

From: Matt Adams <Matt.Adams@mfe.govt.nz>
Sent: Friday, 20 February 2026 10:45 am
To: Bonnie.Hartfield@mfe.govt.nz
Subject: RE: **CLASSIFICATION** 25-BRF-00199 Marine Carbon Dioxide Removal

Awesome, thanks! Will add something to the framework point about informing regulatory environment as well

From: Bonnie Hartfield <Bonnie.Hartfield@mfe.govt.nz>
Sent: Friday, 20 February 2026 10:37 am
To: Matt Adams <Matt.Adams@mfe.govt.nz>
Subject: RE: **CLASSIFICATION** 25-BRF-00199 Marine Carbon Dioxide Removal

If I have time (absolute lol). Additions/amendments in green.

Bonnie Hartfield ([she/her](#))

Advisor | Kaitohutohu
Marine Policy | Kaupapahere Moana
Natural Environment Policy | Te Rōpū Te Whakahaere Taiao me te Urutau

Ministry for the Environment | Manatū Mō Te Taiao
environment.govt.nz

Ministry staff work flexibly by default. This means I work in the office/at home from 8:30 – 4:30.



From: Matt Adams <Matt.Adams@mfe.govt.nz>
Sent: Friday, 20 February 2026 10:25 am
To: Bonnie Hartfield <Bonnie.Hartfield@mfe.govt.nz>
Subject: RE: **CLASSIFICATION** 25-BRF-00199 Marine Carbon Dioxide Removal

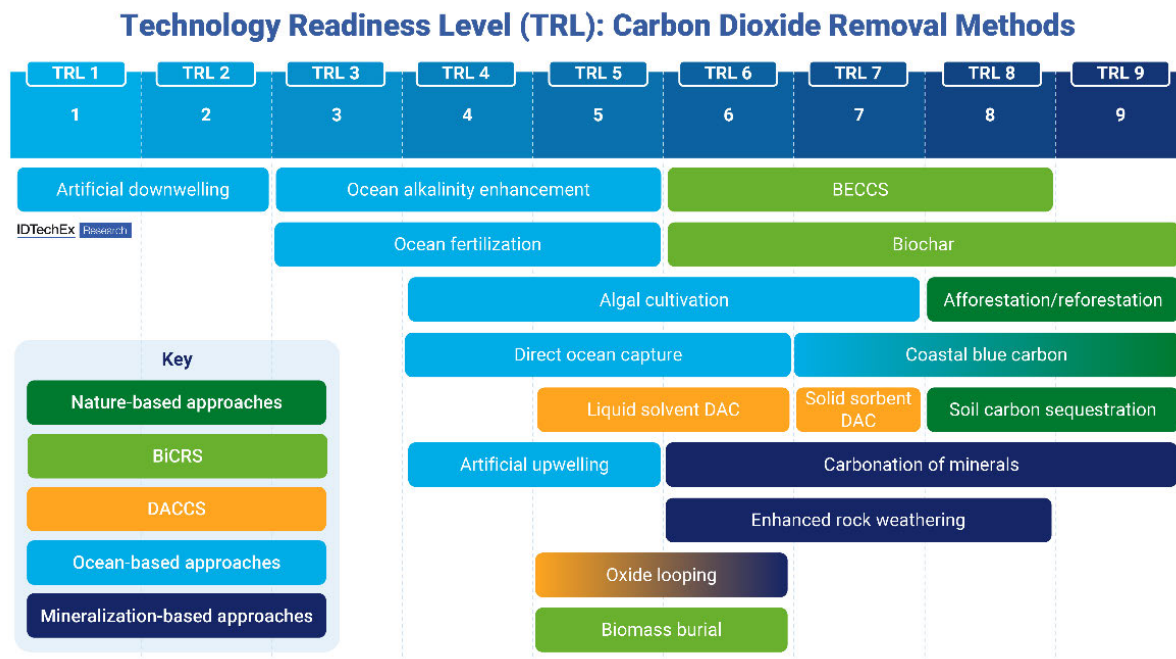
Keen to get your thoughts on the below. Need to bump up the benefits of the national assessment/framework/strategy (I need to read the AMCF paper again) – feel free to have a crack if you have time. I'll take a look as well.

- (Nice to have) What's the size of the prize for NZ? If effective, marine carbon dioxide removals could sequester significant amounts of carbon dioxide from the atmosphere. Blue carbon activities have co-benefits, as they also restore coastal environments that could mitigate some effects of climate change (e.g. mangroves protecting against storm surge). Gigablue aim to remove a gigaton of carbon dioxide by 2035, and already has contracts in place to remove 200,000 tons of CO2 over the next four years. Economic prize: Gigablue have been asked to provide some economic analysis to assess their impact in New Zealand, but has not been forthcoming. Gigablue is focussing on the accessing the voluntary carbon

market, but we do not know whether their operations will be solely focussed in New Zealand waters (they have companies in a number of countries where they are making enquiries).

- (Desirable) How proven/ready are some categories (eg mangroves vs ocean fertilisation?) Blue carbon activities are more proven than marine geoengineering activities. Methods are available to confirm additionality and measure the amount of carbon stored for blue carbon activities. Coastal blue carbon has been proven through successful operations.

