

Renewable Ocean Energy

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Wave Energy

Power drawn from waves occurs when wind blows across the sea surface and water act as carrier for the energy by using wave energy converters. The quantity of energy generated varies with height and the time gap between successive peaks.

Generally, western coast of the continents and extreme latitude are the places where best wave energy is found

There are many different technologies presented globally to capture energy from waves, a couple of them are presented below:

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ATTENUATOR- the floating device (Attenuator) oriented parallel to the wave direction and hence traps energy from the relative motion of the two arms. The most well-known example of this kind of technology is Pelamis, where there is long series of cylindrical floating devices connected to each other with hinges and anchored to the seabed

POINT ABSORBER- These devices does not restrict capturing wave energy unidirectional, however it traps energy from all the possible directions.

One such device is called the Aquabuoy developed by Finavera. According to an estimate, there are more than 100 different patented proposals for this energy and many of them have shown economically viable electricity generation

Wave Energy

there is no consensus over any design for wave energy technology as it is still in testing phase

Even though with less development in wave energy technology, it has higher potential than tidal energy, hence there is expectation of further development in this technology in future.