

The background features a stylized landscape with a gradient sky from blue to orange. A large orange sun is partially obscured by a black silhouette of a wind turbine. Several other smaller wind turbine silhouettes are scattered across the horizon. In the upper left, three small black birds are flying. The foreground consists of dark green horizontal lines representing a field or water.

Renewable Energy & Infrastructure

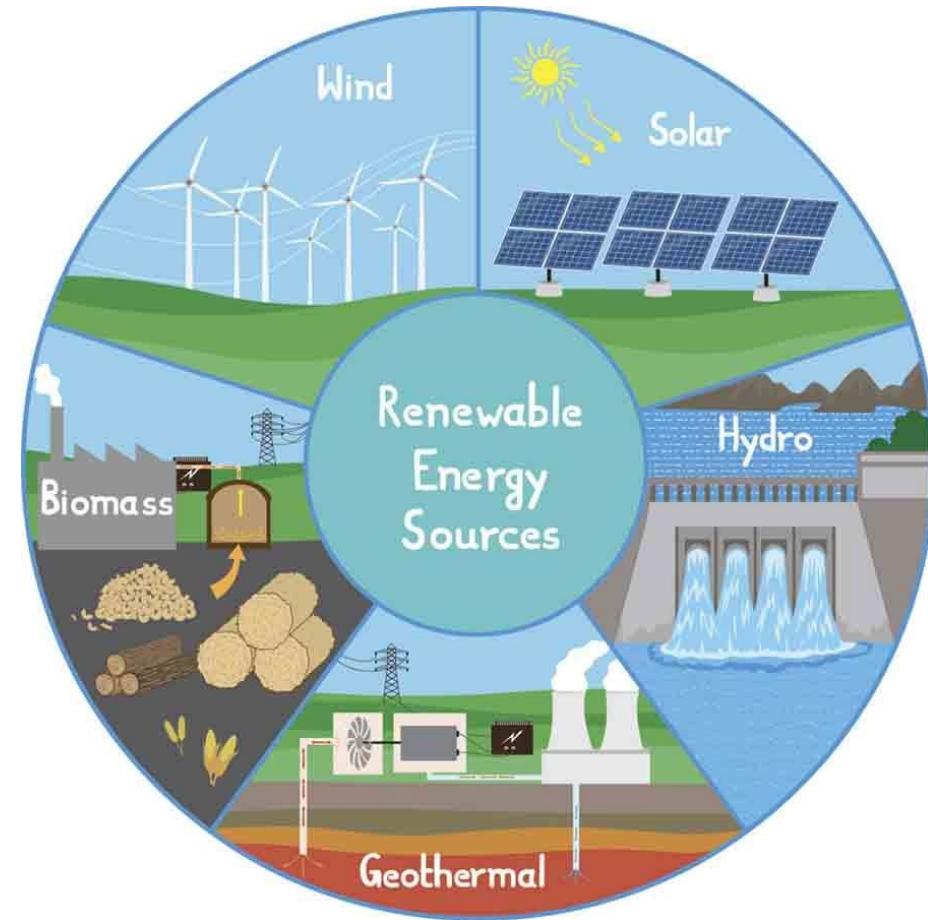
Envirothon Key Topic #2

February 17th 2024

What is Renewable Energy?

