Public Open House

CAPSTONE INFRASTRUCTURE

Sawridge First Nation

# Welcome to the Buffalo Atlee Wind Farm 1/2/3 Public Open House

Meet the team, learn more about the projects and find answers to your questions!

**Please remember to fill out a feedback form before you leave!**

# Project Proponents

Capstone Infrastructure Corporation is an independent power producer, headquartered in Canada, that owns and operates a mix of 24 thermal and renewable  facilities that together generate 605 megawatts.

Capstone is leading the project development and has a track record of success across 8 utility-scale wind projects totalling 123 MW in Ontario and Quebec over the last 5 years.


The Sawridge First Nation is an original signatory to Treaty No. 8 (in 1899), and is a self-determining, innovative, progressive and prosperous nation of Cree people who continue to govern in a harmonious and balanced way. This Nation is inclusive of all members, values relationships, customs, and traditions, and respects both maintaining culture and environment for future generations.

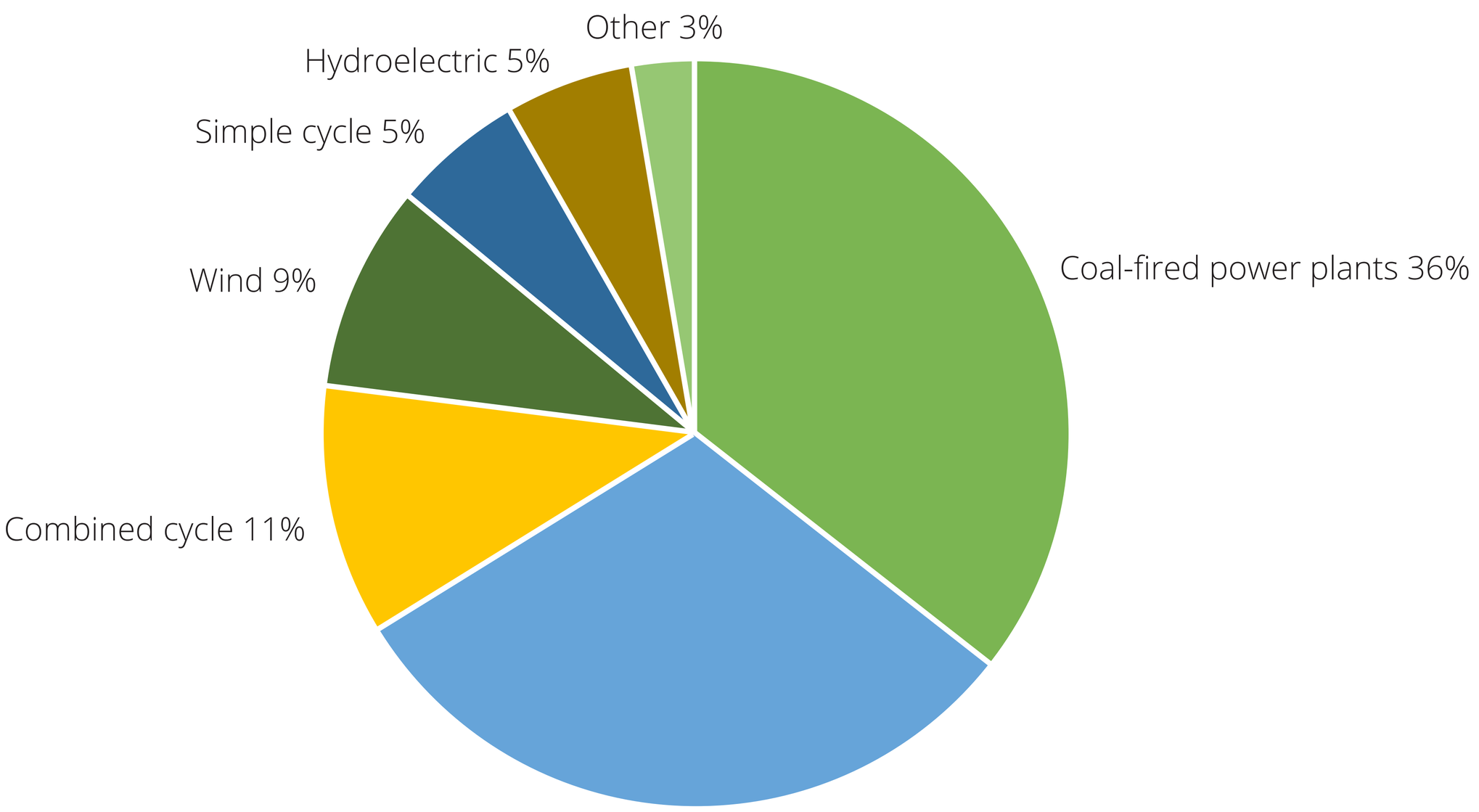
*“This project is a great step for Sawridge First Nation as it helps us move forward in our continued endeavors towards self reliance, while balancing the need for energy and protecting Mother Earth for our future generations”*

