



Piltin Puutarha

The Family-Run Greenhouse Growing their Revenue with Energy Flexibility



PARTICIPATION

3.27 MW



MARKET

FCR-D Up & Down

ACTIVATION <5 SECONDS



Located in Finland, Piltin Puutarha Greenhouse has been operating since 1978 and is led by its CEO, Hanna Leena Helenius. This family-run business of 16 employees has become a beacon of sustainability. **Piltin Puutarha has been participating in balancing services since 2016, showing commitment to sustainability and a greener future.**

Pioneering Smaller Greenhouse Flexibility in Finland

Finland's greenhouses are prime candidates for flexibility services. Their year-round cultivation requires warmth and light that protect young crops from harsh Nordic winters. These lights could be a major operational overhead, but through demand response participation, they can also be a source of additional income.

In 2016, Sympower's Finnish team connected with Piltin Puutarha CEO Hanna to explore how **demand response could potentially benefit their businesses' bottom line and promote sustainability.**

Our experts provided a detailed and comprehensive explanation of how demand response works as a cost-saving solution. This led to a pilot installation of Sympower's hardware.

Making the Most of Flexibility through Energy Balancing Markets

Sympower works with businesses to sell their existing energy assets' flexibility on balancing markets, helping to stabilise the grid frequency.

Initially, Piltin was participating in FCR-D Up markets. The initial assets activated were the greenhouse lights, offering up to 2.27 MW of power that could be turned off during power demand spikes. **But with more markets opening in Finland, they expanded to FCR-D Down markets too with an additional 1 MW of asset flexibility.**

Now, Sympower can remotely turn the greenhouse lights on and off, increasing their overall flexibility and maximising the revenue they generate.



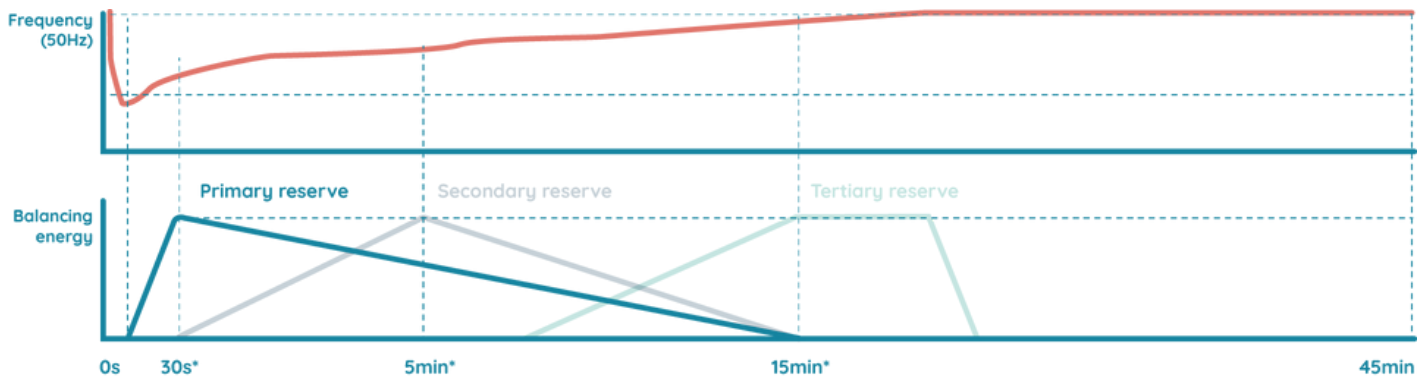
The installation was really easy. After talking to Sympower about the process, they came and installed everything. I didn't have to do a thing! Sympower even called my local electrician to help with the installation.

Hanna Leena Helenius | CEO, Piltin Puutarha

FCR-D Up & FCR-D Down markets

Together, Piltin Puutarha Greenhouse and Sympower now manage 3.27 MW on the FCR-D Up and FCR-D Down markets, with activations a couple of times per month.

Payments for these activations depend on whether flexibility is offered on the yearly market or hourly market. The yearly market is an annual contract-based market which offers a fixed price for the year, whereas hourly market payments are variable payments based on the highest bid for one hour of capacity.



Cost-Savings paired with Environmental Benefits

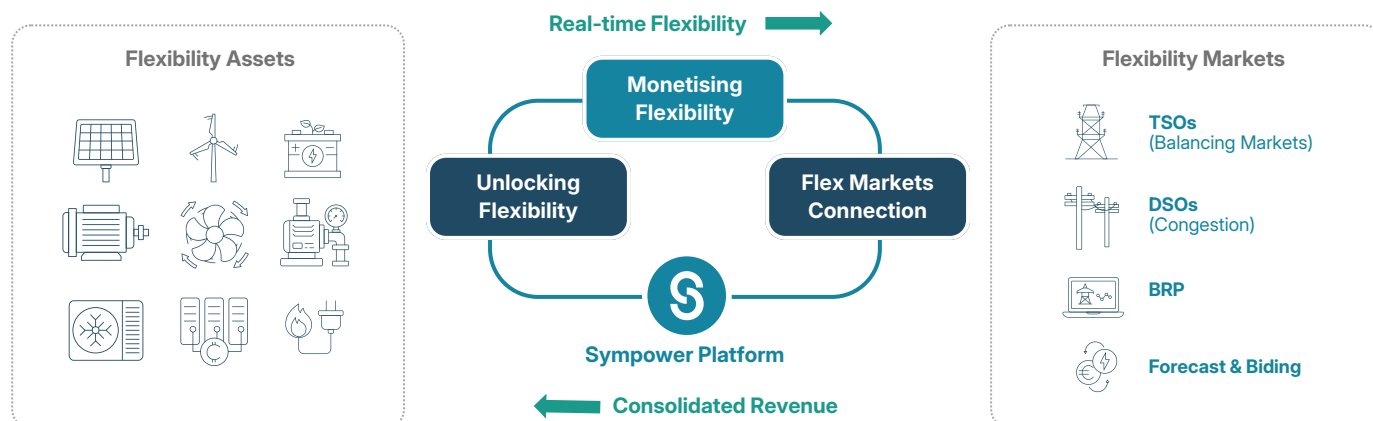
While Piltin Puutarha's greenhouse lights are a central part of the infrastructure's daily operations, utilising them to balance the Finnish grid does not interfere with core business processes. By utilising the flexibility of their existing equipment and being remunerated for balancing the grid, the company is earning thousands of euros in gross revenue annually.



We get a notification alerting us. But in the greenhouse, the lights briefly turn off and on again. But it's so short that we've seen no impact on our crop growth, even during the winter days. What's more, it generates a nice amount of money for us too.

Hanna Leena Helenius | CEO, Piltin Puutarha

Sympower's business model

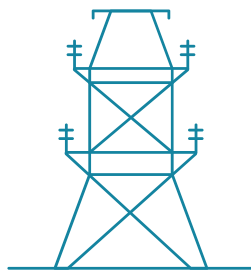


Benefits of demand response



New Revenue Streams

Businesses can **unlock new revenue streams** by offering their energy flexibility to the grid during periods of peak hours.



Reliable Grid

The flexibility of businesses, ensures that grid frequency stays balanced. Everyone connected to the grid **benefits from this reliable energy supply.**



Sustainable solution

The energy transition needs demand response to help phase out fossil fuels, making it **essential to a sustainable energy system.**



Unlock your flexibility and Maximise Revenue!

[Book a meeting with one of our Energy Experts](#)



Powering Change Together