"This link between technology and forestry has always been there, it just happens to be exploding at the moment."

University of British Columbia forestry professor Dr. Nicholas Coops

"The business of planting trees is going to be one of the biggest climate stories of the next 20 years."

Justin Adams, managing director for global lands at The Nature Conservancy

The United Nations' Decade of Restoration estimates that the emerging reforestation sector could command over a trillion dollar market cap over the next 10 years. Current gaps in the industry's MRV framework -- piecemeal project monitoring, inconsistent data reporting methodologies, and disjointed verification standards--represent an opportunity for emerging technologies to capitalize on this influx of green capital. The Open Reforestation Protocol (ORP) is a solution mobilizing green investors, reforestation project operators, and technology providers to mount a coordinated defense against anthropogenic climate change.

Here's how: The ORP acts as a decentralized ledger of reforestation data. This means that reforestation projects using the protocol provide verifiable and transparent data on the progress of their reforestation projects. The data that project operators upload onto the protocol (usually referencing the number of trees planted, the status of reforested trees, and any additional GIS data available to them) is open sourced for anyone and everyone to view. It can therefore can serve as a foundation for a number of integrated technologies.

The ORP is capable of software integration with other IT systems, managing and integrating GIS data from satellite imagery, incorporating drone technology, and hosting AI/IOT software. As such, a protocol is not only a solution for solving current problems relating to reforestation, it is also a foundation for enhancing future initiatives.

How To Get Involved

There are two primary methods for integrating into the protocol. The first is plugging in, or adding your technology as an extension of the ORP. Companies taking this route can integrate and license their solution directly on the ORP. The other route is running your technology as JSON RPC or Rest API. In this method, tech integrators connect their API to the ORP, set their own rates, and then run in tandem with the ORP.

The main value proposition for technology integrators is the chance to grow your product alongside the global community of reforestation practitioners. The ORP is a flexible mechanism limited only by the creative potential of its members. Reforestation will become an economic, social, and environmental phenomenon in the coming decade, and the technological innovators who fuel this transition will be the biggest benefactors.

