



**Land Use Bylaw Proposed Text Amendment  
Council Public Hearing**

December 14, 2021



# **AGENDA**

**Voltarix Group & Team**  
**Proposed Projects**  
**Market Regulators**  
**Impact Management**  
**Community Benefits**  
**What We Heard**  
**Questions**



# VOLTARIX GROUP INC.

- Edmonton based renewable energy company
- Founded 2017
- Sole focus on solar power developments
- We specialize in distributed generation development projects
- Vertically integrated services

*leaders in distributed energy resources*

**Powering Future Abundance**



# MARKETS WE SERVE



Distributed Energy Resources



Utility Scale Solar Energy



Battery Storage



Smart Grid



## What We Do

### Consulting

Guiding clients to achieve sustainability and economic stimulation goals in the highest impact way possible.



### Construction EPC

Total system design, project management and construction management. We execute safely, on time and on budget.



### Asset Management

Offtake agreements, financing and disposition strategies, and financial reporting to maximize return on investment.



### Development

Conceptualizing new solar projects, testing feasibility and working with local markets to prepare for financial and project success.



### Operations & Maintenance

Ongoing performance monitoring, administration and process improvement designed to increase profitability in a sustainable way.





# BYLAW & CONSULTATION PARTNERS

## **PUBLIC CONSULTATION & ENGAGEMENT**

- Identify stakeholders
- Perform PIP consultation
- Public relations

## **LUB PLANNING & PROPOSED AMENDMENTS**

- Background research
- Land use bylaw review
- Proposed text amendments



E1NS



# OUR GUIDING PRINCIPLES

## *Inclusiveness*

- *Reach out to the community and encouraging involvement*
- *Seek feedback from all walks of life, genders and ages to receive a diverse perspective*

## *Transparency*

- *Provide reliable, truthful and accurate documentation from internal and external sources*
- *Communicating clearly and openly about engagement and projects processes, purpose, timing, roles and responsibilities*

## *Efficiency*

- *Engaging quickly and allowing flexibility to the dynamic nature of public engagement*
- *Acting in a responsive manner and leading the process*

## *Communication*

- *Encouraging two-way dialogue*
- *Leveraging a variety of communication methods to raise awareness*
- *Using plain language for all to understand*

## *Accountability*

- *Ensuring Council receives all relevant information for consideration*
- *Respecting all individuals time equally*

## *Commitment*

- *Allocating appropriate resources and consultants to effectively engage*
- *Remaining current with best practices of community engagement and COVID-19 safety*



# BYLAW OBJECTIVES

1. Encourage dialog with the public regarding Voltarix led LUB amendments
  - Parkland County has existing definitions for “Solar Energy Systems” and “Solar Farm”.
  - Solar Farm is currently a Permitted use in the Agricultural Industry Development District.
2. The objective of our proposed amendment is to work with Parkland County to add the existing definition of “Solar Farm” as Discretionary Use to the AGG and AGR zones.

## Districts to Be Amended

1. Agricultural Restricted District
2. Agricultural General District





## WHAT WE DID

- Evaluated Alberta Municipalities with existing utility solar LUB
- Educate about third party regulators involved in power generation facility approvals
- Evaluate existing Alberta & County land zones for suitability
- Sought alignment with Parkland County's MDP to protect prime agricultural areas and a rural farming lifestyle, while promoting economic competitiveness and community growth.
- Actively engaged with nearby Municipalities.
- Consider community benefits and net impacts to lifestyle
- Initial contact with Parkland County, September 2020
- Began public consultation June 4, 2021
  - Public consultation has remained open to-date (7-months)
- Listened and engaged with members of public who presented concerns.





