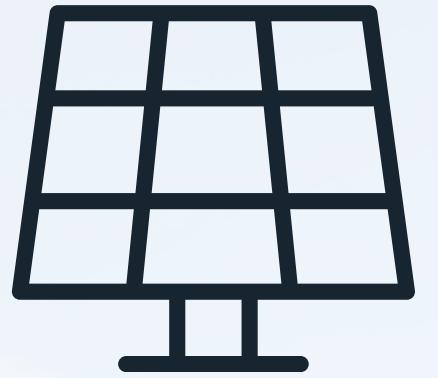




UNIVERSITY  
OF ALBERTA



RENEWABLE ENERGIES

# SolarIQ

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Why doesn't  
it perform as  
it should?





## What is the Problem?



Homeowners don't know if their solar panels are working properly. Annual maintenance can exceed \$400, with technician visits costing around \$100 per hour.

Late detection of issues can lead to energy losses and high repair costs, ranging from \$196 to \$1,219.

**How much time and money are you losing without proper monitoring?**

[More info: Tecnología Ambiental](#)

# Market Size





From 2017 to 2023 the power capacity was increased from 396.32 to 1 418.97 GW

Power capacity experienced a remarkable growth of:

**258.04% !!!**

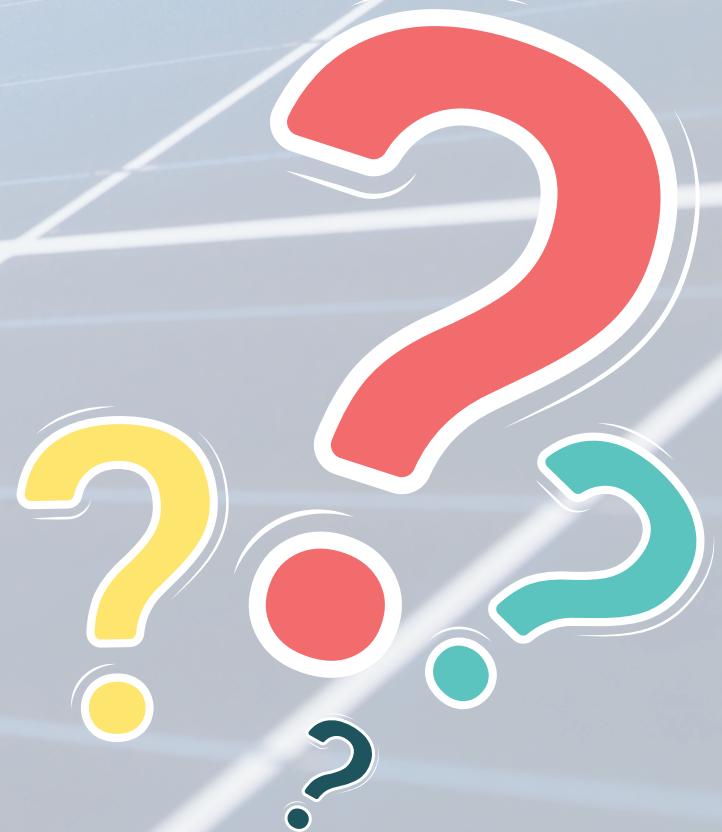
From 2017 to 2023 the power capacity was increased from 2.93 to 5.76 GW

Power capacity experienced a remarkable growth of:

**96.58% !!!**



What's the solution to the problem  
while seizing solar market growth?







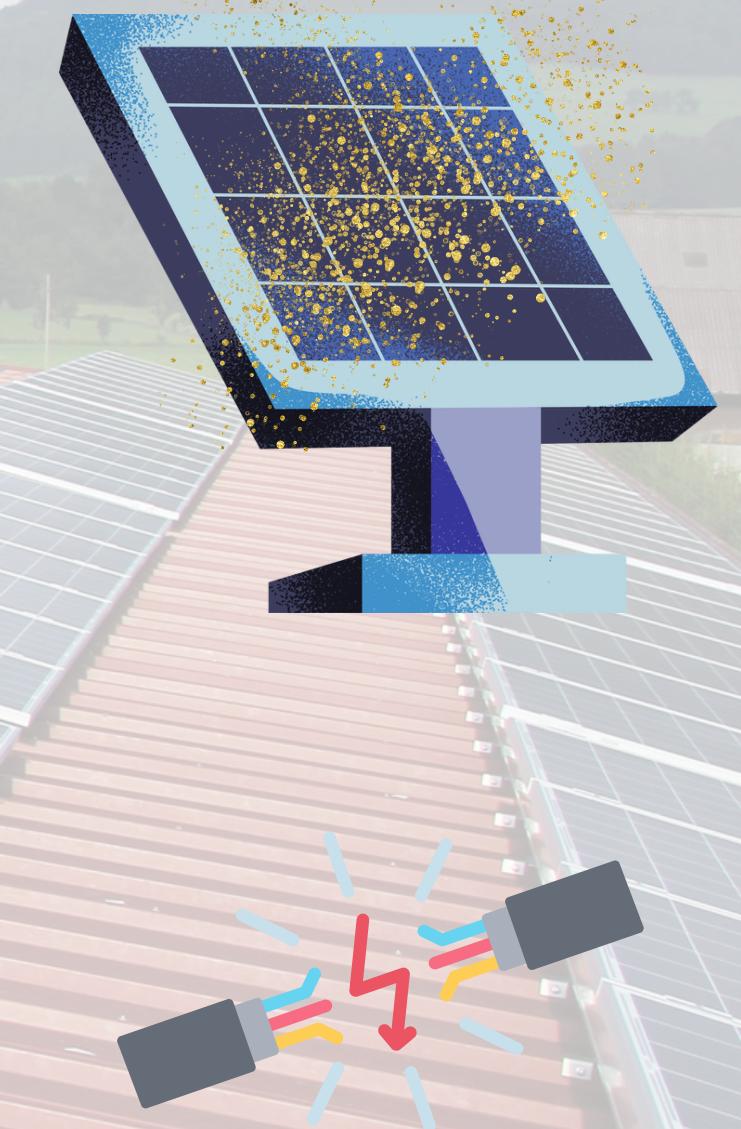
Is a website that can alert if your PV system are having the following problems in real time:

- Dust on the panel and have to be cleaned

- False contact in cables that have to be repaired

The screenshot shows the SolarIQ web interface. In the 'Location Input' section, the address '51.07963726359299, -114.18539494687352' is entered, and a 'Get Solar Data' button is visible. In the 'Upload CSV Data' section, a file named 'Dust problem - Sheet1.csv' is uploaded, and a 'Upload CSV' button is present. The 'Results' section displays a line graph comparing 'Expected Efficiency' (blue) and 'Actual Efficiency' (orange) over time. The graph shows significant fluctuations. Below the graph, the text reads: 'Expected Efficiency: 72.5%', 'Actual Efficiency: 69.89%', and 'Variation in Efficiency: 96.4%'. A 'Recommendation: Possible dust or debris.' message is displayed, along with a 'Compare' button.

<https://sol-eye.onrender.com>





Who wants to be part of the future  
in technological solutions for  
photovoltaic systems?