

IWG9 Plenary and ZEP 78th Advisory Council

20 March 2024, 10:30-17:00 CET

Agenda Item 1: Introduction and welcome

1.a. Meeting instructions

The IWG9 Plenary and ZEP AC76 meeting will be a physical meeting, **held at Comet Louise in Brussels – 20, Place Stéphanie (6th floor) ([direction](#))**.

Physical participation is strongly encouraged. Physical attendance is limited to 34 people; a message to confirm physical attendance will be sent by the secretariat. Virtual participation will be facilitated via Microsoft Teams. The link to register to join online can be found in the Outlook calendar invitation; you can also [click here to join](#).

1.b. Draft meeting agenda

The draft agenda for the IWG9 Plenary and 78th meeting of the Advisory Council is appended as pre-read in the invitation.

1.c. IWG9 Plenary and ZEP AC77 draft meeting minutes

The draft meeting minutes of the previous IWG9 Plenary and 77th meeting of the ZEP Advisory Council, which took place on 13 December 2023, are appended as pre-read (*see below*).

1.d. ZEP ACEC January meeting minutes

The ZEP ACEC January meeting minutes are appended as pre-read (*see below*).

1.e. ZEP ACEC away day meeting minutes

The ZEP ACEC away day meeting minutes are appended as pre-read (*see below*).

1.e. ZEP ACEC February meeting minutes

The ZEP ACEC February meeting minutes are appended as pre-read (*see below*).

DRAFT MEETING MINUTES

ZEP 77th ADVISORY COUNCIL AND IWG9 PLENARY

13 December 2023, 10:30-17:00 CEST

In-person meeting in Brussels (and online)

1. Welcome and introduction

ET/Chair welcomes participants and confirms quorum. Chair asks if there is any other agenda item. Asks for approval of:

- the IWG9 Plenary/AC77 draft meeting agenda – approved.
- the IWG9 Plenary/AC76 draft meeting minutes – approved.
- the ACEC November draft meeting minutes – approved.
- the ACEC October draft meeting minutes – approved.

2. ZEP developments

Chair presents the future ZEP structure. ZEP-C is set up as a legal entity. There would be an additional work programme handled by the newly recruited staff. The plan would be to have two full-time equivalents in 2024. Chair adds that industry associations could become members, some working groups will be members-only, and Networks will be changed to 'Committees'. Participants ask questions and clarifications. Chair provides clarifications. LE mentions a typo in the AC76 draft minutes. Chair asks for approval of the future ZEP structure – approved.

JH presents the ZEP-C budget and the ZEP work programme for 2024. Chair asks for approval of the budget and work programme – approved. Chair asks to approve the postponement of the ACEC renewal to March 2024 – approved. RH says the Carbon Capture & Storage Association (CCSA) has approved additional resources for the 2024 work programme.

3. Updates from governments and projects

MS from Yara presents the Sluiskil project.

MF from the International Energy Agency (IEA) presents the IEA report 'CCUS Policies and Business Models: Building a Commercial Market'.

EL from the Global CCS Institute (GCCSI) presents the report 'Global Status of CCS 2023'.

LSN from Bellona presents the outcomes of COP28 regarding CCS and CCU. A Q&A follows.

Chair thanks the speakers.

4. SET Plan Review – IWG9-relevant

WC introduces the item, mentions the revision of the SET Plan. MB gives a presentation on the work plan for the SET Plan Implementation working group 9 (IWG9).

5. Updates from the Committees

a. Policy & Economics Committee

LE gives an update on the Policy and Economics Committee and the Working Group Policy & Funding. TM asks for a possibility to provide further comments to the draft paper on funding requirements. CAB presents the policy timeline and the CCSA/ZEP report on CO₂ transport by ship. FN highlights a small typo in the report.

b. Technology Committee

FN gives an update on the Technology Committee and the TWG CDR. FN says the work of the TWG supply chain is interrupted.

A Q&A follows. Chair asks for:

- re-circulation of the draft paper on funding requirements – approved.
- approval of the CCSA/ZEP report on CO₂ transport by ship – approved.

6. Updates from the External Relations Committee

KH presents the advocacy and communications work. A webinar will be organised with ETIP Bioenergy. ZEP is applying to organise a session at the European Sustainable Energy Week 2024. Chair asks for approval of LSN and AS as new co-chairs.

7. CCUS Forum and industrial carbon management strategy

JF gives an update on the work following the CCUS Forum. A Q&A follows.

8. ZEP membership application

MGR introduces Repsol. Chair asks for approval of Repsol's application to ZEP membership – approved. Chair asks for approval of the following new representatives:

- Raphael Huyghe for IFPEN;
- Thomas Le Guénan for BRGM;
- and Eadbhard Pernot for CATF – all three approved.

9. ZEP Projects Network

SS provides an update on the preparation and the scope of the first edition of the Projects Network. A Q&A follows.

10. Net Zero Industry Act and Strategic Technologies for Europe Platform

LSN gives an update on the legislative state-of-play for the Net Zero Industry Act. CAB gives an update on the Strategic Technologies for Europe Platform proposal. A Q&A follows.

Chair asks for approval of:

- the draft position and messages on the Net Zero Industry Act – approved.
- the past draft position and messages on the Act (open letter on Article 18 and amendments sent to the ITRE Committee) – approved.

11. CDR and MRR developments

AK gives an update on the state-of-play of the carbon removal certification framework proposal and the work on the draft methodology for carbon removals. A Q&A follows. AN gives an update on the revision of the monitoring and reporting regulation. A Q&A follows.

12. Actions, closing remarks and next meeting

Chair thanks all for participating, summarises the decisions made, and notes the next AC/Plenary meeting date for 2024: ZEP AC78 and IWG9 Plenary on 20 March.

William Christensen	IWG9
Eve Tamme	Zero Emissions Platform
Al Tucker	Shell
Alex Blades	DESNZ
Amy Brunsvold	SINTEF
Ana Šerdoner	Bellona
Anais Faucher	Eurogas
Anders Melhus	Altera Infrastructure
Anton Malakhov	Slaughter and May
Antonella Sopranzetti	ExxonMobil
Alsak Viumdal	Gassnova
Ayan Bhattacharji	Interconnector
Sophie Wilmet	Cefic

	Ceri Vincent	CO2GeoNet
	Charles Soothill	Sulzer
	Clara Pacitti	BCW
	Chris Sherwood	Negative Emissions Platform
	Daniela Peta	GCCSI
	David Warne	Splunk
	Drazen Tumara	European Commission
	Eadbhard Pernot	CATF
	Eirik Lonning	European Commission
	Ellina Levina	GCCSI
	Eric Ingels	Pall Corp
	Frederik Pieters	Antwerp@C
	Filip Neele	TNO
	Hanife Tuzcuoglu	Tubitak
	Henriette Nesheim	Norwegian Ministry of Petroleum and Energy
	Raphael Huyghe	IFPEN
	Iris Rieth-Menze	NRW.Energy4Climate
	Isabella Ermili	Yara
	Isaline Gravaud	BRGM
	Jarand Gauteplass	University of Bergen
	Jannicke Gerner Bjerkas	Hafslund Oslo Celsio
	Johanna Fiksdahl	European Commission
	Jonas Helseth	Bellona
	Joep Sweyen	EBN
	Julia Mülheiss	E.ON
	Juliette Lebourrier	Lhoist
	Jean-Xavier Morin	CO2-H2
	Kasia Wilk	Drax
	Keith Burnard	IEAGHG
	Kristin Jordal	SINTEF

Lamberto Eldering	Equinor
Lina Nagell	Bellona
Line Rydsa	SINTEF
Liv Rathe	Norsk Hydro
Marie Bysveen	SINTEF
María José López	Tecnicas Reunidas
Marta González Rodríguez	Repsol
Martijn van de Sande	RVO
Mathilde Blanchard	GCCSI
Michalis Agraniotis	Mitsubishi Heavy Industries
Michal Wendolowski	Bellona
Marine Valdois	ExxonMobil
Moritz Tiefenthaler	Austrian Ministry of Climate
Nick Bevan	8Rivers
Nicolò Cairo	ETN
Nils Rokke	SINTEF
Pauline Bourguignon	TotalEnergies
Patricia Marcos Suárez	Tecnicas Reunidas
Per-Olof Granström	Energy Climate Solutions
Raquel Carretero	Repsol
Reiner van Noort	Institute for Energy Technology
Roberto Ferrario	Eni
Rodolphe Nicolle	European Lime Association
Ross Brown	Shell
Ruth Herbert	Carbon Capture & Storage Association
Sebastian Fischer	Germany's Federal Ministry for Economic Affairs and Climate Action
Shirley Oliveira	bp
Sina Blix	Prestmo
Stefan Gielis	Air Liquide

	Stijn Santen	EBN
	Stuart Haszeldine	SCCS
	Svante Söderholm	Swedish Energy Agency
	Toby Lockwood	CATF
	Timo Ritonummi	Finnish Ministry of Economic Affairs and Employment
	Tom Mikunda	bp
	Tashin Bahar	Tubitak
	Valeria Di Francesco	Eni
	Valeria Palmisano	SNAM
	Ward Goldthorpe	Sustainable Decisions
	Wim de Jong	TNO
	Winston Beck	HeidelbergMaterials
	Wolfgang Haider	Borealis Polyolefine
	William Druet	CCSA
	Joop Hazenberg	Zero Emissions Platform
	Charles-Albert Bareth	Zero Emissions Platform
	Kristin Heidebroek	Zero Emissions Platform

ACEC January meeting

16 January 2024

9:30-11:30 CET

Draft meeting minutes

1. Introduction and welcome

Agenda is approved. LE states that the AC77 draft minutes should be corrected to show he mentioned a typo in the updated bylaws, not the draft minutes. The draft minutes are adjusted and approved.

2. ZEP development

Chair/ET shares updates on ZEP development: there is an offer for future staff work insurance; an offer from payroll agency SD Worx (EUR 66 per employee); and an offer for an external prevention advisor from Cohezio.

a. ZEP-C organisation

ET shares updates on ZEP-C organisation as included in the file. ZEP is recruiting for two positions: an Advocacy and Communications Assistant and a Policy and Advocacy Director (independent contractor). The confirmation date for the Assistant position is 17 January 2024 COB. ZEP wants to fill these positions from the close-knit CCS community before opening it up to other sites.

ET is engaging in one-on-one meetings with members to gain ideas and insights into what members value most in ZEP and this provides a good foundation on which to build the value proposition. ET will report back on these meetings during the ACEC Away Day. In the discussion that followed, co-chairs ask for further details on topics for the ACEC Away Day. Topics that will be discussed include defining what ZEP is; potential new reports and deliverables; activities; assessing where ZEP could have an impact. ET will share a draft of the agenda at the end of the week.

3. Updates from Committees

a. Policy and Economics Committee

LSN provides an update on the Committee's activities, as included in the file. The policy messaging ahead of EU Parliament elections could be pushed back if necessary. The WG P&F paper on funding requirements for CCS deployment is under revision. Contexte Energie and possibly Bloomberg have seen a leaked version of the ICMS, none of the co-chairs have seen the document. SS asks how "bankable", as stated in the leaked ICMS, is defined. LSN believes that it means to reduce investment risks and improve business cases.

ET asks which CCUS Forum Working Group ZEP should apply for to be co-chair. In the discussion that followed co-chairs express that infrastructure and standards are key; the need for ZEP to remain visible

and play its role as a competent centre; input to WGs came from members but drafted by the secretariat; the alignment of WGs with the IWG9 targets; and the need to participate in all WGs. NR shares that the WG on Carbon Capture and Utilisation (CCU) should be co-chaired by ZEP. AS highlights that the role of ZEP and its public perception is being discussed in the ERC, therefore it would be key to contribute to the WG on Public Perception. ET asks how often the WGs meet. This depends on how the co-chairs want to organise the WGs and how they want to progress reports to deadlines.

It is decided that ZEP will participate in all four WGs and will apply for the co-chair position of the WG on CO2 Infrastructure and a second choice will be the WG on CO2 Standards. There needs to be a clear plan on who will attend which WGs and assume a divide and conquer approach between the secretariat and members. EERA will take responsibility for the WG on CCU and will be active in taking a leading role. The deadline for expression of interest is 31 January 2024.

The next PEC meeting will be 8 February 2024. The next WG P&F meeting will be 17 January 2024.

b. Technology Committee

FPN gives an update on the Committee's activities, including a new WG on Research and Innovation, as included in the file. MB states that she has been in dialogue with co-chairs and IWG9 to gather suggestions on how to move forward and will come back to the ACEC with more details soon.

The next TC meeting will be 22 February 2024.

c. Projects Network

SS gives an update on the Projects Network's activities, as included in the file. The ZEP Projects Network event of 24-25 January is at capacity but there is more interest than could be accommodated. There is little overlap between people who attend ZEP meetings and those who work on projects. SS will share the latest agenda with ACEC members. AS highlights the need to consider competition law during the discussions at the event. This will be communicated to the moderator and Porthos will screen the presentations before the event as well as consider how to tackle intellectual property issues.

ET states that ZEP will wait to see what the EC publishes in its ICMS and what they will outline in terms of a knowledge sharing network. It is expected that the EC will cover a broad initiative that overlaps with the work of the Projects Network but if the EC publishes something different than expected, it may be wise to continue with separate platforms.

