

## ZEP Advisory Council 59 – 05<sup>th</sup> June 2019

### Minutes

#### Attendance

---

##### Advisory Council members

Chris Littlecott	E3G
Didier Bonijoly	BRGM
Filip Neele	TNO
Florence Delprat-Jannaud	IFP Energies Nouvelles
Graeme Sweeney	ZEP Chairman
Helen Bray (alternate)	Shell
Jonas Helseth (alternate)	Bellona
Lamberto Eldering	Equinor
Marie Bysveen (alternate)	SINTEF
Philippa Parmiter (alternate)	SCCS
Rob van der Meer	HeidelbergCement
Ward Goldthorpe	Sustainable Decisions

##### Observers and other attendees

Angus Gillespie	GCCSI
Anne Cavendish	Equinor
Annya Schneider	GCCSI
Brian Murphy	ERVIA
Caterina de Matteis	IOGP
Claudia Vivalda	Vivalda Scientific
Damien Dallemagne	CO2 Value Europe
Egil Kåre Meisingset	Ministry of Petroleum and Energy, Government of Norway
Eric de Coninck	ArcelorMittal
Irma Pacevičiūtė	Equinor
Justus Andreas	Bellona
Keith Burnard	IEA GHG
Martijn Van de Sande	Netherlands Enterprise Agency
Sean Kidney	Climate Bonds
Sofie Vold Fogstad	Ministry of Petroleum and Energy, Government of Norway
Ståle Aakenes	Gassnova
Stijn Santen	CO2 Net
Svend Munkejord	SINTEF

##### ZEP Secretariat

Luke Warren	ZEP Secretariat
Marine d'Elloy	ZEP Secretariat

##### Commission

Arne Eriksson	DG ENER
Maria Velkova	DG CLIMA
Peter Horvath	DG ENER
Vassilios Kougionas	DG RTD

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

---

GS welcomed AC members and observers. The agenda for the meeting was adopted and the minutes from AC58 were approved.

There were no matters arising from the April and May ACEC minutes.

### Chair's update

GS said that ZEP will support the European Commission in organising a workshop in early September at the EU-Norway CCS conference, which will be attended by the Commissioner. To ensure that all major stakeholders are invited and represented at the workshop, it was agreed that the Commission and ZEP will share contacts and the attendance list.

GS said that the SET-Plan activities on CCS and CCU are from the 1<sup>st</sup> May 2019, supported by a H2020 consortium ("Impacts9") of CCSA (Coordinator), BGS, CO2 Value Europe and Sintef. This will enable materially greater support to be provided to support deliver of the SET-Plan's CCS and CCU targets. The current focus of the IWG9 is on 1) collaboration across EU-funded CCS-related activities; 2) greater and broader Member State participation.

GS updated the AC on the engagement programme. GS met with the Permanent Representation of Romania to the EU, discussing views on the Energy Council's conclusions. GS highlighted the importance of this file, representing the legacy of the current Commission for the next college. GS said it is expected that discussions will continue in the autumn under the Finnish presidency.

Regarding the review of National Climate and Energy Plans (NECPs), GS said that ZEP will share its analysis with DG CLIMA and ENER.

ZEP had a discussion with the Secretariat General on the transition to net-zero and the treatment of cross-cutting issues between climate, energy and industrial policy. There were several mentions to the role of hydrogen; however, it seemed that there was no clear reflection on policies that will be needed to trigger its uptake. An outcome of the meeting is the request for ZEP to write a legacy paper with policy recommendations and specific asks for the new Commission, which the Secretariat will develop.

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

---

### Actions from AC58

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

All actions from previous meetings have been completed or are ongoing. ZEP distributed the slides on the EU Taxonomy for Sustainable Finance, prepared a draft template for CCS, presented policy recommendations at the Madrid Forum Workshop, identified Member States who have minimal or no mention to CCUS in their draft NECPs, updated the forward workplan, completed the CO2 safety report and followed-up with DG CLIMA regarding the organisation of the Innovation Fund workshop.

It was noted that an ongoing development is the preparation of a Gantt chart of EU projects in preparation of the Innovation Fund workshop.

### 2019 ZEP-C budget

LW said the AC58 adopted a revised 2019 ZEP-C budget which included two additional elements:

- €45,000 has been allocated towards increased communication activity in 2019. These funds are held by ZEP-C and the ERG will identify enhanced communication opportunities. The ERG has agreed that at present these funds should be retained for opportunities in the 2H 2019 when the new Brussels institutions are established.
- ZEP-C will seek to generate a budget surplus in 2019 of €50,000 which will allow the development of reserves to cover any potential future funding shortfalls.

