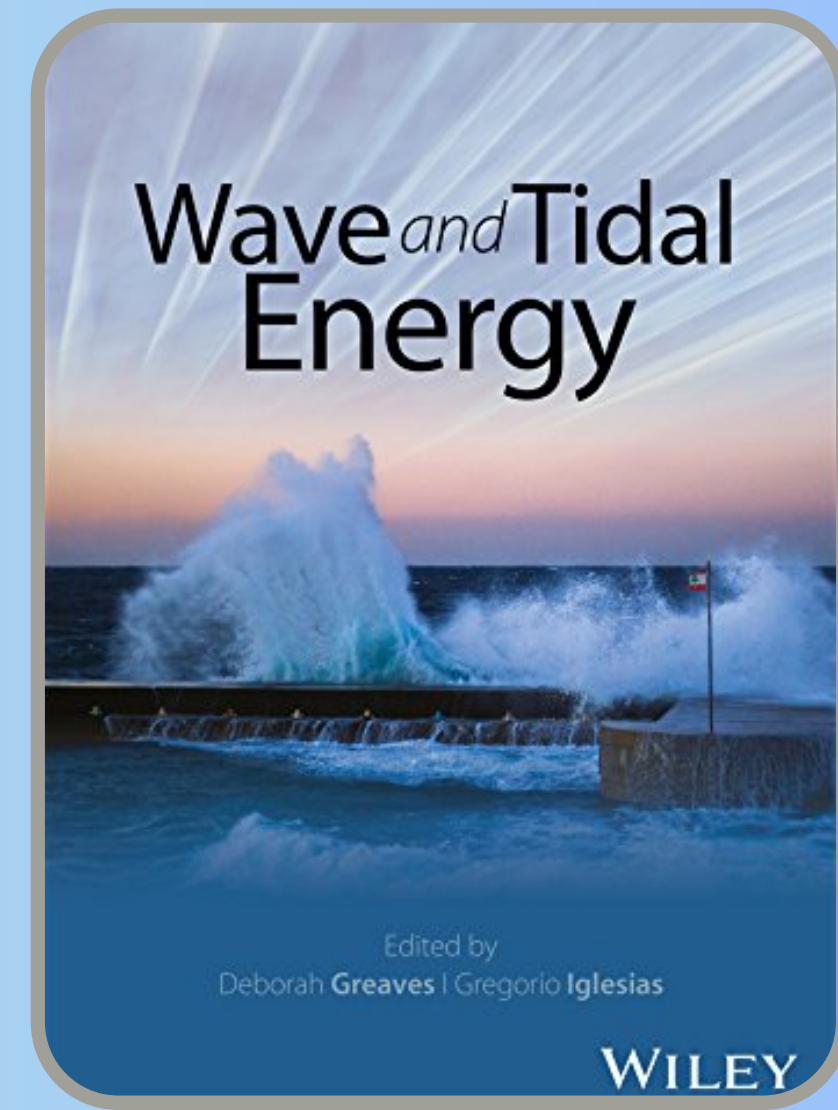


Renewable Energy



Sara, Nihal, Lauanny and Adriana.



