Solar installations unlock cost savings for low-income homeowners



BACKGROUND

This case study explores how TCC-funded solar installations have financially benefited low-income homeowners in Ontario. The case study does so through the lens of two individuals, Ermelindo Mazariego and Thirza Flores, who have been able to re-invest their energy cost savings back into their homes. For more on Ontario's nocost solar program, see page 62.

Interviews for this case study were conducted in March 2022.

Ermelindo Mazariego (center), a beneficiary of Ontario SHINE, joined by his extended family. Photo credit: Ermelindo Mazariego

ERMELINDO MAZARIEGO is a longtime Ontario resident who now gets much of his power from the sun. Originally from El Salvador, Mazariego moved to Ontario in 1981 because his home country was in the midst of a civil war. His aunt had already been living in Ontario and provided him a place to get settled. Since then, Mazariego has built a career as a repair technician for dentistry equipment and raised three children with his wife, whom he met in Ontario. The couple now live with their three grandchildren.

Three years ago, Mazariego sustained a back injury at work and had to cut his hours. The drop in income was then exacerbated by the closure of dental offices during the peak of the COVID-19 pandemic. So when Mazariego received a letter from the City of Ontario about Ontario SHINE, a TCC-funded program that provides low-income homeowners rooftop solar panels at no cost, his interest was piqued.

"The letter from the city came at a time when I was struggling to pay the bills. My health was already not great. I have the responsibility of caring for my grandkids, and then there was the pandemic.... It was a really hard time."

ERMELINDO MAZARIEGO

Initially, Mazariego was skeptical that the program was actually free for homeowners. To investigate whether there were hidden costs, such as higher property taxes, Mazariego followed up with a representative at GRID

Alternatives, the lead partner for Ontario SHINE. The representative assuaged Mazariego's concerns by sending him documentation on how everything would be financed — the solar panels would be provided through a prepaid model that covers installation and warranties for the life of the solar system, all funded by TCC. The no-cost solar system would also not trigger liens or increase property taxes for homeowners. Once Mazariego was confident there wouldn't be any surprise expenses, he was on board.

"At first I was concerned that the panels might raise my taxes or result in a lien, but after reading all the paperwork, I realized that this is legit, I really don't have to pay anything."

ERMELINDO MAZARIEGO

Mazariego's rooftop system was connected to the grid on June 16, 2021. The energy produced by the solar panels on his roof offset his consumption charges each billing cycle. Thus, while Mazariego's electricity usage has stayed more or less the same, his energy bill is appreciably lower.

"My bill was normally \$150 per month, and now with the panels, it's closer to \$30. When you're struggling with money, that helps a lot."

ERMELINDO MAZARIEGO

Over time, the cost savings have added up for Mazariego and enabled him to invest in several home improvements. His first project was to build a fence around his front yard to make it safer for his grandchildren to play outside. His

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second project was to ditch his gasoline-powered generator and install a battery-powered energy storage system. To do so economically, Mazariego did all the work himself and sourced the materials from a salvage yard. Aside from fixing up his house, Mazariego hopes to use his energy cost savings to pay off the remainder of the debt he owes on his home. He's looking forward to a day when he can retire and not have to worry about struggling with bills.

"I'm re-investing the savings back in my house... a fence so I don't have to worry about my grandkids running into the street... and a battery to keep the lights on during a power outage."

ERMELINDO MAZARIEGO



THIRZA FLORES is a another longtime Ontario resident who decided to go solar. Flores moved to the city 35 years ago with her husband and oldest daughter. Her husband has since passed, and now Flores lives on a fixed income with her daughter and son. Her fixed income makes it particularly difficult to accrue savings and build a financial safety net. Moreover, with historic inflation raising the prices of necessities like food and utilities, Flores worries about being able to cover her basic living expenses.

"I don't have a financial cushion to fall back on, so I have to take advantage of every financial incentive program that is available to me."

THIRZA FLORES

When Flores learned that a friend had obtained a rooftop solar system at no cost through the City of Ontario, she was intrigued. However, like Mazariego, she was concerned that the program might be too good to be true. To learn more, she followed up with a representative at GRID Alternatives. After getting a better understanding of how the program works, where the funding comes from, and what it would mean for her utility bills, Flores was sold.

"Initially I was worried it was a scam, but a representative at GRID Alternatives earned my trust and helped clear up how the program works."

THIRZA FLORES

When GRID Alternatives visited Flores' property to assess whether a solar system could feasibly be installed, it became clear that Flores' roof needed major repairs. Flores' late husband had started working on their roof and had stripped it down to the plywood, but sadly he passed before he was able to finish the upgrades. Without the savings to hire a contractor to finish the work, Flores' roof was left in disrepair and prone to leaks. Using funds leveraged from philanthropic sources, GRID Alternatives was able to work with a contractor based in San Bernardino, R.V. Roofing, to complete the needed repairs (totaling about \$4,000) at no cost to Flores.

Flores' solar system went live on October 23, 2020. And like Mazariego, her electricity consumption has not changed, but her bills are much lower. As her cost savings have added up, she's been able to address deferred maintenance projects around her house that she previously felt she could not afford. For example, a bathroom leak caused enough water damage that she had to hire a contractor to remove an entire wall to remedy the issue. Such repairs not only improve the habitability of her home but also the value of her home. Flores has been able to capitalize her energy cost savings in the form of greater home equity. For a person on a fixed income, this savings pathways is one of the few pathways for Flores to build her nest egg.

"With the money I've saved, I've been able to fix up my house.... When my bathroom faucet was leaking, for example, I could afford to call a contractor to come fix it."

THIRZA FLORES



Thirza Flores, another beneficiary of Ontario SHINE. Photo credit: GRID Alternatives