



# **AB/SK RENEWABLES 2020**

**Projects, Jobs, and Community Investment in the  
Alberta & SK Wind and Solar Energy Sectors**

# About the Consultant

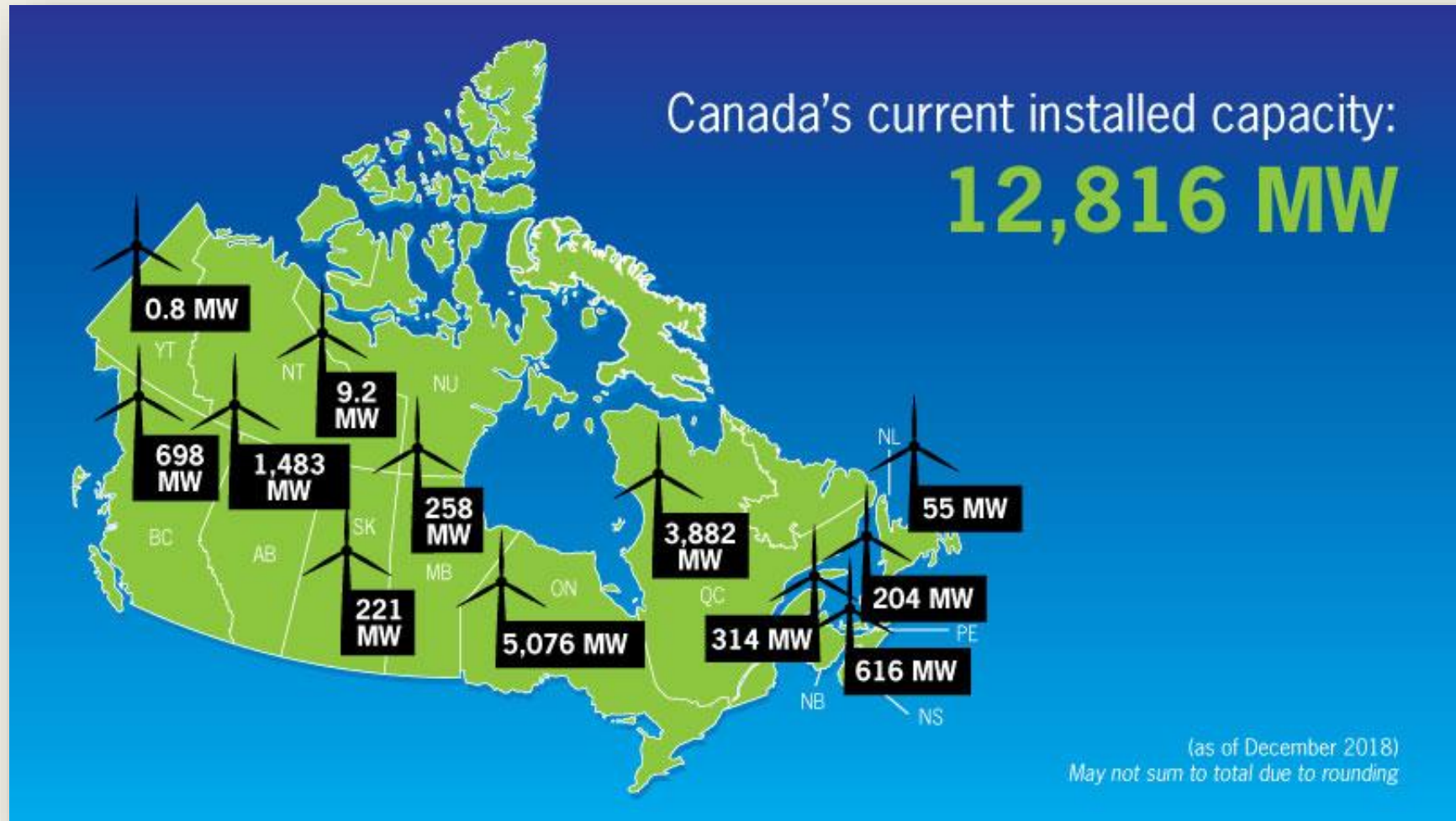
- Involved in renewables as an electrical technician since 2006
- On and off-grid solar, large-scale wind-farm construction
- Market research and business development consultant full-time since 2016
- Real-time industry knowledge, huge and growing network in Canadian and global renewable energy





