Peak Smart

Be a part of the change and help build Yukon's sustainable energy future.



You're a smart Yukoner — now you can smarten up your heating devices!

Peak power demand happens on cold winter mornings and evenings when Yukoners crank up their electricity use, all at the same time. It's during these times that Yukon Energy uses more liquefied natural gas and diesel to generate power.

Now you can smarten up some of your heating devices to help lower peak demands for power. Start by registering for the program and get your free peakshifting thermostats and hot water tank controller. Once connected to Yukon Energy through your home's internet connection, the devices will help shift the electricity used to heat your home and water away from the peak. This in turn will reduce the use of fossil fuels and cut emissions.

Peak Smart is a two-year residential demand response pilot program delivered by Yukon's power utilities. Funded in part by Natural Resources Canada and the Yukon Development Corporation.

To be part of the smart movement, you need to:

- have an electric baseboard heater with wall mounted thermostats or an electric hot water tank
- have cable internet connection
- own your home and live in it for most of the winter
- · live in a home connected to the Yukon grid
- · have an electric utility account in good standing
- Allow Yukon Energy to control your peak-shifting thermostats or hot water tank controller a few hours before a peak event (maximum of 12 times per winter season).*

*other criteria also apply.

Register today for your free thermostats and hot water tank controller.

To register, call: 867-633-7000

To learn more, visit: yukonenergy.ca or atcoelectricyukon.com

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What the program is all about

How will the thermostats and hot water tank controller by used?

Over the course of the winter, there will be up to 12 demand response events. During them, Yukon Energy will remotely adjust all of the participating peak-shifting thermostats and controllers by a couple of degrees for a brief period of time – small changes you probably won't even notice but can add up to make a big impact on the Yukon electrical grid.

What are "demand response events"?

Demand response events are where all the movement happens.

Up to 12 times each winter, before a peak in electricity use is expected, Yukon Energy will remotely control your peak-shifting devices. The temperature will go down by 1-3 degrees Celsius and stay there for short periods of time (about 2-3 hours). These short, minor adjustments of temperature should have little to no impact on the comfort of your home. But it will make a big difference in shifting peak demands on the grid.

You'll be sent an email before each demand response event so you'll know what's about to happen.

Opting out of the demand response event will always be an option for you. If it isn't a good time for the temperature to be lowered, then we won't lower your temperature.

What's involved in participating?

First, we'll ask you some questions to confirm that your home has everything it needs to receive a peak-shifting device. If it does, we'll then ask if you're okay with:

- a. participating in demand response events over the winter, and
- Yukon Energy controlling your peakshifting thermostats and hot water tank controller a few hours before a peak.

If you agree, we'll work with you to set up a day and time that's good for an electrical contractor to install the device(s) in your home.

Will I lose control of my thermostats altogether?

Never! You will always be in complete control of your thermostats whether during a demand response event, or otherwise. While the demand response events can make remote adjustments to your devices, you as the homeowner will always have ultimate control over them.

How long will these demand response events go on?

Right now, we foresee 12 demand response events each winter over the next two years. We're calling this our pilot phase. By piloting the program first, we're hoping to get a better sense of how much peak demand we're actually able to shift and how participants feel about the program. Depending on the success of the pilot, we may extend the program beyond two years.

How many events will there be each year?

We expect about 12 events over the course of each winter season.

Do I need to return the controllers at the end of the program or can I keep them?

Once the program is finished, the devices are yours to keep and use! Continue to reap the benefits of having smart technology for years to come.

Will Yukon Energy be able to control my thermostat/heat/hot water tank outside of an event?

Yukon Energy will never control the installed devices outside of the scheduled events, and you will always be notified of an event beforehand.

Will my electricity bill go down if I participate?

The demand response events shift energy usage as opposed to reducing it, so your electrical bill should remain about the same.

The thermostats do have some added features that you can use to manage your energy use and reduce your bills if you would like to take advantage of those.

If there are problems, who do I call?

Your first point of contact will be the Peak Smart customer service team. They will help direct you to the best resources to deal with the issues you are having. They may be able to help you directly, or you may be forwarded to our team of electricians, or the manufacturers of the devices themselves. Rest assured, we'll help you resolve any problems you might experience.

Can I leave the program if I don't like it?

Definitely! This program is rolling out on a completely voluntary basis. While we believe you'll appreciate being a part of our effort to help manage electricity demands in Yukon, you're free to opt out at any time.

Is there a cost to sign-up?

That's one of the best parts of this program – it's totally free!

How do I sign up?

Call 867-633-7000 to speak to a representative and register for the program. We will coordinate a date and time with you to have a certified electrician come to your home to install the thermostats.

Supplies are limited though, so call today — first come first serve!



How to know if you're eligible

How do I know if I'm eligible to participate?

AN ELIGIBLE PARTICIPANT MUST:

- have electric baseboard heaters controlled by wall mounted thermostats and/or an electric hot water tank
- live in their home for most of the winter season
- · live in a home connected to the Yukon grid
- have no occupancy changes or significant energysavings retrofits planned in the next two years
- have a cable internet connection and an internet router to which the devices can connect
- have access to a smartphone during installation*
- · have an electric utility account in good standing
- be okay with Yukon Energy controlling your peakshifting thermostat and controller for a few hours before a peak

ELIGIBLE RESIDENCES MUST BE:

- single-family detached and attached homes
- townhouses and rowhouses
- apartment buildings
- condominiums
- housing cooperatives

Participants that rent their properties are still eligible to participate, as long as their landlord signs a Landlord Consent Form. In the same way, residents of condominiums are eligible to participate if they submit a Condominium Board Consent Form.

