

ABSTRACT

WEB-BASED GREENING REPORTING PLATFORM IN SUPPORTING ENVIRONMENTAL RESTORATION IN LAMPUNG

by:

Ismail Marzuki

Ismailmarzuki040501.2011010093@mail.darmajaya.ac.id

Technological developments have fundamentally changed the paradigm of human life, especially with the emergence of the fourth Industrial Revolution driven by digital technology, artificial intelligence, and internet connectivity. This transformation has made the website one of the concrete forms of this change from a static source of information to a center of online interaction, commerce, and collaboration. However, serious challenges to the environment, such as deforestation and air pollution, threaten human well-being. Lampung Province is an example that faces serious problems with poor air quality, causing negative impacts on human and public health. In this problem, technological solutions are needed that can facilitate community participation in greening and environmental greening and environmental restoration programs. This research aimed to develop A web-based application that aims to accelerate efforts to reforest and restore the environment and create a balance of ecosystems. The research method adopted the Waterfall development model. This research method used the IPCC (Intergovernmental Panel on Climate Change) Calculation Method to calculate the carbon emissions footprint generated. The research results included a Greening Map. Greening Map presents the location point of greening, Carbon Footprint Calculator to measure the environmental impact, and Greening Reporting allows users to report on locations that need reforestation. By integrating technology into ecological management efforts, it is hoped that synergies can be created between the government, environmental organizations, and society in maintaining and restoring the earth's ecosystem.

Keywords: Fourth Industrial Revolution, Greening, Environmental Recovery, IPCC Calculation Method.

