

Lone Pine Wind Farm
Community Information Session



**Welcome to the
Community Information Session
for the Lone Pine Wind Farm**

October 26, 2023

**11am - 2pm
&
4pm - 8pm**

We invite you to sign in, ask questions, or request a follow up one-on-one meeting to discuss the Project, if interested.

We look forward to an informative and respectful conversation about the Project with everyone in attendance.

To learn more about the Project, visit:
www.lonepinewindfarm.com



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About Capstone

Clean and renewable energy is our business, and our people are our greatest asset. We're here to drive the energy transition forward through creative thinking, strong partnerships, and a commitment to doing things right.

Founded in 2004, Capstone is a publicly traded, independent power producer headquartered in Toronto, with a local office in Calgary leading the development of the Project. Capstone is focused on providing clean, renewable energy to homes and businesses across North America. We own and operate a diversified portfolio of 31 utility-scale renewable and clean power generation facilities with more than 824 MW of gross installed capacity and are actively developing a portfolio of clean power projects in Canada and the United States.

\$800m

in total capital investment since
2018

900+MW

new solar and wind projects
acquired and advanced since 2018

700+

skilled jobs created for project
construction in 2021-2023

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Project Overview

The Lone Pine Wind Farm (Project) is a 350 MW renewable generation facility being planned approximately 15 km west of Three Hills, Alberta. The Project will be comprised of 50 to 60 turbines. Capstone has applied to the Alberta Electric System Operator for 466 MW of generating capacity. Further development efforts are currently underway.

Other components of the Project will include:

- ▶ **Access Roads:** The Project will have roads developed to reach each turbine. Temporary access roads will typically be 7-10 m wide to allow for larger equipment to pass through during construction. Existing County roads may also require upgrades, where applicable. All upgrade work will be in consultation with Kneehill County.
- ▶ **Collector Lines:** Medium voltage collector lines will be required to connect the turbines to the substation. All collector lines will be buried underground where possible.
- ▶ **Substation:** To export the electricity generated from the Project to the Alberta grid, a substation is required which will step-up the voltage from the collector system to be able to export at a higher (transmission) voltage. The Project may also include an Operations & Maintenance building for local staff.
- ▶ **Meteorological (Met) Tower:** A met tower will be required to collect meteorological data locally.

