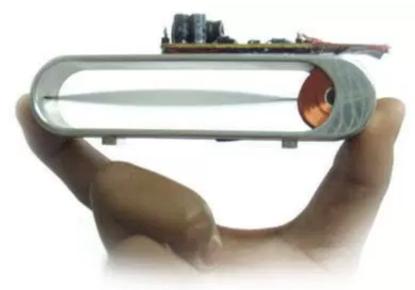
Eco Wanderer

From place to place, there's no place like home

Wind Power Revolution

29 **05** 2009



(http://img38.imageshack.us/img38/1710/windbelt777477.jpg)

Ever considered having a <u>wind turbine</u> (http://en.wikipedia.org/wiki/Wind_turbine)? What if you were told you could build your own device to harness the wind power which were ten to thirty times more efficient and cheaper than building your own wind turbine?

Well look no further, the next wind power has arrived. And it's called Windbelt (http://en.wikipedia.org/wiki/Windbelt).

Inspired by the collapse of <u>Tacoma Narrows Bridge in 1940</u> (http://en.wikipedia.org/wiki/Tacoma Narrows Bridge (1940)), the young inventor Shawn Frayne came up with the idea of generating electricity through a science known as <u>aeroelasticity</u> (http://en.wikipedia.org/wiki/Aeroelasticity, by looking into an effect known as the <u>aeroelastic flutter</u> effect (http://en.wikipedia.org/wiki/Aeroelasticity#Flutter).



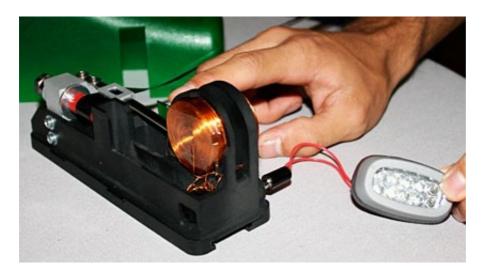
(http://img17.imageshack.us/img17/1246/1006frayne.jpg)Shawn Frayne and a Windbelt charging 2 LED lights

Basically, when the wind goes through a membrane that is attached to two magnets on both its extreme ends, the ressonance on the membrane increases its vibrations, making the magnets move up and down next to electromagnetic coils, therefore inducing current in the wires that make up the coil.

The benefits when comparing to micro wind turbines are obvious: micro wind turbines have too much friction in gearbox and other components, which reduces their efficiency.

"With rotary power, there's nothing out there that generates under 50 watts," Frayne says.

A new upgraded device, recently developed, is now 100 times more efficient than before, generating between 3 to 10 watts in power at around \$2 per watt. Frayne is hoping these kind of technological solutions will help overcome many energy problems in developing countries.



(http://img35.imageshack.us/img35/6946/humdingernew.jpg)Upgraded "micro" windbelt

Here is a video showing one of his firsts windbelts working:

Wind Power Revolution

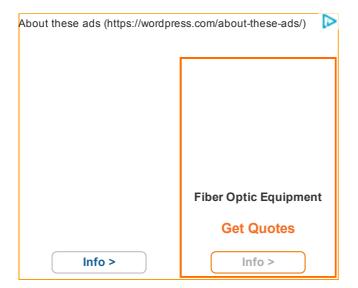




For those interested in making their own, here are some instructables links:

<u>Windbelt Using Hard Drive Components</u> (http://www.instructables.com/id/Hard-Drive-Parts-Generator-and-Theory-Tester/)

<u>Windbelt Redux (http://www.instructables.com/id/Windbelt-Redux-21st-Century-Micro-Power-Generatio/)</u>



Actions

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Information

o Date: May 29, 2009

• Tags: frayne, power, revolution, shawn, wind, windbelt

Categories : Energy

8 responses

12 06 2009

Gordon Simmons (11:25:35) :

Fantastic! Congratulations to Shawn for being such a visionary. I remember seeing the Tacoma Bridge footage years ago, but never thought of relating it to a possible source of renewable energy.

I'll be sure to post a blog about Shawn and linkback to this page.

I truly believe that the power of the information (read Internet), innovative young minds like Shawn's, and advances in technology will not only save our planet, but allow all of humanity to thrive.

I think the implications of Shawn's invention are enormous.

Reply

1 07 2009

hayenmill (08:34:10) :

Thank you for your support! I'm glad you enjoyed that post. Could you show me your blog link so I could take a look on yours and add a link to it in my own?

Thanks for your time

Reply

20 02 2010

Nedian (18:48:39) :

Can ne1 guide me as 2 how can i make a wind belt of ma own? Am actually startng this so just need a bit guidance as to wat material would be best suitable. I actually wanna make a 1.2 volt AA battery charger and tester circuit so how many windings shld i make?

Reply

20 02 2010

hayenmill (20:19:29) :

You can currently find two instructables <u>here</u> and <u>here</u>, but rest assured that an instructable on how to make one will be uploaded soon in this blog, as well.

Reply

21 02 2010

Nedian (11:48:57) :

Eagerly waiting for tht!

Reply

1 06 2010

Robert (00:59:54):

I am developing a housing tower and want it to operate off the grid as much as possible. How can the ideas you have be converted into a commercial project that will have varying winds from many directions. I was thinking of mounting vertical axis wind turbines on the side of the building on a continuous pole and make them an architectural element. They would resemble the helix wind vertical wind turbine aesthetic http://www.helixwind.com/en/ My total project budget is 35 million so I have room for innovation.

Thanks,

Reply

10 06 2010

hayenmill (11:11:26) :

Hello. The ideas presented here are not my own. If you want more information regarding possible mods to fit your project, consider visiting the technology's official website and see if they can help you with that. Perhaps you will be able to bargain some deal with them. Give it a try:

http://www.humdingerwind.com/

<u>Reply</u>

4 12 2010

Kate Smith (16:22:56) :

Wow, truly interesting post. How can I find your subscription?

Kate Smith

nyc escorts

Reply

Blog at WordPress.com. The Freshy Theme.