for 2020 is lower than expected due to Covid-19. This results in increased surplus of approx. €190,000 in December 2020. For the 2021 budget he highlights continuation of core ZEP-C services and assessment of the need for administrative support, communication activities including continuation of the service agreement with CCSA, increased sponsorship – welcoming Fortum Oslo Värme and ExxonMobil, and funds for strategic work, forecasting that the surplus ZEP-C funding will be kept intact.

**GS** reminds all that we are seeking approval for the work programme. For the budget, we seek recommendations that the budget should be recommended to ZEP-C Directors for adoption. AC approves both.

### 3. Horizon Europe and CCUS SET-Plan

**GS** gives the floor to **VK** for an update on Horizon Europe. Preparations are continuing and CCUS will play considerable role for transition of industries but also power sector towards climate neutrality. Particularly for industries where alternatives do not exist. **VK** highlights the importance of low-carbon hydrogen with CCS, in addition to renewable hydrogen. He mentions that calls for proposals for CO<sub>2</sub> capture, for Integration of CCUS in hubs and clusters and for ETIPs including ZEP will be published in 2021 and that the Industry call will be published in 2022.

**LE** asks if there will be calls for hydrogen with CCS in Horizon Europe and if there will be calls for CO<sub>2</sub> storage in the second work programme of Horizon Europe. **VK** replies that there will be opportunities for low-carbon hydrogen with CCS in the industrial call and that a call on CO<sub>2</sub> transport and storage will be part of the second programme, 2023/24.

**GS** asks how CCUS is included in the CETP and **VK** responds that the proposals are included, that the CETP was endorsed at the SET-Plan conference but that the budget is unknown and still to be agreed.

**GS** notes the updated CCS and CCU targets under CCUS SET-Plan. **POG** gives a short update on the CCUS SET-Plan targets, referring to pre-reads and informs that, after

receiving the endorsement of the CCUS SET-Plan plenary, the final updated targets have been presented to the European Commission for their approval. The CCUS SET-Plan awaits the Commission's response.

**POG** also recalls the outcomes of the CCUS SET-Plan study by UCL that includes European and global model scenarios aiming for 1.5°C and 2°C. This work fed into the updated targets and he concludes mentioning the upcoming CCUS 2030 roadmap work and highlighting the importance of a favourable policy framework to support the deployment and development of CCS and CCU in Europe.

#### 4. EU Taxonomy

**GS** gives the floor to Clara Solzbacher, DG FISMA, for an update on the Taxonomy delegated acts. Firstly, she mentions that the Strategy on Sustainable Finance has been postponed to Q1 2021. After a recap on the timeline for the Taxonomy consultation and a brief update on the delegated acts, **CS** highlights that the work on finalising the delegated acts is ongoing and that the list of eligible economic activities will be updated over the years. Changes and adjustments will be made over time – the objective of the Taxonomy is not to be prescriptive but to give a reliable indication of sustainable economic activities. She informs that the timeline for adoption of the delegated acts has changed and is likely to delay, due to the high volume of feedback received by the Commission.

**GS** opens the floor for questions. **LE** asks how the different mitigation thresholds in different delegated acts should be interpreted? **CS**: There will be thresholds in all the delegated acts – one to highlight if an activity makes a substantial contribution and is therefore a golden standard in one specific sector; the others, 'Do no significant harm' are the safeguards to ensure the coherence across environmental objectives. While the level of ambition for DNSH generally corresponds to those in other EU legislations, there are cases where they can and have to go beyond existing law. Where other legislation refers to the DNSH criteria in particular, including for funding opportunities, the taxonomy criteria are usually offered as one possible alternative among others.

**AP** asks why CCU is excluded and why the capture of CO<sub>2</sub> anthropogenic emissions (CO<sub>2</sub> capture) is excluded? **CS**: DAC and CO<sub>2</sub> capture were mentioned in TEG report. However, DAC is not commercially available at large-scale and is now listed as R&D activity; CO<sub>2</sub> capture is not a self-standing activity but associated with specific industrial sectors and is included directly in the respective activities. CCU not included for lack of evidence for now, although some applications of CCU for manufacturing of low-carbon products might be interesting. She invites **AP** to make this clear in the feedback to the consultation.

