

Message from the Chair

Dear Solar Nova Scotia Member,

It has been an exciting year for the solar energy industry in Nova Scotia and for our organization. The amount of installed solar capacity in the province is growing like never before thanks to declining costs, favorable incentive programs and an ever increasing need to reduce emissions. Our role is to help facilitate this growth. After recently wrapping up our [Atlantic Solar Industry Assessment](#) we are embarking on an exciting new initiative called [Discover Solar 2019](#) where we will educate the Nova Scotia public about solar PV. Read more in the article below.



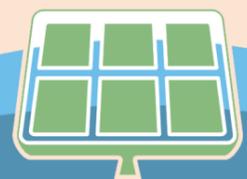
Solar Nova Scotia has been an all-volunteer organization since it was first established in 1980. This year we reached an important milestone by hiring our first full-time employee, Christie Chaplin Saunders, as project manager and strategic planner. Christie is helping to greatly expand our impact on the solar industry in the province. We are also pleased to welcome volunteer coordinator Prince Ding, a recent Engineering Masters Graduate from Dalhousie University who will help us harness the energy and enthusiasm of our members.

We have compiled a collection of solar-related news stories for your summer reading enjoyment. We hope this gives you an appreciation for the extent of positive developments in the industry. Enjoy the sunny weather!

Sincerely,

David Brushett

Chair, Solar Nova Scotia
chair@solarns.ca



Solar NS's Discover Solar 2019 Initiative Launches

Solar Nova Scotia was recently awarded \$75,000 through the NS Department of Energy and Mine's Low Carbon Communities program to deliver a series of 2-hour public presentations in communities throughout the province. The sessions will tackle everything attendees need to know in order to make informed decisions about installing solar PV. This includes information about the technology, economics, funding programs, and environmental benefits. The funding was recently announced at a small ceremony in Chester emceed by local MLA Hugh MacKay.



The course schedule can be found [here](#). Sessions in communities outside HRM will be announced over the coming weeks and we are striving to make this information accessible for all Nova Scotians.

Community groups interesting in helping to host a session are invited to get in touch via info@solarns.ca In a survey conducted by Solar NS as part of the recently

completed [Atlantic Solar Industry Assessment](#), many installers reported spending upwards of 20% of their time on customer education. This education series will seek to relieve this burden from installers to help them operate more efficiently. Solar NS aims to ensure that Nova Scotians are among the most educated and informed Canadians when it comes to solar energy. [Read More](#)

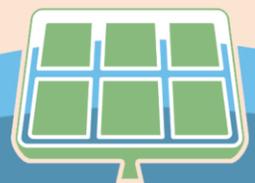
100% Solar Powered History Museum

A Nova Scotia Heritage Museum is now producing enough solar power to cover 100% of its needs. The Memory Lane Heritage Village on the Eastern Shore, which depicts 1940's rural life, installed a 66-panel rooftop PV system which produces approximately 34,000 kWh per year and offsets \$5500 in operational costs. [Read more](#)

Tiny Solar-Powered Library!



A miniature library in Dartmouth, Nova Scotia is 100% solar powered! Michelle and Eric Thornhill built a replica scale library of an actual house in their neighborhood and filled it with donated books for kids in the community. The little library honours the memory of Michelle's late father and shares his books and love of reading with the community. The library contains a tiny



solar panel that keeps the lights on at night! [Read more](#)

Halifax based charity helping schools go Solar



A new Halifax-based charity, Solar Schools Canada (SSC) works with public schools to develop and fund renewable energy projects in order to prevent emissions, reduce school operating costs, and enhance education. In August 2017, SSC completed the installation of its first project: a 3.44 kW solar panel installation at the Dalhousie Law School. SSC is now finalizing the design of a second project : a 16 kW solar panel installation at Basinview Drive Community School in Bedford, Nova Scotia. SSC is currently working with Clean Foundation and the Nova Scotia Department of Energy and Mines to develop P-6 educational resources that use school-based solar projects to lead students in exploring STEAM, energy, climate and sustainability subject-matter. For more information or to get involved, visit: www.ssc-esc.ca

