

# Generation of Electricity Using Oceanic Water

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**Abstract:-** In present scenario electricity is great of need.It is the reason we are able to use our mobile phones , laptops and other electric working things.Due to availability of electricity we feel ease in our life.There are many methods of generation of electricity using river water in this paper we will discuss about generation of electricity by ocean water.

**Keywords:-** Electricity Generation, Generator, Turbine.

## I. INTRODUCTION

**Electricity generation** is the process of generating electric power from sources of primary energy. For utilities in the electric power industry, it is the stage prior to its delivery (transmission, distribution, etc.) to end users or its storage (using, for example, the pumped-storage method).the generation of electricity takes place by a **electrical generator**. a generator is a device that converts motive power (mechanical energy) into electrical power for use in an external circuit.Sources of mechanical energy include steam turbines, gas turbines, water turbines, internal combustion engines, wind turbines and even hand cranks *Use of electricity* it is used for lighting, heating, cooling, refrigerating and many other purposes A **turbine** is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful work. The work produced by a turbine can be used for

generating electrical power when combined with a generator. Head is the height difference between where the water enters into the hydro system and where it leaves it, measured in metres.

## II. ELECTRICITY DEVELOPMENT BY MEANS OF OCEANIC WATER

Let us consider a cylindrical box of 1 km height,1 km radius of both the circular sides box inside the ocean completely and top surface of the box above the ocean surface .let us consider the box is closed from all sides. Now if we made hole inside the box water will start to enter the box.the water flow when entering the box can be utilized for generation of electricity.Let us consider a turbine in the box fitted such that the head of water entering through the hole inside the box hits the blades of turbine and rotates the generator to produce electricity.the electricity generated will depend upon efficiency of generator the more the efficiency of generator the more will be generated electricity and will also depend upon the head loss of water coming inside the box through the hole by the blades of turbine.More head can produce more electricity.After hitting the blade the water will go down at the bottom of the box where it will be taken out by it's own pressure. And thrown back into the ocean as shown in the figure 1.

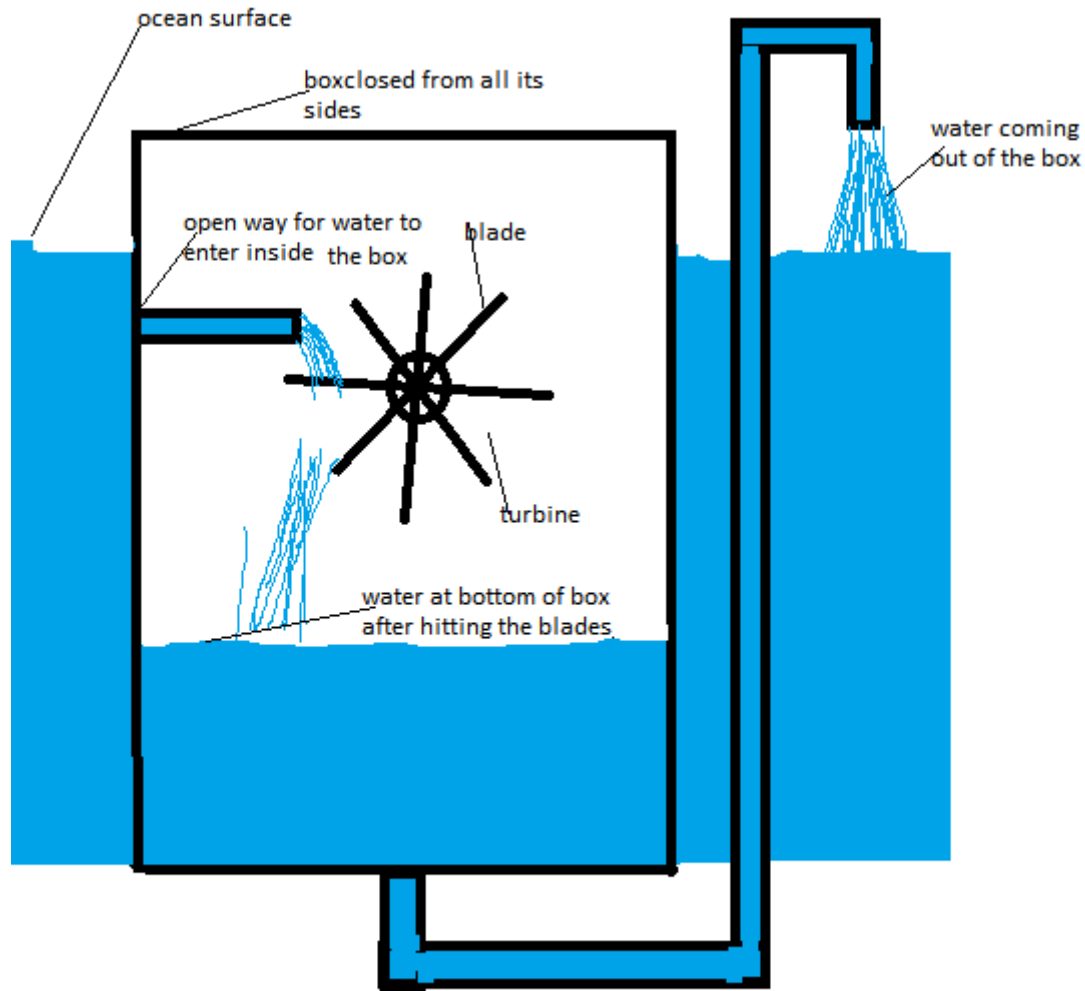


figure:1. generation of electricity using ocean water.

### III. CONCLUSION

The electricity produced by oceans will help us in serving the world with electricity. Electricity as is of great use this invention can help us in making our day to day life better.

### REFERENCES

1. [https://en.m.wikipedia.org/wiki/Electricity\\_generation](https://en.m.wikipedia.org/wiki/Electricity_generation)
2. [https://en.m.wikipedia.org/wiki/Electric\\_generator](https://en.m.wikipedia.org/wiki/Electric_generator)
3. <https://www.eia.gov/energyexplained/electricity/use-of-electricity.php>
4. <https://openstax.org/wiki/Definition:Turbine>
5. <https://www.renewablesfirst.co.uk/hydropower/hydropower-learning-centre/what-is-head/>