

# Saint John Energy

## A Vision for the Future

February 11<sup>th</sup>, 2019

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***Helping to Solve the Problem for Saint John in Saint John***

*Building a sustainable growth model while continuing to address evolving customer needs, transformative technologies and new government legislation*



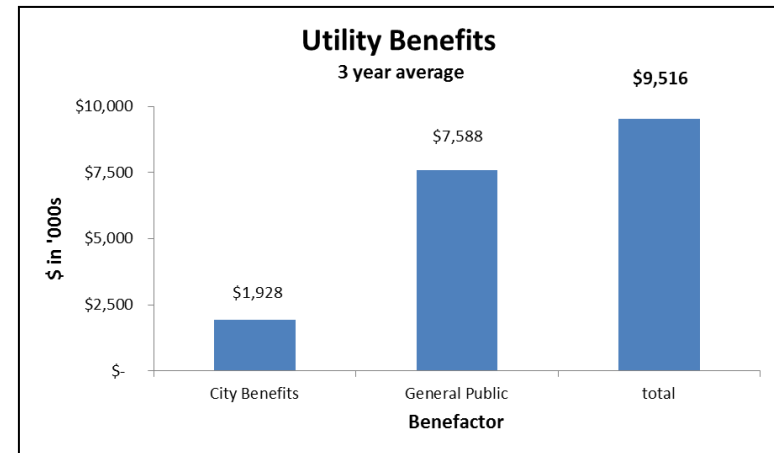
# Saint John Energy - Introduction



SJE is a traditional distribution utility serving light industrial, commercial, and residential customers

## 2018 YE Profile

Established	1922
Customers	36,000
Sales	\$118M
Capital	\$13M
Expense	\$117M
Net Book Value	\$87M



## Industry Recognition



## Quick Facts

Rates: Lowest in Atlantic Canada

Customer Satisfaction: 85%

Long Term Debt: \$0

Reliability: ↑ National Avg

Support for Renewables: 95%

Saint John Energy prides itself in being an advocate for customer choice and has bold aspirations for the future – Most innovative utility in Canada by 2022 - 100<sup>th</sup> Birthday

# Disruptive Technologies

Change presents opportunities for those who embrace it

## Innovations

- Renewables: Solar Power and Wind
- Distributed Energy Resources
- Consumer Products
- Internet of Things
- Storage
- Electric Vehicles
- Blockchain Energy



SJE is uniquely positioned to be able to play a leadership role in the new energy economy

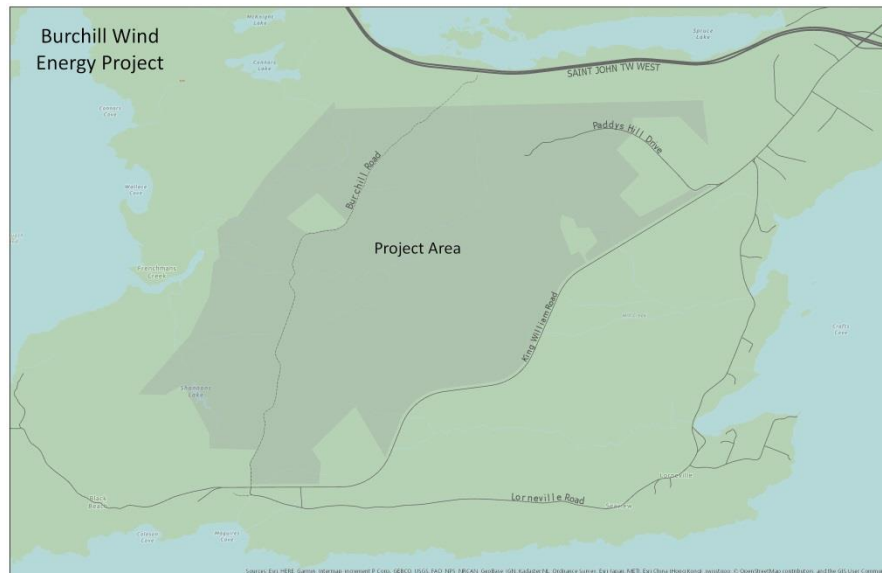
# Wind Projects: Burchill Wind Project

SJE plans to find a 3<sup>rd</sup> party developer to build, own, and operate the wind farm. SJE will simply buy the energy.