***Chief Roland Twinn, Sawridge First Nation***

# Wind Power in Alberta

- Canada’s first commercial wind farm was built on Cowley Ridge, near Pincher Creek, in 1993.
- Over 900 turbines are currently installed across the province as part of 37 total projects.
- Alberta has an installed wind energy capacity of 1,483 MW. Wind farms in Alberta produce enough electricity each year to power about 380,000 average sized homes.
- Coal-fired generation in Alberta will be phased out by 2030, and renewable energy generation is expected to increase to more than 30% by 2030.

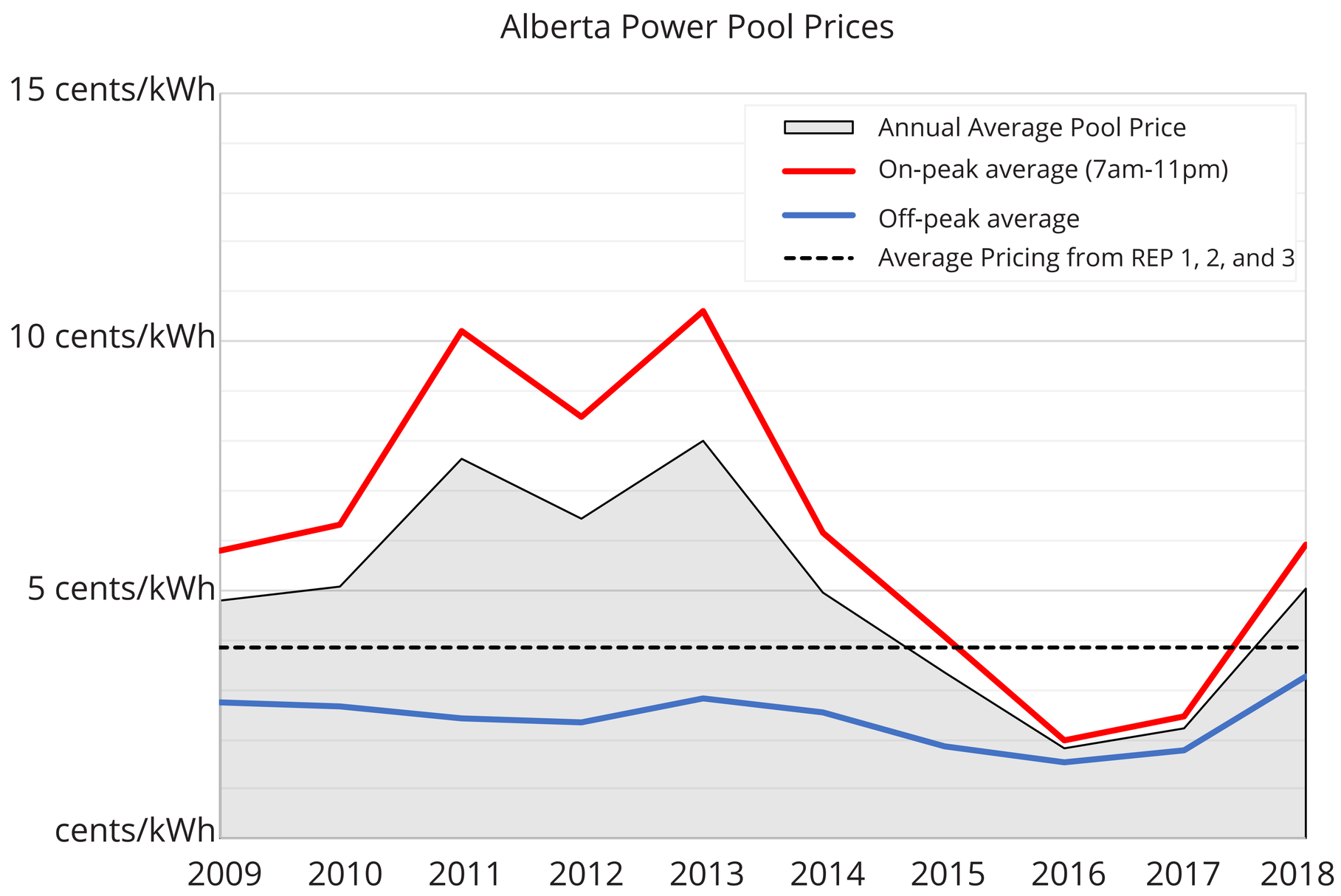
## Where does Alberta’s power come from?