Regarding the 2019 income, LW said that since the last AC, the invoices from BP, Equinor and Shell have been settled. The Crown Estate has informed ZEP that they are not in a position to support ZEP-C in 2019. This is largely a result of not having sufficient internal resources to engage with ZEP activities. In 2018 The Crown Estate provided €12,500 of support and so forecast income for 2019 is now €167,500.

LW said that given the reduction in income from the loss of the Crown Estate the forecast surplus is less than anticipated. The ACEC considered this matter and noted that there may still be under spend from Public Affairs which could mean that the surplus returns to the previously forecast level. The ACEC therefore remains comfortable with the forecast 2019 budgeted expenditure.

The AC confirmed it also remains comfortable with the forecast expenditure.

### ***Item 3: ZEP-C AGM***

---

ZEP-C members agreed that as a non-member GS could chair the AGM. GS confirmed the meeting to be quorate.

GS asked for approval of the annual accounts. This was unanimously approved.

GS informed the ZEP-C members that Gardiner Hill wishes to be dismissed as member of the board of directors and LE wishes to be appointed. This change was unanimously approved.

### ***Item 4: Presentation and discussion on guidelines on LCA4CCU (CO2 Value Europe)***

---

*See presentation slides.*

DD highlighted the lack of standards for LCA and presented the LCA4CCU methodology, highlighting that this methodology will be scrutinised by the Commission.

The consortium leading the work presented on LCA will look at guidance for low TRLs and developing guidelines for policy makers as part of the next phase of their work.

DD also introduced a study from Umwelt Bundesamt looking at integrating CCU into the ETS ('Support for the revision of the Monitoring and Reporting Regulation for the 4<sup>th</sup> trading period, focus: Carbon Capture and Utilisation (CCU)').

There was a discussion about the study's framework and boundary definitions.

JH highlighted the issue of increased demand for baseload supply.

JH said that CO2 sources (DACCs, biomass, etc.) should not be ignored since the mitigation potential of CCU technologies also depends on the CO2 source. JH explained that when CO2

sources are not taken into, the outcome from a climate perspective is that it looks better to take CO<sub>2</sub> from a coal plant than from the air because of the energy input that is needed.

GS explained the differences between a distributive LCA – which DD presented – and a consequential LCA which considers questions such as electricity production. GS explained why using a consequential LCA is important (without a consequential LCA it would be difficult to argue that the stock has been reduced).

Following this discussion, RvdM presented the work from the ZEP TWG on CCU, which assessed the Ramboll study. The work concludes that 4 key questions on the relevance and future of CCU technologies remain to be answered in political and legal terms:

- How relevant will CCU be in Europe?
- What is the real mitigation effect of CCU technologies?  
What emissions free (electrical and thermal) energy demand will be needed to achieve abatement by CCU projects?
- What legal framework is needed to achieve the implementation of CCU technologies?

RvdM also explained ZEP's view on the answers to these questions (see presentation slides).

DD and HB showed interest in joining the TWG and it was agreed that they would be invited to join the next TWG meetings.

### ***Item 5: Commission Updates***

---

#### **DG CLIMA MV:**

In response to Damien's presentation, MV said that DG CLIMA have moved away from the idea of requesting a full LCA for the Innovation Fund and are currently working with JRC on a methodology to calculate GHG emissions savings from CCU. JRC are therefore currently developing two sets of guidelines: 1) on the acceptance of CCU fuels under REDII; 2) for the selection of projects under the Innovation Fund.

This work is ongoing and JRC will organise a workshop to present the second methodology early next year. This will be followed by a public consultation. MV highlighted that the JRC are open and looking for input from any ongoing LCA project. NV noted that the methodology developed would not only affect CCU projects under the Innovation Fund but also projects that produce hydrogen.

Regarding the treatment of CCU under the ETS, MV confirmed that the ETS monitoring report is under revision and discussions are currently ongoing between Member States at the Climate Change Committee.

In response to Rob's presentation, MV explained that some of the questions he mentioned could not be answered by Ramboll due to the lack of peer-reviewed data (i.e. on mineralisation). However, MV highlighted an important finding from Ramboll; the study concludes that using grid energy in particular would not be beneficial from a climate mitigation perspective. Taking Germany as reference, the percentage of renewable electricity would have to be a minimum of 86% in order to break-even in net carbon emissions between CO<sub>2</sub>-based and conventional fossil-based products.

