

February 16, 2024

Christopher Kirkpatrick
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

RIN 3038-AF40: Commission Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contract

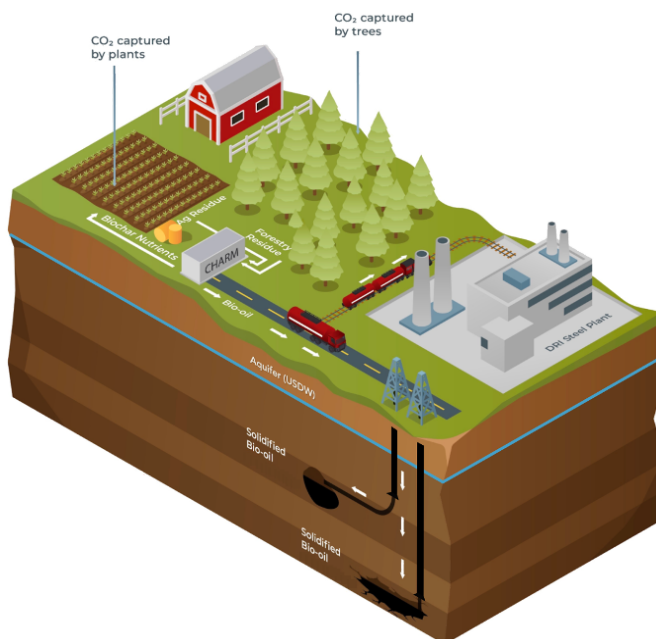
Submitted by:

Charm Industrial | 2575 Marin St., San Francisco, CA 94124
Nora Cohen Brown, Head of Market Development and Policy
nora@charmindustrial.com | 215-850-5602

Introduction

As one of the world's leaders in delivered tons of permanent carbon dioxide removal (CDR), Charm Industrial strongly supports the Commodity Futures Trading Commission's (CFTC) efforts to ensure voluntary carbon markets trade high-integrity voluntary carbon credits (VCCs). In particular, Charm thanks the CFTC for aligning with many of the suggestions in our previous joint comment, including by focusing on the following key attributes: 1) transparency, 2) additionality, 3) permanence and risk of reversal, and (4) robust quantification.

Background on Charm



Charm Industrial removes carbon from the atmosphere by capturing carbon dioxide in plants, converting plant biomass into an injectable bio-oil, and permanently sequestering this bio-oil underground in geological storage. The agricultural biomass residues (e.g., corn stover, wheat straw) and forestry residues that Charm uses would otherwise decompose or burn, releasing the embodied carbon dioxide into the atmosphere. Charm uses fast pyrolysis to quickly heat the biomass to 500°C, breaking down the biomass into a carbon-rich bio-oil that can be

easily transported, quantified, and injected for permanent sequestration.

Charm's key technology is a custom-built, mobile pyrolyzer that moves to each farm or forest to process excess biomass into bio-oil. The produced bio-oil is transported to a network of existing EPA- and state-regulated injection wells, where the bio-oil is pumped underground for permanent storage. Bio-oil is denser than most subsurface fluids, including brine and hydrocarbons, so it sinks within the reservoir. A chemical reaction called auto-polymerization solidifies the bio-oil, locking it in place for a certified period of at least 1,000 years. The net effect is permanent sequestration of the CO₂ captured from the atmosphere by the plants. Alternatively, the bio-oil can be used to create a syngas to decarbonize industrial processes (like iron production).

The image above is a concept drawing of Charm's bio-oil sequestration process. This new, patent-pending method effectively captures atmospheric CO₂ in biomass and sequesters it in formations that have stored oil and gas for hundreds of millions of years.

Comments

General

1. In addition to the VCC commodity characteristics identified in this proposed guidance, are there other characteristics informing the integrity of carbon credits that are relevant to the listing of VCC derivative contracts? Are there VCC commodity characteristics identified in this proposed guidance that are not relevant to the listing of VCC derivative contracts, and if so, why not?

Charm strongly supports the VCC commodity characteristics the CFTC identified in the proposed guidance.

In addition to the characteristics identified, Charm suggests that the CFTC require VCCs to clearly label whether they represent emissions reductions or removals. Removal credits reduce atmospheric CO₂, while emission reductions prevent CO₂ from entering the atmosphere - while both are important, they represent separate categories and companies that purchase VCCs often have separate goals for emissions reductions versus carbon removals. There are also separate considerations for identifying high quality credits in each category. In particular, establishing additionality is dramatically different; for example, it is harder to prove that VCCs were necessary to install solar panels to reduce coal use on the electrical grid, but relatively easy to prove that VCCs were necessary for carbon removal if the only product sold is carbon removal. Requiring clear labeling differentiating these categories will be key to improving market transparency. Additionally, [UN scientists estimate](#) we need ~10 billion tons of permanent removals per year by 2050, and only carbon removal-specific VCCs can support this global scientific imperative. Voluntary markets have long been thought of as a key enabler of industry -

but if buyers cannot identify what they are buying, they cannot effectively support the scientific consensus.

