

## FAQ on Saint John Solar Energy Performance Analytics Project

1. Background-Tell us how the concept for the project started? What prompted SJ Energy looking into solar versus other renewable energy?

Saint John Energy has for a long time been committed to being an advocate for consumer choice so with the continued improvement in both cost and generation capacity of solar technology it is with excitement that we are evaluating what potential solar technology may represent to Saint John. Saint John Energy is certainly interested in all forms of renewable energy that are cost effective and although there is not a favorable business case today to support a broad deployment of solar the trend suggests it is more a question of 'when' not 'if'. This project is important to begin to collect data and perform analytics to ensure that the best future investment decisions are able to be made.

2. What could this project mean for City of Saint John and its residents?

This project is an open data project allowing customers to learn right alongside with SJE so they are able to make informed decisions for themselves. SJE hopes that the learnings from this project will help us shape future investment decisions in the solar space leading to either a solar panel rental program or a community solar project that can be offered to the residents of Saint John.

3. I know it's a pilot project, but do you have estimate of what kind of savings this could mean 5-10 years down the road?

That is really a loaded question and the answer is truly "it depends". In order for a more broad based deployment of solar to make sense in southern NB the purchased rate of electricity needs to increase, the cost of solar technology needs to continue to improve, and the solar resource needs to be better understood. This project is helping us understand better the various configurations and solar potential of the region.

4. Are there similar projects happening elsewhere? What makes this project unique?

This project is certainly unique within NB. This project has deployed the most common residential, commercial, and utility scale configurations with each solar panel reporting a significant amount of data in to the cloud to be analyzed. The project is also deploying smaller solar irradiance monitors in other parts of the city so as to understand the impact related to fog.

5. How does ESJ's Smart & Connected Data Project factor in?

ESJ is providing a centralized data analytics environment to house all the solar generation data, the weather data, and the SJE system data that will be used by the academic partner UNB, engineering research partner Fundy as well as be accessible to the general public.

6. Would this pilot project have been undertaken without funding?

More important than the funding is the fact that ESJ is providing a data analytics environment that will allow large amounts of disparate data to be centrally located and analyzed by our partners and the general public. This is not a level of expertise within SJE and without this project would not have been as efficiently accomplished if at all.

7. What do you want people to know about the project?

This is an open data project meaning that the data and learnings will be shared with the public. SJE hopes that this project will help ensure that prudent decisions will be made with respect to solar investments that are both beneficial from a financial savings perspective and to the environment.

8. What is the timeline for the project to begin, end and understand results?

The solar panels were functional since March so the data collected to date is being uploaded into the data analytics environment, weather data and the additional solar irradiance monitors will be added this fall that will then in turn allow for the analytics and studies to begin toward the end of the year into the spring with the final report being authored by Fundy Engineering in the summer time frame.

9. If successful, what next steps will SJ Energy undertake? What is the process from pilot project to actually implementing a new service/offering?

SJE will leverage the learnings from this project to determine what the opportunity for further participation and timing may be. Simply put, SJE will use the learnings to complete a business case analysis that would only get implemented at such time that there is a favorable financial benefit to be realized. Once there appears to be a favorable financial business case (which could be supported by government subsidies related to climate change action) then consumer engagement would be sought to ensure there is interest.