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Tēnā koe,

Waikato Regional Council Submission to the Proposals for a Regulatory regime for Carbon Capture, Utilisation and Storage

Thank you for the opportunity to submit on the consultation document on Proposals for a Regulatory regime for Carbon Capture, Utilisation and Storage. Please find attached the Waikato Regional Council's (the Council's) submission. The submission was prepared by officials and will be considered formally by the Council's Submissions Subcommittee on 14 August 2024. This is in response to the short consultation period with the close of submissions falling outside (before) Council's committee scheduled meeting calendar.

After consideration by the Council's Submissions Sub-committee, a letter either confirming the status of the attached official's submission or advising of changes will be sent to you.

Should you have any queries regarding the content of this document please contact Blair Dickie, Principal Strategic Advisor, Policy Implementation directly on (07) 859 0851 or by email Blair.Dickie@waikatoregion.govt.nz.

Ngā mihi,

Tracey May Director Science, Policy and Information



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Submission from Waikato Regional Council on the Proposals for a Regulatory regime for Carbon Capture, Utilisation and Storage

Introduction

- 1. We appreciate the opportunity to make a submission on the discussion document for Proposals for a Regulatory regime for Carbon Capture, Utilisation and Storage.
- 2. Waikato Regional Council (the council) recognises the importance of climate action in the current global and national setting and highlight that as a local government authority, many of our activities are impacted by climate change. This is particularly important given our role managing activities that contribute to the emission of greenhouse gases and the sustainable management of natural and physical resources.
- 3. The council also shares the view that well-informed policies and strategies are necessary to ensure that the country will meet the national targets set under the Climate Change Response Act 2002.
- 4. We look forward to future consultation processes to incorporate the proposed amendments into relevant statutes and would welcome the opportunity to comment on any issues explored during their development.

The submission

5. The submission responds to the discussion document's questions, focusing on the topics or questions most closely aligned with our statutory role. We have not responded to all the questions. Our overall position can be summarised as follows:

(a) General overview

The council is aware that many different technologies and approaches will be required to reduce national greenhouse gas emissions, the most important of which is carbon dioxide (CO₂). There is no 'silver bullet' and to the extent that carbon capture, utilisation and storage (CCUS) can contribute to reduce emissions nationally, it should be enabled as part of the suite of responses available.

(b) Treatment under the Emissions Trading scheme

The council recognises that the atmosphere is agnostic as to the source of a molecule of CO_2 or the technology of the process from which it is derived and released. For this reason, the council considers that any anthropogenic release and subsequent capture of CO_2 should be measured and transparently accounted for in the ETS.

(c) Monitoring regime for CCS activities

The council considers an internationally compatible CCUS system to be appropriate. Eventually emissions units will be traded internationally, and this would be hindered by a bespoke New Zealand system. One caveat should apply, in that New Zealand businesses should have preferential access to local CCUS opportunities. Any international use of local CCUS units would effectively advantage that country's competitiveness in preference to local businesses.

As CCUS contributes to the national emissions target and therefore to sovereign risk (which has the potential to incur costs from being required to ipurchasing international emission reduction units), it therefore must be accompanied by the highest level of transparent accounting. This should not be confused by arguments of commercial sensitivity as this relates to national credibility.

(d) Liability for CO₂ storage sites

To ensure compliance and confidence in the process and justify the granting of emissions units into the ETS, full transparency will be needed. Additionally, a minimum period based upon scientific understanding relevant to each specific storage reservoir will be required, to establish the sequestration / storage performance. This period may vary between reservoirs by decades and relate to risk. nature-based solutions that would restore indigenous biodiversity while reducing carbon emissions.

(e) Consenting and permitting for CCUS

Storage reservoirs can potentially exist onshore or offshore (or both). In the case of offshore reservoirs, this may be within the coastal marine area, in the exclusive economic zone or again, span both jurisdictions. The proposed legislation should cover the interactions of the operations with the ETS in an integrated and consistent way, but the council is strongly of the opinion, that it should not try and duplicate the roles of other statutes with respect to the onsite environmental effects, additionally as many of these have bespoke Treaty of Waitangi (te Tiriti) settlement implications. There must be clarity as to which Act prevails for what aspect of the operation.

(f) Carbon capture and utilisation

The council is unaware of any regulatory or policy barriers to investment and adoption of CCU technologies, other than a lack of recognition in the ETS for use of engineered timber, bio-char and recreation of carbon sinks as part of climate adaptation and biodiversity enhancement projects.

The submission

Responses to some specific question prompts follow. Not all are relevant to either the region or the functions and roles of the regional council or there is insufficient understanding to develop an advocacy position. As a consequence not all questions have been responded to.

Submission on Proposals for a Regulatory regime for Carbon Capture, Utilisation and Storage – table of questions and answers from the consultation document.

Note: Not all questions have been responded to. The responses below relate only to those questions that are considered relevant to the council.

