

Wessex Community Energy Network

Bath Guildhall Wed 8th November 2023

Energy Democracy- Developing Local Energy Markets

Case study:

Energy Local Bridport

Pete West

Secretary, Energy Local Bridport Co-operative





**DORSET
COMMUNITY
ENERGY**





**Established in
2013**

**Oct 2023: Total 28
solar PV sites --
1580 kW installed
capacity**

**Approx £1 million
local community
investment @
5.5% pa interest**

**Total cost saving
to sites to date
approx £500,000**



Energy Local Bridport launch January 2020



Two street stalls and a public meeting in Bridport Town Hall in January 2020 resulted in 70 expressions of interest – only 50 households were needed to match the shared generation from the 50 kW wind turbine.



Existing 50 kW wind turbine owned by a local farmer has been supplying 50 households in Bridport with lower cost renewable electricity since September 2021.

There are an additional 90 households on a waiting list.

**Energy Local
Bridport Club
eligible area –**

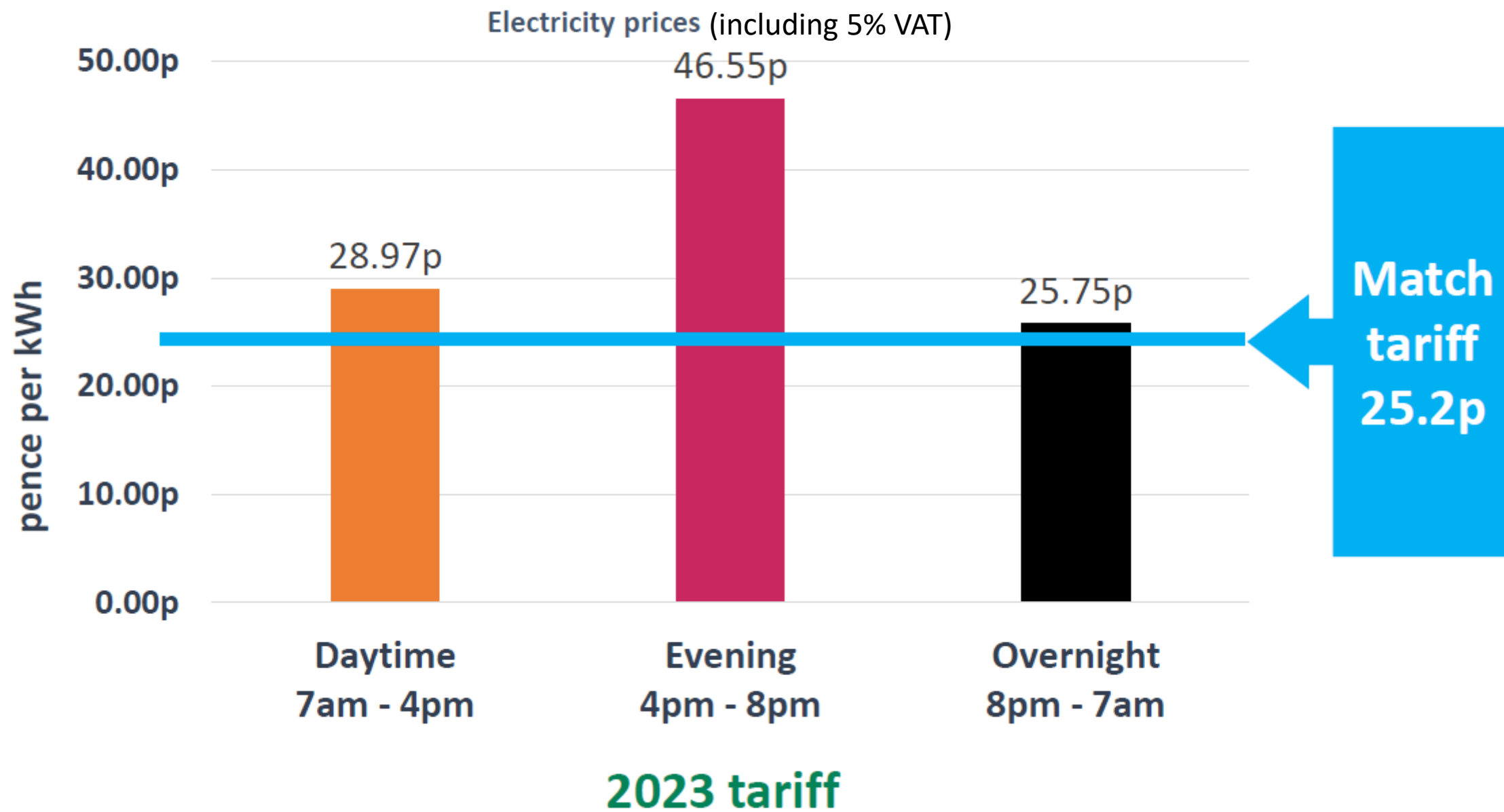
**Bridport
electricity
substation
area**



