

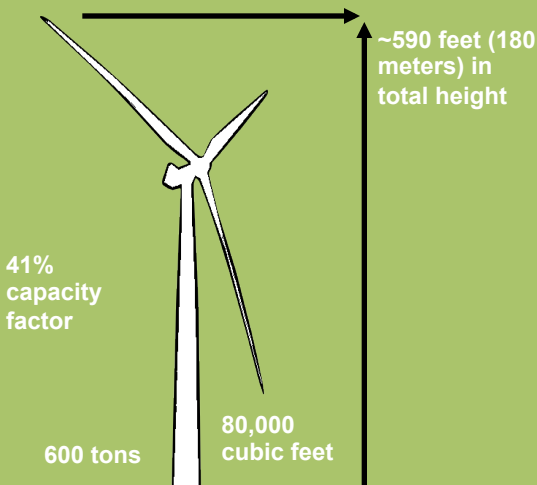
Are Wind Turbines Too Big?

Wind Turbines vs. "Coalbines"

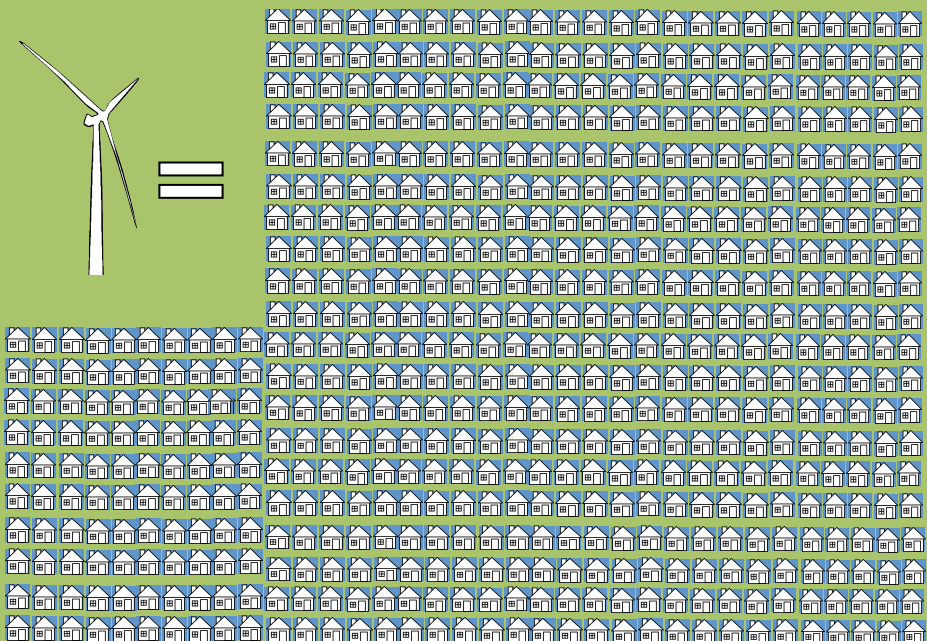
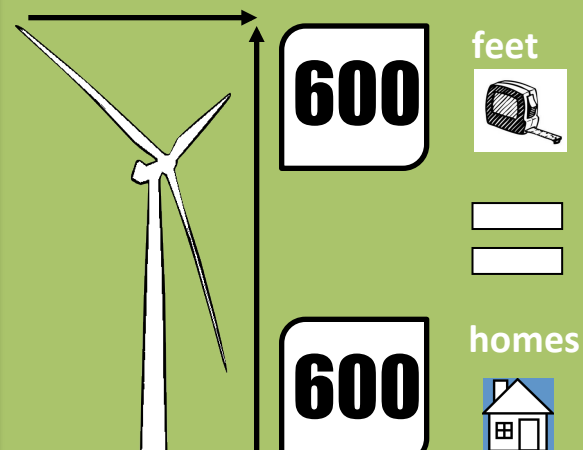
Here is a modern scale 2 megawatt (MW) wind turbine: One of these turbines has an annual energy output of 7,200 megawatt hours (MWh).

