

## ZEP Advisory Council 57 – 05<sup>th</sup> December 2018

### Draft Minutes

#### Attendance

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##### Advisory Council members

Arthur Heberle	Mitsubishi
Dider Bonijoly	BRGM
Dominique Copin	Total
Graeme Sweeney	ZEP Chairman
Jonas Helseth (alternate)	Bellona
Kim Bye Brunn (alternate)	Shell
Lamberto Eldering	Equinor
Marie Bysveen (alternate)	Sintef
Rob van der Meer	HeidelbergCement
Stuart Lodge (alternate)	BP

##### Observers and other attendees

Amélie Carron	Air Liquide
Annya Schneider	GCCSI
Antti Arasto	VTT Technical Research Centre of Finland
Brian Murphy	Ervia
Caterina de Matteis	IOGP
Claire Couet	CO2 Value Europe
Chris Davies	Independent
Eric de Coninck	ArcelorMittal
Jean-Pierre Debruxelles	Fuels Europe
Keith Burnard	IEA GHG
Martijn Van de Sande	Netherlands Enterprise Agency
Martin Schneider	ECRA
Nora Hansen	IOGP
Patrick Clerens	Energy Technology Europe
Pietro Gimondo	RINA Consulting – Centro Sviluppo Materiali Spa
Ståle Aakenes	Gassnova
Stanislas van den Berg	Total
Theo Mitchell	Enerfair Engagement / Bellona
Tomas Wyns	The Institute for European Studies, Free University of Brussels
Ugo Simeoni	European Turbine Network
Virgilijus Petuska	UAB Minijos Nafta

##### ZEP Secretariat

Luke Warren	ZEP Secretariat
Marine d'Elloy	ZEP Secretariat

##### Commission

Achim Boenke  
Arne Eriksson  
Maria Velkova  
Peter Horvath  
Vassilios Kougionas  
Jean-Louis Sangare

## ***Item 1: Introduction***

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GS welcomed AC members and observers. The agenda for the meeting was adopted.

The minutes for AC56 were approved.

There were no matters arising from the October and November ACEC minutes.

### Chair's update

GS outlined current work priorities, including the recent meeting with Carsten Bermig (Cabinet for the Internal Market, Industry, Entrepreneurship and SMEs), the SET-Plan and Parliament engagement (COP 24 Resolution, CEF, etc.)

GS said the CCUS Global Summit had been a very successful event given the global representation, forward looking conversations, and strong statements from the UK and Norway.

GS updated the AC on the Innovation Fund Expert Group meeting. GS said the meeting was very good. Most of the points previously made by ZEP have been included in the draft Delegated Act. The Expert Group will continue to be the source of advice for the establishment of the Innovation and the implementation of the Delegated Act. GS said ZEP will prepare a response to the Delegated Act. TM said that the four weeks public feedback period will start on 10<sup>th</sup> December.

Regarding the Innovation Fund's eligibility criteria, PC said that innovation will not necessarily need to be achieved by innovative technologies – it could also be achieved by innovative business cases.

GS said that a consortium led by CCSA and formed by CO2 Value Europe, BGS and Sintef has been successful in developing a proposal to provide support to the SET-Plan IWG9. The consortium is now in the Grant Agreement stage.

## ***Item 2: Secretariat update***

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### Actions from AC 56

LW provided an update on actions from the last AC meeting.

All actions have been completed. LW said the action on hydrogen is still ongoing, however, ZEP engaged in conversations on hydrogen on two occasions; at the High-level Group of Energy Intensive Industries and during the meeting with Carsten Bermig.

### 2018 ZEP-C budget:

LW said the forecast income for 2018 is €180,000. Since the AC56, an invoice has been settled by the Port of Rotterdam bringing the total income received for 2018 to €165,000. Gassnova have been contacted regarding the outstanding invoice for €15,000 that it is hoped to issue in 2018.

LW said the budgeted expenditure for 2018 is €103,492 and expenditure to date is largely as forecast. ZEP-C has no outstanding creditors.

ZEP-C started 2018 with a net equity position of -€36,650. The forecast outturn shows ZEP-C returning to a budget surplus in 2018 of €40,144 by year end.

The CCSA has signed an H2020 grant with the European Commission to continue to provide support to ZEP. LW said the grant is backdated to 1<sup>st</sup> May 2018 and supports the secretariat to 30<sup>th</sup> April 2021. LW said the backdating enables the CCSA to receive support for the activities between the end of the last grant (30<sup>th</sup> April 2018) and the signing of the new grant.

### 2019 ZEP-C budget

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LW said the AC is invited to adopt an initial 2019 ZEP-C budget for continuation of the core ZEP-C services (Chair, accounts, legal support, etc). The budget will formally be adopted at the ZEP-C AGM.

