



Limited resources and unlimited usage.
How can we save it?

Newsletter



**Conserve the energy,
Save our climate!**

August - 2018

Issue : 22

INSIDE...

Article : 1 Turbine produces ...

[Read more...](#)

Article : 2 Cameroon turns ...

[Read more...](#)

Article : 3 Drones put ...

[Read more...](#)

Article : 4 Bedol water ...

[Read more...](#)

Why ???

We the people on the earth are gifted with wonderful energy sources by the nature, which has made our routine much more smother & easier... However, this gift of the nature is ' limited '. What we have done is, with the growth of science & technology, we have started using it extremely, because of which the energy resources are going to finish in near future. Hence, let us take the pledge to conserve the energy - save the energy!!!

Tips of the Month

Reducing your carbon footprint

Calculate the carbon footprint for your business. There are many ways to do this, and the process can get quite involved. However, a good way to at least get started is to use the Cool California Small Business Calculator.

**ConserveTM
The Energy**

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Article - 1 : Turbine produces energy from typhoon

Normally if someone encounters a typhoon or a cyclone he will surely run away or will move away from it as he is aware of the consequences and devastation. But there is a Japanese engineer who goes on chasing a cyclone. This may sound a little weird but it is true. As conventional air turbines are quite limited as they are only feasible in windy locations.

Japan has more extreme issue when it comes in using wind power in the form of typhoon. Around 30 typhoons form over the North-West Pacific Ocean each year and 7-12 of those make it on to the Japanese main island. Atsushi Shimizu believes that the fury of nature may be helpful someday to cut the country's woes. He believes that his bladeless turbine can not only thrive the crushing force of the destructive storm but can also harness power to generate electricity.

In order to design his typhoon friendly machine, he quit his job in 2013 and founded 'Challenergy'. His machine has three cylinders and a central rod which responds to the wind coming from any direction and doesn't use a propeller

to spin. But it is taking the advantage of the Magnus effect, a force that sees air curve when passing by a spinning object, such as a football. His design achieves 30% efficiency during simulations. Commercial air turbines manage 40% but they don't function in typhoon. Shimizu goal is to have his typhoon turbine installed in the National Stadium in time for the Tokyo 2020 Olympics.

**Source: <https://phys.org/news/2017-03-japan-scientist-eyes-energy-typhoon.html>*



**Image Source: : <https://www.geek.com/tech/japanese-engineer-creates-a-wind-turbine-that-loves-typhoons-1672663/>*

Article - 2 : Cameroon turns human waste into clean power

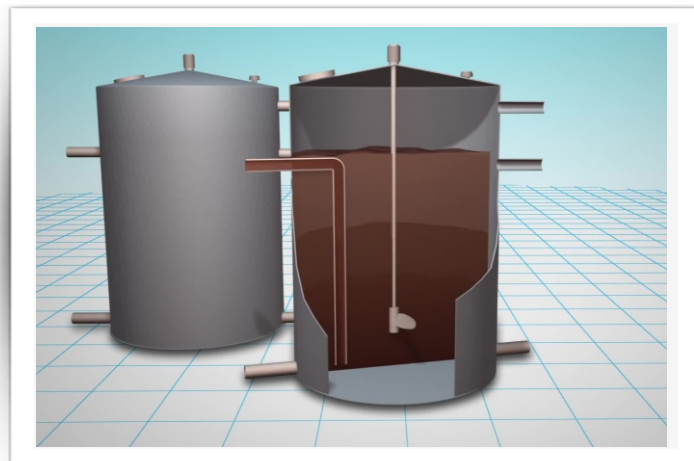
A youth organization in Cameroon has taken the initiative to turn human waste into biogas, which will reduce pollution and will provide cheap renewable energy to the growing populations of the university town of Buea and Bamenda.

This initiative is run by The Green Girls project a Non Governmental Organization in Cameroon that trains young women in technology. There are equipments installed that coverts waste from septic tanks and pit latrines into bio gas, which is usually used for cooking or heating and can also power small generators to run household electrical appliances.

