

Kenyan sugar and confectionery products manufacturer sets up pulp mill to process bagasse waste from its sugar mill



SOLUTION AT A GLANCE

Sim Agro Inc's proprietary Clean Pulp and Clean Energy Technology solution, comprises fiber washing and cleaning and non-wood pulping, powered by renewable energy and in situ production of chemicals that further utilize the renewable energy.

Why work with us

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



"At Sim Agro, we love a challenge. Designing and supplying an end-to-end pulp within a 12 month time line is one of the most difficult things we have accomplished. We are constantly challenging ourselves to innovate and improve our delivery processes to meet our clients' demanding requirements."

Karthik Raghavan

President, Sim Agro Inc

CHALLENGES

The client's sugar mill in Kismu, Kenya was producing large quantities of bagasse as part of its sugar manufacturing process. The client tried burning the bagasse in their boiler, but the boiler capacity couldn't keep pace with the production of bagasse. This meant they had to find storage facilities for the bagasse for extended periods of time - which turned out to be a major challenge.

SOLUTIONS

We designed and deployed end-to-end pulp mill for the client, using our Clean Pulp Technology which is specifically designed to process non-wood fibers and is very environmentally friendly. On the air emissions side, we met all local air standards and exceeded them. The best part is that the sugarcane bagasse that was being landfilled, now produces value added pulp for their paper machine to produce brown paper.

BENEFITS

Exceeded performance goals

The plant was built for 80TPD capacity but in reality produced 110-120 TPD of pulp.

Rapid implementation

Supplied the end-to-end pulp mill equipment in 12 months and completed the installation within 8 months.

Additional support to reduce OPEX costs

To help the client reduce high operating costs, we designed an additional system to recover the chemicals and reduce the make up by 90%.

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.