Source: AESO Installed generation as of March 2019

# Renewable Electricity Program (REP)

- The REP was developed to support the Government of Alberta's goal of 30 per cent renewable electricity by 2030.
- The REP project contracts have a ***contract for difference*** structure. These projects receive a top up payment when revenue is below a set price.  When the Power Pool price rises above the set price, excess revenue is paid back to the government.
- The power prices for the 12 winning projects from REP 1, 2 and 3 in 2018 and 2019 range from 3.1 to 4.3 cents/kilowatt-hour. These are record prices across Canada for wind power and represent the lowest cost new generation in Alberta.




Source: AESO 2018 Annual Market Statistics March 2019

# Wind Farm Benefits

- Through the Buffalo Atlee projects, Capstone and Sawridge First Nation aim to further enrich and strengthen the community and add to the social benefits and sustainability associated with wind power.

## Local services and employment

- Local services and commercial businesses will be utilized to the extent available
- Local qualified contractors and labourers will be engaged for construction
- Construction materials will be sourced locally whenever possible

## Operations employment

- Long-term employment will be created during operations for site managers, technicians, as well as secondary services for site maintenance

## Tax revenues

- Municipal tax revenue will be increased, which will offset gaps in revenue and stabilize taxes for all Special Areas residents

## Landowner royalties

- Host landowners will receive annual revenue which is often invested back into their businesses and the broader community

## Buffalo Atlee Scholarship and Sponsorship Fund

*We are looking for new ways to get involved in the community. Please reach out to us if you have a local initiative which you think would benefit from our support and ties into renewable energy or sustainability within the community.*

