SMART GRID INNOVATION NETWORK CANADA INC.

ANNUAL REPORT

JANUARY 2020- MARCH 2021

SMART GRID
INNOVATION NETWORK

www.sgin.ca
info@sgin.ca

TABLE OF CONTENTS

SMART GRID
INNOVATION NETWORK
Energizing Innovation in Sustainable Electricity

1- BOARD & STANDING COMMITTEE MEMBERS

2020 (Provisional) Board of Directors

Dr. David MaGee - *President*
Lori Clark- *Secretary*
Troy Kearns- *Treasurer*

Steering Committee

David Beauvais *(SGIN)*
Sonya Hull *(Siemens Canada)*
Brent Staeben *(NB Power)*
Blake Hunter *(NB Power)*
Martin Luckett *(Opportunities NB- ONB)*
Andrew Blair *(Opportunities NB- ONB)*
Hart Devitt *(University of NB)*
Julian Meng (transitioning) Mike Bourque *(UNB)*
Ted Parise *(ACOA)*
Greg Robart *(SGIN)*

Membership Committee

Chris Diduch *(UNB)*
Martin Luckett *(ONB)*
David Beauvais *(SGIN) - Jenn Bowes (SGIN)*
Hilliary Baird *(Ginger Designs)*

Establish/ Grow the Organization

Greg Robart *(Chair)*
Martin Luckett *(ONB)*
Blake Hunter *(NBPower)*

Marketing and Outreach Committee

David Beauvais (Chair) (transitioning) / Jennifer Bowes (Chair)
Sonya Hull *(Siemens)*
Brent Staeben *(NB Power)*

Technical Committees (TBD- pending membership interest)

Grid Capacity
EV Charging
Smart Home
Clean Electricity
Microgrid
Standards (Code / Regulatory / Legislation)

SGIN Support Team

David Beauvais – Technical Director
Jenn Bowes – Member Services Lead
Greg Robart - CEO

2- A MESSAGE FROM OUR CEO

The year 2020 began with plenty of activity. As 2019 drew to a close, we were just wrapping up our European Utility Week trade mission in November, and the Finding Common Ground thought-leaders event in Fredericton in December, and we were looking forward to the next evolution of SGIN. Little did we know when we started 2020 that we would experience a year like no other – with the COVID-19 pandemic sweeping the globe. All of our activities that included a face-to-face component would have to be re-thought which made everyone's plans a bit more challenging.

Despite COVID, 2020 exposed new opportunities for SGIN. With the objective of opening to a wider network the work being done with the SGIN, 2020 became a year of adjustment. Most significantly, SGIN became a legal non-profit organization with a national mandate. This new organization, Smart Grid Innovation Network Canada Inc., was formed in November of 2020 with a transitional board and new set of bylaws to govern activities. As we expanded our connections it was important to formalize our vision and mission to ensure that our activities lined up with our organizations purpose, so we undertook a visioning exercise. In January of 2021 we formally launched our membership drive with the support of our marketing firm Ginger Designs, and we are growing our membership base weekly. We have brought on a new Member Services Lead, Jennifer Bowes, who will be supporting our membership with a "how can we help?" approach.

With the limits to in person events and travel restrictions we pivoted to a webinar-based approach to continue our education and advocacy objectives. In 2020 we held events on Energy Transition during a pandemic, Regulatory information and Energy Wholesale Marketing events. In conjunction with our SGIN led events we supported a few our sister organization's initiatives including Economic Forum of the Americas and Marine Renewables of Canada Conference. For 2020 trade missions we drafted the state of Smart Grid in Canada 2020 report for European Utility week in Milan. We continued to support vendors looking for business and technical coaching. SGIN has provided start-up support to through our internal process and through relationship with Energia in coaching services to companies in early-stage development.

We have taken a public position in how intense Electrification can support our nations net zero goals. It is one of the most economical paths to net zero, and will require a more robust grid and set of businesses and solutions to enable this path.

As the industry evolves around the grid edge, sector coupling is becoming more relevant. To support this, SGIN recognises to the renewable, storage and other associations focuses on electricity intensive solutions require support to understand the grid impacts of their work and how to engage in the grid planning dialogues. With this understanding, SGIN is working on establishing formal agreements with sister associations in this electricity intensive clean energy space. In 2020 we have signed such agreements with Marine Renewables Canada and Electricity HR. More to come.

This year we are opening more board seats and are looking forward extending participation to more regions.

As 2021 comes to a close and we enter 2022, the SGIN will continue to tackle obstacles, find solutions, and make progress. In this new era of "building back better" SGIN is positioned to support our four focus areas: education, vendor support, business model innovation and smart grid technology deployments with National aspirations.

We are looking forward to working with our membership, partners, and collaborators in upcoming years to show Canada's energy sector can contribute to a net zero future. Thank you for your continued support.

Greg Robart
CEO Smart Grid Innovation Network Canada Inc.

3- SECTOR HIGHLIGHTS

The energy sector is transitioning. The electricity sector will have a significant role in supporting Canada in transitioning to cleaner infrastructure. The recent Canadian Supreme Court announcement, re-affirming the federal government's jurisdiction in climate change and its authority to mandate a Carbon Tax will begin to change the energy markets and financially motivate companies and individuals to move to less carbon intensive solutions. A less carbon intensive energy infrastructure includes more electrified solutions which will require a more flexible, intelligent, and reliable grid.

Despite the many challenges of 2020, Canada is committed to building a clean energy future for many generations to come. With the energy transition underway, there is a continuous need for increased awareness, education, and deployment opportunities in order to enable and maintain a cleaner, smarter electrical grid. This section highlights some of the diverse projects that are relevant to the progression of the energy transition in communities across the country.

Smart Grid Atlantic
NB Power Led (SGIN Champion Member)

Creating Smart Energy Communities

To build tomorrow's power grid for New Brunswick and the Atlantic region, we need to research and test future energy technologies right here at home. A modern grid will be smarter, greener, more resilient and efficient. Smart Grid Atlantic is working with communities in New Brunswick and Nova Scotia to help create this new energy future for our provinces and region!

Smart Grid Atlantic is a four-year federally funded research and demonstration program to determine how energy technologies of the future can provide customer, community and provincial benefits, such as:

- Cleaner local power: generating more customer-owned and community-based renewable energy
- More renewable energy: developing new software to manage the challenges and maximize the potential of renewable energy
- New energy solutions: using new smart energy technologies to get more information and control over your energy use
- More reliable electricity: increasing the resilience of homes, neighbourhoods and New Brunswick's electricity system

Smart Grid Atlantic includes smart energy community projects in both provinces that will deploy and test smart energy technologies to learn how they impact our provincial power grids and how they can benefit customers in the future.

Shediac Smart Energy Community Project

The Shediac Smart Energy Community Project has three important pieces.

1. Residential Smart Energy Study. Partnering with hundreds of homeowners in Shediac to deploy and test new smart energy technologies and renewable energy sources (also called Distributed Energy Resources – DERs). Intend to identify opportunities for energy savings in these homes, to learn from the customer experiences and behaviours in using these technologies and how these are affecting their energy use.

2. A Community Solar Farm. Building NB Power's first utility-scale solar facility - up to a 1.8 megawatt (MW) solar farm with utility battery storage capacity - right inside the town limits of Shediac. This facility will be connected to the distribution grid in Shediac and provide clean electricity to the two net-zero commercial buildings, with the benefits of any excess renewable energy from the farm flowing into the community.

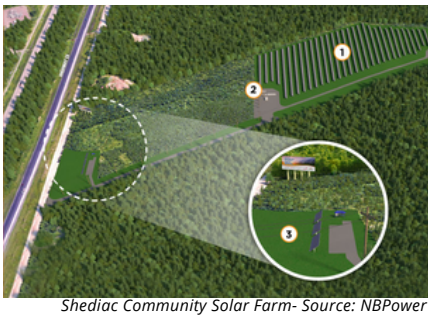
3. Convert Two Commercial Buildings to Net-Zero. Introducing new smart-energy technologies (including solar panels and battery storage) and energy efficiency upgrades into two well-known commercial buildings - the Government of Canada Pension Centre and the Town of Shediac's Multipurpose Centre. The goal is to lower the buildings' energy use, while also adding clean energy sources to provide a new level of self-sufficiency. To achieve a net-zero rating, the buildings will also take advantage of renewable energy generated by the new solar farm. These buildings will become the first two commercial net-zero buildings in New Brunswick!