❖ Renewables

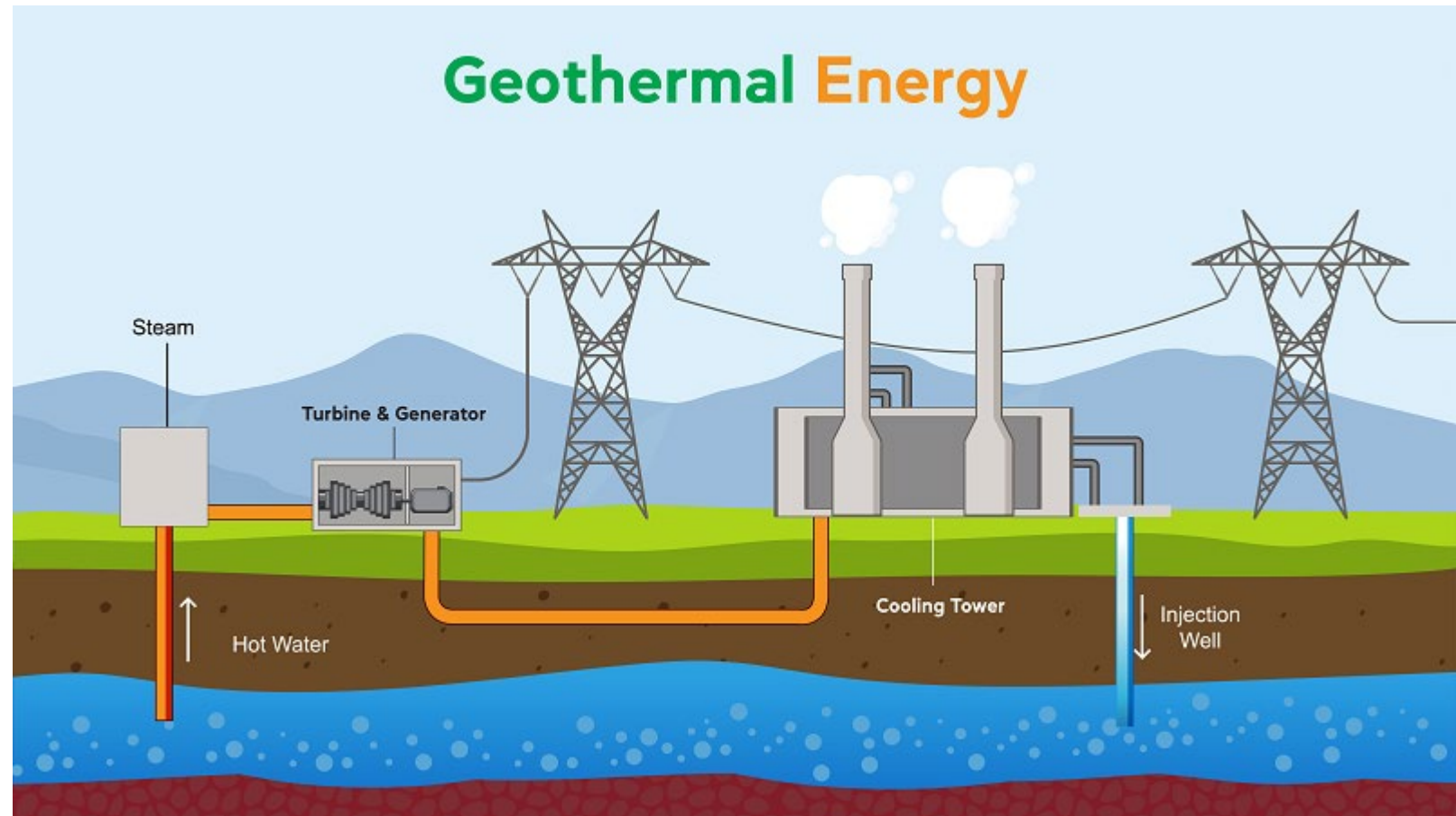
- Renewable energy is usable energy that is collected from renewable resources — which include sources like sunlight, wind, rain, rivers, tides, ocean waves and geothermal heat.



