

CLIMATIC CHANGE AND WATER SAFETY

PROGRAM

"Creating global seawater desalination systems (GSD) from renewable energy of sea waves and currents "

In support of UN initiative to develop green technologies in all areas of human activity aimed at protecting the environment, reducing harmful emissions into the atmosphere and pollution of the seas and oceans, and reviving the planet's flora and fauna.

In terms of implementing this initiative, we offer a program of creating global system of desalination of sea water through renewable, environmentally friendly energy of sea waves and currents. The essence of the project is the widespread construction of wave desalination plants designed by Ovsyankin.

Strategic goals and objectives

Against the backdrop of COVID-19, the global problems that human civilization has already faced have become more apparent. The main one is providing people with fresh water.

According to the UN, more than third of the world's population lack fresh water today. Climatic changes, the widespread drop in the level of rivers, lakes, groundwater, pollution of water bodies with chemical waste have already led to catastrophic consequences in many countries. Frequent fires, droughts can lead to global hunger and the death of millions of people in a matter of months.

Fresh water is the world's main strategic resource for survival , the main national priority of most countries.

The COVID-19 epidemic showed that its successful overcoming depends on the effective using of the time reserve for the comprehensive preparation and implementation of all opportunities.

The strategic goal of the project is to achieve global water security through the creation of a global desalination system of sea water with renewable energy of sea waves and currents.

The strategic goal DOS Tiga is rapid construction of the wave of desalination stations around the world to create a financial and industrial group, which includes:

- analytical center for quick response;
- large-scale production of technical equipment for desalination of sea water;
- structures of operational construction and maintenance;
- financial and economic block.

The activities of financial and economic group will allow us to work out comprehensive standard approached to solving all issues related to the construction of wave desalination plants in different countries and regions . This will reduce construction time and increase the effectiveness of the work group significantly.

GSD Creation Program

Creation of program with global IP threads of desalination of sea water due to the energy of sea 's waves and currents includes the following steps.

1. Creation of information system for monitoring of the state of water security and preparation of proposals and recommendations for normalization in additional supply (possibly within the UN framework) .
2. Development of comprehensive model project for the construction of wave desalination plants and the passaging of the procedure for its approval by the relevant UN structures.
3. Analysis of the energy potential and evaluation of dynamic characteristics of natural processes of water seas and oceans, In theory rationale lineup wave desalination plants.
4. Development of working of technical documentation on the model of ovarian cancer d wave desalination stations , m Modeling the e and testing models in one of the leading research centers.
5. The creation or modernization of enterprises for the serial production of the wave desalination plants on specialization : plastic and composite structures , hydraulic and mechanical components and parts, desalination section , elementy BBC management tem.
6. Creation of mobile units for installation and commissioning works and service maintenance of stations . .
7. Creation of a service for training staff.

