

MEETING MINUTES ZEP 69th ADVISORY COUNCIL MEETING

15 December 2021, 10:00-13:00 CET

Virtual meeting

1. Introduction and welcome

Chair, **GS**, opens the meeting, informs of proxies and declares the meeting quorate.

Chair asks AC members if there are further items for the meeting agenda – no further items and the agenda is adopted. Chair asks AC members for approval of minutes from AC68, ACEC October – provisionally approved at ACEC November – and ACEC November – all approved.

Chair notes the proposed meeting dates for AC, ACEC, ERG and Communications Group meetings in 2022.

Chair notes that Winston Beck has been appointed as a ZEP-C Director at the Extraordinary General Assembly on 9 December.

Chair notes that Mark Driessen will step down from the role of ERG Co-Chair. Chair invites AC members to nominate potential ERG Co-Chairs by contacting the ZEP secretariat.

2. ZEP 2022

Chair notes this item is for information and endorsement, but the decision-making regarding budget lies with ZEP-C. **POG** notes endorsement needed for the ZEP work programme to April 2022 and the ZEP-C budget for January-April 2022. At the AC70 in March, the work programmes for 2022 will be presented for endorsement together with the ZEP-C 2022 budget.

The current work programme, that is funded by ZEP-C members, was endorsed by AC68 and approved by the ZEP-C Board of Directors. ZEP-C has reached an agreement with CCSA on how the work programme will be set up, following legal and financial advice. **POG** provides an overview of ongoing work programme, noting slight amendments to timelines for reports, and the upcoming combined ZEP/IWG9 grant work programme – with a radically lower budget than the current programmes – and the additional ZEP own work programme.

POG notes that the 2021 income has increased with new members, while the expenditure has been lower than expected due to Covid-19. €50,000 was allocated to November-December for the gap in grant funding, and the ZEP-C financial reserves will increase to approximately €280,000 by the end of 2021. The budget for January-April 2022 includes €100,000 for the gap in grant funding, while the rest of the budget is a continuation of the 2021 budget, resulting in expected financial reserves of approximately €250,000 at the end of April 2022.



POG and Chair respond to a question on coordinating work of ZEP and IWG9, noting that the support for IWG9 continues until the end of April. The combined ZEP/IWG9 grant will then coordinate the work into one programme.

NR notes that at the SET Plan conference in November, there was a clear statement from the Commission on revamping the SET Plan. Notes it is important to follow this and give guidance as best as possible. **POG** responds that this has been followed up with the SET-Plan Steering Group and it will be taken into account when the new grant holder will set up the new work programme.

Chair notes AC endorsement is sought today for the work programme and budget – both are endorsed.

3. Updates from Networks

CSc begins the Network Policy & Economics (NWPE) update providing an overview of the latest meeting in October, notes that the TEN-E regulation, 5th PCI list, and Fit for 55 were discussed and the Network is following these initiatives. ZEP has also provided input for the CCUS Forum and an EU strategy for CCS and CCU. NWPE has responded to several consultations. The Hydrogen and decarbonised gas market package and the Taxonomy are also key initiatives the Network is following. **CSc** highlights the topic of cross-border storage liability and ZEP work beginning on this topic. Outlines the issue of liability for post-decommissioning storage liability. The Network will continue work on this topic and report on progress at AC70.

Chair asks for AC endorsement for the proposed actions. **SCr** raises comment on the timeline and a short discussion follows highlighting that ZEP is treating this as highly critical work and has meetings to follow this up with regulators and the Commission. AC endorses the action plan and approves the consultation responses.

LSN updates on the EU Taxonomy, noting the first delegated act has been approved and now awaiting the delegated act to set out the role of gas. It is understood that the leaked document circulated in March 2021 with 'do no significant harm' of 270g is back on the table. The delegated act is expected on 20 or 22 December. It is being considered not to have a public consultation.

FN updates on the work by TWG on the Directive on geological storage of CO₂ and plans to have a report for approval at AC70. **AH** continues the update noting that the work on a biomass and biodiversity and the work on the draft report is continuing. The biomass report is intended to be used as a background for the CCS in biodiversity and land-use perspective work. The draft report is intended to be presented at AC70. The work on CCS for power generation is ongoing. Chair asks AC for approval of ToR for biodiversity work – approved.

IP presents work on the CO_2 shipping report by the ZEP/CCSA Working Group. There is broad membership in the group, with the work aiming to provide early guidance for CO_2 shipping. **IP** provides an overview of the working group's findings. The draft report was circulated prior to the AC meeting for comments. Chair asks if there are any objections to the recommendations – the AC endorse proceeding with the work as described.



YvdM asks about the report descriptions and recommendations on sizing – short discussion follows. **IP** addresses why inland waterways are included in the report.

