

Southeastern Alberta

Renewable Energy

Economic Impact Report

December 2020

Funded by:

**SE ALBERTA
ENERGY
DIVERSIFICATION
STRATEGY**
Our region. Our jobs. Our communities.

This Southeastern Alberta Renewable Energy Impact Report was prepared for SEEDS
partnership by:



Table of Contents

Southeastern Alberta Renewable Energy Economic Impact Report 3

Research Methodology 4

 SEEDS History..... 4

Solar and Wind Project List..... 7

Potential Impacts of Current Solar & Wind Projects..... 41

Investment Calculations..... 42

 Potential Impacts of Solar and Wind Projects on the AESO Project List for Southeastern
 Alberta as of December 1, 2020..... 42

Recommendations and Conclusion..... 42

Southeastern Alberta Renewable Energy Economic Impact Report

The **Southeast Alberta Energy Diversification Strategy (SEEDS)** group is focused on engaging with the renewable energy industry to determine how we can support the industry to grow and thrive in Southeast Alberta. The SEEDS group is comprised of the following organizations in Southeast Alberta:

Alberta Labour

APEX Regional Innovation Network of Southeast Alberta

City of Brooks

City of Medicine Hat

Community Futures Entre-Corp

County of Newell

Medicine Hat College

Verge Economic Development



Research Methodology

SEEDS History

The SEEDS group began in 2016 as a collaboration between three organizations – Alberta Labour, Economic Development Alliance (EDA) of SE AB, and Medicine Hat College – to better understand the impacts the emerging renewable energy industry would have on economic development and the labour force in SE AB. In late 2016, the SEEDS group commissioned the Southeast Alberta Energy Diversification Report: Our Region, Our Jobs, Our Communities report. As the report illustrates, 35 out of 85, or 41%, of proposed large-scale (over 1MW) solar and wind energy projects on the Alberta Electric System Operator (AESO) in Alberta as of December 31, 2016 are in the SE AB region. Renewable energy developers are attracted to SE AB because of the region’s abundant solar and wind resources and its lengthy history as an energy region. Many in SE AB are familiar with energy development procedures (e.g. lease payments) and are skilled energy workers from the oil and gas industry, with skills that are transferable to the renewable energy industry.¹

¹ SEEDS. (2017). Moving forward report. Taken from <http://www.seedsalberta.ca/uploads/1/0/9/3/109320257/seeds4movingforwardreport.pdf>

Using formulas developed by the Canadian Solar Industry Association (CanSIA) and the Canadian Wind Energy Association (CanWEA), the estimated impact of these 35-proposed solar and wind projects in SE AB, over the next two decades, could result in:

- Over \$7 billion in investment.
- Over 10,000 temporary full-time equivalent jobs in development and construction.
- Close to 400 permanent jobs in operations and maintenance.
- Close to \$6 million in lease payments to rural landowners.
- Over \$7.5 million in property tax payments to rural municipalities.

The impacts identified in this report and the recommendation that a formal group be developed in the region to proactively support and grow the renewable energy industry in SE AB, contributed to the SEEDS group expanding to include the City of Brooks, City of Medicine Hat, County of Newell, APEX Regional Innovation Network, and Community Futures Entre-Corp. Currently, renewable energy industries are in rapid growth mode in Alberta. In the recently released Climate Leadership Plan, the Alberta government has committed to 30 percent of the provinces' energy production being produced by renewables by 2030. This includes the Renewable Electricity Program (REP), implemented and administered by the Alberta Electricity Systems Operator (AESO). Through a series of competitions, this program is intended to encourage the development of 5,000 megawatts (MWs) of renewable electricity generation capacity connected to the Alberta grid by 2030. The Alberta Climate Leadership Plan also outlines strategies to reduce greenhouse gas emissions including carbon pricing with revenues invested directly to green energy research and innovation, pollution reduction, green

infrastructure, and energy efficiency programs for Albertans to reduce their energy consumption. These strategies will reduce emissions, grow Alberta's economy, and introduce new employment opportunities for Albertans.²

This Economic Impact Report has been compiled using the most up to date AESO Queue List as of September 1, 2020. It will highlight for you all the projects in Southeastern Alberta that are current and completed; as well as projects that are proposed for the region

In total for Southeastern Alberta, there are 102 Wind and Solar Projects.³

Please Note: The following projects are in order by project name, project type, company listed, city/town located, total megawatts, and in – service date as presented by the AESO Queue List.

They are then filtered first by in – service date and project name.

