



2009

MASSACHUSETTS CLEAN TECHNOLOGY AWARDS

A Program from The Foresight Project Inc; www.theforesightproject.org



Region V, Southeastern MA
Clean Tech Award:

Juliana Kaplan, Pierce School,
Brookline

*"Wind Turbine: Generating
Electricity"*

ABOUT ME:

I go to the Pierce School in Brookline, MA. Brookline is right next to Boston, which is one of its claims to fame. Brookline kids have actually never gone to the Regional fair, and Pierce doesn't even have a science fair; we had to go to the Devotion fair.

My interests and family: I love acting and theater. I also love to sing, and I love musicals. I do a community theater program called Artbarn, which is tons of fun. My favorite musical ever is *Wicked*. I play soccer on the Pierce team with a lot of my friends, and that's really fun too. I have two cats, one snake, one hamster and a fish at home.

MY PROJECT:

My family and I are very Eco- friendly, and I've always been really interested in going green and alternate energy. So when I heard about the Science Fair and that I could participate in it with a project, something that you're interested in, I thought of several projects that would be interesting, but be very hard or have no experimentation involved. I then remembered that we had a build-your-own wind turbine kit at home.

I know a kit sounds like cheating, but it was hard! With over a hundred pieces and very precise gears and not-so-precise instructions, it took me a while to build what I have now, but that was my last step. First was my question: I was curious about designs and blades on wind turbines. I would experiment with the number of blades to see if more or less blades created more or less electricity by lighting up small LEDs (Light Emitting Diodes) of different voltage requirements. I went to windy places and recorded all my results, triumphs and failures. That was experimentation; next was research. I looked up all kinds of crazy designs for wind turbines, and I found out a lot about wind power, wind turbines and wind turbine designs. There is so much that we don't know about wind turbines, it is a cause worth studying.