^{*}devices running iOS 13 are not currently supported.

Is the program available throughout the Yukon?

This program is offered in all Yukon communities connected to the grid.

Do I need to get both the hot water tank controller and peak-shifting thermostat, or can I pick one?

You do not need to sign-up for both devices. You can pick the hot water tank controller and/or the peak-shifting thermostats.

What if I don't have electric baseboard heat, can I still participate?

If you don't have electric baseboard heat, but you do have an electric hot water tank, you may still be eligible to participate – refer to the eligibility requirements earlier in this FAQ to double check whether you qualify.

What if I use fuel or propane to heat my hot water tank/home, can I still participate?

The hot water tank controllers we'll be using in this program are designed specifically for use with electric hot water tanks. So, if yours uses a different source of fuel, you won't be eligible for the hot water tank controller portion of the program. However, that doesn't exclude you from being able to participate with your electric baseboard heater thermostats.

What if I have a wood stove/ supplement with wood heat?

Your home does not need to be exclusively heated electrically in order to participate in the program but electricity needs to be your primary source of heat. We completely understand that many of our customers supplement their home heating needs with wood; it's a Yukon thing and a wonderful comfort in our colder months!

What do I get for participating?

The first thing you'll get are the peak-shifting thermostats, a peak-shifting hot water tank controller, or both. A qualified electrician will install them in your home.

After that, you'll get the comfort knowing that you're taking an active part in reducing our reliance on energy sources like liquefied natural gas and diesel and contributing to a more secure energy future for Yukon.

Why do I need to have a smart phone to participate?

Each device that is installed at your home will need to be linked to your CaSA account. This configuration process is only done using the CaSA smartphone app. While actually operating the devices doesn't really require a smartphone, it's necessary to get them set up for the first time.

Do Androids work?

They do! The smart devices we install in your home will function with either iOS or Android smart phones and tablets.

What does the app do?

The app lets you control the temperature of your home, or individual rooms, from one central place — whether you're home or not! It allows you to program set schedules of when you want thermostats to raise or lower the temperature based on when you know people will be around. You can even monitor the amount of electricity being used by your baseboard heaters or hot water tank. The app is a tool that lets you take control of energy use in your home!



How and when the devices are installed

PEAK-SHIFTING THERMOSTAT

HEIGHT 128 mm

WIDTH **128 mm**

DEPTH

41.25 mm





PEAK-SHIFTING HOT WATER TANK CONTROLLER

HEIGHT

328 mm

WIDTH

218 mm

DEPTH

70.5 mm

When will the installations happen?

Installations will start in November and continue until we meet our target number of 400 households with peak-shifting devices in them.

How long will installations take?

Installation times will vary based on how many devices will be installed in your home. For some, installation could be 10 minutes, and for others having more devices installed, it could take 30 minutes.

Who is doing the installation?

Installation will all be done by licensed and certified electricians from Arcrite Northern Ltd, a trusted company that has been serving industrial, commercial and residential customers across northern Canada since 1979.

Are you screening the installers?

Yes, absolutely. Individuals installing the devices in your home are professional electricians who, as standard part of their employment, have passed Criminal Record Checks and other high-level screening clearances.

What do I need to do to prepare for an installation?

Once your installation has been scheduled, all you'll really need to do to prepare is to make sure that the electricians have a clear path to where they'll be working – this means ensuring there is a clear path to your hot water tank, and no obstructions in front of your wall-mounted baseboard thermostats (plants, furniture, etc).



More about the demand response events

Can I opt out of an event?

Before any demand response event, you will be sent an email letting you know when the event will take place. The email will also give you the opportunity to opt out of the event before it happens. If you choose to opt out of an event, the peak shifting devices in your home won't be controlled before or during the demand response event.

What if it gets too cold or I don't have enough hot water, what can I do?

You will ALWAYS have ultimate control of the installed devices. While the demand response events do involve remotely making minor temperature adjustments to your baseboard heaters and hot water tanks for short periods of time, you can always override them.

Will my internet usage go up? Who will pay for overage charges?

Each device will transmit about 25-30 MB of data each month. This is a rough estimate, and it will vary depending how often you end up using the app and making adjustments to your devices. While the impact is quite minimal to even the most limited cable internet plans, you will be responsible for maintaining your own internet connection during the program.

How will I know if the event worked? How will results be shared?

After all the events for the season have run, and we've analyzed the results, we'll let participants know what sorts of impacts these peak-shifting devices have had. While the season of events is running, we'll be able to provide minor, general updates, but until we have the results of all of the events together, we won't be able to provide a fully accurate report on how the pilot worked.



Privacy concerns

What data are you collecting from me and how is it being used?

As you sign up for the program, some personal information like your name, address, phone number, and number of thermostats in your house, will be collected. This information is necessary for us to properly schedule the installation of your new devices.

The only data that will be collected from the installed devices is the temperatures that each device is set at, and when those temperatures change. This data allows us to learn more about people's home heating trends in order to more effectively design our demand response events in the future.

Your personal information, and the data collected from the devices installed in your home, will not be associated with each other.

I'm nervous about the idea of my "data" being collected — what does this actually mean?

Rest assured, the data we collect from your peak-shifting thermostat and controller will be collected anonymously. It will only be associated with a unique identifier that's stored separately from your personal information. All data will be securely stored within Canada.

Register today for your free peak-shifting thermostat and controller.

To register, call: **867-633-7000**

To learn more, visit: yukonenergy.ca or atcoelectricyukon.com

