

A Comparative Study on the Impact of Global Warming of Applying Low Carbon Factor Concrete Products

Authors : Su-Hyun Cho, Chang-U Chae

Abstract : Environmental impact assessment techniques have been developed as a result of the worldwide efforts to reduce the environmental impact of global warming. By using the quantification method in the construction industry, it is now possible to manage the greenhouse gas is to systematically evaluate the impact on the environment over the entire construction process. In particular, the proportion of greenhouse gas emissions at the production stage of construction material occupied is high, and efforts are needed in particular in the construction field. In this study, intended for concrete products for the construction materials, by using the LCA evaluation method, we compared the results of environmental impact assessment and carbon emissions of developing products that have been applied low-carbon technologies compared to existing products. As a results, by introducing a raw material of industrial waste, showed carbon reduction. Through a comparison of the carbon emission reduction effect of low-carbon technologies, it is intended to provide academic data for the evaluation of greenhouse gases in the construction sector and the development of low-carbon technologies of the future.

Keywords : CO₂ emissions, CO₂ reduction, ready-mixed concrete, environmental impact assessment

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