# PROPOSED PROJECTS

- Rocktree Solar & Moon Lake Solar
- Two solar arrays in Parkland County totalling approximately 50MW of renewable energy generation.
- 15,000 residential homes annual electricity equivalence
- Require Land Use Bylaw text amendment to support utility scale solar in Parkland County





## WHY WE CHOSE PARKLAND COUNTY

- Central Alberta has been overlooked with solar development and there is abundance of opportunity in Parkland County
- Proximity to GEA and skilled workforce of PC communities
- Proximity to Indigenous organizations who we can engage in ownership and employment
- Host to significant existing power infrastructure and a need to transition energy mix to include renewable generation
- Growing communities of Drayton Valley, Acheson, Stony Plain and Spruce Grove support a growth in energy demand.
- Alignment with Parkland County's Master Development Plan



# EXISTING MUNICIPAL DEVELOPMENT PLAN

## 5.0.8 Power Generation Facilities

- *“The County supports the continued operation and adaptive reuse of power generation facilities within Parkland County as an important source of local employment opportunities.”*
  - ✓ Utility Scale Solar power facilities will provide an alternate employment opportunity as existing coal extraction areas and plants are decommissioned





# EXISTING MUNICIPAL DEVELOPMENT PLAN

## 10.1 Healthy Ecosystems

- *“Parkland County is committed to maintaining and promoting the retention of healthy ecosystems and their natural ecological capital... including carbon sequestration, drought resilience, purification of air and water...”*
  - ✓ Utility Scale Solar power facilities align with this goal as a carbon displacing energy source that promotes healthy ecosystems, clean air and nominal environmental impacts.





# EXISTING MUNICIPAL DEVELOPMENT PLAN

## 10.5 Renewable Energy & Sustainable Development

- *“The County supports the diversification of energy generation to include renewable energy as part of a strategy to reduce greenhouse gas emissions and to diversify the County’s economic base...”*
  - ✓ Utility Scale Solar power facilities align with this goal by supporting the growth, development and implementation of sustainable infrastructure and development projects.





# EXISTING ALBERTA SOLAR PROJECT ZONES

Project	Muni	Solar in Ag Zone?	Policy?
<a href="#">Travers Solar</a>	Vulcan County, AB	Yes – Rural Industrial (d)	Section 33 of LUB – very detailed
<a href="#">Claresholm Solar Project</a>	Claresholm, AB	No ag zone, but ground mounted solar is discretionary in most zones	Schedule 13 of LUB – Alternative Energy
<a href="#">Medicine Hat Solar Project</a>	Medicine Hat, AB	Renewable Energy is discretionary in IB, IG, IH, FUD	Only a definition of Renewable Energy in LUB
<a href="#">Suffield Solar Farm</a>	Cypress County, AB	Yes, solar panels are discretionary in all municipal land use zones	Section 61 deals with Solar Energy
<a href="#">Prairie Sunlight Solar Project</a>	MD of Taber, AB	Yes – discretionary in Rural Agriculture	Schedule 11 deals with Solar Energy Systems
<a href="#">Yellow Lake Solar Project</a>	County of Forty Mile, AB	No – discretionary in Solar Energy Facility (SEF) district	Schedule 82 deals with Solar Energy Facility district

We noticed most Municipalities with existing utility solar projects largely defer their Land Use Bylaw to other third party regulators such as the Alberta Utility Commission (AUC) and Alberta Electrical System Operator (AESO).

This is true for:

- Cypress County
- Vulcan County
- Claresholm
- MD of Taber



## OTHER ENERGY REGULATORS



Parkland County is one of many Authorities solar developers will require approval from. Our proposed LUB Amendments will require solar developers to achieve written approval from the following regulators prior to receiving a County Development Permit:



- Alberta Utility Commission (AUC)\*
- Alberta Environment & Parks (AEP)\*
- Alberta Transportation (ABT)\*
- NAV Canada
- Alberta Electrical System Operator (AESO)
- Fortis Alberta (Distribution Facility Owners)
- AltaLink (Transmission Facility Owners)







# ALBERTA UTILITY COMMISSION

## AUC Rule 007 and Rule 012:

- Participant Involvement Program (PIP), consulting with nearby residents within a defined radius of the site and allowing Alberta wide public engagement including:
  - ✓ Project specific information package
  - ✓ A thorough response to all stakeholder questions and concerns
  - ✓ A discussion of options, alternatives and risk/impact mitigation measures
- Environmental Impact Assessment and achieve written support from the AEP
- Department of Transportation written approval addressing setbacks and driver safety
- Approval for interconnection from the transmission and distribution facilities owners
- Noise Impact Assessment addressing cumulative noise impact within a defined radius of the site
- Historical Resource Assessment, addressing the impact of the historic nature of the site