Energy Local Bridport electricity prices from Octopus Energy 2021

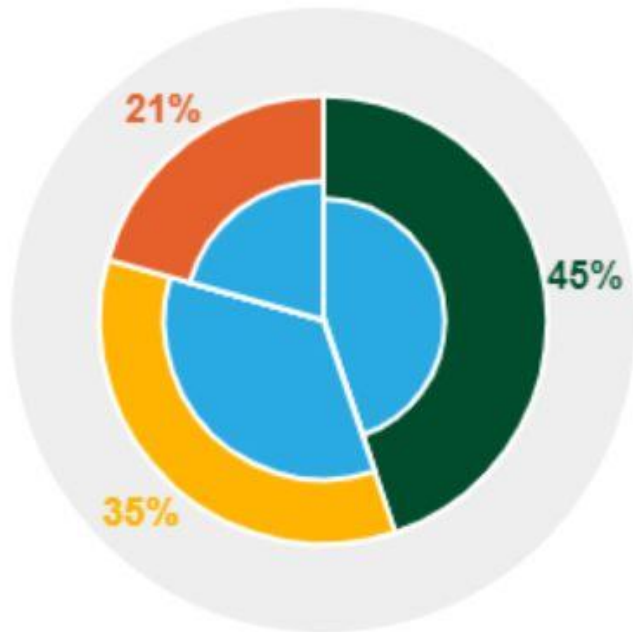


Wind energy from Salway Ash wind turbine: 9-10p/kWh



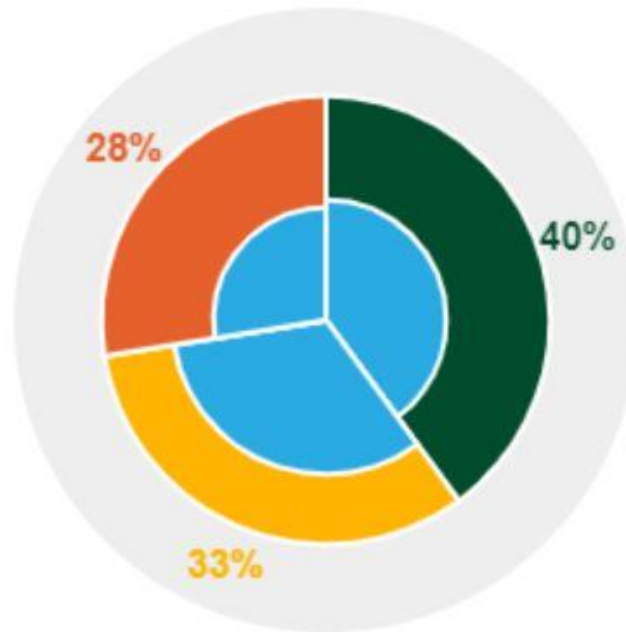
ELECTRICITY

11853.09 kWh







COST

£3243.34



SAVING

