

From: Matt Adams <Matt.Adams@mfe.govt.nz>
Sent: Friday, 6 March 2026 1:31 pm
To: Bonnie.Hartfield@mfe.govt.nz; Aaron.Napier@mfe.govt.nz
Cc: Matthew.Barbati-Ross@mfe.govt.nz
Subject: RE: **CLASSIFICATION** FW: Gigablue NZ Visit

Thanks Bonnie,

I am yet to look at these documents, but following your glowing review, I took a look at the economic analysis. Disclaimer: I am far from an economist, but did spend too much time at university studying accounting and finance. Aaron, it would be great if we could get a real economist to look over this. So, my initial thoughts are:

- I'm not well placed to comment on the pros and cons of the model used. But I don't see any interrogation/testing of the inputs put into the model, which have been taken directly from Gigablue. This could have been mitigated a little by providing some sensitivity analysis (ie, what would things look like if quantity of credits or prices change by + or – 10%). The model throws out some impressive FTE numbers. These seem hard to comprehend based on our lack of understanding of production, for example it will support nearly **9(2)(b)(ii)** FTEs **9(2)(b)(ii)** of which will be in Tertiary education).
- The document appears to classify MCFS as direct ocean carbon capture. This is a different method to biomass sinking (as GB now identify it in document reviewed by Bonnie) and ocean fertilisation. The diagram they use to explain their method also looks very similar to OF
- They appear to have two numbers for their annual capacity – at one place global capacity is equal to the current global demand for CDR (**9(2)(b)(ii)** CO2-e per year) and then later it is equal to **9(2)(b)(ii)** of the Global need for CDR in 2050 (which would be **9(2)(b)(ii)** CO2-e per year).
- Positive to see they reference Blue Economy and link to the Sustainable Seas Challenge definition – however, based on the information we have, I don't see MCFS yet as being able to fit within this categorisation, ie, I don't see evidence yet to support that it is restorative to the marine ecosystem
- It looks like GB would be investing circa **9(2)(b)(ii)** NZD into initial capital expenditure. However, their annual return when production has ramped up looks to be around \$ **9(2)(b)(ii)**. This return on investment is lower than a standard risk-free rate (bank deposit or government bonds). This may impact their ability to attract investors, unless they are happy with a significant discount in order to support the climate action

Have a good weekend,
Cheers,

Matt

From: Bonnie Hartfield <Bonnie.Hartfield@mfe.govt.nz>
Sent: Friday, 6 March 2026 10:02 am
To: Aaron Napier <Aaron.Napier@mfe.govt.nz>; Matt Adams <Matt.Adams@mfe.govt.nz>
Cc: Matthew Barbati-Ross <Matthew.Barbati-Ross@mfe.govt.nz>
Subject: **CLASSIFICATION** FW: Gigablue NZ Visit

Kia ora koutou,

I've done a quick-fire review of the documentation provided and have some initial thoughts.

You can find my more detailed notes for each document (noting I have left detailed review of the economics doc to Matt, our resident economics pro) attached, but here are the general points to note:

- Great to see some more thinking going into effects on the environment, although this is quite limited. The document '**Review study of benthic thresholds for dissolved oxygen and particle deposition**' written by ESNZ raises some interesting points about a lack of information about the efficacy of the particles and what may grow in/around them.
- There appears to be a shift towards describing the activity as primarily biomass sinking – this is mainly seen in the document '**MCFS differentiation from OIF**'. Biomass sinking is considered a form of marine geoengineering by the London Convention/Protocol and is not permitted for research or commercial use under the 2013 amendment. The LC/LP scientific working group are developing a potential assessment framework for considering biomass sinking research, but this is very much a nascent piece of work. Interestingly, this follows the trajectory of [Running Tide](https://www.wired.com/story/how-the-next-big-thing-in-carbon-removal-sunk-without-a-trace/), an mCDR operator that tried to establish in Iceland. Note: this link redirects to: <https://www.wired.com/story/how-the-next-big-thing-in-carbon-removal-sunk-without-a-trace/>
- The information provided doesn't really give us enough information on social licence or cultural considerations. There is a short memo referring to discussions with Ngāi Tahu, but no further information beyond that.
- As with previous information provided, a lot of the findings or conclusions are based on limited information. The documentation from ESNZ is a welcome step forward, and this is the kind of work that could be expanded upon.

Based on the information provided, there isn't really enough new information to justify the sessions requested below. I agree with Matthew's point re: waiting for Ministerial direction.

Please let me know if you have any further questions or would like to discuss.

Ngā mihi,

Bonnie

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

Advisor | Kaitohutohu

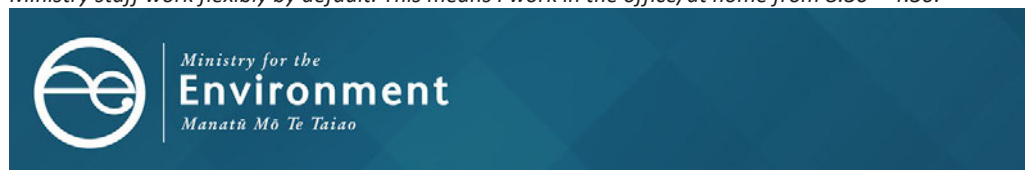
Marine Policy | Kaupapahere Moana

Natural Environment Policy | Te Rōpū Te Whakahaere Taiao me te Urutau

Ministry for the Environment | Manatū Mō Te Taiao

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



From: Sharon Naveh Ovedya [9\(2\)\(a\)](#)
Sent: Friday, 6 March 2026 8:03 am
To: Aaron Napier <Aaron.Napier@mfe.govt.nz>

Cc: Martin Workman <martin.workman@mfe.govt.nz>; Sapir Markus Alford 9(2)(a); Guy Shafran 9(2)(a); Bonnie Hartfield <Bonnie.Hartfield@mfe.govt.nz>; Matt Adams <Matt.Adams@mfe.govt.nz>; Andrea Brandon <Andrea.Brandon1@mfe.govt.nz>
Subject: Re: Gigablue NZ Visit

MFE CYBER SECURITY WARNING

This email originated from outside our organisation. Please take extra care when clicking on any links or opening any attachments.

Dear Aaron,

I hope you are well.

Following our recent correspondence, please find below a link to the materials we prepared in response to the Ministry's request. The materials include the Economic benefits to NZ report as well as an MCFS technical report: 9(2)(ba)(i)

In line with our previous exchange, we would very much welcome the opportunity to hold an in-person working session with the Ministry during our upcoming visit to New Zealand. To focus the discussion, we propose holding two working sessions, each lasting several hours, ideally on two separate days. At this stage, we plan to be in Wellington between 24-26 March, and would be grateful to know if any times during those dates work for your team.

Since we are also planning meetings with other relevant officials and the EPA during the same visit, confirming your availability would be very helpful so we can coordinate the broader schedule accordingly.

Please let us know if the proposed dates work, or if alternative times within that week (or the week before) would be more suitable.

We appreciate your continued engagement and look forward to working with you.

Kind regards,
Sharon

On Thu, Feb 26, 2026 at 5:01 PM Sharon Naveh Ovedya 9(2)(a) wrote:

Hi Aaron,

Thank you very much for your thoughtful and prompt response.

We will ensure that the full set of materials is shared with Bonnie, Matt and Andrea as well. We intend to submit the complete package next week (week commencing 2 March).

Assuming you have the material next week, the team could conduct an initial review, and then schedule the workshop during the week commencing 16 March or alternatively the week commencing 23 March, depending on your availability.

We would welcome the opportunity to use that time together to clarify sequencing under the Framework and discuss the most appropriate pathway forward.