The Shediac project is also serving as the foundation for the development of a new Energy Systems Platform (ESP) being developed by Siemens Global Smart Grid Centre of Competence.

This new cloud-based system will help NB Power connect directly with these new energy technologies so customers can participate in programs that benefit them. NB Power can also use this system to make the power grid more efficient and less expensive, for everyone's benefit. The ESP will become a new product that utilities around the world can use to help manage the significant complexities of integrating distributed energy resources onto local neighbourhood grids.

Government of Canada Pension Centre Source: NB Power

Shediac Multipurpose Centre Source: NB Power



Shediac Community Solar Farm- Source: NBPower

North Branch Smart Energy Neighbourhood

NB Power, Solaire Homes, and Siemens Canada have launched a new project that will see up to 100 highly energy-efficient and "zero energy-ready" homes built. A new neighbourhood, located in Northeast Moncton "North Branch", will become New Brunswick's first solar-powered neighbourhood.

A partnership model for future smart energy neighbourhoods in Canada!

The North Branch project is a partnership between developer Solaire Homes, NB Power and Siemens. A neighbourhood of net-zero ready homes will be built over the next few years for interested homebuyers. These highly efficient homes will include smart home energy technologies, such as home energy management systems, rooftop solar and smart energy storage batteries. Each home will be able to function independently as a 'nanogrid' and will also be part of a 'microgrid', where all homes involved in the project are connected and can share energy they generate with their neighbours as part of a neighbourhood energy exchange program.

Siemens will build the in-home nanogrid and the neighbourhood microgrid platforms, and the technology that will form the energy management systems for homes and the community overall. Learn more about the Siemens technology HERE. The department of Innovation, Science and Economic Development (ISED) is providing funding for the leading-edge technology components of the project.

Most importantly, the North Branch project is a partnership with new homebuyers in the neighbourhood who will become crucial research partners in evolving smart energy practices in the region and the across the country.

Source: North Branch Moncton

Mysa
St. John's, Newfoundland

On January 12, 2021, the Newfoundland-based smart thermostat company Mysa was awarded 'Smart Thermostat of the Year' in the Connected Home category of the prestigious IoT Breakthrough Awards. IoT Breakthrough, a leading market intelligence organization that recognizes the top companies, technologies and products in the global Internet-of-Things (IoT) market, showcases technologies and companies that drive innovation and exemplify the best in IoT technology solutions across the globe.

About Mysa: Mysa's mission is to fight climate change by creating smart thermostats for electric heating and cooling that help homeowners save money by using energy more efficiently. A leading employer in the tech sector in Eastern Canada and a rising star in the smart energy product industry in North America, Mysa's diverse, fully Newfoundland and Labrador-based team is growing at warp speed, as is their ecosystem of energy-saving smart thermostats for electric heating and cooling.

The Atlantic Regional Transmission Loop Project

In September 2020, the Throne proposed The Atlantic Regional Transmission Loop Project, also known as The Atlantic Loop, as a way for New Brunwsick and Nova Scotia to reduce their reliance on coal. The Atlantic loop is intended to interconnect electricity suppliers in Quebec, Newfoundland and Labrador, New Brunswick and Nova Scotia, thereby improving regional reliability. The Atlantic Loop is actually an extension of work on a Clean Power Roadmap for Atlantic Canada. That project, involving provinces and utilities, followed an agreement by the premiers in 2019 to produce and circulate more renewable power, with $2 million then offered by the federal government for related studies and analysis, including modeling possible changes to the transmission system, and a look at policy and regulation.

The fall announcement from the Government of Canada included a $25 million dollar commitment for the Atlantic Loop and other projects to be used in 2021-22. This funding will be used for strategic interties to help complete engineering assessments, community engagement, and environmental and regulatory studies. This will support work with the provinces and territories, and regional partners, to bring clean power to more Canadians, accelerate the country's transition away from coal, and help build new electricity transmission infrastructure. **Click here for more information**

British Columbia Indigenous Clean Energy Project (BCICEI)
(August 2020)

Six central First Nations communities are receiving $1.15 million for clean energy projects as part of a funding partnership between the Province of British Columbia, Government of Canada and New Relationship Trust. “Through CleanBC, we are collaborating with New Relationship Trust and Western Economic Diversification Canada on the British Columbia Indigenous Clean Energy Initiative (BCICEI) to support First Nations-led clean energy and energy efficiency projects,” said Bruce Ralston, B.C.'s Minister of Energy, Mines and Petroleum Resources. “Together, we are providing important funding to Indigenous communities throughout B.C. to develop projects that will help them achieve energy independence, support economic development and reduce reliance on diesel.”

The projects include:

- the Tlingit Homeland Energy Ltd. Partnership in Atlin is receiving $250,000 for work on a hydro energy generation upgrade project;
- The Xeni Gwet’in First Nations Government in Nemiah Valley, Williams Lake is receiving $250,000 for a solar micro-grid connection project;
- Lhoosk’uz Déné in Kluskus Lake is receiving $300,000 for a combined heat and power biomass project;
- Dease River First Nation in Good Hope Lake is receiving $50,000 for a biomass feasibility study;
- Tobacco Plains Indian Band in Grasmere is receiving $150,000 for a solar photovoltaic (PV) and battery storage installation; and
- Lower Nicola Indian Band in Merritt is receiving $150,000 for a solar PV installation.

Funding from the BCICEI supports the planning of clean energy generation projects, such as hydro, wind, biomass, solar, marine and geothermal projects. The BCICEI also targets energy efficiency projects and energy storage. Among its target communities, it specifically seeks to assist remote communities wherever possible in reducing dependency on fossil fuels. Funding to communities through the BCICEI will be used for feasibility and site selection, environmental review and permitting, and project design and engineering. This allows First Nations’ clean energy and energy efficiency projects to proceed to the next step of implementation and construction when additional funding is secured.

Canada Invests in Smart Grid Technology for London Net-Zero Community

(London, Ontario- July 2020)

The Government of Canada is committed to building a clean energy future to strengthen the economy, create jobs and support the natural resource sector. This will be more important than ever as we reopen the economy and plan our recovery from the COVID-19 pandemic.

The Government of Canada announced a $5.1-million investment in London Hydro to develop and deploy a smart microgrid in the West Five Net-Zero Energy Community in London, Ontario. This funding will help the community achieve its net-zero targets. Local partners are also contributing to this project, including S2e Technologies, Sifton Properties and Western University, for a combined investment of $10.9 million.

Building on federal government commitments to achieve net-zero emissions by 2050, this investment supports the design and development of Canada's first large-scale, fully integrated, net-zero energy community. The microgrid will integrate monitoring, data management and communications, electric vehicle infrastructure, distributed energy resource management, solar power generation and batteries to reduce grid use. The goal of this project is to demonstrate that net-zero energy is feasible at the community level, which will promote sustainable development and inspire widespread change across Canada's construction industry.

Funding for this project is provided by Natural Resources Canada's Smart Grid Program, which allows utilities to reduce pollution and optimize electricity use while encouraging innovation. The program is part of the Government of Canada's more than $180-billion Investing in Canada Plan to create long-term economic growth; support a low- carbon, green economy; and build inclusive communities. Additional Information here

Smart, Net Zero Community
Sifton Properties' West 5 - London, Ontario

NB Power Smart Meter Project Approved

Saint John, NB (Sept. 2020)

The New Brunswick Power Corporation (NB Power) applied on Aug. 1st 2019 to the New Brunswick Energy and Utilities Board (Board) for approval of a capital project for the procurement and deployment of Advanced Metering Infrastructure (AMI). The AMI project also includes modifying business processes to integrate AMI technology with NB Power's customer information system, geographic information system and outage management system. The $110-million-dollar plan was approved in September 2020.

