Miistakis Institute

Rural Decision Support Tools for Renewable Energy Development: Progress Update

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Innovative Research. Engaged Communities. Healthy Landscapes.

Miistakis Institute

The Miistakis Institute is a not-for-profit, charitable, applied research institute affiliated with Mount Royal University in Calgary, Alberta, Canada

Our goal – *a world where communities have genuine access to the science and research they need to make choices that promote healthy landscapes*

Our work – make innovative research accessible to communities and decision makers

Research Specializations

- Transportation Ecology
- Human Wildlife Coexistence
- Private Land Conservation
- Municipalities and Conservation
- Conservation Planning and Policy
- Citizen Science for Conservation

Rural Decision Support Tools

Survey (36 municipal surveys), four recommendations for moving forward:

1. Renewables Knowledge Workshop for municipalities and other interested stakeholders;
2. Fact sheet on the regulatory process for renewables in Alberta from a municipal perspective;
3. Fact sheet on ecological impacts of renewable development in Alberta; and
4. development of a renewable energy least conflict lands planning tool.

RURAL MUNICIPAL WIND AND SOLAR DECISION SUPPORT TOOLS

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Renewable Energy Development: Ecological Fact Sheet for Municipalities

November 1, 2017

Alberta's Climate Leadership Plan has set a target to generate

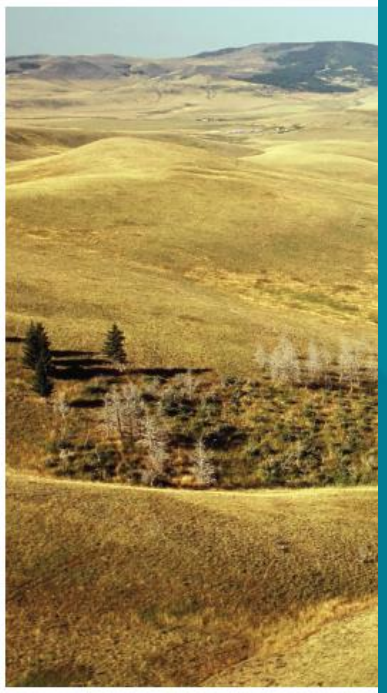
30%

(CURRENTLY AT 9%)

of electricity from renewable sources by 2030.

This is an **increase of 21% electric energy from renewables over the course of 13 years**, the equivalent of 5,000 Megawatts (MW).

Meeting this target will result in additional infrastructure on the landscape and much of the production will occur in rural Alberta, where rural municipalities make important land use decisions.



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Renewable Energy Development in Alberta: Regulatory Resources for Municipalities

November 1, 2017

Renewable solar and wind energy developments are increasing in various areas of Alberta. The regulatory process for renewable energy developments involves numerous agencies and requirements.

This document was developed as a reference for municipalities that would like to better understand the regulatory process for renewable energy developments in Alberta.

The approvals process in a nutshell

The Alberta Utilities Commission (AUC) is the provincial agency that has jurisdiction over energy approvals in Alberta. Not all renewable energy developments are required to submit an application to the AUC; this is determined by the amount of electricity the project will produce and whether it will be for personal use or for distribution onto the electricity grid. If projects greater than 1MW and up to 10MW power are for personal use only and they meet requirements in AUC Bulletin 2014-11, an application to AUC may not be required.

Bulletin 2014-11 requirements:

- No person is directly and adversely affected.
- The power plant complies with AUC Rule 012: Noise Control.
- There is no effect on the environment.
- In addition: If the unit is connected to the distribution or transmission system, the owner must contact the wire owner to determine if adequate protection has been installed to isolate the unit from the wire owner's system or enter into an operating agreement with the wire owner.

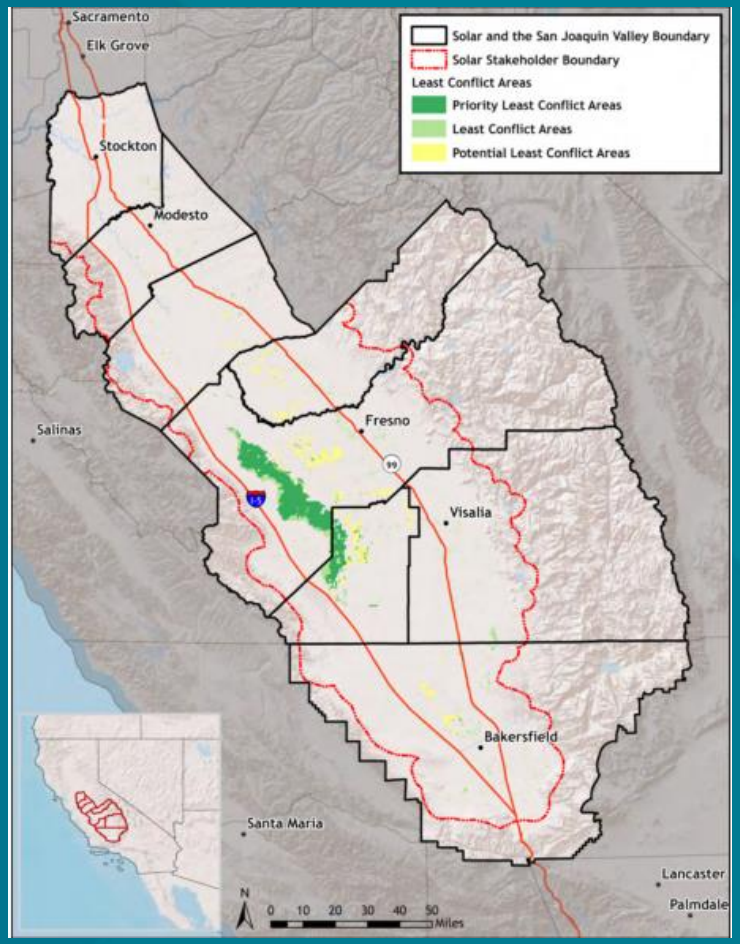
Renewable Energy Least Conflict Lands

- Miistakis Institute
- Wheatland County
- County of Newell
- Alberta Association of Municipal Districts and Counties (AAMDC)

Program Outcome

To explore how rural municipalities and other stakeholders can quickly identify least-conflict lands for solar photovoltaic and/or wind development.

California Methodology



- Modeled after process in California (40,000km^2, eight counties, 190km^2 LCL)
- Stakeholder driven process (solar, transmission, ecological, agriculture)
- Stakeholder workshop: **"where are the least-conflict lands for solar PV or wind development."**

Alberta Methodology

- County of Newell and Wheatland County (10,500km^2)
- Stakeholder driven process (wind, solar, transmission, ecological, agriculture, view shed)
- Stakeholder workshop for March 2018
- Develop spatial layers
- Follow-up meeting in May 2018

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