Hospice Halifax Installs Solar on New Facility



Hospice Halifax recently opened a beautiful new facility in the South End of Halifax complete with a 12- kW rooftop array which will generate revenue for the Hospice for the next 20 years. The system, installed by Solar Global Solutions, was part of the NS Department of Energy and Mines Solar for Solar for Community Buildings Program. The program, administered by the Clean Foundation, allows municipalities, schools, First Nations, and non-profits to install solar systems up to 75 kW and to sell the output to Nova Scotia Power on a long-term power purchase agreement. [Read More:](#)

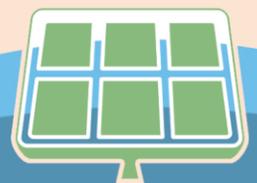
Dalhousie Researcher working on self-healing paint-on solar cells

Ghada Koleilat, an assistant professor of engineering at Dalhousie University has been awarded a \$250,000 grant through the Innovation, Science, and Economic Development Canada's new frontiers research fund. Her team is working with crystal-structured material that is taking off in international solar energy research, perovskite- which creates cheaper, easier to produce and more energy efficiency cells than existing silicon solar cells. Professor Koleilat's vision is for paint-on solar cells that can be applied to any surface, including clothing, cars, windows and tents. [Read more:](#)

CanSIA Completes Study and Prepares New Solar Guide



On April 15, CanSIA released a [Nova Scotia Residential Solar Market Outlook and Labour Force Study](#) which projects up to 22,000 homes in Nova Scotia installing solar systems by 2030. This represents



1.8 per cent of the province's total electricity consumption and could result in the creation of over 1100 solar jobs across the province. The study, prepared by Dunsky Energy Consultants, was funded with support of the Nova Scotia Department of Energy and Mines.

CanSIA is now partnering with Efficiency NS to develop a Nova Scotia Go Solar Guide. The guide, designed specifically for Nova Scotia that will help consumers understand the basics of solar energy, educate and inform Nova Scotians on the benefits of utilizing Solar PV, provide information on Nova Scotia solar programs and services, assist consumers in navigating through the SolarHomes program, and provide tips on selecting a solar installer. The guide should be ready by August 2019.

HRM's HalifACT 2050: Acting on Climate Together

HalifACT 2050: Acting on Climate Together is a long-term climate change plan by Halifax Regional Municipality to reduce emissions and help our communities adapt. The plan will guide efforts to reduce emissions by conserving energy and converting to clean energy sources. The plan will also help communities adapt by raising awareness and helping people prepare.



In the short term, the Halifax Regional Municipality will continue to help people address climate change with their award-winning Solar City Program, which was

made permanent this year by city council. They will continue to plan development and support builders with a changing climate in mind. However, there is more work to do –“ HalifACT 2050 is about what we do together to address climate change over the next 30 years.”

HalifACT 2050 will build on HRM's [successes](#) and shape the future of Halifax for generations to come. What is your vision for a well-adapted, low-carbon Halifax in 2050? Discussion date and locations will be provided soon. Please [join us](#) in the climate conversation.

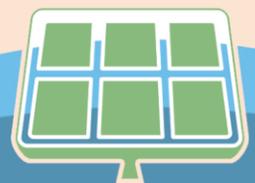
SolarHomes Update from Efficiency Nova Scotia

Now that the SolarHomes incentive program has been operating for a year, the success of the program can be seen in the numbers. Within the first six months, nearly 500 homeowners applied as did over 40 solar installation companies. As the inaugural year wraps up, over 1000 applications have been received and nearly 60 installation companies are registered.



Over the past year program staff have become familiar with its growing partner network. With an aim for continuous improvement and by way of streamlined processes, the SolarHomes team has significantly reduced application and rebate wait times.

With 1000 installs completed or underway, this rebate program will have already helped Nova Scotians nearly triple the number of net metered solar systems in the Province. They will make up 9.3MW of solar PV, which will help Nova Scotians reduce their energy bills by a combined \$1.6M and cut our carbon emissions by nearly 7,000 tonnes in the first year alone. This is the same impact as taking 1,400 cars off the road. Way to go Nova Scotia!



