

ZEP Advisory Council 56

19th September 2018

Agenda Item 2: Secretariat update

2.a. Finance update

Appended to this paper is the ZEP finance update.

2.b. ZEP-C financial report

Appended to this paper is the ZEP-C financial report.

2.c. Personnel update

The meeting will be notified of the nomination of Dr. Liz Rogers and Dr. Florence Delprat-Jannaud and the voting process. Appended to this paper are the respective CVs.

2.d. ZEP Review update

Appended to this paper is the ZEP Review update.

ZEP Advisory Council 56

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Agenda Item 2.a: Finance update

Attached to this note is the 31st August ZEP-Communications financial management report. This covering note provides commentary on developments since the finance update to the AC55.

2018 ZEP-C Budget

- 2018 Income: The forecast income for 2018 is €180,000. Since the AC55, an invoice has been settled by Total bringing the total income received for 2018 to €152,500.
- An invoice for €12,500 has been issued to the Port of Rotterdam and it is understood that this is being processed. It is expected that the outstanding invoice for €15,000 can be issued in the 3/4Q 2018.
- 2018 Expenditure: 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.

European Commission grant

Since the last AC it has been confirmed that the CCSA has successfully bid for H2020 funding to continue the provision of secretariat support to ZEP for a new three-year period (2018 – 2021). The CCSA is currently in the final phase of the grant agreement process with the European Commission and this is expected to be concluded imminently.

Budget management: Expenditure against 2018 budget

Activity	Contractor	Budget 2018	Comments	To date Spent	Comments	To Date Committed	Comments
Administration / Auditing	Adams accountants / Nijs & Partners	€ 8 000		€ 3 045			
Website maintenance	Karakas	€ 1 000		€ 0			
Legal advice	Lawsquare	€ 4 000		€ 0			
Chair	Ardnacraggan Energy Services	€ 67 992		€ 45 328			
Contingency		€ 4 000		€ 1 526			
Public affairs	Weber Shandwick	€ 18 500		€ 18 214			
Total		€ 103 492		€ 68 113		€ 0	

Spent: Actually paid or contractually due for delivered work
 Committed: Based on signed contracts, yet to be approved invoices or founded estimates

Spent + Committed € 68 113
 Remaining total budget € 35 379

€ 36 650	Starting point 2018 (= Left over budget 2017)
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2018 Total Spend	Comments Relative to budget
€ 8 000	
€ 1 000	
€ 4 000	
€ 67 992	
€ 4 000	
€ 18 214	
€ 103 206	Total budget spent 2018

Cash management of ZEP Communications VZW / ASBL

Category	Source	Issued invoices	Comments	Pending invoices	Comments	Received payments	Comments
2018 contributions	O&G					€ 120 000	BP, Statoil, Shell, Total
	OEM						
	Others (confirmed)	€ 12 500	PoR	€ 15 000	Gassnova	€ 32 500	HeidelbergCement, TCE
	Others (Potential)						

€ 120 000	
€ 0	
€ 60 000	

General	VAT return	€ 4 038	VAT declar 2018/07+08	€ 359	Invoices 2018 to be rec.	€ 2 006	REIMBURS 18 Q 2
Total outstanding / pending ZEP-C		€ 16 538		€ 15 359			

€ 180 000	Total forecasted income 2017
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Cash situation (of 31 August 2018)

Current account (KBC - Business compact rekening)		€ 44 750
Savings account (KBC - Spaarrekening)		€ 101
Actual cash at bank and in hand		€ 44 851

€ 40 144	Forecasted Left over budget 2018
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Expenditure situation

Source	Outstanding invoices	Comments	Pending invoices	Comments
Short term creditors	€ 0	ARDN	€ 2 069	ADAMS+NIJS
Outstanding invoices in spent to date, to be paid	€ 0		€ 2 069	

Cash boundaries

Minimum virtual financial position (all creditors paid, no more income) € 42 782
 Maximum virtual financial position (all creditors paid, all income realised) € 74 680



Dr Liz Rogers

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Summary

Liz is an established environmental leader, widely respected within industry and the profession. She is BP's representative on several external climate initiatives including Oil and Gas Climate Initiative (OGCI), Climate and Clean Air Coalition (CCAC) and a member of the Executive Committee of IPIECA (Trade Association for environmental and social issues for the oil and gas industry). She has presented at several prestigious external events including the global climate conference in Paris, 2015. Liz brings passion, expert technical advice and a network of stakeholders; creating and delivering solutions to help our business succeed. She studied environmental science and achieved her PhD by combining her interests with practical research. She has built her career by taking on a broad range of roles in conservation, consultancy and across BP, from new access through to decommissioning, both in the UK and around the world.