4. Updates from External Relations Committee

KH gives an update on ERC activities, including the possibility of an added discussion on the shipping report as there was a lot of interest from participants; and the ZEP spring conference (April). ET shares that the Sefcovic Cabinet meeting went well and there was a discussion around funding of CCS; gathering funding from various parts of the EU budget; and streamlining the work.

ET shares that she is drafting the advocacy strategy implementation plan clearly outlining ZEP's goals; activities; and timelines. A first draft will be available at the next ERC meeting and ACEC Away Day. The discussion around the spring conference focussed on cancelling the event and having an event in autumn instead; collaborating with the GCCSI and joining their event in April; scaling down the event;

or organising an event in the EU Parliament in April. It is decided not to organise a large event in April but instead to consider how ZEP could be involved in another event. ET emphasises the need for ZEP to have tangible outcomes.

Upcoming events include:

- Projects Network meeting: 24-25 January (Rotterdam)
- EEA CCS event: 30 January (ZEP Chair will speak)

5. Net Zero Industry Act and Strategic Technologies for Europe Platform

CAB gives an update on the legislative state-of-play for the Net Zero Industry Act and STEP as included in the file. Co-chairs express their concern on the Council's partial position stating there is no increase of the Innovation Fund and Horizon Europe.

6. ZEP grant deliverables 2024

JH shares ZEP's most important deliverables for 2024 as included in the file. ACEC engagement will be needed to increase the effectiveness of the ZEP platform. JH asks the co-chairs if they could recommend a researcher or institution to work on a study on CCS and just transition. The budget for the study is EUR 15k-20k. ET reiterates that all deliverables are also part of the work programme 2024.

7. Closing remarks

Co-chairs discuss whether the ACEC Away Day will function as the next ACEC meeting or as an addition, this will be confirmed at a later stage. There is no flexibility with the date for the ACEC Away Day.

Chair thanks participants and reminds that the 78AC meeting will take place on 20 March 2024 and the ACEC Away Day will take place on 7 February 2024. Closes the meeting.

List of participants

Eve Tamme	ZEP chair
Charles Soothill	Sulzer
Winston Beck	Heidelberg Materials
Lamberto Eldering	Equinor
Nils Røkke proxy to Lina Strandvåg Nagell	SINTEF
Stijn Santen	EBN
Filip Neele	TNO
Marie Bysveen	SINTEF
Antonella Sopranzetti	ExxonMobil

Joop Hazenberg	ZEP Secretariat
Charles-Albert Bareth	- " -
Kristin Heidebroek	- " -
Sophie Deijkers	- " -

DRAFT

ACEC away day

7 February 2024

10:00-17:00 CET

Draft meeting minutes

1. Introduction and welcome

Chair welcomes everyone. The aim is to present a number of decisions today.

2. Latest policy developments

CAB presents the industrial carbon management strategy, the EU 2040 climate target, the latest updates on the Net Zero Industry Act, and the Joint Research Centre brief.

3. ZEP's positioning as an organisation

Chair starts a question on how to define ZEP and present it to outside stakeholders. Chair held discussions with 19 members to have their feedback. Participants discuss how best to guarantee engagement from ZEP members. Chair mentions that the policy and advocacy director will work on membership recruitment. The overall feedback from members is positive; webinars and reports are appreciated. ZEP members also want to be more informed. Participants discuss ZEP's role as a European Technology and Innovation Platform (ETIP) under the SET Plan and its general brand and positioning. Chair proposes to prepare a description for the website ahead of the next ACEC. Participants also discuss collaboration with other organisations working on CCS and ZEP's added value. Chair raises the need for additional communication tools.

4. ZEP's focus in 2024

JH says that 6 proposals were received for the joint transition study. NR highlights the importance of quality deliverables, adds that no intervention is required from the ACEC before the grant coordinator reviews a report. Chair presents members' feedback pointing at the importance for ZEP to help navigate public funding, focus on projects' details, integrate removals in the EU ETS, and support the Projects Network. Participants discuss the tasks ZEP should focus on. JH says there is no budget for event organisation from the grant's end. Chair points at members' request for transparency and more refined policy papers. Participants discuss the contact via constituencies and the status of members' representatives. Chair raises the question of the renewal of the ACEC and proposes that vice-chairs contact their constituency for potential renewal. Vice-chairs have three weeks to contact their constituency and come back with a renewal proposal. Consensus is the default for decision-making by the AC and ACEC.

Chair presents the advocacy plan that the new director will execute. Participants discuss advocacy efforts and which elements to focus on. MB says the IWG9 update of R&I targets and activities should be a focus. Chair says there is no information on the knowledge-sharing platform. JH says the platform should be tendered by DG CLIMA.

5. ZEP's business model

Chair proposes to make the External Relations Committee members-only, adds that sponsors for ZEP events are possible. Chair asks if sponsorship rates can be increased, if annual inflation adjustments are possible, and if trade associations should pay. Participants discuss how to integrate trade associations. JH says that the CCSA would like to join ZEP. Chair says she will make a proposal before the next ACEC.

6. ZEP Projects Network

SS gives an update on the first edition. SS proposes to charge participants with fees, with a lower fee for ZEP members. Suggestion is not taken on board. SS shares the outcomes of the discussions. Insight into project development is seen as one of the most valuable element of the Projects Network. Participants discuss how to fund the next edition.

7. Closing remarks

Chair thanks all, closes the meeting.

List of participants

Eve Tamme	ZEP chair
Charles Soothill	Sulzer
Winston Beck	Heidelberg Materials
Lamberto Eldering	Equinor
Jonas Helseth (JHe)	Bellona
Nils Røkke	SINTEF
Stijn Santen	EBN
Marie Bysveen	SINTEF
Antonella Sopranzetti	ExxonMobil
Joop Hazenberg (JH)	ZEP Secretariat

Charles-Albert Bareth	- " -
-----------------------	-------

DRAFT

ACEC February meeting

20 February 2024

9:30-11:30 CET

Draft meeting minutes

1. Introduction and welcome

The agenda is approved. ACEC January draft minutes are approved. NR states that the ACEC Away Day draft minutes should be corrected to include Jonas Helseth in the participants list as well as noting that the participants had received three weeks to nominate vice-chairs, but this had not been reflected in the draft minutes. The minutes are adjusted and approved.

2. ZEP development

ET/Chair shares that a Policy & Advocacy Director and an Advocacy and Communications Officer have been recruited. The Office Manager position still needs to be filled.

a. Paper on ZEP introduction

ET presents the draft ZEP introduction paper, highlighting the paper's role in establishing a common ground and understanding of ZEP's objectives. The paper will be a piece for future use for the website, position papers, and emails. Participants discuss the content and how ZEP's role should be communicated. ET proposes to incorporate the suggestions into a new version of the document to be circulated with the ACEC next week.

b. Paper on ZEP membership

ET presents the draft ZEP membership document, noting the absence of a comprehensive document consolidating all necessary information. It is proposed that the incoming Policy and Advocacy Director would finalise the text. Participants discuss a possible membership fee review and the way different constituencies are structured. All suggestions will be presented to the new Policy and Advocacy Director. The fee changes will be decided at the next AC meeting. Changes to constituency names would require amendments to the organisation's bylaws and sponsorship fees.

3. Updates from Committees

a. Policy and Economics Committee

CAB gives an update on the last Committee meeting and activities. The EC has not yet provided updates regarding co-chairs for the CCUS Forum.

The next Committee meeting will be on 23 May 2024. The next WG P&F meeting will be on 28 February 2024.

b. Technology Committee

FN gives an update on the Committee's activities, including possible new WGs; the IWG9 R&I targets review. The next TC meeting will be on 22 February 2024.

c. Projects Network

SS gives an update on the Projects Network's activities including results from the satisfaction survey of the first edition in January. Participants discuss next steps following the first edition and potential funding models. The new Policy and Advocacy Director will have the possibility to explore business plans, membership fees, and event fee structures.

4. Updates from the External Relations Committee

KH gives an update on ERC activities, including upcoming webinars, meetings, and the ZEP conference. The new date for the ZEP conference will be determined by the new Policy and Advocacy Director.

Upcoming events include:

- ZEP Secretary General taking part in the Clean Transition Dialogue on 22 February 2024

5. Policy update

CAB gives an update on the legislative state-of-play for the Net Zero Industry Act and STEP. A discussion follows.

6. ZEP grant deliverables 2024

JHa shares ZEP's most important deliverables for 2024. Participants discuss how the just transition study could be framed. JHa proposes that reports meeting ZEP standards could be shared, ensuring the organisation's work is disseminated effectively.

MB provides an update on the relevance of the SET Plan and discusses plans for updating the R&I targets to support the ICMS. A meeting of IWG9 countries is scheduled on 1 March 2024 to engage SET Plan countries interested in CCS and actively participating in IWG9. NR asks if all SET Plan countries are involved. MB says all SET-plan countries are invited to participate. CAB agrees to follow up with the SET Plan secretariat.

7. Closing remarks

ET highlights that there is a new representative for Northern Lights and asks the ZEP secretariat to provide a list of members in each constituency.

The next ACEC meeting will take place on 20 March 2024. ET closes the meeting.

List of participants

Eve Tamme	ZEP chair
-----------	-----------

Charles Soothill	Sulzer
Lamberto Eldering	Equinor
Nils Røkke	SINTEF
Stijn Santen	EBN
Filip Neele	TNO
Marie Bysveen	SINTEF
Arthur Heberle	LyondellBasell
Jonas Helseth	Bellona
Joop Hazenberg	ZEP Secretariat
Charles-Albert Bareth	- " -
Kristin Heidebroek	- " -
Sophie Deijkers	- " -

DRAFT

Agenda Item 2: ZEP developments – for information, guidance, and approval

2.a. Update on grant deliverables – for information

As stipulated in the EU grant agreement, the ZEP and IWG9 need to complete 12 deliverables in 2024. Here is a short overview of the status of the deliverables:

D1.4 Review of the IWG9 R&I activities and targets – June 2024

(This item will also be discussed under agenda point 4: Review of the R&I targets – overview of process)

The SET Plan's ten CCUS 2030 targets and associated R&I activities are currently under review. The Secretariat has set up a Temporary Working Group and established Terms of Reference for this workstream. The new IWG9 targets and associated R&I actions would be finalised in Q3 2024 and approved at the ZEP AC/IWG9 plenary in December 2024.

Key activities include:

- an update of IWG9 targets and reporting on progress towards new targets.
- the development of a Strategic Research Agenda to address the knowledge gap Report on work on R&I actions
- the facilitation of knowledge-sharing priorities between participating countries
- the facilitation of contributions of stakeholders, including ZEP and IWG9

From April to June 2024, the IWG9 Strategic Coordination Group and four theme-specific Working Groups will continue their work to review the targets and R&I actions. Much of this work will be done in kind by the actors involved in the R&I community on topics like CO2 capture, transport and storage. There is no budget available for the remuneration of the involved actors, so the Secretariat is dependent here on their in-kind support.

- Much of this work will be done through existing structures such as the EERA Joint Programme on CCS and the Technology Committee. Invited participants will include members of past working groups and with expertise in the different topics.
- The Secretariat is, together with the IWG9 Strategic Coordination Group, actively reaching out to European governments to get them involved in the review process – both through the IWG9 channels and the ZEP Government Group.
- In May 2024, IWG9 member states should meet to discuss the draft updates or the secretariat will hold bilateral interviews to map the input of member states (to be decided).
- At the June 19 ZEP AC/IWG9 Plenary, there will be a presentation of the progress made. Given the scope of the work, the full review will likely take the rest of 2024 with a final approval to be expected at the December 2024 ZEP AC/IWG9 Plenary.
- The Secretariat will work on a 'status report' of the CCUS 2030 targets and the R&I activities, to be completed by the end of March 2024. Such an exercise was done at

the previous grant period (IMPACTS9). The status report for this review will form the basis for the discussions in the various WGs.

Together with the IWG9 co-chairs, the ZEP secretariat will look for synergies between the recently announced targets of the Industrial Carbon Management Strategy, the Net Zero Industry Act (to be adopted in April 2024), as well as the EU 2040 climate target communication. It is important to have the CCUS SET Plan targets not developed in isolation but in tandem with the latest EU policy developments and plans.

D1.6 Recommendations focusing on Social Sciences and Humanities expertise – July 2024

The CCSA published a call for proposals and selected one study proposal. After feedback from the ACEC, the proposal was amended by the interested party. We are now waiting for a waiver from CINEA to subcontract this work.

D2.2 Annual progress reviews and recommendations on the 8 R&I activities – May 2024

An update will be given under item 4 of today's agenda.

D2.4 Report on key enablers and hurdles for CCS/CCU projects, focus on public perception – April 2024

The report has been under several rounds of internal review and has a delay of two months. The secretariat is including more details on the experiences with public perception in Denmark and France

D3.1 Outreach programmes and briefings with European institutions and Member States – November 2024

This deliverable will be prepared later in 2024.

D3.4 Present outputs and recommendations at SET Plan Steering Group events, other EC initiatives, etc. – August 2024

This deliverable will be prepared later in 2024.

D4.1 Disseminate reports and recommendations to Member States – November 2024

This deliverable will be prepared later in 2024.