Index

- **Definición**

- **What energy can it produce?**

- **What is needed?**

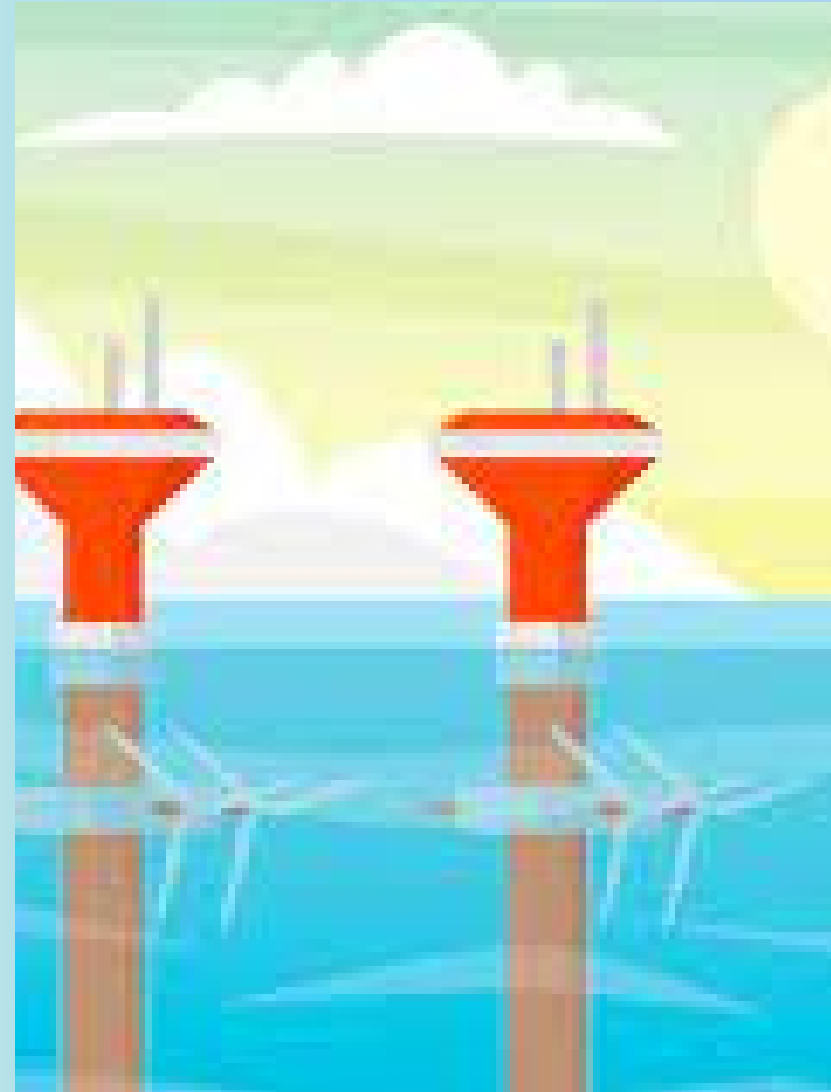
- **Process**

- **Advantages and disadvantages**

- **Uses**

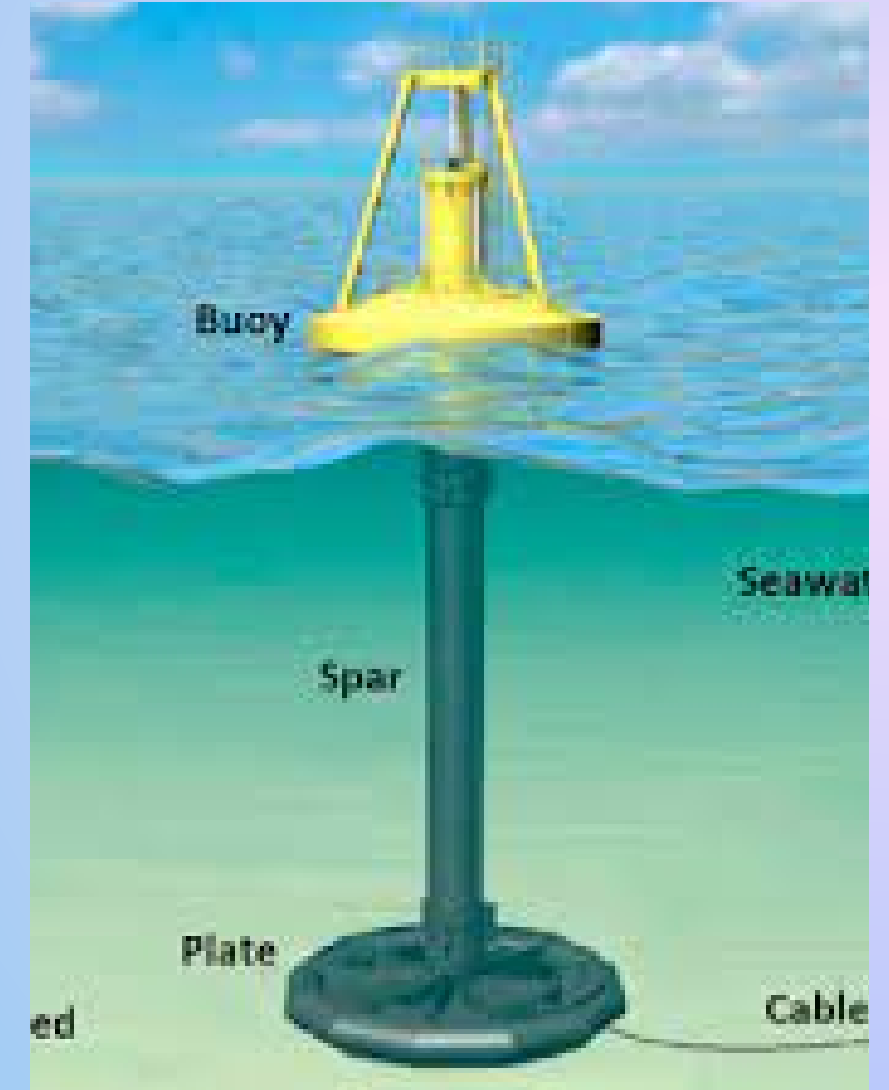
Definition

• **Wave energy is the one that uses the force of sea waves electricity, while tidal energy uses the difference between high and low tides**



Tidal Power

