The press service of the Russian Scientific Fund (RNF) reported that Russian scientists have developed a new device for cleaning and desalining water using solar energy. The basis for the development was graphene and non -woven cotton material, which makes the technology affordable and effective.

The device demonstrates cleaning efficiency up to 97%. Its production does not require expensive materials or complex technological processes, which is especially important for regions with limited resources.

The design of the evaporator includes a chamber for supplying water, a floating heat -insulating platform with cotton material and a tank for collecting condensed water. Sunlight heats the graphene components, which leads to the evaporation of water and the subsequent condensation of the already purified fluid.

Each square meter of material is capable of evaporating from 1.9 to 2.4 kg of water per hour with standard sunlight. The device maintains performance even in water with high salinity, which exceeds the indicators of the Black Sea by half.

Development can solve the problem of access to pure drinking water in hot and arid regions of the world. The technology of self -cleaning and resistance to salt deposits make it a practical solution for large -scale use.