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Project Timeline



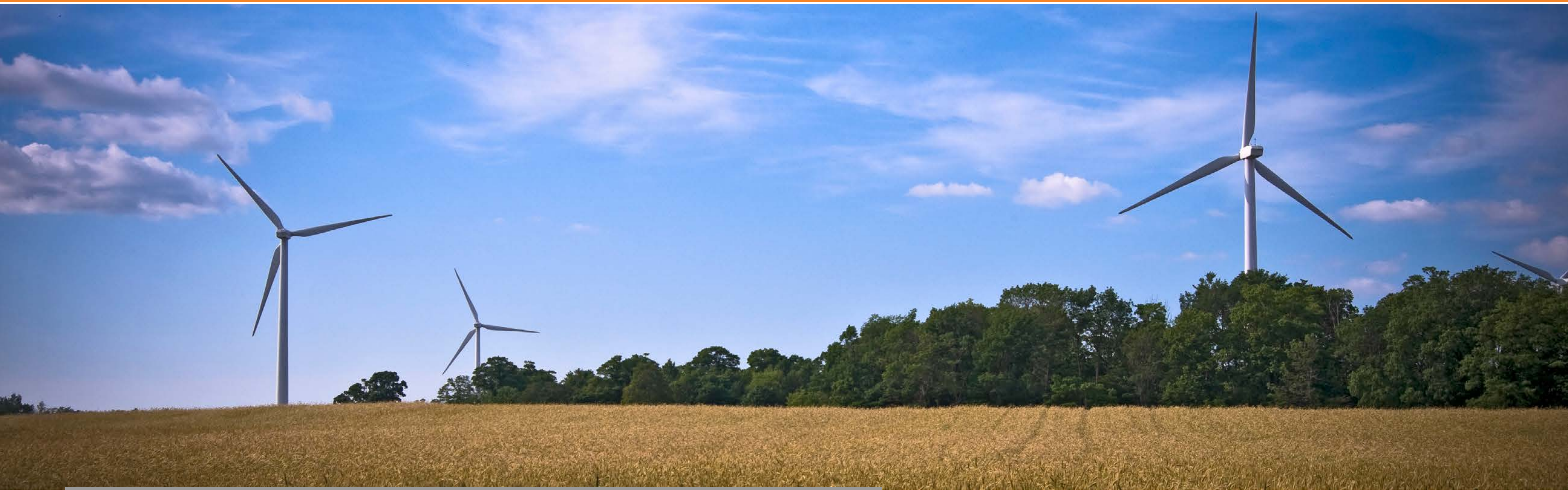
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