It is the energy that is obtained by taking advantage of the tides: by using an alternator, the system can be used to generate electricity, thus transforming tidal energy into electrical energy.



Wave Energy.

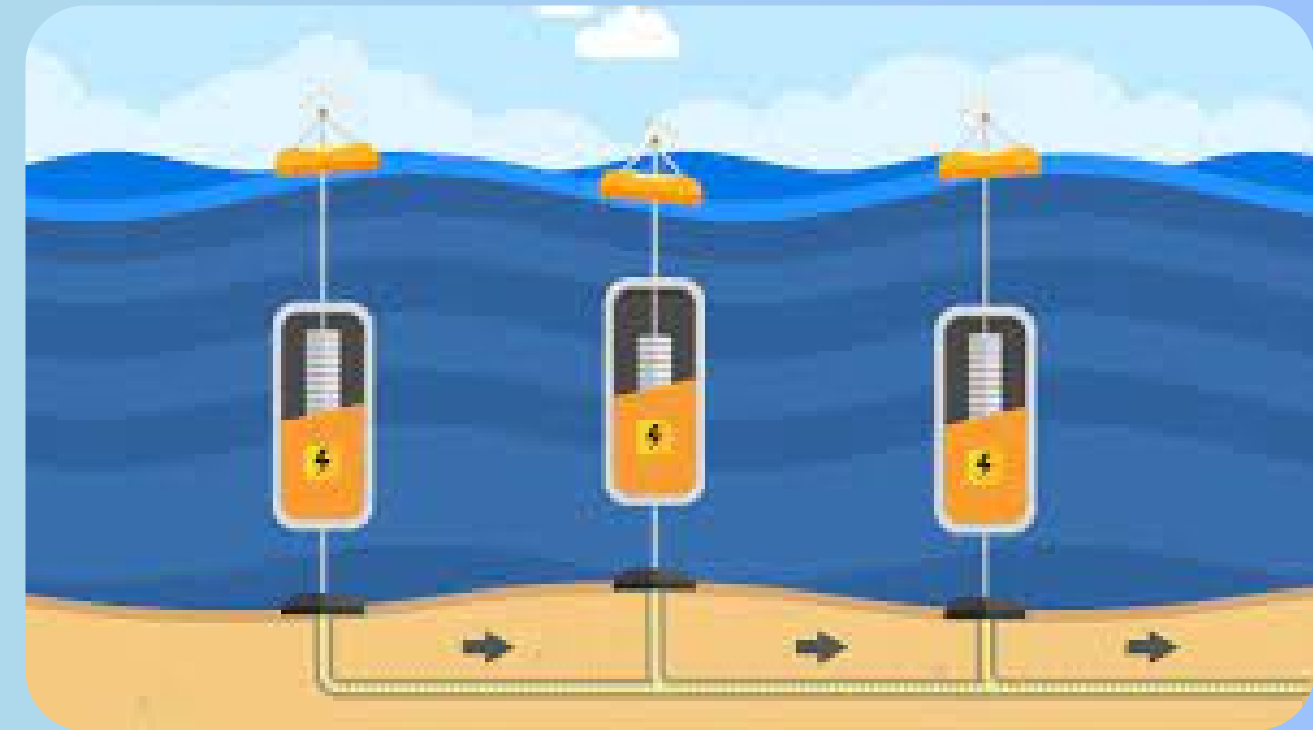
It is the one that captures the energy from the movement of the waves produced by the wind to carry out useful work, for example, generate electricity, desalinate water or pump water.