D4.2 Input from national governments on the focus and outputs from the project - June 2024

The Secretariat will start preparing this deliverable in April and May.

D4.3 Support from national governments on delivery of the Implementation Plan - June 2024

The Secretariat will start preparing this deliverable in April and May.

Work Package 5: Management of the project – June 2024

The Secretariat will start preparing the deliverable in April and May. This is a review of the existing Gantt chart and Work Breakdown Structure.

2.b. Updated ZEP introduction – for information

Considering the ZEP restructuring, as approved during the Advisory Council on 13 December 2024, and in light of the developments in the EU policy landscape, the way ZEP is introduced to our stakeholders needs to be updated.

The prepared version will serve as a basis for introducing ZEP, its objectives, and how it works. This narrative (*see below*) will be used on the ZEP website, in engagement with policymakers, in ZEP’s position papers and elsewhere.

2.c. ZEP membership – for approval

Constituencies

Given the increasing number of ZEP members and to better reflect the diversity of the ZEP membership, it is proposed to rename the constituencies as follows:

Current constituency name	Proposed new constituency name
Fossil fuel producers	Energy companies
Technology providers and energy-intensive industries	Industrial companies
Equipment manufacturers	Equipment manufacturers and infrastructure owners
Academia and research organisations	Academia and research organisations*
Environmental non-governmental organisations and trade unions	Civil society organisations

*Academia and Research organisations would remain unchanged

Sponsorship rates

As ZEP intends to expand its work over the coming years, as well as increase and diversify the member base, reforms are needed to amend our sponsorship structure. ZEP’s expansion in staff and activity will bring added costs in addition to general cost increases experienced over the past years due to inflation.

Therefore, two changes are proposed to ZEP’s sponsorship structure to better reflect ZEP’s growth.

- 1. Reduction of sponsorship rate for members with less than 200 total employees from 2024.**
- 2. Raising the sponsorship rate for paying members by 10% from 2025.**

The reduction of sponsorship rates for smaller members (i.e. those with less than 200 total employees) would result in a 50% reduction compared with the normal rates for those in each paying constituency. To encourage member growth already in 2024, this change is effective immediately for prospective members.

The reduced rate is intended to better enable and attract smaller members to join ZEP and increase the diversity among the membership between small and large undertakings.

ZEP has not increased sponsorship rates for several years. Nevertheless, the costs of running the secretariat have increased due to inflation over the past three years. In addition, with additional capacity and a desire to expand our advocacy work, additional costs are expected over the coming year. Therefore, from 2025, sponsorship rates for paying members will increase by 10%.

Membership value

As discussed during previous Advisory Council meetings, ZEP proposes to formalise that participation in its External Relations Committee and Working Group Policy & Funding is exclusive to its members.

The AC is invited to approve the proposed revision.

2.d. Revision of the bylaws and decision-making process – for approval

The following changes are proposed in the draft ZEP bylaws (*see below*):

- Updating the ZEP narrative (“trusted advisor to the EU on industrial carbon management”), (sections 1.1, 2.1, 3.1, 5) - *aligning the bylaws with the updated ZEP introduction*
- Updating ZEP constituency names (sections 3.2.1, 3.3.3, 4.1) - *formalising the updated constituency names*
- Clarifying the mandate of the AC representative – engaging in a personal capacity whilst representing their organisation (section 3.2.6) - *clarifying the mandate, as requested by ZEP members*
- Adding general guidelines for ZEP sign-off procedure (section 3.3.5, new Annex) - *establishing guidance sign-off procedures, as requested by ZEP members*
- Participation in the External Relations Committee and Policy and Funding Working Group is exclusive for ZEP members (sections 6 and 7) - *formalising this aspect of the ZEP member value proposition, as discussed in previous Advisory Council meetings.*

The AC is invited to approve the proposed revision of the bylaws.

2.e. New recruitment – for information

ZEP Communications ASBL (ZEP-C), the legal entity of ZEP established in 2005, has recruited three staff members. These positions are funded directly by ZEP member sponsorships, as agreed in the ZEP-C budget for 2024.

Eadhard Pernot, Policy and Advocacy Director, started on 1 March 2024.

Contact: Eadbhard.Pernot@ZEPlatform.eu

Eadbhard joins us from our member, Clean Air Task Force, where he led their policy work on carbon capture for over two years and brings extensive experience and knowledge on EU industrial carbon management policy.

Rosa Franco Morocho, Office Manager (part-time), started on 26 February.

Contact: Rosa.Franco.Morocho@ZEPlatform.eu

Kristin Heidebroek, Advocacy and Communications Officer, starting on 21 March.

Contact: Kristin.Heidebroek@ZEPlatform.eu

Kristin has been supporting the activities of the ZEP Secretariat since July 2023 in her capacity as the CCSA's Public Affairs and Communications Officer in the Brussels office. She has been facilitating the External Relations Committee as well as the Technology Committee. Additionally, she played an integral part in organising the first Projects Network meeting in partnership with Porthos.

2.f. ACEC renewal – for information

According to ZEP bylaws, members of the ACEC will serve for a renewable three-year period. The vice-chairs are elected by a majority vote of the members of their respective constituent groups. The following Vice-Chairs have been proposed for renewal by their constituencies:

- Nils Røkke (Academia and Research Organisations)
- Lamberto Eldering (Energy Companies)
- Jonas Helseth (Civil Society Organisations)

The other two Vice-Chairs have not yet served for the three years since their previous appointment.

The AC is invited to approve the renewal.

2.g. Introduction of Orlen, ZEP's latest member – for information

The Advisory Council voted to approve ORLEN's application as ZEP member on 14 February 2024.

ORLEN is an integrated, multi-utility company, operating in Central Europe and Canada. ORLEN provides energy and fuel to over 100 million Europeans, while advanced products are marketed to over 100 countries across six continents. ORLEN pursue strengthening its position as a regional leader in energy transition by implementing clean and sustainable technologies, as well as power generation based on low- and zero-emission sources. Our actions are driven by a strategic goal of reaching emission neutrality by 2050 ([link to the website](#)).

ORLEN was the first energy company in Central Europe to declare an ambition to achieve carbon neutrality by 2050. ORLEN is upholding this commitment and will fast-track the transition with new investments. By 2030, ORLEN intends to reduce emissions in refining, petrochemical and upstream segments by 25%. In addition, ORLEN will cut carbon intensity in the energy segment by 40% and net carbon intensity for total energy sold by the ORLEN Group by as much as 15%.

ORLEN's representative at the ZEP Advisory Council is Agnieszka Baran. She has been the Director of the CCS Programme Office in ORLEN since the beginning of 2023 (in ORLEN since 2016). She is responsible for implementing and coordinating CCS projects in the whole ORLEN Capital Group (e.g. ECO2CEE project). Agnieszka has over ten years of experience in the oil and gas industry and the energy sector in strategy initiation, planning and execution of high CAPEX projects. Agnieszka holds a master's degree in Chemical and Process Engineering from the Warsaw University of Technology and postgraduate studies in Controlling and Project Management from the Warsaw School of Economics.

2.h. RWE's application to become a ZEP member – for approval

RWE is a German multinational energy company with a diverse mix of generation technologies, including renewable and fossil energy. The RWE representative would be Adriaan Van der Maarel (see *resume below* and link to the [LinkedIn profile](#)), a Senior Advisor on Public Affairs and Corporate Responsibility at RWE.

The AC is invited to approve RWE's application for membership.

2.i. New ZEP representatives – for approval

The following organisations have appointed new ZEP representatives. The proposed representatives are:

- Codie Rossi, Clean Air Task Force (link to the [LinkedIn profile](#));
- Benedicte Staalesen, Northern Lights (link to the [LinkedIn profile](#)); and
- Leila Heidari, TotalEnergies (link to the [LinkedIn profile](#)).

The AC is invited to approve the three new representatives.



Zero Emissions Platform

Industrial Carbon Management

Introduction in one sentence

Zero Emissions Platform (ZEP) is the trusted advisor to the European Union on industrial carbon management and seeks to accelerate its deployment in line with Europe's climate ambition.

Introduction in one paragraph

Zero Emissions Platform (ZEP) is the trusted advisor to the European Union on industrial carbon management. Our comprehensive technical work and policy advice builds on a broad, diverse member base, ranging from energy producers and industrial companies to infrastructure and equipment providers, environmental NGOs, academia, and trade unions. ZEP runs the European Technology and Innovation Platform under the European SET-Plan funded by the Horizon Europe grant and collaborates closely with the European Commission.

Our mission is to accelerate the deployment of industrial carbon management in line with Europe's climate ambition.

Full introduction

Established in 2005, Zero Emissions Platform (ZEP) is the trusted advisor to the European Union on industrial carbon management technologies. We work on developing and accelerating the commercial deployment of these climate technologies to achieve climate neutrality by 2050 and net negative emissions after that:

- Carbon Capture and Storage (CCS)
- Carbon Capture and Utilisation (where CO₂ is stored in a manner intended to be permanent)
- Bio-Carbon Capture and Storage (BioCCS)
- Direct Air Capture with Carbon Storage

ZEP runs the European Technology and Innovation Platform under the European SET-Plan funded by the European Framework Programme and collaborates closely with various services of the European Commission on several common deliverables.

Our fact- and science-based policy advice and technical work builds on a broad, diverse member base, ranging from energy producers and industrial companies to infrastructure and equipment providers, environmental NGOs, academia, and trade unions. ZEP functions as the epicentre of the industrial carbon management community in Europe. By fielding input from scientific, commercial development and civil society members, we enable all stakeholders with an interest in industrial carbon management to influence EU policymaking.

Our mission is to accelerate the deployment of industrial carbon management in Europe in line with Europe's climate ambition.



Zero Emissions Platform Bylaws

March 2024

For approval at the Advisory Council 78

Table of contents

1	Introduction.....	4
1.1	Status of the document	4
1.2	Reviews and modifications of ZEP bylaws.....	4
2	Organisational structure	5
2.1	ZEP Objectives.....	5
2.2	Organisation structure	5
3	Advisory Council	6
3.1	Role and tasks.....	6
3.2	Rules of procedure	7
3.2.1	Mandate and obligations of members of the AC	7
3.2.2	Selection and rotation of members.....	7
3.2.3	Appointment of chair and vice chairs.....	7
3.2.4	Changes in membership during a mandate	7
3.2.5	Organisation of meetings.....	8
3.2.6	Representation and quorum	8
3.2.7	Admission of third parties	8
3.2.8	Decision making.....	8
3.2.9	Establishment of working groups.....	9
3.2.10	Transparency.....	9
3.2.11	Amendment to the rules of procedure and terms of reference.....	9
3.3	Terms of reference	9
3.3.1	Guiding principles and values.....	9
3.3.2	Deliverables	9
3.3.3	Composition, balance, and inclusiveness	10
3.3.4	Membership profile	10
3.3.5	Method of working	11
3.3.6	ZEP operations and staff	11
4	Advisory Council Executive Committee	11



4.1	Composition and membership.....	11
4.2	Mandate.....	12
4.3	Rules of procedure:	12
5	ZEP Committees	12
6	Working Groups and Temporary Working Groups	13
7	External Relations Committee	13
8	Government Group	13
	Annex. General guidelines for ZEP sign-off procedure.....	14

1 Introduction

1.1 Status of the document

This document is the agreed description of the organisational structure and workings of the Zero Emissions Platform (ZEP). ZEP is the trusted advisor to the European Union on industrial carbon management. Its comprehensive technical work and policy advice builds on a broad, diverse member base, ranging from energy producers and industrial companies to infrastructure and equipment providers, environmental NGOs, academia, and trade unions.

ZEP runs the European Technology and Innovation Platform under the European SET-Plan funded by the Horizon Europe grant and collaborates closely with the European Commission.

The document replaces the ZEP bylaws of December 2023.

1.2 Reviews and modifications of ZEP bylaws

This document uses as a basis the ZEP bylaws of December 2023. The following additions and amendments have been applied:

- Updating the ZEP narrative (“trusted advisor to the EU on industrial carbon management”), (sections 1.1, 2.1, 3.1, 5)
- Updating ZEP constituency names (sections 3.2.1, 3.3.3, 4.1)
- Clarifying the mandate of the AC representative – engaging in personal capacity whilst representing their organisation (section 3.2.6)
- Adding general guidelines for ZEP sign-off procedure (section 3.3.5, new Annex)
- Participation in the External Relations Committee and Policy and Funding Working Group is exclusive for ZEP members (sections 6 and 7)

2 Organisational structure

2.1 ZEP Objectives

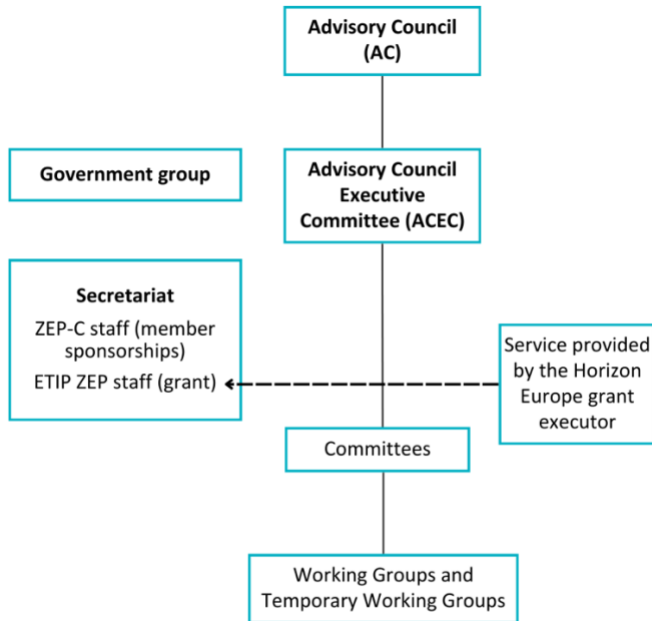
The objectives of ZEP (approved by AC61) are:

- Determining and creating in the political economy the conditions necessary to reach net-zero GHG emissions in Europe by 2050 with a focus on energy and industrial sectors.
- Demonstrating that the implementation of carbon management technologies at scale now is essential to achieve this goal.
- Accelerating the deployment of large-scale CO₂ transport and storage networks, which enable clean, competitive energy and industrial sectors, including early large-scale clean hydrogen and carbon dioxide removal (negative emissions).

