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“Now we are in total control of our energy”

An excess of solar power was the catalyst that drove ex-broadcaster Brian Scott to adopt an energy storage solution for his Isle of Wight home



When Brian Scott and his wife first moved to the picturesque Isle of Wight, they were not thinking about owning an energy-efficient home. “We moved here from Buckinghamshire in 2002 and bought a chocolate-box cottage very close to the West coast. But after 10 years, the occasional 100mph winds, plus sand and salt damage, forced us to move inland,” says Brian.

In 2012, Brian, 70, and his wife Susan, 67, decided to move to the rural village of Freshwater, and the south-facing house made it the perfect place to install

solar PV panels. “Over the years, my interest in renewable energy has grown and it’s sort of become my hobby,” says Brian, a retired broadcast and communications engineer. “I believe, if we’re not careful, we’re the first species on the planet that’s going to make itself extinct. Throughout my career I’d seen every kind of off-grid energy system, which is what led me to get solar panels myself.

“I had a unique opportunity to set up a solar PV demonstration system when I became a technical consultant for a large-scale PV system in the UK to

the details

Where: Freshwater, Isle of Wight

House: 4-bedroom house

Number of panels: 12

Installed by: Engenius Limited, Cowes

Battery: Leclanché TiBox lithium titanate battery

Two-way Inverter: SMA Sunny Island 4.4M

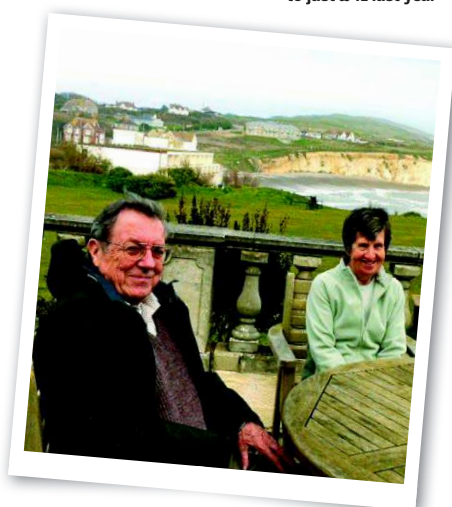
power broadcast transmitters. We needed to test the efficiency of how the solar panels performed when they were crossed by moving shadows cast by the masts, so I agreed to use my house as a testing ground.”

Brian now has eight standard PV panels on his roof, plus four panels that are pitched at different angles and purposefully shaded – to provide an output comparison. Despite having four deliberately hindered panels, the array provides Brian with on average 3.6MW per year, certainly more energy than he needs. It was at that point that he started to think about energy storage – by getting a battery, he could use the stored energy as and when he needed it, saving more money and reducing his dependence on the Grid.

Early last year, he decided to get a Leclanché TiBox lithium titanate battery with an SMA Sunny Island AC-coupled inverter. These were installed and operational by mid-July. “I’m at an age now where I want a ‘fit and forget’ system that’s going to last and requires no servicing – I was impressed by the longevity, high quality control and safety features of the TiBox. I did my research and was pleased to see the TiBox provided the lowest cost per kWh of all energy storage systems tested in a survey by *PV* magazine.”

The TiBox battery also charges up very quickly and can happily discharge down to 9% full. Brian put the battery system in himself after specialist training. However, he suggests approaching an experienced and specialist company, like Wind & Sun, to help with the installation.

He now uses SMA’s Sunny Portal energy monitoring system, so that he can see his battery usage at a glance. “Now, in the summer, we can pretty much go all day and through the evening without having to draw energy from the grid,” says Brian. “And there’s a misconception that you can only discharge your battery at night. Throughout



Above SMA’s Sunny Island inverter and Leclanché’s TiBox battery fit snugly into the utility room

Below Brian and his wife Susan say their utility bill was down to just £41 last year



the day, when we boil the kettle or switch on a heavy load, you can see from the monitor that the energy is being drawn from the battery, rather than the panels.

“This works well for my wife, as she doesn’t want to be told by me, or the storage system, when is the best time to use our energy! Our way of life now is that we can do the washing, use a hairdryer or cook a meal, whenever we want.” However, for those happy to use

“In the future, batteries will be as common as fridges”

automation, the system can automatically control appliances to operate at energy-rich times.

“Since the battery was installed 250 days ago, we have drawn at least 350 kWh of energy from it, rather than from the Grid,” says Brian. “It’s become like a household pet, plus a great talking point!” he says.

Brian believes the potential for domestic energy storage is huge: “In the future, batteries will be as common in people’s homes as fridges or freezers,” he says. “The increasing take-up of large-scale battery energy storage by utility companies will hasten that day, by bringing down battery costs.

“The way I see it, having a battery is a form of insurance against inflation. Energy prices are guaranteed to go up, but my pension won’t. Although there is an upfront cost to install a battery, I know it’s still going to be working for me in 20 years’ time.” ■

■ For more information on the TiBox battery, email home.storage@leclanche.com or visit www.leclanche.com

FREE ENERGY day and night with the TiBox

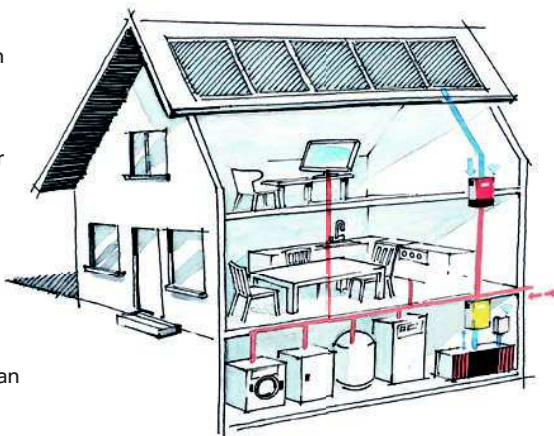
Connect a TiBox to your solar array and you can store the energy your PV panels generate during the day to power your home whenever you like – even if that's first thing in the morning or last thing at night.

With a lifespan of up to 20 years, the TiBox home energy storage system is the smart way to free yourself from the big energy suppliers and take control of the cost of your electricity for decades to come.

Whether you are installing a new solar PV system, or you are thinking about adding an energy storage system to your existing solar panels, get in touch to find out how we can help.



- Longest lifetime for Lithium batteries on the market today
- Charges and discharges in 1 hour
- Supports multiple cycles per day
- Safest chemistry available
- Swiss engineering coupled with German manufacturing



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