

Passive Solar Distiller with Low Cost of Implementation, Operation and Maintenance

Authors : Valentina Alessandra Carvalho do Vale, Elmo Thiago Lins Cöuras Ford, Rudson de Sousa Lima

Abstract : Around the planet Earth, access to clean water is a problem whose importance has increased due to population growth and its misuse. Thus, projects that seek to transform water sources improper (salty and brackish) in drinking water sources are current issues. However, this transformation generally requires a high cost of implementation, operation and maintenance. In this context, the aim of this work is the development of a passive solar distiller for brackish water, made from recycled and durable materials such as aluminum, cement, glass and PVC basins. The results reveal factors that influence the performance and viability of the expansion project.

Keywords : solar distiller, passive distiller, distiller with pyramidal roof, ecologically correct

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020