# ALBERTA ENVIRONMENT & PARKS

A written letter of support from AEP is required prior to submitting applications for approval from the Alberta Utility Commission requiring:

- Seasonal wetland studies
- Wildlife patterns studies
- Vegetation & soils analysis
- Invasive and rare species studies
- Natural drainage studies
- Reclamation and decommissioning plan





# ALBERTA TRANSPORTATION

A permit from Alberta Transportation is required for new or changes to roadside developments within the development control zone, which is 300 m from a provincial right-of-way or 800 m of the centerline of a highway and public road intersection.

- Demonstrate highway setbacks are adhered to
- Adequate space has been allocated for future highway construction plans
- Solar module glare assessment has been performed to ensure driver safety.





# COMMUNITY BENEFITS



## STIMULATING ECONOMY

We employ local labor and increase demand for local accommodations and services through every stage, from assessment through to long-term operations.





# COMMUNITY BENEFITS



## MUNICIPAL TAX REVENUE

The project will provide ongoing tax revenue to the County without adding cost or burden to the community for municipal services, such as water or wastewater services.





# COMMUNITY BENEFITS



## GREEN ENERGY

Solar projects improve air quality by generating emissions-free electricity, and result in meaningful offsets of fossil fuel generation, lowering Alberta's carbon footprint.