LW said the AC may wish to consider whether to build up reserves ahead of ZEP grant ending in April 2021. E.g. to cover potential delay in securing new EC funding and / or contractors being unable to provide bridging secretariat services at risk.

LW said the Secretariat has finalised procurement of professional communications to be supported under the EC grant.

LW said the AC may wish to consider supporting additional communications activities which can build on the core services.

It was agreed that the AC58 will adopt final budgets, which includes proposals for reserves that ZEP wishes to build over period of new grant, proposals for any additional communications activities.

### Personnel

LW said Helen Bray had been nominated as co-Chair of the External Relations Group and Kim Bye Bruun had been nominated co-Chair of Network Policy and Economics.

LW said the Fossil Fuel constituency agreed Lamberto Eldering as the constituency Vice-Chair serving on the ACEC.

LW said Nikki Brain will leave the Secretariat in January and will be replaced by Christopher Gent.

### ZEP review

MD presented the results of the survey which was distributed by the Secretariat in October (see slides). It was agreed that the results would be summarised in a report.

RvdM said the presentation demonstrates ZEP's value, and the quality of its work in terms of research, reports, and consultation responses. RvdM added that it will be essential to revise how ZEP communicates its results externally.

GS said that ZEP will present a 2019 workplan at the AC meeting in March.

## ***Item 3: Commission updates***

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### DG CLIMA

MV gave an update on the EU vision strategy for a climate neutral Europe by 2050. MV said the draft document is not a legislative or an official strategy, but a strategic vision supported by a detailed analysis on how the EU can deliver on the Paris Agreement while supporting its economy.

MV said the draft document is an invitation to all EU institutions and the national parliaments to debate. This EU-wide informed debate should allow the EU to officially adopt the EU strategy for emissions reductions. Given the forthcoming European elections and the new Commission, GS said it will be essential for ZEP to inform these debates and engage with relevant stakeholders.

MV said the vision document shows that it is possible to reduce emissions consistent with the Paris Agreement and there are different pathways to the 1.5 degrees target (*see slides*).

MS asked how the strategy will be implemented. MV said the document is a vision and an enabling framework. MV added that an agreement will be needed to determine whether the EU will pursue a below 2 degrees or a 1.5 degrees route. Therefore, discussions about implementation will be held after the adoption of the strategy.

LW said that there is a disconnect between the data from Member States (i.e. Committee on Climate Change in the UK) and that of the document. LW asked whether there are attempts to calibrate Member States

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analysis in the Commission's modelling. MV said that this will be the next step. Member States will submit their draft National Climate and Energy Plans by the end of 2018. The Commission will then put all National Plans together and analyse them.

GS said the treatment of heat might lack clarity. GS added that several modelling studies provide the evidence-base to demonstrate that CCS will be a driver for heat.

GS said the role of CCS is undersized and ZEP's role will be to demonstrate it.

MV updated the AC on the Innovation Fund Expert Group meeting which took place 4<sup>th</sup> December. The Draft Delegated Act has been published for feedback. The Commission hopes that the Delegated Act will be adopted by May, however, this depends on the outcome of the two months scrutiny period by the Council and the EU Parliament. MV said that in parallel the Commission will prepare the first call for proposals, which they intend to publish in 2020. MV said DG CLIMA intends to discuss all elements of the call with the Expert Group.

DG CLIMA is currently looking at the entity that could help deliver the Innovation Fund. MV said that the two key options are the EIB and the Innovation and Networks Executive Agency (INEA).

GS said there will be calls for large projects. GS said recovery rules feel generous and account for the points made by the recently published ECA report.

TM said that ZEP had pushed for flexibility and pre-financing, and is pleased to see that these elements will be pursued.

DG CLIMA intends to develop a guidance for LCA within the next year, which will allow calculating the mitigation potential of CCU projects.

GS said the Secretariat will prepare written feedback on the Delegated Act, which will be circulated to NWPE and shared with the Commission. GS added that matters around innovation and scale of impact still need to be clarified.

#### DG RTD

VK gave an update on both the ZEP grant agreement process and the SET-Plan CSA.

VK said that as part of H2020, DG RTD is currently working to gather input from different stakeholders and Member States for two calls on geological storage pilots and CCS storage applications.

VK updated the AC on proposals for Horizon Europe (formally FP9). 35% of the budget will be allocated to addressing climate change. VK said that under the proposal, CCS falls under the energy cluster and CCU falls under the industry cluster. The idea behind this is to promote co-creation and collaboration between clusters.

#### DG ENER

PH gave an update on the CCS knowledge network call. It was awarded to a new consortium led by Trinomics and also formed by TNO, Sintef, Bellona and SCCS. PH said that existing activities will need to be taken into account and built on. PH suggested that the consortium presents its forward activities at the next AC meeting in March.

PH updated the AC on the thematic group meeting on PCIs that took place in November.

