



## Alberta's Renewable Energy Boom: Altalis Geospatial Data Helps Lead The Way

### THE RENEWABLE ENERGY

**INDUSTRY** is driving a global shift toward clean power generation. With its abundant natural resources, Alberta is emerging as a key player in this transition. The province is witnessing a surge in solar and onshore wind energy projects, complemented by growing interest in biomass, geothermal and hydrogen energy. The Alberta Electric System Operator (AESO) forecasts that renewables will make up 30% of Alberta's electricity supply by 2026.

Renewable energy companies need a trusted partner to succeed in this dynamic landscape. Altalis, Alberta's leading provider of geospatial data, empowers developers with critical information on land ownership, terrain, environmental features, and regulatory constraints. This data fuels informed decision-making, optimizes project siting and design, and streamlines regulatory compliance. By partnering with Altalis, renewable energy companies can accelerate project development, mitigate risks, and contribute to a cleaner energy future for Alberta.

### NAVIGATING THE COMPLEXITIES: KEY CHALLENGES FACING THE RENEWABLE ENERGY SECTOR

**SITE SELECTION AND ENVIRONMENTAL IMPACT** Developers must identify optimal locations for wind and solar projects while minimizing disruption to delicate ecosystems, wildlife habitats, and precious water resources. .

**LAND ACQUISITION** Securing access to suitable land involves complex negotiations with various stakeholders, including private landowners, Indigenous communities, and government agencies.

**REGULATORY AND POLICY HURDLES** Obtaining permits and approvals requires navigating dynamic regulatory landscapes, such as moratoriums and land-use restrictions, and ensuring compliance with environmental regulations and land-use planning policies.

**SOCIAL IMPACTS** Engaging with local communities and addressing their concerns about potential impacts is essential for fostering understanding and acceptance of renewable energy projects. For example, addressing visual impacts on the landscape, such as those from wind turbines, requires consultation and thoughtful planning and design.

### ALTALIS GEOSPATIAL DATA PRODUCTS: EMPOWERING RENEWABLE ENERGY BUSINESSES

Altalis provides a comprehensive suite of geospatial data products that can be instrumental in the success of renewable energy projects. Examples of these products and their application in the industry include:

**CADASTRAL MAPPING** defines the mapping of survey plan information including lots, blocks, right-of-ways, etc. It can apply to activities such as land acquisition, site planning, regulatory compliance and identifying potential easements or right-of-way issues.

**TITLE/ENHANCED TITLE MAPPING** defines property boundaries and ownership information including Land Titles Office LINC numbers (Land Identification Numeric Code). The data application is great for performing due diligence activities like land rights verification and ensuring clear title for project development.

**DISPOSITIONS** show surface activity extents with detailed attributes for leases and permits on Crown land. The data application can be used for identifying potential project sites, understanding land use restrictions, avoiding conflicts with existing land uses.



**LIDAR 7.5 DEM** is a high-resolution **Digital Elevation Model** data product that can be used for terrain modelling, site analysis, shadow analysis for solar projects and optimizing wind turbine placement for maximum energy capture.

**DAILY UPDATE SERVICE** Altalis offers real-time GIS updates, which provide organizations with up-to-date **Cadastral, Title, and Disposition** geospatial data that integrates seamlessly with operational systems. By leveraging real-time data integration solutions, renewable energy companies can improve infrastructure reliability, optimize resource allocation, and enhance service delivery.

**CUSTOMER SERVICE** Altalis offers more than just data products; it provides opportunities that can help renewable energy businesses thrive. Altalis is committed to building long-term client relationships and providing exceptional customer service. Its experienced team can assist with data selection, purchasing support, and integration, ensuring businesses have the information they need to succeed.



## PARTNERING WITH ALTALIS: DRIVING SUCCESS IN THE RENEWABLE ENERGY SECTOR

Partnering with Altalis offers numerous benefits for businesses in the renewable energy industry:

**MAXIMIZE ENERGY GENERATION POTENTIAL** Altalis data enables developers to identify optimal locations for wind and solar projects. By analyzing factors like terrain, land use, and proximity to transmission infrastructure, they can maximize energy generation potential and minimize environmental impact.

**STREAMLINE ENVIRONMENTAL IMPACT ASSESSMENTS (EIA)** Altalis data provides critical information on water resources, land use patterns, and sensitive ecosystems. This allows developers to design projects that minimize environmental disturbance and protect valuable natural resources, streamlining the EIA process.

**ENSURE REGULATORY COMPLIANCE WITH EASE** Altalis data provides accurate information on freehold land ownership and Crown land permitting. This simplifies the permitting process, reduces the risk of delays or project cancellations, and ensures compliance with all relevant requirements.

**OPTIMIZE PROJECT DESIGN AND REDUCE COSTS** Altalis data supports efficient project planning and design by providing detailed information on terrain, infrastructure, and environmental constraints. This helps optimize project layouts, minimize construction costs, and ensure the long-term viability of renewable energy installations.

**MITIGATE RISKS AND ENHANCE PROJECT SUCCESS** Altalis data helps identify and mitigate potential risks associated with renewable energy projects, such as land use conflicts and environmental hazards. This proactive approach to risk management enhances project success and reduces potential financial losses.

By leveraging Altalis geospatial data, renewable energy businesses can make informed decisions, optimize project development, and enhance the long-term sustainability of their operations.


## ABOUT ALTALIS

Established in 1998, we have been the **authoritative source of spatial data and imagery in Alberta for over 25 years**. We are the leading data management, maintenance, and distribution company in Alberta, and ensure the continued updating, re-engineering, storage, distribution, value-added redistribution, and general management of primary provincial mapping datasets. Our goal is to **make mapping products more available, accessible, accurate, and affordable**. We are your trusted source of spatial data.

Our state-of-the-art webstore, [Altalis.com](https://altalis.com), is powered by AWS enabling reliable, fast and secure data deliveries. **Customers can explore, view, and acquire spatial data products both paid and open data with the click of a button.**

We take pride in providing exceptional customer service and building long-term relationships with our clients. Our experienced customer service team is available to answer any questions you may have about finding the right data to meet your needs.

**Contact Altalis today** to learn more about how our comprehensive data can help your organization.

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