Nova Scotia Power to construct 2 MW Solar Farm in Amherst

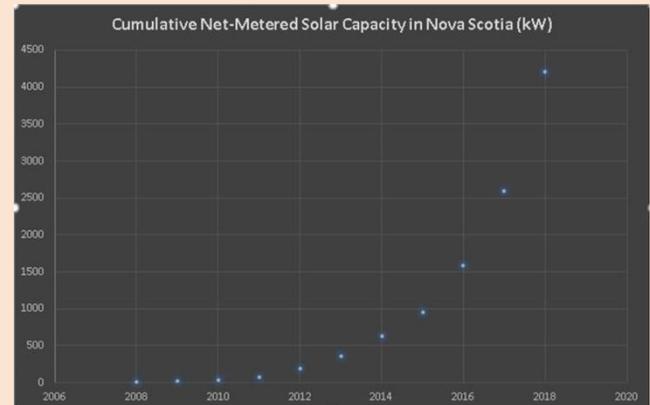
Nova Scotia power will construct a 2 MW solar farm, the largest solar installation in Atlantic Canada, as part of a larger \$93 Million smart grid project with Siemens and New Brunswick Power that is expected to create 241 jobs. The project, called “The Collaborative Grid Innovation for Atlantic Smart Energy Communities” will pilot smart grid infrastructure and will make it easier to incorporate renewable energy onto the electricity grid in Shediac, NB, and Amherst, NS. It was originally announced in January by Rural Economic Development Minister Bernadette Jordan. [Read More:](#)

Solar Nova Scotia Board Members in Jamaica



Two Solar Nova Scotia board members have been working on a project in Jamaica. David Brushett with EfficiencyOne and Dr. Wayne Groszko with Nova Scotia Community College will help to train about 330 public sector professionals involved operations and facilities management on solar energy and energy efficiency interventions. This work is part of a \$40 Million initiative which is being funded by the Inter-American Development Bank, the Japan International Cooperation Agency and the European Union Caribbean Investment Facility. [Read More](#)

Nova Scotia Power 2018 net-metering report shows surge in solar installations.



Nova Scotia Power delivered its 2018 annual net-metering report to the NS Utility and Review Board earlier this year which showed a 54% increase in installations over a record year in 2017. A lot of this activity is attributed to the Efficiency Nova Scotia SolarHomes program which currently provides a rebate of \$0.85/watt to homeowners who have solar PV system installed on their primary residence by an approved installer. Over half of installations in 2018 happened in Q4 after the introduction of the SolarHomes program and 2019 is expected to be another record year!

Canadian Coast Guard College Solar Flower



Spring came early at the Canadian Coast Guard College in Cape Breton this year as this new solar SmartFlower blossomed on campus. This installation is a small part of much broader energy improvements that are happening on campus. Earlier this year, Sydney Victoria MP Mark Eyking announced \$53.6 Million in funding to help upgrade the college's mechanical systems and make energy efficiency improvements. [Read More:](#)

Dalhousie Perovskite Start-Up Launches

Rayleigh Solar Tech, founded by friends Sam March and Dane George, is aiming to commercialize perovskite solar cells. Perovskite is a solution deposited at low temperatures, easy to make, and with an energy capturing efficiency that has skyrocketed to over 23 percent. The young company had the opportunity to participate in the [Creative Destruction Lab Atlantic Program](#). CDL is a seed-stage program for massively scalable science and engineering-based companies. [Read More](#)

Verschuren Centre Cape Breton Community Solar

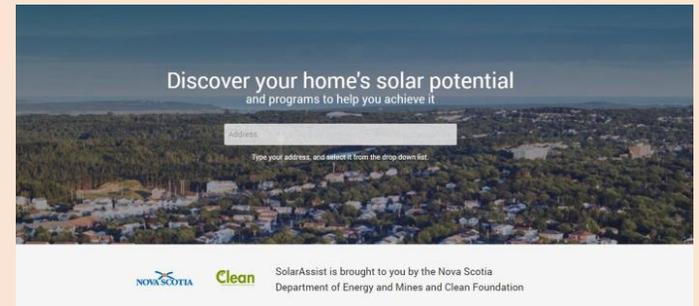
Cape Breton University's Verschuren Centre in Sustainability in Energy and the Environment is installing about 500 solar panels on its campus in Sydney. The project includes 3 separate 50 kW installations each with a 20 year power purchase agreement with Nova Scotia Power. The agreements were awarded in 2017 as part of the Solar Electricity for Community Buildings Pilot Program. The Verschuren Centre, led by Beth Mason, is an industrial solutions, development and deployment centre, advancing sustainable resource management in the fields of renewable energy, bio-processing, aquaculture, and nano materials. [Read More:](#)

