

## Wave Energy

Waves are formed by winds blowing over the sea surface; the water acts as a carrier for the energy. The amount of energy in waves depends on their height and period (the time between successive peaks). Technologies to convert wave energy to electricity include offshore, near-shore, and shoreline wave energy converters.

In 2004, San Francisco took part in a wave power pre-feasibility study conducted by EPRI ([http://www.epri.com/oceanenergy/attachments/wave/reports/009\\_Final\\_Report\\_RB\\_Rev\\_2\\_092205.pdf](http://www.epri.com/oceanenergy/attachments/wave/reports/009_Final_Report_RB_Rev_2_092205.pdf)). The study concluded that the coast off San Francisco is a promising area for locating an offshore wave power plant, and that as much as 300,000 megawatts per year of electricity—enough to power 25,000 San Francisco homes—could be generated annually.

In June 2006, EPRI entered Phase 2 of the study to explore the possibility of developing a wave energy pilot project in California. The study is examining several sites along the California coast, including a site off San Francisco's Ocean Beach, to determine the best location for a pilot project, and to examine the associated regulatory, technological, environmental, financial, and other issues of developing the project.