

What is Micro-Generation?

- Small scale production of electricity, using renewable energy sources by homeowners or small businesses
- The owners are called Micro-generators.

What is Net Metering?

- Net metering is a billing method allows residential and commercial customers who generate their own electricity from renewable energy, like solar power, to sell the electricity they aren't using back into the grid.
- In Alberta, Net Metering is also called Bi-Directional Metering or Net Billing

What types of Micro-Generation qualify for Net Metering?

- Wind turbines, solar panels, biomass, geothermal, fuel cell or hydro.
- The system must produce LESS than 5 Megawatts of electricity.

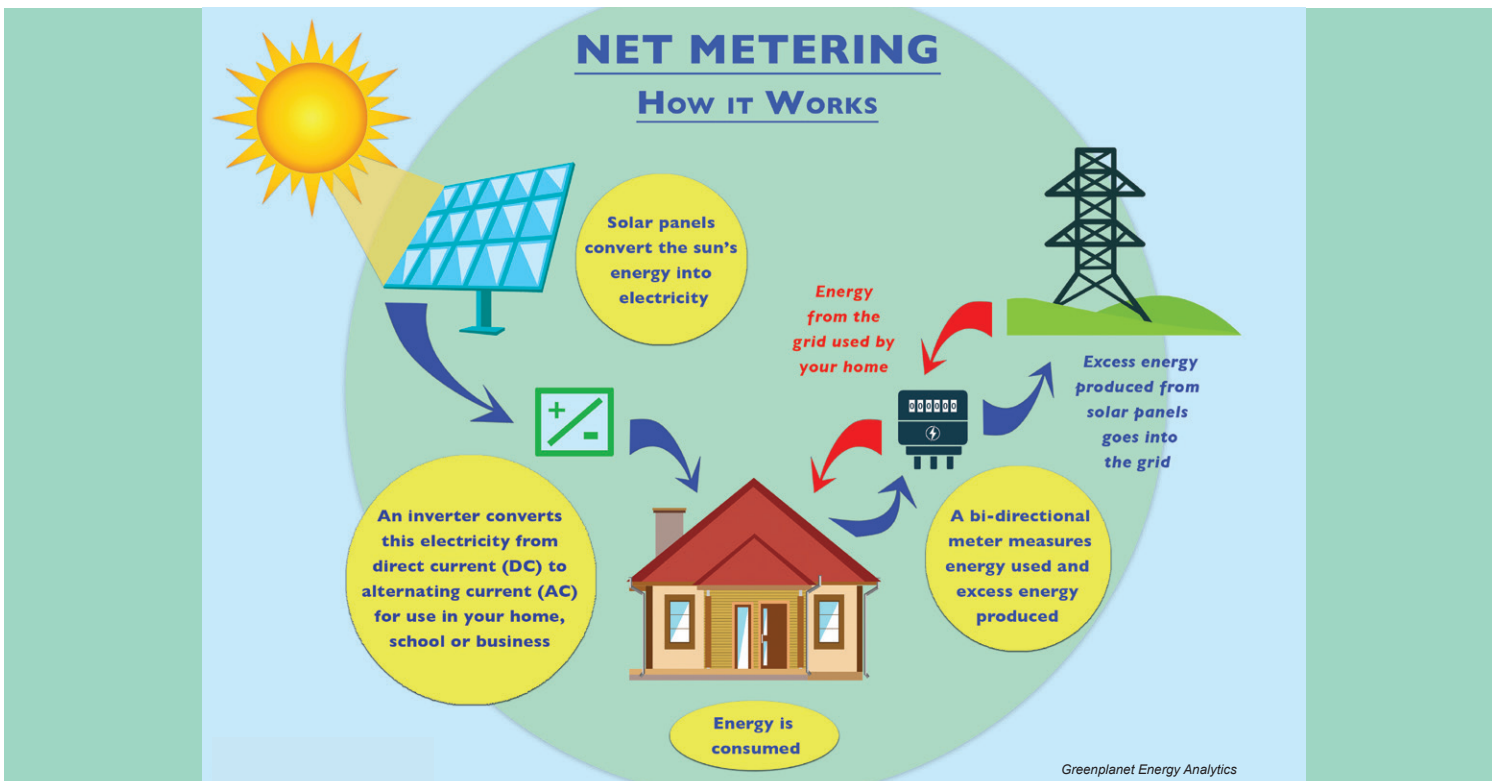
How does Net Metering work?

