

Renewable Energy: Clean Tech Solutions



Vocabulary for Students

- **Concentrated solar energy/power¹:** A system that uses mirrors or lenses to focus a large area of sunlight onto a smaller area, where it can heat water into steam to turn a turbine connected to an electrical power generator.
- **Generator:** A machine that converts mechanical energy into electrical energy.
- **Geothermal energy/power²:** Using heat from Earth's interior to do things like produce electricity.
- **Hertz:** A unit of frequency, or how often something is repeated over a certain time period (cycles/second).
- **Hydropower:** Using the energy of flowing water to do things like generate electricity.
- **Megawatt:** A unit of electrical power.
- **Photovoltaic solar cells:** Technology that converts sunlight directly into electricity.
- **Pumped hydroelectric storage:** A way to store energy by pumping water up a hill to increase its potential energy.
- **Renewable energy/resource:** A resource that is never used up or a resource that can be replaced such as solar power.
- **Reservoir:** A place to store fluids like water.
- **Solar panel:** A technology that can absorb the sun's energy and convert it into electricity. Solar panels are composed of many photovoltaic cells connected together.
- **Turbine:** An engine that has a part with blades that are caused to spin by pressure from water, steam, or air.
- **Wind power/energy:** Using the energy of moving air (wind) to do things like generate electricity.

¹ [Did you know that the world's largest concentrated solar power plant is in California? Learn more about the Ivanpah Solar Electric Generating System \(ISEGS\) and how it powers more than 140,000 homes.](#)

² [Did you know that the world's largest complex of geothermal power plants is also in California? Discover how The Geysers taps into hot water and steam underground to power 725,000 homes.](#)