What energy can it produce?



Tidal power

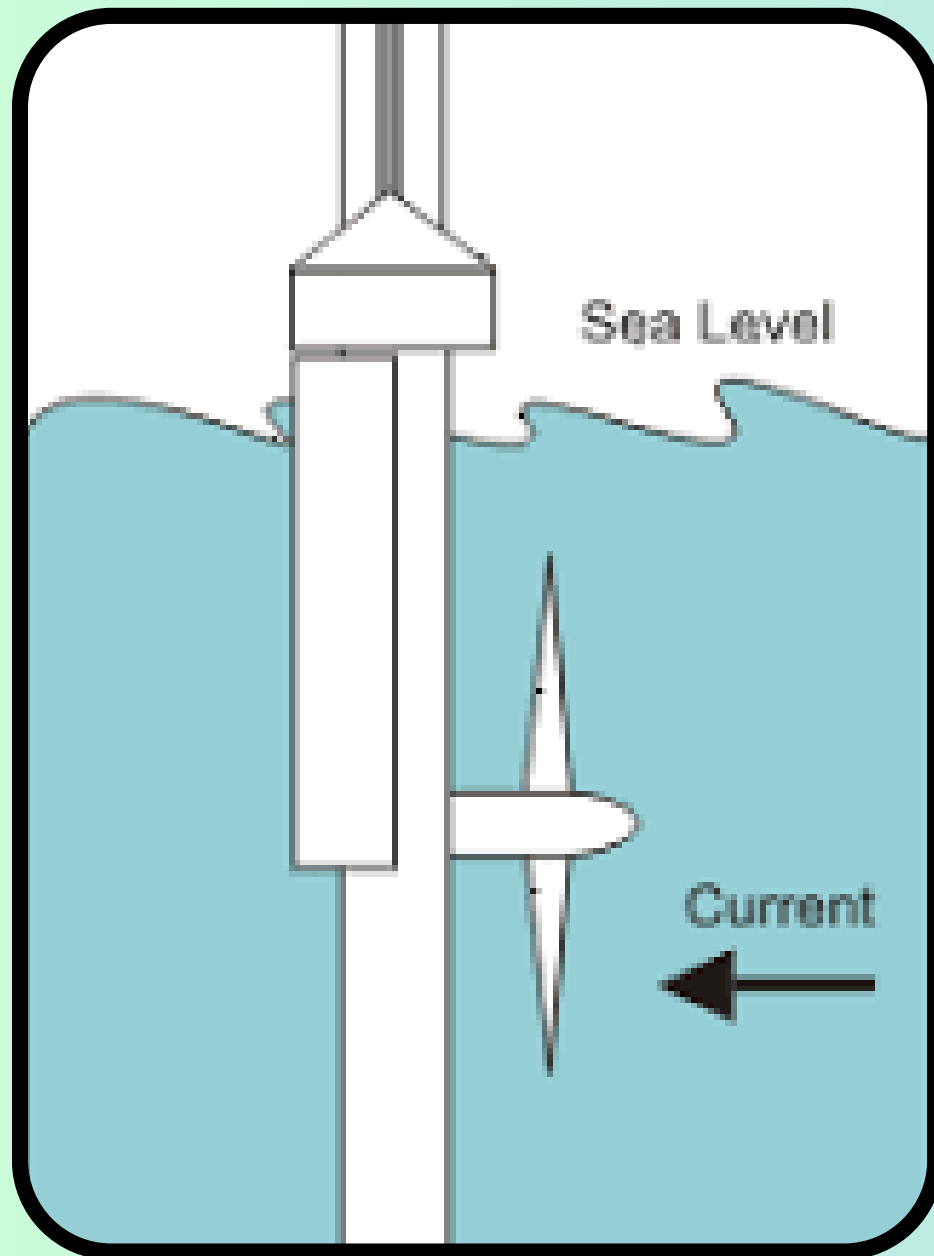
Tidal currents with enough energy for collection occur when water passes through a constriction, causing the water move faster.



Wave energy.

Wave energy can be generated by taking advantage of changes in air pressure that occur in oceanfront wave capture chambers of changes in wave pressure on the ocean floor.

What is needed?



