

# 2021-22 Annual Report



Smart Grid Innovation Network Canada Inc.



# TABLE OF CONTENTS

1. COVER PAGE
2. TABLE OF CONTENTS
3. CEO STATEMENT
4. ABOUT SGIN
5. SGIN BOARD OF DIRECTORS
6. STANDING COMMITTEES
7. OUR WORK
8. ASSOCIATION PARTNERS
9. SGIN 2.0
10. OUR MEMBERS
11. WHAT'S NEXT?
12. 2022-2023 EVENTS
13. 2021 CANADIAN ENERGY HIGHLIGHTS



# CEO STATEMENT

---

As we conclude another year, we reflect on how much we've accomplished during a pandemic and how much potential there still is in the future.

The Smart Grid Innovation Network Canada (SGIN) has approached another difficult business environment head on and despite the impacts of the global pandemic limiting travel and company spending, SGIN has continued to build in this promising sector. Throughout the 2021-2022 year we have held numerous virtual events, trade events, set up and delivered an important project to the smart energy sector for supply chain development. We are all living during a time when the world grapples with clean infrastructure and how we divert from the “traditional” way of thinking to a more sustainable approach that optimizes the assets we have before building more. In August 2021, the Intergovernmental Panel on Climate Change (IPCC), issued an eye-opening report about the current and future impacts of human induced climate change, declaring a 'code red' for humanity. Canada is working towards cleaning up its generation fleet through legislation including the coal phase-out by 2030 and pending Clean Electricity Standard that commits to net zero electricity generation by 2035. Both will set the framework for what is expected to be an unprecedented increase in the need for clean electricity.

Last month the Canadian Climate Institute published its own position paper titled The Big Switch. Driven by the expectation of consumers switching transportation heating and cooking fuel sources from fossil-based sources to sustainable energy sources like electricity, its core findings identify the need for more electricity generation from 2.2 to 3.4 times more, cleaner generation incorporating 31 - 75% more generation compared to only 6% today, and a need for more flexible and intelligent energy systems.

Earlier this year, SGIN facilitated a process to secure input from our members that fed into our long term and near-term planning priorities. A summary view of this work is identified in this annual report and includes activities that are ongoing such as trade support, supply chain inventories and supporting activities that breakdown industry barriers. Also, in partnership with some of our members, the Smart Grid Innovation Network Canada worked to secure an important piece of work to create a benchmarking dashboard for the Smart Energy sector across the country. This work launched in 2022 and will continue through to the end of 2024. Watch for the more public announcements soon.

Our priorities for the upcoming 2022-2023 year include the completion of the Smart Energy Supply Chain Export Study and online database and benchmarking scope of work, extending our participation to other jurisdictions, supporting vendors through smart energy measurement, verification service offerings, and supporting provinces and communities to understand what their role is in using and generating between 2.2 and 3.4 times more electricity than we have today.

Thank you to our members and association partners for your continued support. We look forward to the 2022-2023 year.

**GREG ROBART**

CEO

Smart Grid Innovation Network Canada Inc.



# ABOUT SGIN

## MISSION

We foster Canada's transition to a clean energy future.

## VISION

The Smart Grid Innovation Network Canada 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.

## WHY SGIN?

Smart Grid Innovation Network Canada is a national member network focused on supporting implementations in the smart energy sector for the purpose of decarbonization and grid resilience. We do this by understanding and leveraging diversity of regional strengths and providing opportunities to co-create and mobilize knowledge and connections across the country. SGIN is dedicated to building a clean energy future for the benefit of all Canadians.



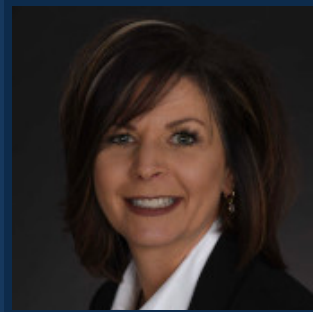
# SGIN BOARD OF DIRECTORS

## Board of Directors

SGIN restructured its Board and governance in 2021-2022 with the addition of six new Board seats which are now held by individuals from across Canada and represent policy, utilities, academia, vendors, and students.



Dr. David Magee  
**Board Chair**



Lori Clark  
**Secretary**



Troy Kearns  
**Treasurer**



Ahmed Hanafy  
**Policy Representative**



Ryan Mitchell  
**Utility Representative**



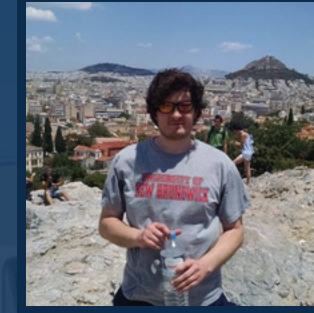
Jeff Mocha  
**Utility Representative**



Gilles Roy  
**Academia Representative**



Daniel Larsen  
**Vendor Representative**



Brandon Kirby  
**Student Representative**



# STANDING COMMITTEES

The following standing committees were active throughout 2021-2022:

