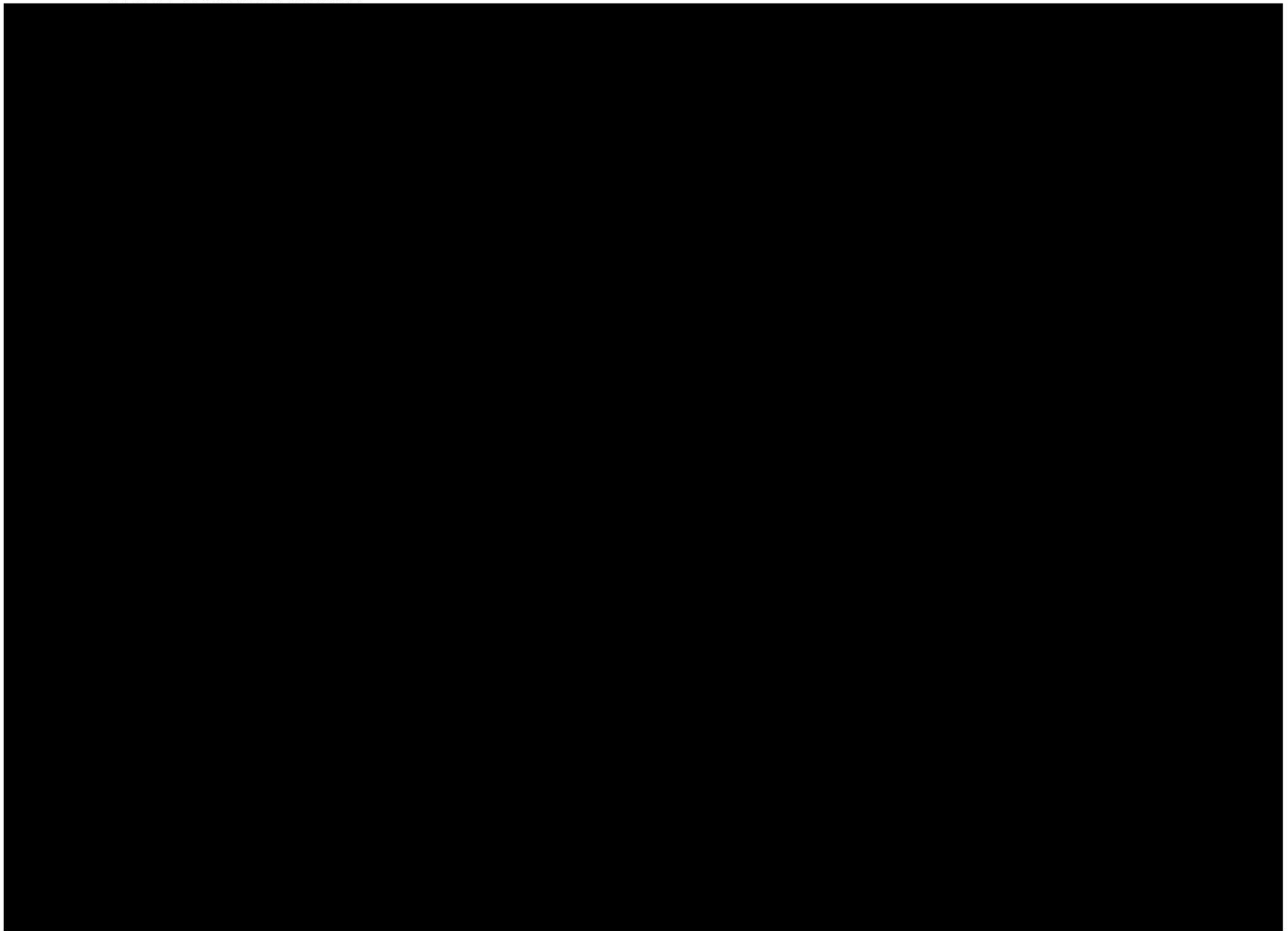


Plans, Site, location of VAWT

The proposed siting is

- At the centre of the property
- More than 5m from a neighbour/ boundary.
- Less than 3m above the roof line
- Small size, less than 1.2m high and 460mm wide.
- Near silent, 30db at 2m
- VAWT's do not flicker.