**LN** asks why there is no indication of declining thresholds? **CS**: A direct emissions threshold based on average EU emission data has been chosen as the preferred

methodology. The Commission believes that the thresholds should indeed be tightened in the future, as also outlined in the Taxonomy Regulation, and will amend the delegated acts periodically. However, fixing trajectories with potentially marginal differences too much in advance might also affect usability and risks to miss out on making the right adjustments later based on new technologies and policies, which is why the current approach removes the declining threshold for now.

**GS** concludes the discussion stating that all technologies should be subject to an LCA and that the Taxonomy must remain technology neutral and science-based and pursue the objective of net-zero by 2050. ZEP will respond to the consultation.

## 5. Carbon Dioxide Removals

**GS** gives floor to Fabien Ramos, DG CLIMA, regarding Carbon Removals. He informs that DG CLIMA has started to work on a regulatory framework for CDR, incentivising investments from private stakeholders. The timeline for finalisation is 2023. The certifications will start with mature solutions today and will need to integrate solutions that come in the next years and the aim is to create a system that can be used across Europe. He also stresses that the priority today is to achieve emissions' reduction. Next year, there will be a stakeholders' consultation and DG CLIMA will begin to work on impact assessment.

**SC** recognises the requirement for quality but is concerned with the timeline, as 2023 seems very slow potentially. She emphasised that industry should already start to work in this direction, as this could help with driving cost down and move quickly on the learning curve element

**GS** moves to presentation of ZEP report on CDR and gives floor to TWG co-chair Kristin Jordal. **KJ** informs that the report is a follow up from the previous report and that it builds on ZEP expertise.

She presents the key messages of the report and proposed a definition of CDR to be adopted by ZEP and based on previous work by Ramirez-Tanzer. She later presents the illustrations provided in the report, which highlight how the definition proposed in the report would be verified in the most common technological processes of CDR. Nature-based solutions are recognised in the report, but not explored further due to a lack of expertise. She finally notes that some examples of potential CDR projects in Europe are provided, noting the need for a case-to-case evaluation.

**GS** opens floor for questions and welcomes approval of report. No questions, the report is approved and will be disseminated with **ERG** guidance.

## 6. ZEP actions on low-carbon hydrogen

**RdK** gives a presentation on the Hydrogen TWG report which focuses on the crucial role of low-carbon hydrogen in meeting Europe's climate ambitions. The presentation highlights some of the key objectives and conclusions on the report with a focus on the scalability of hydrogen production in the 2020s, its costs, climate impact and the critical enabling role CO<sub>2</sub> infrastructure will play to enable an EU hydrogen economy to establish. **RdK** concludes with some of the policy recommendations of the group which can enable both hydrogen and CCUS to deploy rapidly in the 2020s.

**CW** from DG GROW gives an oral update on the Clean Hydrogen Alliance: there is an ambitious timescale to produce 1 million ton of renewable hydrogen by 2024 and the alliance is focusing on industry-based companies active in the sector to make progress. The alliance will consist of the European Hydrogen Forum, 6 roundtables and a high-level coordination group. The roundtables will focus on establishment of a project pipeline and investment agenda. The roundtable chairs will be known at the next Forum.

**LE** asks clarifications regarding the benefit of being on the members' list. **CW** replies that there are no direct financial benefits but networking opportunities. **LE** asks about the **CW's** view on low-carbon hydrogen and its role in this path towards the ultimate goal of large volumes of renewable hydrogen? **CW** says the EC sees a role for blue hydrogen until green becomes available in large quantities. The key elements will be amounts and costs for CCS.

To conclude, **GS** recalls that EVP Timmermans was presented with a wide range of projects including low-carbon hydrogen projects. The list – and the report – will be shared with members of the Alliance.

**GS** asks for comments and approval on Hydrogen report. **NR** seeks clarification regarding figure 8. It is concluded that a short addition will be made to the report to describe the issues regarding the marginal emissions factor from grid-connected electricity, while the issue can be discussed more in depth at a later stage.

**GS** asks to adopt the report with this addition. The report is approved with this addition and can be published.

## 7. Directive on geological storage of CO<sub>2</sub> (CCS Directive)

**LE** gives background on this agenda item, which was raised at a past ACEC meeting and NWPE meeting. **CG** is invited to address the AC to state his arguments. **CG** presents arguments referring to slides for reopening the Directive.

**GS** opens the floor for comments. The following discussion highlights different perspectives in the ZEP membership. Comments are made regarding the potential risks and benefits of reopening the directive and **MV**, DG CLIMA confirms that a full reopening

would lead to an unpredictable outcome, putting at risk current storage permit applications.