## Steering Committee

Brent Staeben (NB Power)  
Blake Hunter (NB Power)  
Martin Lockett (Opportunities New Brunswick)  
Andrew Blair (Opportunities New Brunswick)  
Hart Devitt (University of New Brunswick)  
Michael Bourque (University of New Brunswick)  
Sonya Hull (Siemens) transitioning

## Establish / Grow the Organization

Martin Lockett (Opportunities New Brunswick)  
Blake Hunter (NB Power)

## Marketing & Outreach

Andrew Blair (Opportunities New Brunswick)  
Brent Staeben (NB Power)  
Jenn Bowes (Smart Grid Innovation Network Canada)

*We are currently working on remodeling our committee structures and we look forward to diversifying and growing our new committee membership throughout 2022-2023!*



# OUR WORK

There were a number of initiatives launched by SGIN throughout 2021-2022 with an intent to understand its value in the market so that it can move further toward self-sufficiency and providing maximum benefit to its membership network. Below is a list of some of those initiatives:

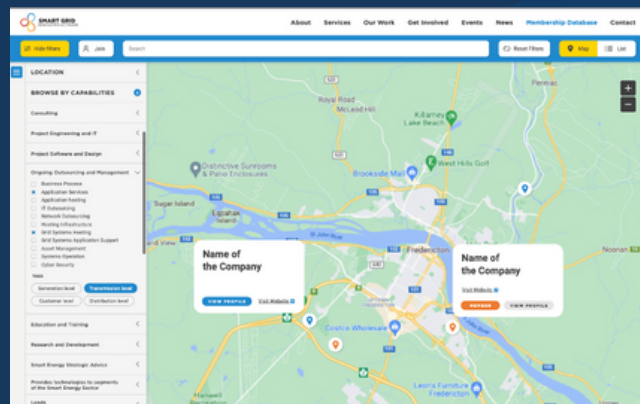
## EXPORT TRADE SUPPORT

### ATLANTIC SMART ENERGY SUPPLY CHAIN EXPORT STUDY

In June 2021, SGIN launched an Atlantic Smart Energy Supply Chain Export Study for product and services companies of Atlantic Canada's smart energy sector. The Atlantic Smart Energy Supply Chain Online Database was designed as a tool to support industry growth by connecting Canada's smart energy expertise with capability needs across Canada. The project included two main objectives:

- To characterize the supply chain sector in Atlantic Canada with a view to collect information to be included in an online directory.
- To understand the need for any sector specific export marketing supports and then develop a program(s) that could meet those needs.

We will officially launch the Smart Energy Supply Chain Online database in June 2022!



The project was supported in part through the Atlantic Trade and Investment Growth Agreement.

## ENLIT EUROPE

In 2021, SGIN received funding to lead a mission of 10-15 Canadian companies and energy sector stakeholders to explore business opportunities in the renewable energy systems sector in Milan, Italy and other European markets by participating in Enlit Europe Conference and Trade Show in November 2021. Due to the COVID-19 outbreak, and Public Health and Provincial restrictions, SGIN made the decision to withdraw from attending the in-person event.



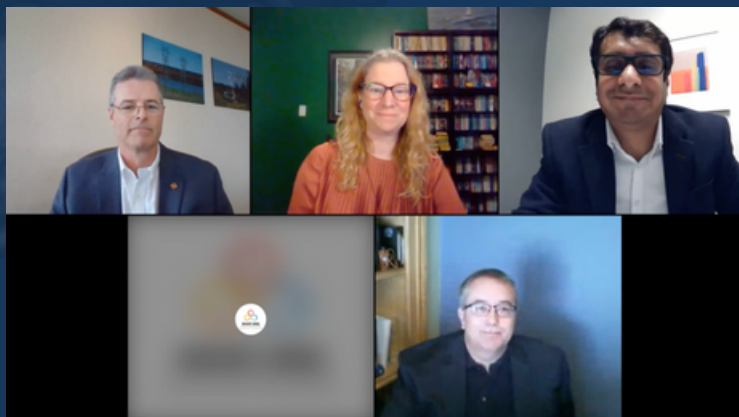
## OUR WORK

### KNOWLEDGE SHARING EVENTS & WEBINARS

SGIN has led various public facing education events and actively supports other organization and industry associations in their planning activities or delivery of specific events. Many of the knowledge sharing webinars focused on Regulatory, Smart Grid Project, Smart Energy basics, and Beneficial Electrification Webinar Series. This section highlights some of those events.

#### Beneficial Electrification Webinar Series

In June and May 2021, SGIN hosted a two-part webinar on Beneficial Electrification. The first session discussed “What is Beneficial Electrification? Why is it important” and featured panelists from Siemens Canada, Dunksy Energy + Climate Advisors, and NB Power. The second session discussed “Deployment Challenges and Opportunities” and featured panelists from OEC, Vehicle Technology Centre, Electricity Human Resources Canada and the City of Summerside. (May - June 2021)



#### Part 1: What is Beneficial Electrification? Why is it important?

Pictured top (L-R): Keith Cronkhite (NB Power), Raegan Bond (Dunksy Energy + Climate Advisors), Shah Nawaz Ahmed ((Siemens), Greg Robart (SGIN Canada).



