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Ocean energy of Taiwan East coast

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At the east coast, especially Taitung coast full of ocean energy, wave energy, ocean current particularly ocean thermal energy conversion (OTEC). Offshore nearly 3 km away from Taitung and Hualien Coast and reaching 1000 to 1500 meter deep, in deep ocean water (DOW) temperatures being around 0 to 4 degrees, whereas sea surface temperature around 25 to 28 degrees, the temperature difference is more than 20 degrees. If ammonia is used as a catalyst, it is easy to generate electric power. Offshore 33 km from Taitung coast and about 5 km from Green Island, there exists 3-4 knots' Kuroshio currents. MOEA (Ministry of Economic Affairs) is planning to develop 3 gigawatts power. The SHOTEC power plant is a good solution to OTEC. That scheme not only offers more thermal efficiency to that of conventional OTEC plant but also circumvents the difficulties of deployment of deep seawater pipe and evaporator biofouling problems. For convenience to develop Ocean Energy and Ocean Resources, the planning of an airport and seaport is shown for future transportation of energy and DOW (Deep Ocean Water) products. The multi-functional arrangement is stretched. The Taitung Ocean Energy development is welcoming an international technical cooperation to take part in its ongoing promotion and future developing.

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