

Lanfine

North and South Wind Power Projects

SEPTEMBER 2017



About the Project

BowArk and Pattern Development are proposing the Lanfine North Wind Power Project and the Lanfine South Wind Power Project in your area. The projects are south and west of Oyen, Alberta and will have up to 284.4 megawatts (MW) in capacity. We expect Lanfine North to be up to 145 MW and Lanfine South to be up to 140 MW. Each phase will have its own project collector substation and interconnection points.

The projects are in both the Special Area 3 and the Municipal District of Acadia on approximately 45,000 acres of private land. We will request signoff from the Special Areas Board and the Municipal District of Acadia. If approved, these projects will generate enough electricity to power approximately 150,000 homes in total.

Invitation to the Open House

To learn more about this Project, please join us at our second public open house.

Wednesday, September 27, 2017

Oyen and District Senior's Rec Centre – 219 2 St. West ,Oyen
5:00 p.m. – 8:00 p.m.

Ownership Update

Since our last public engagement in February 2017, Pattern Development Lanfine Wind ULC, a subsidiary of Pattern Renewable Holdings Canada 2 ULC, acquired the Lanfine North and South Wind Power Projects from BowArk Energy Inc. Though the projects' owner has changed, the BowArk team will lead the projects' development until the operations phase.

Project Updates

The projects have received a Phase 1 buildable areas wildlife referral report from Alberta Environment and Parks. In June 2017, we submitted the Phase 1 buildable areas application to the Alberta Utilities Commission for approval. We will request an updated wildlife referral report for the Phase 2 studies and environmental evaluation for Lanfine North and South. We will also request a Phase 2 buildable areas application approval for Lanfine North and South.

Because of stakeholder feedback, ongoing engineering design, and further environmental studies, we are considering two options for turbine models: Option A — Gamesa 3.465 MW or Option B — Vestas 3.6 MW. We will file the AUC application with both turbine options with two separate layouts. We have also updated the project boundaries for Lanfine North and Lanfine South. The proposed turbine locations and the updated project boundaries can be seen on the maps included in this package.

Option A layout: Option A layout uses the Gamesa 3.465.

The specifications are as follows:

- 81 turbines on 83 turbine locations,
- hub height of 97 metres,
- rotor diameter of 132 metres, and
- capacity of 3.465 MW.

Option B layout: Option B layout uses the Vestas 3.6 turbine.

The specifications are as follows:

- 79 turbines on 83 turbine locations,
- hub height of 105 metres,
- rotor diameter of 136 metres, and
- capacity of 3.6 MW.

We will determine which proposed turbine locations will be part of Lanfine North, and which will be part of Lanfine South, after consulting with the community on all 83 proposed turbine locations.

The Alberta Electric System Operators Renewable Electricity Program

The Alberta Electric System Operator (AESO) has recently introduced the Renewable Electricity Program (REP). The REP is a competitive procurement program that encourages the added development of up to 5,000 MW of renewable electricity generation capacity to the Alberta electricity grid by 2030.

BowArk Energy Ltd. and Pattern Renewable Holdings Canada 2 ULC, and its subsidiaries, submitted a combined application to the AESO's request for qualification in June 2017, and we are continuing to participate in the REP.

Updates to Project details

Wind turbines: At 285 MW, the Project will have either Option A — 81 Gamesa 3.465 MW or Option B — 79 Vestas 3.6 MW turbines, as shown in the maps included in this package.

Project collector system: The Project will use a medium-voltage power collection system with overhead or underground cables that link each turbine to the project collector substation. There will be two project collector substations: one for Lanfine North and one for Lanfine South. This substation links each turbine to the substation where the electricity is transformed from 34.5kV to 144kV and is then linked to the Alberta Integrated Electric System. We are proposing to locate the substations at SW 19-27-04 W4M for Lanfine North and NE 08-26-03 W4M for Lanfine South.

Access roads: The projects will use new access roads for operating and maintaining the wind turbines. The projects may also require upgrades to existing roads in the area. The access roads are shown on the maps included in this package.

Interconnection: Lanfine North and Lanfine South will be interconnected to the Alberta Integrated Electric System. The connection will be at 138 kV to the lines that are close to the projects. ATCO Electric is responsible for the consultation associated with the interconnection options. Please contact ATCO Electric if you have any questions.

Operation and maintenance building and temporary laydown areas:

The projects will have one operation and maintenance building located by the substation at SW 19-27-04 W4M. This facility will be used for Lanfine North and South. There will also be a temporary laydown area where temporary offices and equipment are stored during the construction phase of the project. We have not yet determined the location of the temporary laydown.

Meteorological towers: BowArk erected a 100-metre meteorological tower in September 2016 to measure wind speed, direction, and other meteorological data. We will install additional meteorological towers in 2018, and we will install several permanent meteorological towers as part of the projects.

Ongoing Development Work

We are completing public consultation, environmental assessments, wind resource assessment, and other studies. We are also completing the required regulatory and permitting activities, including the Alberta Utilities Commission application, the Alberta Electric System Operator interconnection process, and other required signoffs from regulatory bodies.

Environmental Studies and Assessments

We have consulted with Alberta Environment and Parks on our environmental study program. BowArk has completed the following desktop and field studies and assessments to identify potential issues and to develop a plan to mitigate impacts. These studies include the following:

Wildlife — birds, bats, and other sensitive species

Vegetation — habitat mapping, and native prairie grass and rare plant studies

Wetlands — mapping, classification, and field verification

Historical resources — archaeological and cultural features

Additional studies that have been completed include the following:

Noise — initial impact assessment

Shadow Flicker Analysis — impact assessment

What is a Buildable Areas Application?

