



Wood Waste and Hydrogen to Renewable Natural Gas for a Paper Mill

Situation

A paper mill in Maine faced increasingly competitive markets for paper and unfavorable energy prices due to high natural gas transmission costs. The company had ready access to wood chip markets with suppliers and facilities in place to acquire and process wood chips, and had a high on-going demand for natural gas. An innovative company, based in Vancouver, Canada, had developed an advanced wood waste pyrolysis system that converts wood waste into renewable natural gas. The paper mill operators were interested in the potential to generate their own natural gas using wood waste, to reduce their energy costs and increase the competitiveness of the paper mill.

The paper mill was also located near multiple wind farms which, due to transmission constraints, generated low-cost renewable power which could be used for generating favorably priced renewable hydrogen.

Solution

Velerity developed a detailed energy and financial model for an integrated system to convert wood waste and renewable hydrogen into renewable natural gas for the paper mill.

Result

The paper mill was provided a viable option to reduce their dependency on high-cost natural gas to meet their energy needs.