² SEEDS. (2017). Moving forward report. Taken from <http://www.seedsalberta.ca/uploads/1/0/9/3/109320257/seeds4movingforwardreport.pdf>

³ AESO. (Sept. 2020). Connection project list. Taken from <https://www.aeso.ca/grid/projects/project-reports/>

Solar and Wind Project List

Project Name: Box Springs Wind Farm

Project Type: Wind

Company Listed: Wind River Power Corporation

City/Town Located: Medicine Hat

Total Megawatts: 6.00

In – Service Date: July 25, 2014

Project Name: Brooks Solar Farm

Project Type: Solar

Company Listed: Elemental Energy

City/Town Located: Brooks

Total Megawatts: 17.00

In – Service Date: July 9, 2017

Project Name: Alberta Municipal Solar Program

Project Type: Solar

Company Listed: N/A

City/Town Located: Across 29 Municipalities in Canada

Total Megawatts: 11.60

In – Service Date: January 1, 2019

Project Name: Schuler Wind Project

Project Type: Wind

Company Listed: Suncor

City/Town Located: Schuler

Total Megawatts: 80.00

In – Service Date: March 1, 2018

Project Name: FortisAlberta Duchess DER Solar

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Duchess

Total Megawatts: 10.10

In – Service Date: March 31, 2019

Project Name: Burdett DER Solar 1

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Burdett

Total Megawatts: 8.00

In – Service Date: May 1, 2019

Project Name: Burdett DER Solar 2

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Burdett

Total Megawatts: 16.00

In – Service Date: May 1, 2019

Project Name: Fincastle DER Solar

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Fincastle

Total Megawatts: 20.00

In – Service Date: May 1, 2019

Project Name: Taber DER Solar 1

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Taber

Total Megawatts: 12.00

In – Service Date: May 1, 2019

Project Name: Taber DER Solar 2

Project Type: Solar

Company Listed: Fortis Alberta

City/Town Located: Taber

Total Megawatts: 22.00

In – Service Date: May 1, 2019

Project Name: 158S Vauxhall DG PV

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Vauxhall

Total Megawatts: 16.00

In – Service Date: June 1, 2019

Project Name: Schuler Windfarm

Project Type: Wind

Company Listed: Invenergy

City/Town Located: Schuler

Total Megawatts: 400.00

In – Service Date: July 1, 2019

Project Name: Krafte 257S Hull DER Solar

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Hull

Total Megawatts: 25.00

In – Service Date: July 1, 2019

Project Name: Brooks DER Solar

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Brooks

Total Megawatts: 22.00

In – Service Date: August 1, 2019

Project Name: Bullshead 523S DER Solar 1

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Bullshead

Total Megawatts: 20.00

In – Service Date: August 1, 2019

Project Name: Bullshead 523S DER Solar 2

Project Type: Solar

Company Listed: FortisAlberta

City/Town Located: Bullshead

Total Megawatts: 20.00

In – Service Date: September 1, 2019

Project Name: West Brooks DER Solar

Project Type: Solar

Company Conducting Work: FortisAlberta

City/Town Located: West Brooks

Total Megawatts: 23.00

In – Service Date: October 1, 2019

Project Name: Schuler Solar

Project Type: Solar

Company Listed: Suncor

City/Town Located: Schuler

Total Megawatts: 80.00

In – Service Date: October 31, 2019

Project Name: Whitla Wind Phase 1

Project Type: Wind

Company Listed: Capital Power

City/Town Located: Whitla

Total Megawatts: 202.00

In – Service Date: December 1, 2019

Project Name: Aira Forty Mile Wind

Type: Wind

Company Listed: Aira

City/Town Located: Forty Mile

Total Megawatts: 125.00

In – Service Date: March 28, 2020

Project Name: 257S Hull DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Hull

Total Megawatts: 25.00

In – Service Date: April 1, 2020

Project Name: 895S Suffield DG PV

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Suffield

Total Megawatts: 22.00

In – Service Date: June 1, 2020

Project Name: P1995 ATCO Coronation 773S Solar DG

Type: Solar

Company Listed: ATCO

City/Town Located: Coronation

Total Megawatts: 12.00

In – Service Date: September 30, 2020

Project Name: P2059 ATCO Three Hills 770S DER Solar 1

Type: Solar

Company Listed: ATCO

City/Town Located: Three Hills

Total Megawatts: 14.00

In – Service Date: September 30, 2020

Project Name: P2061 ATCO Michichi Creek 802S DER Solar

Type: Solar

Company Listed: ATCO

City/Town Located: Michichi Creek

Total Megawatts: 11.00

In – Service Date: September 30, 2020

Project Name: P1837 Fortis 498S Tilley DG PV

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Tilley

Total Megawatts: 13.00

In – Service Date: October 28, 2020

Project Name: P2124 Northland Bow City MPC Solar

Type: Solar

Company Listed: Northland Power

City/Town Located: Brooks

Total Megawatts: 400.00

In – Service Date: November 1, 2020

Project Name: P2241 FortisAlberta 368S Burdett DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Burdett