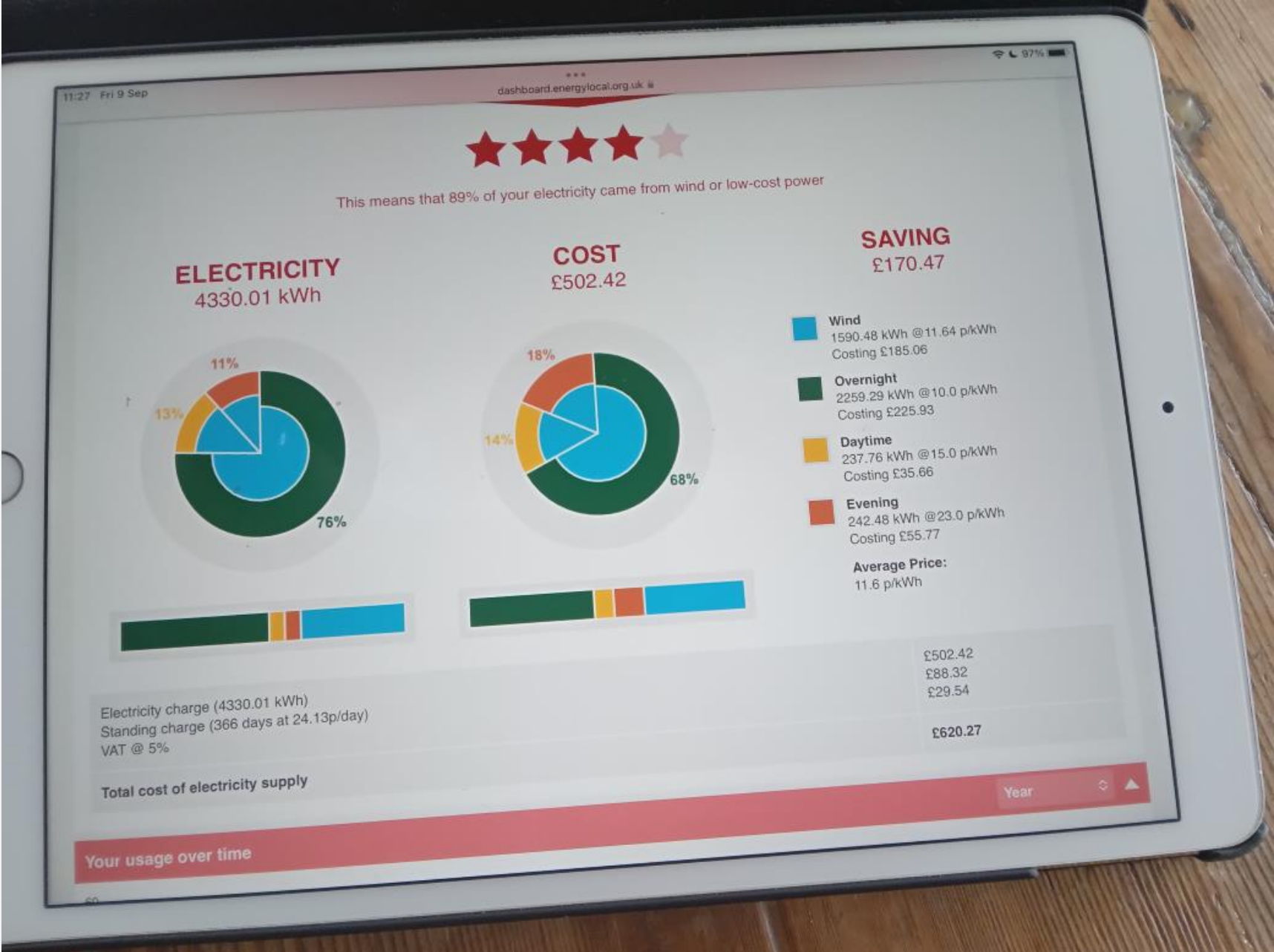
£680.03

-  **Wind**
4566.55 kWh @24.00 p/kWh
Costing £1095.97
-  **Overnight**
3757.04 kWh @24.5 p/kWh
Costing £921.22
-  **Daytime**
2022.05 kWh @27.6 p/kWh
Costing £557.88
-  **Evening**
1507.46 kWh @44.3 p/kWh
Costing £668.25

