

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## **"Windfall" Digital Game - Student Activity**

<http://www.kongregate.com/games/pgames/windfall>

### **Introduction:**

Windfall is a strategy game about building wind farms to create clean energy profitably. You need to fulfill a specified energy offset goal as quickly as possible by building turbines smartly. You can research locations carefully for the best wind conditions, and to avoid upsetting the local citizens by building turbines in undesirable places.



Try to build turbines in key locations and connect them to the energy grid. You can then sell the energy you create energy as renewable energy credits to earn profits to grow your farm. But be careful—nobody wants to have a big, ugly wind turbine in their backyard. Research land value and average wind speeds to generate as much energy as possible with as little political consequence. When protesters start disrupting your plans, you'll have to devote some of your income to the costs of political backpedalling. (from the "Windfall" website)

### **Before the Game:**

To familiarize yourself with some of the issues at the centre of the wind turbine debate, view the following video clip and web links:

- [Wind turbine protest](#) in Peterborough, Ontario (1 min) (2013)
- [Clinton, Ontario wind turbine protest](#) (2 min) (2013)
- [Federal Government wind turbine and health study](#) (2014)

### **During the Game:**

Click on the "How to Play" link and go through the tutorial (very important!). Here are a couple of additional hints:

1. Hint 1: When you build wind turbines next to one another, they automatically connect (you don't need to build a separate power line to each turbine).
2. Hint 2: You can always check how much of a transformer's energy capacity is remaining by clicking on the 'Info' tool and then clicking on the transformer. This is important because once a transformer has reached capacity it is pointless to hook up any more wind turbines to it.

Complete the simulation at least three times and record your results below. Try different strategies each time. Finally, answer the analysis and research questions on the back of the page.

Attempt 1 – fill in the table at the end of your game

Difficulty level:	Funds at end of game:
Popularity:	Political cost (per month):
Wind energy output:	Wind energy output goal:
Money spent:	How long did it take?

Attempt 2 – fill in the table at the end of your game

Difficulty level:	Funds at end of game:
Popularity:	Political cost (per month):
Wind energy output:	Wind energy output goal:
Money spent:	How long did it take?

Attempt 3 – fill in the table at the end of your game

Difficulty level:	Funds at end of game:
Popularity:	Political cost (per month):
Wind energy output:	Wind energy output goal:
Money spent:	How long did it take?

**After the Game:**

1. List and briefly describe some of the challenges you faced while completing this simulation:

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2. List and briefly describe some of the methods/strategies you used to try to overcome these challenges:

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