Work History

- | | |
|----------------|---|
| 2018 - | VP Environmental Technology
BP Group Technology <ul style="list-style-type: none">• Leading a team of 20 to develop and deploy an environmental technology strategy including commercial realisation of carbon capture utilization and storage. |
| 2011 -
2018 | VP Environment, Social Responsibility and HSSE Compliance
BP S&OR <ul style="list-style-type: none">• Lead a team of 20, provided strategic leadership supporting operational risk management and reported progress to executives and Board. |
| 2008 -
2011 | Director, Environment and Social Responsibility
BP S&OR <ul style="list-style-type: none">• Led the environmental technical response for the BP BST for the Macondo incident.• Established plans to implement the United Nations Business and Human Rights framework. |
| 2005 -
2008 | Director, Environmental Operations
BP S&O <ul style="list-style-type: none">• Led the refreshed BP environmental strategy agreed with Senior Executives in 2008. |
| 2003-05 | Director Strategy, Planning and Communications |

- BP Group HSSE**
- Established a BP HSSE strategy and planning framework.
- 2001-03 **Head of Discipline HSE**
BP E&P
- Led the move from internal GHG emissions trading and set up a \$50M budget for energy efficiency and emissions reduction programmes supporting the Group GHG target.
- 1999-2001 **Environmental and Emergency Response Manager**
BP E&P North Sea
- Managed the regions emission reduction commitments and the UK GHG emissions trading programme
 - Managed a \$10m carbon offset programme.
- 1999 **Environmental Manager**
BP Upstream Technology Group
- Environmental support to E&P major projects.
- 1994-98 **Environmental Manager**
Azerbaijan International Operating Company (Seconded from BP)
- Resolved environmental challenges associated with the delivery of the early oil export from offshore Azerbaijan.
- 1994 **Environmental Manager**
BP, Azerbaijan Asset
- Gained agreement from partners and government with the environmental content of the Production Sharing Agreement (PSA) and commenced initial field work.
- 1994 **Environmental Manager**
BP, Wytch Farm onshore oilfield
- Completed engineering support and permitting for onsite power generation using low NOx technology.
 - Developed the liabilities provisioning plan.
- 1994 **Senior Environmental Advisor**
BP, Azerbaijan Asset
- Lead the environmental negotiations with Government and potential partners to agree the environmental requirements for a production sharing agreement.
- 1991-93 **Senior Environmental Advisor**
BP, Exploration Frontier and International
- Established environmental management practices and implemented with exploration teams.
- 1991 **Environmental Advisor**

BP International, HSE Corporate Services

- Technical support for the decommissioning of manufacturing and detergent plants.

1990-91 **Environmental Advisor**
Applied Environmental Research Consultancy

1985-86 **Team Leader**
Suffolk Trust for Nature Conservation

Qualifications

- Ph.D. Restoration of Derelict Land, University of Essex.
- M.Sc (with distinction). Soil Science, University of Reading.
- B.Sc. (2i) Environmental Science, University East Anglia.

Additional Education

- MIT Sloane Business School: Ops Academy.
- Harvard Business School: The General Manager Programme.
- JMW: Leader of the Future.
- University of Cambridge: Executive Education Programme.

Associations

- Formerly a Director, Vice Chair and planning lead for 4 years with IPIECA. Currently Executive Committee member and Climate Change Champion.
- Member of Role of Gas workgroup for OGCI and OGCI CI
- Member of Steering Committee of United Nations (UN) CCAC OGMP.
- Member of Scientific Committee of the UN Environment methane study.

Professional Accreditation and Membership

- Fellow of the Institute of Environmental Management and Assessment (IEMA).
- Member of Society for Petroleum Engineers (SPE).