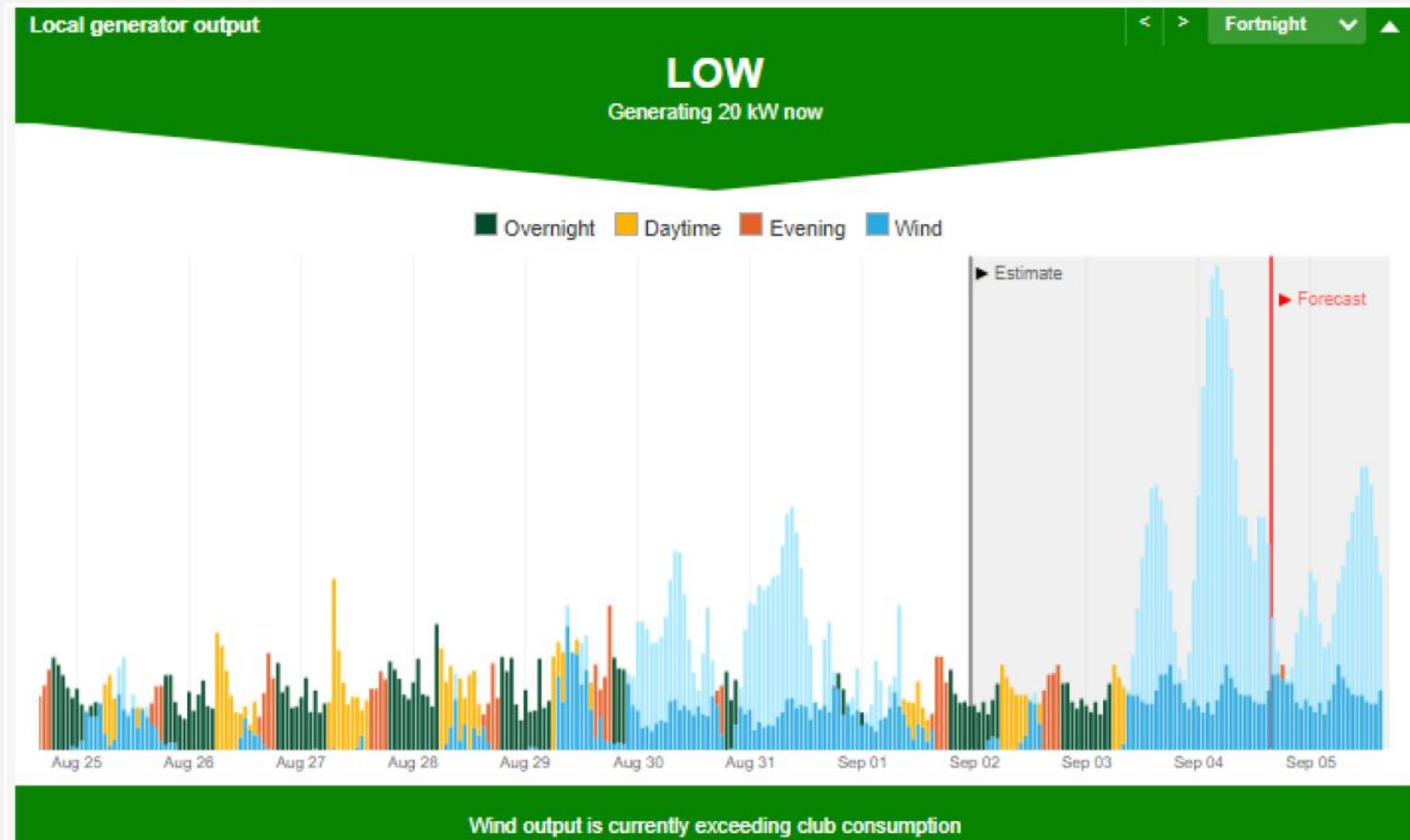
Average Price:
27.4 p/kWh



Annual electricity consumption of an Energy Local Bridport member with 3kW of solar PV on their roof and an electric car driven 6,000 miles per year



Consumer online dashboard



‘Windy Pete’ keeps the village lights on

A retired engineer has become the first person in England to supply renewable energy to the local community through his own wind turbine (Laurence Sleator writes).

Pete Bailey, 69 — or Windy Pete to his neighbours — provides 17 houses in Bridport, Dorset, with clean energy from a 50kW generator on his land.

Residents can purchase enough wind energy to cover half of their total electrical needs through a community scheme that helps to distribute

the power. The cheaper energy supply, which saves locals up to £60 a year, has proved so popular that a waiting list has formed. The scheme aims to expand to more than 50 homes in the spring.

“To be able to supply local people not only makes sense environmentally but economically too,” Bailey said.

Having installed the 80ft-tall turbine ten years ago, Bailey first sold his energy to utility providers. When this proved financially unsustainable he offered it instead to the community, where he could make about

50 per cent more. “I was going to have had to dismantle the turbine,” he said. “Now, by getting more money for the energy I’m generating, I can keep it for the future.”

The scheme is run by



Pete Bailey, in the red trousers, sells cheap electricity to neighbours generated by his own wind turbine

Ireland

Meridian ITV news feature Sept 2022

Peter Bailey interviewed by Holly Green



The Octopus Energy logo, featuring the word "octopus" in a bold, lowercase sans-serif font and "energy" in a lighter, lowercase sans-serif font, both in white.

“The company that has
done the most to advance
UK renewables”

The REA logo, with "REA" in a large, bold, white sans-serif font and a white triangle to the right of the "A".

THE ASSOCIATION
FOR RENEWABLE ENERGY
& CLEAN TECHNOLOGY

Some good news that Octopus Energy is willing to continue supporting Energy Local Bridport and other operational Energy Local Clubs for the next financial year April 2024- March 2025

However it is uncertain at the moment if Octopus will support any new Energy Local clubs or allow new members to join the existing clubs

Challenges- Dorset Community Energy's plans to add 250kW of ground mounted solar PV