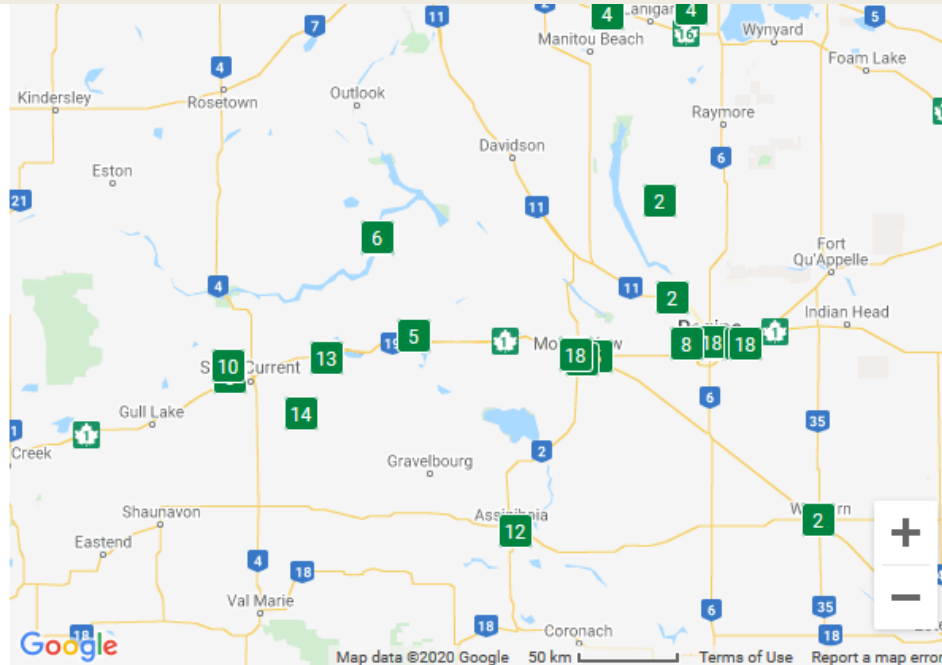
ALBERTA/SASKATCHEWAN:  
10,000 FT VIEW

# Wind in Canada (Now with Whitla project over 13,000MW)



# SASKATCHEWAN

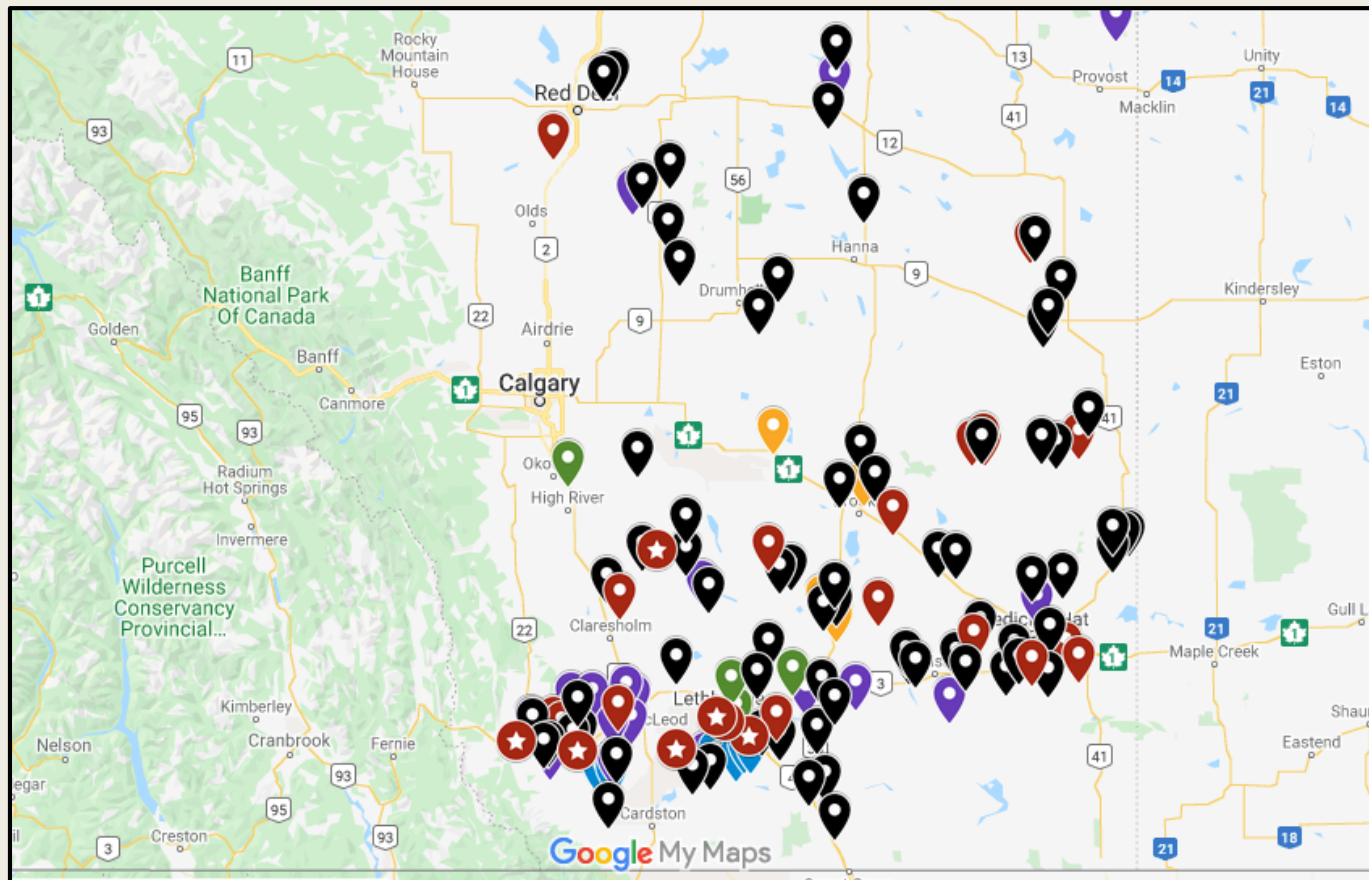
- Goal of 50% renewable energy grid by 2030
- Newest wind-farm (Golden South) will double province's installed wind capacity to over 400MW
- Solar being added in 10MW increments, with focus on First Nations and Community-led projects