Following-up on Rob's policy recommendations, MV said that no changes to the ETS would be made before 2030. However, MV said that the thinking is interesting and encouraged ZEP to continue its work in the area. MV added that it is important to think about potential new frameworks; nonetheless it is also equally important to think about the transition to these proposed frameworks.

MV updated the AC on the Innovation Fund. DG CLIMA are in the process of preparing the first call, aiming at publishing it in the second half of 2020. DG CLIMA are currently organising sectoral workshops with industry to discuss issues that are likely to emerge, especially with regards to selection criteria. The sectoral workshop on CCU will take place on 19<sup>th</sup> September and will be co-organised by CO2 Value Europe. The workshop on bioenergy will take place on 12<sup>th</sup> September.

With regards to the EU Taxonomy for Sustainable Finance, MV thanked CO2 GeoNet for the valuable evidence they provided. MV also noted that many climate and energy do not fully understand the principles underpinning CO2 storage. MV added that there is a need for better communication on CO2 storage safety, which would help raising the awareness of EU climate experts.

GS said that a very small constituency in the Expert Group had a very strong opinion against CO2 storage, GS added that the Ketzin report was deliberately misinterpreted.

#### DG RTD VK

VK updated the AC on a Horizon Europe call for experts for the mission on 'climate neutral and smart cities', which closes on 11<sup>th</sup> June. VK said that 15 independent experts with a broad expertise on clean energy will be appointed as part of the process. VK encouraged the CCUS community to put forward a candidate.

VK updated the AC on Horizon 2020's 2019 & 2020 calls.

VK said that a new Mission Innovation CCUS event will take place in Trondheim, Norway on 19-20<sup>th</sup> June. The workshop is held back to back with the TCCS-10 Conference. The workshop is organised by SINTEF Energy Research on behalf of the Mission Innovation Challenge CCUS. VK said that ZEP did good work on Mission Innovation and asked NWT to continue supporting this process.

VK talked about the EU-China Energy Cooperation Platform, which will meet in September 2019. VK said that discussion during the last meeting in Beijing highlighted the important role of CCS and hydrogen in the energy transition.

VK updated the AC on the ERA-NET ACT CCUS programme.

GS highlighted the need for cross-cutting structures to underpin Horizon Europe.

#### DG ENER PH

PH said that Commissioner Cañete will attend the EU-Norway CCS conference on 5<sup>th</sup> September. This will be a two days event followed by the Innovation Fund workshop. Invitations will go to energy Ministers of all EU countries and their attendance will allow measuring EU countries' interest in CCS.

PH talked about the 10<sup>th</sup> Clean Energy Ministerial which took place in Vancouver on 27<sup>th</sup> May, which featured a high-level CCS side-event supported by Canadian ministers, the United States Secretary for Energy and the IEA.

During the event, the Clean Energy Ministerial CCUS Initiative and the Oil & Gas Climate Initiative announced their collaboration on accelerating CCUS. The parties agreed to explore ways to further their collaboration which may include:

- Identifying possible new strategic investment opportunities, in both OGCI and CEM CCUS countries and beyond, with emphasis on CCUS hubs and major “anchor projects” at commercial scale;
- Considering processes to collaborate to support the development of joint projects through the early stages, up to FEED stage, and further to FID as appropriate;
- Advancing CCUS globally by creating and fostering sustained dialogue on policy, regulatory and risk-sharing mechanisms and principles to support CCUS project development; and by sharing non-proprietary knowledge gained from projects;
- Accelerating the development of new and existing CCUS technologies and reducing costs;
- Investigating the role of financial institutions, and whether commercial banks or development banks, should be encouraged to join the process.

OGCI and CEM CCUS Initiative will establish a joint Task Group to explore this potential collaboration in further detail.

PH said the IEA launched their latest report in CCU and CCS for industry.

PH said that the CCUS Projects Network held its first meeting with projects.

### ***Item 6: Overview of European Parliament, Council & other relevant activities***

---

MD updated the AC on the EU Long-Term Strategy. Several Council meetings were held in March and an Informal Summit of European Leaders took place on 9<sup>th</sup> May. Significant expectations were placed on the Sibiu Summit, the results were however limited, given that leaders will only decide on the EU’s Strategic Agenda for 2019-2024 and high-level appointments at the Summit on 20-21 June.