#### Part 2: Deployment Challenges and Opportunities

Pictured top (L-R): Jeff Mocha (OEC), Mark Chapeskie (Electricity Human Resources Canada), Greg Gaudet (City of Summerside, PEI), Ron Vanderwees (Vehicle Technology Centre Inc.), Greg Robart (SGIN Canada).





## OUR WORK CONT.

### SGIN Member spotlight: Siemens Smart Energy Learning Campus

Murray McIntyre from Siemens Canada presented on the Smart Energy Learning Campus and provided an overview of today's campus buildings as they become smarter, generating data about their operations, and gaining the ability to interact with the electricity grid, digital management systems, and their occupants.



*Pictured top (L-R): Greg Robart (SGIN Canada), Murray McIntyre (Siemens)*

### ADVISORY SUPPORT

SGIN provided advisory and professional services for a number of organizations across Canada throughout 2021 - 2022.

#### Beneficial Electrification Discovery Project

Beneficial electrification has been identified as a significant strategy to support Canada's net zero goals. SGIN was engaged by an organization who was looking to understand economic development opportunities surrounding beneficial electrification in a specific region in Canada through an initial discovery project. The end goal was to inform the region on how they can enable programs to support economic development including investment attraction, business resiliency, and growth along the existing expanding electrification supply chain.

SGIN focused on:

- How other regions have enabled this strategy and the results.
- Understanding the beneficial electrification potential and forecasts for each industry sector, including how beneficial electrification can align to the region's net zero targets.
- Identify the information gaps with respect to key assets (information, physical, workforce, etc.)
- Exploring the strengths, weaknesses, threats, and opportunities surrounding beneficial electrification.

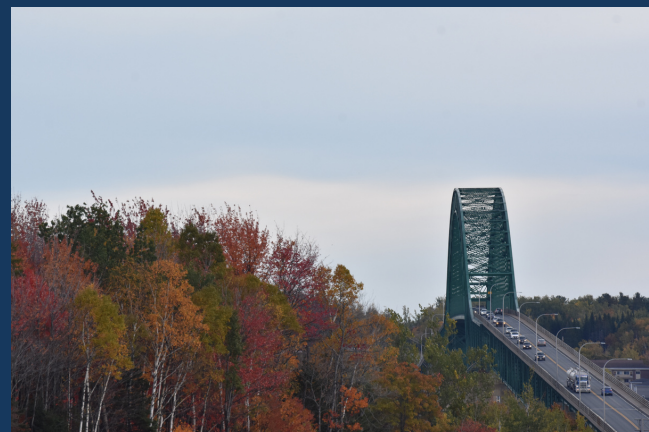
## OUR WORK CONT.

### ADVISORY SUPPORT

#### Positioning Canadian Province to Attract Clean Investment

SGIN was hired by Viable Solutions as an advisor to develop New Brunswick's positioning to attract clean investment. As New Brunswick seeks to attract more clean investment, we will need to better understand the province's clean investment value proposition. SGIN examined global trends to better understand what a "clean" or "sustainable" investment means to international corporations who may be investing in New Brunswick. This project includes:

- Understanding existing global rankings and determining if any of them should be prioritized by the province.
- Understanding New Brunswick's value proposition for clean or sustainable investments.




### STRATEGY REFRESH

In 2021, SGIN took stock of the opportunities presented to the organization and realized that it had the chance to play a stronger role in supporting energy transformation. Smart grid market, regulatory, technology, workforce and business model needs have shifted, opportunities have opened up on a national scale and SGIN is poised to leverage the work done since its inception. The original founding members - NB Power, Siemens and University of New Brunswick remain involved and have been instrumental in launching SGIN Canada to serve broad smart grid market needs across the country.

In order to take advantage of this new direction for the organization, SGIN engaged the Pond-Deshpande Centre at UNB in early 2021 to assist in the development of this organizational roadmap to take the organization into its next level of development. SGIN engaged with stakeholders in the development of the roadmap.

# OUR WORK CONT.

SGIN will leverage its strengths in its business model and its members, aligned with a strong social purpose, to provide membership value and address societal needs federally and locally. We will execute the fundamental facets of managing and growing the organisation well, and follow the below structure and best association management practices.



**VISION:** A clean energy future for all Canadians.

**MISSION:** We foster Canada's transition to a clean energy future.

SGIN is a national member network focused on enabling smart energy sector for the purpose of decarbonization. We do this by understanding and leveraging diversity of regional strengths and providing opportunities to co-create and mobilize knowledge and connections across the country. We are dedicated to building a clean energy future for the benefit of all Canadians.