Geothermal

❖ Geothermal

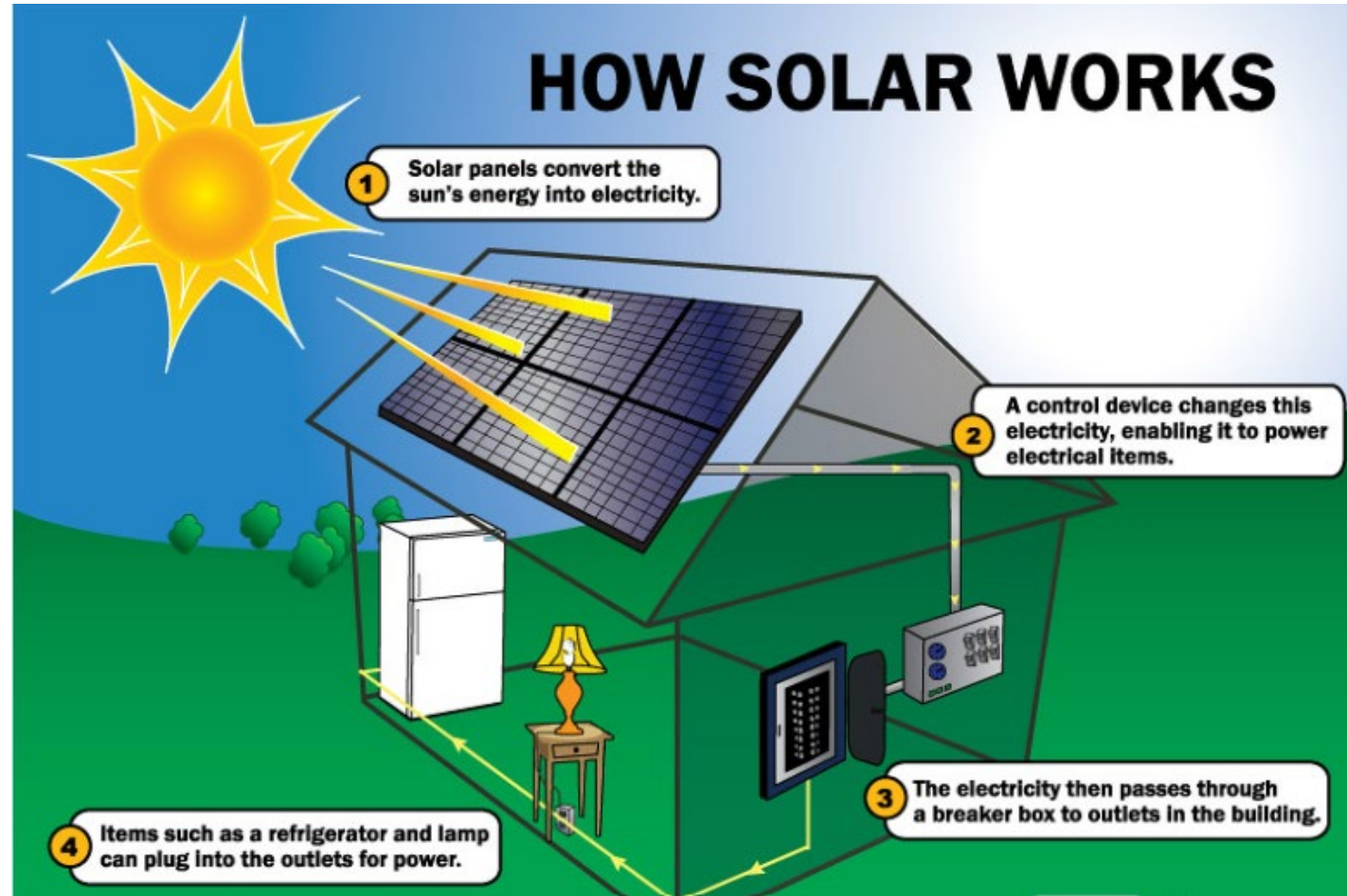
- form of renewable energy created by powering electrical generators with the heat of the earth.