Ocean fertilisation, like many of the marine geoengineering techniques, currently lack evidence of effectiveness (very difficult to show a carbon drawdown from the atmosphere and to monitor, report, and verify sequestration) and their environmental impacts – these is still in the technology development phase. The following diagram shows the readiness of a range of technologies (a score of 3-5 indicates the technology is still in development, whereas 8-9 indicates systems are tested and ready to launch at commercial scale):



- (Nice to have) What are different stakeholders' positions on this matter?
 - Scientists/eNGOs: Marine geoengineering technology not proven, effective or safe. Concerns about environmental effects include nutrient robbing, shading the water column, algal blooms, ingestion effects, smothering the seabed, water chemistry changes. There is potential for regional or global effects from marine geoengineering activities. Scientists are interested in the ability to research how these activities could work and their effectiveness.
 - Iwi/Māori: Gigablue have contracted someone from Ngai Tahu to provide a cultural assessment (which has not been shared with MfE). We are uncertain of this person's ability to speak on behalf of Ngai Tahu, 9(2)(ba)(i)

We have not engaged with wider iwi groups, but understand there is a strong desire to avoid pollution of the marine environment.
 - Pacific Island neighbours: vocal opposition to marine geoengineering in the Pacific
- (Critical) What is the pathway for these kinds of removals?
 - Is it really the VCM - which Ministers Hoggard and Watts are doing something about VCM appears to be the most viable pathway (apart from those activities occurring close to shore, such as coastal blue carbon). There is no international framework to support marine carbon dioxide removal activities being included in the national GHG inventory. Andrea Brandon has been providing advice to Aaron on how this works.
 - How does this interact with the removals framework about to go live? 9(2)(g)(i)

Marine policy team have been working with the team developing guidance for removals framework. We are making it clear that removal activities need to be consistent with international law and our domestic legislation in order to be in scope. 9(2)(g)(i)
- (Critical) What does this mean for the Minister? Eg stimulating economic activity/markets?

- 9(2)(h) [REDACTED]
- Eg there are still some categories that are for the next 10-20 years? They are x y z?
- Where are his opportunities to make progress?
 - Greater participation at international fora (such as the London Protocol) to progress science and regulation of marine geoengineering activities. This could also cover ratifying an amendment to the Protocol that enables research on particular methods and embedding research assessment frameworks in our domestic regime
 - Amend domestic regulations to better enable research in line with our international obligations
 - Develop or fund a national assessment of mCDR techniques in New Zealand and develop strategy/framework for responsible research and use

From: Matthew Barbati-Ross <Matthew.Barbati-Ross@mfe.govt.nz>
Sent: Thursday, 19 February 2026 4:32 pm
To: Matt Adams <Matt.Adams@mfe.govt.nz>
Subject: FW: CLASSIFICATION 25-BRF-00199 Marine Carbon Dioxide Removal

Kia ora Matt

See below – Climate GMs catching up with this advice – perhaps in response to your recent discussion with climate? Can you give me a bullet to highlight the link?

Kā mihi, Matthew

Matthew Barbati-Ross (he/him)

Manager | Kaiwhakahaere

Marine Policy Team | Kaupapahere Moana

Ministry for the Environment | Manatū Mō Te Taiao

9(2)(a) | matthew.barbati-ross@mfe.govt.nz | mfe.govt.nz

Ministry staff work flexibly by default. For me, this means I work from Te Pātaka-o-Rākaihautū/Banks Peninsula.



Ministry for the
Environment
Manatū Mō Te Taiao



From: Stephen Goodman <Stephen.Goodman@mfe.govt.nz>
Sent: Thursday, 19 February 2026 4:20 pm
To: Matthew Barbati-Ross <Matthew.Barbati-Ross@mfe.govt.nz>; Aaron Napier <Aaron.Napier@mfe.govt.nz>
Cc: Kirsty Flannagan <Kirsty.Flannagan@climateieb.govt.nz>
Subject: Fw: CLASSIFICATION 25-BRF-00199 Marine Carbon Dioxide Removal

Hi there,

Checking we are fully joined up on this advice. I like that it is scientifically based and has the international context. That's great. I just want to get ahead of MCC questions on this if he reads it over the weekend.

Is there some correspondence I could read or is it worth a discussion tomorrow afternoon/Monday morning?

My questions

- (Nice to have) What's the size of the prize for NZ?
- (Desirable) How proven/ready are some categories (eg mangroves vs ocean fertilisation?)
- (Nice to have) What are different stakeholders' positions on this matter?
- (Critical) What is the pathway for these kinds of removals?
 - Is it really the VCM - which Ministers Hoggard and Watts are doing something about
 - How does this interact with the removals framework about to go live? 9(2)(g)(i)
- (Critical) What does this mean for the Minister? Eg stimulating economic activity/markets?
 - Eg Large scale ocean categories are not for now. But further science/pilots are the go?
 - Eg there are still some categories that are for the next 10-20 years? They are x y z?
 - Where are his opportunities to make progress?

Happy to discuss,
Steve.

From: Steve Mason <Steve.Mason@parliament.govt.nz>
Sent: Thursday, February 19, 2026 3:55 PM
To: Advice <Advice@mfe.govt.nz>
Cc: environment portfolio [EXTERNAL] (parliament) <environment.portfolio@parliament.govt.nz>; Emily Young [EXTERNAL] (PARLIAMENT) <Emily.Young@parliament.govt.nz>; Briefings - Watts <BriefingsWatts@mfe.govt.nz>
Subject: CLASSIFICATION 25-BRF-00199 Marine Carbon Dioxide Removal

Kia ora Advice Team,

25-BRF-00199 Marine Carbon Dioxide Removal

We understand this briefing was sent to Minister Simmonds on 19 December and should have also been sent to our office the same day. Both Emily and I have checked our inboxes and can't see it coming over (apologies if it did but we can't find any trace).

Can you do a quick check and see if anything happened on your side, and if there may be any other briefings around the same time too? Just want to make sure we catch what happened and make sure no others are stuck in the system.

Ngā mihi,
Steve



Steve Mason-Pryor | Private Secretary – Climate Change
Office of Hon. Simon Watts
Minister of Climate Change
Minister for Energy
Minister of Local Government
Minister of Revenue

M: 9(2)(a)

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