

TECHNOLOGY SCAN FOR A PULP & PAPER COMPANY LOOKING TO ACHIEVE ZERO-EMISSION OPERATIONS



A Pulp and Paper Company with Global Operations

Due to more stringent laws and regulations being enacted and their responsibility as a corporate citizen, the Client was looking to improve and optimize their processes to reduce fossil fuel consumption and emissions while remaining competitive in the industry.



CHALLENGE

In order to reach their sustainability goals, the Client was interested in technologies that could help them improve overall efficiency and achieve zero-emission operations in all production sites by 2045.



APPROACH

PreScouter took a multi-pronged approach, conducting technology scans in the following three areas:

1. Optimizing existing technologies and identifying novel machinery, equipment, techniques, and methods being researched or already in use
2. Landscaping the pulp & paper industry along with other intensive industries, focusing on competitors and identification of similar or adaptable industry processes to be assessed for alternative energy solutions and their integration into the client's operations
3. Mapping out an energy strategy by researching the industry's current energy sources and consumption as well as searching for alternative technologies to replace or reduce fossil fuel consumption



OUTCOME

The PreScouter team recommended a roadmap consisting of:

- R&D investment and collaboration with academia for the development of novel heating methods
- Depending on region, integrating wind, solar, and/or hydropower into the process, along with the adoption of electric processing equipment
- Where available, use of biomass and all byproducts
- A complete process and fuel transition, with a gradual reduction in fossil fuels and adoption of green technologies