2.2 Organisation structure

The structure of ZEP is depicted in the following graph and detailed in subsequent chapters:

- The Advisory Council (AC) is the body of ZEP members. It is responsible for all decisions.
- The Advisory Council Executive Committee (ACEC) represents the AC and takes decisions when the AC is not in a position to do so.
- The Government Group consists of representatives from European governments.
- Committees are the bodies from which ZEP will form working groups (WG) and temporary working groups (TWG) for delivering specific tasks (e.g. technical reports and position papers), based on Terms of References approved by the AC.
- The External Relations Committee (ERC) guides ZEP's regular external relations and communications.
- The ZEP secretariat supports the implementation of the AC and ACEC decisions and manages the ZEP operations.



3 Advisory Council

3.1 Role and tasks

The mission of the AC is to develop and consolidate a joint vision and to facilitate efficient operation of ZEP, ensuring its strategic relevance within a European and global context. ZEP's core purpose is to advise the European Union Institutions on all issues concerning developing and accelerating the commercial deployment of the following carbon management technologies to achieve climate neutrality by 2050 and net negative emissions after that:

- Carbon Capture and Storage (CCS)
- Carbon Capture and Utilisation (where CO₂ is stored in a manner intended to be permanent)
- Bio-Carbon Capture and Storage (BioCCS)
- Direct Air Capture with Carbon Storage.

The role of the AC is to:

- Set overall scope, strategic goals, performance targets and deliverables.
- Steer ZEP's operations.
- Seek to advise on public private partnerships and initiatives.

- Act as a focal point for developing a policy interface between platform operations and policymaking bodies.

3.2 Rules of procedure

3.2.1 Mandate and obligations of members of the AC

AC members agree to commit sufficient time to actively participate in the AC work and to attend all AC meetings. In carrying out their work, AC members shall respect its Terms of Reference (see paragraph 3.3).

AC members shall undertake to act in ZEP's interests and declare to the chair any potential conflict of interest that may arise on any matter under discussion.

All ZEP members apart from Academia/Research organisations and Civil Society Organisations will sponsor the ZEP secretariat and additional activities through the ZEP Communications ASBL (Belgian non-profit organisation) for services and amounts agreed by the AC.

- The proposal for the budget and sponsoring amounts shall be decided at the latest in December of the preceding year.
- ZEP shall seek co-sponsoring from the European Commission.

3.2.2 Selection and rotation of members

The Advisory Council shall appoint its members. Selection criteria will be defined by the AC, based on an offer of commitment, demonstrated experience relevant to ZEP's objectives, representativeness, and a track record of high-level management and strategy development. There should be an adequate balance between stakeholders, nationalities, and gender.

As a guiding principle, AC membership should be renewed every three years.

3.2.3 Appointment of chair and vice chairs

The AC members will select a chair and five vice-chairs, according to the decision-making rules described below. The chair and vice-chairs together constitute the ACEC.

3.2.4 Changes in membership during a mandate

Any new AC member shall be appointed based on the transparent selection criteria mentioned under section 3.2.2.

AC members may terminate their membership at any time, by informing the chair in writing. Wherever possible, sufficient notice should be given to allow a suitable replacement to be found.

If members of the AC demonstrate a lack of commitment, such as persistent failure to attend plenary meetings, they may be asked to resign their membership. The AC will decide whether to appoint replacements for such members.

When the profile of an AC member, regarding the aspects as described in paragraph 3.3.5 (membership profile) of these bylaws, changes significantly, that member is obliged to notify the chair.

3.2.5 Organisation of meetings

AC meetings are organised four times per year and the calendar will be published sufficiently in advance.

The secretariat is responsible for the organisation and facilitation of all ZEP meetings, including proposing draft agendas, circulating documentation in a timely fashion, preparation of meeting minutes, and follow-up on actions.

3.2.6 Representation and quorum

Members of the AC are nominated by their organisation and the AC is expected to appoint them in their personal capacity.

The personal commitment of members is paramount and their substitution in meetings is strongly discouraged. Exceptionally, and only with the prior consent of the chair, substitutes or 'proxies' may be allowed to participate, vote, and contribute to the discussions on behalf of the member they are substituting. Substitutes must be at senior management level.

AC members may seek prior consent to be accompanied to a particular meeting by a technical expert, where justified.

Votes and decisions require participation of 50% or more of the AC members.

3.2.7 Admission of third parties

The AC may invite other participants to its meetings, as appropriate, e.g. in cases where specialist expertise is required to deal with specific issues. Such invitees shall not enjoy membership rights and may be requested to withdraw from the meeting or parts of it.

3.2.8 Decision making

The chair shall make every reasonable effort to facilitate consensus amongst AC members.

Votes and decisions require participation of 50% or more of the AC members.

If the AC remains divided on an issue, the chair may exceptionally request members to vote. Decisions will be subject to a simple majority vote, with the chair holding the casting vote. The outcome of the vote shall be recorded in the minutes of the meeting.

If necessary, the AC decision may be obtained by a written procedure via email.

- The voting is only valid if the meeting is quorate (participation of 50% or more of the AC members).
- If a member does not reply to the request of casting an email vote, it cannot be assumed that this person is either in favour or against. It can only mean that this member does not participate.

- The conditions must be clearly stated in the email which invites voting, including that if the conditions are not met then a decision has not been reached.
- If responses to the request for an email vote significantly deviate from what was asked, they shall not be taken into consideration.

3.2.9 Establishment of working groups

In carrying out its mandate, in accordance with the Terms of Reference, the AC shall establish Working Groups (WG) and Temporary Working Groups (TWG), as it deems necessary.

The AC shall decide on the mandate and chair(s) for the WGs and TWGs. The composition of the WGs and TWGs will be established under the responsibility of its chair(s), who will report to the Committee and seek advice where appropriate.

3.2.10 Transparency

The AC shall have a high regard for the transparency of its activities and the need both for inclusivity and to inform all relevant stakeholders of ZEP's operations.

In principle, all adopted documents that do not have a confidential nature, including meeting agendas and minutes, relating to the work of the AC, shall be made publicly available on the website.

The AC shall make every effort to consult all relevant stakeholders on documents under preparation that have a general interest.

3.2.11 Amendment to the rules of procedure and terms of reference

The terms of reference and rules of procedure of the AC shall be reviewed, and if necessary, amended on a three-year basis.

3.3 Terms of reference

3.3.1 Guiding principles and values

The AC will seek to ensure that EU policy objectives, principles and values are fully reflected in target setting and implementation of ZEP operations.

The AC will ensure that the results of its activities will be widely disseminated to maximise transparency and encourage inclusion.

3.3.2 Deliverables

The main deliverables that ZEP will work towards are:

- Strategic agenda for research and innovation
- Strategy for deployment
- Advise on technology, policy and legislation, economics, and funding
- Initiatives towards investment and business development
- Strategy for international co-operation
- Action plan on safety, codes, and standards
- Action plan for education and training and promoting public awareness.

3.3.3 Composition, balance, and inclusiveness

The AC will be composed of an appropriate number of members, as deemed necessary to carry out its mission, drawn from a range of relevant stakeholders including, but not exclusively, representatives of the following:

- Energy companies
- Industrial companies
- Equipment manufacturers and infrastructure companies
- Academia and research organisations
- Civil society organisations

The range of stakeholders will reflect the need for efficiency and transparency. Stakeholders should reach consensus to facilitate a balanced composition of the AC regarding nationalities, gender, and industrial sectors.

The European Commission (EC) will support the development of ZEP and participate in ZEP's meetings and events as an observer.

3.3.4 Membership profile

Members should be at a management level in their organisation, which should have significant involvement in ZEP's activities. They should also have access to authoritative experts of international standing involved in a wide range of activities relevant to ZEP.

Industry associations can apply for ZEP membership if they meet all of the following eligibility criteria:

- Associations promote carbon capture and storage and/or carbon capture and utilisation technologies, and/or CCS-based carbon dioxide removal technologies
- Associations actively engage in the recognition of these technologies as climate mitigation solution to achieve EU's 2050 climate neutrality target

- Associations bring knowledge and expertise in either (parts of) the value chain of technologies outlined above and/or promote the necessary of policy tools or financial solutions to scale up these technologies.
- Associations will provide in-kind contribution to ZEP's work by participating in its committees and/or working groups and contributing to the deliverables of those groups

Associations would join the appropriate ZEP constituency group as listed in section 3.3.3.

Members should be able to make an active contribution to the AC and be able to influence stakeholders on the planning of work programmes, foster partnerships and leverage resources. They will need to demonstrate a high degree of commitment to ZEP and be able to devote sufficient time to its activities.

They will participate in a personal capacity, not representing their specific organisation.

3.3.5 Method of working

The AC will maintain a joint vision and direction for ZEP. Reports, position papers, opinions, and recommendations will be communicated to the Member States, the European Institutions, and other relevant stakeholders. These documents will also be made available on the ZEP website.

The general guidelines for ZEP sign-off procedure are provided in the annex of these bylaws.

3.3.6 ZEP operations and staff

A ZEP Secretary General leads the secretariat, which is responsible for managing ZEP operations and *inter alia*:

- Implementation of ZEP's strategy and work programme as decided by the AC and ACEC
- Organising and supporting the work of the ZEP AC, ACEC, Government Group, Committees, WGs and TWGs, etc.
- Organising and supporting ZEP's work on external relations, communications, and information dissemination.

4 Advisory Council Executive Committee

4.1 Composition and membership

The members of the AC will select a chair and five vice-chairs. Together with the chair the vice-chairs constitute the ACEC. The vice-chairs each represent constituent member groups of ZEP:

- Energy companies
- Industrial companies
- Equipment manufacturers and infrastructure companies
- Academia and research organisations

- Civil society organisations

The chair of the AC is also the chair of the ACEC. The chair will be elected by a majority vote of all AC members. The vice-chairs will be elected by a majority vote of the members of their respective constituent group. Members of ACEC will serve for a renewable three-year period.

4.2 Mandate

The ACEC is in general responsible for initiating and steering processes within ZEP on behalf of the AC, when the AC is not in the position to do so. This is based on the following delegated limited decision-making power by the AC:

- The ACEC will act on behalf of the AC on urgent issues
- The ACEC will not take action or decisions that, by judgement of the ACEC, are contentious, unless urgency makes it impossible to await a meeting by the AC
- The ACEC is accountable to the AC for all its actions and decisions.

ACEC members shall register as members of ZEP communications ASBL in order to safeguard the interests of the AC members of ZEP.

4.3 Rules of procedure:

Meetings of the ACEC will be planned as needed to progress ZEP's operations. Records of these meetings will be circulated at the following AC meeting for its information and approval.

Decisions of the ACEC require participation of at least 2/3 of the ACEC members and shall preferably be taken on a consensus basis. If this is not possible the decisions will be the subject of a qualified majority vote and require the minimum support of 2/3 of the ACEC members (decisions made by the ACEC using voting, will be reviewed by the successive AC meeting, and can be undone by a 2/3 majority vote by the AC members). The outcome of the vote shall be recorded in the minutes of the meeting.

ACEC members shall make every reasonable effort to participate in ACEC decision making processes.

5 ZEP Committees

Committees:

- Are a group of individuals who are interested, willing and able to work collaboratively on the work programme decided by the AC. Membership should have balanced representation from ZEPs constituency groups and is open to all stakeholders interested in the development and deployment of carbon management technologies in Europe.
- Will form WGs or TWGs for delivering specific work. Representatives from non-ZEP AC member companies can participate in TWGs. A good balance between ZEP constituency groups should be ensured in WGs and TWGs.
- Have a minimum of two co-chairs. The co-chairs participate in the regular ACEC meetings.

- Meet at least three times per year.
- Provide assurance (are responsible for the quality) of the work generated by WGs and TWGs.

6 Working Groups and Temporary Working Groups

Persons who would like to become member of a WG or TWG are invited to contact the ZEP secretariat. Membership in the WGs and TWGs is decided by the secretariat in cooperation with the WG or TWG co-chairs respectively. A membership list of all working groups is made public on the website.

Chairmanship of the working groups:

- All working groups should preferably have two co-chairs.
- The co-chairs of the working groups are approved by the AC.
- Should a co-chair demonstrate a lack of commitment, such as persistent failure to attend working group meetings, the AC will have the possibility to appoint a replacement co-chair.

