

ABSTRACT

Based on data from the Global Carbon Atlas in 2019, shows that Indonesia ranks as the 8th highest contributor to greenhouse gas emissions in the world, with 618 Metric Tons of total emission of CO₂. The 4th report of the Intergovernmental Panel on Climate Change indicates that human lifestyles known as carbon footprint contribute significantly to the increase in greenhouse gasses, which can directly affect climate change. Based on a survey in 2019 by YouGov, concluded that Indonesia occupies the highest position where people do not believe that human activities can cause climate change. To address this problem, the government has released environmental education topics as regulated in UU No.32 in 2009, concerning environmental protection and management, particularly Article 65(2) which states, one of the rights of the community is to receive environmental education. However, the solution is ineffective due to a lack of community and educator understanding of environmental education issues, and the environmental education program is inadequate and less applicable. Therefore, we raise the issue of carbon footprint and offer a technology-based education solution, ReCarbon. ReCarbon, is a Flutter-based app to help improve people's knowledge of carbon footprints and ecological lifestyles through education so that environmental education can be made more applicable and fun. The results of testing on 61 target users related to the effectiveness, usefulness, and satisfaction of the application display resulted in an average percentage of 88.99%, which means that the target users strongly agree that ReCarbon can fulfill its goals.

Keywords: carbon footprint, climate change, education, environment, application, flutter