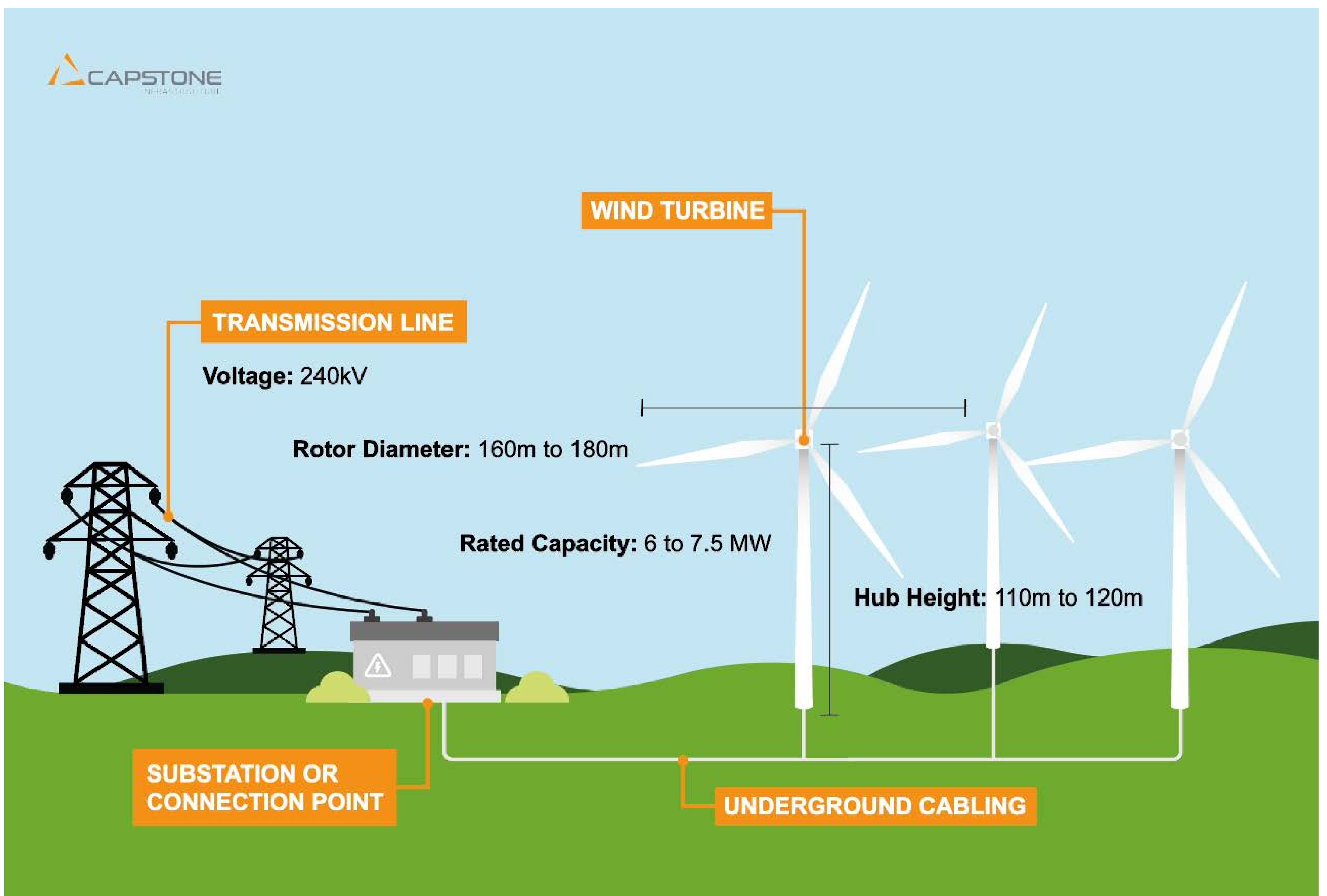
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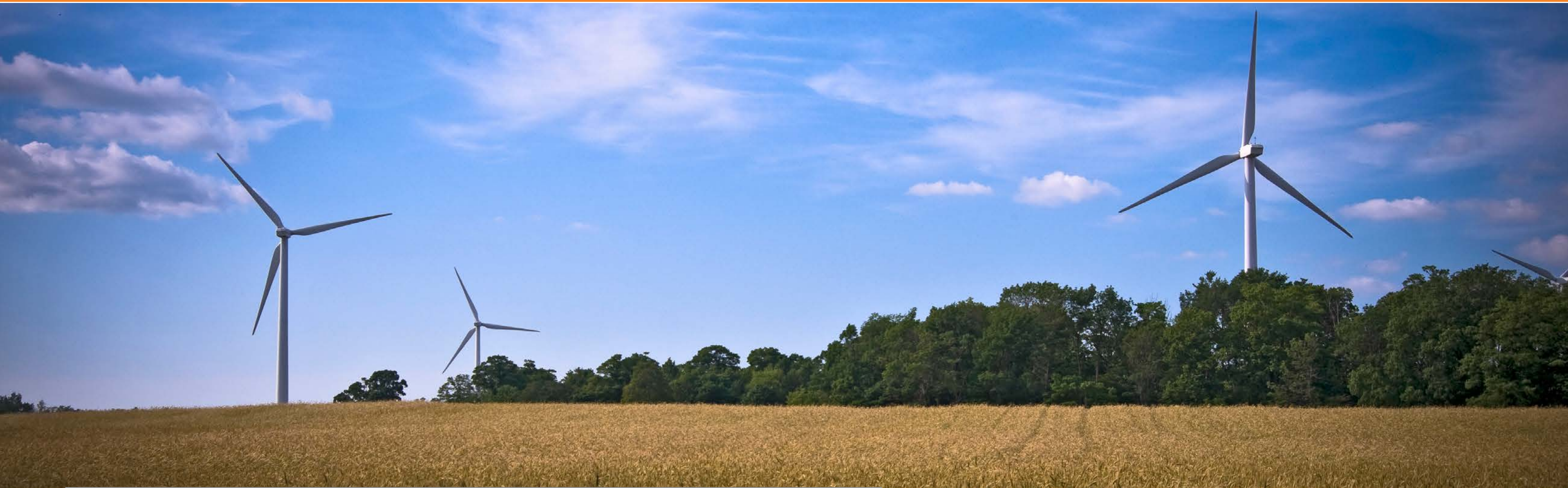
Technology Overview