Questions	WRC response
General Consultation Questions:	
1 Do you agree that the government should establish an enabling regime for CCUS?	The council is aware that many different technologies and approaches will be required to reduce national greenhouse gas emissions, the most important of which is carbon dioxide (CO ₂). There is no 'silver bullet' and to the extent that CCUS can contribute to reduce emissions nationally, it should be enabled as part of the suite of responses available. The government has access to all three policy levers (incentives, penalties and information) and is in the best position to apply these nationally as while the issue of too many greenhouse gas emission is global, it is currently addressed through international agreements under the auspices of the United Nations. The council supports the use of CCUS as part of the country's response to reducing greenhouse gas emissions.
2 Do you agree with our objectives for the enabling regime for CCUS?	As mentioned above – all options should be on the table and the three objectives are appropriate targets for direction, process and scope. The council particularly supports the focus on effectiveness of data in all phases and cautions that transparency will be a critical element. This is because for-profit businesses will be operating in a process that has benefits and implications for the national (public) good.
Treatment under the Emissions Trading Scheme	
3 Should the ETS be modified to account for the emissions reductions achieved using CCS?	The council considers that the ETS is the appropriate mechanism for carbon capture and storage (CCS). Modifications (settings) by successive governments have skewed its past (and current) effectiveness and should be limited to the type of projects available to contribute to offsets, and to transparency with reporting requirements The ETS is currently limited to above ground biomass and does not reflect the 'storage' that is achieved when wood is processed into durable construction solutions such as engineered timber or when converted to biochar and sequestered below ground.
4 Do you agree that all CCS activities should be eligible to receive recognition for the emissions captured and stored?	The council recognises that the atmosphere is agnostic as to the source of a molecule of CO_2 or the technology of the process from which it is derived and released. For this reason, <u>the council agrees that any anthropogenic release and subsequent capture of CO_2 should be measured and transparently accounted for in the ETS.</u>
5 Do you think there should be a separate non-ETS mechanism for providing economic incentives for CCS?	If allowed to operate as originally intended, the ETS is the appropriate mechanism to trade release and use and sequestration of greenhouse gases. If there are industry and or sector specific circumstances in that warrant attention, these should be addressed through specific policy solutions such as winter energy payments, rather than complicating the operation of the ETS. The adage Keep it Simple applies in this situation.

Questions	WRC response
Monitoring regime for CCS activities	
6 In your opinion, which overseas standards for monitoring, verification and reporting of CCUS-related information should New Zealand adopt?	<u>The council considers an internationally compatible CCUS system to be appropriate</u> . Eventually emissions units will be traded internationally, and this would be hindered by a bespoke New Zealand system. One caveat would apply, in that New Zealand businesses should have preferential access to local CCUS opportunities. Any international use of local CCUS units would effectively advantage that country's competitiveness in preference to local businesses.
7 Is there any other information that CCS project operators should be required to verify and report? Please reference the relevant overseas standards where applicable	The council has no comment on this.
8 What methods should be used to quantify CO2 removal and storage in CCUS projects?	The council has no comment on this.
9 Are additional mechanisms required to ensure compliance with monitoring requirements?	The council considers that non-compliance at any stage of the capture, transport and sequestration operation should be treated as an offence so that appropriate penalties may be imposed.
10 What level of transparency and information sharing is required?	As CCUS contributes to the national emissions target and therefore to sovereign risk, it therefore must be accompanied by the highest level of transparent accounting. This should not be obfuscated by arguments of commercial sensitivity as this relates to national credibility. Most businesses are now subject to increased market and customer scrutiny, and many are also subject to the wider Taskforce on Climate Financial Disclosure risks implications. <u>The council strongly supports</u> a system requiring the highest level of transparency and information sharing.
11 Do you consider there should a minimum threshold for monitoring requirements so that small-scale pilot CCS operators would not have to comply with them?	In principle, the council is sympathetic to this matter but does not have the technical understanding to offer a threshold level for monitoring. We consider that any business that engages in CCUS activities should be rewarded for their efforts and that the public (and international concerns) must have confidence in the offsets accepted by the country and reported internationally.
	We propose a conservative (low risk) default level should be available in the same way as look-up tables are provided for above ground biomass for offset inclusion into the ETS.

