



A small village on the southeastern coast of Sweden becomes a front runner in the upcoming energy transition, where 140 households will have the ability to disconnect from the main grid.

Walking around in Simris, a village with around 200 people, you can barely tell that this community holds the key role in a research project with a lot of media attention across Sweden. When asking the villagers it shines through.

“It feels very positive and innovative. I can’t condone anything that destroys the environment and doesn’t promote sustainability for our future generations” says Karin Lefvert, a retiree who’s been living in Simris for ten years with her husband Lars Göran. “And actually, I think it looks like art installations in nature” she says and points to the wind turbine.

The village will be supplied by 100% renewable generation, produced mainly by the wind turbine Karin mentioned, supported by solar power and in the case of no sun and no wind, a backup generator running on biodiesel. To maintain the grid stability the system is also equipped with a battery and advanced steering equipment connecting it all. How much is produced and consumed is easily accessible in real time online.

To further support the grid to operate on only wind and solar power, customers have the opportunity to participate by connecting their heat pumps, water heaters and residential batteries. By adding flexible loads the system will be better equipped to deal with the fluctuations of intermittent power generation. The system will automatically manage the home units without reducing the customer comfort and already 20 something households have signed up to participate.

“We are planning to install PV on the roof and put a battery in the basement, to be ready in the spring. Currently we are heating directly with electricity so this is both cheaper and better for the environment” finishes Karin.

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