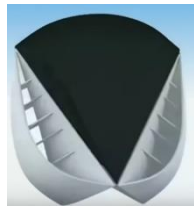
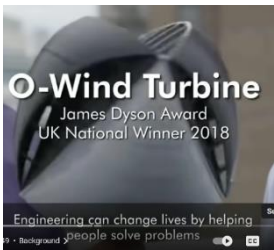
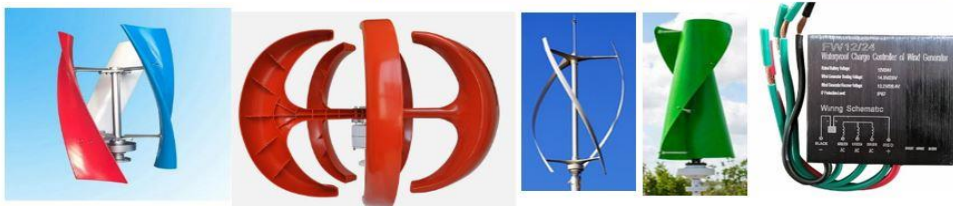


How to get free electricity and store it from the wind 24/7. Solar panels give you free energy on sunny or bright days and are just set up and plug in.

But what to do if there is a month of cloudy days? Better to make free electricity in all weather conditions by adding a wind generator. Visit the Facebook group "Wind/Solar Power, DIY Generators hobbist and parts". <https://www.facebook.com/groups/1178190098902934/>

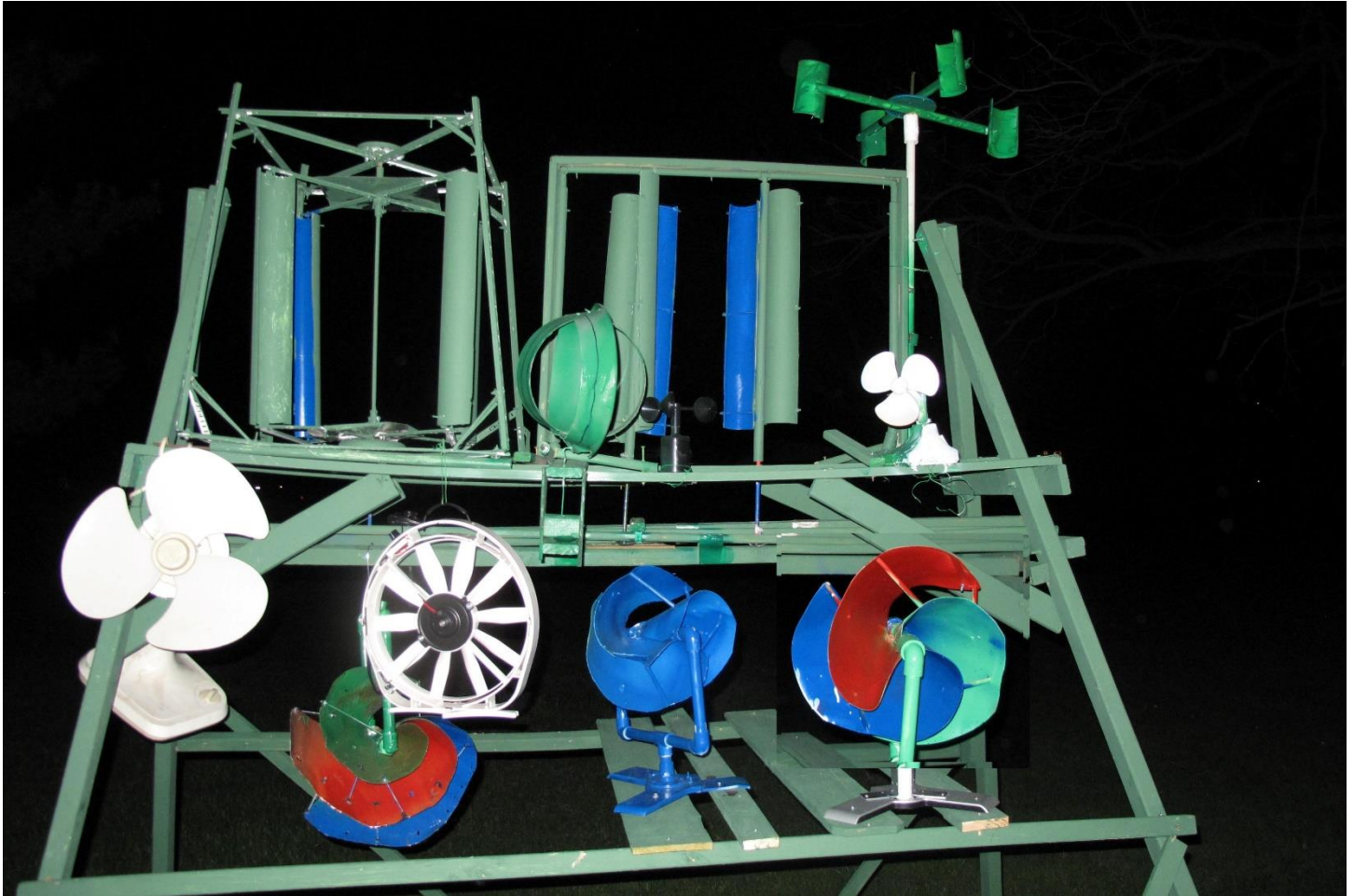


There are endless designs the most efficient may be this one below called an Archimedes spiral conical design.