Questions	WRC response
12 Should a monitoring regime extend to CCU activity?	The council considers that for the ETS to incentivise use of captured CO ₂ , an understanding of the sources is important, and this will not be possible without monitoring. It is one area that the ETS does not currently address. Currently the ETS assumes all CO ₂ from cut above ground biomass is immediately released into the atmosphere, yet this is not the case as in the case of construction using engineered timber instead of hi-emissions steel. Monitoring will also track fugitive emissions from operations associated with use of captures CO ₂ . <u>The council supports monitoring of CCU activity</u> .
Liability for CO2 storage sites	
13 Do you agree the proposed approach on liability for CO ₂ storage sites aligns with other comparable countries (like Australia)? If not, why not and how should it be changed?	The council has no comment on this.
14 Is the proposed allocation of liability consistent with risks and potential benefits? Are there other participants that should share liability for CCS operations?	To ensure compliance and confidence in the process and justify the granting of emissions units into the ETS, full transparency will be needed. Additionally, a minimum period based upon scientific understanding relevant to each specific storage reservoir will be required, to establish the sequestration / storage performance. This period may vary between reservoirs be decades and relate to risk. For example, a competently and documented decommissioned oil and gas reservoir may have a shorter minimum period that an abandoned one as the liability has less risk.
15 Should liability be the same for all storage sites if projects are approved? Or should liability differ, depending on the geological features and characteristics of an individual storage formation?	See previous response. (13)
16 Do you consider there should a minimum threshold for CCUS operators being held responsible for liability for CO ₂ storage sites so that small-scale pilot CCS operators would be exempt? If so, what should be the threshold?	The council does not have the technical understanding to offer a suitable threshold, however, it does note some small (property) scale operations do sequester carbon and should be eligible for participation in the ETS. Some activities have carbon sequestration and hence storage co-benefits such as burying biochar can store carbon as bio-char and some nature based solutions to address the biodiversity crisis, climate adaptation, and water quality issues such as the re-wetting of drained organic soils that not only restarts carbon storage, but prevents the oxidation of soil carbon from cultivation of organic soil

Questions	WRC response
17 Should the government indemnify the operator of a storage site once it has closed? If so, what should be the minimum time before the government chooses to indemnify the operator against liabilities for the CO ₂ storage sites?	The council has extensive experience with the management of underground resources, (geothermal) and understands that each storage site has different geo-chemical characteristics and will respond differently to injection of CO ₂ . There will need to be a minimum time for the storage reservoir has settled into a type of equilibrium. This should not be an arbitrary term offered by policy makers and imposed by regulators, but one based upon technical evidence of geotechnical specialists that is matched to each reservoir, and is potentially in the order of decades. The council supports having a time delay before the government indemnifies the operator and is of the opinion that this time frame needs to be determined for each individual operation based on technical evidence.
18 Are additional insurance mechanisms or financial instruments required to cover potential liabilities from CO2 leakage in CCS projects?	The council has no comment on this.
19 What measures should be implemented to monitor CCS projects for potential leakage and ensure early detection?	The council has no comment to make on the technology to use, the experimental design, or monitoring protocols other than to recognise that different geologies will need different treatments.
20 Do you agree that trailing liability provisions are needed?	<u>The council strongly supports trailing liability</u> . It should be built into the price of the asset so that the risk is fully addressed. The public adoption of liability should be dependent upon the specific characteristics of each storage reservoir, rather than a standardised time.
Consenting and permitting for CCUS	
21 Are inconsistencies in existing legislation for consenting and permitting impacting investment?	The council has no comment on this.
22 Should the permit regime for CCUS operations be set out in bespoke legislation or be part of an existing regulatory regime (such as the RMA, EEZ Act, the CMA or the Climate Change Response Act 2002)? Please give reasons for your answer.	Storage reservoirs can potentially exist onshore or offshore (or both). In the case of offshore reservoirs, this may be within the coastal marine area, in the exclusive economic zone or again, span both jurisdictions. The proposed legislation should cover the interactions of the operations with the ETS, in an integrated and consistent way. <u>The council is strongly of the opinion that it should not try and duplicate the roles of other statutes with respect to the onsite environmental effects, additionally as many of these have bespoke Treaty of Waitangi (te Tiriti) settlement implications.</u> There must be clarity as to which Act prevails for what aspect of the operation.

Questions	WRC response
23 Should CCS project proponents be required to submit evidence that proposed reinjection sites are geologically suitable for permanent storage, in order for projects to be approved? If so, what evidence should be provided to establish their suitability?	The council supports sufficient evidence being provided to enable approval of proposed permanent storage sites. As mentioned, the Council has extensive experience with management of geothermal reservoirs (75% of the national resource is found within the Waikato region) and understands that even with the availability of modern remote sensing technology, reservoir characteristics and suitability for CO ₂ storage will only ever be established definitively once the operation has begun. The risk decreases with increased information, not only on the geology of the proposed storage site but also its responses to previous use. For this reason, all relevant information from the public understanding and any commercial use of the site will be required.
24 Should there be separate permitting regime for CCU activity if there is no intention to store the CO ₂ ?	The council does not have a view on this, however, it does note that recording of usage will be required to prevent double accounting.
Carbon capture and utilisation	
25 Are there regulatory or policy barriers to investment and adoption of CCU technologies?	The Council is unaware of any barriers, other than a lack of recognition in the ETS for use of engineered timber, bio-char and recreation of carbon sinks as part of climate adaptation and biodiversity enhancement projects.
26 What potential markets for CO ₂ derived products do you see as most critical in New Zealand?	The council has no comment on this.
27 Are there any specific barriers to transportation of CO ₂ ?	The council has no comment on this.

Submitter details

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