
the fruits and vegetables fresh for months. Also, MAP of fruits delays ripening, and controls the development of toughness in the stored product as well as the spread of diseases. In the USA and Canada, both whole and cut fruit and vegetables are stored and distributed in modified atmosphere packs. Consumers in more advanced countries are ready to pay extra for fruit and vegetables that are sold 'near-fresh' and are stored in chemical free environments. Therefore, MAP will not only enhance the food supply in the domestic markets but also will improve the export earnings. [2]

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Zahnyboroda Andrii

Bachelor

Scientific Advisor:

PhD of Psychology, Associate Professor

Tsybal S.V.

National University of Life and Environmental Sciences of Ukraine

Kyiv

WIND POWER IS A SUSTAINABLE AND RENEWABLE ENERGY

Wind energy is a renewable energy industry that specializes in the use of kinetic wind energy. Wind as an energy source is an indirect form of solar energy and therefore belongs to renewable energy sources. The use of wind energy is one of the oldest known uses of energy from the environment, and has been known since ancient times.

Wind power or wind energy is the use of wind to provide the mechanical power through wind turbines to turn electric generators and traditionally to do other work, like milling or pumping. Wind power is a sustainable and renewable energy, and has a much smaller impact on the environment compared to burning fossil fuels.

Wind farms consist of many individual wind turbines, which are connected to the electric power transmission network. Onshore wind is an inexpensive source of electric power, competitive with or in many places cheaper than coal or gas plants. Onshore wind farms also have an impact on the landscape, as typically they need to be spread

over more land than other power stations and need to be built in wild and rural areas, which can lead to "industrialization of the countryside" and habitat loss. Offshore wind is steadier and stronger than on land and offshore farms have less visual impact, but construction and maintenance costs are considerably higher. Small onshore wind farms can feed some energy into the grid or provide electric power to isolated off-grid locations.

Wind is an intermittent energy source, which cannot make electricity nor be dispatched on demand. It also gives variable power, which is consistent from year to year but varies greatly over shorter time scales. Therefore, it must be used together with other electric power sources or batteries to give a reliable supply. As the proportion of wind power in a region increases, more conventional power sources are needed to back it up (such as fossil fuel power and nuclear power), and the grid may need to be upgraded.

Power-management techniques such as having dispatchable power sources, enough hydroelectric power, excess capacity, geographically distributed turbines, exporting and importing power to neighboring areas, energy storage, or reducing demand when wind production is low, can in many cases overcome these problems. Weather forecasting permits the electric-power network to be readied for the predictable variations in production that occur. [1]

Wind is the movement of air from an area of high pressure to an area of low pressure. In fact, wind exists because the sun unevenly heats the surface of the Earth. As hot air rises, cooler air moves in to fill the void. As long as the sun shines, the wind will blow. And wind has long served as a power source to humans.

Ancient mariners used sails to capture the wind. Farmers once used windmills to grind their grains and pump water. Today, more and more wind turbines wring electricity from the breeze. Over the past decade, wind turbine use has increased more than 25 percent per year. Still, it only provides a small fraction of the world's energy.

Most wind energy comes from turbines that can be as tall as a 20-story building and have three 200-foot (60-meter)-long blades. The wind spins the blades, which turn a shaft connected to a generator that produces electricity.

The biggest wind turbines generate enough electricity in a year (about 12 megawatt-hours) to supply about 600 U.S. homes. Wind farms have tens and sometimes hundreds of these turbines lined up together in particularly windy spots. Smaller turbines erected in a backyard can produce enough electricity for a single home or small business.

Wind is a clean source of renewable energy that produces no air or water pollution. And since the wind is free, operational costs are nearly zero once a turbine is erected. Mass production and technology advances are making turbines cheaper, and many governments offer tax incentives to spur wind-energy development.

Drawbacks include complaints from locals that wind turbines are ugly and noisy. The slowly rotating blades can also kill birds and bats, but not nearly as many as cars, power lines, and high-rise buildings do. The wind is also variable: If it's not blowing, there's no electricity generated.

Nevertheless, the wind energy industry is booming. Thanks to global efforts to combat climate change, such as the Paris Agreement, renewable energy is seeing a boom in growth, with wind energy leading the way. From 2000 to 2015, cumulative wind capacity around the world increased from 17,000 megawatts to more than 430,000 megawatts. In 2015, China also surpassed the EU in the number of installed wind turbines and continues to lead installation efforts.

Industry experts predict that if this pace of growth continues, by 2050 one third of the world's electricity needs will be fulfilled by wind power. [2]

Wind energy is a source of renewable energy. It does not contaminate, it is inexhaustible and reduces the use of fossil fuels, which are the origin of greenhouse gasses that cause global warming. In addition, wind energy is a “native” energy, because it is available practically everywhere on the planet, which contributes to reducing energy imports and to creating wealth and local employment.

For these reasons, producing electricity through wind energy and its efficient use contributes to sustainable development.

Wind energy does not emit toxic substances or contaminants into the air, which can be very damaging to the environment and to human beings. Toxic substances can acidify land and water ecosystems, and corrode buildings. Air contaminants can trigger heart disease, cancer and respiratory diseases like asthma.

Wind energy does not generate waste or contaminate water—an extremely important factor given the scarcity of water. Unlike fossil fuels and nuclear power plants, wind energy has one of the lowest water-consumption footprints, which makes it a key for conserving hydrological resources.

Wind energy benefits:

- Renewable energy
- Inexhaustible
- Not pollutant
- Reduces the use of fossil fuels
- Reduces energy imports
- Creates wealth and local employment
- Contributes to sustainable development [3]

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