



Climate Change Advisory Council Meeting –Carbon Budgets Working Group

Meeting 5

DRAFT MINUTES

Date: 27th July 2023

Start time: 13:30

Venue: EPA officers, Clonskeagh and Video Conference Meeting

Present: In person: Kian Mintz-Woo, Stephen Treacy, James Murphy, Gemma O'Reilly

On MS Teams: Brian Ó Gallachóir, Hannah Daly, Emma Lynch, Colm Duffy, Mert Yakut, Trevor Donnellan, Kevin Hanrahan, Niall McInerney

Apologies:, Jim Scheer, Niamh Garvey, Jeanne Moore, David Styles, Yvonne Buckley, Kelly de Bruin, Oliver Gedden.

Observers: John Fitzgerald (in person).

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

External Presenters: Joseph Wheatley (online) Kevin Black (online), Peadar Ó Súilleabháin (online), Karen Whitaker (online).

1. Opening of meeting

1.1. Adoption of Agenda

The agenda was adopted by the Carbon Budgets Working Group (CB WG).

1.2. Minutes for the Carbon Budgets Working Group Meeting

The minutes from the previous meeting were accepted by the CB WG

1.3 Actions

Actions 3 & 5 of the Actions Log will be kept open and will be developed as the CB WG continues.

2. Focused Discussion on Methane

The background briefing note on methane was circulated to CBWG in advance of the meeting. Any comments on this can be sent to the Secretariat via email.

Joseph Wheatly from the Energy Institute in UCD presented on methane policy targets in Ireland based on his physical science research using simple climate models (SCMs). Key points included definitions of climate neutrality, different metrics for measuring the warming impact of methane, and the implications of methane reduction to policy targets. The SCMs used were MAGICC, FaIR, Hector and Oscar. The importance of the choice of climate target was discussed. The interaction between Irish and global emissions was outlined along with the utility of SCMs for policy analysis. The utility of a split gas approach to investigate warming impacts of policy was outlined.

Discussions surrounded the selection of climate targets and methane's importance in achieving these. Considerations surrounding fairness, grandfathering of emissions, and implications of delayed action were raised together with the research assumptions, methane residency duration, and the influence of land use change on methane emissions. The ability of the CBWG to consider a split gas approach was discussed.

3. Ethics of Methane Emissions and climate change

Kian Mintz-Woo presented on the ethics of methane emissions based on research in the philosophical literature. This centred around the fundamental differences between carbon dioxide and methane and the resulting differences in stock/flow accounting of these gases. Ireland will experience this issue more than other countries due to the relatively high methane emissions compared to other long lived GHGs. Important considerations include ease of explanation to stakeholders, grandfathering of GHGs, fairness of effort, and inclusion of value judgements.

Discussions were held on the understandability of the metrics, the methodology for presenting carbon budgets, equitable distribution of effort, uncertainty (science and ambition) as a barrier to action, global methane pledge, and the development of technologies.

4. Scoping of Modelling Work

Peadar Ó Súilleabháin and Karen Whitaker at NTA gave a presentation on the Regional Modelling System (RMS) on behalf of Barry Colleary. This suite of computer models is designed to mimic Ireland's transport systems, networks and behaviours and was developed to support strategic planning, including carbon emissions reductions. Inputs are data and evidence based. Outputs such as traffic volumes can combine with other tools to provide the estimated forecast transport CO₂ emissions.

Discussions included emission reductions, adherence of existing modelling results to carbon budgets, and the current availability of modelling results. Future updates to the models will

include increased freight transport modelling, and updated settlement data to inform on long distance commuting. The sensitivity of transport switching to price and population dynamics/heterogeneity was raised.

Kevin Black gave an overview of forestry models (FERs), including inputs, outputs and limitations. Models used, including CBM-CFS calibrated for use in Ireland, can be used to assess GHG inventories. The importance of forest management was highlighted. Model sensitivities depend on rate of afforestation, species, soils, management options and legacy conditions. Management intensity has a large impact on the equilibrium of the system and whether forest is a net remover or net emitter of GHGs.

Discussions included extended rotation, and supply of timber and related product displacement to the construction industry, and the impacts of temperature change to future forest species.

5. Carbon Budgets Work Plan

The Secretariat outlined the work programme for the CB WG, including future thematic topics. In September there will be an overview of socioeconomic considerations, and presentations on population projections by the CSO, ESRI and DHLGH.

The September workshop will include determining the building blocks for scenarios for CB3 and CB4, along with scenario development for 2nd Carbon Budget Programme. Targets for 2050 and the methodology for CB3 and CB4 have not been fully determined by the council. The fact that net zero can be reached prior to 2050 was raised. This can be taken forward at the next CBWG meeting and workshop to be subsequently brought to council for consideration.

The response of DECC to the letters from the CCAC requesting modelling capacity RE TIM and GOBLIN was raised. DECC has been contacted by the Secretariat requesting a response to these letters and this will be followed up on before the next meeting.

In October, a land use review was timetabled, but may be moved out to a later meeting. For December, a global stocktake with discussion of ESAB 2040 target is timetabled and will be confirmed at subsequent meetings.

Action: CB WG Members to provide comment on the Draft agenda for the September workshop by the 4th of August.

Action: CCAC Secretariat to schedule individual meetings with modellers prior to finalising the September workshop agenda.

6. Next Steps and Agenda for next meeting

Two new actions were raised at the meeting (see actions 6 and 7 in the Actions Log below). The next meeting will include a discussion on socioeconomic and population projection considerations.

7. AOB

No items raised under AOB. Participants were thanked for their contributions.

8. CB WG Actions Log

Action Number	Date Raised	Description	Owner	Due	Status
3	20/04/23	Expand discussion of macroeconomic inputs/ drivers	CCAC Secretariat and relevant CB WG Members	Q3 2023	Ongoing – Update to be provided at CB WG Meeting 4 and 6
5	20/04/23	Further develop the approach and preparation for topical discussions	CCAC Secretariat	Q3 2023	Ongoing – Secretariat to provide an update on the approach and preparation for upcoming topical discussions at each meeting.
6	27/07/23	CB WG Members to provide comment on the Draft agenda for the September workshop by the 4 th of August	CB WG Members	04/08/23	
7	27/07/23	CCAC Secretariat to schedule individual meetings with modellers prior to finalising the September workshop agenda	CCAC Secretariat	06/09/23	