PH said the deadline to apply to the third list of PCIs is March 7<sup>th</sup>. PH encouraged ZEP to help identifying new applicants/potential projects.

#### DG GROW

JLS introduced himself to the AC as he recently joined the Chemical unit. JLS said the work undertaken by DG GROW and more specifically the report on recovery and utilisation of gaseous industrial effluents is available online (<https://ec.europa.eu/growth/gie-self-assessment-tool/>, <http://ecrn.net/exploring-how-capturing-and-re-using-currently-emitted-industrial-gases-could-be-stimulated-through-industrial-symbiosis->

[final-conference-of-escss-phase-ii/, https://publications.europa.eu/en/publication-detail/-/publication/4c6a21a1-ec76-11e8-b690-01aa75ed71a1/language-en/format-PDF/source-80406946\).](https://publications.europa.eu/en/publication-detail/-/publication/4c6a21a1-ec76-11e8-b690-01aa75ed71a1/language-en/format-PDF/source-80406946)

#### ***Item 4: IEAGHG presentation on capture rates***

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KB presented a recent report from the IEA GHG (*see slides*).

LW asked whether the IEAGHG engaged with the integrated assessment community to communicate the results of the study. KB said there is a parallel study that looks at models that fed into the IPCC reports. The later study has also just been completed. GS said it would be good to undertake the same exercise with the Commission's models. LE said that the SET-Plan IWG9 subgroup on Modelling could work on the issue.

GS said ZEP should prepare a policy brief based on the evidence from the IEAGHG for to policy makers and think about how this work could be extended to encompass industrial plants.

#### ***Item 5: Overview of European Parliament, Council & other relevant activities***

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MD updated the AC on the InvestEU programme. The programme will replace the European Fund for Strategic Investments under the new Multiannual Financial Framework. Under the Commission's proposals, it will be possible for money from the Innovation Fund to transfer to Invest EU, to facilitate loans as well as grants to projects. Therefore, it is important that the Invest EU and the Innovation Fund are well aligned. The ECON and BUDG committees are currently reviewing the Commission's proposed text. ZEP has issued voting recommendations recommending that two amendments, tabled by Green MEPs, which remove CO<sub>2</sub> transport and CCS from the text.

MD updated the AC on the CEF revision. The Commission proposal states that; "to support the Union's decarbonisation objectives [...] the Commission will aim at increasing the number of cross-border smart grid, innovative storage as well as carbon dioxide transportation projects to be supported under the Programme". There were a small number of problematic amendments, seeking to remove CO<sub>2</sub> transport infrastructure, tabled by members of the Greens. ZEP ERG reached out to Rapporteurs and Advisers on this issue ahead of the vote in the Committees on 22 November and amendments were not adopted. Compromise amendments are not yet published.

MD said that in the draft EU emissions reduction vision document, CCS is included in all scenarios meeting an 80% and net-zero target. The role of CCS and CCU increases dramatically in 1.5 degree-compliant pathways due to substantial amounts of BECCS and DACCS which are used to create large volumes of synthetic fuels alongside permanent storage. Total CO<sub>2</sub> captured by 2050 ranges from 65- 606MTCO<sub>2</sub>/year in scenarios meeting 80% or net-zero targets. Total CO<sub>2</sub> captured in 1.5 degree compliant scenarios ranges from 281- 606MTCO<sub>2</sub>/year. MD said that in two of the three 1.5 degree scenarios, use of CO<sub>2</sub> is more prevalent than storage. This is because CO<sub>2</sub> from fossil fuel use is stored whereas CO<sub>2</sub> from BECCS and DACCS is used to produce synthetic fuels. The scenarios are based on the assumption that CCUS technologies are likely to pick up slowly before 2040 and accelerate only subsequently.

#### ***Item 6: Update on CCUS Developments in the Netherlands***

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MvdS updated the AC on recent CCUS development in the Netherlands (*see slides*). There will be new round of RD&D tenders in 2019 and from 2020 onwards there will be a tender scheme for 'stimulation of deployment of CO<sub>2</sub> reduction' (including CCS). GS said these developments will be important and ZEP will need to find ways in which it can support the later.

#### ***Item 8: Networks update***

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##### **Network Policy and Economics**

TWG PCIs

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LE gave the update from Network Policy & Economics. LE said there was a meeting of the Thematic Group for CO<sub>2</sub> PCIs on 7 November. The Commission announced that applications for inclusion on the 4<sup>th</sup> list of PCIs would run from 7<sup>th</sup> November to 7<sup>th</sup> March 2019.

The thematic group accepted that the same methodology and template be used as developed for the last selection process by ECORYS and RAMBOLL. The Joint Research Centre will assess the projects for this call.