Florence Delprat-Jannaud

Program manager IFPEN
Energetic Resources Business Unit

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florence.delprat-jannaud@ifpen.fr

TRAINING

Professional training

- | | |
|------------|---|
| 1991 | PhD Thesis, Université Paris XI (Orsay, France)
<i>"Reflection tomography: What information on the Earth model do reflection travel times provide?" under the direction of C. Froidevaux (ENS)</i> |
| 1984 -1988 | Ecole Normale Supérieure, Physics Department (Cachan, France)
M. Sc. Geophysics and Geology, Université Paris XI (France) |

Professional career

- | | |
|-------------|---|
| 2017- today | Program manager <ul style="list-style-type: none">- CO₂ capture and storage- Sub-soil for new energy- Reservoir modeling |
| 2016 - 2017 | Director of GIS "Géosciences franciliennes" |
| 2016 - 2017 | Coordinator of FP7 INFLOW project <i>"INdustrialisation setup of a FLoating Offshore Wind turbine"</i> |
| 2011 - 2016 | Project Manager <ul style="list-style-type: none">- CO₂ storage, including FP7 SiteChar and CO2CARE projects- Geophysics methodologies- |
| 2009 - 2014 | Coordinator of FP7 SiteChar project <i>"Characterisation of European CO₂ storage"</i> |
| 1989 - 2017 | Research Engineer IFP/IFPEN |

SKILLS / RESEARCH INTERESTS

- | | |
|-------------------|--|
| Energy transition | Greenhouse Gas: CCUS
Renewable energy: Geothermy, hydrogen, energy storage
Environmental monitoring: gas emission monitoring, impact of climate change |
| CCUS | Capture, Storage, CCS network, Valorisation
European CCS Directive
Public perception |
| Geoscience | Basin and reservoir characterisation
Seismic imaging: seismic modelling, seismic inversion, nonlinear inversion, reflection tomography, VSP inversion |

TEACHING EXPERIENCE

- CO₂ storage: IFP School /University Montpellier (France)
- Seismic modelling and inversion: IFP School (France)
- Project coordination: University Cergy Pontoise (France)

SUPERVISION OF PHD THESIS

2015 - today	Pauline Le Bouteiller – University Paris VI <i>"Integration of seismic information in the modelisation of sedimentary processes"</i>
2007 - 2009	Ludovic Métivier – University Paris XIII <i>"Non linear inversion for high resolution seismic imaging"</i> Yves Chauvin Award 2010
2000 - 2003	Laure Pellé – University Montpellier II <i>"Inversion linéarisée des réflexions primaires et des réflexions multiples"</i>
1993 - 1996	Franck Adler – University Pau- Pays de l'Adour <i>"Tomographie de réflexion à partir des images migrées avant addition"</i>
1992 - 1995	Irina Apostoiu-Marin – University Paris VI (with A. Ehinger) <i>"Interprétation avant sommation pour l'imagerie sismique des structures complexes"</i>

COMMITTEES AND SCIENTIFIC EXPERTISE

2018 - today	ANCRE (National Alliance for Research in Energy, France) – Animator of Group 2 "Fossil and geothermal energy, critical metals"
2018 - today	Scientific and Technical Evaluation Committee for the <i>Energy-Climate</i> domain
2018	Technical committee for the Fifth EAGE CO ₂ Workshop (Utrecht, The Netherlands)
2017 - today	Strategic Orientation Council of <i>Extra&Co</i> structure
2016	Member of the <i>"Information Exchange Group on Implementation of Directive 2009/31/EC on the geological storage of CO₂"</i>
2015 - 2017	Organizing committee for <i>"Four-month program on Mathematics in the Oilfield"</i> (Institute for Pure and Applied Mathematics, UCLA, USA)
2015	Review for "Concerted Research Actions" (French Community of Belgium)
2014	Contribution to <i>"CCS Directive Evaluation"</i> (Commission Européenne)
2013- 2014	Technical committee for the Fourth EAGE CO ₂ Workshop (Stavanger, Norway)
2012	Public examination of the 169 th promotion of civil engineers TFE (Mons, Belgium)
2009 - 2013	Technical committee for the <i>"Tomography of the upper crust"</i> (German R&D - Programme GEOTECHNOLOGIEN)

