The History of Windmills

The global wind energy industry has gone through many ups and downs in the past few centuries. However, the 20th and 21st century proved to be the most crucial for the wind energy sector. Several significant innovative technologies were shaped during these two centuries.

The use of wind energy can be dated back to the Egyptian civilization, where it was used in sailboats. Currently, there exist wind turbines with capacities to generate an output of around 8 megawatts! Let us look at the most significant events in the history of wind energy.

3,500 BC: Egyptians invented the first sailboats. These boats were propelled using wind.

500 to 900 AD: Persians innovated windmills that were used to crush grains and pump water

Late 1100s AD: The English develop windmills to crush grain.

Early 1800s: Windmills started to appear in the Great American Plains as the settlers moved towards the West. The settlers started using windmills to pump water along the western frontier.

1850s: The U.S. Wind Engine Company was established by John Burnham and Daniel Halladay. They build the Halladay Windmill which was designed for the West American landscape.

1887: In July 1887, the first windmill for electricity generation was built by Professor James Blyth in Glasgow, Scotland. Out of the three different turbine designs, the last design is said to have powered the Professor's home for 25 years. Towards the end of year, Professor Charles Brush developed a 12kW capacity wind turbine to charge 408 batteries stored in his mansion.

1890s: Six million windmills were reportedly installed across America. Windmills started using steel blades which boosted efficiency.

1920: Wind turbines began to provide electricity to thousands of rural regions across the Great Plains. They developed a turbine called the 'eggbeater', which stood out for its slender vertical axis turbine. The wind turbines were used on farms to power lighting and charge batteries.

1950s: A majority of wind turbines in the U.S. were shut down as electric came to rural areas and due to as fossil-fuels (burning oil, coal or gas became a cheaper way to create power).

1971, the first offshore wind farm in the world began operations off the coast of Denmark.

1985: A wind farm in California powers around 250,000 homes. However, wind turbine capacities are still inadequate at this time.

1991: Increasing public concerns about environment issues such as global warming raise interest in renewable energy again. In 1991, the U.K.'s first onshore wind farm is opened in Cornwall. The farm had a capacity of 10 turbines that supplied enough power for 2,700 homes.

2020: There are currently 186 operational windfarms in the UK (both onshore and offshore) with 2,120 turbines creating enough energy to power the equivalent of 1,523,052 homes and saving 6,156,175 tonnes of carbon.