



WAVE TRANSLATOR

For decades, the human being has remained in a constant search to find new ways of generating energy to meet its various activities. Sea waves are a source of practically inexhaustible energy in the thousands of kilometres of coastline in each of the five continents which returns them an extremely attractive alternative to obtain clean electricity by not involving the use of fossil fuels increasing carbon footprint on planet earth.

WAVE TRANSLATOR proposal emerges from the concern to know how to take advantage of the energy of waves generated at sea with the aim of generating electricity efficiently in a less aggressive manner with the environment and at the same time attract the attention of the people through a structure that enhances the benefits of a sustainable energy production system.

WAVE TRANSLATOR it's an art installation that shows the energy produced by the waves by the illumination of light bars supplied with the electricity generated into the turbines. The intensity of light in the bars shows the amount of energy produced, translating in a visual and captivating way for viewers how is the process of production of electrical energy. The project arises from the rotation of a cube of 40 x 40 meters wich seem to be truncated to be submerged into the sea. Its shape complies with the intent of being simple but wich in turn impacts and captivates the

WAVE TRANSLATOR works returning to the principles of the OWC system, which consists of a set of columns that contain water that go up and down through the movement of the waves, generating an air flow which activates 80 type Wells turbines which operates through a bi-directional flow of air up and down, allowing a constant movement of the turbines and their consequent estimated energy production in 2000 Mwh per year. Electrical energy produced is conducted to a distribution center in Santa Monica's coast, and is integrated into the power grid of the city.

ENVIROMENTAL IMPACT

The project is located on the seabed, built with organic cement, which is the product of a concrete recycling, previously used in buildings. Has the advantage of being at the same time, a recycled and recyclable product, which gives the project the distinction of being a friendly structure with the environment.

The functioning of the system of turbines, through the movement of the waves, stop using fossil fuels that emit pollutants into the environment, preventing leakage of harmful substances into the sea.

WAVE TRANSLATOR then becomes an interesting alternative for energy production, using responsibly the resources that nature provides, freeing it from fossil fuels pollution.