CONFERENCES ORGANISATION

2018	Workshop EAGE Fifth EAGE CO ₂ Workshop (Utrecht, The Netherlands)
2017	Workshop <i>"Full Waveform Inversion and Velocity Analysis"</i> (Institute for Pure and Applied Mathematics, Los Angeles, California)
2017	Workshop EAGE <i>"Data Science for Geosciences"</i> (Paris, France)
2013	SiteChar <i>"Characterisation of European CO₂ storage"</i> Closing conference (Rueil-Malmaison, France)
2012	Workshop EAGE <i>"From Kinematic to Waveform Inversion - Where are we and where do we want to go?"</i> (Copenhagen, Denmark)
2006	Rencontre Scientifique <i>"Méthodes quantitatives de caractérisation des réservoirs"</i> (Rueil-Malmaison, France)

ACKNOWLEDGMENT

Awards

2014	Etoiles de l'Europe 2014 – (MESR, France) for the FP7 SiteChar project
2008	CANUM best poster 2008 - <i>Inversion 2D de données sismiques de puits.</i>

Invited seminars

March-June 2017	<i>Computational issues in Oilfield applications</i> , UCLA, Los Angeles, USA
9-11 Apr. 2015	<i>Mathematical and Computational Challenges of Wave Propagation and Inverse Problems</i> , Michigan State University, USA
12-16 Dec. 2011	<i>Inverse Problems in Science and Technology</i> , The International Newton Institute, Cambridge University, UK

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Patent

1. Pellé L., **Delprat-Jannaud F.**, Lailly P. and Renard, F., 2002. *Méthode pour former un modèle représentatif de la distribution d'une grandeur physique dans une zone souterraine, affranchi de l'effet de bruits corrélés entachant des données d'exploration*. N° 4953.
2. **Delprat-Jannaud F.**, Lailly P. and Métivier L., 2009. *Méthode pour imager une zone cible du sous-sol à partir de données de type walkaway*. N° 5958.