Solar

❖ Solar

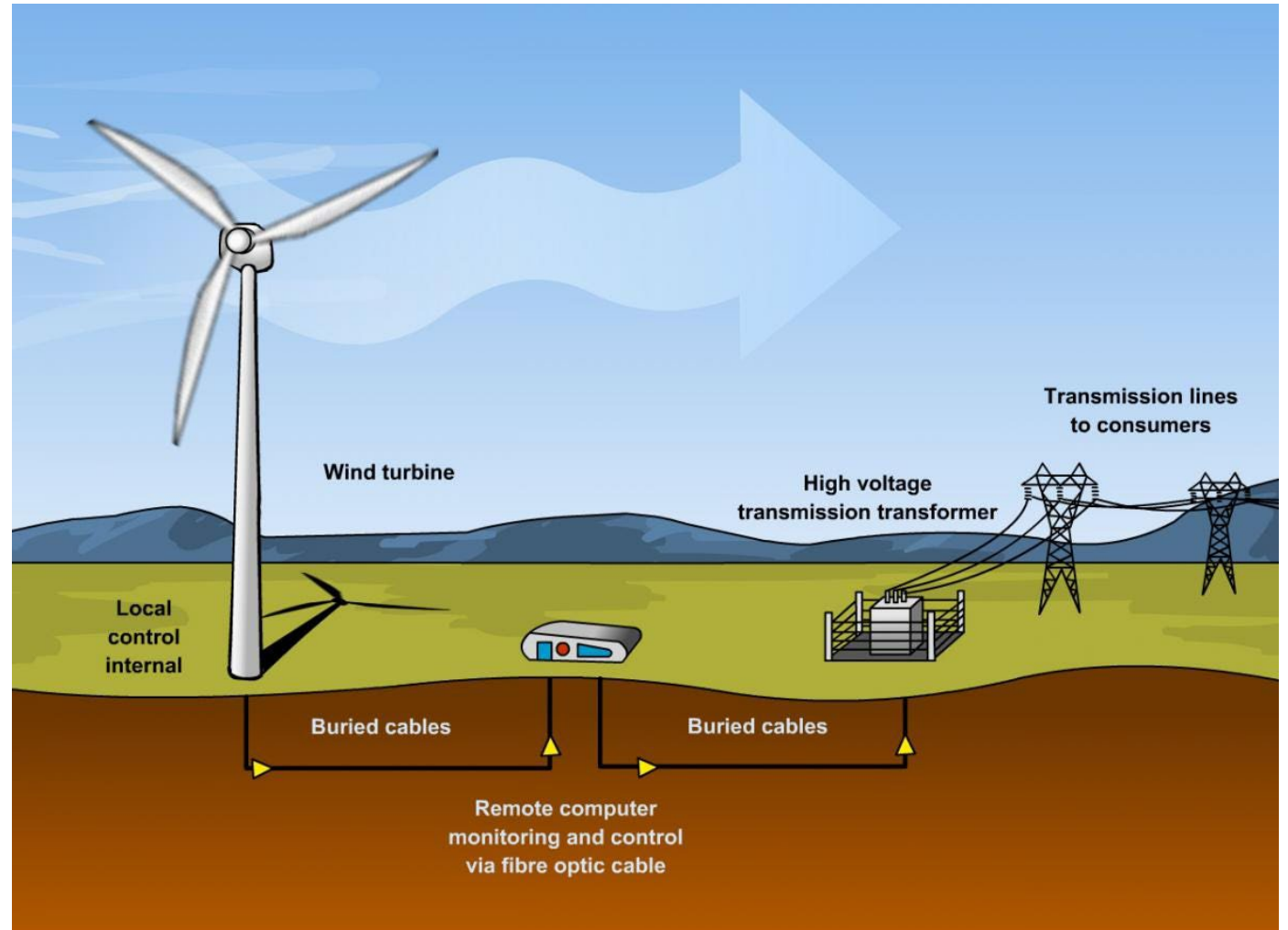
- form of renewable energy that captures radiant light and heat from the Sun that is harnessed using a range of technologies such as solar power to generate electricity, solar thermal energy, and solar architecture.



