



Climate Change Advisory Council Meeting –Carbon Budgets Working Group

Meeting 15

Approved MINUTES

Date: 28 June 2024

Start time: 13:30

Venue: EPA offices, Clonskeagh and Video Conference Meeting

Present: In person: Niall McInerney, Stephen Tracey

On MS Teams: Kian Mintz-Woo, Jeanne Moore, David Styles, James Moran, Oliver Geden, Jeanne Moore, Emma Lynch, James Murphy, John Fitzgerald, Emma Lynch, Trevor Donnellan (left meeting at 15:00),

Apologies: Hannah Daly, Kelly de Bruin, Kevin Hanrahan, Mert Yakut

Observers: Online: Jillian Mahon, Andrew Murphy, Gemma O' Reilly

Secretariat: In person: George Hussey, Meabh Gallagher; Phillip O'Brien, Gina Kelly.

Online: Claire Camilleri, Jodie Colgan, Eleanor Mathews, Katherine Dooley

External presenters: Joe Wheatley (UCD), Kerrie Sheehan (SEAI), John McCann (SEAI), Jean-Pierre Roux (SEAI), Sarah Kelly (Byrne Ó Cléirigh), Jeremiah Higgins (DECC),

1. Opening of meeting

All were welcomed to the meeting.

1.1. Adoption of Agenda

The agenda was adopted by the CBWG.

1.2. Minutes for the Carbon Budgets Working Group Meeting

The minutes from the previous meeting were agreed by the CBWG.

1.3 Actions

One open action was discussed. Action 19, the Secretariat to schedule trilateral discussion with NTA, TIM and SEAI CBWG members. This trilateral discussion with NTA, TIM and SEAI took place on Monday the 27th of May and it was proposed to close the action.

2. Analysis of warming impact of selected core scenarios (2nd iteration)

Joe Wheatley (UCD) presented on the second iteration of warming impact of selected core scenarios from the 2nd iteration of TIM and GOBLIN scenarios. The use of the MAGICC7 simple climate model (SCM) was outlined including the methodology, scenario inputs and outputs. Ireland's marginal warming contribution was presented, with variability due to variations in climate sensitivity and the probability of temperature neutrality across different years and across different TIM and GOBLIN scenarios. JW also presented planned future work for the coming months including running a 3rd iteration of scenarios with the preferred SCM and a final report on the findings.

Discussion followed the presentation. Members agreed the importance of using the revised LULUCF emissions factors for rewetted soils. New Action: DS will discuss further with JW over the coming week and provide guidance for the 3rd iteration of analysis and ST noted that a bilateral call with the EPA inventories team regarding the emissions factor would also be beneficial.

There was further discussion on the topic of methane and grandfathering within the model and the issue of historical emissions data. Members flagged different sources with reliable historical emissions data. The group also discussed the consideration of anthropogenic versus natural emissions.

3. Presentation of the macroeconomic impacts of core scenarios

Niall McInerney (Central Bank) presented on the macroeconomic impact of the core TIM scenario 300 Mt-BAU' in a semi-structural model of the Irish economy up to 2050. The presentation described the methodology employed including a description and inputs of the COSMO model. The updated COSMO analysed the economic impact of transition related investment on the Irish economy out to 2050. The model considered the level of investment required to meet decarbonisation targets as provided by the TIM model across the four energy sectors. The results highlight that the investment should be a mix of both private and public investment.

Discussion following the presentation concerned the indicative total investment required up to 2030 and 2050, the possible impact on GDP and the future labour requirements for the development of infrastructure out to 2050. A further discussion of the wider macroeconomic impacts of the transition to 2050 included the impact on house prices due to the need for an increased migrant labor force. Lastly, how to factor the phasing out of fossil fuels into the model and other costs to the economy such as adaptation and just transition was discussed.

GH questioned the additional assumptions made on energy infrastructure and grid development, suggesting that the EU reference scenarios and EirGrid's Network Delivery Portfolio could be useful for making assumptions about these components of investment. New Action: Secretariat agreed to follow up with NMCI with these potential sources on assumptions regarding the required grid investment.

JF noted that the results indicate a rise in GDP likely due to the model treating investment in decarbonisation increasing productive capacity, whereas it should result in less productive capacity as investment is diverted. New Action: JF agreed to follow up with NMCI regarding the macroeconomic analysis after the meeting.

4. Decarbonised Electricity System Study

Jean-Pierre Roux (SEAI) accompanied by Kerrie Sheehan (SEAI), John McCann (SEAI), Jeremiah Higgins (DECC) and Sarah Kelly (Byrne Ó Cléirigh) presented on the SEAI report, 'Expert elicitation on plausible deployment rates of generation technologies in Ireland 2024 –2040'. The objective of the study was to provide Department of Environment Communications and Climate with the information relevant to validating critical assumptions that underlie model solutions informing the setting of the 3rd and 4th carbon budgets and to prioritise critical assumptions on the availability and deployment rates of onshore wind, offshore wind, solar PV, thermal plant utilising green/blue hydrogen (or ammonia), and power generation with Carbon Capture and Storage (CCS) up to 2040. The presentation provided detail of the study methodology, results and key findings.