## Projects

Project	Legend
Birtle to Tantallon Power Line Project	7
Blue Hill Wind Power Line Project	13
Capstone Wind Power Connection Project	6





# Alberta's Green Energy Project Goldrush...at a Crossroads

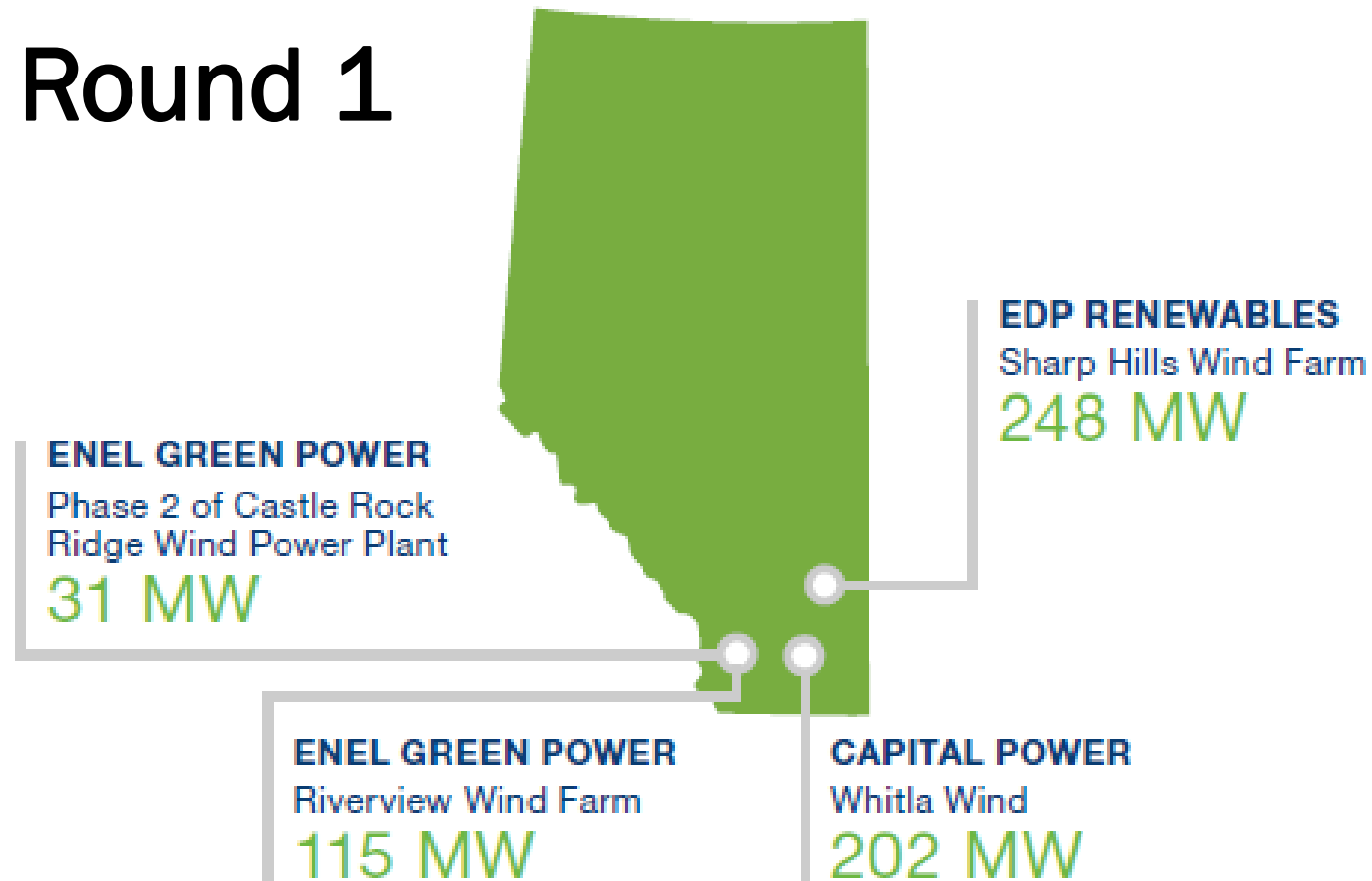
- Map resource at [www.SAAEP.ca](http://www.SAAEP.ca)
- Lists operational, under-development, and special interest in the southwest region
- Disclaimer, not all projects shown will ever be built