NWT Clean Energy Projects

Inuvik, NT (Sept. 2020)

As Canada's North continues to experience the impacts of climate change, many Indigenous communities have identified clean, reliable energy as key to a resilient future. The government announced over $8 million for eight community-led clean energy projects in the Northwest Territories that will support communities to build a cleaner future by reducing their reliance on diesel fuel for heat and power while creating jobs.

These investments are:

- $184,000 to Inuvialuit Regional Corporation to promote energy literacy in the community, renew Inuvialuit dialect and culture, and promote cross-generational learning between Elders and youth on traditional practices, language and sustainability;
- $797,000 to the Arctic Energy Alliance to build community capacity and energy literacy to support and direct their local Community Energy Planning process;
- $1.7 million to the Town of Inuvik to install a biomass heating system to replace the diesel boilers that are currently used for heat and provide freeze protection for the municipal water reservoir;
- $2.6 million to the Tulita Land Corporation to install biomass boilers to heat seven municipal buildings and to establish a forest-based value chain to produce wood chips to fuel the boilers;
- $500,000 to the Deline Got'ine Government to create a community energy plan that will increase energy efficiency and reduce diesel use, generate local green jobs, introduce a 30kWh solar system for the community's Grey Goose Lodge hotel and respond to increasingly limited access to the winter road; and
- $2.25 million to Nihtat Energy Ltd for three projects aimed at replacing diesel-fueled boilers with biomass-heating systems in six public buildings and engaging with Aklavik and other Gwich'in communities in the Northwest Territories to test methods of integrating renewables into isolated grids while maintaining Indigenous participation and building community knowledge on energy planning processes.

Canada believes in building a clean energy future for all Canadians. By working together, we are building healthier, greener and more energy-resilient communities for future generations.

Saint John Energy and Stash Energy

Saint John, NB (Oct. 2020)

Saint John Energy launched a pilot project with Fredericton based start-up Stash Energy that will bring smart, thermal storage heat pumps to up to fifty Saint John Energy customers over the next two years. The units store energy to be used during peak electricity usage times, reducing the need for us to generate electricity from sources with high greenhouse gas emissions.

The award-winning technology developed by Stash Energy is the first technology to allow heat pumps to store energy through built-in thermal energy storage capacity. Energy would be stored during off peak periods and then be used during peak times to offset more expensive electricity generating costs and reduce the carbon footprint.

The project with Stash Energy adds to the list of many initiatives by Saint John Energy to integrate innovative consumer solutions with the electricity system. This integration will assist in reducing the peak and balance renewables making them a more viable option to offset fossil fuel electricity generation. **Click here for the news release.**

Development of Smart Grid Co-Simulations Platforms

Montreal, Quebec (Oct. 2020)

Smart grid modelling is set to benefit from a new Canadian R&D partnership established by Hydro Quebec's research centre (CRHQ).

CRHQ will work with Canada-based software solution developer E-Sim Solutions on collaborative simulation solutions with a focus on cybersecurity and telecommunications systems. The aim of co-simulation platforms is to improve the efficiency of virtual testing methods used to validate the overall behaviour of complex systems involving multiple subsystems or technologies, such as electrotechnology, telecommunications, automated controls, mechanics and thermal analysis.

"Through this agreement, Hydro-Québec is joining forces with a small Québec-based company to prepare for the future by developing grid simulation and analysis solutions that both support the energy transition and leverage the digital transition," said Jean Matte, senior director of CRHQ. The project is expected to yield many benefits, according to a statement. These include reducing design and commissioning delays through the early detection of failures, enhancing collaborations among engineering teams through a common information exchange platform, and increasing the quality of testing aimed at optimising electrical systems from end to end.

Canada's Largest Remote Community Solar Farm

Fort Chipewyan, Alberta (Nov. 2020)

Canada's largest remote community solar farm, in Fort Chipewyan, Alberta launched November 17th 2020. The Three Nations Energy (3NE) solar farm project is jointly owned by the Athabasca Chipewyan First Nation, the Mikisew Cree First Nation, and the Fort Chipewyan Metis Association. This system is the largest solar PV system in a remote Canadian community. Located on approximately 8 hectares of land, the solar farm is a $7.76 million project consisting of 6,500 solar modules that produces 2.2 megawatts. This facility replaces 25 per cent of the diesel generated electricity in Fort Chipewyan with solar generated electricity and harkens a new era of clean energy in Fort Chipewyan. The community of Fort Chipewyan is grateful to the Government of Alberta and the Government of Canada for its financial support to this project. Beyond the construction and operation of the solar farm, 3NE will continue to serve as a vehicle for the Nations to work together on other renewable energy and energy efficiency initiatives. **Click here to learn more.**

Xeni Gwet'in Community Electrification Project

Xeni Gwet'in First Nation, British Columbia (Dec. 2020)

Xeni Gwet'in First Nations Government (XGFNG) is one of six Tsilhqot'in communities that make up the Tsilhqot'in Nation. Located approximately 200 km west of the closest townsite of Williams Lake, BC, Canada, this remote location can only be accessed after a 100km drive on an unpaved gravel road. XGFNG's project "Xeni Gwet'in Community Electrification Project- Underground Distribution" was funded by the BC Indigenous Clean Energy Initiative (BCICEI) in 2020.

The project is about developing an underground distribution line from the central community's solar-powered microgrid to connect their nearby western community that is reliant on diesel generators. The underground distribution line project is an excellent example of renewable energy projects in Indigenous communities rooted in traditional values to address unique needs and create sovereign energy solutions.

Regina's Renewable, Energy-Efficient Economy

Regina, Saskatchewan (Feb. 2021)

As the City of Regina prepares for the future of renewable energy, local organizations and stakeholders are looking at a number of solutions to work toward the city's goal of energy neutrality. A December 2020 report outlines four areas where the city can seize upon the emerging industry including: creating local jobs, taking advantage of federal funds for renewables, aligning with changing attitudes toward power and adapting early.

Read the full news article here

Launch of Solar Electric Rebate Program

Charlottetown, PEI (Feb. 2021)

In February 2021, PEI launched an incentive program to promote customers to invest in their own energy independence. This is another example of a region who is incenting. customers to invest in their own energy independence as part of an electrification strategy. The solar program makes solar power more affordable than ever before by providing financial incentive for island homeowners, farms and businesses to install solar PV panels. Solar incentives will help reduce greenhouse gas emissions by over 500 tonnes annually and create approximately 20 jobs in PEI's renewable energy sector. In addition to solar rebates, financing is available through the Government of Prince Edward Island to assist with the up-front costs of solar installation.

Texas Power Outages

(Feb. 2021)

Texas has been the recipient of the most recent climate change event in North America. In February millions of texans were left without power, heat and running water for several days after a severe winter storm crippled power plans and the electricity grids. A number of factors prevented Texas from being prepared for the storm. **Read the full news article here**

Qulliq Energy Corporation (QEC) Launches New Commercial and Institutional Power Producer

Nunavut, Iqaluit (March 2021)

The Qulliq Energy Corporation (QEC) has launched the new Commercial and Institutional Power Producer (CIPP) program in Nunavut, Iqualuit. The program is designed to allow existing commercial and institutional customers to generate electricity using renewable energy systems and sell it to QEC. CIPP participants will be paid for the power they generate and sell to QEC at a rate equal to the corporation's diesel savings.

"I am proud to present the territory's newest program intended to further clean energy for our communities," said the Honourable Jeannie Ehaloak, Minister responsible for QEC. "This program will spark local development of renewable resources, while also working to ensure Nunavummiut, who pay the highest rates for power in Canada, do not pay more for the benefit of clean power."

"Integrating renewable energy systems into the territory's energy grid will help decrease Nunavut's dependency on diesel fuel, reduce carbon emissions and promote energy self-reliance," said Rick Hunt, QEC's President and CEO. "QEC continuously pursues energy initiatives that will help develop clean energy for the territory." **Learn more here**.

Smart Grid Boost in Alberta

(March. 2021)

The Government of Canada announced a combined investment of over $900,000 for two smart grid projects in Alberta that will enhance the energy grid and reduce greenhouse gas emissions.

