



# Dundonald Avenue Solar Farm

Economic Impact Study

September 2021



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# About the Study

## Objective

The Dundonald Avenue Solar Farm Economic Impact Study analyzes the economic impact from spending on the project's construction, as well as the impact of a local company doing the construction versus an out-of-province company. Note that impact from the construction phase is a one-time impact.

## Economic Impact Modelling

Economic impact modelling simulates changes in the economy caused by a specific business activity. This is done using multipliers that show the relationship between an initial increase in investment (input) and the resulting increase in output, GDP, labour income and jobs.

Statistics Canada has developed Input-Output tables for each province. These tables are updated every year but lag behind by three years. Using the most recent multipliers (2017), SREDA estimated the direct, indirect and induced impacts of the solar farm's construction. These impacts can be defined as follows:

- Direct impact: production changes in an economy as a direct result of operational activities.
- Indirect impact: production changes in an economy as a result of the re-spending of the industries receiving revenue from operational activities.
- Induced impact: production changes in economic activity resulting from household spending of incomes earned from the directly and indirectly affected firms.

## Limitations

SREDA prepared this economic impact study at Saskatoon Light & Power's request. SL&P provided SREDA with estimated construction costs.

The study's classifications were made using NAICS (North American Industry Classification System) codes, resulting in an overarching industry for multiple sub-sectors.

Assumptions were made for out-of-province local re-spend as SREDA has no access to such data.

The results of this study are subject to limitations generally associated with estimating economic impacts.



## Overview

Cleaner power generation is a priority for the City of Saskatoon. As part of the Low Emissions Community Plan (LEC Plan), the City aims to reduce its emissions by 40% below 2014 levels by 2023 and 80% by 2050. Generating electricity through solar energy is one way to help achieve these goals.

Saskatoon Light & Power (SL&P) is proposing a solar farm between Circle Drive West and the railway tracks south of 11th Street West and east of Dundonald Avenue. The Dundonald Avenue Solar Farm, a 2.2-megawatt solar power project, will enable SL&P to generate renewable electricity to the power grid for their customers. An estimated annual emissions reduction of 1,800 tonnes of carbon dioxide equivalent would be comparable to removing 400 cars from the road. Currently, SL&P purchases most of its electricity from SaskPower, which primarily uses fossil fuels.

With the use of Statistics Canada Input-Output Economic Multipliers for the Saskatchewan economy, SREDA estimated the economic impacts of the construction of the Dundonald Avenue Solar Farm project. SREDA also outlined the impact on the Saskatoon Region economy of having a local company build the project as compared to an out-of-province company.

The estimated total cost of the project is \$4.25 million. SL&P has received \$2.5 million of funding from the provincial government for the project. With this funding, the project is forecast to pay itself back in 11 years due to reduced purchasing of electricity from SaskPower.

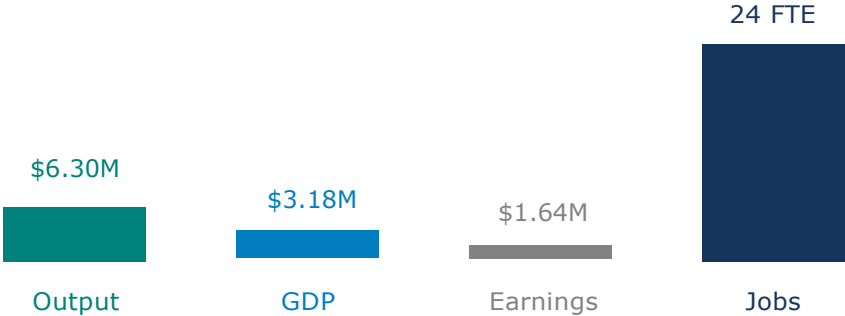
The following is a summary of the economic impact study on Saskatoon Light & Power's solar farm project.

# Solar Farm Construction Economic Impact

Solar farm construction costs are estimated to be \$4.25 million. This would lead to an estimated total economic output of \$6.30 million, an increase in GDP of \$3.18 million, 24 full-time equivalent jobs and \$1.64 million in labour income. The project’s total economic output is a combination of direct, indirect and induced output:

- Direct output of \$4.25 million, resulting from expenditure associated with the cost of construction.
- Indirect output of \$1.27 million, resulting from suppliers of the builders purchasing goods and services (to fulfill new incremental spending) and hiring workers (to meet that incremental increased demand).
- Induced output of \$0.78 million, resulting from employees purchasing goods and services at a household level from income earned.

Solar Farm Construction Economic Impact  
Based on construction costs of \$4.25M



Impact	Output (\$M)	GDP (\$M)	Earnings (\$M)	Jobs (FTE)	Taxes (\$M)
Direct	4.25	2.03	1.07	14	0.0
Indirect	1.27	0.64	0.37	6	0.01
Induced	0.78	0.51	0.19	4	0.38
Total	6.30	3.18	1.64	24	0.40

## Local Re-Spend Economic Impact

Supporting locally-owned businesses strengthens the local economy: dollars recirculate locally, which then supports growth in employment opportunities for people in the community.

If SL&P were to construct the solar farm, SREDA estimates that construction would lead to local re-spend of 100%, or an additional \$1.00 for the local economy from every \$1.00 spent. All \$4.25 million in construction costs would recirculate locally, where they would be spent in other Saskatoon Region businesses and contribute to the growth of local employment opportunities.

Note that this estimate of local re-spend for SL&P's construction is based on the assumption that SL&P would source from other local companies. If not, the local re-spend estimate would need to be reduced.

If an out-of-province company were to construct the solar farm, SREDA estimates a local re-spend of between 16.1% and 66.4%, depending on where equipment and services are sourced. For every \$1.00 spent on the project, an additional \$0.16 to \$0.66 would be available for the local economy; of the \$4.25 million in estimated construction costs, this would translate to between \$680,000 and \$2.82 million.

This study does not account for local re-spend on the supplier side, nor does it account for employees from out-of-province businesses staying in hotels, eating out at restaurants, purchasing food from grocery stores and participating in activities related to recreation and entertainment.





### **Our Role**

The Saskatoon Regional Economic Development Authority (SREDA) strengthens the local economy so that all people can thrive here. We assist entrepreneurs with starting and expanding their businesses, develop Indigenous economic reconciliation strategies, support the rebound and growth of local businesses and coordinate effective collaboration to encourage growth across the Saskatoon Region.

### **Visit Us**

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