Participation in the ZEP Policy and Funding Working Group is exclusive to ZEP members.

7 External Relations Committee

ZEP's External Relations Committee (ERC) oversees and provides input to external relations and communications activities.

- ERC will preferably have three co-chairs, preferably from different constituencies.
- ERC has the mandate to guide the activities as agreed by the AC.
- Participation in the ERC is exclusive to ZEP members.
- ERC will report to the ACEC.

8 Government Group

The ZEP Government Group (GG) operates independently from the AC.

The GG appoints its own members and meets regularly, at its own discretion. It maintains a record of its meetings. Meetings can only be attended by invitation. The GG is supported by the ZEP secretariat.

All members of the GG will be invited to attend AC meetings.

Annex. General guidelines for ZEP sign-off procedure

APPROVING ZEP CONTENT (POLICY PAPERS, LETTERS AND REPORTS)

1. Reports fall under the responsibility of the respective Committees.
2. Policy papers and letters are the domain of the Policy and Funding Working Group (P&F WG), with input allowed from the External Relations Committee (ERC), where relevant (limited to style and messaging rather than on content).
3. Co-chairs of the committees should allow more time to approve policy items where ZEP members' views diverge, and achieving an agreement is more challenging.
4. Members must respect deadlines.
5. When members cannot agree on a common position, the Committee Co-chairs are responsible for finding a solution or asking the ACEC for guidance.
6. Where urgent policy responses are needed, the ERC can act quickly whilst consulting the P&F WG. However, such material should build on existing positions and agreed language. The P&F WG leads the development of new positions, and its Co-chairs need to act swiftly—the Co-Chairs judge whether the sign-off times (below) can be shortened.

Approval procedure

- A) Drafting phase: either secretariat or members draft a policy paper, letter or report, with one Committee or WG in the lead.
- B) Review of the first draft: five working days.
- C) Review of the second draft: three working days.
 - a. In this phase, the ERC is provided with a copy and can provide input on style and messaging.
- D) Approval of the final product: ACEC, two working days.

CO-SIGNING LETTERS

ZEP is regularly asked to support or co-develop letters written by a third party. In these matters, the below approval procedure should be followed.

Joint writing of a letter where a third party prepares the first version:

- A) Review of the first draft: five working days. P&F WG is in the lead, supported by the ERC.
- B) Review of the second draft: three working days.



C) Approval of the final product: ACEC, two working days.

Co-signing of a letter where no textual changes are allowed:

A) Approval of the final product: Lead by the ACEC, with consultation of the co-chairs of the P&F WG and the ERC: two working days.

Contact

www.linkedin.com/in/adriaan-van-der-maarel-2776b67 (LinkedIn)

Top Skills

Dutch

Change Management

Corporate Communications

Adriaan Van Der Maarel

Team lead / Senior advisor Public Affairs and Corporate Responsibility at RWE in NL

St Michielsgestel, North Brabant, Netherlands

Experience

RWE

Senior advisor Public Affairs and Corporate Responsibility
October 2014 - Present (9 years 6 months)

Nederland

Lobby

Stakeholder management and engagement

Corporate Responsibility

Member Technical and Advisory Committee Bettercoal

PvdA

Fractievoorzitter GroenLinks/PvdA Gemeente Sint-Michielsgestel
September 2020 - Present (3 years 7 months)

Essent

9 years

Senior advisor Public Affairs

October 2008 - October 2014 (6 years 1 month)

Senior Communication Advisor

November 2005 - September 2008 (2 years 11 months)

Manager Internal Communication a.i.

July 2006 - February 2007 (8 months)

Sociale Verzekeringsbank

Communication advisor

May 2001 - November 2005 (4 years 7 months)

AD Groene Hart

Journalist

October 1997 - April 2001 (3 years 7 months)

Education

University of Amsterdam

Political Science - International Relations · (1993 - 1997)

Fontys University of Applied Sciences

Academie voor Journalistiek en Voorlichting/PR · (1989 - 1993)

Van der Hilst

Agenda Item 3: Updates from governments and projects – for information

3.a. Industrial carbon management strategy

The European Commission published the Communication 'Towards an ambitious Industrial Carbon Management for the EU' on 6 February 2024 (link to the [communication](#) and [ZEP's first response](#)).

There will be a presentation by the European Commission at the meeting.

3.b. Key points of Germany's carbon management strategy

The German Ministry for Economic Affairs and Climate Action published the key points of its upcoming carbon management strategy (link to the [press release](#)).

There will be a presentation by the German Ministry for Economic Affairs and Climate Action at the meeting.

3.c. Equinor's increased ambitions for CO₂ transport and storage

Equinor announced an increase in its ambitions to transport 30 to 50 million tonnes of CO₂ per year by 2035. Equinor's plans cover different projects, including the CO₂ Highway Europe, Northern Lights, Smeaheia CCS, and Endurance (link to the [2024 capital markets update](#)).

There will be a short update by Equinor at the meeting.

3.d. Update on the Aramis project

The Aramis project is a CO₂ transport and storage project (link to the [project](#)). The project is expected to take a final investment decision in 2025. In the launching phase 5 million tonnes of CO₂ would be transported and stored.

There will be an update by EBN at the meeting.

Agenda Item 4: SET Plan – IWG9, for information and guidance

4.a. IWG9 2024 work plan

The objective of the Strategic Energy Technology (SET) is to accelerate the deployment of cost-competitive clean technologies, including CCS and CCU. The SET Plan identifies ten priority actions that could help accelerate the energy system transformation. Each of these actions has developed an Implementation Plan with targets and Research & Innovation activities needed to achieve them. The progress of the Implementation Plan is monitored by an Implementation Working Groups (IWG). IWG9 is the Implementation Working Group for Carbon Capture Utilisation and Storage (link to the [website](#)).

The IWG9 monitors progress on CCS/CCU. In 2016, the European Commission, the SET Plan countries, and industry agreed on 10 targets for CCS and CCU for 2030. These were updated in 2020 (link to the [past 10 targets](#)). To deliver on the 10 targets, IWG9 identified 8 R&I activities (link to the [IWG9 2017 Implementation Plan](#)). 4 working groups will work to produce new R&I activities and targets by June 2024. The first working groups are scheduled to take place in April.

4.b. SET Plan

The European Commission adopted its Communication on the revision of the Strategic Energy Technology Plan on 20 October 2023 (link to the [communication](#)).

The Commission plans to take action on:

- new priorities, including sustainability by design, skills development, research and innovation, tailored to societal needs, digitalisation, and market accessibility;
- expand the scope to encompass all strategic renewable energy technologies;
- establish a dedicated workstream on hydrogen to implement the 'ERA pilot on Green Hydrogen';
- forge cooperation between the European Technology and Innovation Platforms and the European industrial alliances; and
- provide a roadmap for progress that will continue to be monitored through the SET Plan information system (SETIS).

The Net Zero Industry Act is expected to formalise the SET Plan Steering Group under the provisional agreement published in February (link to the [final compromise text](#)). The Steering Group will be chaired by the European Commission and composed of Member States representatives. The tasks of the Steering Group include “*providing guidance and direction to the SET Plan*” and “*help support the development of clean, efficient and cost-competitive energy technologies through coordination and collaboration in clean energy research and innovation (R&I) and where relevant with third countries upon invitation.*”

There will be an update on the IWG9 work plan 2024 and the Horizon Europe programme.

Agenda item 5: Updates from Committees – *for information and guidance*

5.a. Policy and Economics Committee

The Policy & Economics Committee held its latest meeting on 8 February. The next Committee meeting will take place on 23 May.

The Working Group (WG) Policy & Funding held its latest meeting on 28 February. The group worked on ZEP's draft response to the industrial carbon management strategy, exchanged views and positions on the provisional agreement on the Net Zero Industry Act, worked on the draft paper on funding requirements, and presented the way forward for a paper on low-carbon products (*see attached pre-read*). *The next WG meeting will take place on 10 April.*

Lina Strandvåg Nagell (Bellona) will be on a leave.

The AC is invited to approve the nomination of Hannah Biro (Bellona) as co-chair of the Policy & Economics Committee and co-chair of the Working Group Policy & Funding, as an interim replacement of Lina Strandvåg Nagell (Bellona) during her leave.

Charles-Albert Bareth (secretariat) has been invited to participate in the stakeholder committee of the SESAME research project (Trajectoire socio-technique pour le stockage géologique de CO₂ terrestre en France, 'Socio-technical trajectory for the onshore geological storage of CO₂ in France') as ZEP representative. This project aims to identify the conditions under which onshore geological storage could be set up in France. Partners include, among others, the CNRS, the University of Pau, the University of Lorraine, the University of Rennes, BRGM, and IFPEN. The committee would meet once a year for four years to receive information on research progress, suggest avenues of research, and contribute to the relevance of the roadmap. The committee would be composed of representatives of competitiveness clusters, professional organisations, medium-sized and large companies, administrations, and state agencies. The first meeting is scheduled for June 2024.

The AC is invited to approve the nomination of Charles-Albert Bareth (secretariat) as ZEP representative in the stakeholder committee of the SESAME project.

Consultations and calls for feedback – *for information*

Consultation in preparation:

- European Commission (EC) call for feedback on *Emissions trading system (ETS) – permanent emissions storage through carbon capture and utilisation* ([link to the call for feedback](#)). The call would include the proposed draft act.

EU policy and funding timelines

- The EU policy timeline with a focus on CCS and CCU can be found here ([link](#)).

- The EU funding timeline with a focus on CCS and CCU can be found here ([link](#)).

Public and private funding for CCS deployment – for approval

The WG Policy & Funding worked through a draft paper (*see pre-read below*) highlighting that public and private funding for the deployment of CCS should match forecasted spending needs. During AC77 in December 2023, the Advisory Council agreed to postpone the approval to allow members to provide additional input. Updates were also included following the publication of the industrial carbon management strategy and the outcome of the inter-institutional negotiations on the Strategic Technologies for Europe Platform.

The AC is invited to approve the draft ZEP paper.

Position on the Industrial Carbon Management Strategy – for approval

The WG Policy & Funding prepared a draft paper (*see pre-read below*) highlighting ZEP's position on the strategy and its various components.

The AC is invited to approve the draft ZEP paper.

Germany launches first climate protection contracts bid – for information

The German ministry for economic affairs and climate protection launched on 12 March 2024 the first bidding process for the “climate protection contracts” funding programme. Companies from the energy-intensive industry that were selected during the preparatory procedure in 2023 can apply for 15-year funding for their decarbonisation projects within the next four months. The funding programme totals €4 billion and is approved under the European Commission state aid procedure. According to the ministry, 350 million tonnes of CO₂ could be avoided until 2045 ([link to the press release](#)).

Cross-border agreement between Denmark and France – for information

Denmark and France signed a bilateral agreement under the London Convention and a letter of intention to create a political cooperation agreement on 4 March 2024 ([link to the letter of intent](#)). The bilateral agreement aims to legally allow the transport and storage of CO₂ between the two countries.

New CO₂ storage areas in Norway – for information

The Norwegian government opened two new areas for CO₂ storage permit applications. This opening follows companies asking to make specific areas available. The application deadline is 24 April 2024 ([link to the press release](#)).

National energy and climate plans – for information

Member States were due to submit their draft updated national energy and climate plans (NECPs) by June 2023. The EC has included CCS and CCU technologies in its NECP guidance stating that “*Member States are encouraged to include in their updated NECPs the*

efforts planned to enable their industries to capture and store their inherent process emissions permanently in geological storage sites, in accordance with Directive 2009/31/EC” (link to the [guidance](#)). The draft updated NECP of Austria was not available on the EC website as of 11 March 2024 (link to the [website](#)).

EU ETS allowance price – for information

The price of EU ETS allowances stood at €60.5 on 5 March 2024¹.

5.b. Technology Committee

The latest Technology Committee meeting took place on 22 February. Members discussed the potential Working Group and activities to be organised under the Technology Committee. The launch of the working groups updating the CCUS SET Plan R&I targets was presented to the Committee. Members were briefed on the publication of the Industrial Carbon Management Strategy, the EU 2040 Climate targets, the agreement on the Strategic Technologies for Europe Platform (STEP), and the first meeting of the Technical Committee working on standardisation. Presentations sharing insights were provided on the North Sea CCUS infrastructure, the CO₂ infrastructure study by the Joint Research Centre, direct ocean capture, and the transport of CO₂ in solid form.

The next Technology Committee meeting is planned for 8 May.

Activities

The Technology Committee will organise a webinar on CO₂ storage with the purpose of publishing a paper based on its conclusions. The date of the webinar is to be confirmed.

Temporary Working Group Carbon Dioxide Removal

The TWG CDR held a meeting on 11 January. During the meeting, members discussed the developments on the carbon removal certification framework. The Coordinator of the Mission Innovation CDR provided key takeaways from COP28. Additionally, Hafslund Celsio presented a presentation on CDR from WECCS. Lastly, members discussed topics relevant to the expert groups on carbon removal.

The TWG CDR held another meeting on 29 February. The TWG welcomed European Commission representatives who provided a thorough brief on the provisional agreement on the carbon removal certification framework and the publication of the Industrial Carbon Management Strategy relating to CDR. The Coordinator of the Mission Innovation CDR provided a brief on their latest meeting and work programme. Lastly, members discussed the upcoming expert groups taking place between 16 and 17 April.

