

ZEP Advisory Council 54

Draft Minutes

Attendance

Advisory Council members

Didier Bonijoly (alternate)	BRGM
Lamberto Eldering	Statoil
Ward Goldthorpe	Sustainable Decisions
Angus Gillespie	Shell
Stuart Haszeldine	SCCS
Gardiner Hill	BP
Filip Neele	TNO
Rob van der Meer	HeidelbergCement
Nils Røkke	Sintef
Graeme Sweeney	ZEP Chairman
Keith Whiriskey (alternate)	Bellona

Observers and other attendees

Ståle Aakenes	Gassnova
Achim Boenke	European Commission
Karl Buttiens	Arcelor Mittal
Damien Dallemagne	CO2 Value Europe
Chris Davis	
Caterina de Matteis	IOGP
Concetto Fischetti	Climate Investments
Paal Frisvold	Federation of Norwegian Industries
Bernard Hoffait	Total
Vassilios Kougionas	European Commission
Francois- Regis Mouton	IOGP
Brian Murphy	Ervia
Virgiljus Petuska	UAB Minijos Nafta
John Scowcroft	GCCSI
Vegar Stokset	Gassnova
Damien Valdenaire	Concawe
Vladimir Zuberec	European Commission

ZEP Secretariat

Nikki Brain	ZEP Secretariat
Luke Warren	ZEP Secretariat

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Item 1: Introduction

The Chair (GS) introduced the meeting. The AC adopted the agenda for the meeting and approved the minutes of AC53. The AC endorsed the actions taken by the ACEC on its behalf since the last AC meeting.

LW fed back on the actions from AC53. The action to share ZEP's position on TRL levels was ongoing. All other actions had been completed.

Chair's update

GS said that ZEP has offered regional modelling to Flanders and to North Rhine-Westphalia, as well as offering to build on ME5 work to assist with the Commission's Mid-Century Strategy. WG said that EERA Net- ACT was undertaking modelling work with Ruhr University and asked whether these pieces of work could be linked in. It was agreed a follow up call would be held on this topic.

GS said another ongoing topic for engagement was the reuse of InnovFin EDP money which remains unspent. GS said he hoped ZEP could agree with the Commission for the funds to be released.

GS said the SET- Plan Implementation Working Group (IWG-9) would be meeting twice a year, with the formation of sub-groups which would meet more frequently. A call from the Commission for a coordination and support action would take place in May.

GS fed back on a meeting with CO2 Value Europe (COVE), highlighting constructive links with ZEP. GS said COVE has embedded climate benefit into its charter of association, differentiating "smart" CCU from CCU without climate benefit. GS said that while ZEP was a technical advisory body with a mandate to cover utilisation alongside storage, COVE was a trade body focused purely on utilisation and therefore while there were synergies, the organisations had different purposes.

Item 2: Secretariat update

LW said that Harriet Howe had moved on from the Secretariat to a role at the UK Department for Business, Energy and Industrial Strategy. Harriet is replaced by Marine D'Elloy, who was previously on a traineeship with DG CLIMA working on NER 300 and the Innovation Fund.

LW confirmed the ZEP-C AGM would take place at AC55 in June.

LW said the Commission had extended the Secretariat's grant until the end of April, and the successful bidder for the next contract would be able to draw down grant funding from May. It was agreed that the ACEC would deal with any matters arising around the new contract. At its January call the ACEC approved the budget for Weber Shandwick to provide services to ZEP-C for the 1Q of 2018.

LW said ZEP-C is expected to start 2018 with a net equity position of -€36,650. The net equity position of ZEP-C at the beginning of 2017 was -€135,747. The forecast outturn shows ZEP-C returning to a surplus of €39,858 by year end.

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AG asked whether there was potential for new membership to ZEP. LW said he was aware of several interested organisation but none yet committed. It was agreed a structured process for attracting new members should be developed as part of the ACEC's work on future sustainability of the Platform. It was agreed this would be added to the next ACEC call agenda.

Item 3: Commission updates

DG RTD

VK said the future of ZEP as an ETIP would be dependent on the new activities proposed under FP9. VK said these would be aligned with the SET-Plan.

VK said that FP9 would be based on "missions" as proposed by Dr. Marianna Mazzucato. VK thanked ZEP for its draft mission proposals. He said currently the missions are being looked at in cluster areas, and CCS would be in energy whereas CCU would not. He said the Commission was looking to see if this needed resolving.