**GS** proposes to follow this up in a working group within NWT. While ZEP will not suggest a review of the directive, this group would look into the different items in the Directive that causes concern and propose suggestions to the guidance document. Interested to participate can contact the Secretariat or **FN**.

## 8. Global Status of CCS 2020

Guloren Turan presents highlights and key findings from the Global Status of CCS 2020 report, which is available for download on the website. She reflects on the different progress around the world on CCS.

**SC** echoes the remarks and invites all to take a critical look at the key learnings to take away in a European perspective.

## 9. Networks update

**GS** notes that little time is left to discuss the updates from the Networks. He highlights that the draft ToR for the work on CCS for clean flexible power generation, included in the pre-read, will form basis for a working group and asks for approval of this. The ToR is approved.

**GS** mentions regarding TEN-E, the secretariat will contact DG ENER to organise a meeting focusing on ZEP's concerns such as transport modalities and storage. Some members express the interest in joining the meeting. Members are welcome to contact the secretariat with their comments on this.

## 10. External Relations Group Update

**GS** invites the new ERG co-chairs and **LB** and **MD** introduce themselves and look forward to working with ZEP. In a short update, **JH** refers to preparation of the upcoming meeting with EVP Timmermans and for ZEP members to consider how they can contribute to this. **GS** agrees.

## 11. Closing remarks and next meeting

**GS** thanks all for their contributions through 2020 and for those who will work with us in 2021. Wishes all a safe holiday season. Closes the meeting.

## List of participants

<b>ZEP AC representatives</b>		
1	Dr Graeme Sweeney	Chairman of ZEP
2	Frederic Hauge ( <b>Proxy to Jonas Helseth</b> )	Bellona
3	Liz Rogers ( <b>Proxy to James Todd</b> )	bp
4	Isabelle Czernichowski	BRGM
5	Chris Littlecott	E3G
6	Stijn Santen	EBN
7	Lamberto Eldering	Equinor
8	Constantin Sava	GeoEcoMar
9	Rob van der Meer	HeidelbergCement
10	Florence Delprat-Jannaud	IFPEN
11	Filip Neele	TNO
12	Stuart Haszeldine	SCCS
13	Syrie Crouch	Shell
14	Nils Røkke	SINTEF
15	Charles Soothill	Sulzer
16	Ward Goldthorpe	Sustainable Decisions
<b>External speakers</b>		
17	Vassilios Kougionas	European Commission
18	Fabien Ramos	European Commission
19	Clara Solzbacher	European Commission
20	Christian Weinberger	European Commission
21	Katrien Prins	European Commission
22	Guloren Turan	GCCSI
23	Chris Gittins	TAQA
<b>Guests</b>		
24	Eric De Coninck	ArcelorMittal
25	Lina Stranvåg Nagell	Bellona
26	Shirley Oliveira	bp
27	Jean-Xavier Morin	CO2 H2
28	Johanna Lehne	E3G
29	Daniele D'Angelo	Eni SpA
30	Lucie Boost	Equinor
31	Brian Murphy	Ervia
32	Félix Mailleaux	ETUC
33	Maria Velkova	European Commission
34	Peter Horvath	European Commission

35	Robin Clowes	ExxonMobil
36	Antonella Sopranzetti	ExxonMobil
37	Jannicke Bjerkås	Fortum Oslo Värme
38	Ståle Aakenes	Gassnova
39	Angus Gillespie	GCCSI
40	Eve Tamme	GCCSI
41	Anghel Sorin	GeoEcoMar
42	Paula Coussy	IFPEN
43	Arthur Heberle	Mitsubishi Power Europe
44	Tom Mikunda	The Netherlands, Ministry of Economic Affairs and Climate Policy
45	Bram Sommer	Port of Rotterdam
46	Stijn van Els	Port of Rotterdam
47	Martijn van de Sande	Rvo
48	Mehmet Onal	Shell
49	Christian Schwarck	Shell
50	Marie Bysveen	SINTEF
51	Kristin Jordal	SINTEF
52	Carl van der Horst	Tata Steel
53	Robert de Kler	TNO
<b>ZEP Secretariat</b>		
54	Per-Olof Granström	ZEP Secretariat
55	Giorgia Bozzini	ZEP Secretariat
56	Meghann Kissane	ZEP Secretariat
57	Luke Warren	CCSA
58	Chris Gent	CCSA