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## What is Micro-generation?

Micro-generation is the production of electricity on a small scale, using renewable and alternative energy sources, typically solar and wind, by individual home owners and small businesses, as well as municipal and community buildings, such as a fire hall, to meet their electricity needs. Other sources of energy include biomass, micro-cogeneration, geothermal sources, and fuel cells.

### What is the micro-generation regulation?

The [Micro-Generation Regulation](#), which was established in 2008, allows Albertans to meet their own electricity needs by generating electricity from renewable or alternative energy sources.

Under the regulation, micro-generators receive credits for the electricity that they produce but do not consume. Small micro-generators, sized under 150 kilowatts, are credited for the electricity sent back to the grid on a monthly basis at their retail rates, while large micro-generators, sized 150 kilowatts and above, are credited for the electricity sent back to the grid at the hourly wholesale market price. Small micro-generators may also choose to install a meter that allows them to receive credit for excess electricity based on hourly wholesale market prices rather than retail rates.

Micro-generation systems are sized to offset all or a portion of the customer's electricity needs. Albertans that want to generate electricity to earn revenue, and not for their own use, are considered commercial generators and do not meet the requirements to be a micro-generator. Small commercial generators may qualify as distributed generation and should check with the Alberta Utilities Commission (AUC) for the process and requirements for becoming distributed generation. The AUC has developed the [Distributed-Generation Application Guideline](#) to provide an overview of the application process involved in becoming a distributed generator.

On December 21, 2016, the Regulation was amended to provide more flexibility for rules on how Albertans can generate their own electricity.

Changes include increasing the size limit of a micro-generation system to five megawatts from one megawatt and allowing a micro-generating system to serve adjacent sites, which is especially helpful for operations with more than one building. Other changes will help to better ensure the reliability, stability, and safety of micro-generation and the distribution grid. More information on the [amendments](#) can be found on Alberta's Queens printer or see the [news release](#) for an overview.

On March 31, 2017, the province announced that the AUC is conducting a formal study to help inform government as it develops policy to enable more small-scale, community-owned generation from greener sources, such as wind or solar.

The AUC will meet with utilities, consumer groups, developers, and other interested stakeholders to assess the supports and barriers around accommodating more local electricity generation by individual Albertans and communities. The review will explore opportunities to enable this growth. The AUC has sent a report to the Minister of Energy. More information is available from the [AUC](#).

Alberta's existing electric infrastructure has the capacity for growth of alternative and renewable distribution-connected generation in Alberta. The work being led by the AUC is focused on how more alternative and renewable generation can be efficiently integrated over the long-term. This will provide stakeholders the opportunity within a formal review process to provide their suggestions on ways to make it simple and straightforward to develop alternative and renewable distribution-connected generation in Alberta.

### How does this affect me?

Customers are provided more choices for how to source their electricity.

The local wire service provider, also called the distribution company, looks after connecting a micro-generator's system. Individual micro-generators do not have to pay for the ordinary and reasonable costs of interconnection and meter infrastructure as these costs are shared by all customers in the distribution company's service area. This is monitored by the Alberta Utilities Commission to ensure costs passed on to the customers are fair.

The customer's electricity retailer must manage the administration and billing of the excess energy sent into the grid. This saves the micro-generator customer direct and indirect administration costs. Credit is received for electricity supplied to the grid, which allows customers to obtain value for every kilowatt-hour (kWh) they generate and don't use.

## Micro-generators in Alberta


January Statistics	Sites*	Combined Capacity (megawatts)
2017	1840	17.2
2016	1426	10.5
2015	1119	6.2
2014	866	4.3
2013	610	3.1
2012	329	1.3
2011	203	0.8
2010	115	0.4



\*Includes installed micro-generation systems and pending sites that have requested connection.

The Alberta Electric System Operator publishes [quarterly micro-generation reports](#) .

### How do I become a micro-generator?

All customers who want to become a micro-generator must apply to their distribution company (also known as the wire service provider) to get approval to connect and operate a generating unit.


The [Alberta Utilities Commission](#)  (AUC) is responsible for overseeing the implementation of the Micro-generation Regulation.

The first step in applying is to contact your distribution company to inform them that you plan to install a micro-generation unit. The [Utilities Consumer Advocate](#)  at 310-4-UCA maintains a list of [retailers and distributors](#)  for Alberta. You can also find your company on your electricity bill.

After notifying your distribution company of your intent to become a micro-generator, there are a series of steps that must be completed. These steps are part of the AUC's guidelines and include, but are not limited to:

- consulting with an electrical contractor;
- getting municipal permits;
- preparing a site plan.

When these steps have been completed, an application may be submitted. The AUC supplies the application form as part of its guidelines. The application form is submitted to your distribution company.



Micro-generation customers are also required to sign an interconnection agreement with the distribution company. The distribution company owns the distribution system for your home, farm, business or industry. The distribution system carries electricity from the provincial transmission lines to consumers. The distribution company reviews and approves micro-generation applications, installs meters, and provides metering data to retailers and the [Alberta Electric System Operator](#)  for settlement. Small micro-generators may also choose to install a meter that allows them to receive credit for excess electricity based on wholesale market prices rather than retail rates.

You must also notify your electricity retailer to discuss the information required by your retailer for compensation and billing. Your electricity retailer credits you for excess electricity that you return to the grid. The rate at which you are credited is agreed upon between you and your electricity retailer. The government does not decide what this rate should be. Your retailer collects from the AESO for crediting you for the excess at the same rate that you paid when buying electricity from the grid. The way these credits flow between you, your retailer and the AESO is described under the Micro-generation Regulation.

If there is a dispute between the micro-generator and the distribution company or retailer that cannot be resolved, it may be referred to the AUC, the provincial regulator.

In all cases the micro-generator must prove that greenhouse gas (GHG) emissions from the system are 418 kilograms per megawatt hour (kg/MWh) or less of electricity and/or useful heat generated. This ensures that all micro-generators will have lower GHGs than a typical combined cycle natural gas power plant.

For more information:

- Application process - [Alberta Utilities Commission](#)  780-427-4903 (for toll-free access from anywhere in Alberta, please dial 310-0000 and enter 780-427-4903 to be connected)
- Distribution companies or your bill - [Utilities Consumer Advocate](#)  310-4UCA
- Email [Microgeneration.Energy@gov.ab.ca](mailto:Microgeneration.Energy@gov.ab.ca)



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