The Sibiu Declaration agreed by the leaders consists of 10 commitments that the leaders will move forward in supporting the EU. It however only mentions tackling climate change as part of combating major global issues, without providing more substance. Nonetheless, nine Member States (Belgium, Denmark, France, Latvia, Luxembourg, the Netherlands, Portugal, Spain and Sweden) signed a non-paper on climate in the margins of the informal. These countries have expressed support for the following points:

- Achieving net-zero emissions by 2050 and support for the Commission’s draft Long-Term Strategy on EU energy and climate policy, stressing the urgency of acting on climate change now.
- Strengthening European competitiveness in a global climate neutral future. Innovation budgets must be heavily focused on making clean energies accessible to all people in all regions.
- EU industry to seize the opportunities of the transition to enhance EU position as a major industrial powerhouse.
- The new MFF to strongly support decarbonisation, and these Member States highly support the Commission’s MFF target of spending 25% of EU funding towards combating climate change.
- Strong support for sustainable finance.

The Council process on the Long-Term Strategy is set to continue at the 20-21 June Summit, where the leaders are expected to adopt dedicated Conclusions. The Energy and Environment Councils of



25 and 26 June would be left in reserve for further discussions on the long-term strategy should that prove necessary.

MD also updated the AC on Energy Council discussions, the Connecting Europe Facility, the status of NECPs and Horizon Europe (see presentation slides).

MD gave an overview of the new EU Parliament and provisional results. MD said that the elections saw a rise in voter turnout, to more than 50 per cent for the first time in 20 years. Overall, traditional parties have come out from the elections somewhat weakened, but the pro-European core has not suffered as much as projected. The European People's Party (EPP) came in first, followed by the Socialist and Democrats (S&D), a centrist-liberal coalition led by French President Emmanuel Macron and Dutch Prime Minister Mark Rutte (ALDE&R), and the Greens.

Importantly, the two largest groupings in the Parliament, the EPP and the S&D, lost their majority for the first time in 40 years. ALDE-R, on the other hand, can be considered as a winner of the election, having gained additional seats as well as becoming an important partner for any future coalition-building among pro-European groups in efforts to reach a majority. Similarly, the Greens have come out of the elections strengthened, confirming that climate issues are likely to top policy-making agenda during the Parliament's next term.

Eurosceptic groups, represented in the previous Parliament by the European Conservatives (ECR), the Europe of Nations and Freedom group (ENF) and the Europe of Freedom and Direct Democracy group (EFDD), will now hold around 25% of seats in the new Parliament. MD said that Eurosceptic and far-right parties represent a relatively disparate group, and it is not yet clear whether and to what extent they will be able to effectively coordinate in the new Parliament.

MD said it is expected that the new European Parliament will become more fragmented. This means that decision-making within the Parliament is likely to go through a transformation where voting alliances are likely to be increasingly made on issue-by-issue basis, with potentially smaller majorities depending on votes of each MEP. This could in turn make policy-making less predictable and make it harder for stakeholders to have their voice heard and reflected in the Parliament's decisions.

GS and JH said that Chris Davies (CD) is now an MEP working for the Alliance for Liberals and Democrats in Europe (ALDE).

### ***Item 7: Presentation from Norwegian Government on London Protocol***

---

*See presentation slides.*

SVF discussed the London Protocol issue on cross-border transport of CO<sub>2</sub> storage for the purpose of storage and the interim solution on which the Norwegian Government is currently working.

SVF highlighted that the 2009 amendment to article 6 has been ratified/accepted by 6 parties: UK, Netherlands, Norway, Finland, Iran and Estonia. Two thirds of parties must ratify the amendment for it to enter into force. The interim solution is to use Article 25b of the Vienna Convention on the Law of Treaties which states:

*A treaty or part of a treaty is applied provisionally pending its entry into force if:*

- a) The treaty itself so provides or:*
- b) The negotiating states have in some other manner so agreed*

This means that countries which ratify the impending amendment are able to operate with other ratifying countries provisionally whilst the amendment is still pending. The resolution will be prepared by 5<sup>th</sup> July, where it will be released for comments/feedback by 16<sup>th</sup> August. The Norwegian, Dutch and UK Government will then present the joint resolution at the Meeting of the Parties 7-11 October 2019.

AG talked about the exclusion of CO<sub>2</sub> transported by ships under the EU ETS and asked whether the Ministry sees this issue as manageable given the timeframe. EM confirmed that the shipping element would be less challenging than the legal barrier underpinning the London Protocol.