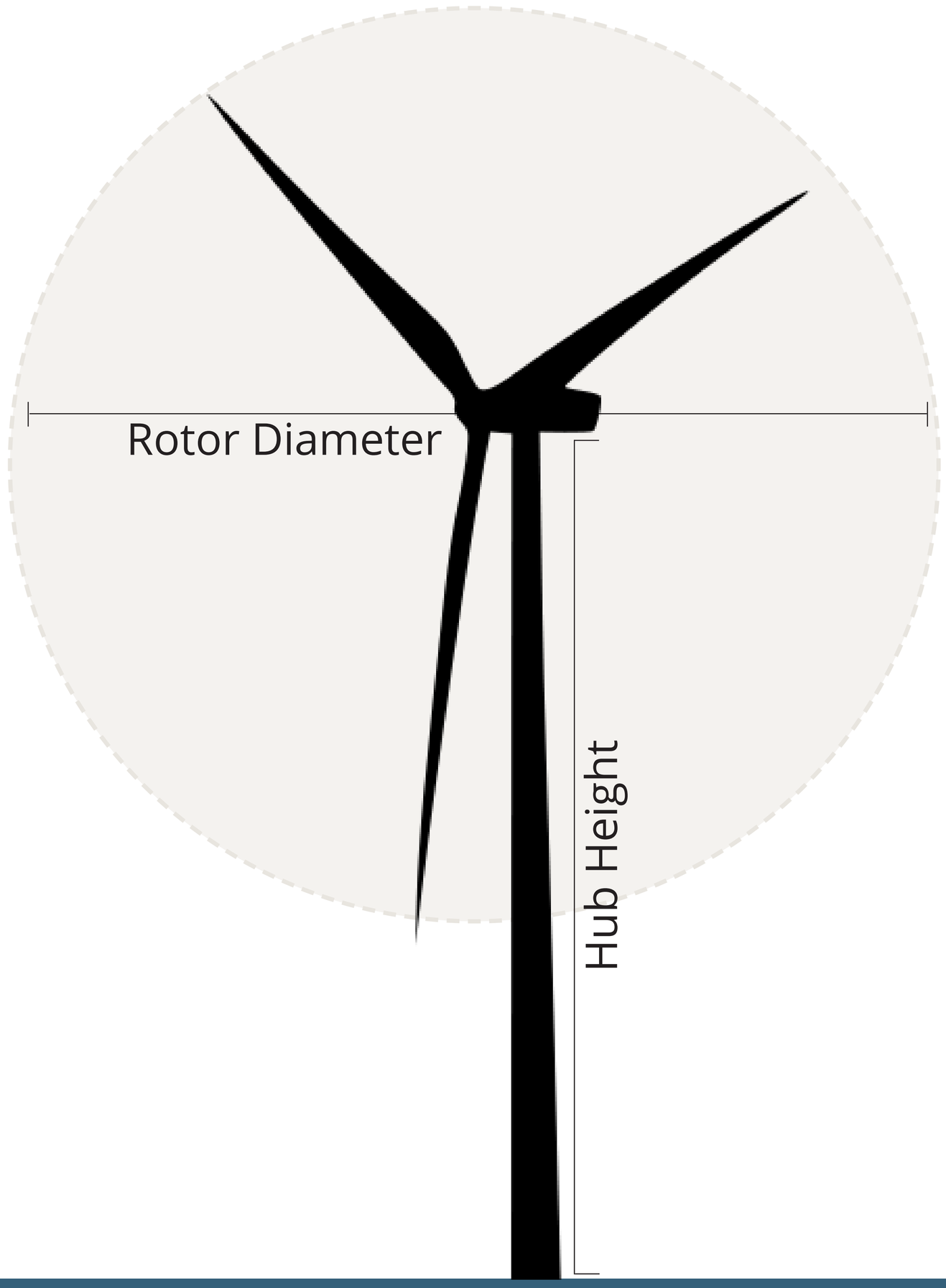
# Project Details

| | |
|---|---|
| Combined Nameplate Capacity: | 48.3 MW |
| Total Number of Turbines: | 11 |
| Interconnection: | Connection to the existing above ground distribution lines which feed into the Jenner substation |
| New and Upgraded Access Roads: | Approx. 7.5 km |
| Underground Collector System: | Approx. 7.8 km |
| Meteorological Towers: | Anticipated 1 met tower for the 3 projects (location to be confirmed) |

