

MICRO-GENERATION PRODUCTION INCENTIVE PROGRAM

Generate your own electricity
with renewable energy!



Diversifying Yukon's Energy Supply

The Government of Yukon's Micro-generation program helps diversify Yukon's electrical supply by providing incentives for individuals and businesses to become part of the energy supply solution.

The Micro-generation program enables Yukoners from both hydro and diesel generation communities to connect their renewable electrical generation systems

to the grid. Program participants save money on monthly electrical bills and receive an annual reimbursement for surplus electricity exported to the grid.

Micro-generation of renewable energy increases local energy supply, reduces electrical energy demand and greenhouse gas emissions, and supports key goals found in the Government of Yukon's Energy Strategy and Climate Change Action Plan.

Yukon's Micro-generation Program

The Micro-generation program provides opportunity for Yukoners to grid-tie their renewable energy systems and produce electricity from renewable technologies for their own consumption. Yukoners not only save on monthly bills but can export any generated surplus to the grid for compensation.

Only renewable energy technologies are applicable to this program. This includes solar power (photo voltaic), wind power and micro-hydro systems. The incentive program provides an annual reimbursement applied to exported energy from micro-generation systems.

The energy is measured in kilowatt-hours (kWh) and exported to the grid. The reimbursement is set at a rate of \$0.21/kWh on Yukon's Integrated System (YIS – the 'hydro grid') and \$0.30/kWh in electrically isolated communities powered by diesel generation.

In all residential installations, savings from offset are worth at least \$0.12/kWh while General Service accounts save at least \$0.10/kWh for offset from PV system generation.

Utility customers in the residential, general service and industrial rate classes choosing to generate electricity from eligible sources for their own consumption can apply to participate in the Government of Yukon's Micro-generation Program.

Defining Micro-generation

Micro-generation is the term used in Yukon to describe the small-scale generation of electrical energy, using renewable energy technologies, by individuals, small businesses and communities to meet their energy needs. This type of generation can be used as a partial source and to supplement and offset power used from the grid.



Participating in the Micro-generation Program

The proposed project must meet several requirements prior to actually connecting a renewable energy generation system to the electrical grid.

Requirements are typical of other electrical projects but also include a stream-lined application process and legal agreement with the electrical utility.

The project proponent (usually the property owner) is fully responsible for the design and implementation of the renewable energy system. The project proponent is responsible for ensuring the system conforms to the relevant municipal bylaws, and territorial and federal regulations and codes as well as securing all the appropriate permits, inspections, authorizations and approvals relevant to the location's zoning where necessary.

All potential micro-generation projects will submit a completed application package to the Government of Yukon's Energy Branch for review and approval to become a Micro-generation Program client.



Application Requirements

The applicant **must be the electrical account holder** but can be represented by another person for all or part of the process. A recommended first step is to schedule a meeting with a Yukon government Energy Advisor. At this meeting, the Energy Advisor will provide an overview of the incentive program and can provide assistance in determining if the proposed project is viable and eligible. If so, an Interconnection Application form will be provided.

Subsequently, the Energy Advisor can assist with each application as necessary and will act as the liaison with the electrical utility.

When submitting the application package, please include the Micro-generation and Interconnection Application form as well as the following required documents:

- **Electrical diagram:** Hand-drawn diagrams are acceptable and should be single line diagram (SLD) style with all system components properly labeled.
- **Site plan:** Hand drawn plans are acceptable. Plans must be approximately to scale and include site orientation, address or legal description, property lines, buildings, service poles, service lines, point of service entry (meter), generation system location and a north arrow.
- **Protective device data:** In most cases, this is the inverter specifications sheet.
- **Electrical Inspection:** A final approved electrical inspection is required for micro-generation projects. Please refer to the “Important Permitting Information” section of this brochure for additional details.
- **Legal Agreement:** A signed copy of the Micro-generation Interconnection and Operating Agreement.

Approval for Exporting Electricity

Connection to the grid can occur on the day that the electrical inspector approves the system. However, there are a few more steps to complete prior to becoming a Micro-generation program client. To apply to the program, a complete application package must be submitted to the Government of Yukon’s Energy Branch for review and approval before the utility will replace the existing electrical meter with a dual register meter.

Once the application package is reviewed and deemed adequate, the Energy Branch will submit your application to the utility for final review and approval. Within 14 business days, the utility will issue an approval or a (verbal or e-mail) notice of deficiencies. Subsequently, the identified deficiencies must be rectified and approved to become a Micro-generation Program client.

Once the proposed project receives final approval, the utility will install the dual register meter to track the electricity exported from your system. Please note that the installation of the dual register meter may take two to eight weeks.

