

Project Title: Removal of atmospheric nitrous oxide (N₂O) using Photocatalytic Technology

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Reviewers: Ned Horning, Gisel Booman, Sam Bennetts

Collected Feedback:

This is concrete and very well formulated. However it is a synthetic catalyst that's sprayed over crops and this raises some questions:

- Is there any potential undesired side effect to biota or environmental health
- How is the environmental cost of production factored in
- Is there any composite that could threaten humans' health when consuming the products? Hard to evaluate, as it seems to be a secret recipe
- What is the potential toxicity of R-Leaf
- What happens to all of the nitrogen removed from the atmosphere?

They mention that their expectation is that farmers will not reduce nitrogen amendments but I would expect this will add even more nitrogen to the local environment? My concern is that nonpoint source nitrogen pollution is already a huge concern so I wonder if this exacerbates that problem?

On the toxicity side they might be taking the "dilution is the solution" approach since application rates are quite low but it would be good to know for sure. I'm not qualified to answer my concerns without significant study so I don't think this should be a show-stopper.

The review process should explicitly address if there could be negative environmental impacts. I favor engineered solutions but also hope we follow a "do no harm" approach.

Could we have access to the first publication they reference? It's behind a paywall and I can't access it.

It doesn't fully align with our mission to regenerate via natural processes but I think it's important all the same and we shouldn't necessarily be the gatekeepers on it.

What is the intended use and expectations around the methodology?

Are they planning on using it for some of their own projects?

Do they have those projects?

Are they committing to using Regen Registry to develop a credit class and become a project developer or to develop it for royalties?