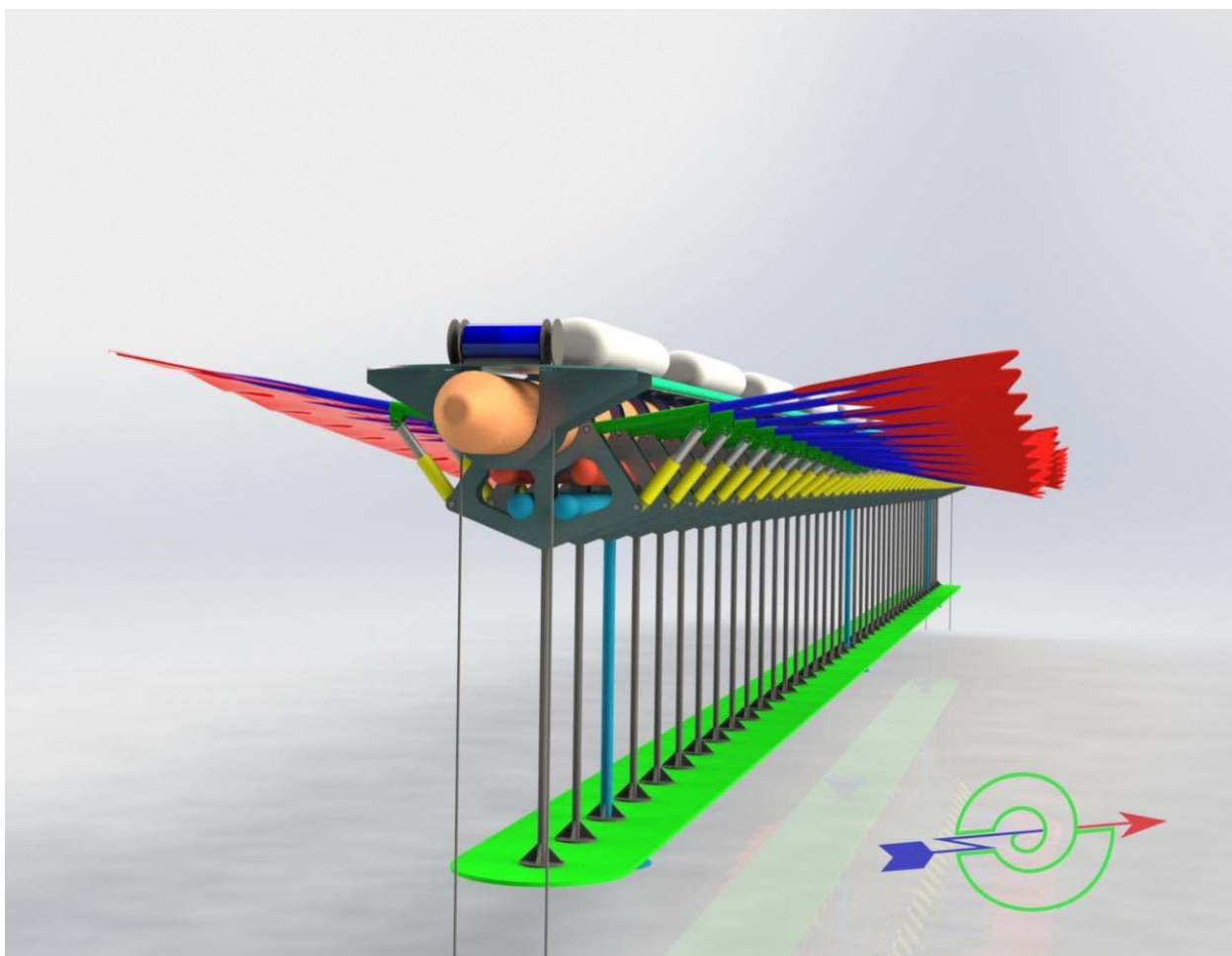
Implementation program will commercially produce annually new desalination plants with total capacity of up to 1 000 000 meters of cube of fresh water per day.

Wave desalination platforms are built on a modular basis. This allows, with increasing demand for fresh water, to increase the productivity of platforms due to the installation of additional modules.

The wave station can be installed on a large tanker-water carrier, which will be filled by fresh water in the open sea while moving to the place of water consumption.

Ovsiankin's wave desalination station

The wave desalination station is designed for desalination of sea water due to the renewable, environmentally clean energy of sea waves and currents in the open sea.



The efficiency of the wave station is ensured by its main properties such as:

- presence of a flexible energy-absorbing element, which changes its shape from a flat longitudinal body to a spatial spiral under influence of each incident wave;

- the design of the station is permeable to waves and has the ability to dive to a depth in the zone of action of calculated parameters waves;
- main structural elements of the station are made of composite polymer materials;
- presence of several desalination sections with holders of reverse osmosis membranes, connected to work consistently. it depends on wave situation in the water area.

The design of the wave station is protected by five patents of Ukraine, Russia. Today it is carried out patenting in other countries. The productivity of one module of the wave station for the oceans will be up to 1000 cubic meters per hour, for inland seas - up to 300 cubic meters per hour.

The specific investment per unit of installed capacity (m^3 / h) of the desalination wave station will be 15,000 - 20,000 €

The cost price of one cubic meter of fresh water will be 0.2-0.3 €