"Funding innovative ideas to further lower emissions, increase competitiveness and modernize our energy grids in Canada is how we get to net zero by 2050," said Seamus O'Regan Jr., Minister of Natural Resources.The first investment of $495,000 is for FortisAlberta Inc. to support the Waterton Energy Storage Project by showcasing how using a battery energy storage system and advanced distribution control systems can provide reliable access to the grid with economic and social benefits for the community. The second investment of $413,250 is for Lethbridge Electric Utility to enhance its distribution network by using Conservation Voltage Reduction software technology in its metering system to conserve energy and reduce demand on the energy grid, providing financial benefits to over 40,000 customers who rely on the network.

Funding for this project was provided by Natural Resources Canada's Smart Grid Program, which allows utilities to reduce pollution and optimize electricity use while encouraging innovation. It is part of Canada's more than $180-billion Investing in Canada Infrastructure Program for public transit projects, green infrastructure, social infrastructure, trade and transportation routes and Canada's rural and northern communities.

RECENT POLICY EVENTS

FERC Order 2222

Sept. (2020)

The Federal Energy Regulatory Commission (FERC) approved a historic final rule, Order 2222, enabling distributed energy resource (DER) aggregators to compete in all regional organized wholesale electric markets. This action empowers new technologies to come online and participate on a level playing field, further enhancing competition, encouraging innovation, and driving down costs for consumers.

This rule enables DERs to participate alongside traditional resources in the regional organized wholesale markets through aggregations, opening organized wholesale markets to new sources of energy and grid services. It will help provide a variety of benefits including: lower costs for consumers through enhanced competition, more grid flexibility and resilience, and more innovation within the electric power industry. This rule allows several sources of distributed electricity to aggregate in order to satisfy minimum size and performance requirements that each may not be able to meet individually. **Learn more here.**

Carbon Tax Supreme Court Ruling

Ottawa, ON (March 2021)

On March 25, in a significant victory for climate action, Canada's Supreme Court ruled in the federal government's favour. It affirmed that climate change, caused mainly by greenhouse gases emitted into the atmosphere through burning fossil fuels, is "a threat of the highest order to the country, and indeed to the world" and that there is "broad consensus among expert international bodies that carbon pricing is a critical measure" to reduce emissions. The ruling also stated, "A provincial failure to act directly threatens Canada as a whole," and "Canada would not be able to push for global action on climate change if provinces were not cooperating in the fight against it."

Carbon pricing is one of the many solutions to reduce the risks of climate disruption, and has been a critical policy the David Suzuki Foundation has been advocating for since 1998.

Although this decision was specifically about carbon pricing, it signals that the federal government has the authority to enact national climate and clean energy regulations that reduce harmful emissions. It also sends a clear message to provincial governments that have put entrenched fossil fuel interests ahead of the well-being of our children, communities, future and all living species and ecosystems.

Under Canada's law, provinces are required to set their own carbon price through a tax or cap-and-trade system, meeting minimum standards set by Ottawa. If they don't, they're subject to a federal "backstop" carbon price, including a charge on gasoline and other fuels, offset by household rebates that leave most families better off, and a separate pricing system for heavy industries. The minimum price is $40 per tonne of emissions as of April 1, set to increase to $170 per tonne by 2030 to meet the current target of reducing emissions at least 30 per cent below 2005 levels by 2030.

Because greenhouse gas emissions, mainly carbon dioxide, cause extensive and costly harm, carbon pricing ensures polluters pay for damages. Even though it rarely reflects the full costs, it gives polluters incentives to find cleaner ways to operate — reducing their costs and emissions. It also gives cleaner energy sources like solar and wind a growing price advantage over coal, oil and fracked methane. **Learn more here.**

FUNDING ANNOUNCEMENTS

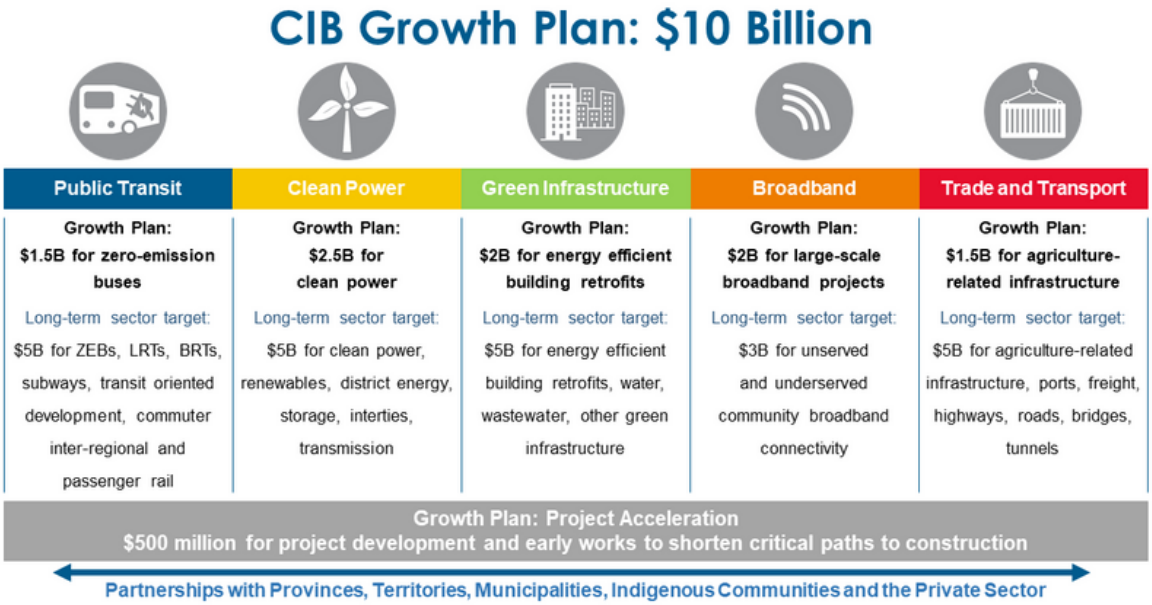
The Government of Canada has committed the goal of net-zero emissions by 2050 by introducing the Canadian Net-Zero Emissions Act. This initiative will require support and engagement from all parts of society, including provinces, territories, Indigenous Peoples, youth, and businesses. The following projects below detail some of the current funding initiatives in development across Canada.

Canadian Infrastructure Bank Growth Plan & Sectors

The Growth Plan is focused on investing in transit for cleaner commutes including zero-emission buses, clean power, green infrastructure with focus on energy efficiency building retrofits, digital connectivity to significantly increase broadband access, and agriculture-related infrastructure in the context of trade and transportation expansion. As well, the Growth Plan includes the potential to accelerate project development and early works on projects.

The CIB has investment targets for each of the priority sectors, and has a target to invest $1B towards the Indigenous Community Infrastructure Initiative (ICII) across these sectors, as outlined in its Statement of Priorities and Accountabilities (SPA).

The $10B, three-year Growth Plan will strengthen Canada's economic growth and accelerate Canada's transition to the low carbon economy. Learn more about the Growth Plan initiatives, such as the Commercial Building Retrofits and Zero-Emission Buses.



Smart Grid Programs- Government of Canada

The Smart Grid Program is one of Natural Resource Canada's targeted national programs addressing key infrastructure to advance the goals of the Pan Canadian Framework on Clean Growth and Climate Change. Up to $100 million is being invested for utility-led projects to reduce GHG emissions, better utilize existing electricity assets and foster innovation and clean jobs for:

- Demonstration of smart grid technologies
- Deployment of smart grid integrated systems

List of projects funded by the Smart Grid Program: *(Source: Government of Canada- Smart Grid Program)*

- Yukon Energy: Residential Demand Response Program (RDRP)
- EPCOR: EPCOR Smart Grid System (ESGS)
- EQUS REA: Canada's 1st Member- Owned Rural Smart Grid Project
- ENMAX Power: Integrating Distributed Generation into Secondary Networks in Large Urban Centres
- SaskPower: SaskPower Distribution Modernization Program
- SSM PUC: Sault Smart Grid
- Bracebridge: Smart, Proactive, Enables, Energy Distribution; Intelligent, Efficiently, Responsive (SPEEDIER) Project
- London Hydro: West 5 Smart Grid Project
- Alectra Utilities: Power House Hybrid: Minimizing GHGs and Maximizing Grid Benefits
- Alectra Utilities: GridExchange
- Independent Electricity System Operator (IESO): York Region Non-Wires Alternatives Demonstration Project
- Lakefront Utilities: Digital Utility Platform
- Hydro- Quebec: Smart Grid Deployment of Off- Grid Networks
- Hydro- Quebec: Lac- Megantic Microgrid
- Saint John Energy: Integrated Dispatchable Resource Network for Local Electric Distribution Utility
- NB Power & NS Power: Collaborative Grid Innovation for Atlantic Smart Energy Communities
- PEI Energy: Slemon Park Microgrid Project

The table below presents a sample of the active smart grid demonstration projects.