Wind

❖ Wind

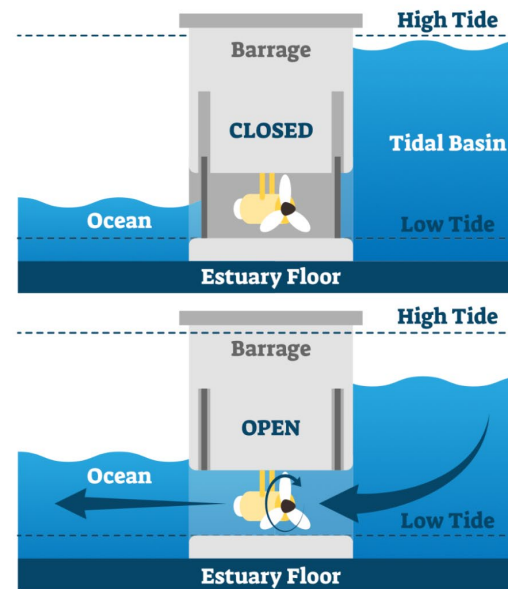
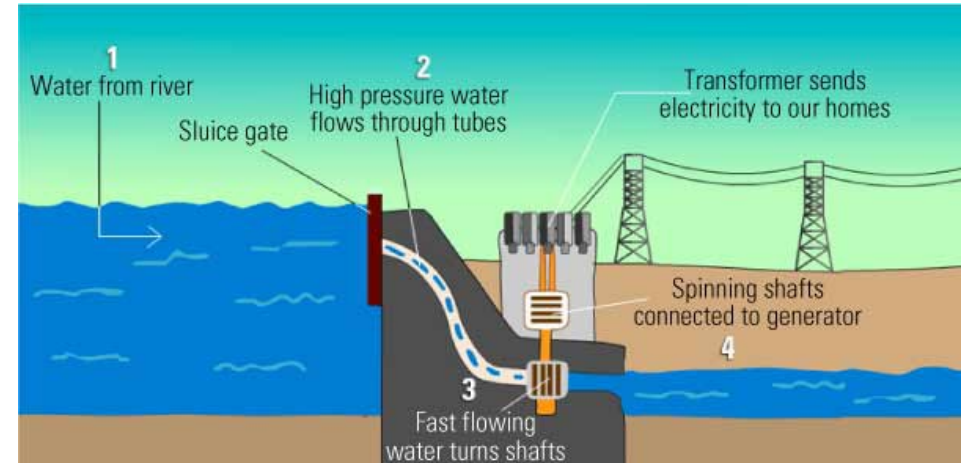
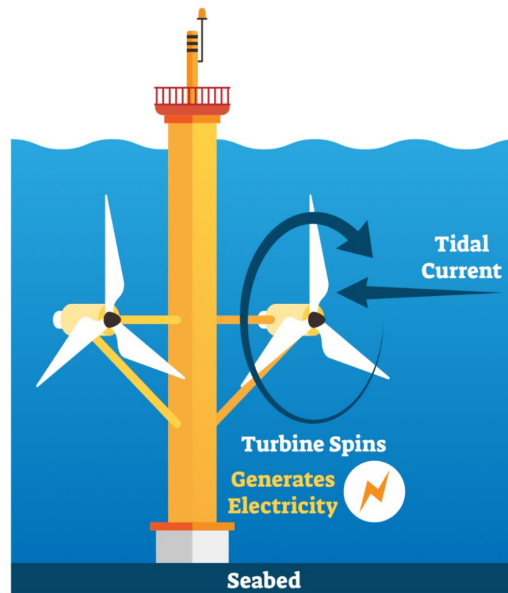
- process by which we use wind to generate electricity or mechanical power. Wind energy refers to capturing the energy from moving air and converting it into electricity.