- A customer who has a micro-generation system may produce more electricity than they use during daylight hours.
- If the property is net-metered, the electricity meter will run backwards when there is an excess of electricity produced.

- This will provide a credit against the electricity consumed at night or other periods when electricity use exceeds what the micro-generation system is producing.
- Customers are only billed for their "net" energy use.

What are the benefits of Net Metering?

- It gives customers control over their electricity bill
 - Net metering allows utility/energy retailer customers to generate their own electricity cleanly and efficiently.
 - During the day, most solar customers produce more electricity than they consume; net metering allows them to export that power to the grid and reduce their future electric bills.
- It creates jobs and encourages private investment in solar/wind power
 - Net metering increases demand for solar/wind energy.
 - This creates jobs for the installers, electricians, and manufacturers who work in the solar/wind supply chain.
- It protects the electric grid
 - Net metering policies create a smoother demand curve for electricity and allow utilities to better manage peak electricity loads.
 - By encouraging generation near the point of consumption, net metering also reduces the strain on distribution systems and prevents losses in long-distance electricity transmission and distribution.



How do you make money from Net Metering?

The owner of the micro-generation system receives credits from their energy retailer towards their electricity bill for electricity they send into the grid.

Who makes the rules in Alberta?

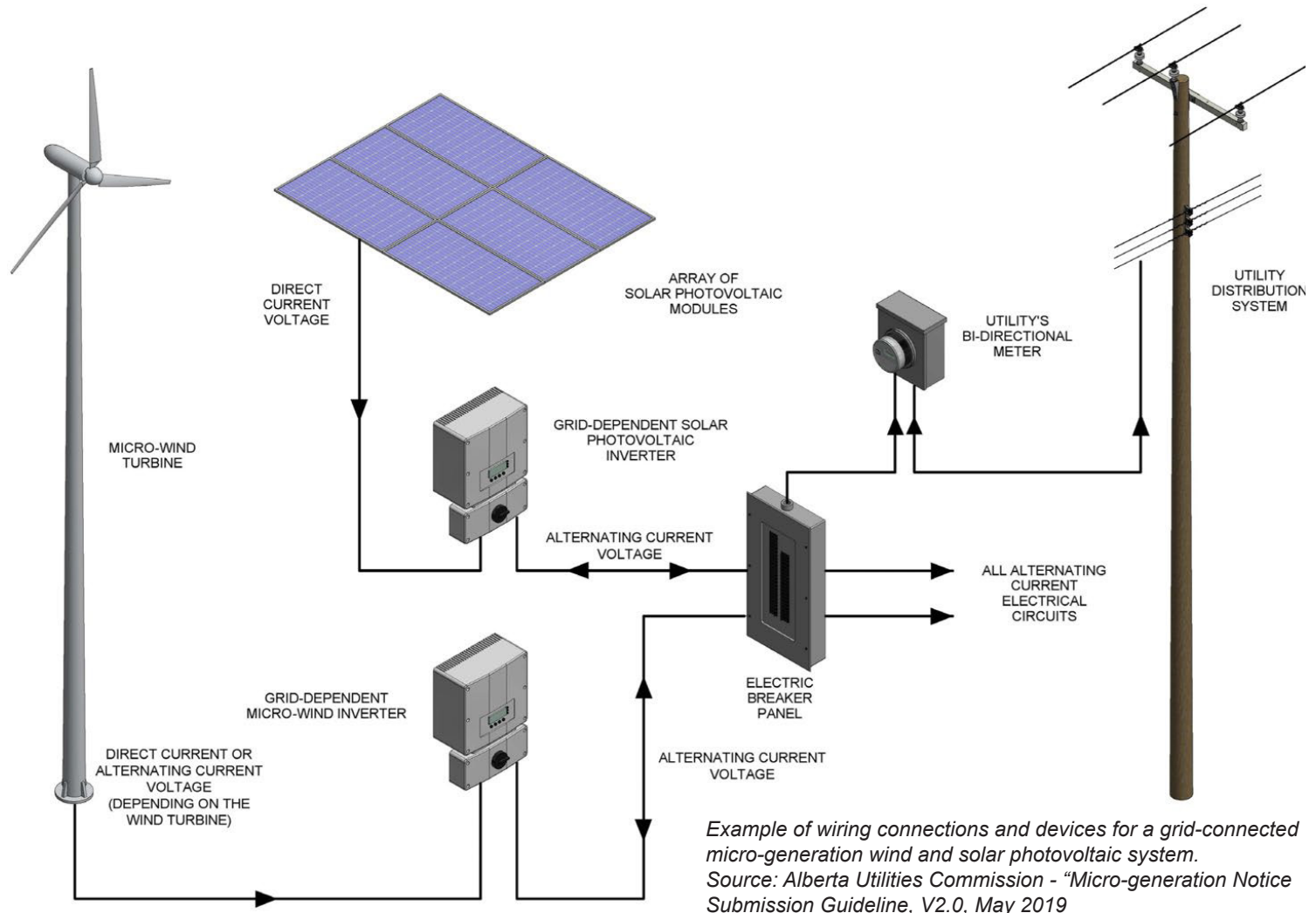
Micro-Generation Regulation 27/2008, under the Province of Alberta Electric Utilities Act