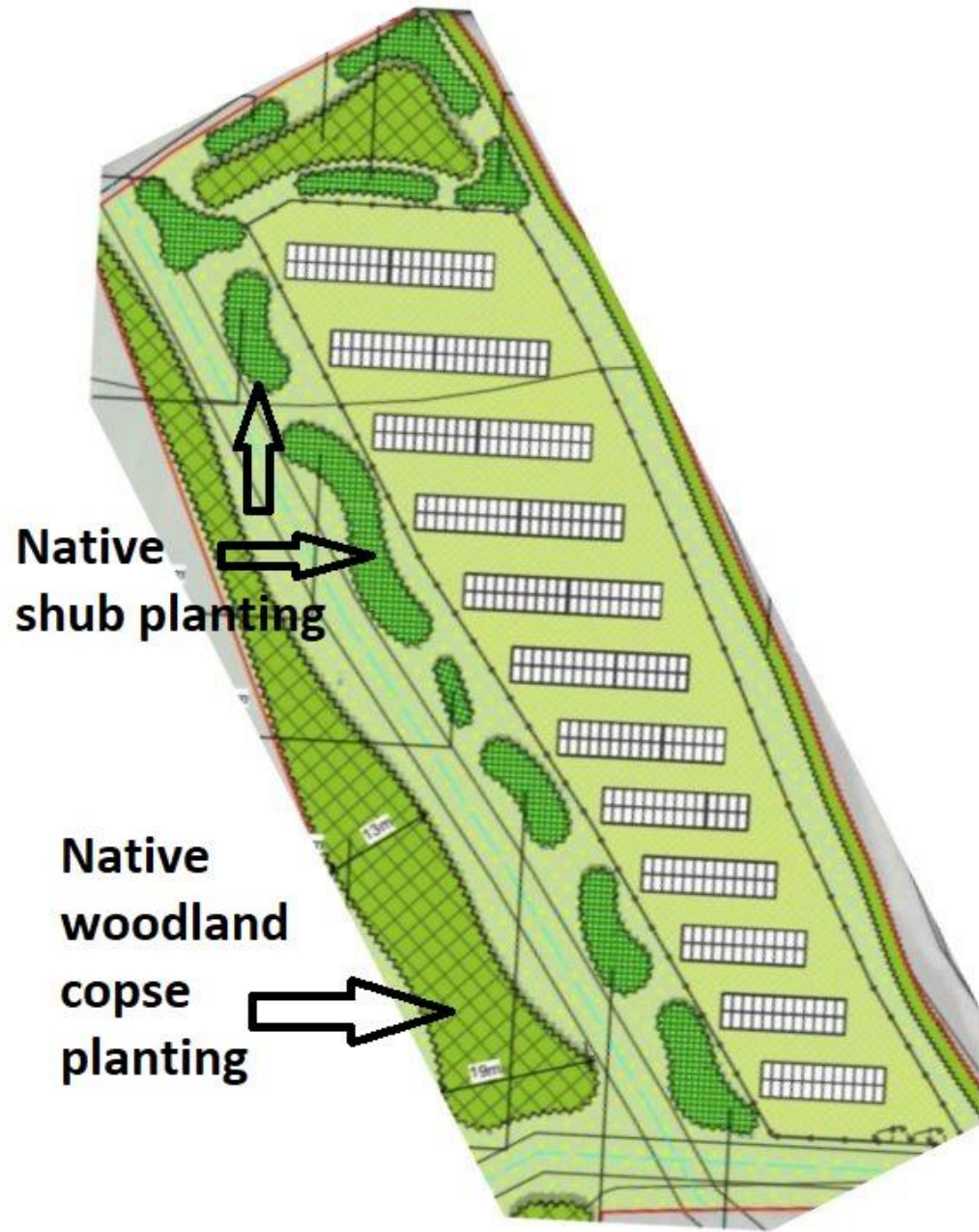


Sunken rural road
along the eastern
side of the site

Landscape looking
northwards is Dorset
Area of Outstanding
Natural Beauty

Affordable low
voltage grid
connection point in
the same field as the
solar array





Planning permission for 250kW of solar panels was granted at a Dorset Council Planning Committee meeting in February this year with a 7-2 majority in favour

Q94		97975					
	A	Q	R	S	T	U	V
77							
78	NET COST / INCOME	8,466	9,650	10,835	12,022	13,210	14,398
79							
80	CUMULATIVE NET COST / INCOME	37,861	47,511	58,346	70,368	83,577	97,975
81							
82							
83							
84	Electricity value to end users	36,137	37,111	38,110	39,132	40,180	41,254
85							
86	Cumulative electricity value to end users	452,030	489,141	527,251	566,383	606,563	647,817
87							
88							
89	<u>Community benefit fund</u>		<u>Assumptions</u>				
90	Income surplus over 20 years		75% of solar generation supplied locally				
91	Decommissioning funded from surplus yrs 20-30		Local supply price 13p/ kWh				
92			Householder standard grid price 25p/kWh				
93			PPA export price for 25% of generation 8p/kWh				
94	Total available funds contingency/ community fund	97,975					
95							



ANY QUESTIONS?

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