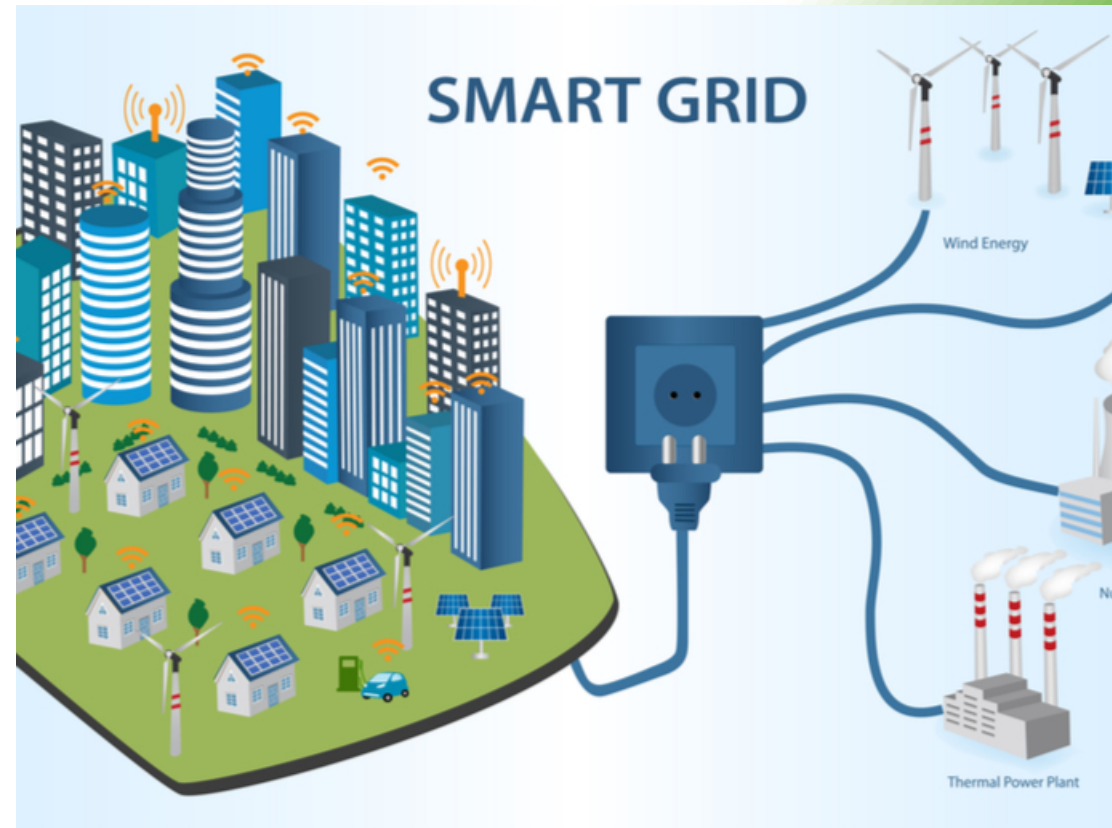


# COMMUNITY BENEFITS



## LOCAL GENERATION

Electricity consumed in the area where it is harvested results in greater grid stability and reduced losses of energy that comes from transmitting power over longer distances.





# PUBLIC CONSULTATION & ENGAGEMENT

## Inform

Provide the public with objective information about proposed land use amendment in order to educate on risks, opportunities, and overall purpose.

## Consult

Public feedback from the initial project information and proposed land use notice provided to required stakeholders has been collected, documented and responded to in an effort to resolve any questions or concerns.

## Empower

Throughout the consultation process Voltarix will continually empower stakeholders to share their opinions, positive or negative. These conversations have formed part of our project consultation logs.





# PUBLIC CONSULTATION & ENGAGEMENT

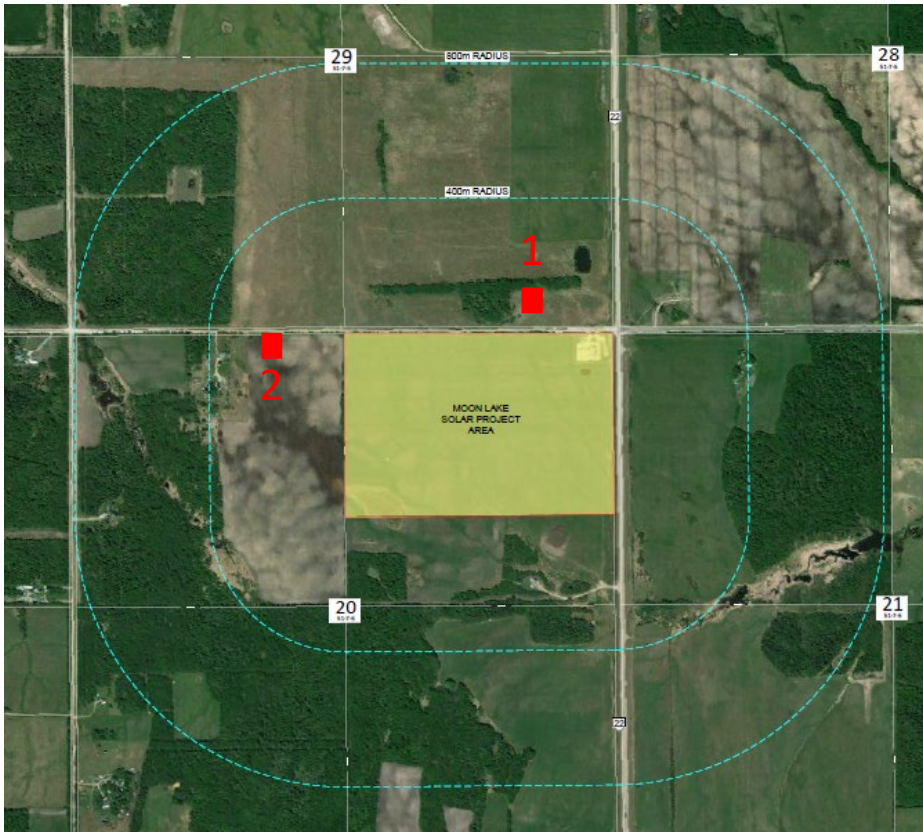
Participant Involvement Program included the following Stakeholders:

- Personal Consultation – Landowners (no Occupants or Residents present) within 400m
- Notification – Landowners, Occupants and Residents within 800m
  - Physical mailout to all owners and parties with land interests registered address on Land Title
- Municipalities - Parkland County, City of Spruce Grove and Town of Stony Plain