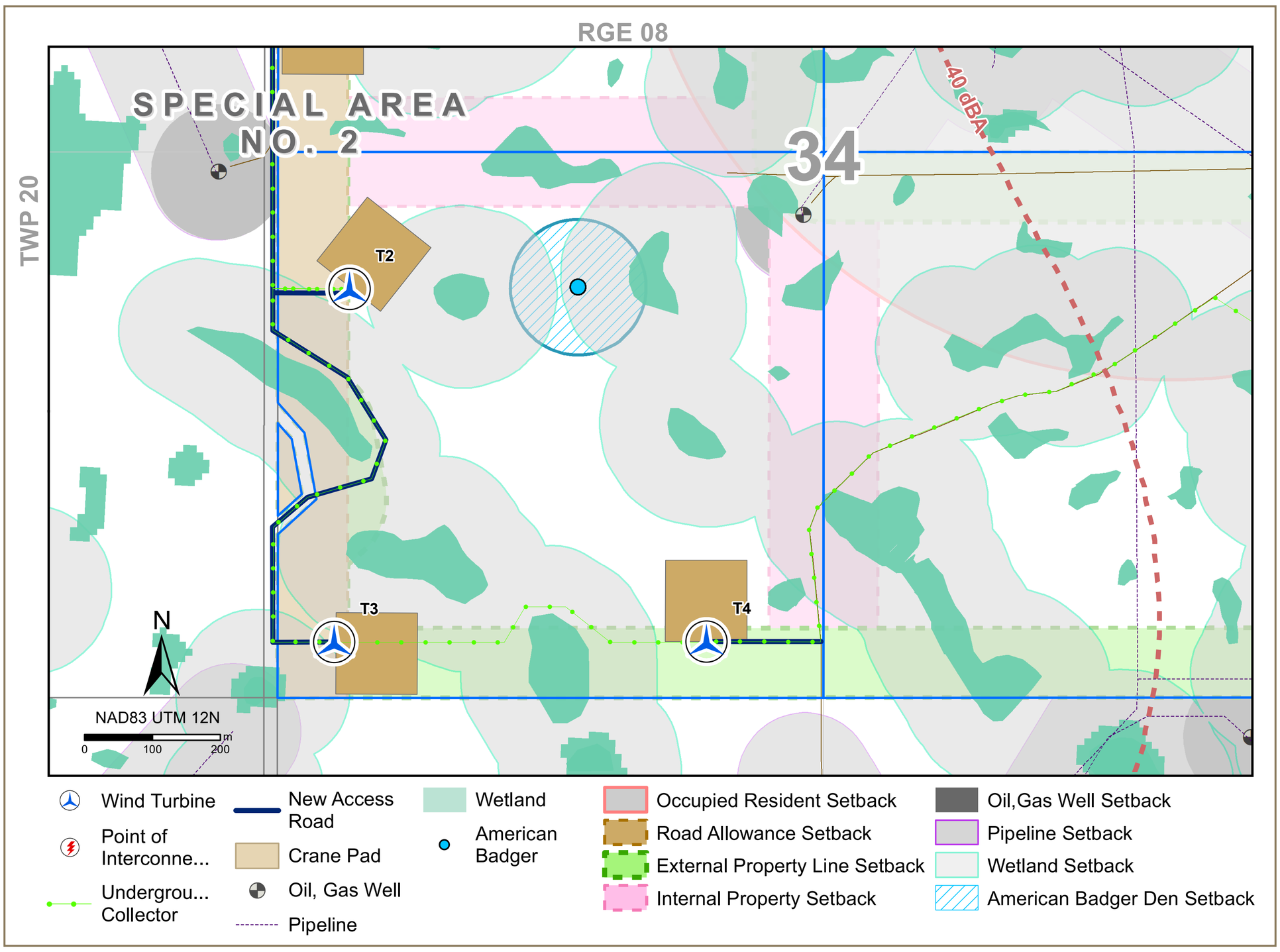
**Rotor Diameter:**
136 to 55 metres
446 to 509 feet