**PIRORITIES & RELATED GOALS**

MEMBER SERVICES		ORGANIZATIONAL SUSTAINABILITY			KNOWLEDGE ACQUISITION & DISSEMINATION		ADDRESSING INDUSTRY CHALLENGES	
<b>Enhance Member Services</b>	<b>Expand services nationally</b>	<b>Formalise the delivery model</b>	<b>Formalise the revenue and business model</b>	<b>Diversify revenue</b>	<b>Develop and deliver a national SE knowledge management strategy in partnership with prov &amp; fed gov.</b>	<b>Enhance market presence through tool-kit approach</b>	<b>Baseline and continually address initial priorities</b>	<b>Address current known industry challenges, leveraging existing services</b>
<ol style="list-style-type: none"> <li>1. Trade event for members.</li> <li>2. (2) member interaction events/year.</li> <li>3. Searchable national database.</li> <li>4. Member profile opp.</li> <li>5. Member opp to work on SGIN SE projects.</li> <li>6. Multi-year national export support strategy.</li> <li>7. Revenue-generating working groups.</li> <li>8. National, member advocacy event / year.</li> <li>9. Equity Diversion and Inclusion program.</li> </ol>	<ol style="list-style-type: none"> <li>1. Partnership(s) with indigenous community associations. Rep in Board and working committees.</li> <li>2. Presence into 60% of provinces.</li> <li>3. Services/ info in Canada's Official Languages.</li> <li>4. Launch work involving members in each province.</li> <li>5. National member working committee.</li> <li>6. National marketing campaign.</li> </ol>	<ol style="list-style-type: none"> <li>1. PM method/toolset.</li> <li>2. New service offering re: SE projects.</li> <li>3. National partnership/ affiliate model.</li> <li>4. Case study / lessons learned library</li> <li>5. Capability model associated improvement plan.</li> </ol>	<ol style="list-style-type: none"> <li>1. Formalize sales process</li> <li>2. Member inclusive enterprise sales strategy for the fed/ prov gov</li> <li>3. Funding plan for the next 12 months.</li> </ol>	<ol style="list-style-type: none"> <li>1. Market assessment/ national relaunch plan of existing offerings.</li> <li>2. Program admin offering</li> <li>3. Establish process to capitalize on opp funds.</li> <li>4. Develop capacity building opportunity.</li> <li>5. Partnership strategy with Energy Champions.</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop knowledge HUB Strategy lead by a SE knowledge hub partnership.</li> <li>2. Hold inter-organization national event to share knowledge.</li> <li>3. SE learning platform.</li> </ol>	<ol style="list-style-type: none"> <li>1. Build database &amp; CRM.</li> <li>2. Build website traffic and impressions.</li> <li>3. Engage media through press release campaign.</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop approach to prioritize /address industry challenges.</li> <li>2. Launch priority industry challenge national project(s).</li> <li>3. Complete cross sector national baseline report.</li> <li>4. Release report card on SE capability annually.</li> <li>5. Develop industry relevant white paper.</li> </ol>	<ol style="list-style-type: none"> <li>1. Perform market needs assessment for lab environment.</li> <li>2. Develop national database of SE companies.</li> <li>3. Champion national electrification for SE + Decarbonization strategy – develop a public campaign for proposal and member funding.</li> </ol>

## OUR WORK CONT.

### ASSOCIATION SUPPORT

Throughout 2021, SGIN supported other regional and national Associations such as:

- **Energy Fundamentals** – hosted by Atlantica Centre for Energy,
- **Clean Tech Advisory Committee** – hosted by Springboard Atlantic,
- **SCADA Job Standard Definition** – hosted by Electricity Human Resources Canada,
- **Big Green Ideas for Atlantic Canada’s Economic Recovery** - Marine Renewables Canada,
- **Operations Summit: Summer Spotlight** - Canadian Renewable Energy Association
- **Flexibility by Design** – Canadian Renewable Energy Association,
- **Careers in Renewable Energy** – The Gaia Project,
- **Solar Show 2022 Nerding Out for Net-Zero** - Solar Alberta,
- **Swiss-Canadian Cleantech Innovation Summit** -This event was jointly organized by the Swiss State Secretariat for Education, Research and Innovation (SERI), the Swiss State Secretariat of Economic Affairs (SECO), the Embassy of Switzerland in Canada, Global Affairs Canada (GAC), Innovation, Science and Economic Development Canada (ISED), and the Embassy of Canada in Switzerland

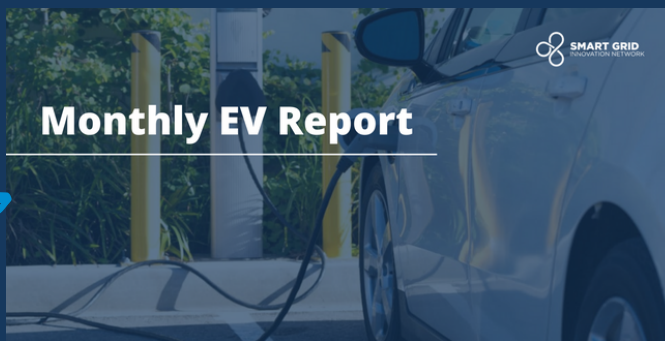


## OUR WORK CONT.

### SGIN MONTHLY EV REPORTS

In January 2022, SGIN published a monthly EV report written by SGIN Member, Andrew McPherson. Each report explores latest EV news and discusses manufacturers updates, infrastructure, trends, issues and observations.

