

Tokenization of climate-smart practices

Through timber construction, there is a future in which forests can support cities and, in return, cities can support forests. As the global population increases, particularly in cities, the construction sector is expected to exponentially grow in order to accommodate the demand for housing and other infrastructure. Current construction techniques are a significant contributor to the global climate crisis and urgently need to be transformed. By substituting the carbon-intensive materials commonly used in construction with forest economy biomaterials, such as wood and bamboo which sequester carbon, we can create buildings with reduced carbon emissions. However, this timber construction industry is still in its nascency and there is a need to address its market gaps and leverage opportunities to accelerate its development and increase its uptake.

These interventions for the mass timber construction industry can be segmented into seven main categories of solutions that affect the value chain and enablers of the ecosystem. Through various internal and external discussions, Climate Smart Forest Economy Program (CSFEP) has categorized potential solutions as relating to i) Finance and insurance; ii) Product and process certifications; iii) Communication and awareness building; iv) Timber knowledge ecosystem; v) Forest management and timber policies; vi) Value chain linkages; and vii) Timber-based real estate. The proposed solutions can be executed as for-profit, philanthropic, or blended ventures, with the services developed as individual offerings or paired with complementary services in a single offering. Additionally, while some solutions may be set up as a free-standing entity, other solutions may be similar to services provided by existing actors in or adjacent to the CSFE sector. In the case of the latter, it may make sense to approach these existing providers as potential partners to find a suitable and effective home for needed services.

FINANCE AND INSURANCE

There is a need to guide and incentivize the uptake and continued participation in climate-smart forest economy (CSFE). Parties interested in the CSFE are daunted by barriers to entry to adopting climate-smart practices (namely, cost). While actors participating in the CSFE are looking to recoup the expenses of climate-smart practices and generate additional revenue streams.

Developing an agency for the tokenization of climate-smart practices will leverage market forces to encourage the use of climate-smart practices across forest economies by generating revenue from climate-positive activities and practices. The organization would aim to:

- Monetize and incentivize the adoption of climate-smart practices and safeguards by forest economy practitioners
- Develop a 3S¹ (carbon **Sink**, carbon **Sequestration**, and biomaterial **Substitution**) token to spur the adoption of the 3S methodology
- Provide additional revenue streams to forest economy practitioners committed to climate-smart practices

Tokenization would increase the value of forests and create a physical trading space for these assets. Sometimes you have to create an intermediate instrument between an asset and its investors, as some

¹ The 3S Framework (carbon Sink, carbon Storage, and biomaterial Substitution) quantifies carbon benefits and tradeoffs along forest economy value chains. Refer to the [Climate Smart Forest Economy Program](#) for more

would want to invest in sustainable forestry or biodiversity but wouldn't want to be bonded to a specific asset. If a forest has a green token attached to it, it becomes a form tradable capital of the asset that is more palatable to interested parties who would be intimidated by largescale forest investments.

In order to meet its objectives, the agency would need to develop and issue tokens, conduct ongoing compliance assessments, and support adoption of tokenized CSFE practices. This could consist of the following activities:

Developing and issuing tokens

- Work with practitioners and registration services to understand which CSFE practices are tokenizable
- Develop methodologies for each token OR tokenize existing methodologies (e.g., 3S Framework, safeguards²)
- Develop standards and milestones against which to measure progress and impact (this could be developed into a policy paper or white paper, as well as to develop learnings for how to tokenize climate-smart forestry practices)
- Register organizations whose practices comply with methodologies on [Topl's](#) registration platform

Conducting ongoing assessments

- Provide assessment services to organizations offering tokens for their CSFE practices to ensure ongoing compliance with token standards

Supporting the adoption of tokenized CSFE practices

- Market and publicize successes in CSFE impact tokenization
- Offer support to forest economy actors who want to adopt tokenized practices

Opportunities for revenue generation could include i) Fee for service for developing tokenizable methodologies; ii) A portion of revenues generated through token sales; and iii) Fees for auditing services if performed in-house.

If you would like to know more about using tokenization to incentivize supply chain actors, you can reach out to [Fishcoin](#) which operates in the fishing sector.

² CSFEP has established safeguards guiding principles and tools to support sustainable, equitable, and durable forest systems for our partners. Our Safeguards Tool identifies and prioritizes social and environmental risks in order for our partners to maximize benefits for all by mitigating any potential harm generated by their forest and development activities.