# AESO Renewable Electricity Program 2015-2019

- Procured over 1,300MW of new energy generation at historically low prices, comparable with competitive US markets for wind energy
- 3 Tendering rounds resulting in 10 new wind projects contracted, with approximate total CAPEX of \$1.9B and regional investment of \$240M
- Has sparked new market-only development and projects (eg Warren Buffet's Rattlesnake Ridge)



# REP Round 1



LOCAL NEWS PROVINCIAL NEWS NATIONAL NEWS WORLD NEWS SOUTHERN ALBERTA NEWS

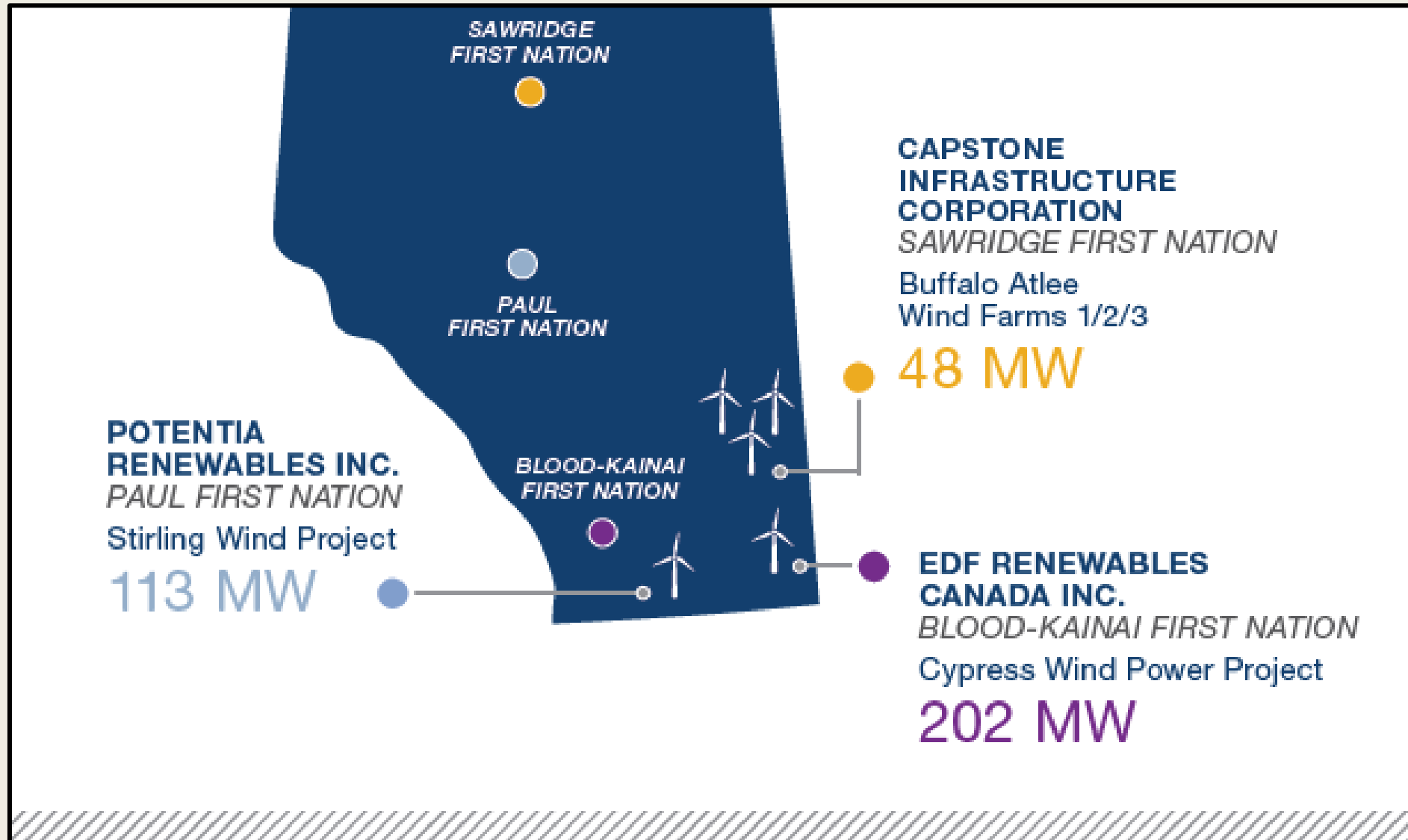
## Wind farm near Oyen suffering from approval process delays

