



A NEUTRAL MARKET ASSESSMENT TO FIGHT ENERGY POVERTY

Community Solutions Advisory Service Case Study

Town: Bridgewater, Nova Scotia

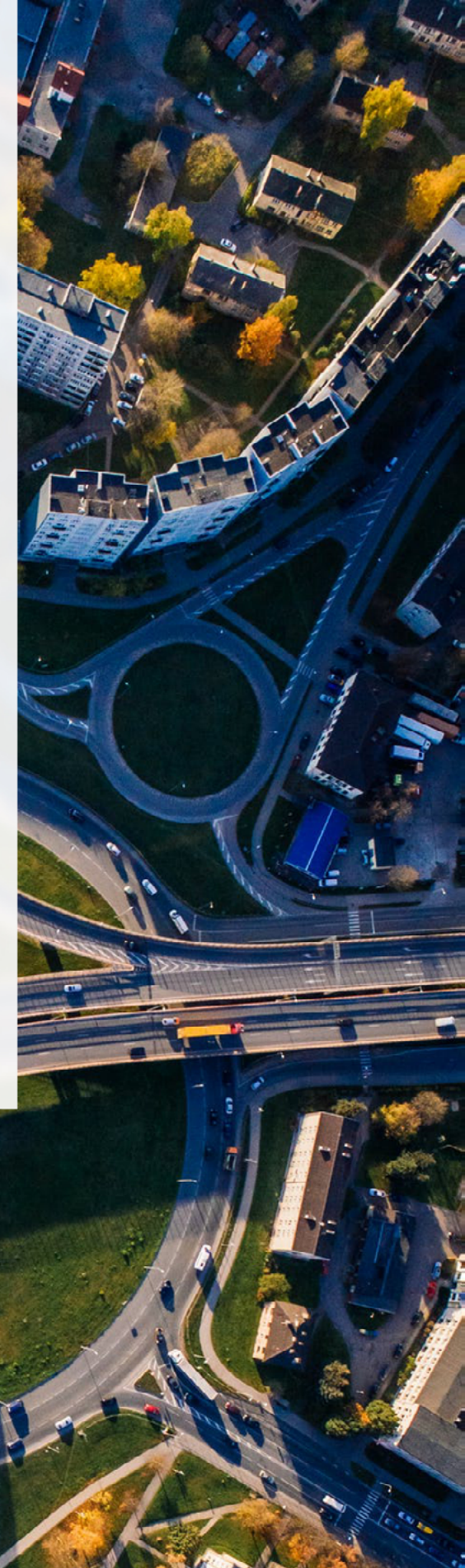
Population: 8,532

Winner of the \$5 million Prize Category in the Canadian Smart Cities Challenge

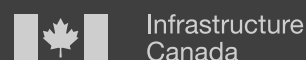
This is one of four Community Solutions Advisory Service Case Studies that highlights the replicability of the open smart city approach and the solutions offered to communities through the Community Solutions Advisory Service led by Open North.

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With funding provided by:



Source: Town of Bridgewater



Executive Summary

Once the dust settled from the excitement of winning the \$5 million Prize Category in the Canadian Smart Cities Challenge, the Town of Bridgewater, Nova Scotia was faced with the imminent risk of their project Energize Bridgewater being delayed before it even started, as they faced a major roadblock at the early stage of procurement.

Objective: reducing the energy poverty rate by 20% by 2025

Bridgewater, like many towns in Nova Scotia, has struggled for decades with low incomes and high energy costs, which has led to households being unable to meet their most basic energy needs. To take on this challenge, Energize Bridgewater has the ambitious goal of using a combination of community engagement and connected technologies to reduce the energy poverty rate in their community by 20% by 2025. With plans such as

implementing an energy management information system (EMIS), embedding in-home energy use sensors, retrofitting homes with improved insulation, and helping residents access home renovation funding assistance, the only way of meeting their goal on-time is ensuring that hardware and software are procured quickly.