Hydro

❖ Hydro

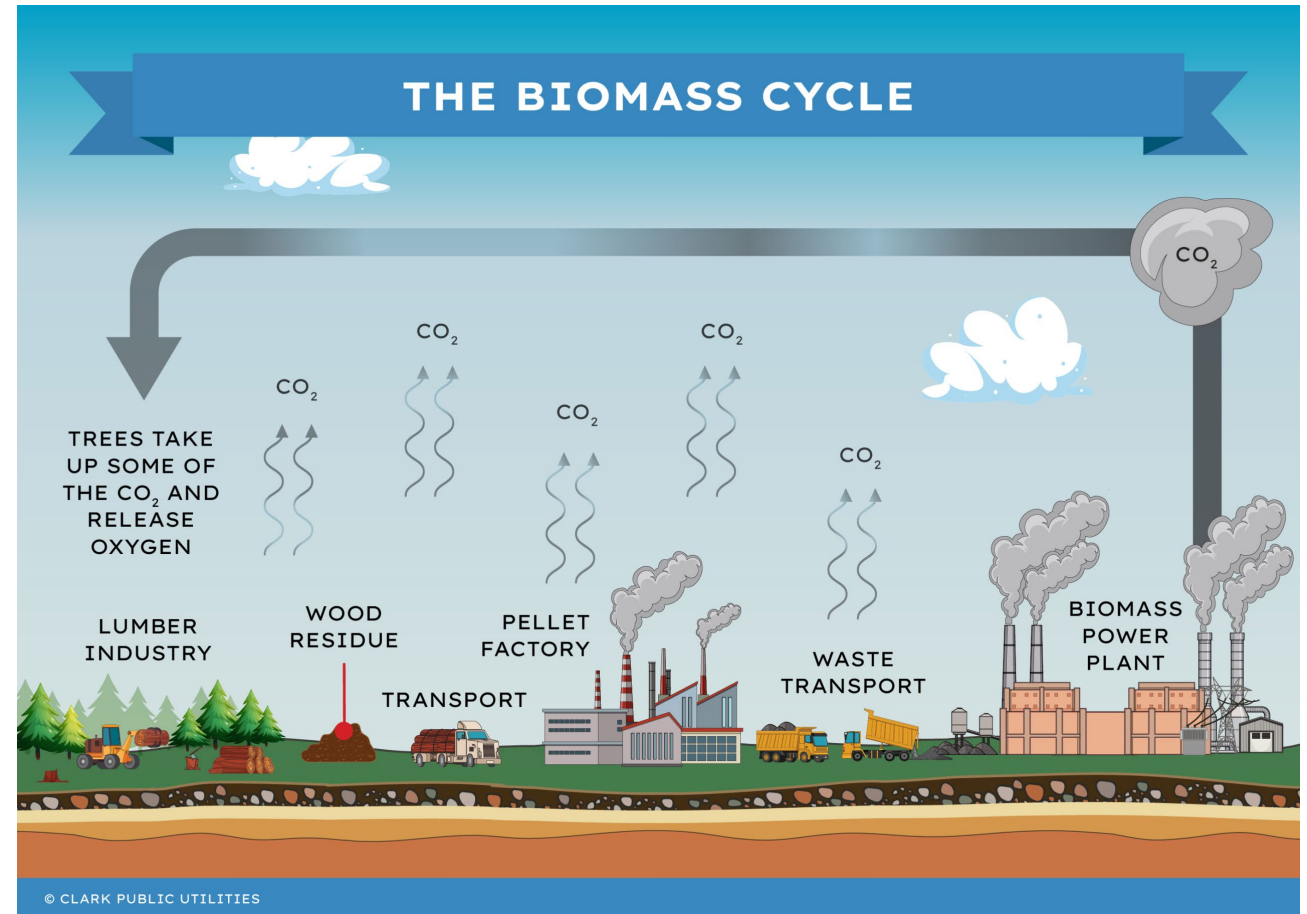
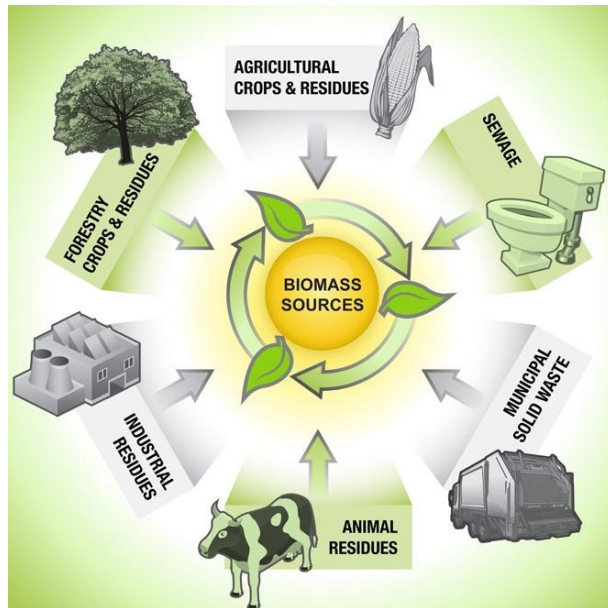
- hydro energy or water energy refers to capturing the energy in flowing or falling water and converting it into electricity. When this energy is converted into electricity, it is referred to as hydroelectricity.