VK said there were concerns that Mission Innovation challenge on CCUS was not progressing as planned. NR said the lead authors are drafting the report but there is no consultative process in place. GS pointed out participants would need sight of the process before the meeting in Malmo in May. VK said he would follow up with the U.S. DOE for clarity.

VZ said that the DOE was pushing for an initiative on CCUS under the Clean Energy Ministerial, which would focus on closer to market technologies. VZ said he would see if ZEP could have input into this process.

LW asked if there was progress on discussion around the scope of the hydrogen Joint Undertaking in FP9. VK said the JUs were not yet being discussed individually. GS said that ZEP had been trying to pull together a position with Hydrogen Europe and other stakeholders which proposed the scope of the JU was expanded to include clean hydrogen from multiple sources; however it was proving difficult to bring all stakeholders together. It was agreed ZEP would share its own position with the Commission and ask stakeholders for comment. VK said Australia was proposing a mission on hydrogen under Mission Innovation, which would encompass production with CCS.

DG ENER

VZ said the tender on knowledge sharing was likely to be published before Easter.

VZ said he would be moving on to DG GROW, and would be replaced by Peter Horvath. GS thanked Vladimir for his work with ZEP. It was agreed a meeting would be set up with Peter once he was in post.

It was noted that the Coal Regions in Transition Platform would be broadened out to look at energy intensive regions in transition, where CCS could become relevant to the process. VZ said that there were two working groups, one looking at structural and the other at technical issues. It was agreed ZEP and EERA should put in a joint perspective on this topic. VZ gave the name of a colleague in DG ENER to contact.

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DG GROW

AB fed back on the COSME Project on the European Sustainable Chemicals Support Service. He said phase two would be extended to include gaseous emissions. Consultants have undertaken work identifying hotspots for developing sustainable chemicals in Europe. AB said Scotland had not been identified as a hotspot; SH said that there were 300MT of biogas produced in Scotland each year. SH agreed to share data with DG GROW.

Item 4: Overview of European Parliament, Council & other relevant activities

NB shared an update on the Clean Energy package. It was noted that the preparation document for the second trilogue on the Governance Directive showed that the position on 2050 targets could be stronger, and it was agreed there was value in ZEP continuing to advocate for a strong framework. It was agreed this would be prioritised in the Chair's forward stakeholder engagement.

Item 5: Network Technology update

Rob van der Meer shared a draft Terms of Reference for the Temporary Working Group (TWG) on CCU and Sink Factor methodology. The ToR was approved by the AC.

FN gave an update on the TWG Collaboration across the CCS Chain. Two streams of work are being undertaken; one to quantify storage risk to enable solutions to be provided; and the other to look at managing cross-chain risk in CCUS clusters. It was noted there are multiple organisations working on this issue that it would be useful to bring into this work. WG pointed to work being done on managing risk across the hydrogen chain which could enable parallels to be drawn.

FN fed back on work being undertaken by the TWG on CCS in a Below 2 Degrees Scenario. The work is being led by Charles Soothill and Karen Turner, University of Strathclyde. The aim is to produce a short paper by May which sets out the necessity of CCS to the EU achieving Paris Agreement goals; and the wider value associated with deploying CCS to this end. In particular the report will look at sustainability of jobs in skilled sectors alongside environmental benefit. SH pointed out that in IPCC modelling CCS was excluded after a certain point due to the impact of residual emissions, based on the presumption of a 90% capture rate. SH said this presumption was based on available data from projects; and therefore ZEP could work to compile better data.

Item 6: CO2 Value Europe

DD presented an update from CO2 Value Europe (COVE), a new trade body dedicated to CO2 utilisation which evolved from the SCOT project. DD said that COVE was focused on bringing high TRL level technologies to market and preparing an R&I roadmap for CCU. The organisation has written climate benefit into its membership charter. COVE is working with the Global CO2 Initiative to look at standardisation of Lifecycle Analysis (LCA) methodology. DD said he had reservations about the Sink Factor methodology being proposed by ZEP, and it was agreed RvdM would liaise with DD on this piece of work.