# PUBLIC CONSULTATION & ENGAGEMENT

Moon Lake



Rocktree





# PUBLIC CONSULTATION & ENGAGEMENT

## Stages:

- Program initiation (early discussions with municipality)
- Project Information Package mailed to all stakeholders
  - Cover Letter, Project Information Package and Site Specific Map
- Public Notification
  - Newspaper advertisement placed within the Stony Plain Reporter / Grove Examiner
  - LinkedIn Posts
  - Twitter Posts
- Personal consultation
  - Phone consultation conducted with landowners within 400m
- Public Engagement
  - Virtual Open House June 17<sup>th</sup>
    - Invitation to Open House was included in the Project Information Package sent to all stakeholders and publicly advertised



# PUBLIC CONSULTATION & ENGAGEMENT

## Public Notices

### VIRTUAL OPEN HOUSE INVITATION

**Proposed Text Amendments to Parkland County's Land Use Bylaw Agricultural General (AGG) & Agricultural Restricted (AGR) Districts.**

**Online Microsoft Teams Meeting**  
Thursday, June 17, 2021  
6:00 – 8:00 PM

You're invited to attend an online open house to learn about our proposed amendments to the AGG & AGR LUB Districts in Parkland County. The objective is to add discretionary uses to support utility grid scale solar energy developments. Project Specific Information Packages for the proposed projects are available at the weblinks below.

Access to the Virtual Open House will be made available 10-minutes prior to 6-PM through the following weblinks (both links will provide access the same meeting, and there is no need to try to access both):

[volarixgroup.com/projects/moon-lake/](https://volarixgroup.com/projects/moon-lake/)  
or  
[volarixgroup.com/projects/rocktree/](https://volarixgroup.com/projects/rocktree/)

For more information in advance, contact Scott Porter at [scott.porter@brittradius.com](mailto:scott.porter@brittradius.com)



Volarix Group is hosting a Public Open House on June 17 to engage with the communities of [@ParklandCounty](#) [@citysprucegrove](#) [@StonyPlainAB](#) regarding our developer led proposed Land Use Bylaw amendments

The meetings available through Voltarix' website

[volarixgroup.com/projects/moon-lake/](https://volarixgroup.com/projects/moon-lake/)



10:33 AM · Jun 4, 2021 · Twitter Web App

Posted by Richard Haas · 6/17/2021

**Volarix Group Inc.**  
50 followers  
3d · 📍

Friendly reminder to attend the Public Open House this evening to learn about our developer led Land Use Bylaw amendments in Parkland County.

<https://lnkd.in/g9tkTDd>

**Volarix Group Inc.**  
50 followers  
2w · 📍

We're hosting a Public Open House at 6:00PM on June 17th to engage with the community of Parkland County and neighbours.

...see more





# WHAT WE HEARD FROM STAKEHOLDERS

## Stony Plain:

No concerns or comments were raised.

## Spruce Grove:

Interested in seeing renewable energy projects in their backyard

No objections to the Rocktree Solar project or LUB amendments

Desire to ensure Golden Spike road future widening plans and HW628 are not impacted

Questioned if LUB supports significant solar development surrounding City perimeter; however market/power regulator conditions will not allow this to occur.

Requested regular updates on progress



# PUBLIC CONSULTATION & ENGAGEMENT

## Concerns and Mitigation:

- (1) Landowner/Resident: SE 29-51-7 W5M LOT 1 BLOCK 1 PLAN 0728009 (land approx. 2m from Moon Lake project, separated by TWP 514)
- Concerns: visual, noise related, potential land value would diminish, as well as perceived potential health concerns living that close to a power plant
  - Proposed Mitigations:
    - Reduce visual impacts by fabric installs in fencing or tree plant trees along North side of the property.
    - Noise Impact Assessment,
    - Photos of similar projects to show infrastructure
    - Site Security – Photos of fencing that will be installed, monitoring equipment. When employee site attendance and traffic would take place
    - Planned lawn and weed control measures were provided to landowner.
  - Outcome: Landowner remains unsettled despite Voltarix's multiple attempts to meet, further discuss and mitigation attempts