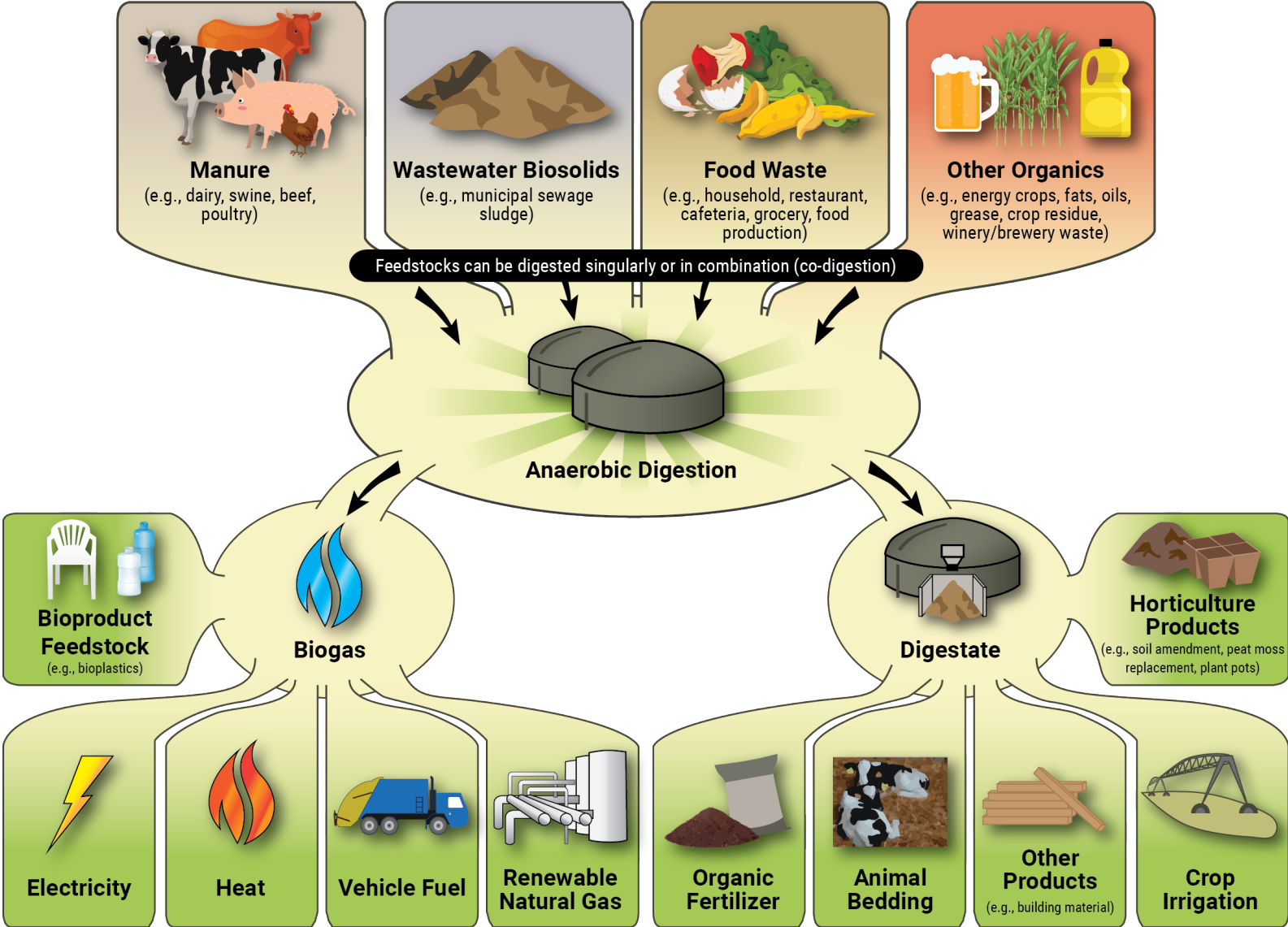
Biomass

❖ Biomass

- carbon-neutral electricity generated from renewable organic waste that would otherwise be dumped in landfills