Peer Review Publications

1. **Delprat-Jannaud F.**, 1991. *Tomographie de réflexion : quelle est l'information contenue dans les temps d'arrivée ?* Thèse de docteur en sciences, Université Paris XI, Novembre 1991. Editions Technip, Paris, 1991, 300 p.
2. **Delprat-Jannaud F.** and Lailly P., 1992. *What information on the Earth model do reflection travel times provide?*, J. Geophys. Res., Vol. 97, No. B13, p. 19,827--19,844. [doi:10.1029/92JB01739](https://doi.org/10.1029/92JB01739)
3. **Delprat-Jannaud F.** and Lailly P., 1993. *Ill-posed and well-posed formulations of the reflection travel time tomography problem*, J. Geophys. Res., Vol. 98, No B6, p. 589--6,605. [doi:10.1029/92JB02441](https://doi.org/10.1029/92JB02441)
4. **Delprat-Jannaud F.** and Lailly P., 1995. *Reflection tomography: how to handle multiple arrivals?*, J. of Geophys. Res., Vol. 100, No. B1, p. 703--715. [doi:10.1029/94JB02461](https://doi.org/10.1029/94JB02461)
5. Jannaud L. and **Delprat-Jannaud F.**, 1995. *Traveltime inversion with a priori information on illuminated parts of reflectors*, J. Geophys. Res., Vol. 100, No. 2, p. 2151--2160. [doi:10.1029/94JB02873](https://doi.org/10.1029/94JB02873)
6. **Delprat-Jannaud F.** and Lailly P., 2004. *The insidious effects of fine-scale heterogeneity in reflection seismology*, J. Seismic Expl., Vol. 13, p. 39--84.
7. **Delprat-Jannaud F.** and Lailly P., 2005. *A fundamental limitation for the reconstruction of impedance profiles from seismic data*, Geophysics, Vol. 70, No. 1, p. 1--14. [doi:10.1190/1.1852784](https://doi.org/10.1190/1.1852784)
8. **Delprat-Jannaud F.** and Lailly P., 2008. *Wave propagation in heterogeneous media : the effects of fine-scale heterogeneity*, Geophysics, Vol. 73, No. 3, p. 37--49. [doi:10.1190/1.2897326](https://doi.org/10.1190/1.2897326)
9. Métivier L., Lailly P., **Delprat-Jannaud F.** and Halpern L., 2011. *A 2D nonlinear inversion of well-seismic data*, Inverse Problem, Vol. 25, Article 055005. [doi:10.1088/0266-5611/27/5/055005](https://doi.org/10.1088/0266-5611/27/5/055005)
10. Bekri S., Renard S. and **Delprat-Jannaud F.**, 2015. *Study of permeability changes during injection*. OGST, Vol. 70, No 4. [doi: 10.2516/ogst/2014046](https://doi.org/10.2516/ogst/2014046)
11. Nepveu M., Neele F., **Delprat-Jannaud F.**, Akhurst M., Vincké O., Volpi V., Lothe A., Brunsting S., Pearce J., Battani A., Baroni A., Garcia B., Hofstee C. and Wollenweber J., 2015. *CO₂ storage feasibility: a workflow for site characterization*. OGST, Vol. 70, No 4. [doi: 10.2516/ogst/2014034](https://doi.org/10.2516/ogst/2014034)
12. **Delprat-Jannaud F.**, Akhurst M., Pearce J., Nielsen C., Neele F., Lothe A., Volpi V., Brunsting S. and Vincké O., 2015. *SiteChar - Methodology for a fit-for-purpose assessment of CO₂ storage sites in Europe*. OGST, Vol. 70, No 4. [doi: 10.2516/ogst/2014059](https://doi.org/10.2516/ogst/2014059)
13. Gruson J.F., Serbutoviez S., **Delprat-Jannaud F.**, Akhurst M., Nielsen C., Dalhoff F., Bergmo P., Bos C., Volpi V. and Iacobellis S., 2015. *Techno-economic assessment of four CO₂ storage sites*. OGST, Vol. 70, No 4. [doi: 10.2516/ogst/2014057](https://doi.org/10.2516/ogst/2014057)
14. Akhurst M. C., Hannis S. D., Quinn M. F., Shi J-Q., Koenen M., **Delprat-Jannaud F.**, Bossie-Codreanu D., Nagy S., Klimkowski L., Gei D., Pluymaekers M. and Long D., 2015. *Risk-led characterisation of a site for the geological storage of CO₂*. OGST, Vol. 70, No 4. [doi: 10.2516/ogst/2015013](https://doi.org/10.2516/ogst/2015013)
15. Baroni A., Estublier A., Vincké O., **Delprat-Jannaud F.** and Nauroy J.F., 2015. *Dynamic fluid flow and geomechanical coupling to assess the CO₂ storage integrity in faulted structures*. OGST, Vol. 70, No 4. [doi: 10.2516/ogst/2014024](https://doi.org/10.2516/ogst/2014024)
16. Volpi V., Forlin E., Baroni A., Estublier A., Donda F., Civile D., Vincké O. and **Delprat-Jannaud F.**, 2015. *Evaluation and characterization of potential CO₂ storage site in the South Adriatic offshore*. OGST, Vol. 70, No 4. [doi: 10.2516/ogst/2014039](https://doi.org/10.2516/ogst/2014039)

ZEP Advisory Council 56

19th September 2018

Agenda Item 2.d: ZEP Review update

The Advisory Council agreed that ZEP should undertake a review of its activities at the beginning of the new grant period.

The objectives of the review will be to:

- Ensure that ZEP understands CCUS stakeholders' priorities and is able to meet their needs.
- Agree activities for the new grant period and ensure ZEP maximises its effectiveness.
- Consider ZEP's potential role longer-term, how it might be structured and supported.

In order to develop a comprehensive overview of the current landscape, the survey will be targeted both at immediate stakeholders and a wider stakeholder audience.

Immediate stakeholders are directly engaged in ZEP activities i.e. the European Commission, Advisory Council members and observers, Network technology and Network Policy and Economics members.

The survey will also be shared with a broader stakeholder audience, including prospective members, other CCUS organisations, NGOs, and other organisations working on the energy transition (trade associations, research institutions, industry groups i.e. in the chemical sector).

The survey was approved by the ACEC and will be circulated in the last week of September. Results will be collected mid-October and a workshop will be held in the autumn to assess the results. The conclusions of the work will be presented at the December Advisory Council.