WIND ENERGY SIEGE, STOP WIND FARMS IN LIVING SPACES

Wind farms, while being one of the most important clean energy sources, threatens life around them!

Wind energy is amongst the most clean and sustainable energy sources we have at our disposal. With it being basically an infinite energy source and producing zero emission after it's construction has led to a considerable increase in investment in wind energy and in 2023 it is currently responsible for %6.6 of the total energy consumption in the world.

Clean Energy: Wind Farms

Firstly, wind energy causes about 6000 times less deaths per unit of energy when compared to coal (factoring in construction, accidents and pollution). In fact it is only beaten by nuclear and solar energy in this field. It has wholly earned it's title as a clean energy source so this naturally led to construction of many wind farms. Normal efficiency of a wind turbine is between %20 and %45, this may seem low but it is among the most efficient renewable energy sources.

Amount of wind energy produced is steadily rising both in our country and the world. In 2022 %6.6 of the total energy in the world comes from wind which equates to 734 gigawatts.

The demand for wind farms are rising as only in 2020 wind energy capacity of over 93 GW's were added to the existing energy supply. This is the second biggest yearly increase in wind energy production recorded.

Ref: Global Annual Proportion of Electriticy From Wind www.roundup.org

In Turkey (as of the end of 2021) there exists 3864 total wind turbines which produce a combined amount of over 10 GW's. In April 2022 the biggest single wind energy production accured which is about 190 MW/h. This was about %22 of the total production. Lastly according to TUREB Izmir holds the title for the city with the most wind farms with about %17 of the total amount in the country.

Ref: Türkiye Rüzgar Enerjisi Birliği www.tureb.org.tr

Are Wind Farms Truly Risk Free?

Research shows that wind farms possess no significant harm to the environment. They can be built anywhere that has enough wind including seas. Furthermore empty space between wind turbines can be utilized for agricultural activities.

However the location of the wind farm is of great importance. It can effect wild life if it is built in close proximity. Best example of this is three studies conducted in 2014 used data from 2012. Studies estimated that yearly between 140.000 and 679.000 birds died in USA due to the effects of wind turbines,

mainly collision. However as the data is pretty old it can be expected that this number is way higher today. Not to mention the fact that some of these birds are big birds that produce relatively small amount of offspring and some that are endangered. President of EGA RES, İlhan Çeneli also mentioned this issue: 'We are careful not to build farms on migration routes, otherwise some bird species can be effected negatively'.

Another issue arrises when wind turbines are built close to settlements. Noise the turbines make can cause symptoms such as headaches, dizziness and even vertigo. This has been named 'wind syndrome'.

The noise caused by RES's are under 80 decibels which isn't that high but effects of constant noise have been observed to be harmful to the human ear. However it is wrong to compare this noise to the noise of factories or planes.

Disturbance of Çeşme Residents

The first turbine in Çeşme was built in 1986. However there exists around 500 turbines today in just Çeşme. Even though wind has been crowned as the 'cleanest energy' standarts in Turkey aren't up to the ones around the world. When a turbine should be at least 1.4 kilometers away from any residency this is only 400 meters in Turkey. Furthermore the construction proccess which involves having to carry 45-49 meter long blades requires that roads have to be cleared which is harmful to the surrounding plant life.

One of the residents of Germiyan village, Nuran Erden said ' *We aren't against wind energy because it is clean, its proximity to residencies is what disturbs us. Turbines aren't in small amounts either, they surround our village'* about this issue.

As Nuran Erden said, number of electricity poles are also a problem. As the turbines cant store most of their energy it has to be transported to distrubition centers. To transport energy from one turbine requires electric poles to be built. Considering there is 490 wind turbines in only Çeşme, magnitude of the magnetic fields produced can't be imagined. It also has been observed that magnetic fields cause harm to wildlife and humans.

"Wind turbines found in Turkey, Ege region specifically, are in operation continously every day of the year excluding faults in the system."

"One of the key parts of the turbine, the tower, can reach heights up to 120 meters and the blades can be as long as 80 meters. Blades and the tower are transported from the factories they are made with trucks and are assembled together."

Writers: Zehra Alya Alpan,Hüseyin Ege Kahraman,