

Multinational project and process company successfully scales technology for cellulosic bioethanol production



SOLUTION AT A GLANCE

Sim Agro Inc's proprietary Clean Pulp and Clean Energy Technology solutions help commercialize startup technologies, especially in the biofuels and bioenergy arena.

Why work with us

- Global leaders in clean pulp and clean energy technologies
- 200+ projects across 15 countries



"We partnered with this client over several years, and continue to do so, helping them achieve their goals through our expertise.

This project is a testament to our strategy - we focus on developing long-term relationships, helping our clients expand and in turn growing our own business."

Karthik Raghavan

President, Sim Agro Inc

CHALLENGES

The client's pilot plant for cellulosic bioethanol production, set up by another vendor, was underperforming. The client wanted to scale its technology and chose to partner with Sim Agro Inc because of our experience in agricultural residues and their preparation, as well as our innovative Clean Energy Platform that allows pretreatment of these fibers.

SOLUTION

We worked closely with the client to design and deploy a 1 ton/hr pilot plant using our Clean Technology Platform to pre-treat fibers like bagasse and corn cob. The plant includes fiber preparation, wet washing, water recycling, and fiber pretreatment with acid, which required special focus on the material of construction. The pilot plant helps the client successfully demo their process to their end clients - oil companies - in order to grow their business.

BENEFITS

Accelerated delivery

Supplied the entire system in six months and operationalized it in nine months.

Helped client build sales pipeline

The pilot plant has helped the client acquire three major contracts. Sim Agro Inc has been a part of these contracts as well.

Long term partnership

The client is impressed with our technology, long lasting systems and expertise, and has turned to us for other pilots and system expansions.

Clean Pulp Technology

Sim Agro Inc's Clean Pulp Technology Platform is specifically designed for non-wood pulping systems. Our proprietary technology addresses the unique needs of our clients - whether it's removing impurities from the fiber or effectively pulping feedstock.

The platform offers solutions to pulp agricultural residues like sugarcane bagasse, wheat straw, industrial hemp, and bamboo and turn them into paper products like printing writing paper, container board, sack kraft, molded product, tissue, towels and any number of sustainable products. It significantly enhances the the quality of pulp that determines the quality of the final products, while reducing costs.

Our Clean Pulp Technology is underpinned by our Clean Energy Platform which uses renewable energy of different forms - biomass, solar and wind - to minimize the carbon footprint of pulping operations. While using agricultural residues as feedstock is typically carbon neutral or even carbon negative, adding renewable energies to the mix makes it even more sustainable.

In addition, we provide Zero Liquid discharge systems that treat and reuse waste water completely. Finally, we offer ways to capture CO₂ in our system that is cost effective and further helps reduce Green House gases. Our continuous innovation in green energy and carbon capture is helping global paper and pulp manufacturers turn their long term sustainability goals into reality.