By partnering with the Advisory Service procurement experts, the Energize Bridgewater team has been able to better structure their hardware and software RFP, assess risks and the total cost of ownership, and be in a position to procure goods with a sourcing strategy that is adapted to their needs. Beyond the Energize Bridgewater team, Town staff have also become familiarized with the neutral market assessment approach to IT procurement, a useful tool developed by the City of Montreal and adapted by the Advisory Service to help guide all purchasing decisions in any level of government.

Problem Assessment

When it comes to IT procurement, no detail is too small

When the Energize Bridgewater team started looking at software options for their energy management information system, they encountered a challenge common in IT procurement: what specific criteria should the RFP include? The team knew that they needed a single system that could monitor energy use patterns in their community but were unsure of the technical details of the software and hardware.

With a total cost that represents a significant increase in the town's service provision - the details of this purchase mattered, and the team

knew that the results of the purchase would have long-term impacts on the project's success in the community.

Without knowing the full extent of the potential of energy management information systems, Bridgewater runs the risk of acquiring a software which may not be able to fulfill all their needs. Omitting important functional components such as notifications of energy use anomalies or comparative analyses of savings over time could compromise the town's ability to achieve their vision of a future free from energy poverty.

“The team knew that the results of the purchase would have long-term impacts on the project's success in the community.”

Source: Town of Bridgewater

We're impressed with what you've provided us in such a short time. The recommendations you've presented here on taking a best value sourcing approach is some of the most concrete and useful advice we've had in a long time, and we really appreciate your work.

Director Information Technology
Municipal Joint Services Board
Lunenburg Region

How We Helped

Given the importance and long-term implications which this purchase would have on Energize Bridgewater, conducting a neutral market assessment was the best plan of action to make as informed a decision as possible. The detailed analysis obtained through this process provided insights into the requirements that the software and hardware companies would have to meet to bid - helping ensure that the purchase is the right fit for their needs.

Here's how the neutral market assessment we conducted responded to their most immediate challenge (and its risks) and added-value to their future planning:

Our neutral market assessment had a profound impact on Bridgewater's RFP process by revealing an additional 97

functional and technical criteria that could be included in their RFP. One key criterion we identified ensures that the purchased system can benchmark buildings according to their type, creating an accurate frame of reference for energy consumption; another ensures that the EMIS can collectively visualize all energy consumption profiles, increasing detectability of anomalies in household consumption.

While assessing all that the market had to offer, we collected valuable market data and technical information on the purchase, allowing us to present several strategic recommendations. We provided a Total Cost of Ownership (TCO) analysis for a five-year period, conducted a preliminary risk assessment, proposed future high-level open source IT architecture schemas, and proposed sourcing and general procurement strategies.

The neutral market assessment revealed an additional 97 functional and technical criteria to include in the RFP

Source: Town of Bridgewater

Results

Through the neutral market assessment, the Energize Bridgewater team gained enough knowledge of what the software component of the market offers to be able to develop an RFP that closely matches what the market can respond to, and above all, matches what they need to fulfill their project vision.

Just as the Energize Bridgewater team learned new things about their project, our team at the Advisory Service also took away from important lessons which are applicable across Canada, and relevant to all smart city projects:



Having well-established, long-term (five-year or more) project planning in place is fundamental in knowing what specific purchases will need to be made, and increases the accuracy of purchasing within the project.



Neutral market assessments are an effective tool for identifying functional and technical criteria to include in RFPs.



Neutral market assessments provide added-value components to municipal purchasing such as allowing staff to get to know the market, exploring international markets, and observing risks.



Any project involving Internet of Things (IoT) must have a strong security and telecommunications expert presence from the planning stage to avoid risk and accurately assess the true cost of smart city investments.

ABOUT THE COMMUNITY SOLUTIONS ADVISORY SERVICE

Led by Open North, the Community Solutions Advisory Service consists of a personalized community needs assessment, a tailored Capacity-Building Action Plan, and a customized learning path to help build the capacity needed towards the implementation of open smart cities approaches. There is no cost to participate.

Our Advisory Service provides personalized support by sharing knowledge, expertise, experience and guidance to municipal staff and Indigenous communities to build internal capacity and navigate the open smart cities landscape on relevant topics such as security, privacy, data, governance and public engagement.