Total Megawatts: 15.00

In – Service Date: November 2, 2020

Project Name: P2171 FortisAlberta Westfield 107S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Vauxhall

Total Megawatts: 16.30

In – Service Date: November 9, 2020

Project Name: P1840 Fortis 275S Jenner Solar DER

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Jenner

Total Megawatts: 23.00

In – Service Date: November 12, 2020

Project Name: P1567 EDPR Sharp Hills Wind Farm - Phase 1

Type: Wind

Company Listed: EDPR

City/Town Located: Sharp Hills

Total Megawatts: 51.60

In – Service Date: November 15, 2020

Project Name: P1987 Solar Krafte Rainier

Type: Solar

Company Listed: Solar Krafte

City/Town Located: Rainier

Total Megawatts: 450.00

In – Service Date: November 15, 2020

Project Name: P1800 Capital Power Whitla Wind Power Facility Phase 2

Type: Wind

Company Listed: Capital Power

City/Town Located: Whitla

Total Megawatts: 97.20

In – Service Date: December 1, 2020

Project Name: P1991 ENMAX Zephyr MPC Wind

Type: Wind

Company Listed: Enmax

City/Town Located: Taber

Total Megawatts: 200.00

In – Service Date: December 1, 2020

Project Name: P2000 ENMAX Taber BTF Wind

Type: Wind

Company Listed: Enmax

City/Town Located: Taber

Total Megawatts: 21.00

In – Service Date: December 1, 2020

Project Name: P2008 Greengate Lathom MPC Solar

Type: Solar

Company Listed: Greengate

City/Town Located: Lathom

Total Megawatts: 120.00

In – Service Date: December 1, 2020

Project Name: P2216 FortisAlberta Chappice Lake 649S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Medicine Hat

Total Megawatts: 10.60

In – Service Date: December 1, 2020

Project Name: P2338 Capital Power Whitla Wind Phase 3

Type: Wind

Company Listed: Capital Power

City/Town Located: Whitla

Total Megawatts: 54.00

In – Service Date: December 1, 2020

Project Name: Suncor Forty Mile Granlea Solar

Type: Solar

Company Listed: Suncor

City/Town Located: Granlea

Total Megawatts: 100.00

In – Service Date: December 1, 2020

Project Name: P1849 Fortis Burdett 368S DG P/V

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Burdett

Total Megawatts: 10.50

In – Service Date: December 15, 2020

Project Name: P2086 FortisAlberta Brooks 121S DER Solar (83L)

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Brooks

Total Megawatts: 13.00

In – Service Date: December 31, 2020

Project Name: P2092 FortisAlberta Brooks 121S DER Solar (257LE)

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Brooks

Total Megawatts: 12.00

In – Service Date: December 31, 2020

Project Name: P1839 Fortis 421S Hays DG PV

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Hays

Total Megawatts: 13.40

In – Service Date: February 15, 2021

Project Name: P2068 Four Rivers Wind

Type: Wind

Company Listed: Four Rivers Wind Power Inc.

City/Town Located: Medicine Hat

Total Megawatts: 450.00

In – Service Date: March 31, 2021

Project Name: P1918 FortisAlberta Conrad DER Solar 1

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Conrad

Total Megawatts: 18.40

In – Service Date: April 15, 2021

Project Name: P1959 FortisAlberta Conrad DER Solar 2

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Conrad

Total Megawatts: 18.00

In – Service Date: April 15, 2021

Project Name: P2297 FortisAlberta Burdett 368S DER Solar Battery Storage

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Burdett

Total Megawatts: 17.50

In – Service Date: May 1, 2021

Project Name: P1533 Joss MPC WAGF

Type: Wind

Company Listed: Joss Wind

City/Town Located: Jenner

Total Megawatts: 122.00

In – Service Date: May 31, 2021

Project Name: P1698 Joss Jenner WAGF – Phase 2

Type: Wind

Company Listed: Joss Wind

City/Town Located: Jenner

Total Megawatts: 71.40

In – Service Date: May 31, 2021

Project Name: P2234 Jenner Wind Phase 3

Type: Wind

Company Listed: Joss Wind

City/Town Located: Jenner

Total Megawatts: 109.20

In – Service Date: May 31, 2021

Project Name: P2212 RESC Rattlesnake Ridge MPC Wind

Type: Wind

Company Listed: RESC

City/Town Located: Rattlesnake

Total Megawatts: 150.00

In – Service Date: July 30, 2021

Project Name: P2195 FortisAlberta Bassano 435S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Bassano