## Project

20MW – 40MW

5 to 10 turbines



Over 45 developers interested in responding

### Background:

- 5 years of wind data: 2003-2008
- Exploration agreement with RDC: 2017
- Number of Engineering Studies: 2017
- 14 Expressions of Interest submitted to SJE: 2018
- 95% of rate payers support SJE pursuing renewables

### Developer Investment:

- \$30M to \$80M

### SJE Investment:

- Only related to distribution and not in the wind farm

### Jobs:

- Up to 40 during construction + up to 4 Fulltime

### SJE Benefit:

- >35% savings vs. wholesale energy cost
- Bottom line: expecting \$3M to \$8M in savings per year

### Provincial Benefit:

- 15%-30% name plate peak reduction benefit
- Increase green renewable energy decreasing GHGs

### RFP Deadline:

- February 22<sup>nd</sup>

Considerable cost savings to SJE and overall peak system reduction are expected

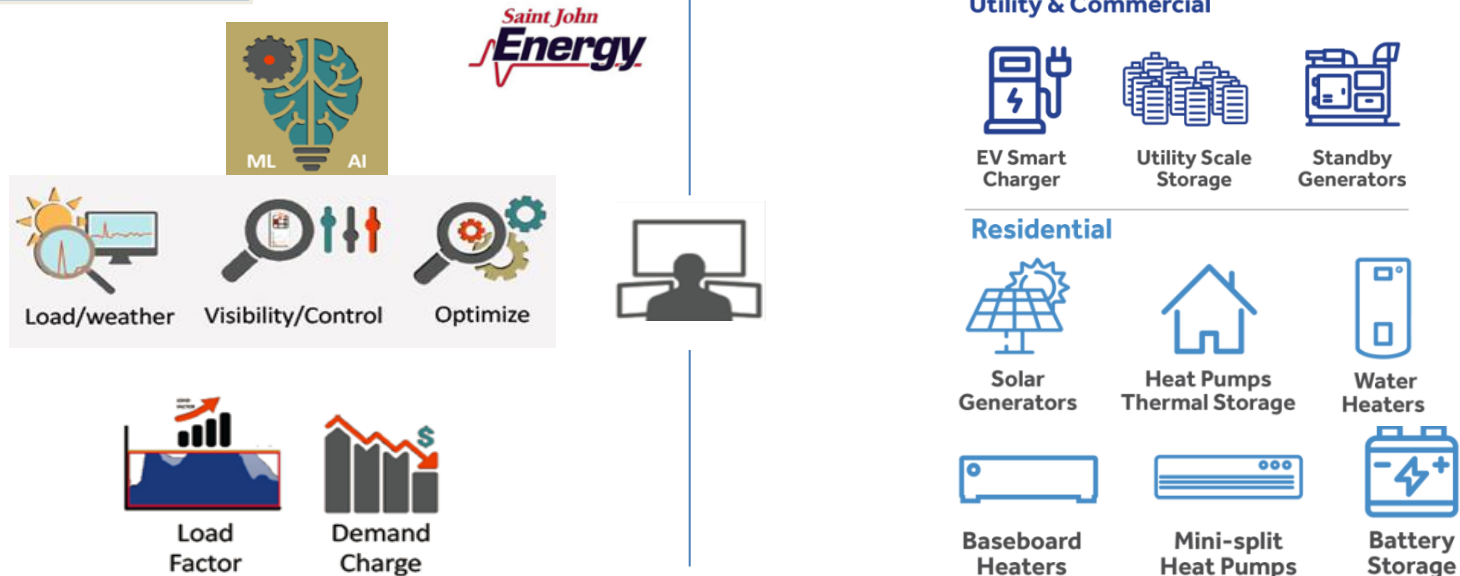
# NRCAN Smart Grid Project

Smart Grid Pilot is an \$11M+ advanced demand response project that will develop Artificial Intelligence capability

## Objectives

- Reduce \$30M annual Peak Demand cost (highest demand charge in Canada)
- Offer smart consumer products
- Potential to build an exportable product
- Establish an innovation centre in Saint John
- Reduce the provincial peak – SJE peak is 97% coincidental

## Overview



This Smart Grid Demonstration offers export potential along with economic, environmental and consumer benefits

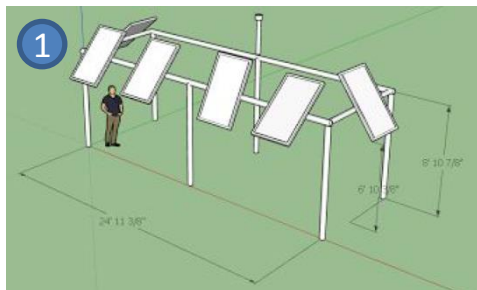
SJE has been conducting a solar demonstration project since March 2018

## Solar Pilot



### Project Summary:

- Models the most common configurations for residential, commercial, and utility scale deployments
- Partners: EDGSJ, UNB, NextGen Energy, and Fundy Engineering
- Significant amount of Data from each panel is being collected and shared with public