TH of DG CLIMA provides an update on the Innovation Fund and the results of the small-scale and large-scale calls. Also highlights the London Protocol and cross-border storage liability. Adds a separate comment on cross-border liability, noting that the Directive on geological storage of CO₂ should not be opened for revision. **TM** raises a question on storage sites by 2030, as Innovation Fund sites will be online by second half of 2020s. A short discussion follows on long-term vision.

POG provides a short update on the CCS+ Initiative. ZEP is a member of the Advisory Group, and has provided clear input on the Principles and Guidance document. An updated version has been sent out for comments and ZEP will follow up with the ACEC to give input. The Initiative will be in contact with EC in Q2 2022 to establish what links there are for certificate scheme and regulatory framework. Chair asks if the AC are content that the ACEC Vice-Chairs provide guidance – approved.

4. Updates from External Relations Group

LB begins the ERG update highlighting a new meeting structure for the ERG and Communications Group: a two-hour structure, with the first hour allocated to the Communications Group and the second hour allocated to the ERG. Highlights the ZEP Conference which took place after AC68, a 'grant farewell'. Also highlighted the key EU policy initiatives that ZEP will follow and communicate around in Q1 2022. **MK** continues the updates on ZEP's communication activities and events in October-December 2021 as well as ZEP articles. Highlights the planned communications and events for Q1 2022.

5. TEN-E Regulation

WvL provides update on TEN-E Regulation negotiations.

Pending the final text, the key points for the category of CO₂ infrastructure are:

- CO₂ storage is included in the regulation. CO₂ storage will also be included for infrastructure developed between an EU member state and a non-EU country, which could receive the status of Projects of Mutual Interest (PMI).
- CO₂ transport modalities other than pipeline such as ship, train, truck, barge will not be included in the regulation, as the Commission and the Council 'fail to see the network component of their inclusion'.
- CO₂ transport for utilisation will be allowed, given that the utilisation is 'with a view to permanent neutralisation' of the CO₂. The sustainability of utilisation will be checked against the sustainability criteria included in the regulation.



- There will be a general sustainability criteria in the Regulation, however, it will not include a specific capture rate for industrial installations.
- The focus of CO₂ infrastructure will be on industrial CCS installations, not power installations.

The status of the relationship with non-EU countries remains to be clarified in the final text.

LSN raises a question on permanent neutralisation. Short discussion follows. Only if in accordance with sustainability criteria. **WB** asks question on transport modes and how they would like to include them in the future. Could TEN-T be an option? Responds that they didn't indicate this. **KBB** asks around wording of third countries – would Norway be included? **WvL** responds that Norway would be included and that this wording should be finalised soon. Chair notes that following ZEP's recent meeting with DG ENER, the EC does not support transport modalities in the TEN-E.

CB provides update on 5th PCI list and CO₂ network projects.

6. Hydrogen

HE provides an update on the European Clean Hydrogen Alliance (ECHA) project pipeline, which is available as an online database. Provides an overview of project locations, categories, maturity, production, transmission (production and consumption). Short questions and answers follows.

Chair highlights the importance of infrastructure and notes that the complementary development of CO₂ and hydrogen infrastructure can reduce costs.

HE notes a report from the ECHA which highlights barriers for hydrogen project development.

7. Horizon Europe work programme

VK provides an update on the Horizon Europe work programme preparations for 2023-2024.

For Mission Innovation, the challenge on CO₂ removal, the US, Canada and Saudi Arabia are leading and the EU has joined as support.

Adds that input given to Horizon Europe is much appreciated and is in line with planning for 2023-2024. **VK** suggests restarting the ZEP working group on Mission Innovation. Chair confirms this with **FN**.

8. Carbon Dioxide Removals

FR presents the EC communication on 'Restoring Sustainable Carbon Cycles'. It details the long-term strategy: (i) decrease reliance on fossil carbon, (ii) replace it with sustainable streams of carbon, and (iii) offset emissions with carbon removals. The strategy looks at two sides: the role of ecosystem and role of industry. Provides an overview of the role of industry. The communication also notes CO₂ transport.



Call for evidence – impact assessment, public consultation planned late-January with questions on views of different elements related to the certification. Organising a conference at the end of January – high-level session and also to discuss with stakeholders/technical discussions. By the end of 2022, legislative proposal will be communicated.

