Assessing Technologies for Salinity-Gradient Power Generation

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The mixing process that naturally occurs when fresh water from rivers meets into the salt water sea has the potential to be harnessed to generate up to 40% of the planet's energy needs. Furthermore, this is a renewable source of energy with minimal environmental impact. While several technologies are being developed and even deployed (at small scale), a number of hurdles exist that have precluded the widespread implementation of any such solution. The goal of the project is to review and perform an engineering analysis of the different nascent technologies to better outline potential avenues for research and development.