Tidal Power
Is renewable energy powered by the natural rise and fall of ocean tides and currents. Some of these technologies include turbunes and vanes. The energy of the tide is produced by the waves of the ocean waters during the rise and fall off the tides.

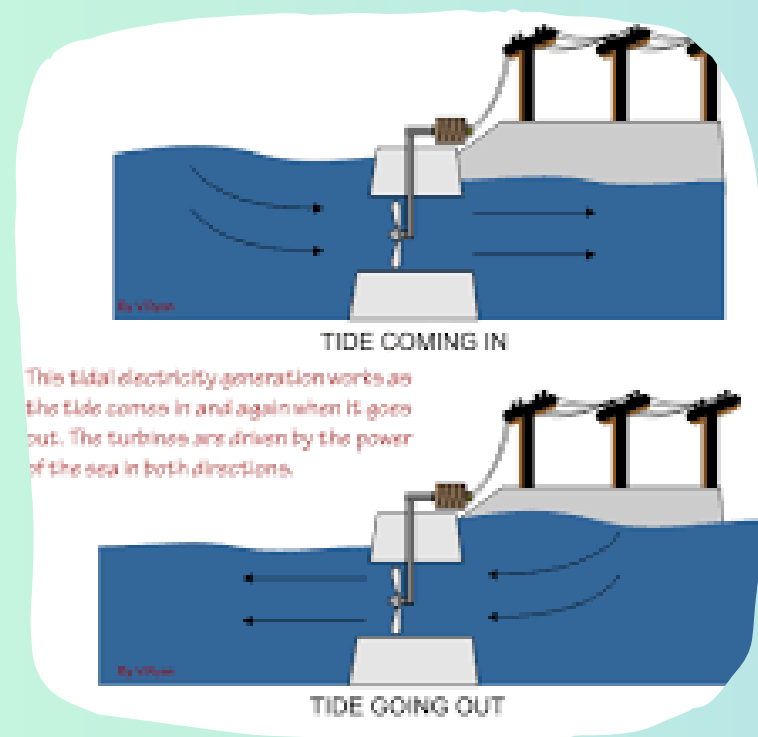


Wave Energy.
Is usually produced by floating turbine plataforms or buoys that rise and fall with the swell.

Process

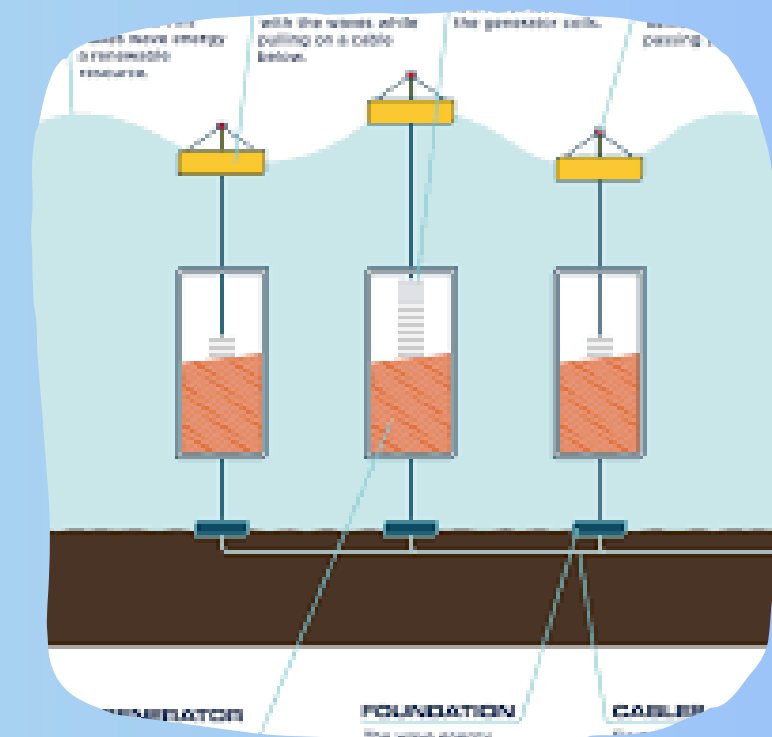
Tidal Power

Tidal currents with enough energy for harvesting occur when water passes through a constriction, causing the water to move faster and thus generating electrical energy.