Visit: <https://www.sgin.ca/news-events> to catch up on the latest reports!



### SGIN MONTHLY NEWSLETTER

In 2021, SGIN launched a monthly newsletter that covers SGIN events & activities, upcoming industry events, a monthly member spotlight, Canadian Energy Transition highlights, student leadership opportunities, and funding opportunities.

**SMART GRID INNOVATION NETWORK**

### SGIN'S MONTHLY NEWSLETTER

What's inside the January 2022 Newsletter:

- ✓ SGIN Events & Activities
- ✓ Upcoming Industry Events
- ✓ Monthly Member Spotlight
- ✓ Canadian Energy Transition Highlights
- ✓ Student Leadership Opportunities

### UPCOMING INDUSTRY EVENTS

SGIN has compiled a list of upcoming Energy Transition events for the industry taking place in April 2022:

- Efficiency For All: Low-income energy efficiency programs in Canada**  
Efficiency Canada  
April 1st 2022
- Leadership Conference for Women in Energy Canada**  
EUCI  
April 20-21, 2022 (virtual)
- EHRC Awards of Excellence**  
Electricity Human Resources Canada  
April 28th 2022

### SGIN EVENTS & ACTIVITIES

Atlantic Smart Energy Supply Chain Export Study Webinar Series

### MONTHLY MEMBER SPOTLIGHT

Every month we will feature an active member of the SGIN network in our newsletter. This spotlight will introduce leaders in the energy transition, and provide member insight and involvement.

In March, we are spotlighting SGIN Energy Transition Leader Member, **OEC!**

OEC serves the electricity distribution, infrastructure, energy and power generation sectors. With over 1,600 employees, they provide insightful and reliable energy and infrastructure solutions to clients across Canada and beyond. Driven to lead, innovate and commit to excellence, they partner with their clients to create value. Their group of companies deliver end-to-end solutions from conception and design to engineering, construction and comprehensive field services across a wide array of services.

[Explore OEC](#)

Stay Tuned - SGIN will continue to highlight our network of members throughout the upcoming months.

What isn't listed on our Industry Events? Let us know!

# ASSOCIATION PARTNERS

## MARINE RENEWABLES CANADA

In 2021, SGIN established an affiliation agreement with Marine Renewables Canada 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.



## ELECTRICITY HUMAN RESOURCES CANADA

In 2021, SGIN established a strategic partnership with Electricity Human Resources Canada to work together 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 SGIN's mandates. By developing this relationship, EHRC and SGIN hope to enhance each organization's effectiveness by leveraging the visibility, communications reach, and access to audiences that a partnership can offer.



## DECENTRALIZED ENERGY CANADA

In 2022, SGIN established a strategic partnership with Decentralized Energy Canada to work together to foster collaboration and provide a partnership for both organizations to strengthen the friendship and cooperation between the two organisations through cooperation in the specialised areas of smart energy and decentralised energy, based on the principle of mutual benefits. We look forward to this new partnership!



# SGIN 2.0

---

## SGIN FINISHES SGIN 2.0 PROJECT WITH ACOA DECEMBER 2021

In 2016, SGIN launched as a partnership between NB Power, Siemens Canada, and the University of New Brunswick, all of whom were active on smart grid activities in New Brunswick. The goal of SGIN was to bring together experts and leaders in smart grid innovation to ensure the smart grid transition work being done in New Brunswick would be transformational and the lessons learned would be applied to new jurisdictions. In 2018, SGIN along with its Board and Steering Committee embarked on a journey to develop a roadmap that would take them into the coming years. This work has been instrumental in the achievements of SGIN over the last few years in Atlantic Canada.

In 2019, Atlantic Canada Opportunities Agency (ACOA) supported SGIN 2.0, the new project administered by the University of New Brunswick. The project end date for this contract was March 31st, 2021, which was later extended to December 2021.

In November 2020, a new not for profit company was established, the Smart Grid Innovation Network Canada Inc. SGIN Canada Inc. was established to leverage the work started by the founding partners. As part of the growth of the organization, SGIN has redesigned its Board and governance, including 6 new seats held by individuals both in Atlantic Canada and other provinces. During its original years, SGIN did not have a member model and feedback from the public was that SGIN was behaving like a closed shop. With the re-launch of a membership drive, our member network now includes approx. 190 members, a mix of paid and affiliate members from across Canada.

The SGIN 2.0 project was completed in December 2021, and because of ACOA, SGIN, and its founders, New Brunswick is now recognized as an innovation leader in the smart grid space. SGIN looks forward to supporting the growth of our network to enable the regions' efforts to reach NetZero while improving grid resilience, we are dedicated to accelerating energy innovations in a rapidly changing sector.

