

A Prefeasibility Study on Ocean Wave Power Generation for the Southern Coast of Sri Lanka: Electrical Feasibility

Amarasekara, H.W.K.M., Abeynayake, P.A.G.S., Fernando, M.A.R.M., Atputharajah, A.,
Udanwaththa, D.M.A.R., Gunawardane, S.D.G.S.P., Gerdin, L., Keijser, M.R., Fahraeus, M.W.,
Fernando, I.M.K. and Cooray, V.

Abstract

This paper presents the details of a prefeasibility study carried out about the ocean wave power generation for the southern coastal area of Sri Lanka. It includes a brief review on wave energy devices appropriate for wave climate around the country and the electrical feasibility of integration of wave energy power plants to the national grid based on some of the selected sites along the southern coast. Social and environmental impacts of wave energy power plants are also discussed. Further, depth studies are suggested to be done prior to the implementation.