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Project Benefits

Jobs & Growth

Lone Pine Wind Farm will create approximately 300 jobs during construction and generate business for local service providers and suppliers.

Long-term Municipal Tax Base

We will provide over \$100 million in tax revenues for the County over the life of the project.

Landowner Royalties

Over \$50 million in revenue for host landowners and community which will support farming communities be resilient to extreme weather and farming conditions.

Emissions Free Electricity

The facility will generate enough low-cost renewable energy to power more than 149,000 average Alberta homes each year for decades to come.

Emissions Reduction

Electricity generated from the Lone Pine Wind Farm will offset an estimated 460,000 metric tonnes of CO₂_e emissions annually when commercial operation begins. Renewable energy credits are generated as a result and can help offset emissions from carbon emitters.

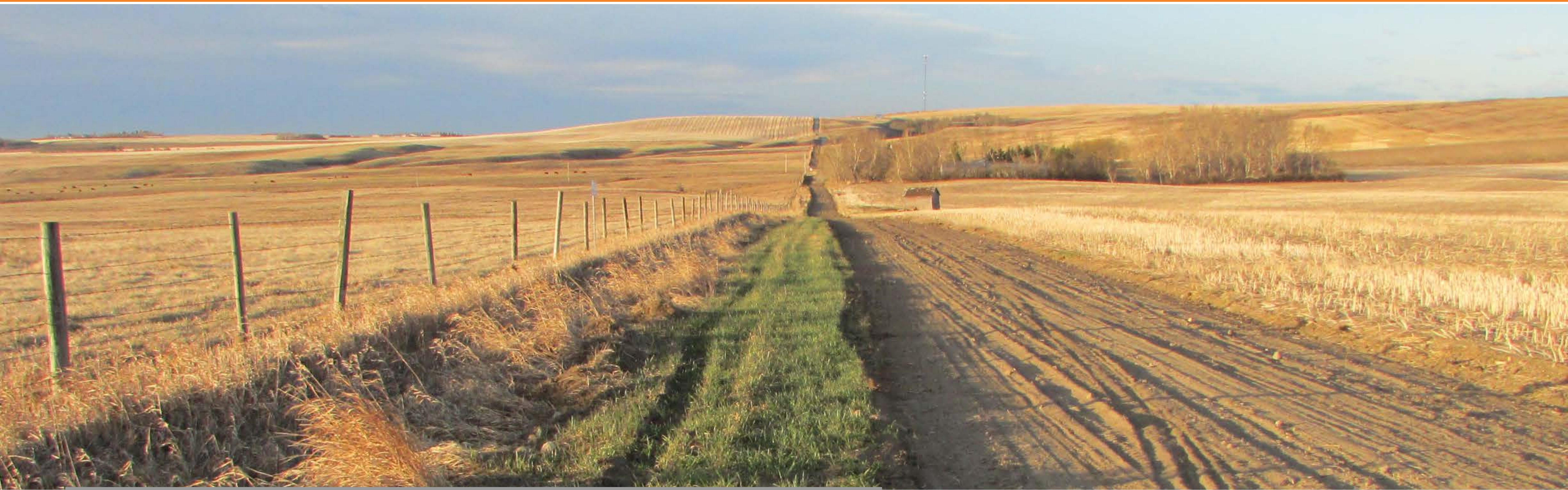
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Environmental Studies

To meet the requirements of Environment and Protected Areas (EPA), a full suite of environmental studies has been completed between 2021 and 2023.

The following environmental surveys were completed and the findings have been incorporated into the Project design and layout.

- ▶ Wildlife - Spring and fall acoustic bats, spring and fall migratory birds, sensitive raptors, and sharp-tailed grouse.
- ▶ Vegetation - Habitat mapping.
- ▶ Wetlands - Mapping, classification, and field verification.

