

To:
The Supervisory Body
United Nations Framework Convention on Climate Change

Removal activities under the Article 6.4 mechanism

Rewind.Earth Response To Information Note

Dear Supervisory Board,

Background

Rewind.earth is grateful for the opportunity to provide feedback on the Article 6.4 Supervisory Body's [Information note on Removal activities under the Article 6.4: Guidance and questions for further work on removals](#).

Rewind.earth is a startup developing a natural, permanent, and scalable CDR solution, mimicking the natural transport of terrestrial organic carbon by rivers to the deep sediments of the sea. This natural phenomena is especially unique in the Black Sea, as the Danube river transports megatons of organic carbon every year, and in the anoxic bottom of the Black Sea, the organic carbon is preserved for millenia. Our company is leading the necessary scientific research to prove the permanence and environmental safety of this method, as well as defining the methodology and building the best-in-class MRV technology.

Our company was founded in the beginning of 2022 in Israel (registered as C Sink LTD, reg #: 516567260). We are collaborating with global marine research institutions (Geomar, Woods Hole) as well as institutions local to the Black Sea (Bulgaria, Romania, Ukraine, Turkiye, and Georgia). The support of the scientific community is overwhelmingly positive, as the anoxic conditions which exist in the deep Black Sea prevent most forms of life. We are currently in the "Seed" stage of our startup company, working to lay the foundation for a governmental permit as well as carbon removal accreditation with [Puro.earth](#). Once the foundation is established, we will build the MRV solution which will cover carbon accounting and sustainability from cradle to grave: from the source of the biomass, through the transportation & processing, all the way to the deep sea. We are developing novel measurement approaches and modeling to accurately show the permanence of the CDR, ultimately reducing the risk of re-emission and leakage to a minimum. In addition, we plan to incorporate additional benefits to the local communities we work with, such as additional source of income and adoption of agriculture & forestry best practices. The potential of storing terrestrial biomass in the Black Sea can very quickly reach gigaton scale, as the biomass is available and accessible, and the Black Sea is vast in volume and depth.

Response to Information Note

The following bullet points summarize our feedback to the discussions regarding Article 6.4 of the Paris Agreement.

- As indicated by the IPCC, CDR at gigaton scale must be developed by 2050 in order to limit global warming to 1.5°C or 2.0°C
- The CDR industry is extremely nascent, and suffering from the lack of proper financial incentives, which in turn prevent investors from investing in new technologies.
- Governments in addition are reluctant to provide permits for R&D of new CDR technologies.
- Agreeing on the right definition of Article 6 will be a major boost for the CDR field.
- The existing framework for carbon offsets is suffering from several disadvantages:
 - Carbon offsets issued for avoidance of new emissions are a “tax loophole”, where emitters in non-carbon-taxed countries are profiting instead of just getting a tax break. This is the equivalent of double-counting but in the form of tax.
 - Due to the variety of carbon offset types, the price range varies from \$2/ton to \$800/ton , causing confusion amongst buyers and hurting the high-value CDR solutions.
 - Distinguishing between carbon offset types by counting **ton-year** instead of just tons will dramatically improve the visibility of the carbon markets.
 - The standards and methodologies for carbon offset certification define poor and inaccurate measurement and verification requirements. Today’s technologies allow for high accuracy and level of detail which will allow fast scale of the industry with less overhead of 3rd party verifiers.
- Monitoring and reporting
 - Our approach is to use technology to monitor and report at a high level of detail and accuracy.
 - Measurement of CO2 removed should be accurate to the ton.
 - Proof of sequestration and measurement should be provided at issuance of the carbon credit
 - Verification of the removal should be performed yearly, until permanence is proved beyond reasonable doubt.
 - We plan to weigh each truckload of biomass before storing in the Black Sea, as well as extract samples to measure carbon content, and continue monitoring the stored carbon in the deep sea until permanence is proved.
- Addressing Reversals
 - In all CDR methods, insurance of reversal should be a requirement. There are some startups that are already tackling this challenge - how to assess and insure carbon removal solutions. Ultimately the priceXrisk of reversal will be incorporated into the cost of a carbon credit.

- Where the risk of reversal is high (e.g. soil organic carbon), the ton-year currency should provide a solution where payment is performed yearly, as long as no reversal has occurred.
- Accounting for Removals, Reductions, Leakage and Other Negative Impacts
 - The importance of a certified, peer reviewed life cycle analysis is critical.
 - Every CDR solution and implementation should undergo a detailed LCA which will take into account all of these considerations.
 - Carbon credits should be issued for the net negative CO2 emission, and nothing else.

In conclusion, Article 6.4 and the Supervisory Body have the opportunity to be a turning point in how carbon credits are viewed and implemented in the world. With peer reviewed LCAs, required insurance, and ton-year measurement paradigm - there is room for nature based CDR solutions as well as engineered solutions, and there is room for a slow phase-out policy for "avoidance" credits.

Sincerely,

Ram Amar
CEO, Rewind.earth

A handwritten signature in blue ink, appearing to read "רם אמר" (Ram Amar).

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ח.פ 516567260