Total Megawatts: 9.30

In – Service Date: September 1, 2021

Project Name: P2362 Fortis Enchant 447S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Vauxhall

Total Megawatts: 71.90

In – Service Date: September 14, 2021

Project Name: P2362 Fortis Enchant 447S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Enchant

Total Megawatts: 22.00

In – Service Date: September 14, 2021

Project Name: P2363 Fortis Enchant 447S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Enchant

Total Megawatts: 17.90

In – Service Date: September 14, 2021

Project Name: P2364 Fortis Enchant 447S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Enchant

Total Megawatts: 9.3.

In – Service Date: September 14, 2021

Project Name: P2365 Fortis Enchant 447S DER Solar

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Enchant

Total Megawatts: 22.70

In – Service Date: September 14, 2021

Project Name: P2218 ENGIE Duchess Solar

Type: Solar

Company Listed: ENGIE

City/Town Located: Duchess

Total Megawatts: 90.00

In – Service Date: September 15, 2021

Project Name: P1909 TransAlta Garden Plain Wind

Type: Wind

Company Listed: TransAlta

City/Town Located: Hanna

Total Megawatts: 130.00

In – Service Date: October 1, 2021

Project Name: P2248 ATCO Michichi Creek 802S DER Solar

Type: Solar

Company Listed: ATCO

City/Town Located: Hanna

Total Megawatts: 13.50

In – Service Date: October 1, 2021

Project Name: P2361 ATCO Youngstown 772S DER Solar

Type: Solar

Company Listed: ATCO

City/Town Located: Hanna

Total Megawatts: 5.80

In – Service Date: October 1, 2021

Project Name: P2249 FortisAlberta Empress 394S DER Solar 1

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Empress

Total Megawatts: 22.00

In – Service Date: November 1, 2021

Project Name: P2250 FortisAlberta Empress 394S DER Solar 2

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Empress

Total Megawatts: 15.50

In – Service Date: November 1, 2021

Project Name: P1812 Suncor Forty Mile Granlea WAGF

Type: Wind

Company Listed: Suncor

City/Town Located: Granlea

Total Megawatts: 200.00

In – Service Date: November 16, 2021

Project Name: P1853 Fortis Buffalo Atlee Cluster 1 WAGF

Type: Wind

Company Listed: FortisAlberta

City/Town Located: Buffalo

Total Megawatts: 18.30

In – Service Date: December 1, 2021

Project Name: P2199 FortisAlberta Buffalo Atlee Cluster 2

Type: Wind

Company Listed: FortisAlberta

City/Town Located: Buffalo

Total Megawatts: 13.80

In – Service Date: December 1, 2021

Project Name: P1892 Fortis Buffalo Atlee Cluster 3 WAGF DER

Type: Wind

Company Listed: FortisAlberta

City/Town Located: Buffalo

Total Megawatts: 17.30

In – Service Date: December 1, 2021

Project Name: P2137 Enerfin Winnifred MPC Wind

Type: Wind

Company Listed: Enerfin

City/Town Located: Winnifred

Total Megawatts: 50.00

In – Service Date: December 1, 2021

Project Name: P1780 Sequoia Energy Oyen MPC Wind

Type: Wind

Company Listed: Sequoia Energy

City/Town Located: Oyen

Total Megawatts: 100.00

In – Service Date: December 14, 2021

Project Name: P2211 ENGIE Buffalo Trail South MPC Wind

Type: Wind

Company Listed: ENGIE

City/Town Located: Medicine Hat

Total Megawatts: 200.00

In – Service Date: December 24, 2021

Project Name: P2232 ENGIE Buffalo Trail North MPC Wind

Type: Wind

Company Listed: ENGIE

City/Town Located: Medicine Hat

Total Megawatts: 200.00

In – Service Date: December 24, 2021

Project Name: P1926 Solar Krafte Vauxhall

Type: Solar

Company Listed: Solar Krafte

City/Town Located: Vauxhall

Total Megawatts: 150.00

In – Service Date: December 31, 2021

Project Name: P2348 BluEarth Wheatcrest MPC Solar

Type: Solar

Company Listed: BluEarth

City/Town Located: Vauxhall

Total Megawatts: 60.00

In – Service Date: March 31, 2022

Project Name: P1567 EDPR Sharp Hills Wind Farm - Phase 2

Type: Wind

Company Listed: EDPR

City/Town Located: Sharp Hills

Total Megawatts: 248.40

In – Service Date: April 15, 2022

Project Name: P1824 Lone Pine Wind

Type: Wind

Company Listed: Lone Pine Resources Inc.