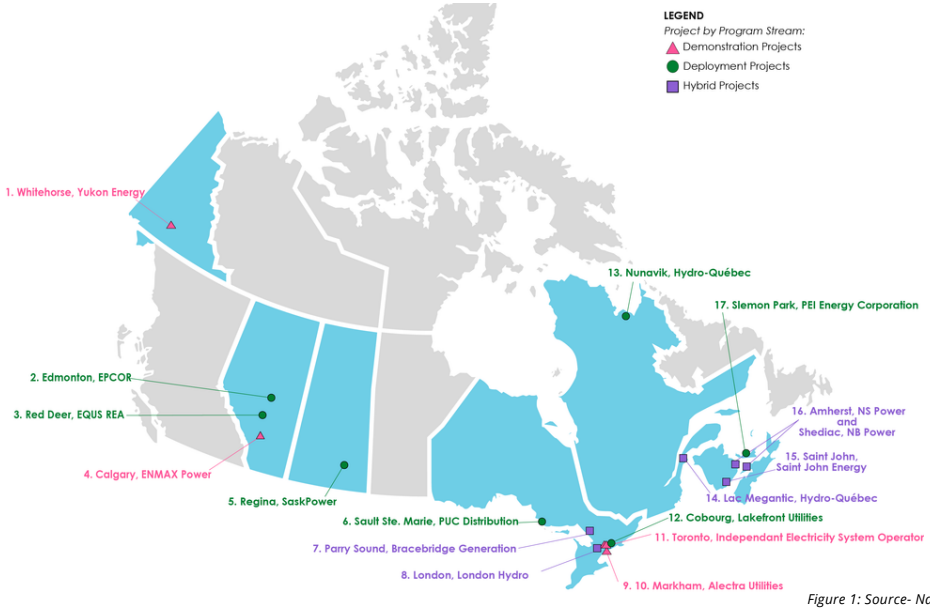


Figure 1: Source- Natural Resources Canada

Government Services

Smart Grid in Canada Report

Milan Enlit (Nov. 2020)

As part of our government support offerings, we offer trade mission planning and services. SGIN partnered with Trade Canada in their hosting of European Utility week 2020. SGIN provided export support services for Enlit Milan 2020 and were contracted to develop a Primer report. This document provides an in-depth overview of the smart grid sector in Canada. It highlights the status of smart grid deployment, a market review, smart grid's key drivers, and the role that smart grid will have in meeting Canada's goal of achieving carbon neutrality by 2050.

Our Involvement

The Smart Grid Innovation Network Inc. Is involved in ATIGA, Smart Grid Action Network and guest attendance at NER.

Technology Support

This section highlights activities SGIN has been involved in to support vendors as they work provide impact in the sector. Those that may be commercially sensitive they have been anonymized.

Power Precision

Power Precision is a New Brunswick-based company designing and improving electrical equipment for mines, power generating sites and other facilities. The company has developed a new dual-source switchgear to connect back-up generator and was interested in evaluating the potential for peak demand reduction on the network. SGIN established a working group to discuss the technology, the standards in different regions and to evaluate the business case of deploying this equipment as a standard in all new facilities.

Smart water heaters for smart utilities

A Municipals Utility is currently demonstrating a platform to control distributed energy resources such as batteries and smart equipment. SGIN prepared a session on smart water heaters for smart utilities to support the organization with his smart water heater procurement decision.

Mirco-market Pilot Project- Municipal Utility

The peak charges for this Municipal Utility is very expensive and SGIN supported the utility in evaluating the savings using back-up generators, but also new thermal storage devices. The Utility uses a SCADA system to control back-up generators and SGIN is helping in integrating a feature to also control smart loads. A field testing a heating system for alternative thermal storage is in preparation.

Distributed Demand Response Company

SGIN assisted a European Based Company, to share knowledge on the demand response environment in Canada and in North America. We provided expert advice on electricity and communication on the structure of different market for residential direct load control and aggregation.

Battery Solution Company

Solar Company develops scalable solar battery systems with measurements. The company reached out to SGIN to provide input on their solution, the product-market fit and the evaluation of potential uptake in the current smart grid environment.

Energy Startups

SGIN organized a webinar showcasing three companies participating in the Energia Venture Fall 2020 cohort. Each company presented their organization and their product to a virtual audience and answered questions.

Battery Energy Storage

A Canadian based, with advanced Battery Energy Storage solutions reached out to SGIN to get advice on the maritime energy market and to develop a demonstration project. SGIN provided technical and commercial advices.

DR Analytics Solution Company

An energy analytics company develops smart grid analytic solutions and demand response technology for the residential sector. The company reached out to SGIN to get insight on their solution and the market in Canada.

Net Zero Homes

Company B architects net-zero homes and buildings and reached out to SGIN for technical advice about the development of a novel community housing complex in Canada that could be "Smart grid ready". SGIN provided advice to the company.

Heat Pumps as a Distributed Energy Resource

CA Canadian based heat pump manufacturer has reached out to SGIN to discuss the testing of their unit in the US market. The company has developed a mini-split heat pump with built-in thermal energy storage. Their unique design stores thermal energy during off-peak demand hours, then draws from the stored energy during times of peak demand. This allows users to lower their energy costs.

This project shall demonstrate a cost-effective solution that serves to prove to end-users that this technology lowers energy demand during peak demand hours, thus lowering energy costs, while showing utility providers the potential benefits of DR incentives. SGIN has supported this company in designing a 3rd party validation program.

5-INDUSTRY EVENTS & INVOLVEMENT

Regularly, SGIN leads public facing education events as well as supports other organization and industry associations in their planning activities or delivery of specific events. This section highlights some of those events.

Marine Renewables Canada (MRC) Conference Participation (May 2020)

MRC Presented A Systems Approach to Enabling Renewables in Canada

- Why renewables?
- What needs to be addressed?
- A new energy future

Big Green Ideas for Atlantic Canada's Economic Recovery- Hosted by Marine Renewables Canada (May 2020)

- SGIN's Proposed Big Idea: Electrification Enables De-carbonization
- SGIN proposes the full electrification of Atlantic Canada by 2040 as an ambitious but viable goal. To enable our decarbonization aspirations

Energy Transition During a Global Pandemic: Micro Decisions enable Macro Actions (Sept. 2020)

- Webinar focused on providing perspective of:
- How youth see their contributions in our energy transition journey
- What building developers are striving towards
- How an economist sees the impact and challenges in energy transition

The International Economic Forum of The Americas Presentation Conference of Montreal (June 2020)

In 2020, SGIN facilitated a private panel discussion which was sponsored by Opportunities New Brunswick titled, *POWERING TOMORROW: A TRANSITION TO SMART ENERGY*. The IEFA Conference of is committed to heightening knowledge and awareness of the major issues concerning economic globalization, with a particular emphasis on the relations between the Americas and other continents. The Conference also strives to foster exchanges of information, to promote free discussion on major current economic issues and facilitate meetings between world leaders to encourage international discourse by bringing together Heads of State, the private sector, international organizations, and civil society.