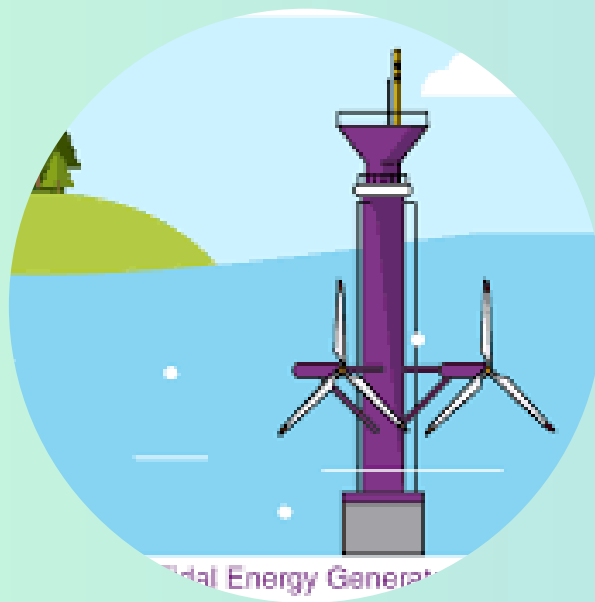


Wave Energy

Is generally produced by floating turbine platforms or buoys that rise and fall with the swell while energy is being collected from the motion of the waves.

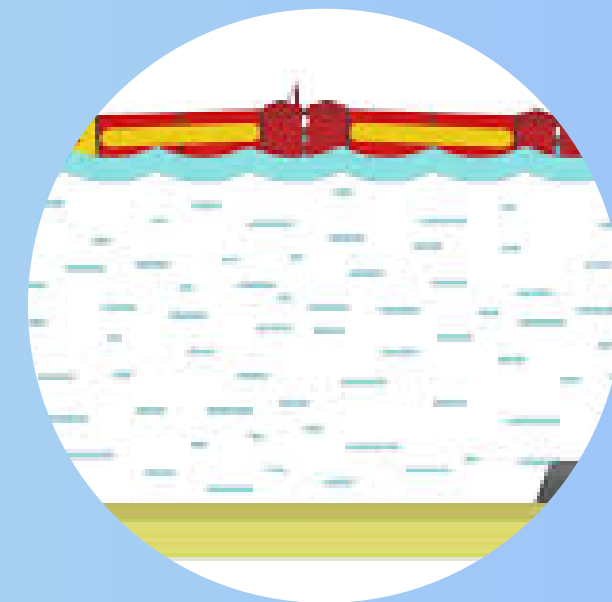


Advantages



Tidal Power

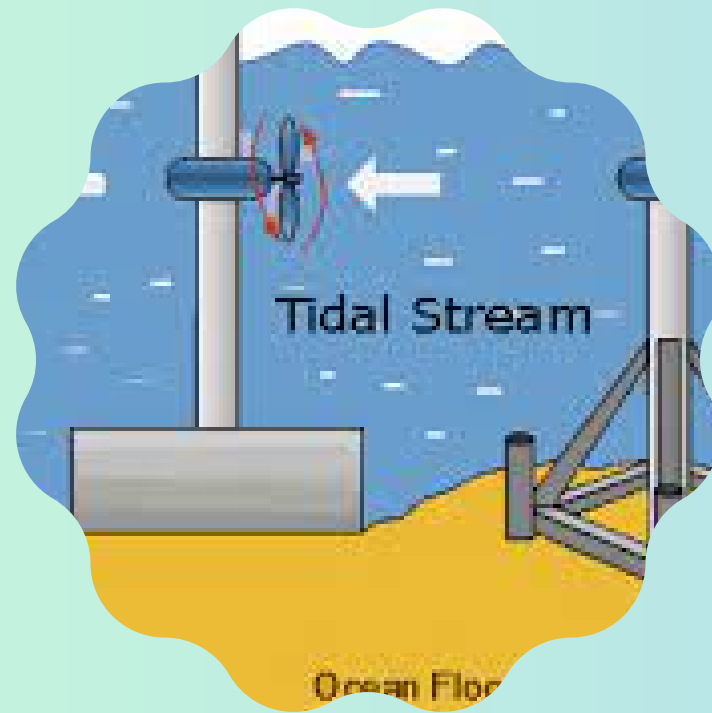
Water is hundreds of times denser than air, making tidal energy more powerful than wind energy. It is more efficient than wind or solar power due to its relative density and does not produce greenhouse gases or other wastes, making it an attractive renewable energy source.