5. Should the VCC commodity characteristics that are identified in this proposed guidance as being relevant to the listing by a DCM of VCC derivative contracts, also be recognized as being relevant to submissions with respect to VCC derivative contracts made by a registered foreign board of trade under CFTC regulation 48.10?

Charm strongly supports requiring any VCC derivative contract sold in the United States to meet the standards set in this proposed guidance. **Therefore, the VCC commodity characteristics identified in the proposed guidance should also be applied to VCC derivative contracts made by a registered foreign board of trade.**

Additionality

8. In this proposed guidance, the Commission recognizes VCCs as additional where they are credited for projects or activities that would not have been developed and implemented in the absence of the added monetary incentive created by the revenue from carbon credits. Is this the appropriate way to characterize additionality for purposes of this guidance, or would another characterization be more appropriate? For example, should additionality be recognized as the reduction or removal of GHG emissions resulting from projects or activities that are not already required by law, regulation, or any other legally binding mandate applicable in the project's or activity's jurisdiction?

Charm supports the CFTC's current definition of additionality, i.e. "projects or activities that would not have been developed and implemented in the absence of the added monetary incentive created by the revenue from carbon credits," and explicitly adding a requirement for legal additionality (as expressed in the second definition) as well. While the first definition obliquely includes the second definition proposed above (because any project already required by law to be developed would have happened without payment from selling a carbon credit), it is worth explicitly citing it to ensure all projects meet both thresholds. Importantly, the first definition requires projects to prove that, in absence of the VCC, existing economic incentives in the marketplace would not have been enough to produce the emission reduction or carbon removal. This requirement to prove economic additionality, in addition to legal additionality, is crucial to ensure that buyers are only investing in carbon credits that produce real climate impacts.

Risk of Reversal

10. How should DCMs treat contracts where the underlying VCC relates to a project or activity whose underlying GHG emission reductions or removals are subject to reversal? Are there terms, conditions or other rules that a DCM should consider including in a VCC derivative contract in order to account for the risk of reversal?

As the CFTC lays out in the proposed guidance, DCMs should consider whether VCCs are subject to buffer pools that can be tapped in case of a reversal. **Importantly, the CFTC should clarify that the composition of the buffer pool (e.g., size) should be differentiated based on the reversal risk associated with each project.** Certain projects, such as forest carbon, are inherently subject to more reversal risk (from wildfire, insects/disease, etc.) than others that sequester a substance underground that sinks and solidifies, nearly eliminating reversal risk. Therefore, buffer pools should be tailored for the specific kind of project, and as the CFTC recommends, DCMs should regularly review this methodology in line with updated scientific research to ensure the buffer pool appropriately reflects reversal risk.

Robust Quantification

11. Are there particular criteria or factors that a DCM should take into account when considering, and/or addressing in a contract's terms and conditions, whether a crediting program applies a quantification methodology or protocol for calculating the level of GHG reductions or removals associated with credited projects or activities that is robust, conservative and transparent?

Charm appreciates how seriously the proposed guidance takes the issue of robust quantification and certification. These are crucial topics that lie at the heart of creating a market for trustworthy, high quality VCCs.

In addition to the specific details and mechanics of a protocol or methodology, we recommend that the CFTC include additional guidance that prevents misaligned financial incentives for protocols and third party verifiers from systematically calculating more carbon credits than actual reduction impact. Currently, it is common practice for carbon credit suppliers to pay protocol developers to develop the carbon credit protocol that will apply to their credits, and this financial relationship incentivizes protocol developers to create protocols that are less robust than they should be. Additionally, most third party verifiers are paid per tonne of carbon credit verified, incentivizing them to verify more tonnes than a project deserves. Following [best practices](#), **Charm recommends the CFTC stipulate that 1) carbon credit protocols or methodologies not be developed with funding by VCC suppliers, and 2) third party verifiers should not be paid per tonne verified, but rather as a service fee per tonne to be inspected.**

These two suggestions should dramatically increase the robustness of quantification methodologies and protocols, aligning incentives for protocol developers and third party verifiers to ensure they only issue credits for high quality, durable carbon dioxide removal.

Sustainable Development Benefits and Safeguards

16. Certain private sector and multilateral initiatives recognize the implementation by a crediting program of measures to help ensure that credited mitigation projects or activities meet

or exceed best practices on social and environmental safeguards, as a characteristic that helps to inform the integrity of VCCs issued by the crediting program. When designing a VCC derivative contract, should a DCM consider whether a crediting program has implemented such measures?

The key source of environmental and social safeguards is United States law. **Therefore, Charm’s recommendation is that DCMs should consider if VCCs are out of compliance with United States environmental law; if so, they should not be sold as a VCC derivative contract.** Of course, there should be an opportunity for VCCs to identify any positive, non-carbon-related impacts they have on the environment or society, but United States law should be the ultimate benchmark for judging whether a VCC meets social and environmental safeguards.

We appreciate your careful consideration of these comments and look forward to continuing to work with the CFTC on high-integrity VCCs.

Sincerely,

Nora Cohen Brown
Head of Market Development and Policy
Charm Industrial