BY COLLIN GALLANT ON SEPTEMBER 25, 2019.

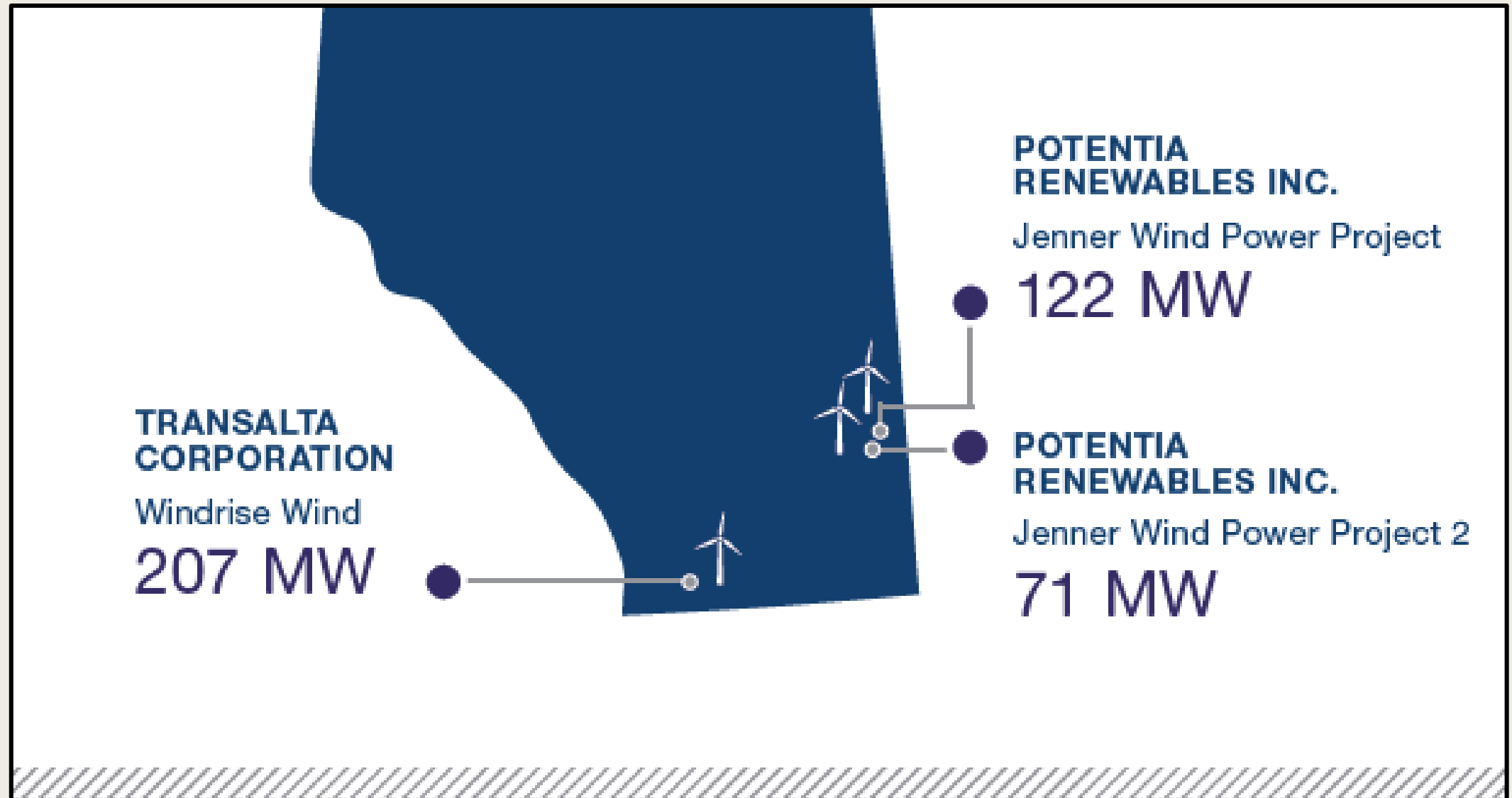
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# REP Round 2