City/Town Located: Hanna

Total Megawatts: 172.80

In – Service Date: April 30, 2022

Project Name: P2237 RESC Forty Mile MPC Wind

Type: Wind

Company Listed: RESC

City/Town Located: Forty Mile

Total Megawatts: 400.00

In – Service Date: June 16, 2022

Project Name: P1927 Solar Krafte Brooks

Type: Solar

Company Listed: Solar Krafte

City/Town Located: Brooks

Total Megawatts: 400.00

In – Service Date: June 30, 2022

Project Name: P1856 NaturEner Buffalo Trail WAGF

Type: Wind

Company Listed: NaturEner

City/Town Located: Medicine Hat

Total Megawatts: 100.00

In – Service Date: July 15, 2022

Project Name: P1857 NaturEner Ross Creek WAGF

Type: Wind

Company Listed: NaturEner

City/Town Located: Medicine Hat

Total Megawatts: 100.00

In – Service Date: July 15, 2022

Project Name: P0479 NaturEner Wild Rose 1 Wind Farm

Type: Wind

Company Listed: NaturEner

City/Town Located: Medicine Hat

Total Megawatts: 217.60

In – Service Date: August 15, 2022

Project Name: P0693 NaturEner Wild Rose 2 Wind Farm

Type: Wind

Company Listed: NaturEner

City/Town Located: Medicine Hat

Total Megawatts: 192.00

In – Service Date: August 15, 2022

Project Name: P2254 RESC Hilda MPC Wind

Type: Wind

Company Listed: RESC

City/Town Located: Hilda

Total Megawatts: 100.00

In – Service Date: August 31, 2022

Project Name: P1734 Suncor Forty Mile Maleb WAGF

Type: Wind

Company Listed: Suncor

City/Town Located: Maleb

Total Megawatts: 200.00

In – Service Date: September 1, 2022

Project Name: P2263 BER Hand Hills MPC Wind

Type: Wind

Company Listed: BER Hand Hills

City/Town Located: Hanna

Total Megawatts: 200.00

In – Service Date: September 16, 2022

Project Name: P1898 Pattern Lanfine North Wind

Type: Wind

Company Listed: BowArk Energy

City/Town Located: Hanna

Total Megawatts: 145.00

In – Service Date: September 30, 2022

Project Name: P2091 EDP Renewables Blue Bridge Solar

Type: Solar

Company Listed: EDPR

City/Town Located: Empress

Total Megawatts: 150.00

In – Service Date: October 1, 2022

Project Name: P2247 Buffalo Plains MPC Wind

Type: Wind

Company Listed: ABO Wind

City/Town Located: Brooks

Total Megawatts: 500.00

In – Service Date: October 1, 2022

Project Name: P2342 EDF Bull Trail Wind

Type: Wind

Company Listed: EDPR

City/Town Located: Medicine Hat

Total Megawatts: 300.00

In – Service Date: October 1, 2022

Project Name: P2122 Cypress Wind Project Connection

Type: Wind

Company Listed: EDF

City/Town Located: Cypress County

Total Megawatts: 201.60

In – Service Date: November 1, 2022

Project Name: P2209 ATCO Monitor 1 774S DER Solar

Type: Solar

Company Listed: ATCO

City/Town Located: Hanna

Total Megawatts: 4.00

In – Service Date: November 1, 2022

Project Name: P2323 Fortis Taber 83S DER Solar 1

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Vauxhall

Total Megawatts: 16.40

In – Service Date: November 1, 2022

Project Name: P2324 Fortis Taber 83S DER Solar 2

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Vauxhall

Total Megawatts: 15.00

In – Service Date: November 1, 2022

Project Name: P2325 Fortis Taber 83S DER Solar 3

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Vauxhall

Total Megawatts: 13.30

In – Service Date: November 1, 2022

Project Name: P2326 Fortis Taber 83S DER Solar 4

Type: Solar

Company Listed: FortisAlberta

City/Town Located: Vauxhall

Total Megawatts: 9.20

In – Service Date: November 1, 2022

Project Name: P0513 Pteragen Peace Butte Wind Farm

Type: Wind

Company Listed: Pteragen

City/Town Located: Peace Butte

Total Megawatts: 119.70

In – Service Date: December 1, 2022

Project Name: P1828 HEP Capital Alderson Solar

Type: Solar

Company Listed: HEP Capital

City/Town Located: Alderson

Total Megawatts: 100.00

In – Service Date: December 1, 2022

Project Name: P1786 Sequoia Schuler WAGF (MPC)

