



TITLE

SUB TOPIC

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Time Frame:	Standards:
3 – 60 min. class periods	
Objectives:	
Following the activity the students will have a real life experience of what the controversies are to erect wind turbine and have the some idea of the work involved in getting permission to erect one, this will be demonstrated by them completing the activity.	
Background Information:	
Many cities and counties do not have ordinances in place to govern the process of erect structures for renewable energy structures. So they have town hall meeting or planning and zoning meeting for the public to get input and draft laws and ordinances to govern the process. Sometimes these meeting can be very contentious.	
Background Information:	
Background Information:	
Materials:	
Materials:	
Procedure:	
CAN WE GET PERMISSION? (Wind Energy)	
BACKGROUND: The Wilson family: Dad, mom and three children (Jenny-16, Jack-12, and Baby Jordan) have a nice home with three acres of pasture. They have animal rights in the city where they live. They actually own a large lot comparably speaking in a town of 25,000. Their house is in	

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the country (not in the city limits), but the city is just one street over. There are many houses in the borders around their property.

Recently, dad has attended a conference in a far away big city where presenters have talked about the switch to renewable energy sources. In particular the discussion has centered on more and more families being helped by putting up things such as wind turbines, solar panels and promoting other clean renewable sources to make electricity. He has made the decision to put a wind turbine to help the family energy bill and to contribute to green energy.

They have some fear that they will not get permission to put it up because there are some people who are against their proposal. But they are also not sure how many are for it or against it. They do not have to get permission from the city but the neighbors are in the city limits and they have gone to the city council to have a meeting. They have invited the Wilsons to the meeting because they are the first to do this and they think there will be others. The Wilsons also will need county planning and zoning permission and are worried that if the city meeting goes poorly that this will make getting county permission very difficult or impossible. So they are hoping that the meeting will go well.

(Teacher should copy the roles and hand them out or allow the students to choose their own. Give the students time to get their positions written and have the reason together why they stand on the position they have. Then hold the actual meeting with the students portraying the parts of the role play. Give plenty of time for each student to give their reasons and points in front of the other members. So that all can make a decision as to where they stand on the issue.)

Roles for the wind scenarios:

- 5 city council members
Responsible to make decisions on things such as granting permits to put up the turbine. It is the first in the area and there is no standing ordinance in place. They will hear arguments for and against and make a final decision.
- 1 moderator
This person acts as the judge. He/she oversees the discussion and helps to keep things on track. He makes the decision of who speaks. He can also make comments to clear things up or he may have questions for the speakers to clarify their position. He may also set a time limit on speaking to keep the discussion going.

- Dad
He is totally for the project. He wants the turbine no matter what. He could care less what others think. "It's his property and he'll do what he pleases."
- Mom
She wants to make our world a cleaner place but is worried about what her friends may think. She is not so sure a residential turbine is the answer.
- Jenny
She is not so sure she wants a wind turbine just outside her bedroom window. She understands what it will do for the environment but will the other kids see it as cool or something weird!
- Melissa
Jenny's friend thinks it is cool to be green! But many of the other kids think she is odd. She can't figure out why Jenny is not sold on it.
- Lester
He owns wind turbines in a neighboring town and is very positive. He thinks they are about to be put up everywhere.
- Bill
He is a wind turbine expert from the local electrical utility. He can answer all the questions about turbines that might be a concern to local residents such as noise, possibility of falling over, how long they last, etc.
- June
She is the next door neighbor and is not so sure she is okay with a wind turbine right next door. She would be willing to try it for a few months, but wants the right to have it removed if it is not working out.
- Jed
He is a local business owner. If the residents get permission to have them then he wants permission to have them downtown at his business. However, having them there may have some problems. Others may be against this in the business area but at private homes they are okay.



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- Joe
A neighbor of Lester's, who lives in the other town, is against them. They are big, tall, unsightly, noisy and a general pain. He would never let it happen here.
- Jim
President of a local environmental group, he likes the clean source of energy but what will happen to birds? Will the turbine be noisy? Why should we let lots of little ones be built? Let's have everyone who wants just put money in and we will build one big one. He just doesn't want to see a lot of little ones in everyone's backyard.
- Nina
President of the homeowner's association that is next door to the Wilson's place she is strongly opposed. Her entire association is against it! They do not want the noise the tall weird looking tower will bring nor the danger that is may fall. She has the backing from the association to sue if the commissioners grant permission. She hopes that the threat of a lawsuit will stop the Wilsons and others.

Assessment:

Additional Content:

Energy for Educators

Bringing Energy into the Classroom



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References:

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