The organization efforts are spurring the use of clean energy in homes and secondary schools where there is no grid electrical power and other energy sources like gas cylinders which are very expensive. The project has successfully able to engage local councils and other youth groups on board. Families benefitting from the cheap

biogas are now using their saved money for other essential things like school fees and medical care. Till now the project has benefitted 3000 households in the regions of northern and southern Cameroon, where they have received bio digesters through the project.

**Source: <https://www.reuters.com/article/us-cameroon-energy-biogas-idUSKBN13U0MO>*



**Image Source: <http://news.trust.org/item/20161205072135-jx527/>*

Article - 3 : Drones put wind and solar power plants in the sky

The demand of renewable energy is to its paramount and researchers are continuously pushing themselves as solar and wind turbines limit their level to the ground. A UK based company thinks that they have solved the program by taking the power plants to the sky.

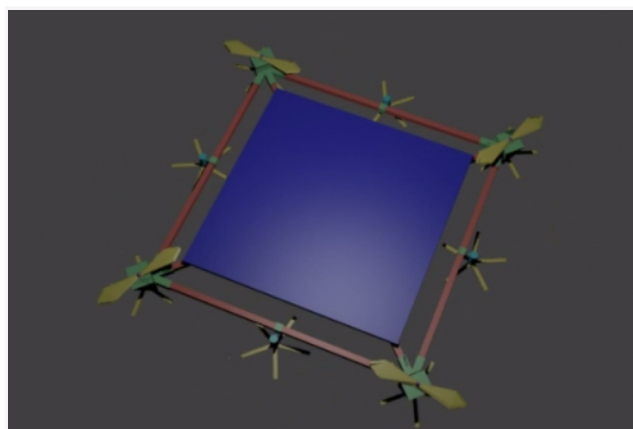
UK based New Wave Energy in the recent years has developed an army of power generating drone air craft. Each air craft is 20x20m and would be fitted with four small propellers that will keep it aloft and a large flat surface would be covered with solar panels.

The drone would also be fitted with a turbine to generate power from the winds. The drone would be capable of flying at altitudes of up to 50,000 feet, which puts them outside the air traffic prone area and also above the clouds which might sometime act as an obstacle. The propellers would allow the craft to track the course of the sun across the sky to remain in optimal position for as long as possible. At these altitudes, the wind is also more consistent and powerful, which means smaller turbines can be used in place of the giant towers necessary down near the ground. Power from the drones could be beamed down as a low-energy microwave and collected by antenna arrays on the ground. These antennas can

then be used to turn the electromagnetic radiation into usable DC power.

New Wave Energy's proposed drone power plants don't even have to land to refuel themselves. They will supposedly be able to power themselves entirely with the energy generated on-board. Even allowing for that, each drone could produce 50kW of power at the ground-based receiving station. That means several thousand drones would be needed to power a large city of 205,000 homes.

**Source: <https://www.extremetech.com/extreme/171717-proposed-drone-aircraft-would-put-solar-and-wind-power-plants-in-the-sky>*



**Image Source: <https://www.extremetech.com/extreme/171717-proposed-drone-aircraft-would-put-solar-and-wind-power-plants-in-the-sky>*

Article - 4 : Bedol water clocks

Bedol water clocks have now become the superstar of the market. They possess an exclusive quality to run solely on water, helping to reduce our carbon footprint. Apart from this, these watches are environment friendly, where they also come with different shapes, color and sizes. In addition to this, these clocks are of high quality and perfectly accurate.

These clocks require no batteries, chemicals or any other form of energy to work rather these eco-friendly clocks works just by filling water into them and they will run for six months. There is a memory chip inside the clock, for when you are filling water inside the clock; it is able to continue keeping time.

The watch is also installed with a feature of alarm, which can be set on daily and hourly basis. In keeping with its progressive, Bedol also offers a wall wave clock, which

can also display the humidity and atmospheric pressure of the room.

**Source: <http://www.earthtimes.org/green-blogs/eco-friendly-gadgets/bedol-water-clocks-saving-energy-water-20-Aug-11/>*



**Image Source: <http://www.earthtimes.org/green-blogs/eco-friendly-gadgets/bedol-water-clocks-saving-energy-water-20-Aug-11/>*


Conserve the Energy,
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Conserve™
The Energy



It's
Tomorrow™

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