Regarding the London Protocol, LE said there will be a meeting in December with the Norwegian Delegation for official feedback. Norway is taking the lead regarding the drafting of the text ahead of the next official meeting (no official date yet). The intention is to finalise the text over the summer and engage extensively with other Member States. Unilateral acceptance will be needed to implement the text. LE said that ZEP could play an important role in engaging with Member States.

#### TWG Policy and Funding

LE said that the Network was asked to support proposals put forward by Equinor to the Connecting Europe Facility regulation which propose inclusion of CO<sub>2</sub> storage and for hydrogen. As the deadline for amendments in the Parliament had passed, these have been shared with Council members and also with the Commission and the Rapporteurs on the file for information.

Regarding the Innovation Fund, GS said that the TWG will need to ensure that infrastructure projects are included in the scope and ready for the first call in 2019.

#### **Network Technology**

The last NWT meeting took place on 31<sup>st</sup> October 2018 in Brussels.

#### TWG Collaboration across the CCU Chain

##### Workstream 1 (WS1)

AH said WS1 (storage-related risks) has produced a draft report for review. The ERG prepared a dissemination plan. It was agreed that the dissemination plan should be approved after the external review of the report. It was also agreed that the report would be submitted to the ACEC for approval either in February.

##### Workstream 2 (WS2)

AH said WS2 (risk sharing in a CCS network) held two teleconferences since the ERA-NET ACT & ZEP workshop on CCS risk and liability sharing. The group is in the process of preparing a draft report, consistent with WS1 recommendations and the feedback from the workshop.

#### TWG CCU

RvdM said there has been no progress since the last AC meeting. It was previously agreed that the TWG would meet after the release of the Ramboll study to discuss ZEP's response. The study should have been released in November, however, it is unclear whether it has been published because it is not available in the public domain. The Secretariat will follow-up with DG CLIMA.

### ***Item 12: External Relations Group (ERG) update***

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TM said that since the AC56 meeting, the Secretariat has taken part in the following meetings and events:

- Gassnova CCS Safari, Norway.
- Meeting of the DG Grow High Level Expert Group on Energy Intensive Industries.
- IEA Gas & Oil Technology Collaboration Programme (IEA GOT) roundtable on "*Role of the renewable - hydrocarbon nexus in accelerating the energy transition*".

Following the event, ZEP wrote an op-ed summarising the key conclusions of the event and setting out the importance of CCS for delivering net-zero emissions. The op-ed was published in Euractiv on the 23<sup>rd</sup> October.

LW updated the AC on the communication agency tender process. CCSA has begun the process of sub-contracting for a communications agency to provide communications and PR support to ZEP. A request for proposals was sent to seven communications agencies on the 22<sup>nd</sup> October and CCSA received six proposals in response. The ERG discussed these proposals on a call on the 8<sup>th</sup> November and it was agreed to arrange follow-up calls with two agencies to further discuss their proposals. These calls were held in the week commencing 12<sup>th</sup> November. It is expected that a final decision will be made imminently.

TM updated AC on the COP24 resolution and said that the ERG and a number of other stakeholders carried out a concentrated engagement effort in the days leading up to this vote to encourage MEPs to reject the amendment. This effort was successful as the amendment was rejected, however, further engagement with the Parliament will be essential ahead of the European elections.

Regarding the Long-term Strategy, TM said the Parliament is expected to vote on 1<sup>st</sup> March on its response.

Regarding the release of the ZEP report on CO2 storage risks, TM said ZEP proposes a soft launch. The idea was approved by the AC.

GS emphasised that further work is needed on hydrogen, especially regarding Horizon Europe.

### ***Item 13: Any other Business and closing remarks***

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CdM said that IOGP was asked to undertake some work on the role of CCS and hydrogen in the decarbonisation of the gas network at the Madrid Forum. IOGP will have to deliver a presentation on the potential of CCUS in June. The work is supervised by DG ENER.

CdM said IOGP developed terms of reference for the work and are seeking feedback from stakeholders. CdM said there will be two stages. The first stage will be to collect data and analyse the collected material. CdM stressed that IOGP will need supporting evidence from stakeholders. The second stage will be to organise two workshops (in February and March). IOGP invited ZEP to contribute to this work.

### ***Actions***

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<b>Action</b>	<b>Owner</b>	<b>Deadline</b>
1	Secretariat to prepare a written response to the Innovation Fund draft Delegated Act	Secretariat
2	ZEP to present 2019 workplan at the next AC	ERG + Secretariat
2	ZEP to prepare a short report on ZEP review results	Secretariat
4	ZEP to prepare a policy brief for policy makers on capture rates based on the evidence from the IEAGHG report	Secretariat + NWPE
8	TWG Collaboration across the CCS chain WS1 report to be peer-reviewed	Secretariat
8	Secretariat to follow-up with DG CLIMA about the release of the Ramboll study on LCA	Secretariat