



PROJECT PROFILE

Osmose Improves Grid Resilience for Canadian Utility

The Situation

The Canadian Province of Ontario covers more than 415,000 square miles – an area encompassing both wild and rocky terrain and suburban neighborhoods. One of the province’s utilities distributes power across a substantial area, and is responsible for millions of wooden power poles and enough power lines to wrap around the world three times.

But the utility’s distribution network is showing signs of its exposure to the region’s summer heatwaves and sub-arctic climate. A first pass inspection of the utility’s wood pole distribution structures indicated that many of the poles are in danger of failure. And with an ever-increasing frequency of adverse weather events, shoring up those structures has become a priority for the company.

The utility faced the daunting task of changing out tens of thousands of poles, with estimates ranging as high as \$20,000 each with limited labor resources, increasing pole shortages and limited time.

Instead, they turned to Osmose.

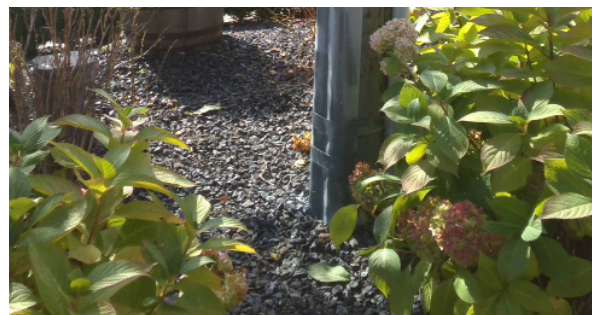
The Solution

After several years of exacting evaluation and testing, the utility engineers gave the go-ahead to Osmose’s line of trusses—including Osmose Tough Truss®. In 2023, using their own selection criteria for which poles in their network qualified for refurbishment, the utility designated 5,000 units to implement Osmose’s trussing technology.

Even as the utilities engineers were enthusiastic about the ways that Osmose’s trussing system could help them save money even as they brought a new level of resilience to their grid, they were eager to find the most cost-effective way to implement the solution.

Initially, the company hired on an Osmose installation crew while having one of its own crews trained in the process. After training on Osmose’s installation methods. Their internal crews averaged 6 to 8 trusses per day, while Osmose’s teams averaged 12 to 15 or per day per crew.

The utility allocated 800 poles to its internal crew for the year, and Osmose signed on for the remaining 4,200 units of the 2023 goal. Osmose was able to scale up quickly, bringing multiple crews onto the project. Over the course of the year, the crews sometimes combined for as many as 50 trussing deployments per day across the entire province.



The Results

Osmose refurbished approximately 4,050 wood poles for the utility in 2023, and coordinated the utilities crew for another 450, racking up an astounding 4,500 poles trussed in one year. With over 20,000 poles still marked for refurbishment by the utility Osmose has been brought on for additional units to complete in 2024.

With Osmose's trussing installation expertise, they were able to bring the cost per pole for trussing down to \$1,260, less than the utilities in-house cost of \$2,600 per pole.

The utilities internal crews will now shift focus on poles that cannot be recovered through trussing, using the company's designated digging equipment to focus on installing replacements. Those units are expected to cost \$20,000 each, meaning that each successful trussing saves the utility \$18,740 per pole, or 94 percent of anticipated costs.

With the pioneering success of the utility's partnership with Osmose, many other Canadian utilities are working with the company to implement the solution throughout the country.



4,050 units

wood poles refurbished by
Osmose in 2023.

12 to 15

trusses installed pre-
Osmose crew, per day.

94%

of anticipated
costs saved

To learn more, visit osmose.ca/pole-restoration-services, or contact your local Osmose expert at poleinfo@osmose.com.