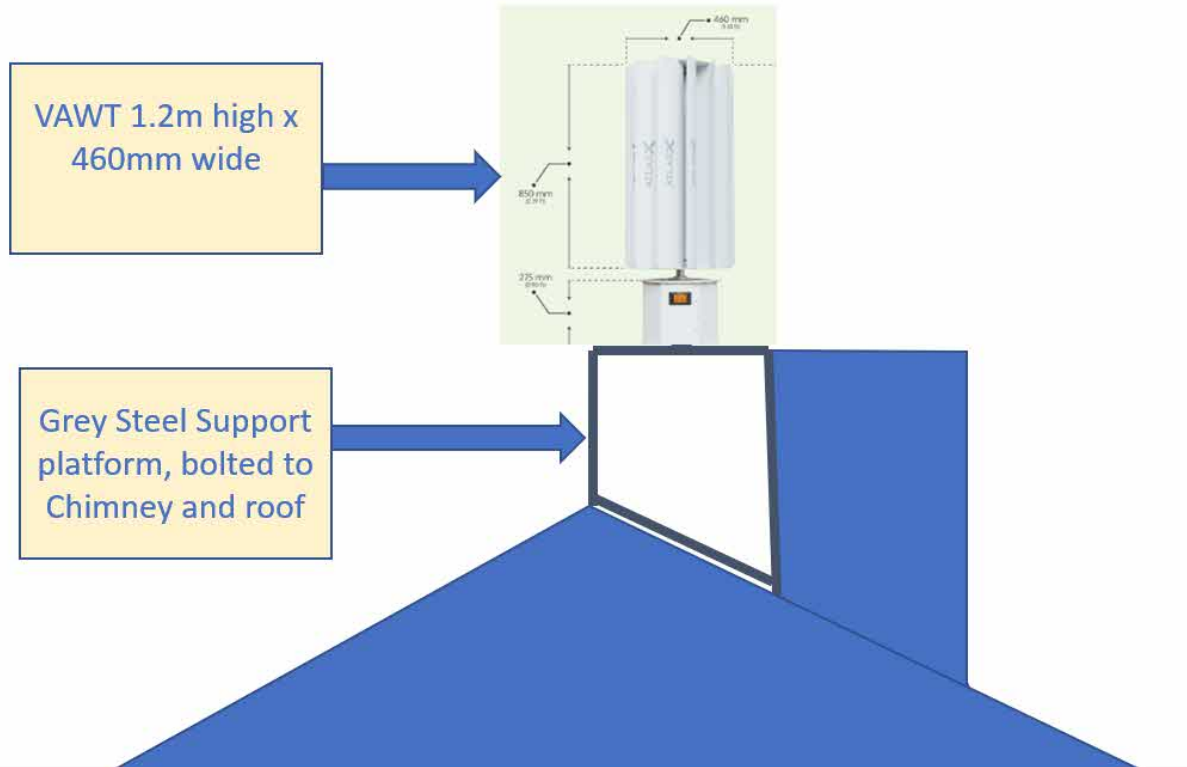
Application for a small, roof mounted Vertical Axis Wind Turbine at Alma Cottage IP6 8HJ

The VAWT will be roof mounted, on the ridge, behind the chimney.



The VAWT will be mounted attached to the roof ridge and chimney.

Schematic and dimensions.



USER_MANUAL.pdf

Open with Google Docs

ATLAS X

TESUP Vertical Axis Wind Turbine

Weight 10kg.
Height 1180mm.
Width 460mm.

Min Wind speed 3m/s
Max wind speed 50m/s (force 3 hurricane).

Noise 30db at 2m
(almost silent, less than a fridge).

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Rationale:

There are four main reasons why a Vertical Axis Wind Turbine (VAWT) is appropriate.

- a. They are nearly silent
- b. They are smaller in size
- c. They work with wind from any direction
- d. They work in low wind conditions.