¹ [Carbon Price Tracker](#). Ember.

In order to support the ZEP representative in the expert group, an ad hoc meeting will be organised ahead of the expert group meeting, beginning of April.

The next TWG CDR meeting is planned for 25 April (date to be confirmed).

5.d. Government Group

The latest Government Group meeting took place on 7 March 2024 online. The German ministry for economic affairs and climate action gave a presentation on the key points of the upcoming carbon management strategy. Participants exchanged on recent national developments on CCS and CCU. The European Commission presented the final compromise text for the Net Zero Industry Act, the provisional agreement on the carbon removal certification framework, and the study 'Shaping the future CO₂ transport network for Europe'. The Croatian Ministry of Economy, Business and Trade gave a presentation on Croatia's plans for CCS and CCU.

The next meeting will take place on 7 June.

Draft Public and private investments must fit CCS deployment requirements

Public and private funding for the deployment of CCS should match forecasted spending needs. Sustained public investments both at the European and national level will be necessary to make CCS economically viable and reach climate neutrality. Private investments should be incentivised via adequate business cases and a more robust EU ETS price.

Large-scale funding is required

Europe will not reach climate neutrality by 2050 without carbon capture and storage (CCS). All reliable modelling scenarios, including those from the Intergovernmental Panel on Climate Change and the International Energy Agency, consider the deployment of CCS critical to reaching climate neutrality by 2050¹². Achieving climate neutrality requires a major transformation of energy-intensive and process industries, such as cement, lime, steel, aluminium, waste-to-energy, and chemicals. The Antwerp Declaration signed by industrial companies and trade unions is the latest signal that CCS is critical to preserve industrial production and high-quality jobs in the EU³.

The deployment of carbon dioxide removals (CDR), such as bioenergy with carbon capture and storage (BECCS) and direct air carbon capture and storage (DACCS), is another crucial component of the EU's climate toolbox. Their deployment at scale must complement and not displace emissions reductions; the latter must remain the priority of climate action. The European Commission's industrial carbon management strategy includes the following figures:

- 50 million tonnes of CO₂ captured annually by 2030 in the EU;
- 280 million tonnes of CO₂ captured annually by 2040 in the EU;
- 450 million tonnes of CO₂ captured annually by 2050 in the EU; and
- 250 million tonnes of CO₂ as a minimum injection capacity by 2040 in the European Economic Area.

The strategy also foresees that the 2030 injection capacity objective of 50 million tonnes of CO₂ per year under the Net Zero Industry Act requires approximately €3 billion of investments in storage facilities⁴. A report by the Joint Research Centre estimates that the investment needs for the transport infrastructure of pipelines and ships associated with the 2030 objective would range between approximately €6.2 and 9.2 billion by 2030⁵. Finally, a recent analysis estimates a cumulative funding gap of €10 billion by 2030 for currently announced CCS projects⁶.

¹ [Climate Change 2022: Impacts, Adaptation and Vulnerability](#), Intergovernmental Panel on Climate Change, 2022.

² [Carbon capture, utilisation and storage](#), International Energy Agency, 2022.

³ [Antwerp Declaration for a European Industrial Deal](#), 2024.

⁴ [Industrial carbon management strategy](#), European Commission, 2024.

⁵ [Shaping the future CO₂ transport network for Europe](#), Joint Research Centre, 2024.

⁶ [The gap between carbon capture and storage ambitions and available funding](#), Carbon Limits and Clean Air Task Force, 2022. The analysis is based on project announcements as of January 2022 and assumes a carbon price increasing from €60 per tonne to €93 per tonne in 2030.

The next European Commission should commit to funding

ZEP recognises and strongly welcomes the support provided to date to CCS projects by the Innovation Fund and other EU and national funding programmes. The European Commission proposed an increase in the Innovation Fund and Horizon Europe programmes under the proposed Strategic Technologies for Europe Platform (STEP). ZEP regrets that there will be no increase in these two programmes under the informal interinstitutional agreement.

There is a wider concern that current national budgetary ambitions are not in line with the funding required for adequate CCS deployment. In addition, the current price of EU ETS allowances has fallen to approximately €56 per tonne⁷, which is far from providing the required incentive for private companies and mechanically reduces the size of the Innovation Fund. An increase in EU ETS prices that is not accompanied by adequate incentives could also threaten the financial viability of industrial sites investing in CCS. A general increase in EU climate funding for industrial decarbonisation would address these concerns and avoid divergence between Member States. This increase could take various forms, including Carbon Contracts for Difference (CCfDs) at the national level, tax credits coordinated at the EU level for industrial installations investing in full decarbonisation or an overarching funding programme replicating the precedent set by the NextGenerationEU Green Bonds.

The industrial carbon management strategy indicates that the European Commission could “work, as of 2024, with Member States in the transparent and coordinated design of a possible important project of common European interest for CO₂ transport and storage infrastructure via the JEF-IPCEI” and “engage, as of 2024, with the European Investment Bank on financing of CCS and CCU projects”. These two possible mechanisms are welcome and would trigger additional investments. The commitment of the next European Commission on these two proposed policies and their prioritisation would be welcome.

Funding must match deployment requirements

The total size of national funding programmes, EU funding programmes, and private investments must reach the scale required to reach net zero by 2050 and enable intermediary targets in 2030 and 2040. Developing national investment schemes at the required scale and enhancing EU funding programmes supporting CCS, such as the Connecting Europe Facility for Energy (CEF Energy), the Innovation Fund, Horizon Europe, and LIFE, would help match funding requirements. National funding programmes have proven critical to support CCS projects and should be replicated across Europe. Unused funds from the Recovery and Resilience Facility should also be allocated to funding programmes focused on CCS deployment at scale. The effective allocation of the funds available under these programmes to CCS projects is crucial. The cohesion between the various funding programmes is also key to avoiding a fragmented funding approach. Future Horizon Europe programmes should provide adequate opportunities in the form of dedicated calls for the funding of innovative research projects and pilots on CCS and carbon removal technologies and their applications to industrial decarbonisation. The Innovation Fund should continue supporting the deployment of large-scale industrial CCS projects across hard-to-abate sectors via grant funding. Dedicated competitive bidding processes should also be launched for low-carbon technologies, including CCS. In that regard, the Hydrogen Bank could

⁷ [The price of emissions allowances in the EU](#), Ember, as of 11 March 2024.

support the deployment of CCS in Europe if its scope is expanded to the production of low-carbon 'blue' hydrogen. The CEF Energy should continue supporting the development and implementation of cross-border CO₂ network projects of common interest (PCI) and projects of mutual interest (PMI) projects. This includes, for the first time, CO₂ storage under the 1st PCI/PMI list. The introduction of new eligible infrastructure categories under the revised TEN-E regulation, such as hydrogen, should not jeopardise CEF Energy funding allocated to cross-border CO₂ network projects. Its budget should be increased accordingly to accommodate the expansion of infrastructure categories.

Support schemes should be predictable and designed to specifically address market failures preventing the deployment of the full value chain. Policy schemes targeted to one element of a CCS project are likely to be less successful than a holistic approach that facilitates planned and sequential investment decisions in full-chain, multi-actor CCS projects. CCS projects typically require major investment decisions with very large capital expenditures and can also face uncertain utilisation rates and cross-chain risks. These major infrastructure developments are likely to require bespoke policy approaches that provide projects with capital support and address the full-chain financial risks. Funding capacity building for EU and national public authorities will also be crucial to reduce bottlenecks and avoid project delays. This includes staff recruitment and staff training on CCS.

A more robust and stable EU ETS price, combined with an effective carbon border adjustment mechanism to avoid carbon leakage, would help incentivise industrial decarbonisation at scale. Strong business cases along the value chain are required to guarantee sufficient private investments where public funding is not required. Finally, supporting markets for low-carbon products, including via public procurement, would help incentivise private investments in CCS.

The benefits of investing in CCS are significantly higher than their deployment costs. Funding programmes and investment frameworks need to align with this reality.

About the Zero Emissions Platform

The Zero Emissions Platform (ZEP) is a European Technology and Innovation Platform (ETIP) under the Commission's Strategic Energy Technology Plan (SET-Plan) and acts as the EU's adviser on the deployment of Carbon Capture and Storage (CCS), and Carbon Capture and Utilisation (CCU).

ZEP supports the European Union's commitment to reach climate neutrality by 2050, defined as net-zero greenhouse gas (GHG) emissions by 2050. To this end, CCS technologies represent readily available and cost-efficient pathways for the decarbonisation of industrial and energy sectors in the European Union. Some applications of CCU – where CO₂ is stored in a manner intended to be permanent – can also contribute to this goal.

Draft ZEP's response to the Industrial Carbon Management Strategy

The publication of the industrial carbon management strategy is a milestone for the deployment of carbon capture and storage in the EU. ZEP has historically called for an EU strategy dedicated to carbon capture and storage and carbon capture and utilisation. We are very pleased that the European Commission is presenting a clear way forward. Increasing funding and providing a regulatory framework for CO₂ transport is needed to reach the target set.

A landmark recognition for CCS and CCU

The publication of the Industrial Carbon Management Strategy on 6 February 2024 represents a critical step for carbon capture and storage (CCS) and carbon capture and utilisation (CCU). This roadmap clearly shows that CCS is unavoidable for Europe to reach climate neutrality. Some applications of CCU – where CO₂ is stored in a manner intended to be permanent – can also contribute to this goal. Finally, the deployment of carbon dioxide removals (CDR), such as bioenergy with carbon capture and storage (BECCS) and direct air carbon capture and storage (DACCS), remains a crucial component of the EU's climate toolbox.

No climate neutrality without CCS

As stated in the past Europe will not reach climate neutrality by 2050 without CCS. All reliable modelling scenarios, including those from the Intergovernmental Panel on Climate Change and the International Energy Agency, consider the deployment of CCS critical to reaching climate neutrality by 2050¹². Achieving climate neutrality requires a major transformation of energy-intensive and process industries, such as cement, lime, steel, waste-to-energy, and chemicals. The Antwerp Declaration provides another clear reminder of the critical role of CCS and CCU in preserving Europe's industrial base and high-quality jobs and the need for strong funding instruments³.

Objective and modelling figures

The European Commission published the Communication 'Europe's 2040 climate target and path to climate neutrality by 2050 building a sustainable, just and prosperous society' and an accompanying impact assessment on 6 February 2024⁴⁵. The Communication recommends a 90% net GHG emission reduction target compared to 1990 levels as the EU climate target for 2040, in line with ZEP's request⁶. This overarching target is broken down for CCS and CCU in the Industrial Carbon Management Strategy with the following modelling figures:

¹ [Climate Change 2022: Impacts, Adaptation and Vulnerability](#), Intergovernmental Panel on Climate Change, 2022.

² [Carbon capture, utilisation and storage](#), International Energy Agency, 2022.

³ [Antwerp Declaration](#), 2024.

⁴ [Communication 'Europe's 2040 climate target and path to climate neutrality by 2050 building a sustainable, just and prosperous society'](#), European Commission, 2024.

⁵ [Impact assessment report](#), 2024.

⁶ [Submitted questionnaire responses](#), 2023.

- 50 million tonnes of CO₂ captured annually by 2030 in the EU⁷;
- 280 million tonnes of CO₂ captured annually by 2040 in the EU; and
- 450 million tonnes of CO₂ captured annually by 2050 in the EU.

Capturing 50 million tonnes of CO₂ per year, in line with the EU injection capacity objective under the Net Zero Industry Act, represents a large step that will only be achieved if adequate funding and regulatory conditions are rapidly put in place both at the EU and national level. This includes, for instance, stronger national subsidy schemes, a larger Innovation Fund programme, and a larger Connecting Europe Facility programme. The strategy states that “*values representing the average of scenarios [scenario 2] S2 and [scenario 3] S3 are reported*” to build the modelling figures. Clarifications regarding the modelling choices and the assumptions that underpin the different 2040 climate scenarios are necessary and crucial.

Funding and policy support is needed to achieve the strategy’s objectives

The large-scale deployment of CCS is a “*large endeavour*”, as mentioned in the strategy, and will require large resources. The European Commission’s strategy states that:

- an annual storage capacity of 50 million tonnes of CO₂ requires approximately €3 billion investments in CO₂ storage facilities;
- investment needs range between €6.2 and €9.2 billion for the transport infrastructure (pipelines and ships) associated with the 50 million tonnes target; and
- a funding shortfall of €10 billion by 2030 is expected for currently announced CCS projects⁸.

Addressing the funding gap

This assessment implies that billions of euros of public and private investments must be unlocked in the next five years to stay in line with the EU climate objectives and address the incentives put forward by the Inflation Reduction Act in the United States. The Communication on the proposed EU 2040 climate target states that “*an additional 1.5% of GDP compared to the 2011-2020 decade should be invested annually in the transition*”⁹. The strategy suggests the development “*of a possible important project of common European interest (IPCEI) for CO₂ transport and storage infrastructure*” as of 2024. An IPCEI could help close the funding gap and allow Member States to pool resources to develop a joint transport network. The strategy also proposes that the European Commission engage, as of 2024, with the European Investment Bank on financing of CCS and CCU projects. This second approach is strongly welcome and would avoid divergence between Member States. The next European Commission’s commitment to these two proposals will be key. Finally, the European Commission

⁷ According to the European Commission modelling, CO₂ would predominantly come from industrial process emissions with a much smaller share of fossil fuel and biogenic emissions. CDR would exclusively come from BECCS. Approximately a couple of million tonnes of CO₂ would be dedicated to the production of e-fuels.

