

Validere Edge: Identifying More Efficient Opportunities and Decreasing Unnecessary Carbon Miles and Waste

The Validere Edge platform tracks marketing/logistics opportunities and matches buyers with the specific quality of oil/liquids they require from sellers. This is achieved thanks to machine learning and a confidential sharing of up to date quality data between parties on the platform. The Edge platform reduces inefficient transport and emissions by identifying the best destination for products, reduces waste by ensuring that entities know what qualities are being purchased (and don't go offspec or require disposal), and increases the value received for Alberta products by matching them with the natural buyer.

With the incremental TIER funding of \$275,000, Validere will make two complex additions to the Edge platform, with the support of Alberta Innovates, that will increase industry efficiencies and adoption of Validere Edge. The first addition will be tracking and reporting emissions reductions to clients directly in the platform (for example, the emissions reduction from a new trucking approach which can then flow into sustainability reports) and the second will be connecting in live field data (from the Validere 360 platform) to further reduce unnecessary disposal and waste resulting from a disconnect between operations and marketing across the supply chain.

Validere Edge at a Glance

440,466 bbl/day on Edge

- 1000+ Locations
- 640 Trucked Locations
- 428 Facilities Sourcing Supply
- 50+ Active Users
- Monthly Trading Cycles
- Powerful Analytics & Modelling



RECIPIENT:

Validere



PARTNERS:

Multiple Alberta Oil and Gas Operators



TOTAL BUDGET:

\$1,247,692



AI FUNDING:

\$475,000

TIER



PROJECT DATES:

MAR 2020 –

APR 2022



PROJECT TRL:

Start: 4-6

End: 10

APPLICATION

Validere Edge commenced the project in early 2020 in the Development phase (TSRL 4-6). The basic components were built out in constrained environments and small-scale tests had occurred. These tests were successful in providing the Validere team with the confidence to continue investing in the development of Edge, as the tests identified waste of approx. 3-5% of barrel value on average (usually through a combination of inefficient current logistics and/or inaccurate quality related decisions).

ALBERTA INNOVATES CLEAN RESOURCES

ADVANCED HYDROCARBONS

DIGITAL OILFIELD

PROJECT GOALS

Validere plans to spend ~\$770,000 specifically related to developing the parts of Edge relevant to this initiative, in order to have the capabilities to serve the entire province of Alberta with the updated tools by April 5, 2022. The tech related jobs and IP created in relation to this initiative, as well as additional Validere initiatives, will support the economic diversification of Alberta. The development and use of Validere Edge in the province highlight that Alberta oil and gas continues to be a global leader in identifying efficiency improvements that benefit all stakeholders. Validere's corporate oil and gas, and government partners, confirm that oil and gas is truly an engine that drives the development of cutting edge technologies in both the province and the country that improve the quality of life for everyone.

BENEFITS TO ALBERTA

- Leveraging Validere's AI/IIoT solutions will increase the global competitiveness of Alberta's industry participants. Adopting the novel technology will put enterprises in the position to collectively transform the way product is moved. By being at the forefront of oil and gas technological disruption, Alberta's key players will differentiate themselves as shareholder focused and attract investment, achieving significant uplift in margin from existing assets.
- Increased deployment of Validere's AI/IIoT technology in Alberta will lead to increased employment opportunities within the Validere team. As the demand for the platform rises, hiring needs will also increase, evidenced by multiple open roles at the company currently. This will attract local talent, along with highly qualified skilled workers from across Canada, to work at their Calgary Alberta office, and this influx of talented workers will directly benefit the local economy.
- This project will contribute to direct reductions of 350 tonnes CO₂e/year and enable future GHG emissions reductions on product volume transport enabled by Validere Edge.



1 New
Product/Service



5 Project Jobs



50 Future Jobs



Enables Future GHG
Emissions

CURRENT STATUS

SEP 2021

The project is fully on schedule, with the tasks in Milestone 2 completed as planned. Validere has completed Milestone 2 with the continued Development of the Edge Interface. The milestone included developing an interface for Edge that included logins for all clients, tiering of client options, predicted qualities, improved logistics transparency, and buy-side and sell-side screens. **As a result of these developments over 1,000 locations in Western Canada now use Validere Edge.**