Type: Wind

Company Listed: Sequoia Energy

City/Town Located: Schuler

Total Megawatts: 100.00

In – Service Date: December 15, 2022

Name: P1704 Paintearth Wind Power

Type: Wind

Company Listed: ATCO

City/Town Located: Hanna

Total Megawatts: 150.00

In – Service Date: April 1, 2023

Project Name: P2337 Dunmore Solar

Type: Solar

Company Listed: Dunmore Solar Inc.

City/Town Located: Dunmore

Total Megawatts: 216.00

In – Service Date: April 1, 2023

Project Name: P2318 EDF North Slope Solar

Type: Solar

Company Listed: EDF Renewables

City/Town Located: Medicine Hat

Total Megawatts: 200.00

In – Service Date: August 1, 2023

Project Name: P2303 Nose Hill MPC Wind

Type: Wind

Company Listed: ABO Wind

City/Town Located: Hanna

Total Megawatts: 120.00

In – Service Date: October 1, 2023

Project Name: P2356 RESC Oyen MPC Wind

Type: Wind

Company Listed: Sequoia Energy

City/Town Located: Oyen

Total Megawatts: 250.00

In – Service Date: December 29, 2023

Potential Impacts of Current Solar & Wind Projects

Wind and solar energy provide significant economic development opportunities for Alberta.

Every 150 MW of installed **Wind** energy capacity represents \$316 million in investment, 140 direct full-time equivalent construction jobs and 10 permanent direct jobs in operations. It also will provide approximately \$17 million in lease payments to rural landowners and \$31 million in property tax payments to rural municipalities over a 20 year period. ⁴

Every 150 MW of installed **Solar** energy capacity represents \$310 million in investment, 1,875 direct full-time equivalent construction jobs and 45 permanent direct jobs in operations.¹¹ It also will provide approximately \$54 million in lease payments to site-hosts and \$30 million in property tax. ⁵

In total there are 102 renewable projects for Southeastern Alberta. There are 43 projects with 6,885.90 MW of Wind and 59 projects with 3,291.20 MW of Solar.

Example Calculation:

Wind: $6885.90/150=45.9060$ MW

Solar: $3291.20/150=21.9413$ MW

*For every 150 MW of installed Wind or Solar energy capacity it represents the below totals.

This is why you must divide the total MW for the region by 150 to get a proper equivalent match

⁴ CanWEA & CanSIA. (2015). Submission to the Alberta Climate Change Advisory Panel. https://solaralberta.ca/sites/default/files/canwea_-_cansia_final_submission_sept_30.pdf

⁵ CanWEA & CanSIA. (2015). Submission to the Alberta Climate Change Advisory Panel. https://solaralberta.ca/sites/default/files/canwea_-_cansia_final_submission_sept_30.pdf

the CanSIA and CanWEA formula. E.g. Every 150 MW of installed solar energy = \$310 million investment.

Investment Calculations

Potential Impacts of Solar and Wind Projects on the AESO Project List for Southeastern Alberta as of December 1, 2020

	Wind	Solar
	\$316,000,000 for every 150 MW 6,885.90 MW	\$310,000,000 for every 150 MW 3,291.20 MW
Investment	\$14,506,296,000.00	\$6,801,813,333.33
Direct Full-Time Equivalent Construction Jobs	6,427 Jobs	41,140 Jobs
Permanent Direct Jobs in Operations	459 Jobs	148,104 Jobs
Lease Payments	\$780,402,000.00	\$1,184,832,000.00
Property Taxes	\$1,423,086,000.00	\$658,240,000.00

Recommendations and Conclusion

It is very clear and evident there are many renewable energy projects planned for Southeastern Alberta. With this Economic Impact Report, we can see renewable energy is now on the rise. It would be valuable to review this project again this time next year on September 2021 to see what projects have changed, added, or been dropped from the AESO QUEUE List.