⁸ [The gap between carbon capture and storage ambitions and available funding](#), Carbon Limits and Clean Air Task Force, 2022. The analysis is based on project announcements as of January 2022 and assumes a carbon price increasing from €60 per tonne to €93 per tonne in 2030.

⁹ [Communication ‘Europe’s 2040 climate target and path to climate neutrality by 2050 building a sustainable, just and prosperous society’](#), European Commission, 2024.

foresees to “develop policy options and support mechanisms for industrial carbon removals, including if and how to account for them in the EU ETS”. ZEP welcomes the European Commission’s commitment to investigate how permanent carbon removals could be accounted for and covered by emissions trading, among other options, as laid out in the revised EU ETS directive.

Other possibilities to close the identified funding gap include national support schemes, clear business cases, a more robust and stable EU ETS price combined with an effective carbon border adjustment mechanism, a substantial increase in the Innovation Fund and Horizon Europe programmes, and an increase in the Connecting Europe Facility. The next Multiannual Financial Framework represents a significant opportunity in that regard. Together with other signatories, ZEP has signalled the value of “fostering a market for low-carbon products, with the inclusion of concrete demand and supply side policy initiatives” adding that “such initiatives targeting the demand and supply for low-carbon products will be crucial to advance industrial decarbonisation, including through the scale-up of European green lead markets”¹⁰.

CCS as a license to operate fossil fuel power plants

Based on the proposed EU 2040 climate targets, the strategy mentions “the broader deployment of CO₂ capture power installations [in 2040] in a context where the overall use of fossil fuel in power installation is significantly lower towards 2050” indicating the forecasted application of CCS on fossil fuel power plants. As stated in the consultation that preceded the strategy’s publication^{11,12}, CCS can ensure clean flexibility to the European electricity grids and should be a requirement for the license to operate any power plant relying on fossil fuels¹³. CCS should not be aimed at prolonging fossil fuel-based power generation. The International Energy Agency stated that no new oil and gas fields can be approved for development to reach net-zero emissions by 2050, with production falling “from almost four-fifths of total energy supply today to slightly over one-fifth by 2050”¹⁴.

Carbon capture and utilisation

The strategy identifies CCU as its third pathway “where industry uses captured CO₂ in synthetic products, chemicals, or fuels. Whilst initially using all types of CO₂, over time a strategic focus of utilisation value chains on capturing biogenic or atmospheric CO₂ will yield higher climate benefits”. As highlighted by ZEP in the past, some applications of CCU – where CO₂ is stored in a manner intended to be permanent (e.g. in construction material) – can contribute to reaching climate neutrality by 2050. The strategy’s CCU modelling figures foresee a large increase in CO₂ capture for utilisation with half of the CO₂ used in 2050. The proposed EU 2040 climate target foresees close to 90 million tonnes

¹⁰ [Joint letter ‘Call for concrete demand and supply side initiatives to promote a market for low-carbon products in the Industrial Carbon Management Strategy’](#), 2024.

¹¹ [Consultation ‘Industrial carbon management – carbon capture, utilisation and storage deployment’](#), European Commission, 2023.

¹² [ZEP’s response to the industrial carbon management strategy](#), 2023.

¹³ [Carbon capture and storage for clean flexibility](#), ZEP, 2022.

¹⁴ [Net Zero by 2050 A Roadmap for the Global Energy Sector](#), International Energy Agency, 2021.

of CO₂ captured for e-fuel production in 2040. Clarifications are necessary regarding the assumptions that underpin these figures and the role of CCU in climate change mitigation.

Investment atlas of potential CO₂ storage sites

The proposal to set up an investment atlas of potential CO₂ storage sites is welcome and in line with ZEP's paper on the Net Zero Industry Act, which states that *"a high-quality European Storage Atlas will be instrumental to scale up the CO₂ storage capacity and the CCS value chain. The publication of areas where permitting is possible will greatly facilitate the work of storage operators and feed into the European Storage Atlas"*¹⁵. The cooperation with neighbouring countries, such as Norway and the UK, will be key. The focus should not only be on ensuring that the total injection capacity available is sufficient but also on bringing down costs by creating economies of scale via a Europe-wide storage market. Efforts aimed at mapping industrial emitters, transport infrastructure, and storage sites will help provide clarity and ensure an effective coordination of different projects.

A regulatory framework for CO₂ transport should be a priority

The strategy indicates that *"a possible future CO₂ transport regulatory package from 2024"* could be developed by the European Commission. ZEP has repeatedly called for a regulatory framework for CO₂ transport, including as co-chair of the CCUS Forum working group on CO₂ infrastructure, and welcomes this reference¹⁶. Commitment to developing this regulatory package within the next year will be crucial. Assessing the possibility of reusing existing infrastructure is also positive and could potentially reduce initial infrastructure costs. The development of emissions accounting rules to enable all means of transport of CO₂ is key and will ensure an adequate framework for non-pipeline transport solutions. The creation of minimum standards for CO₂ streams is in line with the findings of the CCUS Forum¹⁷.

Carbon dioxide removals

The proposed EU 2040 climate target includes different modelling figures for emissions reductions, nature-based carbon removals, and industrial removals. However, separate targets for emission reductions, nature-based carbon removals and industrial removals are missing, which is not aligned with ZEP's consultation response¹⁸. The proposed EU 2040 climate target also foresees that industrial carbon removals would amount to more than 60 million tonnes of CO₂ in 2040. Clarity regarding the respective role of BECCS and DACCS, their respective contribution to permanent CO₂ storage and e-fuel production, and the assumptions underlying these figures are strongly encouraged.

The European Commission considers that *"the role of industrial removals [compared to land use removals] remains much more limited in the short run, given the need to fully develop some aspects of the technology to ensure large-scale deployment"*. ZEP still considers that a stronger reliance on industrial removals is to be recommended since the evolution of land use sinks is uncertain. ZEP

¹⁵ [ZEP paper on the Green Deal Industrial Plan and the Net-Zero Industry Act](#), 2023.

¹⁶ [ZEP proposal for a regulatory framework for CO₂ transport infrastructure](#), 2022.

¹⁷ CCUS Forum report ['An interoperable CO₂ transport network – towards specifications for the transport of impure CO₂'](#), 2023.

¹⁸ [ZEP's response to the public consultation on the EU climate target for 2040](#), 2023.

considers that industrial removals should be relied upon primarily to counterbalance residual emissions rather than depending on uncertain and shorter-lived land sinks for that purpose. The development of high-quality credits is critical for industrial carbon removal activities is crucial and should be based on a robust, transparent, and complete quantification of the removed CO₂. The EU approach can provide a good basis for the development of similar approaches outside the EU. EU climate action should prioritise emission reductions over removals.

R&I

As indicated previously, an increase in Horizon Europe would ensure that the latest technologies are available for the large-scale deployment of CCS required to reach the proposed 2040 climate objectives. ZEP welcomes the strategy's indication that the Commission will continue to invest in R&I for CCS and CCU to contribute to standardisation and would “boost EU research, innovation and early-of-a-kind demonstration for novel industrial technologies to remove CO₂”. ZEP would recommend enhanced efforts in R&I.

About the Zero Emissions Platform

The Zero Emissions Platform (ZEP) is a European Technology and Innovation Platform (ETIP) under the Commission's Strategic Energy Technology Plan (SET-Plan) and acts as the EU's adviser on the deployment of Carbon Capture and Storage (CCS), and Carbon Capture and Utilisation (CCU).

ZEP supports the European Union's commitment to reach climate neutrality by 2050, defined as net-zero greenhouse gas (GHG) emissions by 2050. To this end, CCS technologies represent readily available and cost-efficient pathways for the decarbonisation of industrial and energy sectors in the European Union. Some applications of CCU – where CO₂ is stored in a manner intended to be permanent – can also contribute to this goal.

Agenda Item 6: ZEP Projects Network – *for information*

6. ZEP Projects Network

The Zero Emissions Platform together with Porthos organised the first Projects Network in Rotterdam on 24 and 25 January 2024. The meeting was held in Rotterdam where the Porthos project is located.

Agenda

The meeting took place over two days, the **full draft agenda is appended to this document** (annexe 1).

Participants

The meeting gathered over **120 delegates** from across **17 European countries**. About 80% of participants said they were involved in a CCS project (commercial scale or pilot).

Recommendations and takeaways

The key takeaways of sessions were noted down by participants on flip charts to share these with participants after the meeting.

These recommendations are currently under review and will be shared with participants and policymakers when available.

Feedback from participants

16 participants responded to an after-event survey to gather their feedback.

Here is an overview of some the highlight of the feedback:

- The general organisation of the meeting was perceived positively by participants.
- Participants were generally satisfied with the agenda and its length.
- Participants enjoyed the format of the sessions, with a preference for presentations.
- Regarding topics to be covered in future meetings, most participants indicated “private investors and CCS business cases”, “shipping” and “connecting policymakers”.
- Respondents responded unanimously they would attend ZEP Projects Network meetings.
- Most respondents stated “maybe” as to whether they would attend if the Projects Network had a participation fee.

Next meeting

The next Projects Network meeting is yet to be defined.

Annex 1.

Network Project Meeting 1 – Porthos – 24 and 25 January 2024

Day 1: Wednesday January 24th (Hilton Hotel, Weena 10, Rotterdam)

Sessions	Speakers	Time
Registration		08.15 – 09.00
1 Introduction & welcome – for information		09.00 – 10.15
<ul style="list-style-type: none"> • Presentation/Welcome - ZEP projects network chair • Welcome speech - by Porthos project director • Introduction by moderator (HSE, program) • Keynote speech + Q&A – Role of Port of Rotterdam in development in CCS (by former CEO of Port of Rotterdam) 	Stijn Santen Hans Meeuwssen Jelte Bosma Allard Castelein Q&A	09:00 – 09:10 09:10 – 09:20 09:20 – 09:25 09:25 – 09:55 09:55 – 10:15
2 Presentation - Zero Emission Platform as the catalyst for CCS in Europe		10:15 – 10:30
<ul style="list-style-type: none"> • ZEP's work • What's ahead and why is it important? • Why membership matters 	Eve Tamme (ZEP)	
Coffee & networking		10:30 – 11:00
3 Keynote presentation + Q&A: Porthos' main lessons learned		11:00 – 12:00
<ul style="list-style-type: none"> • Project history and scope • Project dimensioning and oversizing (economy of scale) • Project governance • Project financing (IRR demands of public investments) 	Dorus Bakker (Porthos)	
Lunch & networking		12:00– 13:00
4 Parallel workshop A – Business model and funding		13:00 – 14:00
<ul style="list-style-type: none"> • Commercial model (send or pay/force majeure) 	Stijn Santen (moderator)	

	<ul style="list-style-type: none"> Contact structure developing over time Value chain management (decisions and risks) 	Alexander Vink (Porthos)	
4	Parallel workshop B – Repurposing depleted gas fields: Flow assurance study and injection design <ul style="list-style-type: none"> Flow assurance modelling in pipelines and reservoirs Conditions (CO2 specifications, pressure, flow) and CO2 behaviour Repurposing gas wells for CO2 injection and well decommissioning Engineering challenges related to CCS and Porthos wells 	Jelte Bosma (moderator) Wouter Schiferli Frans Smits (both Porthos)	13:00 – 14:00
5	Panel discussion: Perspective of Porthos customers <ul style="list-style-type: none"> CCS as part of decarbonisation of industry portfolio Different capture technologies/ processes Blue H2 production and usage 	Jelte Bosma (moderator) Floris Mackor (Air Liquide) Paul Hoogeveen (Air Products) Jan Huinink (Shell) Yelda Guven (ExxonMobil)	14:00 – 15:30
Short coffee break			15:30 – 15:45
6	Presentation - Role of the Government <ul style="list-style-type: none"> Cross-border transport EU funding and subsidies (PCI, CEF) Rijkscoördinatieregeling, MIEK, SDE++ 	Mark Driessen (Porthos) Natalie Dobson (Ministry of Economic Affairs)	15:45 – 16:30
7	Wrap-up day 1 <ul style="list-style-type: none"> Thanks to all the speakers Practical announcements on reception, dinner and start of day 2 	Jelte Bosma (moderator)	16:30 – 17:15
Reception			17.15 – 18.15

Free time to fresh up before dinner

Network dinner (included)

19:00 – 22:00

Dinner speech by Stijn Santen "Dealing with the unexpected"

Day 2: Thursday January 25th (Hilton Hotel, Weena 10, Rotterdam)