# OUR MEMBERS

## ENERGY TRANSITION CHAMPIONS

### NB POWER

Their 2,300 employees are dedicated to providing expert service and safe, reliable electricity at low and stable rates. The electricity NB Power generates at their 14 facilities throughout New Brunswick is delivered via power lines, substations and terminals to more than 350,000 New Brunswick homes, businesses, hospitals and schools. They also export some of the electricity we generate to New England, Quebec, Nova Scotia and Prince Edward Island.



### SAINT JOHN ENERGY

Saint John Energy is a progressive energy company providing trusted energy solutions to residential and business customers in Saint John, New Brunswick. Locally owned and operated since 1922, it is one of the highest-rated electrical utilities in Canada for reliability and customer satisfaction and holds the coveted Sustainable Electricity Company designation. Its commitment to innovation has earned it national and international acclaim, including an Award of Excellence from the International Smart Grid Action Network for innovation and a Clean50 Award for outstanding commitment to sustainability.





# OUR MEMBERS

## ENERGY TRANSITION CHAMPIONS

### SIEMENS CANADA

Siemens is a technology company focused on industry, infrastructure, mobility, and healthcare. Creating technologies for more resource-efficient factories and resilient supply chains to smarter buildings and grids, to cleaner, comfortable transportation and advanced healthcare, the company empowers customers to transform the industries that form the backbone of economies, transforming the everyday for billions of people.



## ENERGY TRANSITION LEADERS

### DUNSKY ENERGY + CLIMATE ADVISORS

Dunsky Energy + Climate Advisors provides top-level research, analysis and strategic counsel in support of our clients' clean energy and climate goals, with focus on buildings and industry, renewable energy and clean mobility. Their clients include leading utilities, governments, solution providers, large consumers as well as non-profit organizations. Over the years, they have delivered on over 500 projects in 30 provinces and states in North America.



# OUR MEMBERS

## ENERGY TRANSITION LEADERS

### ENVIGOUR POLICY CONSULTING INC.

Envigour Policy Consulting serves clients with an interest in developing or responding to public policy and related programs, and legislation/regulation. Their strength is in the energy sector, particularly in electricity markets, renewables, and efficiency. Their focus includes work on energy information (data) policies and plans; energy efficiency policies and supports; and policies, strategies, regulations for the development of marine renewable energy. Envigour is also a member of Marine Renewables Canada and a founding supporter of PAMEC. Energy Association – a not-for-profit organization dedicated to research into the factors that could lead to the sustainable development of all form of marine renewable energy (from and in a marine environment) in the Americas.



### OEC

OEC serves the infrastructure, energy, renewable generation and electricity, telecommunications and gas distribution sectors. With over 2,000 employees, OEC provides insightful and reliable energy and infrastructure turnkey solutions to clients across Canada and beyond. Driven to lead, innovate and commit to excellence, they partner with clients to create value. Their group of companies deliver end-to-end solutions from conception and design to engineering, construction and comprehensive field services across a wide array of services. As a cornerstone of their business, health, safety and the environment is at the core of everything that they do. Through an unwavering focus, OEC is continuously working to ensure the safety of their employees, the public they serve and the environment they live in. The group of companies includes: Planview Utility Services, DPM Energy, QSP Geographics, EMB Management, UTS Consultants, Trans Power, Teraflex, El-Con Construction, PVS Contractors, GTel, Oakville Hydro, OEC Geo-Exchange, OEC Generation, and Golden Horseshoe Metering Services.



# OUR MEMBERS

## ENERGY TRANSITION LEADERS

### VIABLE SOLUTIONS - PORTFOLIO SOLUTIONS GROUP

Viable Solutions is a team of strategic experts that provide solutions for growth and innovation in the energy sector and beyond. They work within a proven process to chart the most effective route to achieving growth goals, working with regional, national and international organizations, associations, utilities, industries, businesses and governments of all shapes and sizes.

From economic development strategy to business growth planning to innovation accelerators to financial acuity solutions to technology commercialization, their team of experts follow a process that starts with comprehensive discovery, research and engagement to build strategic and customized solutions that work to deliver real, measurable outcomes for each and every client. Viable Solutions is part of Portfolio Solutions Group, with strategic alliances that broaden our offerings in marketing, communications, creative design, graphic design, production, and web development – providing a complete set of strategically aligned solutions.



## SGIN AFFILIATES

Throughout 2021-2022 SGIN surpassed 200 affiliates from across Canada, covering representation from vendors, academia, policy, students, utilities, municipalities, and more. We look forward to increasing engagement and involvement with our affiliates throughout the next year.

# WHAT'S NEXT?

## SMART ENERGY BENCHMARK PROJECT

In early 2022 SGIN proposed to launch a Smart Energy Benchmarking Project to support electric utilities across Canada in preparing for the decarbonized energy transition.