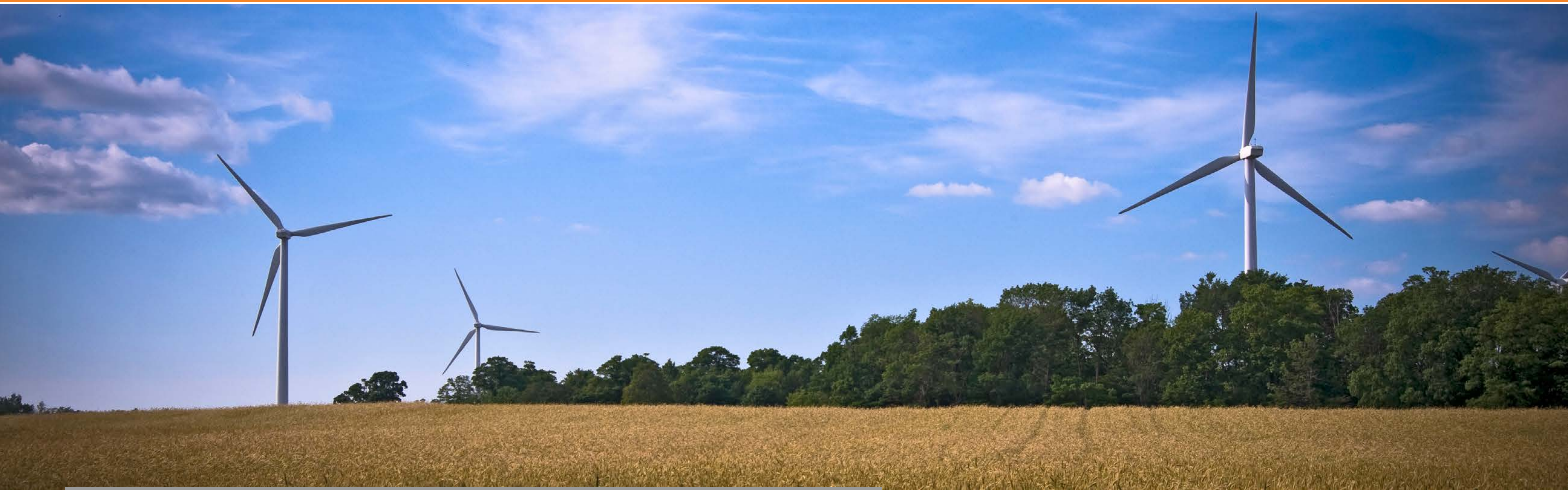
Next steps include:

- ▶ Receiving a referral letter from EPA.
- ▶ Developing mitigation measures as part of the Environmental Protection Plan, including, but not limited to:
 - ▶ Dust control
 - ▶ Erosion and sediment control
 - ▶ Weed control and
 - ▶ Noise control.
- ▶ A Conservation and Reclamation (C&R) Plan will be developed that details plans for reclamation from construction to decommissioning at end of project life.

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Regulatory Approvals

- ▶ Alberta Arts Culture and Status of Women
- ▶ Alberta Electricity System Operator
- ▶ Alberta Transportation
- ▶ Alberta Utilities Commission
- ▶ Environment and Protected Areas
- ▶ Environment and Climate Change Canada
- ▶ Kneehill County
- ▶ NAV Canada
- ▶ Transport Canada

Approval Process for Wind Projects in Alberta

- ▶ The Alberta Utilities Commission (AUC) is the governing approval body for power plants, including wind farms, in Alberta.
- ▶ Prior to commencing construction, additional permits will be required from local jurisdictions and other non-government agencies (e.g., development permits, new or upgraded approaches, building permits, aviation clearance, etc).

STEP 1

- Applicant completes stakeholder consultation and wildlife work
- Applicant prepares final layout, and obtains AEP approval prior to filing with AUC

STEP 2

- Applicant file complete application with AUC
- AUC reviews application for completeness and sends notice to all stakeholders on notification list

STEP 3

- AUC makes Information Requests to applicant
- AUC determines whether any interveners qualify for standing
- AUC schedules a public hearing