The average household uses about 12 MWh of electricity a year. So, a single 2MW wind turbine can power approximately 600 homes annually!

While coincidental, for about every foot tall a wind turbine is, enough electricity is generated to power an average home for a year.



And let's not forget— a wind turbine has a lifespan of 20-25 years.



Wind energy is a clean, renewable source of electricity that requires no water to operate and emits no air pollution.



The vast majority of Americans support wind power. Just 4% have "strongly unfavorable" opinions of wind energy. One of the most commonly used arguments against wind energy is that wind turbines are too big.

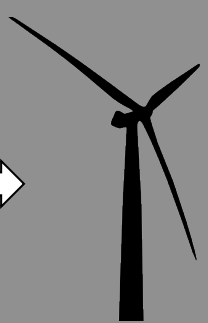
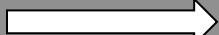
Compared to what?

Lets pretend wind turbines were replaced it in the shape and form of another electricity source.

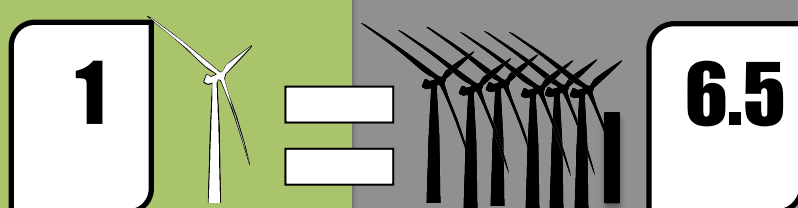


How about coal?

This is a fictitious turbine made out of coal. It weight 600 tons (the same weight as a wind turbines). We'll call it a "coalbine."



To produce the same amount of energy as a wind turbine, you would need about 6.5 "coalbines."



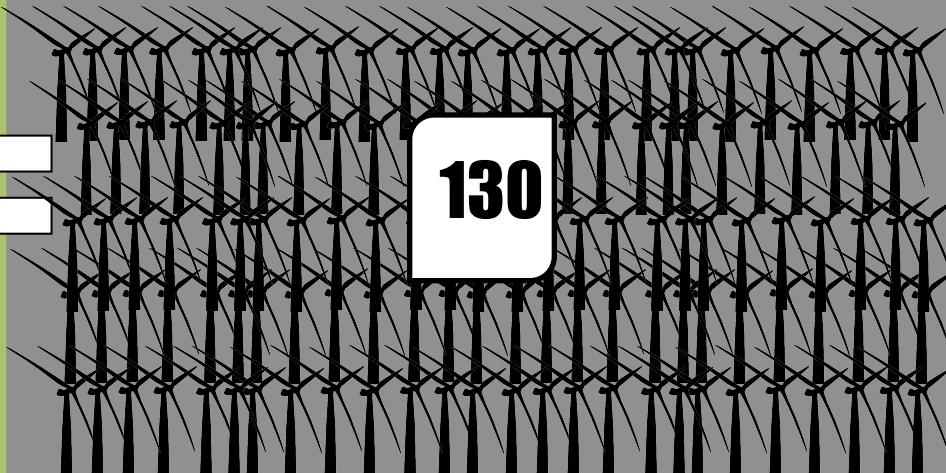
But, that's only *per year*. After those "coalbines" are burnt up, you'll have to get more. How much more?

Over the 20 year lifespan of a wind turbine, it will generate the equivalent of about 130 solid "coalbines"

1 wind turbine

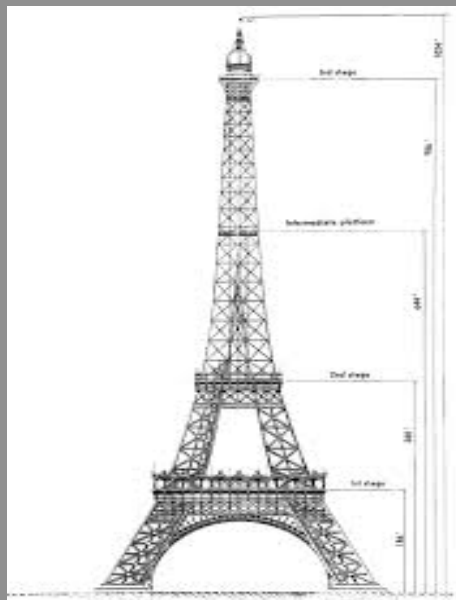


130 "coalbines"