**Hub Height:**
110 to 131 metres
361 to 430 feet

**Rated Capacity:**
3.5 to 4.6 MW
per turbine



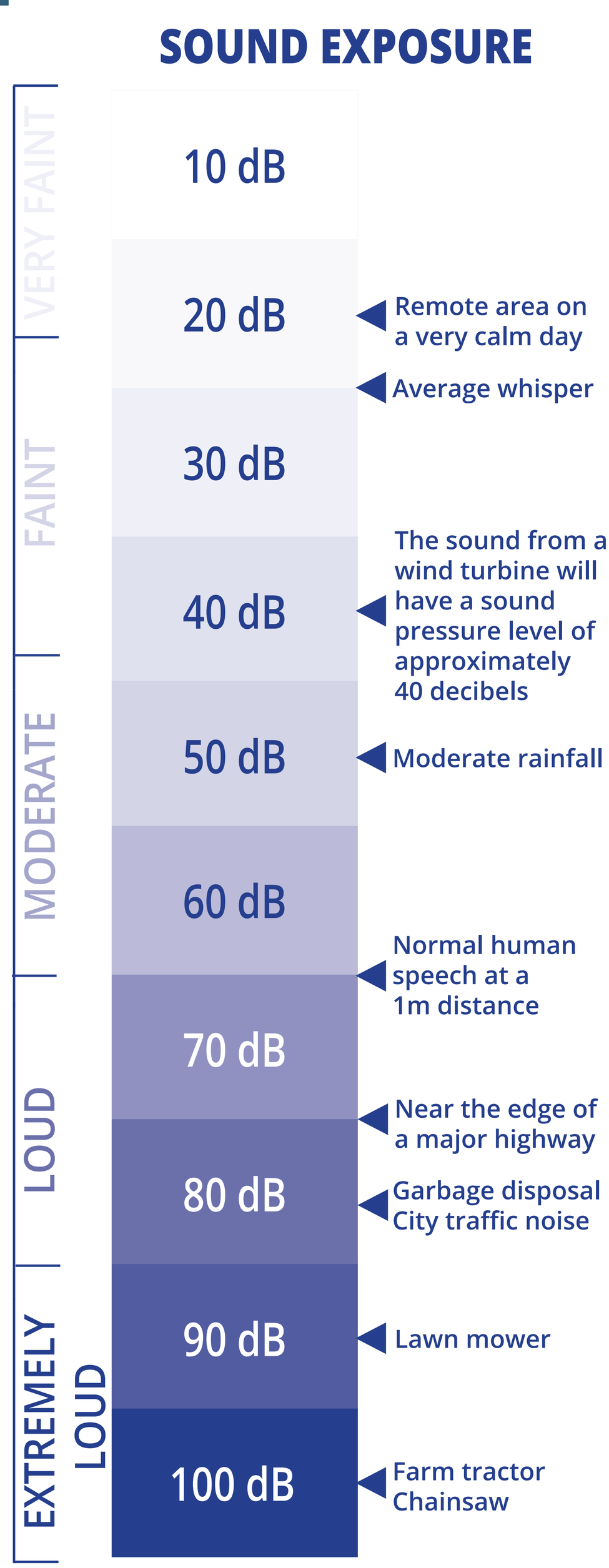
# Project Siting Considerations




| Feature | Setback Distance |
|---|---|
| Oil & Gas Infrastructure | 30 m to 100 m |
| Transmission Lines | 80 m |
| Provincial Highways | 300 m |
| Public Roads | 200 m |
| Occupied Resident | 800 m |
| External Project Property Line | 103 m |
| Road Allowance | 103 m |
| Internal Project Property Line | 80 m |
| Class III to V Wetlands | 100 m |
| Ferruginous Hawk Nests | 1,000 m |
| American Badger Den | 100 m |
| Swainson’s Hawk Nest | 100 m |

# Wind Turbines and Noise

- All wind energy projects must comply with Alberta Utilities Commission (AUC) Rule 012: Noise Control.
- A Noise Impact Assessment (NIA) will be completed for all residences and dwellings within 1.5 kilometers of the project (“noise receptors”).
- All receptors must be at or below the noise limit thresholds (50 dBA daytime, 40 dBA nighttime limits). Our layout is designed to conservatively meet 40 dBA day or night.
- The noise model considers sound from the project and nearby operational and proposed energy and industrial facilities (other wind farms, solar, oil & gas, etc.)
- Noise compliance, among other environmental and social considerations, will determine the final turbine layout.




Source: CANWEA

# Stakeholder Consultation Process

- All wind energy projects must comply with Alberta Utilities Commission (AUC) stakeholder consultation (“Participant Involvement Program”) requirements outlined in Rule 007

- A project Stakeholder Engagement Plan has been specifically developed to identify key stakeholders and outlines a detailed consultation plan for all interested parties

- Key Stakeholders include: landowners and occupants, local businesses, government entities, non-government organizations and potentially impacted Indigenous communities

