

What is a wind turbine?

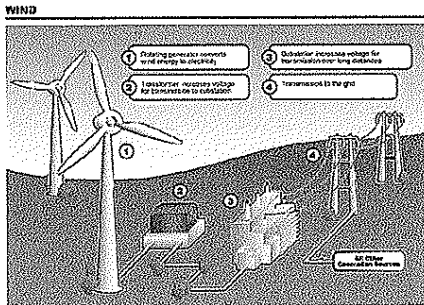
A wind turbine is a machine with huge blades that converts the wind, or kinetic energy, into mechanical energy and into electricity.

Why is wind energy a good idea?

1. Most of the time there is wind which is free energy blowing by. We should catch it!
2. Energy independence for the Nation, and cost savings in the long run on your energy bill.
3. Wind energy does not cause pollution which will help save the environment.

How does wind energy get electricity to your home?

1. A rotating generator that converts wind energy to electricity.
2. Transformer increases voltage for transmission to substation.
3. Substation increases voltage for transmission over long distances.
4. Transmission to the homes.



Wind Turbines

A great idea to use our natural resources to provide energy!

Wind turbines do not pollute our environment while producing clean energy!

Wind is a natural resource that is everlasting. Wind will not run out!

What is wind energy?

The sun's radiation heats different parts of the earth at different rates (for example, water and land) as hot air rises and cooler air is drawn in to replace it. The result is wind.

Air has mass, and when it is in motion, it contains the energy of that motion — "kinetic energy" Some portion of that energy can be converted into other forms — mechanical force or electricity — by wind turbines and can be use to perform work.

What can our community do to help use Wind Energy?

- There are only 10 states not using wind energy in America, mostly in the Southeast.
- In October 2008 Virginia started its first wind turbine farm. A good step but we need more of this renewable energy source.
- Contact your power company, state and national representative / senator, and insist on more Virginia Wind Power.
- Educate yourself and friends by going to America Wind Energy Association website <http://www.awea.org/>

Tips to Reduce, Reuse, Recycle

1. Use reusable water bottles
2. Use fluorescent light bulbs instead of incandescent light bulbs
3. Instead of using your own car try to carpool, bike, bus, or metro
4. Recycle bottles, cans, and paper
5. Use and support solar and wind power
6. Allow grass clippings to stay on the lawn, instead of bagging them.
7. Compost leftover food for soil
8. Use a reusable lunch box instead of brown bags
9. Donate clothes so people can reuse them
10. Hang clothes on clothes line instead of using a clothes dryer



*Great ideas
and very well
explained!*

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Jenny Verheul

Homeroom

Class Period

Mrs. Papathanassiou

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WIND ENERGY



A Bright Idea

By Erin Calpin

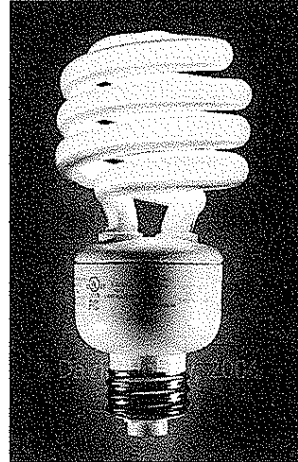
Change Those Bulbs

It's time for everyone to switch from traditional light bulbs to compact fluorescent light bulbs or CFLs. There are many wonderful reasons to make the change to CFLs. First there's the cost savings and the prevention of greenhouse gases. Next, the new CFLs save a lot of energy. Did you know that if each house switched just one light bulb to a compact fluorescent bulb it would save enough energy to light over 3 million homes? Plus, one of the best things about CFLs is that these bulbs last longer and make just as much light as regular light bulbs.

The new CFLs are available at most hardware and grocery stores. You can also purchase the bulbs from the Spring Hill PTO. They may cost more up front, but they really cost us less over time. So do the right thing for our environment and change those bulbs!

Facts about CFL Bulbs

- Last longer than regular bulbs
- Uses up to 75% less electricity
- Helps fight global warming
- Reduces pollution
- Lowers your energy bill
- Provides more light with less power
- CFLs can be recycled



Spread the Word

If you want to make your neighborhood environmentally friendly, here are a few things you can do.

1. Put up posters promoting CFLs and energy efficient resources.
2. Be a role model and change over the bulbs at your house.
3. Start a bulb exchange. Trade in your traditional bulbs for CFLs. Find a sponsor to help fund this event.
4. Write an article in your neighborhood or school newspaper.

Be Smart – Save Energy

Even though these light bulbs are better for the environment, you still can't forget to save energy. Remember to turn off the lights when you leave the room.

What does the terms

Reduce, Reuse and Recycle mean?



Reduce - To make something into a smaller size or amount.

Reuse - To take the left over of anything and use it again.

Recycle - To process in order to regain useful material.

excellent definition!

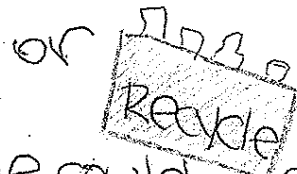
Plastic Bag Story How To Fix It

I think that it is very bad to our environment to buy plastic bags to put lunches or snacks. When you throw it away it will all go to the dump and do nothing good for our environment or us.

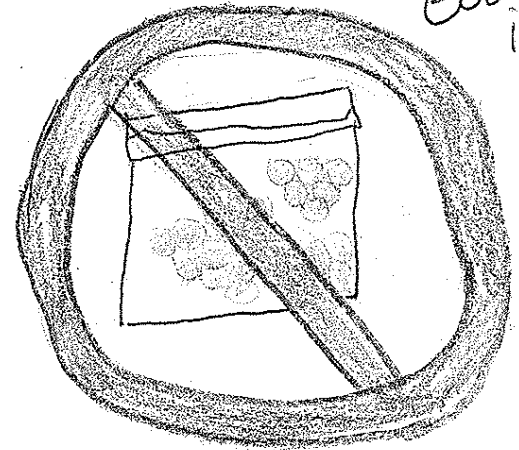
Maybe some food stores can stop selling as much plastic bags and more tupperwares that way, instead of throwing bags away, people can reuse them.

If we could start that, we could save a lot of money and natural resources.

Good idea!



If people could start buying plastic tupperwares than save the environment. Also, it costs a lot to keep buying bags. If they could buy tupperwares than people only had to buy it once. Plus, it's better for our environment.



Other Tips

• To help save paper, recycle your old newspapers. ✓

• To help save paper, people should buy tupperwares instead of bags. ✓

• Try to only drive places if you have to to not waste gas.

• To conserve your natural resources, turn off your lights when not using them. ✓

• Don't leave water running! Also, don't buy plastic water bottles. Instead, buy reusable bottles.

Good idea
and well explained!

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By: Caroline Jackson
Smith
period 3