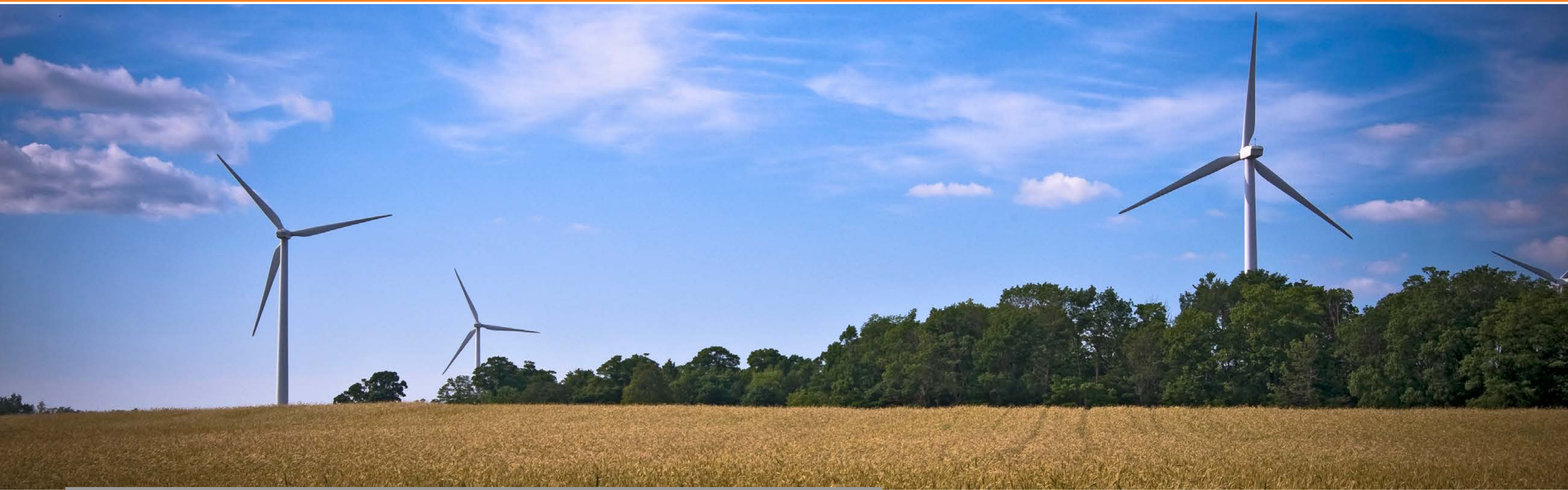
STEP 4

- Hearing is held and AUC reviews all filings
- AUC makes determination (approval/rejection) and identifies conditions
- Appeal process initiated

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Noise Control Regulations


In accordance with Alberta Utilities Commission (AUC) Rule O12: Noise Control, the Project will need to comply with regulated noise levels.

Regulation stipulates that:

- ▶ The Permitted Sound levels at residences are 40dBA at night and 50dBA during the day.
- ▶ The noise model needs to consider sound levels from varying sources such as existing oil and gas facilities and other generation facilities.

As part of the application package to the AUC, Capstone is required to submit a noise impact assessment (NIA) detailing sound levels at receptors (residences) within 1.5 km of any Project infrastructure. The NIA will be carried out by a third-party consultant and results will be shared with stakeholders upon completion.

Examples of common sound levels (dBA)



140	Threshold of pain
130	Jet take off
120	Rock concert
110	Jackhammer
100	Power saw
90	Street traffic
80	Doorbell
70	Office
60	Normal conversation
50	Quiet urban neighborhood, daytime
40	Quiet Office
30	Soft whisper
20	Ticking of a wrist watch
10	Rustling leaves

Note: 40 dBA is the AUC nighttime permissible sound level at receptors.



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Shadow Flicker

- ▶ Shadow flicker is a phenomenon that occurs when the spinning blades of a wind turbine casts a 'moving shadow'. The moving shadow can be a form of nuisance onto neighbouring properties as they experience a 'flicker' effect.
- ▶ Potential for shadow flicker is often modelled to understand when and where it will occur. Residences within 1.5km of a turbine are assessed.
- ▶ The AUC utilizes best practices from internal standards that define acceptable shadow flicker limits as 30hours/year and 30mins/day.
- ▶ Shadow flicker effects is often mitigated by weather conditions (non-clear skies), natural shielding from vegetation, and proper turbine siting.
- ▶ Studies to date conclude that shadow flicker does not have an impact on human health.
- ▶ A shadow flicker assessment will be carried out for the Project, as required by AUC Rule 007, and will be shared with stakeholders when completed.

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Decommissioning & Reclamation

Repower or Decommission?

- ▶ Once constructed, the turbines will operate for 30 to 40 years.
- ▶ After this time, there are two options for the Project: decommission or repower.
- ▶ Alberta's first wind farm, TransAlta's Cowley Ridge Wind Farm was constructed in 1993, and operated for (23) years. In 2016, TransAlta successfully decommissioned the 57 turbines.
- ▶ As the wind does not deplete over time, and decades of operation prove the wind resource, projects may also end up being repowered.

