

ABSTRACT

Implementing sustainable practices on college campuses is one way to combat global climate change. A key aspect of developing a sustainable university campus is evaluating activities related to carbon dioxide (CO₂) emissions. However, until recently, it was not common to calculate CO₂ emissions from university campuses in Indonesia. Indonesia International Institute for Life Sciences (i3L) is a school that is committed to sustainability, so determining a learning model that could possibly reduce the amount of emissions generated would be beneficial. This study aims to compare the effects of different modes of transport, electricity and appliances used toward carbon emissions during several established learning model scenarios in i3L. The learning model scenarios were divided into offline and hybrid learning. In offline learning, all staff and students worked/studied at campus full time, meanwhile in hybrid learning all staff and students worked/studied at campus for 2 or 3 days out of 5 days, while the remaining activities were done at home. This study employs the Greenhouse gas reporting: conversion factors 2021 obtained from GOV.UK for calculating the amount of carbon footprint generated from i3L staff and students. The result showed that the learning model scenarios during hybrid learning generates less GHG emissions than the learning model of i3L during offline learning as a whole, with a range between as low as 3.8%, to as high as 47% difference. This concluded that establishing hybrid learning in i3L may result in lower GHG emissions due less frequency of staff and students commuting than offline learning.

Keywords: *COVID-19 Pandemic, GHG Emissions (kg CO₂e), The UK Government GHG Conversion Factors*