

Frequently Asked Questions

We've included answers to questions on the Urban Solar Garden and the benefits of participating in this initiative.

What is the Urban Solar Garden?

The Urban Solar Garden is a centrally located and community-owned solar array that will generate local renewable energy for the benefit of subscribers within New Westminster.

Interested subscribers will receive an annual credit based upon their proportionate amount of energy the array produces. Participation is voluntary and open to any New Westminster Electrical Utility account holder.

What are the benefits of the Urban Solar Garden?

The Urban Solar Garden provides many benefits to those who are interested in local renewable energy:

- **Accessible Solar Energy:** You do not need to install your own solar PV system to use solar energy.
- **No maintenance fees:** Operation and maintenance of the solar array will be handled by the City, and participants will not need to pay for maintenance or repairs.
- **Transferable:** Your subscription can be transferred if you move within the New Westminster Electrical Utility service area.

Who can participate in the Urban Solar Garden?

Anyone with a New Westminster Electrical Utility account can participate, including homeowners, renters, business owners, and non-profit organizations.

Subscriptions can also be given as a gift, so long as the one receiving the gift is a New Westminster Electrical Utility account holder.

How do I participate in the Urban Solar Garden?

For this pilot project, there will be a 4-week pre-sale period to participate in the Urban Solar Garden. Subscriptions will be pre-sold on a per-panel basis beginning on October 19th, 2017, at the close of that evening's Public Information Session. As a measure of community interest, a target of 75% of the total project needs to be pre-subscribed by November 17th, 2017 in order for the project to proceed to the design stage.

At the close of the October 19th Public Information Session, interested participants will have the opportunity to complete the subscription agreement form and include a deposit of \$500 per panel. Following this event, subscription forms will be available at City Hall up to November 17th, and deposits can be made by cash, cheque, or debit. Please note that subscriptions are limited and will be given on a first come, first served basis.

If the 75% subscription target is not met, or the necessary bylaw amendments are not passed, deposits received will be refunded to customers. If the project moves ahead as we expect, then subscribers will receive an invoice for the final costs on their Electrical Utility bill on the billing period following the official opening of the Urban Solar Garden.

What size will the array be?

The target size of the array is 50kW, which represents approximately 150-200 photovoltaic panels. The final size of the array will depend on the number of participants. The Urban Solar Garden is intended to be a small-scale pilot project.

How large of a subscription can I purchase?

During the Pre-sale period:

- **Oct 19-Oct 26:** Subscribers can purchase up to three panels (approximately 1080 kWh/year)
- **Oct 26-Nov 17:** Subscribers can purchase up to ten panels (approximately 3600 kWh/year)

The total number of subscriptions purchased cannot exceed 100% of the participant's annual energy use.

How is the annual solar credit calculated?

Once subscribed, the annual solar credit will appear your electric utility bill for the 25-year lifecycle of the array, starting one year after the project is operational.

The annual solar energy production will be measured in kilowatt-hours (kWh). Your annual solar credit will be based on the current electric rate for the year, multiplied by your share of the Urban Solar Garden.

Daily energy production of the Solar Garden will be displayed in real time on City website and at City Hall.

Do I own the panel(s) in the array?

The solar panels will be owned and maintained by the City of New Westminster. Subscription to the project is for receiving the solar credit, not the panel itself. For simplicity, we refer to the sales of panels but this means the subscription on a per-panel basis.

How much energy will each panel generate?

Based on simulated solar energy production, each panel may produce around 360 kWh annually. Panel degradation will decrease panel output slightly each year during the 25-year lifecycle of the solar array.

Is there enough sunshine in the Lower Mainland?

The areas in southern Canada, where 90% of the population lives, receive more solar radiation than Germany, which is the world leading nation in the use of PV per capita.

How many kWh's does the average home in New Westminster use?

A single-family detached home within New Westminster uses an average of 9,800 kWh of electricity per year. The average condo uses about 4,400 kWh of electricity per year.

How do I calculate what my subscription should be to match my energy needs?

New Westminster Electric Utility can help you determine your individual average household or business electric usage. The following table shows how many panels the homeowner could subscribe to match different percentages of energy use. For this pilot project, the maximum subscription limit is 10 panels, due to the potential demand of the program.

| Panels Purchased | Estimated Annual Energy Production (kWh) | Usage Match Home (%) | Usage Match Condo (%) |
|------------------|--|----------------------|-----------------------|
| 3 | 1080 | 11% | 24% |
| 5 | 1800 | 18% | 40% |
| 10 | 3600 | 36% | 81% |

What is the cost per panel?

The final per panel cost is expected to come well under \$1000/panel, based on preliminary project costs.

What is the payback period per subscription?

If over the 25-year period, the historical increasing trend in rates continues, the payback will range between 15-20 years. A lower final project cost will ultimately improve the payback period to subscribers.

How long will the contract term be?

The length of the contract will be for 25 years.

What if I move before the 25-year end?

If you move within the New Westminster Electrical Utility service territory the solar credit can be transferred to your new account for a \$25.00 processing fee/transfer. If you will no longer be a New Westminster Electrical Utility customer, you can transfer the credit to an account of your choice. You may choose to donate this credit to a charity or non-profit organization or if you own your home, you may wish to use it as a selling feature and then transfer it to the new owners account. You can sell the credit to someone of your choice for a price that is agreed upon by you and the buyer. The Electrical Utility will keep a waitlist for those interested in purchasing one or more panels when they come available, and can help facilitate the transfer by connecting interested parties.

What happens after the 25-year contract ends?

The annual payments are discontinued and New Westminster Electric Utility decides whether to keep operating the system or to decommission it.

Can I still participate even if all subscriptions have been sold?

Yes, a waitlist will be started once available subscriptions have been sold out.

If you have any questions on the Urban Solar Garden, please contact Ryan Coleman (Program Coordinator for Energy Save New West) at 604-515-3818 or via email at rcoleman@newwestcity.ca