

## ADVANTAGES OF WAVE ENERGY

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**Abstract.** Our experts offer assessments and evaluations for clients in all areas of the wave energy industry, including research, testing and project development. Tidal energy is a relatively new form of renewable energy that involves harnessing the power contained in waves on the ocean’s surface.

**Key words:** energy, wave energy, energy, solar energy, development of our country.

**Introduction.** Although the use of wave energy has not been widely used for commercial purposes, in recent years this industry has grown tremendously due to the emergence of new technologies and devices that allow practical solutions to the world’s future energy needs. Wave energy devices are designed to efficiently convert wave energy into electrical energy. Depending on the concept, these devices are located in strategic positions that allow operators to maximize energy production. Some of these locations include shores, seashores, or seashores, and are typically connected to a subsea power distribution facility via a submarine power cable. Because wave energy installations are located in dangerous, sometimes unpredictable marine environments, it is essential that wave energy developers partner with a

reputable company in the marine energy industry. This will allow you to better understand the potential energy efficiency of the site and how the devices will interact with the environment.



Did you know that waves are actually caused by tides, which vary depending on the lunar cycles? That's right – you can blame the moon for those days of rough surf on the beach. Depending on the lunar cycles, tides, winds, and weather, waves can vary in size and strength. As waves roll through the ocean, they create kinetic energy, or movement. This movement can be used to power turbines, which, in turn, create energy that can be converted into electricity and power. There are also several ways of harnessing wave energy that utilize the up and down motion of the waves to power pistons-turn generators.

Currently, the countries with the largest wave power generation capacity are: South Korea, followed by France, Canada, Great Britain and Norway. Currently, wave energy makes up only a small fraction of the world's renewable energy, but the potential is huge.

**Summary.** In conclusion, one of the biggest obstacles to wave energy is that many people believe that wave energy systems are too small and not suitable for powering large buildings or structures.

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