

High-Tech for Old Growth

Startup grabs \$4.5M for technology to monitor forests. Among the purported benefits: more accurate carbon-offset measurement.

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If a tree sequesters carbon in a forest and nobody is around to measure the offset, does it help solve the problem of climate change?

That's the question a 2-year-old startup hopes its decidedly high-tech approach to forestry can help solve.

Morgantown, W.Va.-based ImageTree announced Tuesday that it had grabbed \$4.5 million in a second round of funding from Battelle Ventures.

Its system is meant to replace boots-on-the-ground forest measurement with remote sensor systems to help forest-management trusts, governmental agencies and conservation groups more accurately monitor their lands.

ImageTree said the system also should help to more accurately measure carbon being absorbed by forests. Those measurements could play an increasingly important role as voluntary carbon-offset markets and new climate regulations from states like California lead to increased investment in reforestation projects. Also known as "carbon sinks," such projects are based on the principle that young forests capture carbon during the photosynthesis process and store it in biomass.

But forest carbon sinks also have been hampered by a lack of clear standards and measurement tools, said ImageTree CEO Mark Redlus.

"The way carbon has been measured in trees is very manual, and very projected, and it's not as empirical as it needs to be," Redlus said.

While traditional forestry developed by lumber companies generally uses human labor to examine a small piece of forest and then estimate conditions for the entire forest, ImageTree seeks to replace that with a system that it says can directly measure 80 percent of a forest. ImageTree uses light detection, color infrared, energy measurement and GPS -- fed into its own software -- to produce data points and reports for land-management groups.

The company reported that many of its customers are public and private land trusts that have replaced lumber companies as the owners of large swaths of forest in many parts of the United States. Many are seeking more efficient and new-fangled tools for monitoring their forests, ImageTree said.

Those customers increasingly are looking at the value of carbon sinks, said Redlus.

"For institutional customers," he said, "we can deliver the ability to bring carbon credits cost effectively to market because we have the only technology that can measure the net change in the growth a tree across a property owner's entire forest.

"We're seeing a heightened demand in this space and expect it to explode over the next six months."

ImageTree plans to use its funding infusion to support sales and marketing, as well as for research and development, the company said Tuesday.