

# SolarPEI Analysis Report

New Installation Plan

Property: 259 Queen St, Charlottetown, PE C1A 4B9, Canada

Generated: January 27, 2026

## Suitability Score

**84%**

Your PEI property has excellent potential for solar installation. With approximately 80 m<sup>2</sup> of roof area and medium shading levels, a 4.4 kW system could save you approximately \$1,090 annually at current Maritime Electric rates. PEI receives an average of 3.6 peak sun hours daily. While winters are shorter on sunlight, PEI's cold temperatures can boost panel efficiency by 2-3%.

## System Overview

System Size	<b>4.4 kW</b>	Panel Count	<b>11 panels</b>
Annual Production	<b>6,263 kWh/year</b>	Roof Area	<b>80 m<sup>2</sup></b>
Usable Area	<b>80%</b>	Roof Pitch	<b>35°</b>
Roof Orientation	<b>south</b>	Shading Level	<b>Medium</b>

## Financial Summary

Total System Cost	<b>\$13,200 CAD</b>
Monthly Savings	<b>\$91</b>
Annual Savings	<b>\$1090</b>
Payback Period	<b>12.1 years</b>
25-Year Savings	<b>\$37,232</b>
Net Profit (25 years)	<b>\$24,032</b>

# Recommendations

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# Technical Details

Peak Sun Hours/Day	3.61 hours
Yearly Solar Potential	0 kWh
Layout Suggestion	A single array of 11 panels arranged in 3 rows would maximize efficiency. For PEI's latitude (46°N), prioritize south-facing sections with a tilt angle close to 44° for optimal year-round production.