**The Smart Energy Benchmarking project will involve three phases:**

- 1. Smart Energy Scorecard:** Smart Grid Innovation Network will be engaging with a subset of Canadian utilities to develop a Smart Energy Scorecard that benchmarks their resources, capabilities, activities, and progress towards a clean, smart, and electrified energy future.
- 2. Capability Maturity Model:** In addition to benchmarking, celebrating utility leadership, and encouraging improvement, several utilities will be short-listed for further in-depth analysis and strategic support through a tailored Capability Maturity Model.
- 3. Smart Energy Knowledge Hub:** To disseminate knowledge beyond the immediate beneficiaries of the Smart Energy Benchmarking Project, key insights will be used to establish a Smart Energy Knowledge Hub that allows utilities, regulators, governments, and other stakeholders across the country to learn about emerging trends and best practices.

The goal of this project is to articulate the current state of smart energy development, including renewable energy, grid modernization, clean energy use in Canada, better understand utilities' preparedness, and to share the findings, conclusions, and recommendations amongst all stakeholders while maintaining data privacy to accelerate the transition to a clean, smart, and integrated system as electrification scales up.

## SMART ENERGY KNOWLEDGE HUB

SGIN is proposing to accelerate the energy transition by creating a Smart Energy Knowledge platform focused on the application of technological advances and business models currently available to transform our energy systems. SGIN will build the capacity of the various stakeholders and target groups to become engaged as active participants in the energy transformation by putting forward the Smart Energy Knowledge Hub, an electronic learning platform and a collaborative partner-based knowledge dissemination framework. By using expertise from practitioners in this sector who wish to replicate their knowledge, overlaid with strategic social science strategies, this initiative will build capacity quicker than traditional methods.

# WHAT'S NEXT?

## STRATEGIC PARTNERSHIP

SGIN will continue to establish and formalize mutually beneficial partnerships across Canada and in the region. Once identified, relationships with key entities will be established to enable a comprehensive offering to clients. To the extent possible, these relationships will be formalized to fast-track, or otherwise benefit, SGIN clients into and through partner services.

## STUDIES AND WHITEPAPERS

SGIN will build credibility and attract knowledge seekers to SGIN by developing studies and whitepapers for members. Topics of interest include:

- Complete cross sector national baseline report on electrification for decarbonization readiness, opportunities, and challenges. (Example: utility, community, workforce, and academia)
- Provincial / regional / federal report card on smart energy capability for utility, regulatory and community readiness, annually.
- Industry relevant annual whitepapers that reflect the state of the industry to be presented at a national Federal audience.

## MEMBERSHIP

SGIN will continue to grow the SGIN membership network across Canada. SGIN is also looking to redesign the membership model. This process will include launching the Membership committee to support an Association scan of other membership models such as CIPNET, MRC, Electricity HR, DEC and redesign the membership model (fee structure) based on committee recommendations. Following this remodel, SGIN will relaunch the membership drive to ensure inclusivity and diversity across membership.

## INDUSTRY SUPPORT

In 2022-2023 SGIN will support industry members by connecting smart energy companies in the Smart Energy Supply Chain Online Database, continue to support members through trade missions, hold inter-organization national events to share knowledge and connect members, leverage diversity of regional strengths in the sector and provide opportunities to co-create and mobilize knowledge.

## SERVICE OFFERINGS

Enhance our service offering on how to support vendors around the grid edge with the Grid Edge Implementation support offering. This will explore market needs for critical infrastructure implementation support. Examples include Smart Energy Simulation environments, Grid readiness, Interoperability standards adoption, M&V, Smart Energy Project launch, Collaboration Center.

# 2022-2023 EVENTS

## ENERGY INNOVATION FORUM - CANADA 2022

The first Energy Innovation Forum (EIF) was held April 4-5th 2017 at the Fredericton Convention Centre. The 2 day conference was created and hosted by SGIN, including foundering organizations NB Power, Siemens and UNB as well as other supporting partners; the Atlantic Canada Opportunities Agency (ACOA), Opportunities NB (ONB) and Ignite Fredericton. The event brought together energy thought-leaders and over 200 delegates from across North America to discuss the rise of renewable energy generation and storage, and showcase how smart grid will enable these energy sources for customers and utilities and the benefits and opportunities that will flow from this smart energy evolution.

In Fall 2018, SGIN presented the second Energy Innovation Forum. This time the forum explored new opportunities for local and regional companies in the growing digital energy space. EIF 2018 featured energy innovators from North America and Europe and provided a deep-dive into ‘evolving energy technologies’ and encompassing ‘energy innovation in practices’ - examining the developments, challenges and evolving business opportunities in the smart energy sector.



*Images from the Energy Innovation Forum in 2018*

Recognizing the burgeoning sector of decentralized, smart and low carbon energy and continued demand for knowledge sharing, networking, and opportunity identification across various sectors regionally and nationally, Smart Grid Innovation Network Canada Inc. has collaborated with leading national energy organizations: Marine Renewables Canada, QUEST Canada, Canadian Renewables Energy Association, Electricity Human Resources Canada, Natural Resources Canada, and The National Research Council of Canada to champion a multi-sector national forum: Energy Innovation Forum Canada 2022, “Collaborating to accelerate Canada’s smart low-carbon future” which will be held in Toronto, Ontario on September 19-20, 2022.