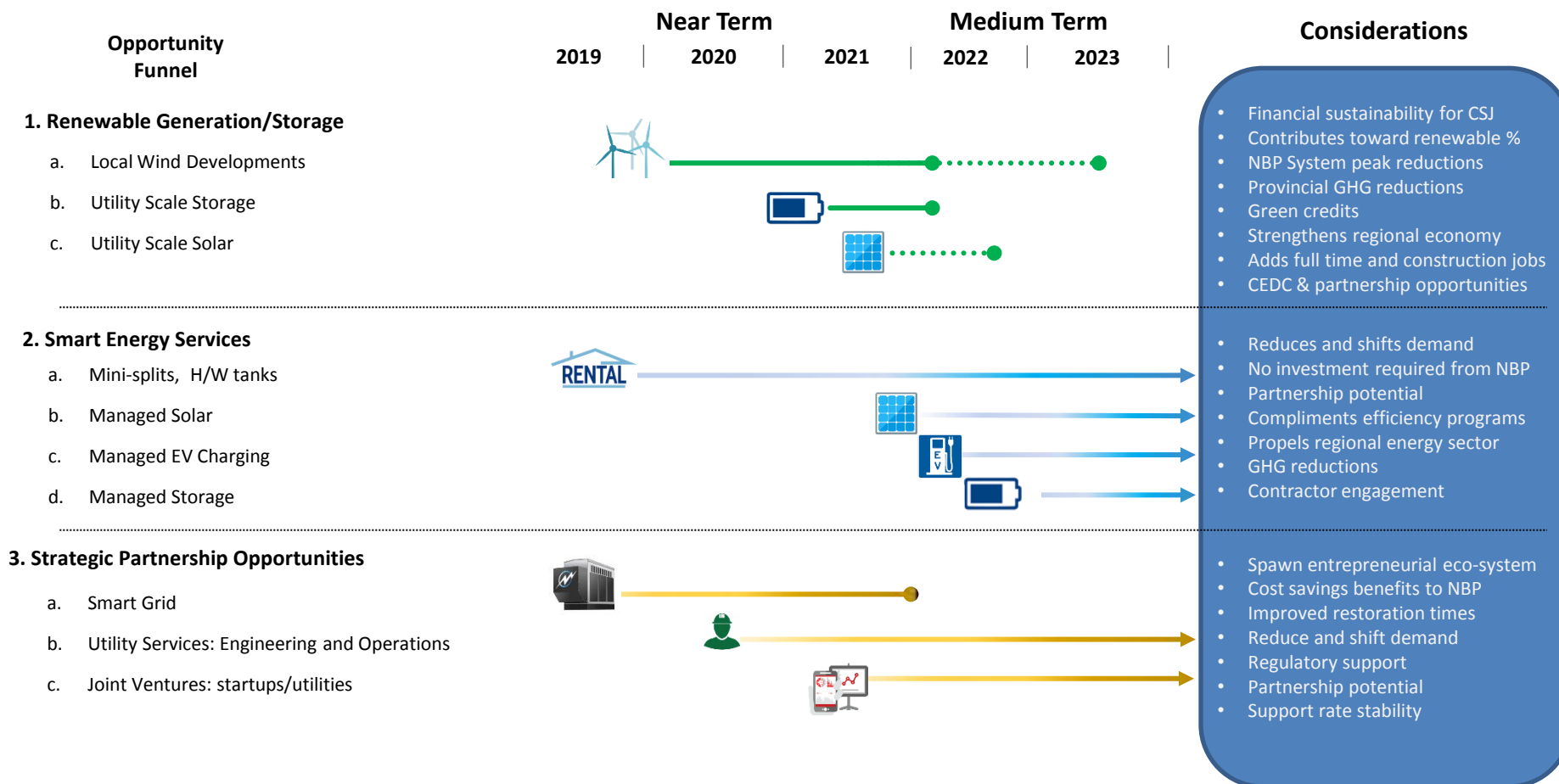
### Future Aspiration: Business Case Dependent

- Implement first solar virtual net metering program in Atlantic Canada adjacent to Burchill Wind
- Customers rent solar panel(s) and have the generation output credited off their bill
- Large scale ground mounted solar vs. roof top – ~50% of the cost
- Timing is business case dependent and would only advance if economics can justify

This demonstration project will provide insights into the solar generation opportunity in SJ

# Aspirational View for Saint John Energy

Business development opportunities exist for SJE that would contribute to the financial sustainability of the City of Saint John as well as contribute to regional and sector growth while benefitting NBP



SJE plans to introduce more innovative services benefitting the City of Saint John, the rate payers and attract more businesses to New Brunswick

# Out Dated and Restrictive Legislation

Current Legislation within the Municipalities Act and Electricity Act is preventing growth

## Opportunity

- SJE is committed to maintaining a sustainable utility, low electricity rates, and sharing the benefit from new revenue streams and cost savings with the City
- SJE has a number of opportunities at varying stages in the business development funnel
- Growth potential would be largely impacted by timing and span of opportunities enabled through legislative reform
- It will take time for a dividend stream to develop but could become substantial <5 years

Right sized legislative reform could yield transformational results for the region



*Saint John Energy remains committed to the growth strategy and the evolution from a pure electric distribution utility to a more diverse generation, distribution and customer-driven energy services firm. A model that has been successfully implemented by municipalities of all sizes across Canada...*