Energy Marketing Webinar (Dec. 2020)

How NB Power maximizes its geographic advantage for New Brunswickers presented by Andrew Robinson

Energy markets are very volatile and complex and the growth of renewable energy and distributed energy resources including demand response is likely to add to this complexity. This introductory webinar introduced participants to the basics of energy markets, with a focus on the electricity markets of the Northeastern US and Atlantic Canadian regions. Participants learned about the different electricity products traded in the region, the different types of markets, and how renewable generation and distributed energy resources are being integrated into these markets.

EUB Webinar (Jan. 2021)

In partnership with NB Energy Utilities board, SGIN presented: What Happens in a NBEUB Electricity Rate Matter?

6- PARTNERSHIPS & COLLABORATIONS

In establishing its place in the ecosystem as the grid edge, there are a number of entities identified where SGIN can mutually benefit from benefit from formal relationships.

Electricity Human Resources Canada (EHRC)

Electricity Human Resources Canada (EHRC) and Smart Grid Innovation Network Canada Inc. (SGIN) have agreed to work together in 2021/2022 to foster collaboration and provide a partnership for both organizations to actively support the field of human resources in Canada's electricity industry in alignment with both EHRC and the SGIN's mandates. By developing this relationship, EHRC and SGIN seek to enhance each organization's effectiveness by leveraging the visibility, communications reach and access to audiences that a partnership can offer through the development and implementation of this MOU. The MOU was signed in March of 2021.

Marine Renewables Canada (MRC)

Marine Renewables Canada and the Smart Grid Innovation Network Canada have entered into an affiliation agreement to share knowledge and support the development of cleaner energy systems through marine renewable technology and the associated grid operations improvements needed. This agreement will increase collaboration to benefit industry in Canada and support the federal and provincial governments to increase the clean generation in our energy mix.

Marine renewable energy presents a predictable, reliable resource that can produce clean electricity for both remote communities using diesel, as well as larger grid-connected users. While the predictability and reliability of marine renewable energy can complement the use of other forms of renewable energy like wind and solar, integration of different renewable energy resources can be a challenge. Smart grid technology can provide a solution to integrating all renewable resources and optimizing their value to the electricity system. On this new collaboration, Elisa Obermann, Executive director of Marine Renewables Canada said, "We have many members working to provide marine renewable energy solutions in Canada and internationally. By working more closely with the Smart Grid Innovation Network and its membership, our members can collaborate on developing integrated systems that can be used by remote communities and utilities. This is another step towards ensuring marine renewable energy plays a role in our future electricity mix and contributes towards action on climate change and growing the blue economy."

Canada is blessed with an abundance of opportunities for marine renewables. Enabling grid interconnections connections, flexible energy storage and grid operations are critical components of delivering this clean energy where and when it is needed. We look forward to working closely with Marine Renewables Canada to cultivate this opportunity in Canada. By working together, we can help industry collaborate on key issues, build partnerships, and share information that will support advancement of the entire ecosystem.
More at www.marinerenewables.ca

marine renewables canada

7- SGIN INC.

In 2020, SGIN became a legal non- profit organization with the national mandate. Additionally, SGIN was proud to relaunch as a member driven organization with a mission to foster Canada's transition to a clean energy future. All members of the Canadian energy sector are encouraged to join. SGIN is excited to welcome 64 new members who have joined the organization in 2020.

Membership Levels

Energy Transition Champion

Energy Transition Champion membership represents a corporate member who is a pioneer and guiding force in a smart energy transition industry. They play a leadership role by contributing to the strategic direction of the industry and the network. This membership is recommended for those who want to get more involved in supporting SGIN and may nominate someone to represent them on the board.

Annual Fee:
$10k for organizations with fewer than 1,000 employees.
$25k for organizations with more than 1,000 employees.

Energy Transition Leader

Energy Transition Leader membership is designed for key players and influencers in the industry. This class includes organizations who are active in the association, wish to benefit from relationships, and increase their presence in the network.

Annual Fee:
$1,000 for organizations with fewer than 5 employees.
$3,000 for organizations with more than 5 employees.

SGIN INC.

Membership Levels cont.

Individual

Individual members are designated for people who support and advocate for energy transition. These individuals have no corporate interests.
Annual Fee: $100

Student

Student members may have an interest in learning more about the industry and being exposed to opportunities to learn, connect to industry leaders, and potential job prospects.
Annual Fee: Free

Affiliate Member

This level is for individuals who simply want to get involved in the dialogue. Annual Fee: Free

Association Member

These membership classes are identified for other associations who wish to mutually exchange knowledge and interface with our collective membership (reciprocal membership).
Annual Fee: Call to Discuss

We thrive on the diversity of our membership which creates a strong voice of support and advocacy for the energy transition in Canada, and around the world.

Benefits of Member Services:

- BUSINESS DEVELOPMENT & NETWORKING
- POLICY DEVELOPMENT, ENGAGEMENT & ADVOCACY
- FOSTERING COLLABORATION & INNOVATION

SERVICE OFFERINGS

Technical Support

SGIN supports vendors with technical service needs such as:

1) Connecting their product to the Smart Grid
SGIN is in partnership with Siemens Lab in efforts to help connect vendors' products with the Smart Grid.

The Siemens Lab has the following assets:

- **Interoperability testing:** Siemens DEMS, OpenADR 2.0a, 2.0b, other protocols, and energy management systems
- **Simulated 'plug & play':** DER simulation, DER management system
- **Consulting:** Open standards implementation, test case execution

About OpenADR (Automated Demand Response) :
Demand Response (DR) and Distributed Energy Resources (DER) programs help utilities maintain grid reliability and enable customers to realize the significant value. Unfortunately, existing proprietary solutions add unnecessary cost and complexity. The Open Automated Demand Response (OpenADR) protocol was created to standardize, automate and simplify DR/DER to enable utilities to cost-effectively meet growing energy demand, and for customers to control their energy future.

2) **Lab and field trials with host utilities, municipalities, or building owners.**
Smart Grid product faces technical challenges that are difficult to solve independently.
In partnership with the University of New Brunswick (UNB) and New Brunswick Power to help connect vendors' products with:

- Power engineering challenges require connectivity to the grid.
- Design challenges require deep electrical engineering or computer science knowledge/skills.
- Sandbox environment and testing products and services with real utility customers is required.

The UNB Lab has the following assets:
Assets & Services:

- Research & development
- Power system simulations
- Smart grid software testing, training and demonstration
- Prototype development

The NB Power Lab has the following assets :
Assets & Services:

- Smart product test benches
- Utility demand response integration testing
- Building energy management test bench
- Public communications network testing
- Testing automation and data analytics

SERVICE OFFERINGS

Government Support

SGIN helps its government members promote their local industry in foreign markets. We provide services such as:

Trade mission planning and delivery

Whether you're attending a trade mission physically or virtually, the behind the scenes coordination of such an event is critical to its success. SGIN offers trade mission planning and delivery services in efforts to enable collaboration and exchange ideas and opportunities within the Smart Grid and Energy sectors.

- Schedule meetings, conferences, panels and sessions
- Arrange guest speakers
- Handle event logistics
- Align publications with stakeholders
- Ensure participants get the most out of their experience

Industry Reports

SGIN is equipped with the expertise and resources necessary to create well-informed industry reports. SGIN sources expertise from internal and external members and/or groups to compile vital information such as industry forecasts, trends, challenges in order for federal governments to perform effective trade emissions.

SERVICE OFFERINGS

Community Engagement

Leadership Forums

As part of engaging the community, SGIN hosts leadership forums to explore opportunities in digital energy. By hosting such forums and bringing several different perspectives together, SGIN is able to have a collaborative approach to prioritizing activities and shaping messaging within the energy ecosystem.

Workshop Organization

SGIN organizes a number of workgroups that gather on a regular basis to tackle a set of evolving topics in the energy industry (technology benefits, electrification pathway, greenhouse gas reduction pathway, distributed energy resource pathways). Our association aids in providing solutions for the challenges addressed in such workshops.

Conference Design Services

SGIN has significant experience with organizing and executing educational events within the energy industry. Our organization is skilled in leading event logistics and designing relevant content for such conferences. Furthermore, in order to exhibit productive collaboration, it is important there are representatives from several groups in attendance. SGINs ties with governments, utilities, the business community, technology vendors, media, engineering, NGO/non-profits, and economic development agencies within the energy industry are beneficial to conference outcomes.

