Carbon Offsetting Within a Theory of Change

Within a theory of change aimed at mitigating climate existential risk in the long term, carbon offsetting should be positioned as both a direct intervention and a catalyst for broader systemic change. While it offers an immediate mechanism to balance carbon emissions, a theory of change suggests that ecological solutions alone are insufficient in addressing the cascading risks posed by the interplay between climate change and the broader human or socio-technical responses. Hence, carbon offsetting must be consciously integrated within rigorous business and policy frameworks that ensure the accountability and interests of all relevant stakeholders, which is vital in achieving the long-term goal of a sustainable and resilient future.

Challenges with Existing Carbon Offsetting Frameworks

While carbon offsetting has gained prominence as a tool for businesses and governments to neutralize their carbon footprints, the field faces critical challenges, including questions about the real impact of certain offset projects, inconsistencies across various certification standards, and debates over the true additionality of some initiatives.

- For instance, polluters might be inadvertently incentivized to buy offsets instead of making substantive sustainable changes to their operations, which might lead to a false sense of progress in combating climate change.
- Another concern is the current insufficiency of oversight and on-ground verification. For instance, projects claiming significant achievements, like a specific number of trees planted, often lack independent verification to substantiate these claims.
- 3. Furthermore, the issue of conflict of interest in the verification process is a significant concern, especially when verification bodies are paid by polluters or project developers to overstate their environmental impact.

Broader Policy Recommendations

- 1. Implement Stricter Emission Reduction Targets: Implementing more stringent emission reduction targets for industries and companies can ensure that offsetting is not the primary strategy for compliance. By doing so, it compels businesses to first focus on directly reducing their carbon footprint through innovative technologies, process improvements, and sustainable practices. This places carbon offsets as a supplementary measure—as a tool for addressing residual emissions, rather than a loophole to avoid making substantial reductions.
- 2. Limit the Use of Offsets: In immediate relation to the policy recommendation above, it is important to establish clear limits on the proportion of emissions reductions that can be achieved through offsets. For instance, setting that a certain percentage of a company's emission reduction target must be met through direct actions, such as upgrading to cleaner technologies or improving efficiency. By doing so, this policy ensures that offsets

- are used responsibly and do not become the primary means of meeting emission reduction goals.
- 3. Design Robust Verification and Certification Systems: Strengthening the verification and certification process for carbon offset projects can ensure that these projects genuinely contribute to carbon reduction. This step involves rigorous and transparent monitoring to verify that the carbon savings claimed are real, additional (i.e., they wouldn't have happened without the offset project), and permanent.

Future Plans/Business Models Based on Proposed Policy

Mission

In the long-term future, if the proposed policies are implemented, Curify can be repositioned to enhance the integrity and effectiveness of the carbon offset market through advanced satellite imaging and computer vision technology, providing unbiased, third-party verification of carbon offset projects.

Position

We will be positioned as a technology service provider for third-party monitoring and verification entities focusing on existing Payment for Ecosystem Services (PES) schemes in the carbon offset market. We target environmental regulatory agencies and carbon offset certification bodies with B2G (business-to-government) and B2B (business-to-business) models.

Responsibilities

1. Filling a Critical Oversight Gap and Rebuilding Trust

With a significant need for independent, objective verification of carbon offset projects, our technology provides accurate data to ensure that claims made by polluters and project developers are accurate. The inconsistencies and potential conflicts of interest in the current Payment for Ecosystem (PES) schemes have eroded trust in carbon markets. Our role is to support independent third-party verification bodies to rebuild this trust by ensuring transparency and accountability.

2. Enhancing Policy Implementation

Our service aligns with the need for stricter emission reduction targets and limits on the use of offsets. We help regulatory bodies enforce these policies more effectively by accurate tracking of tree planting and carbon sequestration projects, providing essential insights into whether projects are meeting, exceeding, or falling short of established carbon offset limits.

3. Leveraging Technology for Better Compliance

We ensure that the thresholds are accurately met so that businesses are neither uncompensated for carbon emissions nor incentivized to exceed offset allowances via "buying in". Ultimately, this encourages businesses to prioritize making more systemic changes to enhance long-term operational sustainability.

4. Opportunities for Scalability and Diversification

Once established in the carbon offset verification market, there may be opportunities to expand your services to other areas of environmental monitoring, further increasing the impact and profitability of your business.

Future Business Model

- Service-Based Revenue: Charging for monitoring and verification services. Pricing models could be based on project size, duration, or specific client needs.
- Partnerships: Collaborating with certification bodies to integrate our services into their standard verification processes.