How do you qualify to become a micro-generator in Alberta?

- Only use renewable or alternative energy sources to produce electricity.
- Produce energy intended to meet all or a portion of your energy needs.
- Have generation capacity that does not exceed 5 megawatts.
- Supply energy only to a site that you own or lease.
- Install the micro-generation unit on the site the energy is consumed or on a property you own or lease adjacent to the micro-generation site.

What are the steps to becoming a Micro-Generator in Alberta?

1. Review your utility bill to find the electric distribution company in your area.
2. Contact the company to inform them that you plan to install a micro-generation unit and find out what their requirements are.
3. Work with the electric distribution company ensure the project meets the requirements set out in the Alberta Utilities Commission's Micro-generation notice submission guideline.
4. Complete an Operating Agreement with the company.
5. Obtain all required permits.
6. Complete construction and inspection of your Micro-Generation System.
7. Contact the electric distribution company to install a Net (Bi-directional) Meter and connect your system to the electrical grid.
8. Notify your electricity retailer and provide information they require for compensation and billing.





wikipedia.org

Who is Involved?

Several governing bodies are involved in connecting a micro-generation system to the electrical grid in Alberta. They ensure system safety, process approvals and manage administration. These include:

- Alberta Utilities Commission: sets out requirements for micro-generation sites and specifications and makes decisions about micro-generation if a dispute arises
- Alberta Electric System Operator: reports on the number of micro-generation sites and installed capacity
- Electrical Inspectors: ensure Canadian Electrical Code standards are met for all micro-generation installations.
- Electrical Distribution Company: provides metering and connection of the micro-generation generating unit to the distribution system.
- Energy Retailer: provides credits to micro-generation customers on a monthly basis and manages the administration requirements.

Further Information

Micro-generation - Alberta Government

<https://www.alberta.ca/micro-generation.aspx>

Micro-generation - Alberta Utilities Commission

<https://www.auc.ab.ca/Pages/micro-generation.aspx>

"Micro-generation Notice Submission Guideline, V2.0, May 2019 - Alberta Utilities Commission

https://www.auc.ab.ca/regulatory_documents/Reference/MicrogenerationNoticeSubmissionGuideline.pdf

Links to Alberta Electric Distribution Company Micro-Generation Information Pages:

Fortis

<https://www.fortisalberta.com/customer-service/get-connected/generation/micro-generation>

ATCO

<https://www.atco.com/en-ca/for-home/electricity/our-services/micro-generation.html>

ENMAX

<https://www.enmax.com/generation-wires/transmission-and-distribution/our-system/distributed-generation#>

EPCOR

<https://www.epcor.com/products-services/power/micro-generation/Pages/micro-generation-application.aspx>

For more Alberta Electric Distribution Companies, see Alberta Utilities Commission:

<https://www.auc.ab.ca/Pages/generate-your-own-electricity.aspx>



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