SGIN LinkedIn Community

Being a part of SGIN's private Linkedin Group forum will allow you to connect, share ideas, and build relationships with a national network of like-minded professionals. A source for exclusive access to news articles, industry reports, webinars, conferences, networking opportunities, services and advocacy.

FINANCIAL REPORT

The following financial information outlined below represents Smart Grid Innovation Network Inc. which was incorporated under the laws of the Province of New Brunswick. Its main business activity is to support Canada's clean energy transition by advocating for the smart energy sector. The Company is registered as a not-for-profit organization under the Income Tax Act, and as such is exempt from income taxes. This highlighted report provided by Daye Kelly & Associates is a representation of the period September 8th, 2020 ending in March 31st, 2021.

Statement of Financial Position

March 31	2021
ASSETS	
CURRENT	
Cash	$ 4,270
Accounts receivable	33,311
	$ 37,581
LIABILITIES	
CURRENT	
Accounts payable and accruals (Note 2)	$ 8,928
Deferred revenue	26,000
	34,928
MEMBERS' INTEREST	
MEMBERSHIP (Note 3)	2,653
	$ 37,581

Statement of Operations

For the Period September 8, 2020 to March 31	2021
REVENUE	
Product and services	$ 8,466
EXPENDITURES	
Salaries and benefits	2,732
Insurance	422
Professional fees	2,500
Interest and bank charges	159
	5,813
EXCESS OF REVENUE OVER EXPENDITURES	$ 2,653

Statement of Cash flow

For the Period September 8, 2020 to March 31	2021
OPERATING ACTIVITIES	
Cash received from customers	$ 6,325
Cash paid to suppliers and employees	(2,055)
	4,270
INCREASE IN CASH	4,270
CASH - BEGINNING OF PERIOD	-
CASH - END OF PERIOD	$ 4,270

Statement of Changes in Members' Interest

For the Period September 8, 2020 to March 31	2021
BALANCE - BEGINNING OF PERIOD	$ -
EXCESS OF REVENUE OVER EXPENDITURES	2,653
BALANCE - END OF PERIOD	$ 2,653

Notes to Financial Statements

1. **SIGNIFICANT ACCOUNTING POLICIES**

The accounting policies of the Company are in accordance with Canadian accounting standards for not-for-profit organizations. Outlined below are those policies considered particularly significant.

Cash and Cash Equivalents

The Company's policy is to disclose bank balances under cash.

Revenue Recognition

Revenue is recognized when service is provided and ultimate collection is reasonably assured at the time of performance.

Notes to Financial Statements cont.

Financial Instruments

The Company initially measures its financial assets and financial liabilities at fair value. It subsequently measures all its financial assets and financial liabilities at amortized cost.

Financial assets subsequently measured at amortized cost include cash, short-term investments and accounts receivable. Financial liabilities subsequently measured at amortized cost include accounts payable and accrued liabilities.

Unless otherwise stated, it is management's view that the fair value of these items either approximates amortized cost, or cannot be readily determined.

Management believes the Company has no material risk of default by debtors or exposure to changes in exchange rates, interest rates, or other market prices.

Use of Estimates

Under Canadian accounting standards for not-for-profit organizations, management is required to make estimates and assumptions to prepare financial statements. These estimates are based on management's best knowledge of current events and actions that the Company may undertake in the future. These estimates and assumptions may affect the amount of assets and liabilities presented as at the reporting date and the reported amount of revenue and expenditures during the fiscal period. Actual results may be different from the estimates and assumptions used.

2. ACCOUNTS PAYABLE AND ACCRUALS

Trade payables and accruals	$ 2,922
HST payable	5,170
Payroll remittances	836
	$ 8,928

3. MEMBERSHIP

There are two classes of members in the Company. The two classes of membership are:

a. Class A voting
b. Class B non-voting

The initial Class A voting members are:

a. The University of New Brunswick
b. NB Power
c. Siemens Canada Limited

Each member of the Class A voting shall be entitled to receive notice of, attend and vote at all meetings of the members of the Company.

Each member of the Class B non-voting shall be entitled to receive notice of and attend all meetings of the members of the Company.

Notes to Financial Statements cont.

4. RELATED PARTY TRANSACTIONS

In the course of regular business activities, the Company has routine transactions with related parties. The Company received membership fees from NB Power for $25,000 and services from UNB for $2,966. Such transactions were measured at the exchange amount, which is the amount established by and agreed to by the related parties.

5. COVID-19 PANDEMIC

In March 2020, a worldwide pandemic was declared by the World Health Organization. This pandemic has resulted in a widespread health crisis that has affected the economies and financial markets around the world resulting in an economic downturn. The Company is continually monitoring the potential impact on its operations and, to the date of the authorization of these financial statements, has not been significantly impacted. However, COVID-19 may affect the ability to continue at its current level of operations. The full extent of the impact on the Company's future financial results is uncertain, given the length and severity of these developments and cannot be reliably estimated.

8- OUR MEMBERS

SGIN is pleased to welcome new members who have joined the organization in 2020:

Energy Transition Champions

Siemens Canada- Troy Kearns
New Brunswick Power Corporation- Lori Clark

Energy Transition Leaders

Envigour Consulting- Bruce Cameron

Affiliate Members

David Sollows
Brian Beaton
Martin Moody
Peter Corbyn
Sarah Corey Hollohan
Alexandre Pavlovski
Darren Lanteigne
Brittany Maclean
Steve Kelly
Jean-Francois Veilleux
Hilliary Baird
Jeff Wilhelm
Thomas Barbieri
Mike Melanson
Francis John Atis
Anu Gupta
Angelo Giumento
Jodi Webb
Geoff Flood
Ron Vanderwees
Chrissy Dreger
Graydon Tranquilla
James Pickard
Haïfa Souifi
Andrew Blair
Grant Erb
Jen Hiscock
Terry Thibodeau
Craig Church
Martin Luckett
Victor Mendez
Kerry Wells
Rim Ben Salah
Danny Pellerin
Bernard LeBlanc
Michael Bedford
Roberta Desserre
Hussain Rizvi
Jill Searle
Lynn Adams
Scott VanBuskirk
Andrew Bedford
Kim McKinley
David Taylor
Pruthvi Brahmchatt
Chris Tumpach
Brad Crawford
Dan Curwin
Susana Rojas
Diana Cartwright
Kevin Kilbride
Ted Parisé
Chris Diduch
Colleen D'Entremont
Marlene Moore
Barbara Sawyer
Geoff MacDonald
Ryan Gavin
Kristine Burke

9- SGIN 2020-2021 STRATEGIC PLAN

Overview:

- Target metrics set for Nov. 2019 to Aug 2021
- Each goal is allocated to a working committee
- Each working committee is supported by staff as identified in Appendix A – E.
- Each goal is further broken down by quarterly targets

Continue to Build and Strengthen the Network

Goals:

- Sign up 6 paying members
- Provide 25 services to vendors or other organizations (utilities and municipalities)
- 3 new working committees
- 5 new member representatives on working committees
- Establish 2 new partnerships
  (See appendix A)

Enhance Capability for Smart Grid Technology Development and Testing

Goals:

- Establish budget for SGIN 2.1 that targets 20% self-funded
  (*See appendix B)*

Formalize the Organization

Goals:

- Secure $140K in membership fees
- 4 new Board members
  (See appendix C)

Go to Market Strategy

Goals:

- Launch 1 new offerings
- Establish marketing capability
  (See appendix D)

Knowledge Acquisition and Dissemination

Goals:

- Hold 12 webinars
- Hold 1 virtual conference
- Publish 6 articles
  (See appendix E)

SMART GRID INNOVATION NETWORK

10- WHAT'S NEXT

As it aligns with our strategic plan 2021 activities will be focused on the following key areas:

Membership

While COVID protocols remain in place, we will continue to engage existing and future members primarily virtually. We welcome networking event topics like this one for our future events and would like to give you the members a chance to highlight what you are passionate about.