Wave Energy

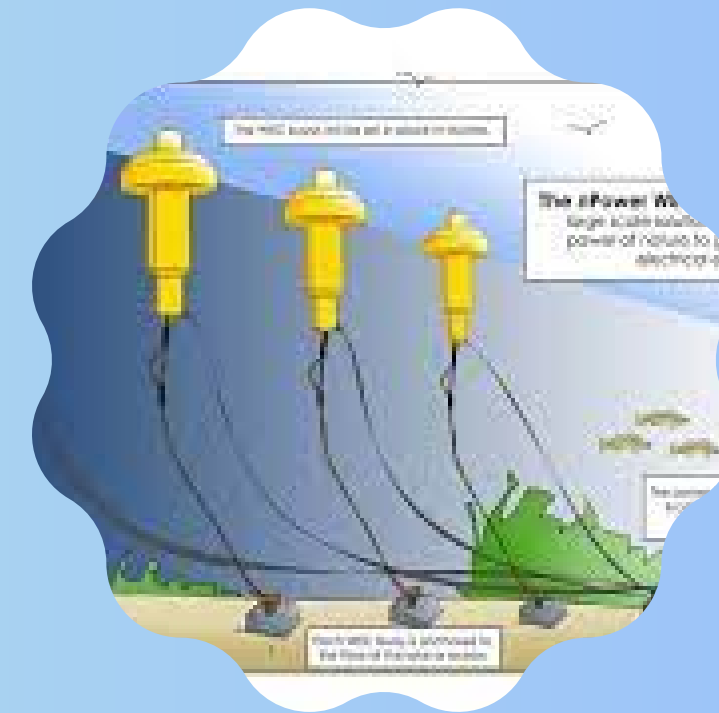
The biggest advantage of wave power over most other alternative energy sources is that it is easily predictable and can be used to calculate how much you can produce. Wave energy is constant and is much better than other sources that depend on wind or sun exposure.

Disadvantages



Tidal Power

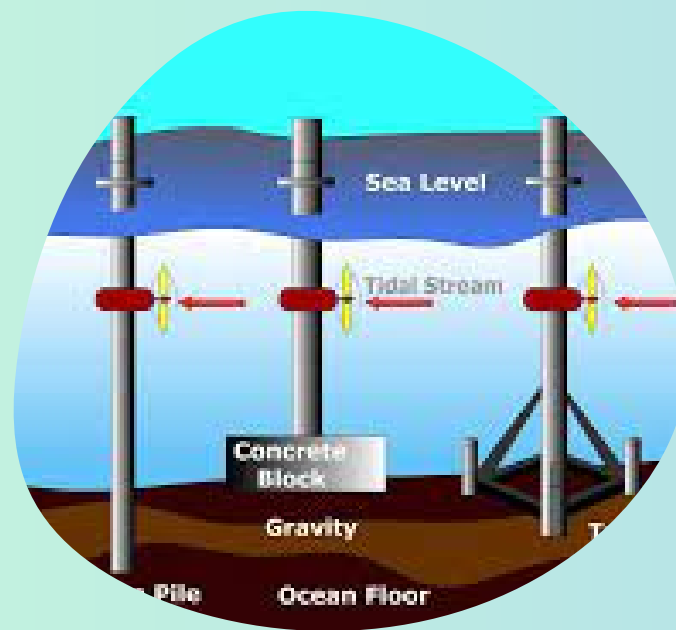
The main disadvantages of tidal power are that there are limited installation sites, it is expensive, the turbines can impact the surrounding ecosystem, and the power produced does not always match up with peak energy demand.



Wave Energy.

One of these is the cost right now. The technology is still developing and is very expensive when compared to other renewable energy sources.

Domestic Uses



Tidal Power

Tidal streams are areas in which the tides naturally produce a strong ocean current.



Wave Energy

Wave energy is the transport and capture of energy by ocean surface waves.

Industrial Uses



Tidal Power

The predominant application for tidal energy has been the generation of electricity for use on shore via the national power grid.



Wave Energy.

Devices wave energy converters capture the energy from waves and turn it into electricity. Some devices sit beneath the water's surface while others are anchored to the ocean floor.



*Thanks
for
watching*