

Global OTEC Resources

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Abstract

Ocean Thermal Energy Conversion (OTEC) relies on the thermal stratification of the water column in tropical oceans to drive a heat engine. OTEC technologies require large seawater flow rates since temperature differences from different water depths are relatively small.

This raises a number of questions, for example, whether global OTEC resources are limited, and what large-scale environmental effects might occur. Attempts to address such issues, for more than a decade, are summarized, from one-dimensional analyses of the oceanic water column, to simulations using an ocean general circulation model (*MITgcm*).