JH notes this is a strong signal from DG CLIMA of CDR's importance for climate action. Highlights concerns on carbon farming. Short response follows. TM highlights provision of storage. If including targets for carbon removals, it is important to have a statement on importance of storage. Short response follows. Want to put in place tracking of CO₂ emissions and where it goes to be stored, and where emissions are from. Chair notes that describing what we have, we may lose track of current network which is pipeline based. POG thanks FR for great cooperation with ZEP and for providing updates as the work progressed. Mentions the good descriptions on CO₂ infrastructure in the Communication and refers to the ZEP input to the Commission regarding an EU strategy for CCS and CCU. WB asks if there were reflections on differentiating between CO₂ emissions and unavoidable process emissions. Response follows – broad view of EU economy, but in context of certification next year this point will be relevant. Possibly also relevant next year when looking at supply side of certification.

9. Closing remarks and next meeting

Chair thanks all ZEP members and CCS/CCU community for support during 2021 and for participating today. Wishes all a happy holiday season. As the calendar stands, the next ACEC meeting is 18 January and AC70 on 23 March.



List of participants

AC	AC members				
1	Jonas Helseth	Bellona			
2	Shirley Oliveira	bp			
3	Isabelle Czernichowski	BRGM			
4	Stijn Santen	EBN			
5	Lucie Boost (Proxy from Lamberto Eldering)	Equinor			
6	Jannicke Bjerkas	Fortum Oslo Varme			
7	Winston Beck	HeidelbergCement			
8	Florence Delprat-Jannaud	IFPEN			
9	Kim Bye Bruun	Northern Lights			
10	Stuart Haszeldine	SCCS			
11	Syrie Crouch	Shell			
12	Nils Røkke	SINTEF			
13	Charles Soothill	Sulzer			
14	Ward Goldthorpe	Sustainable Decisions			
15	Filip Neele	TNO			
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External speakers					
16	Chris Bolesta	European Commission			
17	Henning Ehrenstein	European Commission			
18	Timo Herberz	European Commission			
19	Vassilios Kougionas	European Commission			
20	Fabien Ramos	European Commission			
21	Willem van Laatum	Parliamentary Assistant to MEP Berendsen			
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Guests					
22	Hanne Rolén	Aker Carbon Capture			



23	Roeland Kuiper	ALP Maritime
24	Adrien Berthier	Alvance Group
25	Eric De Coninck	Arcelor Mittal
26	Christian Heller	Austrian Environmental Agency
27	Frederik Pieters	BASF
28	Mark Preston Aragones	Bellona
29	Lina Strandvåg Nagell	Bellona
30	Michal Wendolowski	Bellona
31	Ceri Vincent	BGS
32	Esme Brandon	bp
33	Helen Bray	Carbon Engineering
34	Georgina Katzaros	CCSA
35	Chris Gent	CCSA
36	Ruth Herbert	CCSA
37	Ross Kennedy	CCSA
38	Rowan Emslie	Clean Air Task Force
39	Alessia Virone	Clean Air Task Force
40	Eve Tamme	Climate Principles
41	Anastasios Perimenis	CO2 Value Europe
42	Tom Mikunda	Dutch Government
43	Domien Vangenechten	E3G
44	Dennie Kleijweg	EBN
45	Merwe van der Yolandi	EBN
46	Daniele D'Angelo	Eni
47	Roberto Ferrario	Eni
48	Lucie Boost	Equinor
49	Adrien Allard	ETN Global
50	Jitka Spolcova	ETN Global



51	Yelda Guven	ExxonMobil
52	Antonella Sopranzetti	ExxonMobil
53	Alex Novo Tellado	ExxonMobil
54	Paola Mazzucchelli	F.Circe
55	Paul Bonnetblanc	French Government
56	Angus Gillespie	GCCSI
57	Guloren Turan	GCCSI
58	Marlene Arens	HeidelbergCement
59	Jan Theulen	HeidelbergCement
60	Francois Regis Mouton	IOGP
61	Caterina de Matteis	IOGP
62	Iskren Kirilov	IOGP
63	Nora Hansen	LO Norway
64	Arthur Heberle	Mitsubishi Power
65	Stig Svenningsen	Norwegian Government
66	Raphael De Loenen	Port of Antwerp
67	Sophie Cuypers	Port of Antwerp
68	Marleen Ramakers	Port of Antwerp
69	Bram Sommer	Port of Rotterdam
70	Christian Schwarck	Shell
71	Alistair Tucker	Shell
7	Marie Bysveen	SINTEF
73	Kristin Jordal	SINTEF
74	Ian Phillips	Storegga
75	Svante Söderholm	Swedish Energy Agency
76	Evis Linfoot	TotalEnergies
77	Frederic Linsig	TotalEnergies
78	Dimitra Rontogianni	TotalEnergies



79	Hernan Silva	TotalEnergies			
80	Gjengedal Ane				
ZEP Secretariat					
81	Per-Olof Granström	ZEP Secretariat			
82	Giorgia Bozzini	ZEP Secretariat			
83	Meghann Kissane	ZEP Secretariat			
84	Dr Graeme Sweeney	Chairman of ZEP			