The Archimedes windmill is a new type of wind turbine comprising three circular blades which are wrapped around one another and then expanded. This creates a three-dimensional conical turbine, similar to elongated shells found on the beach. The special design ensures that wind is drawn into the turbine. The average yield is many times higher compared to a normal urban windmill propeller.

Do it Yourself or Buy one.



After building several my advice is unless you are a handy do-it-your-selfer with tools it is safer, less time consuming and less frustration to just shop around and buy one. If you want to do it yourself you can make a workable wind turbine that gives you free power on the cheap.

The Archimedes spiral conical wind turbine is the most efficient wind turbine if one considers noise and wildlife safety. This is important because birds and bats eat mosquitoes and other insects. **It will not replace the big commercial three blade propeller commercial turbines in the near future but they may do so depending on more research.** For the most middle or low income home owners it has been proven most efficient and bird and bat friendly. "Very interesting is the Archimedes Liam F1 a horizontal axis turbine with a spiral rotor developed by a Dutch company inspired by the Archimedes screw and the nautilus shell. Unlike normal blades functioning by lift (horizontal turbines, Darrieus) or drag (Savonius), the spiral collects the kinetic energy of the wind on a surface always perpendicular to the flow direction, managing to nullify output air speed and, according to the developers, promising efficiency up to 80%, while the standard generators do not go beyond 25-50% in production. Other advantages are the good reactivity (minimum speed of 0.9 m/s) and the ability of the rotor to self-align."

The only commercial offering out there at the moment is the Liam.



The Archimedes is an innovative wind turbine design: small, silent, and affordable. Based upon the writings and methods of the Greek mathematician Archimedes the design mimics a shellfish, the Nautilidae (translated as sailor). We did 10 years research and development of the wind turbine Mini, and the results are spectacular.

Main characteristics of this innovative design are high efficiency, low cut-in wind speed providing for the highest yield (W/m^2)*, silent operation, insensitive to turbulence, low maintenance, and an organic appearance. All together this wind turbine is able to generate about five times more energy than standard wind turbines of the same diameter.

The Liam F1 Mini Urban Wind Turbine is a small wind turbine with a diameter of 0.75 meters which weighs approximately 32 kilograms. Due to its size and weight it is (like the Liam F1) suitable for installation on almost every roof and wall. Due to its smaller size the mini will generate approximately 1/4 of the yield of a Liam F1. Because of its conical shape, the Liam Pole Urban Wind Turbine will yaw itself in any wind direction starting from a windspeed of 2 m/s, even when the wind direction changes a lot. Ideal for an urban environment where turbulence rules – making a lot of competing turbines idle. Because of its low cut-in wind speed and the fact that it's mounted higher on a pole, the Liam Pole will have a sufficient yield. Also, it operates fairly silent. All together very pleasant for pedestrians or bikers passing by.

It is small, quiet and affordable. This wind turbine can extract about 40% of the energy from the wind. Its natural shape causes it to yaw itself in the wind, there are no complicated systems required. Several Liams can be placed together in a triangular alignment. Each turbine draws in wind by turning into the right direction, therefore the turbines do not compromise each other in their yield. They do not capture each others wind, which is the case with the large turbines. In addition, combining the Liam with solar panels is a possibility that provides a virtually constant output.

Liam F1 is specially designed for an urban environment with turbulence (rotating wind) so installation on a large pole is not required, it suffices if he just rises slightly above the roof/ the wall. The turbine can be supplied in any given color so it blends in. Generally a permit will be required before placement, because of the diameter that exceeds 1 meters. It has 3 safety systems and both consumers and corporate users have many subsidy opportunities. In addition, a mini-Liam is developed with a diameter of 75 cm.

Do it yourself Archimedes spiral wind turbine from plastic pipe. Much safer, easier and cheaper than struggling with sheet metal. Video <https://www.youtube.com/watch?v=KFK9EDF99Zl> They get their plastic from pipe but the dollar store may have even better alternatives such as Tupperware like pitchers or plastic lids.

There is also a new type of wind turbine that used the Venturi effect which is the effect that happens when a fluid flows thru a constricted area. One example is a new product called the Power Pod. This is a fully enclosed unit which is safe to wildlife and children, can be placed anywhere, has no exposed blades used wind from any direction, accelerates it towards its own efficient enclosed blade, and produces up to 1.5 kW pf power which is enough to power a small house.



It is also modular and can be connected with other units to increase power. See this video

<https://www.youtube.com/watch?v=MWtPkDTXwd0>

There are several other commercial offerings out there but none of the vertical ones have good reviews so best to not waste your money..

One can buy a horizontal wind turbine in a smaller version but is not bird or bat friendly. These are all expensive..

