



Proactively planning for a more electrified future

How one utility company is preparing to meet customers' growing energy demands while advancing on its net-zero journey

Strategic planning

Core need

Assessments, Roadmaps

Solution

Data-driven Insights, Scenario Modeling

Key capability

Sustainability & Climate Stories

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The Vision

Dealing with growing electricity demands from customers, Saint John Energy wanted to get ahead of future challenges—by getting clarity on potential consumption trends and understanding solutions for addressing them. At the same time, the utility wanted to make sure its efforts would align with its emissions reduction goals and net-zero ambition.

The starting point

Electricity needs are growing across the globe,¹ and the thriving seaside city of Saint John is no exception. Here, in the first incorporated city in Canada, leaders are continuously looking to the future and asking “what’s next?”—especially when it comes to how local residents are adopting electricity to power their vehicles, heat their homes, and energize their businesses

For Saint John Energy, the local utility that serves more than 36,000 customers, navigating evolving electricity usage trends has become a priority. Getting sharper insights into how customers are relying on electricity now—and what future usage trends might look like—can provide a foundation for future decision-making and support the utility’s net-zero emissions goal. For the energy company, the path ahead wasn’t going to be easy. Making reducing carbon emissions a strategic priority would mean significant changes to operations, reallocation of capital to “clean assets,” and the potential

for added costs to customers. It would mean overcoming hesitancy by balancing urgency with credibility.

Getting those insights can enable Saint John Energy to anticipate new grid infrastructure needs more precisely as the population grows and as more aspects of life become electrified. Those insights can also enable the utility to work more efficiently and proactively with regulators, its wholesale energy provider, and others in the value chain—to get ahead of growing demands and expectations.

Ultimately, such insights could enable Saint John Energy to be better prepared—to model scenarios based on location, policy, technological evolution, macroeconomics, and other factors, react to evolving energy needs, and ensure that the utility can keep up with customers’ growing appetite for electricity.

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The way forward

To begin building a better strategic view for the future, Saint John Energy selected Deloitte Canada to provide support for a wide range of needs related to the utility's Zero30 program—its roadmap for achieving net-zero emissions. Deloitte first helped Saint John Energy get its energy supply and consumption data in order by verifying, validating, and supplementing the information. This enhanced data set provided the foundation for Saint John Energy to use in modeling, forecasting, and strategic planning—enabling the utility to create a virtual replica or digital twin of its entire system, including meters, cables, transformers, and other grid infrastructure components.

As part of the project, Deloitte Canada used its proprietary ElectrifiedGrid™ platform to help Saint John Energy conduct a Grid Impact Assessment. ElectrifiedGrid brings together customer and energy asset data to generate

critical insights, such as predicting adoption and consumption behaviors in diverse policy and technology scenarios. Using geospatial data, it also can help determine where and when technologies will be adopted, predict the detailed load impacts of technology adoption, and quantify infrastructure impacts.

The Grid Impact Assessment tool, which revealed that the Saint John area could need twice as much electricity by 2050, has become a pivotal resource for helping Saint John Energy plan for its evolution to meet customer demand safely, affordably, and reliably. In addition to the assessment, Deloitte helped Saint John Energy develop a Customer Electrification Roadmap, analyzing a range of solutions and providing the utility with a list of products, services, and steps to consider as it works to minimize emissions in its operations.



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The way forward

Using its proprietary D-Times solution, Deloitte also supported Saint John Energy in creating an Optimal Supply Mix that assesses a range of scenarios and options—such as continuing to purchase electricity while incorporating more renewable energy, and considering local wind projects and distributed energy sources.

A Net-Zero Roadmap was also a key component of the project, with Deloitte outlining potential strategies that could help the utility reduce emissions in the future. For example, the roadmap included recommendations on renewable energy, grid modernization, operations, energy storage, and smart energy products.

In supporting Saint John Energy’s vision and plan for its future, Deloitte leveraged the experience and skills of a diverse set of practitioners, including specialties in data science, electrical engineering, user experience design, operational transformation, and corporate strategy.

By working with Deloitte to transform insights and planning capabilities, Saint John Energy has positioned itself to navigate a rapidly evolving future—with greater clarity into needs and possible solutions, as well as increased confidence for taking the next steps in its net-zero journey.

The achievements



Greater visibility into electric consumption and possible future needs



New modeling and simulation capabilities to explore diverse scenarios



Enhanced ability to meet growing demand and rising customer expectations



Increased confidence to support long-term planning for the energy system



A clear path forward on the grid-modernization and net-zero journey—through a prioritized list of options and next steps



Opportunities for cost savings and new operational efficiencies in the future

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Let’s talk sustainability

How is your organization working to get ahead of future needs and reduce carbon emissions? Discover how Deloitte’s network of industry-focused specialists can help you understand the opportunities and navigate risks as you move forward on your sustainability journey. Contact us to get the conversation started.

Learn more

1. Deloitte 2025 Power and Utilities Industry Outlook.
<https://www.deloitte.com/us/en/insights/industry/power-and-utilities/power-and-utilities-industry-outlook.html>



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The view ahead

With greater clarity into its data and options, the utility is better equipped to plan for a future that will be defined by more electrified technologies—from vehicles to home heating systems—and to meet growing customer demand.

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