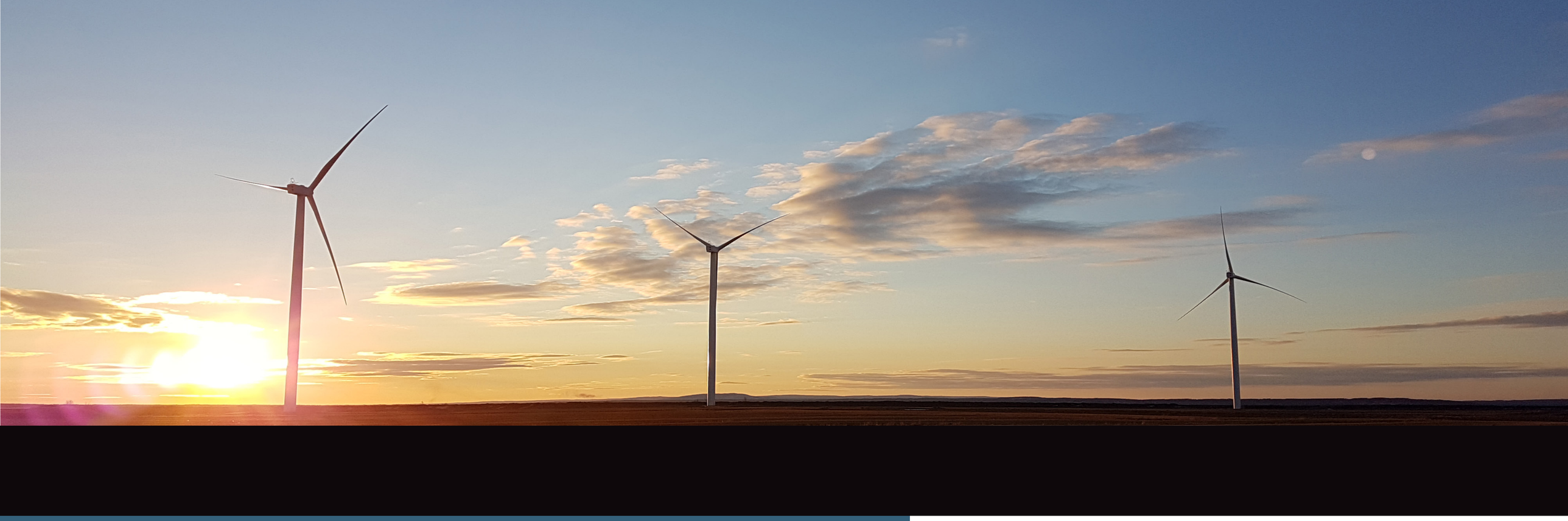

## Stakeholder Consultation Schedule:

| | | | |
|---|---|---|---|
| ✓ | COMPLETE | Initial newsletter and mailout package | March 2019 |
| ✓ | COMPLETE | Follow-up phone calls and meetings | March 2019 |
| ◔ | IN-PROGRESS | First public open house | June 2019 |
| ••• | PLANNED | Project update mailout package | July 2019 |
| ••• | PLANNED | Second Open House (if needed) | August 2019 |
| ••• | PLANNED | Filing of Rule 007 application (including Participant Involvement Program report) to AUC | September 2019 |
| ••• | PLANNED | On-going engagement and dialogue throughout AUC review process | September 2019 - March 2020 |

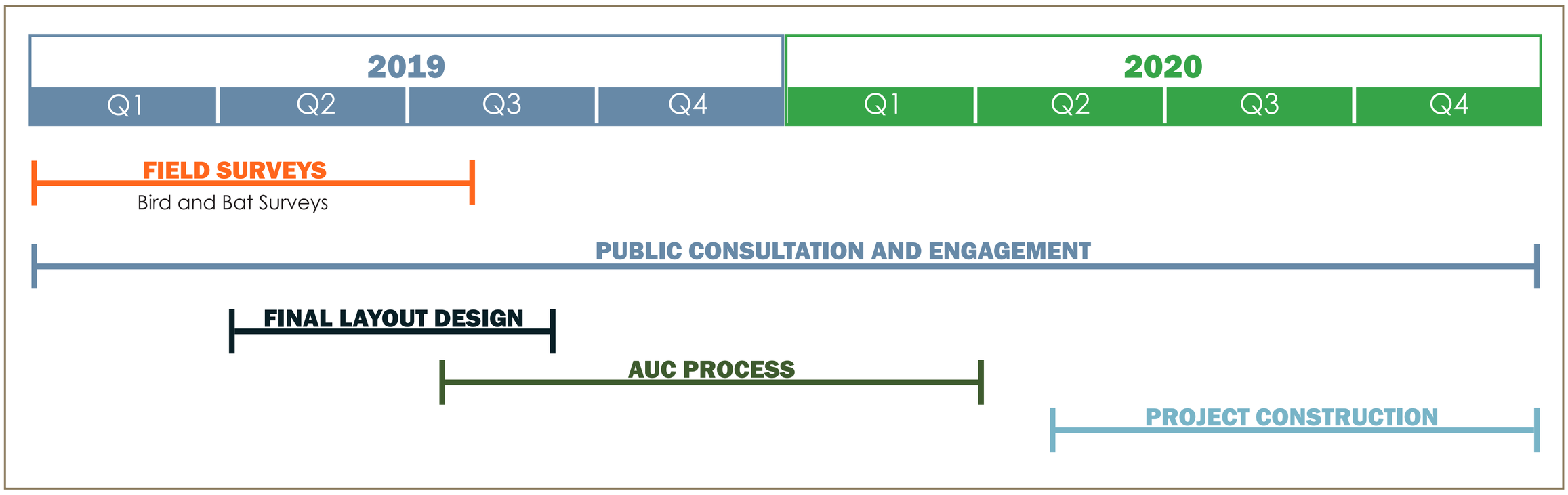
# Environmental Evaluation and Protection