If stacked on top of each other, 130 "coalbines" would reach the height of 78,000 feet or 14.5 miles

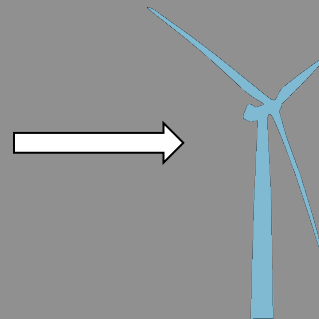
The Eiffel Tower is 1,063 feet tall



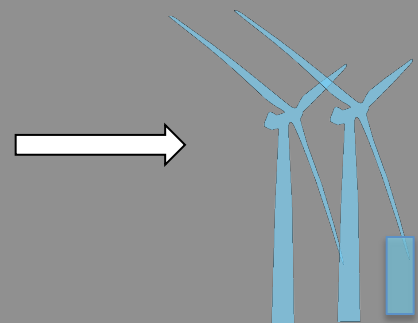
That's equivalent to over 73 Eiffel Towers staked on top of each other!

But there is something else we have to consider: Coal-fired power plants require water. Lots of water. Lets build some turbines out of water.

This is a "waterbine." Just like a "coalbine" it weights 600 tons. With each "coalbine" you will need additional "waterbines." How many?



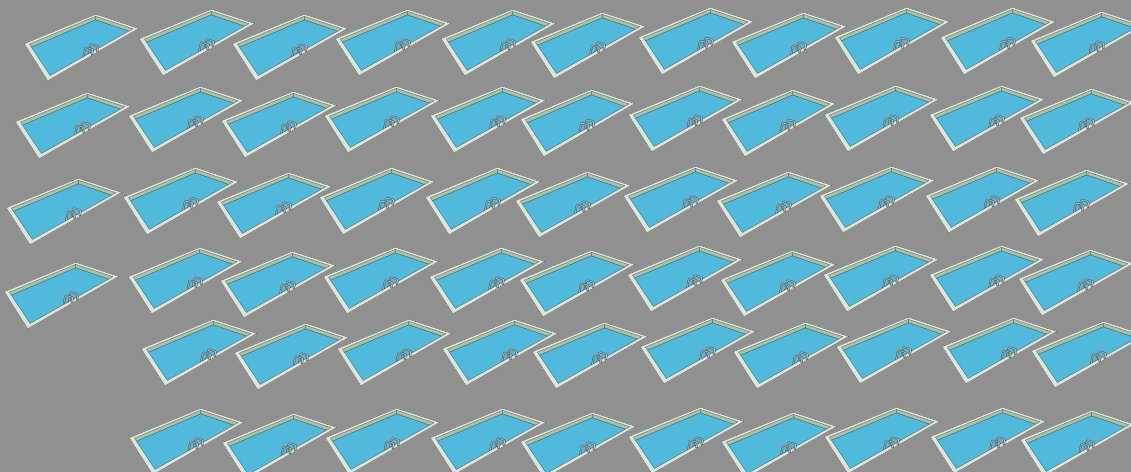
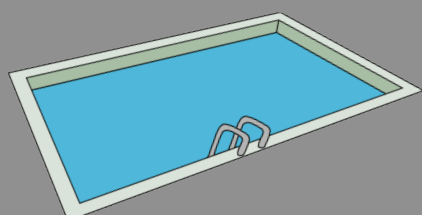
In order to produce the equivalent amount of electricity as a single wind turbine, it would take 2.3 "waterbines" to power each "coalbine."



Now, that's big!

Over 20 years? About 300 "waterbines!" to power these "coalbines." That's 43 million gallons of water!

43 million gallons of water. That's equivalent to the amount of water for 65 Olympic sized pools.



To recap, a single wind turbine generates an equivalent amount of electricity as...

