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Electric

# Partnering with Upgreen: Meeting Grundfos' Green Target while Increasing Resiliency and Cost-Efficiency

With Grundfos' objective of finding a solution that is not only sustainable and resilient, but also economically efficient, Schneider Electric and Upgreen Canada partnered to provide exactly that: a new generation system that provides reliable backup power, avoids CO2 emissions, and saves electricity costs.

[solar.schneider-electric.com](https://solar.schneider-electric.com)



Grundfos, one of the world's leading water technology companies, sought to find a reliable, environmentally conscious, and cost-saving energy solution for their expanding business. Not only did they want the ideal results for their unique energy challenges, but they also wanted a solution that will contribute to their goal to be carbon neutral by 2035.

Upgreen, a renewable energy installation company that provides the best, cost-effective solutions, partnered with Schneider Electric to develop and design an energy solution that aligns with Grundfos' policies in sustainability, provides reliable power, and maintains cost-effective electricity bills.

### Challenges

Grundfos expanded their business and now consumes more energy per month in their Oakville location. According to Ontario's electricity policies, this is a cause for extra fees and charges to their monthly energy expenses. On top of that, overall energy costs are getting more and more expensive every year, and Grundfos needed a way to lower and maintain their electricity bills.

One of the concerns for this location is that it does not receive any generation from the grid, causing Upgreen to design a non-parallel generation system to assure zero export to the grid. Additionally, with the preferred commercial solution of a 3-phase 120/208V or 347/600V for the building, choices were limited in the market.

With these challenges, Grundfos sought the services of Upgreen for a unique and powerful solution. They evaluated a total of 7 technologies and solutions, but ultimately only one was ideal for them. They wanted a solution that will save monthly energy expenses, aligns with their sustainability practices, and protects against power outages, and Schneider Electric's multi-unit XW+ system was the best option to achieve just that.

## Customer Profile

Grundfos pioneers solutions to the world's water and climate challenges and improve quality of life for people.

## Installer Profile

Upgreen is a renewable energy company committed to finding the most convenient cost-effective solution through design and development.

## Goal

To meet sustainability goals with a powerful and resilient solar power system, while lowering monthly energy expenses.

## Solution

Upgreen developed a solution consisting of 6 of Schneider Electric's XW+, 6 MPPT 100, 3 MPPT Disconnect RS, 2 XW Power Distribution Panels, 4 Connection Kits, 1 Gateway, 6 Discover AES 48V batteries, and 1 ASCO Series 300 ATS.

## Results

Grundfos significantly increased their power resiliency, sustainability, and cost-efficiency. Their new building is protected from potential power shutdowns, charging all their technology continually, while decreasing their energy expenses. This solution will also avoid 2 tons of CO<sub>2</sub> emissions per year, meeting Grundfos' sustainability goals.

## Solution

Schneider Electric had the experience in developing non-parallel solutions from other projects, giving Upgreen confidence in Schneider Electric technologies. They worked together to create the perfect solution for Grundfos' needs. The Schneider Electric multi-unit XW+\* was the most ideal to achieve a commercial solution in 3-phase 120/208V. Upgreen designed the multi-unit system including these devices:

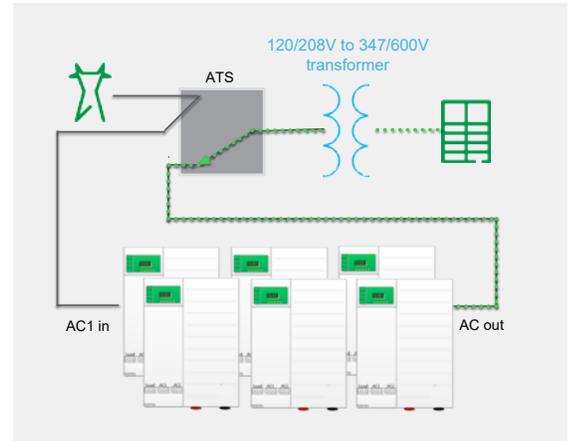
- 6 XW+ 6848 Hybrid Inverters
- 6 MPPT 100 Charge Controllers
- 3 MPPT Disconnect RS
- 2 XW Power Distribution Panels
- 4 Connection Kits
- 1 Gateway
- 6 Discover AES 48V batteries
- 1 ASCO Series 300 ATS

With the flexibility and scalability of the XW+, it allows for Grundfos to expand their system to up to 60% any time in the future.

## Results

With the multi-unit XW+ system, Grundfos can now run most of the loads islanded from the grid, resulting in the resiliency of their energy system. Their new building is now protected from potential power shutdowns. Powering through all outages, Grundfos can continue to operate their business, charging all their technology continually, including their electric vehicles, while decreasing their energy expenses. Not only is their new system more cost-efficient, but this solution will also avoid 2 tons of CO2 emissions per year, meeting Grundfos' sustainability goals.

With the support of Schneider Electric, Upgreen successfully solved any challenges and achieved all of Grundfos' objectives.



“Grundfos is always looking to partner with companies that share the same vision of sustainability. We believe we found with Upgreen and Schneider Electric the right fit to help us accomplish the SDG 13 goal. The next step is to improve our internal electrical load and add more renewable energy to our building. The end goal is to be CO2 neutral or better by 2035!”

— Grundfos

Footnotes: \*This multi-unit system is also supported by the XW Pro model and may utilize an ASCO Series 300 ATS or a single POC AC contactor as outlined in our newly published Multi-unit Design Guide. Please visit [here](https://solar.schneider-electric.com/purchase-products/) for reference. Reach out to your local sales application engineer for design assistance. <https://solar.schneider-electric.com/purchase-products/>

## XW Pro Hybrid Inverter

Learn more about the **XW Pro hybrid inverter** and how it connects solar and battery for backup power and energy security.

Watch the **XW Pro video**.



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