

## 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.

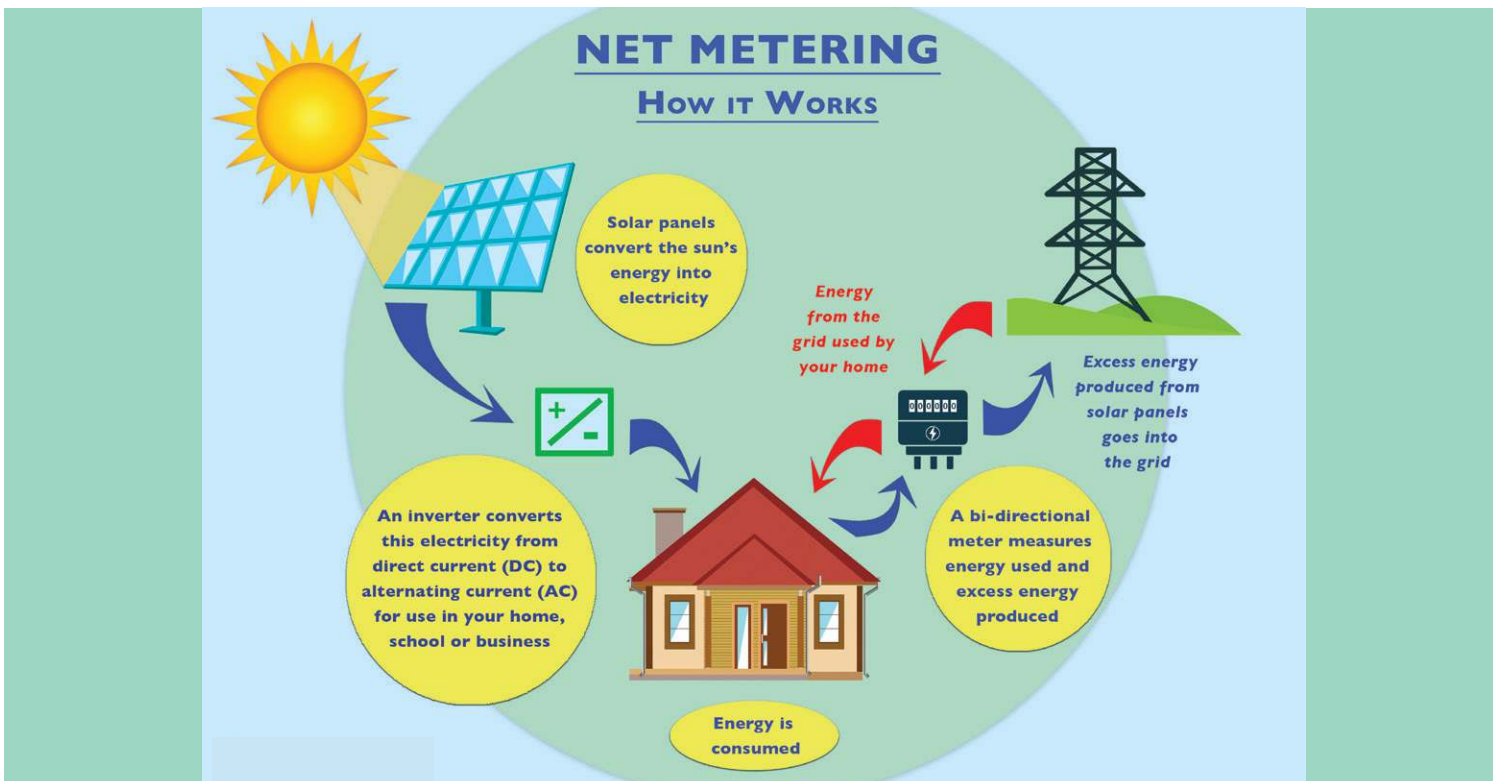
## How does Net Metering work?

- 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?