Did you know?

- ▶ Kneehill County has decommissioning security requirement for wind and solar projects as a condition to development permit approvals.
- ▶ Kneehill County accepted Capstone's landowner commitments for our Kneehill Solar Project which was constructed and reached commercial operation in 2023.

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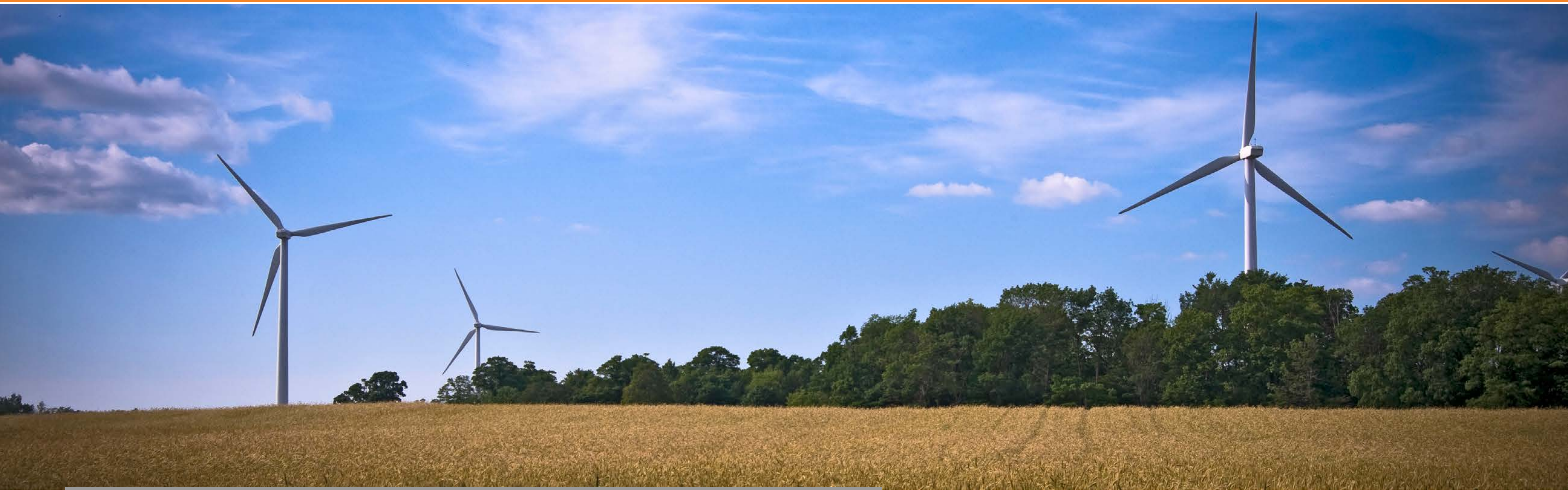
Reclamation & Landowner Protections

- ▶ In both the decommissioning or the repowering scenarios, there will be reclamation required.
- ▶ Reclamation requirements:
 - ▶ Reclamation activities would be based on the reclamation plan submitted with our AUC application.
 - ▶ Generally, equipment is removed to at least 4 ft below grade to allow the land to be returned to its prior use.
 - ▶ Landowners will be directly consulted with respect to the type of vegetation to be planted, and developers are required to monitor reclamation activities in following seasons.
- ▶ At this time, the inclusion of financial securities for reclamation are not mandatory by the province but is an accepted industry practice.
- ▶ We invest in the lands through long term lease rights, and the inclusion of security requirements in our lease agreements was the result of two way negotiations with our landowners, and hearing their desire to protect the heirs of the land generations from now.

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Have your say!

At Capstone, we're committed to building long-standing relationships with our landowner partners and the communities where we operate. Following through on this commitment with each of our projects has been integral to our success.

We look forward to working with the community to ensure the Lone Pine Wind Farm builds value and diversification for local residents for the life of the project.

We want to hear from you. Your feedback is important as it allows us to understand your thoughts on the Project early in the process.

Please remember to fill out a survey before leaving.

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