We will be updating our web presence to bilingual to support more member needs and fit into our federal Government guidelines. Finally, we will be launching our working committees. These committees are an important place for communities of practice to group to propose activities that support the industry.

Operational Activities

At our AGM 2021, we will be calling for nominations for seats on the board. Voting members will get the opportunity to take part in shaping the future of the Smart Grid Innovation Network Canada Inc. The existing board has approved the call for nominations, and it is attached as an appendix to this report. Nominations

SGIN is currently expanding its technical team and has a posting for a new resource. If you are aware of a good candidate who understand the Smart Energy space, please reach out to **Info@sgin.ca**

Based on our membership input, SGIN will launch working committees.

Existing Offerings

SGIN has a track record for providing good services to its clients. We will continue to support vendors in getting their product grid ready and provide business coaching, support local and federal government in local and export activities such as trade missions and supply chain development and provide educational opportunities such as webinar topics.

We are hopeful that COVID restrictions will permit us to resurrect our in-person Energy Innovation Forum in early 2022. In May we will be launching an electrification webinar series to expand the dialogue on how more intense electrification of our infrastructure can provide many social, grid and consumer benefits. Finally in 2021 we will complete a project launched last year around a micro market to support a municipal utility understanding of the opportunities demand response using distributed energy resources can provide to their grid management.

We are hopeful that COVID restrictions will permit us to resurrect our in-person Energy Innovation Forum in early 2022. In May we will be launching an electrification webinar series to expand the dialogue on how more intense electrification of our infrastructure can provide many social, grid and consumer benefits. Finally in 2021 we will complete a project launched last year around a micro market to support a municipal utility understanding of the opportunities demand response using distributed energy resources can provide to their grid management.

New Offerings

SGIN is currently in product development lifecycle to launch 2 new offering. These offerings are a Smart Energy Supply Chain Database and a Community Electrification Pilot. In 2021 we will complete the offering evaluation and develop an implementation plan based on the results.

SGIN is entering a strategic planning phase from May to July to help us shape our future in 2022 and beyond. We welcome members who wish to participate. Currently the idea bank is quite large but includes concepts such as a Smart Energy Collaboration Center, Open Energy Information, Energy Transition Education all of which are linked to how we can support grid modernization that can accommodate cleaner energy providers and users.

SMART GRID INNOVATION NETWORK

11- CALENDAR OF EVENTS 2021-2022

2021

April

- AGM
- Electrification Series Session #1

May

- Electrification Series Session #2
- Kickoff of Working Committees

June

- Virtual Member Networking Event
- Monthly Working Committee Meetings
- Electrification Workshop- Town Hall Meeting

July

- Monthly Working Committee Meetings
- Distributed Energy Resource Pathways Webinar
- Member Social Event (Virtual)

September

- Working Committee Alignment Meeting
- Energy Data Webinar

October

- Energy Transition Champion Leadership Forum
- How the Grid Supports GHG Pathways Webinar

November

- Student Information Webinar Session (University/College invite)

December

- Members Christmas Event
- Working Committee Alignment Meeting

2022

January

- Announce Spring 2022 SGIN Conference Event
- Valuing Energy Transition Webinar

SMART GRID INNOVATION NETWORK

12- APPENDIX

Goals and Objectives 2019-2021

Appendix A - *Continue to Build and Strengthen the Network*

Activity	Description	Target Date	Status	Committee
Establish working Structure	Non-Profit organization created, Membership committee established, Establish the org established, technical committee drafted	Sept 15	Complete	Board
Design and launch membership drive	Contract marketing org for support, design recruitment strategy, publish member drive, personal touch points	Sept 30	Complete	Membership
Member Involvement	Recruit members for committee participation into committees	Dec 2020	Complete	Membership
Partner reach out	Candidate Partnerships: Marine Renewable Canada, Cyber NB, Maritime Energy	March 2020	Complete	Board
Deliver Services	Manage defined and ad Hoch service offing's	Aug 2021	In progress	Technical committee

Appendix B- *Enhance Capability for Smart Grid Technology Development and Testing*

Activity	Description	Target Date	Status	Committee
Define financial targets	Define financial targets		Complete	Board
Launch portfolio development approach	Develop method to identify, priorities, define, launch and operate and terminate offerings		Complete	Establish the Organization
Launch new service(s)			In Progress	Board

Appendix C - *Formalize the organization*

Activity	Description	Target Date	Status	Committee
Legalize SGIN Inc	Finalize incorporate and bi-laws	September 14, 2020	Complete	Board
Board Roles	Establish Board roles (minimally President)	September 30, 2020	Complete	Board
Secure new members	Establish membership, model, launch drive, collect funds	Aug 2021	In Progress	Board
Launch nomination for new board members		Dec 2, 2020	Delayed-April21	Board

Appendix D- *Go to Market Strategy*

Activity	Description	Target Date	Status	Committee
Prioritize offerings	Establish governance over idea list.		Complete	Establish the organization
Define and launch offerings	1 Launched – Stakeholder Webinar (member services) 2 in progress – Electrification, Collaboration Center		Complete	
Validate financial viability	Beta test new offering(s)		Planning phases	
Launch Selected offering(s)	Fully launch offering – ensure capability is established to promote and operate the new offering(S)		Not started	

Appendix E- *Knowledge Acquisition and Dissemination*

Activity	Description	Target Date	Status	Committee
Procure webinar platform			Complete	Marketing and outreach
Establish webinar capability	Create ability to define, market and hold webinars – test		Complete	Marketing and outreach
Create calendar of events			Complete	Marketing and outreach
Virtual Conference	Define, design and hold one virtual conference	Dec 2020	Planned April 21	Marketing and outreach
Publish outreach articles	Develop capability to consistently identify, design and publish awareness articles	Aug 2021	Complete	

Appendix F- Call for Board Nominations

The Smart Grid Innovation Network is a network of leaders in the Canadian smart energy sector. By fostering Canada's transition to clean energy, we will help build stronger, more resilient communities and a sustainable economy.

The Smart Grid Innovation Network supports Canada's clean energy transition by advocating for the smart energy sector. Through education, vendor support, business model innovation and smart grid technology, we will leverage our position in the Canadian energy sector to create impact. We are dedicated to building a clean energy future for the benefit of all Canadians.

The Smart Grid Innovation Network was founded to advocate for the many benefits of smart, clean energy in Canada. As a non-profit, member-driven organization, we promise to:

- Act as leaders, modeling the changes we work towards;
- Remain focused on providing a benefit to society;
- Dedicate ourselves to open and fact-based information sharing;
- Encourage diversity of perspective in the clean and smart energy space;
- Operate on a non-partisan basis;
- Take a holistic system design approach to solving problems through education, vendor support, technology and business model solutions.

SGIN is looking for volunteers to represent SGIN in industry activities. Seats are reserved for Class A voting members and preference will be given to Energy Champion level members. Please see below for the nomination terms. Please check back for updates as we open each nomination period. For questions about any of the openings listed below, please contact Greg Robart at greg@sgin.ca or 506-292-3601

All upcoming deadlines are tentative and subject to change.

Existing Board

Founder Seat – UNB
David Magee – President (officer)
Term: Nov 2020 to Oct 2022

Founder Seat – NB Power
Lori Clark – Secretary (officer)
Term: Nov 2020 to Oct 2022

Founder Seat – Siemens Canada
Troy Kearns – Treasurer (officer)
Term: Nov 2020 to Oct 2022

Call for Nominations 6 seats

Utility – 1 year Term New Board member July 2021 to June 2022 **Policy Representative – 1 year** New Board member July 2021 to June 2022 **Student Representative - 1 year** New Board member July 2021 to June 2022	**Utility – 2-year Term** New Board member July 2021 to June 2023 **Academia – 2 Year** New Board member July 2021 to June 2023 **Vendor – 2 year** New Board member July 2021 to June 2023	**Note: Seat titles are meant to represent the expertise of the individual in the seat, not their employment status.** Diversity is a strong consideration as we select the next board members.

To submit a nomination, please provide a resume and cover letter highlighting your interest in SGIN. Submit your applications to Board Nomination. Thank you!