Solar Nova Scotia Board Recruitment

Solar Nova Scotia is looking to recruit two additional board members to its all-volunteer board. Ideal candidates will have a passion for renewable energy and a willingness to devote time and energy to the organization and helping to facilitate the growth of solar energy in Nova Scotia. Experience in law, accounting, entrepreneurship, grant-writing and social-work have been identified as key areas of need. If you or someone

you know is an ideal candidate please contact us at info@solarns.ca

New Website Launches to help Nova Scotians Navigate Solar

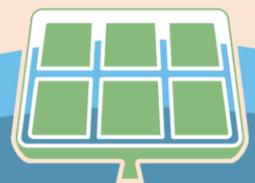


A new website was recently launched Nova Scotians navigate through the process of installing solar PV on their houses. The website helps determine the suitability of a site for solar, performs economic analysis and provides information about incentive programs. R&G Strategic developed the website on behalf of Clean Foundation. The work was funded by the Nova Scotia Department of Energy and Mines. Check out the website: solarassist.ca

Solar Tour of Ikea



Solar Nova Scotia was pleased to offer a tour to Solar NS members this June of the new rooftop solar system at the Dartmouth Crossing IKEA. The system is currently the largest system in Nova Scotia at 850 kW. IKEA installed the system behind-the-meter to get around the current 100 kW net-metering cap in Nova Scotia. IKEA



therefore uses all the energy that is produced rather than supplying excess energy back to the grid.

Atlantic Provinces to create Road Map for energy future

Representatives from the Atlantic Provinces and the federal government met in Halifax this spring to work together to form a coherent and collective vision for the future of energy in the region. The federal government announced a \$2 Million investment towards the plan as part of the Atlantic Growth Strategy. [Read more:](#)

Solartron Installation at HRM Fire Station



A lot of people drive by Fire Station #7 on dish Knightsridge Drive in Halifax wondering what the purpose of the large satellite is. As a matter of fact it is not a Satellite dish at all! It is a Solartron SolarBeam concentrated thermal solar collector that is intended to heat up hot water for use by the fire station. Have a look next time you drive by!

HRM Makes Solar City Data Available Online

All of the production data from solar PV systems financed by HRM's Solar City Program is now available online. This is a great opportunity for research projects and is a testament to the city's commitment to open data. [Check it out!](#)

NSCC Community Solar Installation



Nova Scotia Community College's installation under the Solar Electricity for Community Buildings program was spotted going up earlier this year on the Ivany Campus. NSCC will sell the output from the 39 kW system to Nova Scotia Power at 35 cents/kWh for the next 20 years. Read more about the Solar Electricity for Community Buildings Program [here.](#)

Colchester County Solar Installations

Colchester County is establishing a \$300,000 annual budget for loans to ratepayers who want to participate in its solar energy program. This Property Assessed Clean Energy program will enable up to 20 installations each year. Property owners who buy into the project will be required to pay back their loans over a 10-year period at an interest rate of .75 percent over prime. [Read More:](#)



Emera Building Solar and Battery Storage



The recently renovated Emera Place in downtown Halifax is one of the smartest buildings in the city. The modern, energy-efficient facility is built to the world's leading green building standards. It includes a large rooftop solar array, a 170 kWh Tesla Powerwall battery and the largest Cisco enabled power-over-Ethernet lighting system in the world. [Read more](#)

Solar CEDIF 4th Offering now Open

Solar Scotia Energy Community Economic Development Investment Fund has launched its fourth share offering after successfully raising over \$2.4 Million in its first three offerings. The proceeds of the offerings have been used to bulk purchase and lease out around 60 solar systems throughout Nova Scotia. Installations to date will reduce CO2 emissions by about 30,000 tonnes over the lifetime of the systems. [Read more:](#)