# REP Round 3





# WORKING IN WIND: JOBS AND PROJECTS

# Wind Energy Construction Occupations & Roles

- Developers
- Investors
- Accountants
- Engineers
- Field Biologists
- Data Analysts
- More Engineers

Project Goes to Construction! >>>

- Truckers
- Equipment Operators
- Crane Operators
- Rigging Crews
- Rebar
- Concrete
- Ironworkers
- Millwrights
- Electricians
- Rope Access Technicians
- Commissioning & Start-up  
(More Engineers)
- Operations Teams

# Alberta and Sask Wind Projects/Timelines

## 2020

- Whitla, 202MW (completed)
- Riverview/Castle Rock Ridge 2, (138MW) (under construction)
- Stirling, 113MW (Potentia Renewables)
- Windrise, 206MW (TransAlta)
- Buffalo Atlee, 48MW (Capstone Infrastructure)
- SK: Golden South, 200MW (Potentia Renewables)

## 2021

- Jenner Wind 1+2, 193MW (Potentia Renewables)
- Cypress Hills, 202MW (EDF)
- Rattlesnake Ridge, 117MW (BHEC-RES)
- Forty Mile Wind, 400MW (Suncor)
- SK: Blue Hills, 177MW (Algonquin Power)



**WORKING  
IN SOLAR:  
JOBS AND  
PROJECTS**

# Solar Energy Construction Occupations & Roles

- Developers
- Investors
- Accountants
- Engineers
- Field Biologists
- Data Analysts
- More Engineers
- Truckers
- Equipment Operators
- Concrete
- Skilled Labour
- Electricians
- Commissioning & Start-up  
(More Engineers)
- Operations Teams

Project Goes to Construction! >>>

# Alberta and Sask Solar Projects/Timelines

## 2020

- Vauxhall/Hull, 57MW-dc (innogy)
- Claresholm, 130MW-ac (Capstone Infrastructure, pending)
- Suffield, 32MW-dc (Canadian Solar)
- Innisfail, 25MW-ac (GP-Joule)

## 2021

- Travers Solar Project, 400MW-ac (Greengate)
- Jenner/Tilley/Hays, 94MW-dc (Canadian Solar)
- SK: Highfield, 10MW-ac (Saturn Power)





RATHER HAVE YOUR MONEY  
WORK *FOR YOU*, WHILE  
BUILDING COMMUNITY  
RENEWABLES IN ALBERTA?

# Southern AB Renewable Energy Co-Operative

- Now launching!
- Lethbridge, AB
- \$100/membership
- Eligible for bond or equity offerings, \$5,000 minimum
- Board strength
- Excellent regional location for wind and sun resource
- 1<sup>st</sup> project announcement pending
- [www.sabrecooperative.wordpress.com](http://www.sabrecooperative.wordpress.com)



# Solar Power Investment Co-operative of Edmonton

- First projects under development
- Edmonton brings policy, community strength
- Board strength
- [www.joinspice.ca](http://www.joinspice.ca)



# Elemental Energy

- Developed and built Brooks Solar 1, Brooks 2 under development
- Innisfail solar project now under construction
- Chappice solar project NE of Medicine Hat under development
- For accredited and/or high-net worth investors

