

عنوان مقاله:

Environmental Impacts Assessment of Power Extraction by Salinity Gradient Power (SGP) Method

محل انتشار:

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خلاصه مقاله:

A huge potential to obtain clean energy exists from mixing water streams with different salt concentrations. Salinity gradient power (SGP) is based on the chemical potential difference between concentrated and dilute salt solutions. In this paper we discuss about the potential environmental impacts of salinity gradient power (SGP) processes. We discuss how these issues depend on the technology applied (reverse electrodialysis (RED) or pressure retarded osmosis (PRO)), on the sources of water used and on the specific site conditions. Regarding the environmental impacts, we analyse the water intake, the water disposal, and the infrastructure impacts. After a general review of each of the disadvantages and advantages of these systems, a conclusion is made about the risks of using or not using these systems.

کلمات کلیدی:

Environmental Impacts, Salinity Gradient Power, chemical potential

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