BowArk submitted a Phase 1 Buildable Areas Application to the Alberta Utilities Commission in June 2017. The Phase 1 application identified the project boundaries, as well as the area where turbines could be sited, called “buildable areas.” We used a map showing the buildable areas for Lanfine North and South to consult with stakeholders in March 2017. This map is available on our website.

We intend to submit a Phase 2 application to the Alberta Utilities Commission in fall 2017. The Phase 2 application will include the Option A and Option B layouts; we will determine which Option during the application process.

Both Phase 1 and Phase 2 require stakeholder consultation. We will continue to meet the Participant Involvement Program requirements so that stakeholders have an opportunity to give us their feedback. For more information, please contact us or visit www.auc.ab.ca.

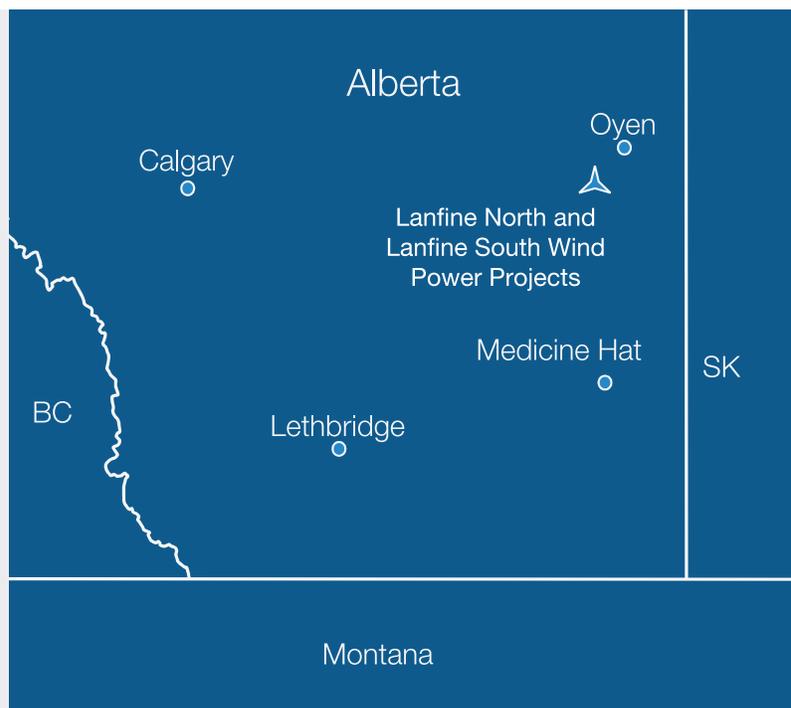
We look forward to discussing the proposed Lanfine North and Lanfine South Wind Power Projects with you and gathering any input you may have to help refine the projects.

The schedule below outlines the proposed timeline for the permitting process.

Expected Project Schedule

**Project schedule is subject to change.*

March 21, 2017	First open house
Q2 2017	Submission to the Alberta Utilities Commission for Phase 1 Buildable Areas Application
Spring 2017	Spring environmental studies
September 27, 2017	Second open house
Fall 2017	Submission to the Alberta Utilities Commission for Phase 2 Buildable Areas Application
2018	Alberta Utilities Commission approval anticipated
Fall 2018	Final project engineering complete
Winter 2019	Site mobilization Lanfine North
2019	Commercial operations Lanfine North
Winter 2020	Site mobilization Lanfine South
2020	Commercial operations Lanfine South



Community Benefits

In addition to the increased local spending on goods and services during the projects' development, construction, and operations phases, the Lanfine North and Lanfine South Wind Power Projects will benefit the local community as follows.

Construction phase

- Local employment opportunities through contract jobs
- Road Use Agreements

Operation

- Local employment opportunities, including at least 10 full-time positions for both Lanfine North and Lanfine South
- Property taxes
- Provincial tax revenue throughout the projects' life
- A Community Benefit Fund to contribute to local community projects, events, and organizations

Next Steps

We will include a summary of stakeholder comments in the power plant application we submit to the Alberta Utilities Commission. To learn more about the application and review process, please contact the Alberta Utilities Commission at 780-427-4903 (toll-free by dialing 310-0000 before the number) or via email at consumer-relations@auc.ab.ca.

Who Are We?

Pattern Development

Pattern Development is a leader in developing renewable energy and transmission assets. With a long history in wind energy, our highly-experienced team has developed, financed and placed into operation more than 4,500 MW of wind power projects. We have a global footprint currently spanning the United States, Canada, Mexico, Chile and Japan and a strong commitment to promoting environmental stewardship drives our dedication in working closely with communities to create renewable energy projects.

We have earned our position as an industry leader by combining creativity, focus and a scientific approach to discover patterns that unlock important opportunities. As a result, our company history shows consistent, groundbreaking work.

BowArk Energy Ltd.

BowArk Energy is a renewable energy and natural gas power developer based in Calgary, Alberta. BowArk Energy's major shareholder is Clearwater Fine Foods Inc., a multi-million dollar seafood company based in Nova Scotia. BowArk Energy has the experience, knowledge, and financial backing to be an industry leader in renewable energy projects in Alberta. Our success is based on working closely with communities to maximize stakeholder benefits, building strategic partnerships to provide financing and engineering expertise, and focusing on optimal locations to ensure success.

Meet the Team

For additional information about the Project, please contact:

Keith Knudsen | BowArk Project Manager

T 403.585.6761 **E** kknudsen@bowark.com

Shelley Sammartino | BowArk Land Administration

T 403.237.0211 **E** ssammartino@bowark.com

Jody Law | Senior Manager, Business Development

T 1.416.263.8029 **E** jody.law@patternenergy.com