### ***Item 8: Presentation on CCUS Projects Network***

---

*See presentation slides.*

PP presented the aims and forward work programme of the CCUS Projects Network.

DB asked about the long-term objectives of the Network. PP said that hopefully the Network will continue after the end of the contract with the European Commission.

DB invited the Projects Network to join the Carbon Sequestration Forum.

LE asked how many projects participate in the Network. PP said that 8 projects are now members (including ACORN, Northern Lights, ERVIA's Cork project and ArcelorMittal's steel project) and a further 8 projects showed interest. The intention is to have around 25 projects participating in the Network.

WG asked whether the projects that will receive funding from the Innovation Fund will be formally requested to join the Network. PP said there will not be a legal obligation. Ideally, however, the Network will be used to promote knowledge sharing amongst CCS projects supported by the Innovation Fund.

WG asked whether there is some work done on lessons learned from the previous CCS Projects Network. PP said that there will be a continuity between both Networks and lessons from previous projects will be taken into account. With regards to knowledge transfer, the Network is currently looking into confidentiality issues.

GS said it would be great if the Network could attend the AC meetings and provide regular updates on their work.

### ***Item 9: Presentation on ELEGANCY Programmes***

---

*See presentation slides.*

SV presented different work streams and case studies under the ELEGANCY programme.

### ***Item 10: Update on EU Taxonomy for Sustainable Finance***

---

*See presentation slides for more detail.*



SK presented the work from the Energy Group. SK said that the report from the Expert Group will be released on 18<sup>th</sup> June.

There was a discussion on the effect of the ETS price on the Taxonomy.

AG questioned the statement that fugitive emissions need to be measured rather than estimated (production of electricity slide). SK said that this could be done through flyovers with methane detection cameras.

With reference to the point stating that pipelines that only carried CO<sub>2</sub> "mainly" for sequestration would qualify as sustainable ("energy other" slide), AG said that a better definition of what "mainly" means is needed.

LW asked clarifications about how the Do No Significant Harm criteria will be managed. There is a concern that some stakeholders may argue that CCS should not be supported because it does not promote a circular economy. SK said that this should not be an issue for this round, however, the criteria is likely to change/evolve in the future.

PP requested a minor amendment to the slides (replacing the wording on 'gas' by 'methane').

JH asked about the eligibility of biofuels and underlying assumptions.

SK talked about criteria for aviation and long-term shipping.

SK described the political timeline and engagement activities around the Taxonomy.

It was agreed that all comments from the AC will be collected by LW and feed into ZEP's response to the consultation on the Taxonomy.

Note that a [stakeholder dialogue](#) will take place on 24<sup>th</sup> June to discuss progress and outcomes of the technical expert group's work. It was agreed that ZEP would attend this event.

### ***Item 11: Review of Network Work Programmes & Item 12: ERG update***

---

Due to time constraints, pre-reads for agenda items 11 & 12 were taken as read.

The AC discussed the following items:

- The CO<sub>2</sub> storage report, which was unanimously approved.
- The next steps for the TWG on CCU. It was suggested that the TWG could prepare a short brief on the 4 questions that need to be answered when assessing CCU. It was also agreed that this paper should not be directly related to the Ramboll study and should highlight the complementarity between CCU and CCS.
- The High-Level Group on EILs. LW said he will attend the next subgroup meetings on 24<sup>th</sup> and 25<sup>th</sup> September and report back on work progress.
- GS said that the Secretariat will draft a letter for DG RTD on DG GROW's involvement in the ETIP.

### ***Item 13: AOB***

---

N/A

## ***Actions***

---

<b>Item</b>	<b>Action</b>	<b>Owner</b>
1.	ZEP to share NECPs analysis with DG ENER and DG CLIMA	NWPE
1.	Sec to prepare policy legacy paper with specific asks for the next Commission (for Sec Gen)	NWPE, Sec
1.	NWPE to prepare Gantt chart of EU CCUS projects	NWPE, Sec
10.	ZEP to attend Stakeholder Dialogue on EU Taxonomy for Sustainable Finance on 24 <sup>th</sup> June	ERG
11.	TWG CCU to prepare short one pager outlining the four questions raised by the TWG and presented at the AC.	NWT
12.	LW to attend 24 <sup>th</sup> and 25 <sup>th</sup> June meetings of the HLG on EILs and report back on work progress	LW
13.	Sec to prepare letter for DG RTD (RE: DG GROW's involvement in the ETIP)	Sec