Leveraging asset data to increase equipment reliability, lower maintenance costs.

**How Canada’s Largest Integrated Energy Company Saved Time and Resources by Optimizing its Maintenance Strategies — Improving the Safety and Reliability of its Global Operations.**

A global energy company implemented a cost-optimized maintenance program to digitally transform its operations. Uptake Compass optimized the company’s maintenance strategies for 656 different pieces of machinery in 50% less time using 90% fewer resources than previous methods, all while increasing operational safety and asset reliability.

**MACRO VIEW**

The energy industry is more competitive than ever. Today’s energy companies are faced with the challenge of delivering on the market’s demand for lower prices. The good news is there are levers that forward-thinking businesses can pull to run increasingly efficient and economical operations, boost productivity, and gain a competitive edge. But it cannot come at the expense of safety or reliability.

**MICRO VIEW**

Global operations of Canada’s largest integrated energy company span oil sands development and upgrading, offshore oil and gas production, petroleum refining, and retail and wholesale. The company responsibly develops these petroleum resources and has grown a renewable energy portfolio including wind power, biofuels and solar. It faced the complex challenge of implementing more consistent, cost-effective maintenance strategies across its diverse asset types to improve business operations and performance.

**SOLUTION**

The global energy company needed a way to drive more value from its maintenance programs. However, realizing gains in efficiency and productivity could not be a tradeoff for suffering losses in other critical areas like safety or reliability. As explained by the company’s former President and CEO who pioneered the business and led the company for more than 20 years: “A strategic focus on maintenance across the company is also expected to help us deliver on our plans to have all systems running safely and reliably.”
Uptake Compass was selected for its ability to inform and implement innovative financially optimized maintenance strategies. Powered by Uptake's Asset Strategy Library* — the world's largest database of industrial equipment types, failure modes and maintenance tasks — Compass provided data-backed recommendations on how to optimize maintenance programs to increase the effectiveness of repairs, decrease maintenance costs, and improve the uptime and reliability of assets based on their specific conditions.

Using Compass, the company:

- Developed a consistent maintenance program at one of its key facilities used for upgrading bitumen (a form of crude oil).
- Performed risk analysis of several hundred unique pieces of rotating machinery.
- Leveraged the actionable recommendations generated by the analysis to plan and prioritize its Preventive Maintenance schedules based on estimated risk and expected value impact.

Compass digitally transformed operations by implementing a financially optimized maintenance program that delivered the required amount of equipment reliability at the minimum cost. In just five months, Compass increased the company's operational safety and asset reliability by:

- Optimizing maintenance strategies for 656 different pieces of machinery, including 2,405 effects at the individual plant level.
- Recommending 3,097 Preventive Maintenance tasks with detailed descriptions, which provided the foundation for a central knowledge base of implementation documentation.
- Defining key performance indicators to monitor the effectiveness and progression of its financially optimized program.
- Increased the company's operational safety and asset reliability.
- Accomplishing all of the above in 50% less time and using 90% fewer resources than previous methods.