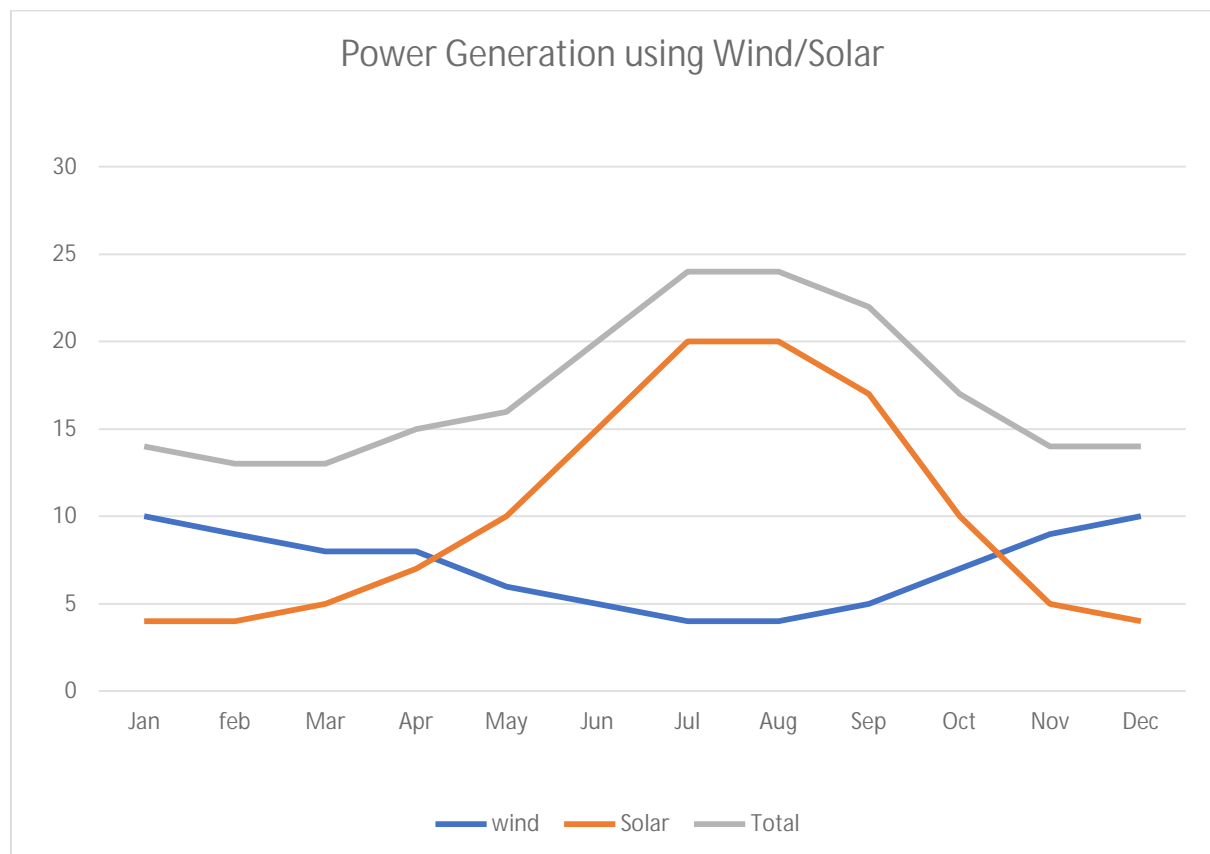
Alma Cottage already has a Solar array and battery system providing electrical power to the house.

It is less sunny in the winter than in the summer. Conversely, it is windier in the winter and less so in the summer.

During the summer, on a sunny day, the system can generate 20kwh per day, but in the winter this drops to less than 5kwh (which is when the power is needed for heating).

Wind speeds in Barking are ≈ 4 m/s in summer and ≈ 7 m/s in winter, which means that wind turbines produce more energy in the winter months compared to the summer.

A graph showing the potential energy production of a wind/solar system is below:



As can be seen using wind or solar alone only provides power for part of the year, but they are complementary, and when together, can provide the power needs of a house.