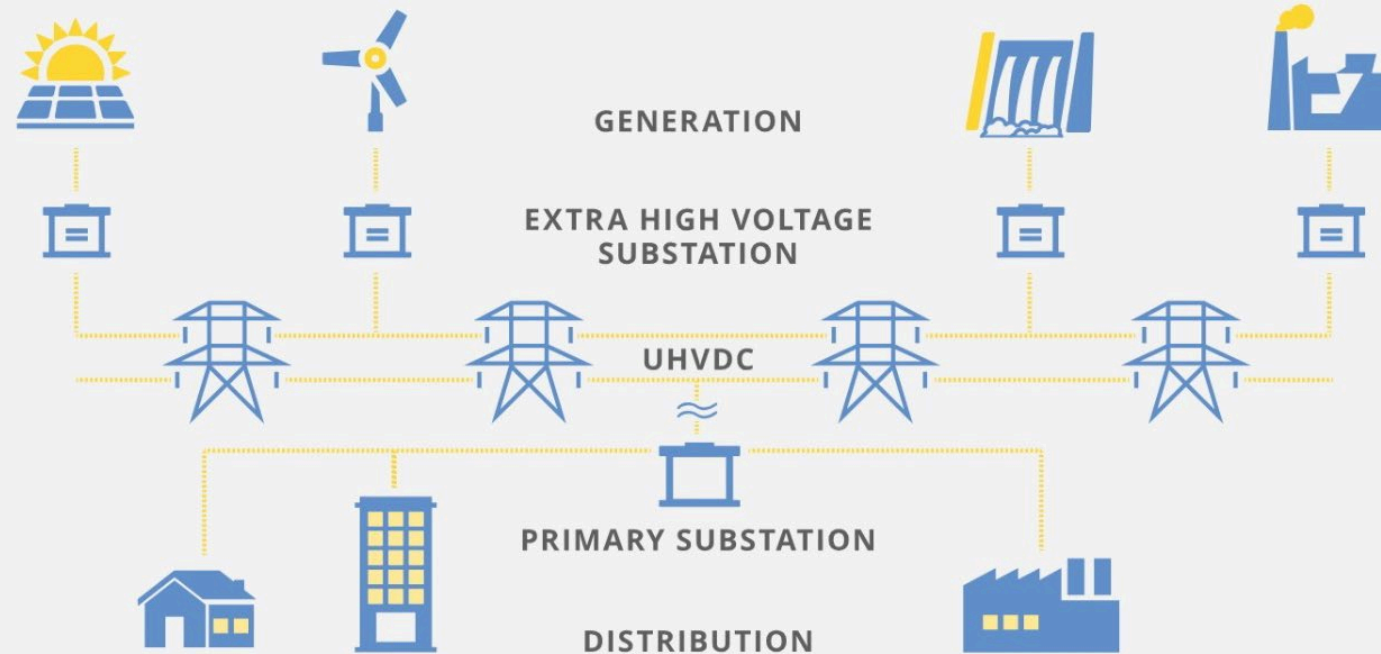


Anaerobic Digestion



Renewable Energy Infrastructure

Power play: how the grid works



Source: CEERT, Tepco

mega.
mega.online

Questions ?

