Solar Energy Supported Desalination Processes for Desalting of Sea Water*

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Abstract: This study is a review of solar energy supported desalination processes. Although the sun light captured by earth excessively meets of world’s need, we can use a few amount of this source. Solar energy supported desalination is one of the method developed for desalination. Solar energy usage will also decrease CO2 emission which is responsible of global warming. A lot of studies to improve the efficiency of solar energy systems have been carried out during last years. Solar energy can be used both of direct or indirect methods. Direct methods have low efficiency and low cost. Indirect methods include sun collectors which heating water, heat exchanger, evaporation compartments, photo voltaic panels which may used to drive the pumps and valves and may be finally have membrane treatment. Productivity and economic conditions determine which method will choose.

Keywords: Solar energy; desalination; sea water; water scarcity.

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