

## Wind Turbines in Ireland

Windmills have been used as far back as the middle ages. They were used to pump water or grind flours. They are still used in many places in the world to pump water like in the story. It is in the 1800's and 1900's that they were used to generate electricity. Wind power is energy and there is always wind on planet earth. Large windmills are called wind turbines; they are used to generate electricity which then allows us to switch on the kettle or light switch at home. Lots of wind turbines are called wind farms and they are either on land or out in the ocean. Ireland's location at the edge of the Atlantic makes it a prime location to harness wind. We are one of the leading countries in the world for harnessing wind to generate electricity. On a windy day Ireland can generate 50% of the electricity needed to power the country.

## **Fun Facts about Wind turbines**

- The tower of the wind turbine is 200-300 feet tall. When you add the height of the blades they become 400 feet tall. The same size if the Spire in Dublin City.
- The blades are huge also and are usually 115 -148 feet long in width
- The wind turns the blades of the turbine which turn a shaft inside the turbine. The shaft is big and it turns slowly. This shaft is connected to a number of gears which causes a smaller shaft to turn much faster. The smaller shaft drives the electrical generator which generates the electricity we use in our homes

## What are the advantages of using wind?

- It is a renewable source of energy, which means that it will not run out!
- As one of the windiest countries in Europe, it is perfect for our climate!
- Wind energy is pollution free.
- The land between the turbines can be used for farming meaning it does not take up too much space.
- Wind turbines can be used to supply energy in remote places.
- There is no need to dig underground or drill for the resource; therefore, there is less land pollution!

## What are the disadvantages of using wind?

- There are potential local wildlife impacts such as birds being killed by the blades of the
- The wind is not always predictable. Some days may have a lot of wind and others may have no wind at all.