Hello, I hope all is well with you. I am looking to find someone with your skills to do a project for a friend of mines start up company.

It will be doing CFD, comparisons and more with report. The product is a Vertical Axis Wind Turbine (VAWT). This is not a normal turbine and it has some unique features. After the VAWT it has way we call "Directors" these attach at the end of the turing to catch more wind and direct it into the turbine. I have attached what my friend wrote me, please read it and let me know if you can help and what you think. I can also send you photo and sketches. Here is what he said:

**1-** Our New Model VAWT included big directors (guide-boost) 5.5 meter included our rotor in the middle, and 30 % drg angle bottom, new rotor design of 24 blades, 2 meters height, and 1.22 diameter, hollow rotor is 30 cm in the middle.

**2-** Also compare with various other models (VAWT)

**3-** CFD activities:

Starting from our basic model VAWT (with dimensions, plans, etc.) Widened with a 3D drawing of the wind catchers (guide-boost in total 5.5 meters, included rotor with hollow in the middle, and 30 % drg angle system on the bottom, and boost in closed on top, guide area is open). With dimensions and specifications, I expect them to theoretically calculate axle output with torque and speed at different wind speeds.

They should also be able to provide us with a curve of the Cp in function of the wind speed. The Cp is defined as the ratio between Pmechanic to Pwind, with other words, how much is the Pwind boosted by the combination of the VAWT and the proposed windscreens. (big guide boost directors and 30 drg angle system on bottom and closed boost system on top to creacte pressure in the follow rotor, inside the windturbine boost ratio 1 to 12)

Besides, they will also be able to provide other parameters for pressure build-up, friction, max and min theoretical speeds. Can they also vary the proposed windscreens (guide-boost directors) in their models to see the impact on the mechanical power of the proposed turbine VAWT?

Any idea of what you can do this GIG for? I see on your profile the different options and also wanted to see a guess on how long it will take you. Thank you and I look forward to hearing from you.

Best regards,

Conrad