The discussion that followed the presentation included the possible deployment of mega infrastructure relating to Hydrogen and CCS as well as alternative technologies, such as waste to energy , Bioenergy with carbon capture and storage (BECCS) and green fuels such as ammonia. There was also further discussion on the national planning and grid system compared to other EU countries and barriers to CCS deployment before 2040. Historical deployment rates for onshore renewables were highlighted as the basis for the forecast of low deployment rates of wind and solar by 2030 and beyond. Importantly it was noted that these deployment rates did not take into consideration policy and legal reforms that could potentially increase deployment.

The presenters agreed to forward a supplementary expert briefing document to the Secretariat for information purposes. New Action: Secretariat to circulate the supplementary brief on the factors influencing power generation technology deployment in Ireland that was prepared by SEAI.

Following the discussion Jean-Pierre Roux and colleagues left the meeting.

5. Aviation and Maritime Emissions

The Secretariat introduced the paper on aviation and maritime emissions for discussion which had been previously circulated to the CBWG members. The presentation illustrated the emission trends for aviation and maritime. Decarbonisation options for both maritime and aviation were presented to the group.

Discussion following the presentation included the interpretation of the Paris Agreement in regards the inclusion of international aviation fuels, the future pressure on land for biomass production for sustainable aviation fuels, the possibility of producing synthetic fuels in Ireland and airlines to take more responsibility by paying for CO₂ capture as possible decarbonisation options for the sectors. Further discussion pointed out that inaction is not necessarily down to lack of intention by Government, rather barriers of multilateral agreements.

6. Carbon Budgets Work Plan

The carbon budgets work plan was shared with the working group. The final three meeting topics were presented with a focus on the July meeting, where SEAI and NTA are due to present their additional analysis results on both the 1st and 2nd iterations of modelling. The July meeting will also facilitate a follow-on discussion on biodiversity considerations by JM, and a follow-on discussion on CDR and Carbon Budgets by OG. The August meeting was also discussed where the 3rd and final iteration of modelling and analysis will be presented.

Prioritisation of in-person attendance at the July and August meeting was encouraged by the Secretariat with a reminder that the meetings will be held at the SEAI Head Office at 3 Park Place, Hatch Street, D02 FX65.

7. Next Steps

The Secretariat presented next steps for the Scenario Dialogue Tool to the group. New Action: Each member was asked to fill at least one scenario before the July 25th meeting. The Secretariat will set up a call with each member to walk through the tool in more detail and address any questions the members might have. It was noted that the format and approach final iteration to the tool will be locked down after the July 25th meeting and final input to the tool is expected no later than September 30th.

New Action: the Secretariat will schedule a call with KH and TD to discuss FAPRI scenario results the week of 8th of July.

The Secretariat also noted that they final feedback from the CCAC for the 3rd iteration of modelling and analysis will be agreed at the Council meeting on July 18th.

8. AOB

The Secretariat gave context to the additional paper that was circulated to the group in advance of the meeting.

9. CB WG Actions Log

Action Number	Date Raised	Description	Owner	Due	Status
19	22/03/24	Secretariat to schedule trilateral discussion with NTA, TIM and SEAI CBWG members.	Secretariat	Apr 2024	Proposed to Close Trilateral discussion occurred on the 27 th May
22	28/06/24	DS to provide guidance to JW for the 3rd iteration of analysis and ST to facilitate a bilateral call with the EPA inventories team regarding the revised soil emissions factor.	CBWG Members	July 2024	Open
23	28/06/24	Secretariat to follow up with potential sources on assumptions regarding the required grid investment for NMcl to consider as part of the next iteration of COSMO analysis	Secretariat	July 2024	Open
24	28/06/24	JF to follow up with NMcl regarding comments on the macro analysis	CBWG Members	July 2024	Open
25	28/06/24	Secretariat to circulate the supplementary brief on the factors	Secretariat	July 2024	Open

		influencing power generation technology deployment in Ireland that was prepared by SEAI.			
26	28/06/24	Each member was asked to fill at least one scenario in the dialogue tool before the July 25th meeting. The Secretariat will set up a call with each member to walk through the tool in more detail and address any questions the members might have.	CBWG members and Secretariat	July 2024	Open
27	28/06/24	Secretariat will schedule a call with KH and TD to discuss FAPRI scenario results the week of 8th of July.	Secretariat	July 2024	Open