- Wind projects must follow Alberta Environment and Parks (AEP) siting guidelines to minimize impacts on local wildlife including birds and bats
- Potential impact on birds and bats will be assessed by AEP when they review the Environmental Evaluation for the projects in July
- Capstone is working closely with AEP to assess potential risks and implement appropriate mitigation measures
- A wildlife monitoring program will be undertaken to assess whether any additional mitigation is needed

Photo credit: Chris Law



## Project Timeline




## Next Steps

- Capstone is working to complete field surveys
- The project layout will be updated incorporating wildlife and consultation findings
- Noise modeling will be done once the updated layout is confirmed and turbine choice is finalized
- Updated consultation information will be mailed to stakeholders and all documents will be posted on the project website at www.buffaloatlee.com
- A second public open house will be scheduled in either July or August 2019
- AUC application filing is targeted for September 2019

# Regulatory Approvals

- Alberta Culture and Tourism
- Alberta Environment and Parks
- Alberta Transportation
- Alberta Utilities Commission
- Environment and Climate Change Canada
- Fortis Alberta
- NAV CANADA
- Special Areas Board
- 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 other non-government agencies (e.g., for new or upgraded approaches, building permits, aviation clearance, etc).

| STEP 1 | STEP 2 | STEP 3 | STEP 4 |
|---|---|---|---|
| • Applicant completes stakeholder consultation and wildlife work<br>• Applicant prepares final layout, and obtains AEP approval prior to filing with AUC | • Applicant files complete application with AUC<br>• AUC reviews application for completeness and sends notice to all stakeholders on notification list | • AUC makes Information Requests to applicant<br>• AUC determines whether any interveners qualify for standing<br>• AUC schedules a public hearing | • Hearing is held and AUC reviews all filings<br>• AUC makes determination (approval/rejection) and identifies conditions<br>• Appeal process initiated |

# End of Project Life

- The wind turbines planned for the Buffalo Atlee 1/2/3 wind projects are expected to be operational for more than 30 years.
- Given the renewable fuel source (the excellent wind resource), there is always some value at the site and so the project operations may be extended, depending on market conditions at that time, which is very different from oil and gas wells.
- At the end of the useful life of the wind turbines, Capstone will assess whether to repower or decommission the site
- If decommissioning is necessary, significant residual value from equipment  is anticipated at end of life.

## Repowering

- Turbines and/or other infrastructure may be upgraded and reused.
- Cowley Ridge wind farm, the first commercial wind farm installed in Canada, was recently taken down and a new project is being proposed on the site after more than 25 years of operation.

## Decommissioning

- Turbines and infrastructure are removed and the land is restored to its original or equivalent land use.
- Decommissioning and reclamation will be completed based on the ***Conservation and Reclamation Directive for Renewable Energy Operations*** (AEP) and any updates at that time.
- Some underground infrastructure at depth of greater than 1 metre may be left in place if it has no impact on the surface land use and is in compliance with all laws and regulations in place at that time.
- Waste and debris generated during decommissioning activities will be collected and disposed at an approved facility.

# Thank you

**Please remember to fill out a feedback form before you leave!**

**Additional resources, reports and copies of the FAQs are available for attendees.**


## Contact Us

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