Sessions	Speakers	Time
Registration		08:45 - 09.10
1 Introduction & welcome <ul style="list-style-type: none"> Introduction sessions day 2 	Jelte Bosma (moderator)	09.10 - 09.20
2 Discussion – Project pitches: introducing new CCS projects <ul style="list-style-type: none"> Bifrost (Total Energies, Denmark) Sluiskil (Yara, NL) Northern Endurance Project (BP, UK) Prinos (Energean, Greece) Baltic CCS consortium (KN, Lithuania) 	David Nevicato (Total Energies) Michael Schlaug (Yara) Luke Warren (BP) Nikolas Rigas (Energean) Justinas Jazbutis (KN)	09.20 - 11.00
Short coffee break		11:00 - 11:20
3 Presentation – Stakeholder and community engagement <ul style="list-style-type: none"> Societal and political support for CCS at different levels Stakeholder management and engagement Improving public perception 	Mark Driessen (Porthos)	11.20 - 12:15
Lunch & Networking		12.15 - 13.15
4 Parallel Workshop A – Storage permitting <ul style="list-style-type: none"> Project Maturation Storage permit application (criteria and process) Reservoir characteristics (containment, injectivity, capacity) Storage permit appraisal process 	Stijn Santen (moderator) Willem-Jan Plug Wiebe van Driel (Porthos & TNO-AGE)	13.15- 14.20

5	Parallel Workshop B – Offshore engineering		
	<ul style="list-style-type: none"> • Choice of suppliers • Modifications of platforms • Impact of CO2 on choices of materials and equipment (pipelines) 	Jelte Bosma (moderator) Jan de Pagter (Porthos)	13.15 - 14.20
5	Plenary workshop – Management of Project Execution		
	<ul style="list-style-type: none"> • Project governance from several parent organisations • Suppliers and contractors • Investments and decision making 	Helen Miley (Porthos)	14.20 - 15.20
Coffee & Networking			15.20 - 15:50
7	Plenary wrap-up of all sessions & Goodbye		
	<ul style="list-style-type: none"> • Main Messages of speakers • Main take-aways from participants • Reflections for next project event 	Jelte Bosma (moderator) Stijn Santen	15.50 - 16.25 16:25 - 16:35
Closing drinks (optional)			16:35 -17:30

Agenda item 7: External Relations Committee Update – for information

7.a. ZEP advocacy and communication strategy

An advocacy implementation plan has been developed to deliver ZEP's advocacy and communication strategy. This plan was developed together with a group of volunteers from the External Relations Committee who provided feedback and guidance on the delivery plan. This plan aims to guide the activities carried out by members of the ZEP Secretariat recruited under ZEP Communications.

7.b. ZEP External Relations Committee update

The **ERC held this year's first meeting on the 26 January**. Members were presented with the first draft of the advocacy and communication strategy implementation plan for guidance. The Committee also provided guidance on ZEP's statement on STEP, the publication of a IWG9 public perception report, and shared best practices on awareness-raising activities.

The **ERC held another meeting on 8 March**. On the agenda, members provided guidance on ZEP's outreach efforts, shared best practices for guidance, and were presented to ZEP's information toolkit created in 2022 to be updated.

The next ERC meeting is scheduled on 3 May.

7.c. Overview of ZEP advocacy and communication activities

ZEP x ETIP Bioenergy webinar on BECCS

ZEP jointly organised a webinar on Bioenergy with CCS together with ETIP Bioenergy. The webinar took place on 18 December and gathered close to 100 participants. ZEP Secretary General Joop Hazenberg provided an overview of the state of play of CCS and the potential for BECCS projects. ZEP members provided presentations of projects and considerations to have for BECCS.

CO₂ transport by ship report

ZEP launched the report on CO₂ transport by ship on 9 January together with the Carbon Capture and Storage Association. The webinar gathered a panel of policymakers, industry leaders, shipping companies and NGOs. The webinar was followed by 250 participants joining online. The recording of the webinar is available [here](#). The report was widely disseminated to relevant stakeholders and policymakers. The report was picked up by multiple carbon market news outlets (e.g., [Carbon Pulse](#) and [Carbon Capture Journal](#)).

Statement on STEP negotiations

ZEP published a statement on the Strategic Technologies for Europe Platform (STEP) supporting the European Commission's proposal and calling on decision-makers to support increased funding programmes. A link to this statement can be found [here](#). The ZEP secretariat reached out to decision-makers with this statement and pushed the statement on social media. The agreement reached on STEP does not foresee any increased funding under the Innovation Fund and Horizon Europe, contrary to the European Commission's initial proposal.

Open letter on low-carbon products

ZEP joined a group of 13 industry and civil society organisations calling on the European Commission to include policy initiatives to foster a market for low-carbon products, ahead of the publication of the Industrial Carbon Management Strategy. This initiative was launched in response to the leaked strategy draft which made no mention of low-carbon products. A copy of this letter can be found [here](#). The final Communication on the Industrial Carbon Management Strategy does mention the challenge linked to matching supply and demand for low-carbon products.

Clean Transition Dialogues

The Zero Emissions Platform Secretary General, Joop Hazenberg, received two formal invitations to partake in the Clean Transition Dialogues. The stakeholder dialogues were initiated by the President of the European Commission to gather input from key stakeholders to prepare for an Industrial strategy. The Secretary General took part in the third round of dialogues on 22 February, upon the invitation of the President of the European Commission Ursula Von der Leyen and the Executive Vice-President Maroš Šefčovič. This round focused on clean technologies. The Secretary General was invited to speak on funding and the need to support CCS projects.

The Secretary General has been invited to take part in another Clean Transition Dialogue organised by Executive Vice-President Margrethe Vestager and Executive Vice-President Maroš Šefčovič on 22 March. The discussion will focus on the steel industry.

Outreach to the European Commission

ZEP was invited for a meeting together with members of the Executive Vice-President Maroš Šefčovič Cabinet. The meeting was organised following up on ZEP's initiative to meet with the Commissioner following his appointment as chief of the European Green Deal. A delegation of ZEP representatives met with the Cabinet on 12 December. ZEP is invited to meet with a cabinet member of the Commissioner in charge of Climate Actions Wopke Hoekstra for an introductory meeting on 18 December.

EUSEW

ZEP submitted an application to organise a policy session at the EU Sustainable Energy Week 2024 together with the GCSSI. Selected sessions are expected to be announced by mid-March.

ZEP annual conference

ZEP annual conference has been officially reported for the autumn, a new date and location will be announced.

Speaking engagements at external events

This is an overview of ZEP's past and upcoming speaking engagements:

- 14 December 2023: presentation of ZEP at Hydrogen Leadership Forum, Rotterdam – ZEP Sec Gen
- 30 January 2024: The Development of Carbon Capture and Storage in the EEA, EFTA House – ZEP Chair
- 21 February 2024: presentation of ZEP Projects Network at CCUS ZEN conference Madrid – ZEP Sec Gen
- 27 February 2024: Roundtable CCS of the European House, Ambrosetti – ZEP Sec Gen
- 17 April 2024: GCSSI European CCS Forum, Rotterdam – to be determined
- 30 May 2024: Swedish Energy Agency Annual Network Event, Stockholm – ZEP Chair

Agenda item 8: CCUS Forum – *for information*

8.a. CCUS Forum

Background

The European Commission (EC), in cooperation with the Danish Ministry of Climate, Energy and Utilities, hosted the third CCUS Forum edition in Aalborg (Denmark) on 27 and 28 November 2023 (link to the [event](#)). The EC announced the creation of 4 working groups (WGs) under the Forum:

- WG on CO₂ infrastructure;
- WG on CO₂ standards;
- WG on public perception; and
- WG on carbon capture and utilisation.

During the CCUS Forum, five countries (Denmark, Germany, France, the Netherlands, and Sweden) signed the Aalborg Declaration, which states that CCS and CCU as essential technologies needed to support the green transition and reach net-zero emissions by 2050. The declaration also calls for the need to develop a European CCS and CCU market (link to the [declaration](#)). The 2024 edition will be jointly organised in Pau (France) by the EC and the French Ministry for Energy Transition on 10 and 11 October 2024.

According to the Industrial Carbon Management Strategy, the EC foresees new roles for the Forum, including to:

- *“from 2024, work towards proposing an EU-wide CO₂ transport infrastructure planning mechanism in cooperation with Member States and the CCUS Forum stakeholder platform”;*
- *“work, as of 2024, with Member States in the transparent and coordinated design of a possible important project of common European interest for CO₂ transport and storage infrastructure via the JEF-IPCEI. To start the process as soon as possible, use the existing CCUS Forum platform to ensure good coordination, set the timing, monitor progress and maintain the pace of the project. Consider establishing a dedicated high-level platform to work beyond 2030”;* and
- *“use the CCUS Forum and other Commission fora, including the European Sustainable Energy Week, to stimulate public debate and increase public understanding and awareness on industrial carbon management”.*

ZEP actions

ZEP applied to participate in the four working groups and to co-chair the working group on CO₂ infrastructure and the working group on CO₂ standards. The call for co-chairs is not open at the moment.

Agenda item 9: Net Zero Industry Act – *for information*

9.a. Net Zero Industry Act

Background

The Net Zero Industry Act is part of the Green Deal Industrial Plan for the Net-Zero Age, published on 1 February 2023, aiming to provide a supportive environment for scaling up EU manufacturing capacity for the net-zero technologies and products required to meet EU's ambitious climate targets (link to the [communication](#)). The European Commission published the proposal for a regulation Net Zero Industry Act on 20 March 2023 (link to the [proposal](#)).

Interinstitutional negotiations (trilogues) took place on 13 December 2023, 22 January, and 6 February 2024. The European Parliament and the Council reached a provisional agreement during the third trilogue held on 6 February 2024 (link to the [provisional agreement](#)). The ITRE committee approved the provisional agreement on 22 February 2024.

Next steps

The European Parliament is expected to vote on the provisional agreement during the 22-25 April plenary session. Following this plenary vote, the Council is due to approve the European Parliament's position.

ZEP actions

ZEP published its position on the proposal (link to the [paper](#)), published an open letter together with other stakeholders on Article 18 (link to the [letter](#)), and engaged with policymakers in the context of the trilogues.

Agenda item 10: EU certification framework for permanent carbon removals – *for information*

10.a. EU certification framework for permanent carbon removals, carbon farming and carbon storage in products

Background

The European Commission published a proposal for a regulation in 2022 to establish a voluntary framework for certifying carbon removals across the EU (link to the [proposal](#)). The proposed voluntary framework is intended to accelerate the deployment of high-quality carbon removal and soil emission reduction activities in the EU. The proposal would lay down rules for the certification of carbon removals by independent certification bodies appointed by public or private certification schemes recognised by the European Commission.

The European Parliament and the Council reached a provisional agreement on the proposal for an EU certification framework for permanent carbon removals on 19 February 2024 (link to the [provisional agreement](#)).

Next steps

The European Parliament's ENVI Committee approved the provisional agreement on 11 March 2024. The European Parliament is scheduled to vote the provisional agreement during a plenary session on 11 April 2024. Following this plenary vote, the Council is due to approve the European Parliament's position.

The expert group on carbon removals supports the European Commission in its work on voluntary certification, including the preparation of legislative texts (link to the [expert group](#)). Kristin Jordal is ZEP's representative in the expert group. The next expert group meeting will take place from 15 to 17 April (link to the [meeting](#)).

Agenda item 11: Study ‘Shaping the future CO₂ transport network for Europe’ – *for information*

11.a. Study ‘Shaping the future CO₂ transport network for Europe’

Background

The European Commission’s Joint Research Centre (JRC) published a study estimating the potential evolution and extent of the future European CO₂ transport network and related investment needs on 6 February 2024 (link to the [study](#)).

The study focuses on infrastructure comprising pipelines and ships that are needed to transport captured CO₂ from its sources to suitable storage sites. The study considers that this network will serve as a backbone infrastructure and could eventually enable additional connections with smaller emission sources through other transportation methods such as trucks, rails, and barges. According to the authors, these networks will be constructed at the local, regional, or national level to connect multiple CO₂ sources to a common infrastructure. The assessment focuses on the transport of CO₂ through onshore and offshore pipelines and suitable maritime ships from 2025 to 2050.

Key findings

- The future European CO₂ transport network could reach a length of 6,700-7,300 km by 2030 and 15,000-19,000 km by 2050. Its deployment could cost between €6.5 billion and €19.5 billion by 2030, rising to between €9.3 billion and €23.1 billion in 2050.
- The CO₂ transport infrastructure is a crucial factor and a key enabler of the successful large-scale deployment of CCUS. The development of a European CO₂ pipeline infrastructure will be challenging during the early phases of CCS deployment, before 2030, and alternative forms of CO₂ transport should also be explored.
- The EU lacks commercially proven CO₂ storage capacity in the early phase of CCS deployment. Coordination efforts are needed to identify suitable CO₂ storage locations. An updated European CO₂ storage atlas should be developed which will provide comprehensive and accurate information on storage potential across the continent.
- The future CO₂ transport network will exhibit a highly international character. Therefore, common quality standards for CO₂ for its transport and storage are essential.
- Investment costs could be reduced by developing storage capacities in areas where identified capacity is insufficient (e.g. southern and eastern Europe) to avoid

transport of the captured CO₂ over long distances, for example to the North Sea region.

- International coordination and collaboration is crucial for the successful, cost-optimised development of the CO₂ infrastructure.

Agenda Item 12: Actions, closing remarks, and next meeting

12.a. Next meeting dates – for information

IWG9 Plenary and ZEP Advisory Council (Wednesdays)

- 19 June

ZEP Advisory Council Executive Committee (Tuesdays)

- 16 April

Technology Committee

- 8 May

Policy & Economics Committee

- 23 May

External Relations Committee

- 3 May

DRAFT