Ecology Action Centre Update

Emma Norton of the Ecology Action Centre presented to members of the Nova Scotia legislature recently about a report that highlights the benefits of going green. She told provincial politicians the Gardner Pinford Consulting cost-benefit analysis suggests there could be as many as 185,500 green jobs created by 2030 if the province

adopts measures to shift from fossil fuels toward sustainable resources and to reduce energy consumption. [Read more](#)

Atlantic School of Theology Solar Installation

The Atlantic School of Theology is installing a 50 kW solar PV system on their south-end Halifax Campus. The school recently accepted a \$150,000 cheque recently from the Diocese of Nova Scotia and Prince Edward Island to purchase the solar panels. This is another project made possible by the Solar Electricity for Community Buildings Program. [Read More](#)

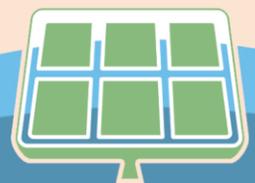
Urban Climate Centre to be created in Halifax!

An \$18-Million urban climate centre is being established to help communities in Halifax Regional Municipality cut their greenhouse gas emissions. Andy Fillmore, MP announced the funding recently at a ceremony on the Halifax waterfront. EfficiencyOne and the Federation of Canadian Municipalities will work jointly on this Low Carbon Cities initiative. [Read More](#)

Bridgewater Wins Smart Cities Competition by addressing Energy Poverty

Mayor David Mitchell described May 14, 2019, as, perhaps, the most significant day in the 120 year history of the Town of Bridgewater. That was the day the community, its residents, businesses, and supports, learned that Bridgewater had won Infrastructure Canada's \$5 million Smart Cities Challenge Price.

The town's Smart Cities Challenge application focused on Bridgewater's growing need for affordable, clean and reliable energy which is out of reach for many of its residents. Estimates show that around 38% of Bridgewater households are unable to meet their basic energy and transportation needs. A combination of old, leaky homes, and high energy and transportation costs make it difficult for Bridgewater residents to meet their basic energy needs. The town aims to solve this issues at a community and household level by creating access to affordable energy through solutions such as home upgrade programs, and improving access to local transit.



Of particular relevance to the solar industry is Bridgewater's plan to widely deploy solar technologies throughout the community. This will include solar PV installations as part of a standard package of affordable home energy upgrades for participating properties, as well as the development of a 6MW "solar garden" within the community that will generate income for residents and offset greenhouse gas emissions from the community. [Read More](#)

Welcome new corporate members

Solar Nova Scotia is pleased to welcome our newest corporate members. We are grateful for their support. They are helping the solar industry in Nova Scotia thrive. Check them out today!

[Equilibrium Engineering](#)- A Nova Scotia based energy firm rooted in sustainable building design energy conservation sectors.

[Polaron Solartech](#)- A leading Canadian solar installer with a mission to make solar more affordable and secure your greener future.

[One Wind Services](#) - An independent service provider offering professional construction and O&M Services for the renewable energy industry.

[Gullivan Electrical](#)- A leading Canadian distributor with a comprehensive range of commercial, residential, and off-grid solar solution.

[Dacey Electrical](#)- An electrical contractor providing commercial and residential services in Nova Scotia
[HESPV](#) – Offering residential, off-grid, and commercial solar solutions. HESPV is dedicated to helping Canadians use solar energy.

[Stanton Solar](#) – Through solar power, heat pumps, and other home products, Stanton Solar can design an overall plan to make your home as efficient as possible.

[Energyhub.org](#) – A free online resource created to help Canadians utilize natural resources to produce energy and manage their energy sustainably.

[East Coast Solar](#)- A local business dedicated to customer relationships and quality service that can help you go solar.

[Unconquered Sun](#)- Unconquered Sun has engineered and constructed hundreds of residential and commercial solar systems across Canada.

[W. McNeil Electrical](#) – A full service electrical company specializing in green energy initiatives. They build install and maintain off-grid and net-metered solutions.

Thanks to all corporate Members!



Please contact us at info@solarns.ca to inquire about corporate membership or sign up [online](#). Our rates are very affordable!