# PUBLIC CONSULTATION & ENGAGEMENT

## Concerns and Mitigation:

- (2) Landowner/Resident: NW 20-51-7 W5M LOT 1 BLOCK 1 PLAN 1324935 (land approx. 0m from Moon Lake project, quarter directly West)
- Concern: Did not receive information package, requested information on construction practices due to sheep heard and dogs within proximity and interest in grazing sheep on the solar farm property
  - Mitigation: Information Package re-sent to resident's email address with Voltarix's contact number to discuss construction and sheep grazing
  - Outcome: Landowner received information package, no further questions or concerns at current time. Planning meeting with landowner and Voltarix to discuss project and sheep grazing.



# PUBLIC CONSULTATION & ENGAGEMENT

## Letters of Support:

Multiple letters of support from area landowners and local MLA's

Landowner/area Resident: SW 21-51-7 W5M (land approx. 200m from Moon lake project)

Landowner/area Resident: NE 20-51-7 W5M (Landlord of Moon Lake project, resides on property)

Landowner/ area Resident: NW 27-52-27 W4M (land approx. 2m from Rocktree project)

Mark Smith, MLA, Drayton Valley-Devon

Shane Getson, MLA, Lac Ste. Anne-Parkland





# FREQUENTLY ASKED QUESTIONS

## ***Question: What about the Agricultural Land?***

Voltarix is committed to ensure nominal impacts to the agricultural potential of the land.

We're actively working with local farmers, Ag-Industry and Municipalities to incorporate a "dual land use" approach.

No soil will be stripped from site. There are no below grade contaminants, no sewer or water lines, and no concrete slabs such as those required for commercial buildings and residential dwellings which kill the soil fertility below them.

Solar energy systems are temporary in nature, and the land below the array will have nominal impacts from the arrays existence.

Steel driven piles can easily be removed at time of decommissioning and the land can easily be returned for agricultural uses with no contamination remediation.





# FREQUENTLY ASKED QUESTIONS

***Question: How much energy will a solar array generate?***

As an example, the Rocktree Solar and Moon Lake Solar projects will produce +/- 50MW of renewable electricity, which is equivalent to approximately 15,000 Alberta residential homes annual electricity needs.





## FREQUENTLY ASKED QUESTIONS

***Question: Does solar energy reduce Alberta's carbon footprint?***

Yes. As an example, the Rocktree Solar and Moon Lake Solar projects will produce approximately 30,000 carbon credits, which are equivalent to one tonne of displaced carbon each (tCO<sub>2</sub>e).





## FREQUENTLY ASKED QUESTIONS

### ***Question: Why was the Agricultural Restricted zone chosen?***

Both AGG and AGR sites are well suited for utility solar projects. During site selection we qualify for flatness, proximity to existing distribution systems, and nominal environmental impacts.

AGR sites are well suited in particular as they're often located close to high electricity load (demand for power). Supporting solar at AGR zones allows for greater displacement of non-renewable electricity to meet communities energy need, reduced line losses, and far more “meaningful” solar energy projects.

The Rocktree Solar project (AGR zoned) has capacity to displace nearly 85% of Spruce Grove's power needs during sun hours.





# FREQUENTLY ASKED QUESTIONS

***Question: Is there risk of contamination to the land or air?***

No. Solar modules do not leach chemicals and there will be no underground hazardous materials, nor will our project emit dangerous heat capturing fumes.





## FREQUENTLY ASKED QUESTIONS

***Question: What will be done to prevent weeds from spreading to adjacent farmland?***

Weeds will be managed through mechanical and natural means as required to ensure no overgrowth or contamination.





# FREQUENTLY ASKED QUESTIONS

***Question: What will a solar array look like when complete?***





## CLARESHOLM SOLAR EXAMPLE

# Solar & Sheep

What happened to the farmland  
under the largest solar farm in Canada?







# FREQUENTLY ASKED QUESTIONS

*Question: Where can I learn more and follow progress?*

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



Following us on LinkedIn.

We are committed to provide regular updates and share field study results with the public. You can also find more information on solar projects in Alberta through the AUC & AESO.





# DISCUSSION / Q&A