## عنوان مقاله:

Calculation of Extractable Wave Power in Oman Sea

## محل انتشار:

پنجمین همایش بهینه سازی مصرف سوخت در ساختمان (سال: 1385)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

The world's oceans represent an enormous and virtually untapped source of clean, non-polluting renewable energy. Technologies exist to exploit this resource but at the present time, high initial construction costs make electricity produced from these power plants more expensive than that from traditional sources. Technological breakthroughs, standardized plant designs, increased fossil fuel prices and/or increased world concern over environmental issues such as global warming will increase the pace at which ocean wave and ocean thermal energy conversion systems are utilized. World is running out of oil and we need to start finding new energy sources. Scientists need to explore wave energy as an alternative energy source. World-wide, the potential for waves to supply energy is enormous. Dutch researchers have estimated that the world has 20,000 km of coastline suitable for harnessing wave power. Iran has hundreds kilometers coastline in Oman Sea. In this paper initially calculated the height and period of average wave in Oman Sea. Then by this information, we calculated the extractable power from the average waves that moves toward the coast of Iran in Oman Sea, with about 500 km coastal border, by using a continuously system is approximately 6445 MW. This is a large amount of power that can supply main part of Iran consumption electricity.

## کلمات کلیدی:

wave, Renewable energy, energy, power, Oman Sea