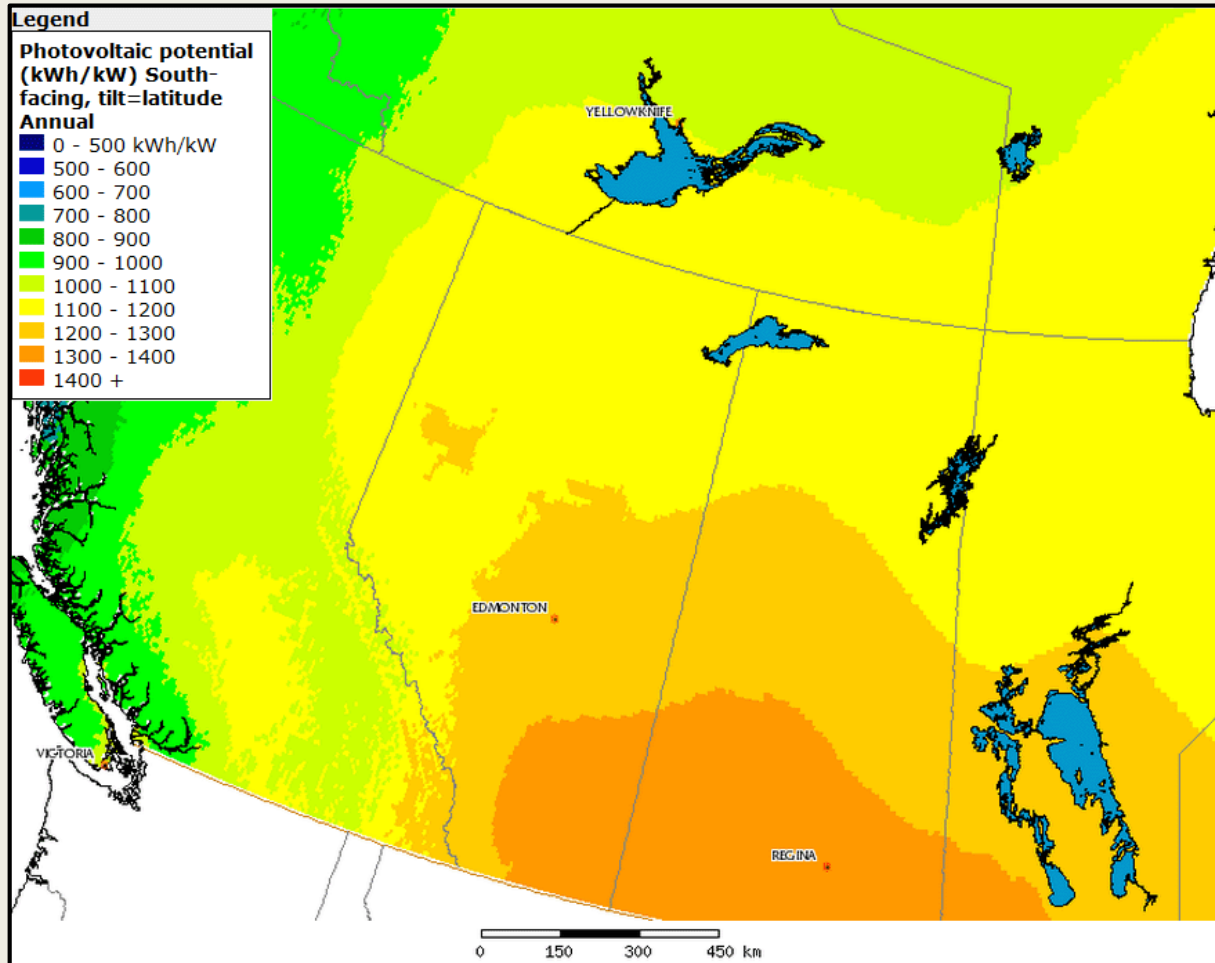


# CoPower/Vancity Investment Bank

- Builds on a successful track record of retail Green Bond portfolio by CoPower
- New partnership massively expands scope and scale of community-impact projects
- \$5,000 min
- 6 year term
- 5% Returns
- Seeking AB projects for newest round of bond offerings
- [www.copower.me](http://www.copower.me)