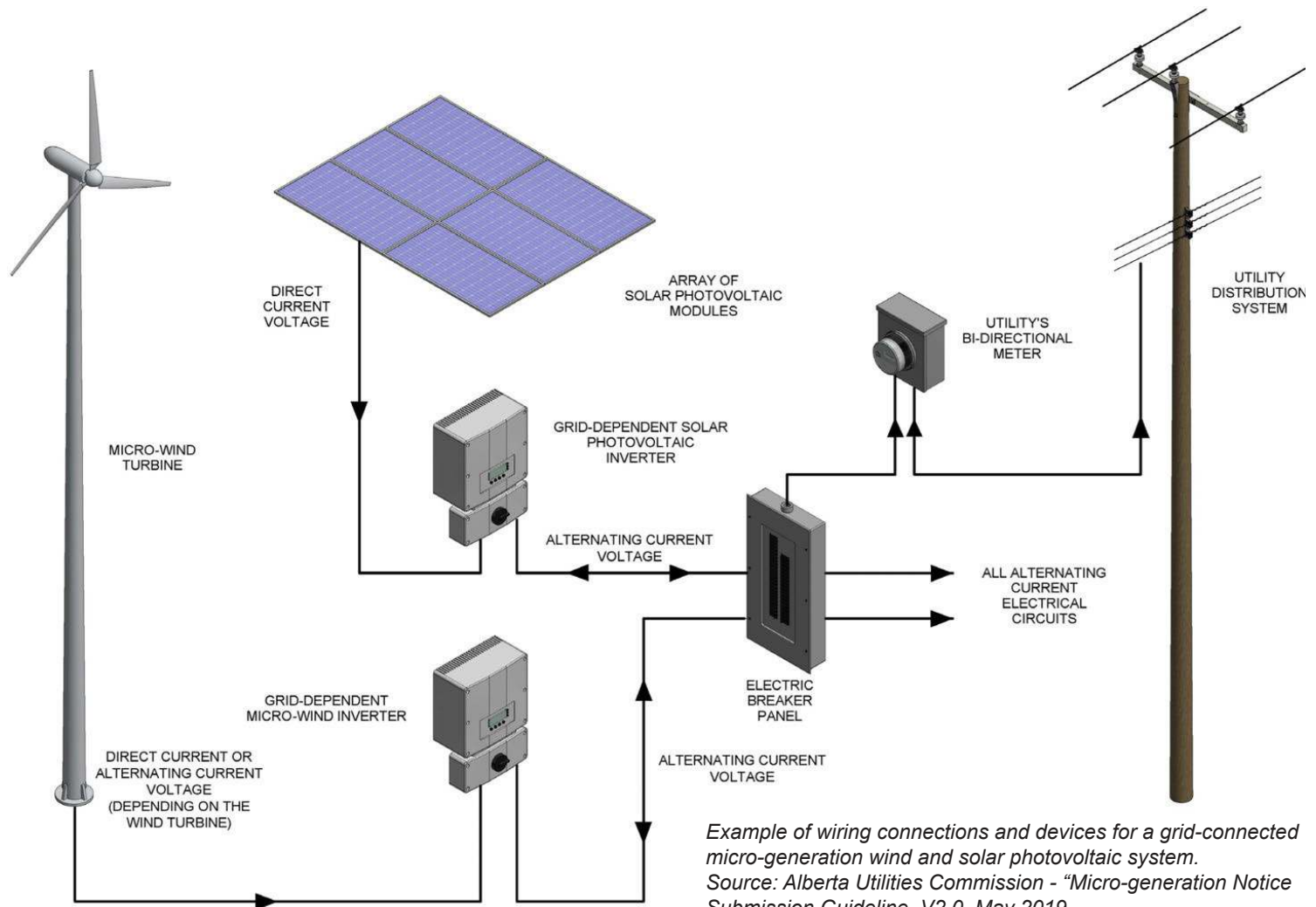
Micro-Generation Regulation 27/2008, under the Province of Alberta Electric Utilities Act

## 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

## 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](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>

