19 – 06 – 2023

News: Global Wind day

- Global Wind Day celebrated on 15th June 2023 by the Ministry of New and Renewable Energy (MNRE) with the theme of "Pawan - Urja: Powering the Future of India".
- MNRE has set the target of 500 GW renewable energy capacity by 2030 and Wind Atlas at 150 meter above ground level was also launched by National Institute of Wind Energy (NIWE), estimating the onshore wind potential at 1,164 GW.

Global Wind Day

- Global Wind Day is an annual event since 2007 to promote wind energy as a clean and renewable source of power.
- It was started by the European Wind Energy Association (EWEA) and later joined by the Global Wind Energy Council (GWEC).
- GWEC is a member-based organisation that represents the entire wind energy sector.

Wind Energy

- Wind energy is a form of renewable energy that uses the kinetic energy of the air to generate electricity.

Mechanism

- Wind energy is created using wind turbines, which are devices that have blades that rotate when the wind blows.
- The rotation of the blades drives a generator that produces electricity.
- Wind energy can be generated on land or offshore, where there are stronger and more consistent winds.

Emission of Gases

- Wind energy is a clean and renewable source of power that does not emit greenhouse gases or other pollutants.

Uses

- Wind energy can be used for homes, businesses, farms, and other applications. Wind energy is one of the fastest-growing renewable energy sources in the world.

Facts about Wind Energy

- The largest wind power market in the world is China, with a capacity of over 237 GW of wind power installed followed by U.S and Germany.
- China also has the world's largest onshore wind farm in Gansu Province, built out of the Gobi Desert.
- India ranks fourth in wind power capacity (with 42.8 GW as of April 2023) in the world and have a huge potential for both onshore and offshore wind energy production.
- Wind energy is vital for India's transition to a low-carbon economy and achieving its goals of 50% non-fossil fuel-based energy by 2030 and Net Zero by 2070.
- Tamil Nadu installs highest wind power capacity presently followed by Gujarat and Karnataka.