As far as do it yourself. I spent weeks and built 10 test wind turbines and also purchased a few motors to be used as generators. So far I can tell you that unless you are very handy with tools and are an experienced do it yourselfer, forget trying to make one yourself. Creating rotating mechanical devices takes planning and quite a lot of work.. I recommend using PVC pipe and joints as there is little drilling and machining involved and less expensive than metal.

The first one I made was out of PVC pipe cut in half but had a metal frame of shelving pilasters which are white painted steel shelving verticals. Two problems are cutting metal and considering they have slots which the cheap screws do not fit and have to be drilled out which is problematic as the drills get caught in the slots. One really needs a drill press and metal cut off tool to do this. Then we have sharp metal cuttings which can hurt hands, eyes and the smaller ones can get into the lungs if one does not wear a mask. Best to do cutting outside. Also one has to spend much time connecting with angle brackets using nuts and bolts. All of this takes much time.

Working with PVC pipe is much faster, easier, and is lighter weight.

My first Archimedes was made using inexpensive but strong aluminum roof flashing. But be advised caution because thin metal can cut. Flat plastic could be a lighter alternative.. Without a pattern it took a lot of time planning. Then assembling the thing was another challenge. Using bucket helps. The average person is not going to have the patience to make one. And then the other big issue is finding a motor suitable to generate 12 volts to charge batteries according to the average RPM output of the wind turbine. This may involve gears and then there are the torque issue. Matching the RPMs and gear ratio is another time consuming challenge. Read on there is a better idea.

And there are seemingly countless other designs for wind turbines. Once you build the blades you will need a good generator motor. That is another challenge. You can make one for very low cost or buy one. There are many choices out there with a big price range.

Robert Murray-Smith's video on making a wind turbine from a car radiator fan.

<https://www.youtube.com/watch?v=wIMIEkR704U>

But I bought a car radiator fan and did a test and the American one I had did not generate enough voltage. Did not work out well. Dirty used fans and motors or \$30 new ones which do not work (at least the new one I tried which appeared to need higher RPM speed or battery hook up for coils.

Another easier great possibility is using electric fans. Those blades are ready made and could be extended a little to make them more efficient and using a fan means most of the work is already done. And the RPM, gear, motor, connections and case problems are already solved. Used fans can be found cheap. Adding permanent magnets can make the old motor an efficient generator. See YouTube for several videos on how to do this but this usually means grinding out a few slots in the rotor to lace in magnets you buy and gluing or epoxying them into place.

The winner. The three white fans in the above picture picked up the slightest breeze.

THE EASIEST SOLUTION IS TO JUST BUY A FAN WITH A MOTOR THAT HAS MAGNETS AND YOU HAVE A FAN FOR COOLNESS AND A POWER GENERATOR THAT CAN CHARGE BATTERIES DURING WIND. ALL THIS WITH NO MODIFICATION AND NO HASSLES. You only need two alligator clip leads to hook it up.

Here is a video from a guy that did it. <https://www.youtube.com/watch?v=ZUv4TBAY7Eo>

He lives in Argentina and did not give a brand name. The problem then is to find a suitable magnetic motor fan.

A Google shopping search on magnetic motor fans turns up many. I am now looking for one at a reasonable price.

Cross flow fans found in vertical heaters and air filters also offer exceptions such as low profile and can be placed on roof tops and require very little wind speed to get them going. Add magnets to the motor or switch out the motor with a magnet motor all at a lower cost.

So far Solar panels have wind beat as far as ease of set up and generating electricity. For now but that may change as research finds better alternatives for free energy. Having an alternative for dark days and if you have wind is also a nice way to get free power. And the commercial offerings for home wind turbines are very expensive or do not live up to their advertising. Here is the YouTube video "Building a Simple and Cheap Wind Power Generator Using Scrap Microwave Parts!" You can do this for almost no cost.

<https://www.youtube.com/watch?v=G-WkJI5TtmQ>

See the Facebook group that tests these here. [Wind/Solar Power, DIY Generators hobbyist and parts. Lets unite](#)

There also is a separate document on research I have collected here:

https://dogoodforall.today/wind_power_generation.pdf

Also consider string and other vibration electricity generators and electricity from rain. Yep! Research is being done on that. The home of the future may actually generate its own electricity in many ways.

One expert Robert Murray Smith who has used scientific research and done practical testing sums up some of his findings in this video called "053 Wind Power Special - Man In A Shed - Episode 7"

<https://www.youtube.com/watch?v=UmMEIJRTRrA>

And he notes that there is not one best solution as it depends on local area winds and users needs.

Getting free energy from nature research is ongoing. I started by doing my own research but soon discovered that others had already spent much time and money to do far more and better research than I could with my limited money.

Check YouTube and Goggle Scholar for research. By watching these I can report to you newer developments as research continues.

Your comments and help is welcome and wanted. This old man is trying to do something useful by giving you the best research and ideas on this website. **(bestideas.today)**

Please let me know what you think because it is important to this old one. Send to wecare@dogoodforalllll.today