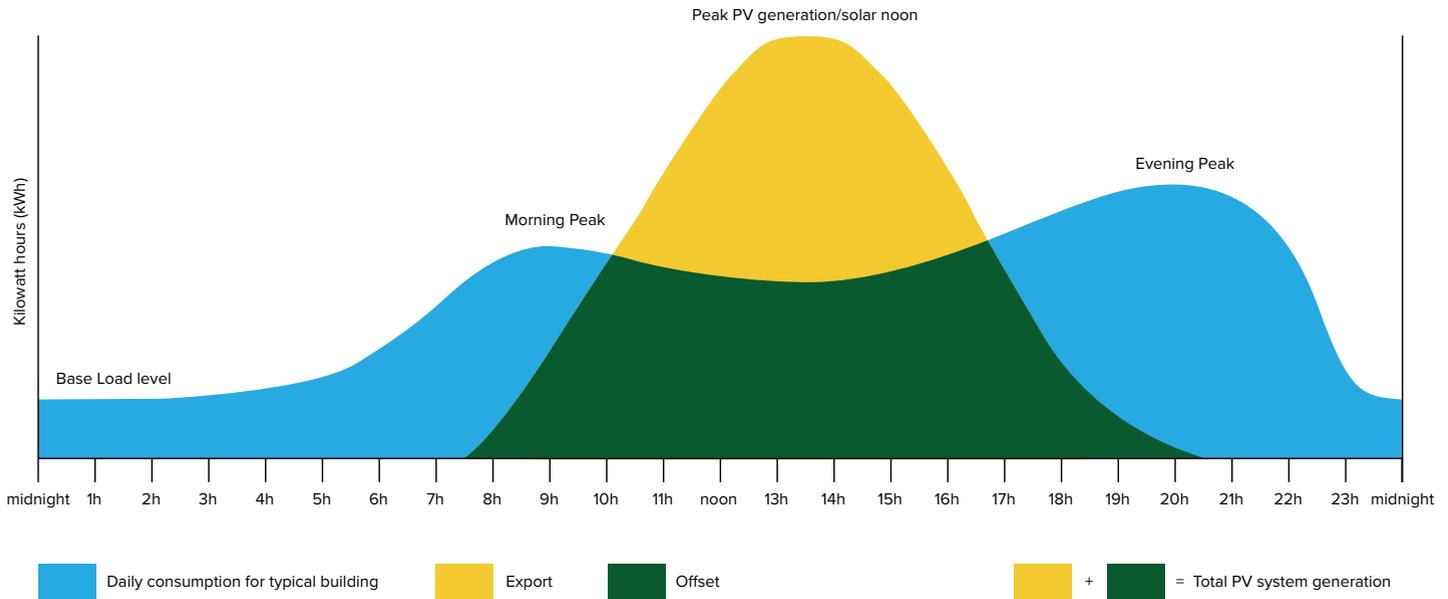
Compensation under the Micro-Generation Production Incentive Program will be based solely on exported electricity as recorded on the calibrated, revenue-approved and utility-installed dual register meter.

Contact an Energy Advisor

Energy Branch
Dept. of Energy, Mines and Resources
Government of Yukon
206 a Lowe Street Whitehorse, Yukon
867-393-7063 / energy@gov.yk.ca
www.energy.gov.yk.ca

Typical Building's Energy Consumption and Potential Electricity Generation

A representation of energy consumption, offset and export.



Graphic Explanations:

- Every kilowatt-hour the solar electricity system generates is either used by the building (offset) thus lowering monthly grid-based electricity costs or exported (export) to the grid, thus earning an annual reimbursement.
- Export earns \$0.21/kWh (hydro) to \$0.30/kWh (diesel) while offset can save approximately \$0.12/kWh or more.
- The summer solar electricity generation may exceed the building's consumption with any surplus generation exported to the grid for compensation.
- The winter solar electricity generation is lower and may be offset only depending on system size and building demand.
- The electrical rates are approved by the Yukon Utilities Board.
- The compensation rates are set within the Government of Yukon's Micro-generation policy.

Important Permitting Information

Electrical Inspection

An approved electrical inspection is required when applying to participate in the Micro-generation program. When the system installation is completed, the project proponent must contact the inspections office and request an inspection. It is important that you request a **service** inspection rather than a **final** inspection.

This is mandatory and ensures that the inspector will issue a connect authorization to the utility which is required to change out the existing electrical meter to a dual register meter.

Only journeymen electricians or home-owners, who have passed the Home Wiring Test, can do the electrical connections for a renewable energy system at the project proponent's personal residence.

Building Permits

Depending on system type and inspection jurisdiction, building permits may or may not be required. In all cases it is strongly recommended that project proponents contact the Yukon government's Building Safety branch or the City of Whitehorse's Building Inspections office for accurate information.

There are different requirements for wind and micro-hydro systems. It is recommended that project proponents contact the Yukon government's Energy Branch for more information.

Bylaws

In some cases, municipal bylaws may apply to renewable energy systems. Contact the City of Whitehorse's Bylaw Services for more information.

