Winglette

WIND POWER FOR YOU...

Electricity For you...

Model W03

PICTURE GALLERY

...ion...

At this ... to ask oneself: "How much power can I expect ... ***Vinglete*** wind generator..?"

Becaus... any wind generator is directly propor... **wind data** can be helpful to answer this questi... ize of the project you envision, you may want t... **e assessment"** at the proposed site, since wind is affected by subtle variations in landscape and tree growth.

On one end of the scale, this wind resource assessment may involve a simple **visual inspection** backed up by existing wind data (e.g. from the Canadian, or American Wind Atlas, or from data obtainable from the South African weather Bureau, for the southern parts of Africa).

On the other end of the scale you might want to purchase an anemometer, that can take precise wind measurements for up to a year. It depends on how much you want to spend and how accurate you want your data to be.

For our purposes, we will stay with the first approach, and find data for the region where one wants to install the ***Winglette.***
(Note: The figures in the following tables, represent only a general indication of the power production that you may expect. They are no guarantee of exact power generation values.)

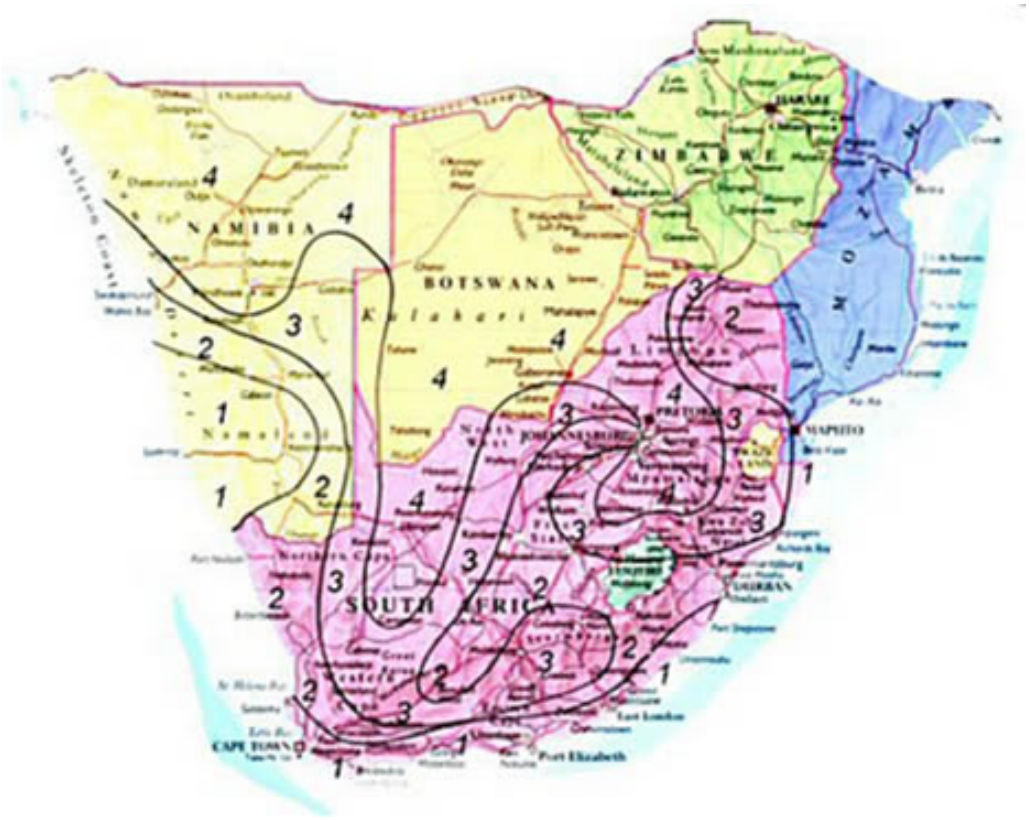
Southern Africa:

For all installations in the Southern parts of Africa, a Wind Atlas has been prepared, that is display as follows.

Testimonials.
In the end, it is what our customers say that really matters. Here are the comments of some of them:

Johnny Hanekom, Keetmanshoop, Namibia: The two (2) machines that I've bought, exceed all my expectations as far as power generation is concerned. I am really pleased with their performance, and I am planning to buy the third unit.

Johnny van der Linde, Groblershoop: We are retired on our farm outside Groblershoop, and have always experienced a shortage of electricity from the solar panels we had. With our Winglette wind generator now installed, we are seeking ways to utilize the abundance of power that available now!



From this chart it can be seen that the area is divided into four (4) wind zones. You can find the zone that complies to the site where you want to install your ***Winglette*** wind generator. The table below, summaries the expected daily power production for the 3 kWatt ***Winglette***, for different tower heights.

For example: If you want to install a machine on your farm in the Beaufort West district, which is in **zone 2**, the expected power production of your ***Winglette*** on a 18m tower, will be 16.2 kWatt-hour per day.

EXPECTED DAILY POWER PRODUCTION
FOR DIFFERENT TOWERS HEIGHTS in (kWatt-hours/day).

Zone	12m	15m	18m	24m	30m
1	21.7	24.0	26.6	29.1	33.4
2	12.1	13.5	16.2	18.6	20.6
3	9.0	10.0	12.0	13.8	15.3
4	7.6	8.4	10.2	11.7	12.9

Other parts of the World:

Wind Atlases, exist for all other countries in the World. To help your with power production estimates, we have prepared the following table, with figures, for different average wind speeds, in meters per second (m/s).

For example: If you want to install a machine on your farm in an area where the average wind speed is 6 m/s, the table shows that the expected power production of your ***Winglette,*** on a 18m tower, will

Choose today:
...the wind is blowing...
..the power is there...
...take your share...

be 15.7 kWatt-hour per day.

EXPECTED DAILY POWER PRODUCTION FOR DIFFERENT TOWERS HEIGHTS in (kWatt-hours/day).

Average m/s	12m	15m	18m	24m	30m
4	6.7	7.4	9.0	10.3	11.4
5	11.8	13.1	15.8	18.1	19.9
6	18.1	20.1	24.3	27.8	30.7
7	24.8	27.6	33.2	38.1	42.1

Practical considerations:
Over and above, looking at available wind data and a Wind Atlas, a import aspect of your wind resource assessment, involve a simple **visual inspection** of the site, where that machine will be located. We therefore want to remind you of the following factors that have been dealt with, at the page on wind conditions:

- **Surface roughness.** High above the ground level, the wind is hardly influenced by the surface of the earth. At lower levels the wind is greatly retarded by surface conditions like trees, buildings, and all kinds of vegetation. The more pronounced the roughness of the surface, the more will the wind be slowed down. If you site has rough surface areas, **go for a higher tower** to avoid gustier winds.
- **Turbulence.** Not only surface conditions, like trees and buildings causes turbulence, but changes in the weather patterns, day time and night time, and uneven terrain. Turbulence decreases the possibility of using the energy in the wind effectively for your ***Winglette*** wind generator. It also impose tear and wear on your machine. **So, minimize turbulence.**
- **Obstacles.** Obstacles, like buildings, and trees, decreases the wind speed down stream from the obstacle. The slow down of the wind increases with the height and width of such an obstacle. So, **stay upwind of any obstacles.** If downwind side of obstacles, consider a higher tower. Remember, trees keep on growing taller, towers not.

These are some considerations to take into account when doing a wind assessment for your ***Winglette*** wind generator. Take your time to weigh all factors properly. You will be rewarded with a system that takes the best advantage of one of our **free gifts** on Earth... **the Wind**.

To receive a competitive price for a ***Winglette*** wind generator system, that will suit you, ***please click here.***

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