EIF Canada 2022 will invigorate national collaboration by focusing on developments that will accelerate the pace of energy sector decarbonization and the opportunities unlocked by further enabling smart energy approaches. The forum will introduce attendees to industry experts, discuss emerging trends, and present a diverse range of initiatives and research that will propel Canada's decentralized low-carbon energy sector.



Visit: [energyinnovationforum.ca](https://energyinnovationforum.ca) for more information on the program, speakers, registration and more!

## SGIN MEMBER SPOTLIGHT WEBINAR

### Saint John Energy Peak Reduction Strategy & Green Energy Projects

Andrew Ahearn, Manager of Engineering at Saint John Energy will present on Saint John Energy's current and future strategy for demand reduction, and provide details on their Distributed Energy Resources and how they contribute to peak reduction. Andrew will end with a detailed walkthrough and overview of Saint John Energy's Burchill Wind Project and Somerset Battery Project.

The Burchill Wind Energy Project illustrates how efforts to help New Brunswick meet its climate action targets are generating new economic activity and opening the door to additional opportunities. This is an exciting and important development for Saint John region, and it is just one of their projects underway to ensure Saint John businesses continue to have access to reliable, affordable energy.



## SMART ENERGY SUPPLY CHAIN EXPORT STUDY WEBINAR SERIES PART 2 OF 2

In part one of the webinar series SGIN and Envigour Policy Consulting shared the outcomes of the study performed to date which included methodology such as defining & classifying sector components, survey results, data from interviews conducted, explored existing funding programs and identified potential gaps in the smart energy sector.

### The key features of webinar #2 will include:

- The official launch of the Smart Energy Supply Chain Database.
- Smart Energy Supply Chain Database overview & tutorial.
- Summary of the Atlantic Smart Energy Supply Chain Export Study Report.
- Opportunity to network with the companies listed in our Smart Energy Supply Chain database.
- Q&A session.



The graphic features a map of the Atlantic region of Canada (New Brunswick, Nova Scotia, Prince Edward Island, New Hampshire, Vermont, Maine, and New York) as a background. In the top left corner is the SMART GRID INNOVATION NETWORK logo. The main text reads: "Atlantic Smart Energy Supply Chain Export Study Webinar Series Part 2 of 2". Below this, the date and time are listed: "Thursday June 23rd 2022 11:00AM - 12:00PM (ADT)". On the right side, under the heading "Presented by:", there are two circular headshots. The first is for Greg Robert, CEO of Smart Grid Innovation Network Canada. The second is for Bruce Cameron, from Envigour Policy Consulting.



# 2021 CANADIAN ENERGY HIGHLIGHTS



- Saint John Energy: In Confronting the Uncertainty of Disruption, A Path of Innovation and Growth ([read more](#)).
- Canada's Power Grid is Pretty Clean. Here's Why it Needs to Be Cleaner ([read more](#)).
- NBI Releases Building Decarbonization Code ([read more](#)).
- ISGAN publishes: A Transition Perspective on Demand-Side Flexibility in the Integrated Energy System ([read more](#)).
- NB Power: Energy efficiency programs have big impact for NB homes and businesses ([read more](#)).
- NREL pilots new AI-enabled Smart Community concept in Colorado ([read more](#)).
- Canada at COP26 ([read more](#)).
- CEO-led Long Duration Energy Storage Council launches at COP26 ([read more](#)).
- Efficiency Canada publishes: 2021 Canadian Provincial Energy Efficiency Scorecard ([read more](#)).
- ISGAN publishes: Smart Grid Drivers and Technologies by Country, Economies, and Continent ([read more](#)).
- Malta and NB Power announce collaboration towards development of province's first long-duration energy storage project ([read more](#)).
- Cleantech investment so hot that 'you just can't lose' ([read more](#)).
- Natural Resources Canada publishes Energy Factbook 2021-2022 ([read more](#)).
- Enel connects over 1 million prosumers to grid network ([read more](#)).
- Saint John Energy: Driving Energy Solutions for New Brunswick ([read more](#)).
- What are the hurdles to electrifying a home? Contractors and experts weigh in ([read more](#)).
- Canadian Climate Institute: Cutting to the chase on fossil fuel subsidies ([read more](#)).
- Energy data: What the sector thinks about EU legislation ([read more](#)).
- PEI Announces Net Zero Plan ([read more](#)).
- NRCAN - Energy Efficiency and Canada's Net Zero Future Report ([read more](#)).
- GM and POSCO to build plant in Quebec to produce battery material for electric cars ([read more](#)).
- Canada's Future in a Net Zero World ([read more](#)).
- QUEST Canada: Creating Smart Energy Communities in Atlantic Canada ([read more](#)).
- Canadian Climate Institute: Framework For Canada's Emissions Reduction Plans ([read more](#)).
- Saint John Energy: Charging an EV in Saint John Just Got Easier! ([read more](#)).
- Ottawa Commits \$9.1B to Hit Greenhouse Gas Target by 2030 ([read more](#)).
- Government of Canada: Delivering clean air and a strong economy for Canadians ([read more](#)).