# Conclusion

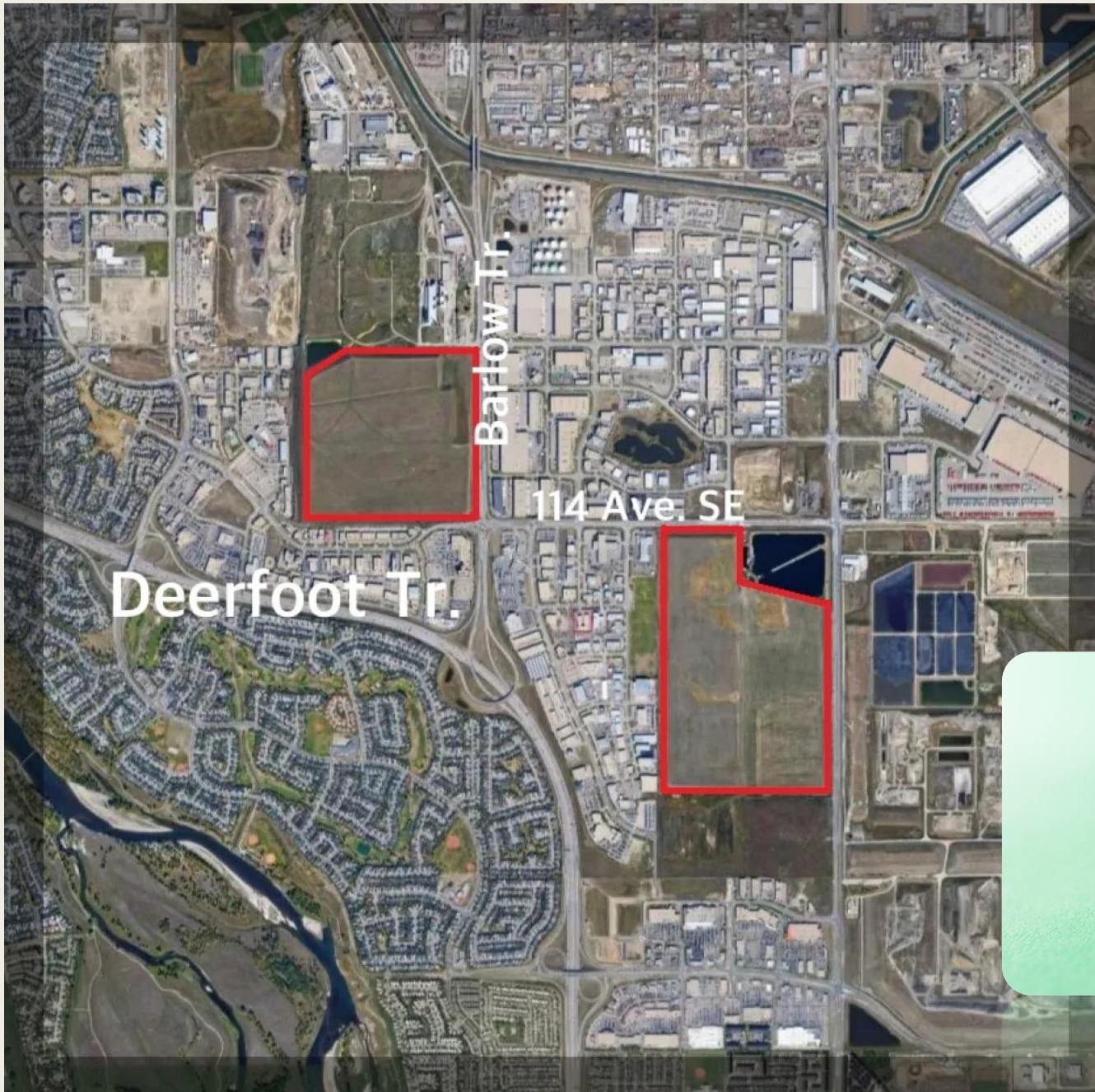


- Robust resource forever (climate changes notwithstanding)
- "The legislated target for renewable electricity generation has not been repealed".
  - Kavi Bal, Alberta Energy spokesperson
- Increasing corporate energy procurement (open energy market)
- Persistent interest in community-scale projects despite lack of specific incentive
- Significant Construction Employment Surge to 2022
- Time for Alberta to “make its own luck” in modern energy



# Calgary's BIG (Irish) SOLAR Opportunity?

[www.dpenergy.com](http://www.dpenergy.com)





[www.Renewable-Randolph.com](http://www.Renewable-Randolph.com)



Riverview Project, Pincher  
Creek AB