

CIF Project #126 - MRF Business Case Framework and Tool

Background

In 2008, the CIF engaged PSTG Consulting Inc. to develop a framework and tool that could be used to assess the performance of both a specific MRF operation, and MRFs on a larger system scale.

Around this time, a discussion paper that reviewed the Waste Diversion Act (WDA) laid out direction for a move to full producer responsibility, which sparked interest in how efficiently municipal recycling programs and MRFs were being run. There appeared to be a historic lack of consistent and focused methodology and tool(s) that could assess the performance of MRFs and/or municipal recycling operations from a comprehensive business perspective.

Summary of Results

A MRF Business Analysis Tool was created in excel, containing five major components, including the instructions, baseline, operations data, scenarios and the NPV/ROI evaluation summary.

To use the tool, an analyst would input existing data on the operations (facilities, staffing, equipment, etc.) and baseline information from a previous year, including volume of materials sold, revenues, moisture loss, residue, operating expenses, income taxes, capital expenditures and other costs. From there, a copy of the baseline is made and can be altered to test different scenarios where various assumptions, estimates and operating changes are entered. The results of these scenarios are highlighted in a summary worksheet that contains a Net Present Value (NPV) and Return on Investment (ROI) analysis. In addition, there are worksheets to be used for systemic analysis of a multi-site or multi-facility operation.

Financials

The CIF approved funding of \$24,500 and the final cost was \$24,282.

Learnings

During the process of developing this tool, some observations were identified and detailed in the final report. In analyzing the business case of a specific MRF, or a network of MRFs, it is important to consider:

- there are many factors outside the MRF that can affect costs;
- many MRF operations are integrated with other waste services and operations, which can make isolating MRF analysis challenging;
- the impact of opportunity costs and monopolies/oligopolies on costs and pricing, especially in Northern Ontario
- sunk costs of various investments and operations should be ignored when considering new or different investments;
- if a MRF is operated by a municipality, it may have different financing approaches available; and,
- business decisions take into account not only pure financial components, but many operating factors and impacts on other parts of the system and stakeholders.