Didier Bonijooly (DB) asked DD about COVE's interaction with the Phoenix initiative, which is looking to create a CCU Important Project of European Common Interest. DD said COVE supported the initiative, and wanted ZEP to be involved. It was agreed ideally someone from ZEP would attend the Phoenix meeting taking place on 22 March.

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Item 7: Update on Norwegian CCS developments, Trude Sundset

Trude Sundset (TS) gave an overview of the Norwegian CCS programme. The new government in Norway had requested that Parliament receive a status report on the project by May, which will then be subject to a decision on whether to fund 1, 2, or all of the capture projects through FEED. TS said this was positive as Parliament would have a full view of the costs up front head of the next budget, and that it would make sense to support all three projects as that would enable competition to drive cost reduction. TS said Norway's aim was to demonstrate industrial CCS and show CCS is investible in Europe. Comparisons were made between the new 45Q tax break in the US and the high offshore carbon tax in Norway which stimulated early investment in CCS. A major challenge currently is communication with the public as understanding of CCS is low. TS noted that while the Norwegian state is intending to support CAPEX and 5 years of OPEX, as the costs of the project have risen it is likely access to European funding, such as the Innovation Fund, would also be required.

It was noted that Norway was demonstrating Europe's first real "market maker" for CCS, and that it was worth talking to the Commission about the project in this framing. It was noted that Norway was looking to develop Projects of Common Interest to store CO₂ from other countries, and that for this to happen a solution needed to be found on the London Protocol amendment.

Item 8: OGCI Clean Gas Project

Concetto Fischetti (CF), OGCI Climate Investments presented on OGCI Climate Investments' Clean Gas Project in the UK. CF said CI was looking to develop a full chain project with utilisation and technology innovation built in. The Clean Gas Project study was acquired from the Energy Technologies Institute in the UK, and would benefit from the lessons learned from previous FEED studies on projects during the two CCS commercialisation competitions. CF said the project would be located in the North-East of England.

CF said OGCI wants to see private investment alongside its own funds; the project should be bankable and investible. The UK has a market opportunity through its Contracts for Difference scheme for low carbon power, and CF said the aim was for the project to be competitive with offshore wind with intermittency and transmission costs for both taken into account. CF said it is important a project is developed that is replicable in other countries. OGCI is derisking the first project by using proven post-combustion capture technology, and by developing a large scale project to realise economies of scale. CF said second and third of a kind projects would be able to be developed with a 30% cost reduction.

CF said innovative CO₂ utilisation would be important to the economics of the project. The plant will be designed to be fully flexible to operate as baseload or peaking plant.

Item 10: Network Policy & Economics update

Lamberto Eldering (LE) gave an update on the work of the Network. LE said that the last Network meeting in February had included a briefing of Katrien Prins of the European Commission on the PI process. So far 74 PCIs have gained access to a total of €1.6bn under the CEF underpinning €48bn CAPEX, meaning an average funding around €20m Euros per project. It was noted that CEF funding will only be granted for activity that cannot be funded through private companies,

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member states or other sources of funding. LE said a call of the TWG PCIs would be held soon to discuss how best to support the forward process.

LE presented the ZEP response to the Commission's consultation on the Innovation Fund for approval. The AC approved the response without amendments.

Item 11: External Relations Group (ERG) update

GS said that Sarah Kempe would be stepping down as co-chair of the ERG and that a replacement would be nominated by Shell. The AC granted permission for the ERG to work with Sarah's replacement on an interim basis until the appointment could be formally confirmed.

Item 12: Any other Business and closing remarks

Keith Whiriskey (KW) said that positive progress was being made on communicating with NGOs and green groups on CCUS due to the phase-out of coal. KW said the European Greens had released a report that pointed to the need for CCS in industry, which was a positive development.

Actions

Action	Owner	Deadline	
1	Hold call to discuss modelling work ZEP/ EERA	GS & WG	March
2	Member recruitment to be discussed at next ACEC call	Sec	April
3	Follow up with DOE re Mission Innovation	VK	March
3	Find out how ZEP can input into discussion around CEM	VZ	March
3	ZEP to share position on hydrogen under FP9 with Commission	Sec	March
3	ZEP to meet Peter Horvath, DG ENER	VZ	April
3	Share data on Scottish biogas with DG GROW	SH	March
4	Governance directive to be prioritised in Chair's April engagement	GS	April
6	Collaborate with COVE on CCU work	RvdM	June

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