

## Implementing 6R Principles of the Circular Economy Concept in Sri Lankan Construction Industry

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This study is focused on implementing 6R principles of the circular economy concept in Sri Lankan construction industry and provides a criteria that can be applied to uplift the adaptation towards the circular economy concept in construction projects. Circular economy concept in the construction industry can be considered with the application of sustainable construction approaches to the whole construction process, from material extraction through building and infrastructure planning, design, and construction, as well as the ultimate demolition and the waste disposal. The purpose of the circular economy concept is to create economic strategies that allows to regenerate the materials, resources, and components while retaining their worth for as long as feasible. There is a set of principles in the circular economy concept that have been identified in the literature, called 6R principles, i.e. reduction, reuse, recycle, redesign, re-classification and renewability. A qualitative data collection approach was followed to collect data and the semi-structured interviews were conducted among construction professionals. It was highlighted at the interviews that the circular economy concept is a very new concept not very popular in Sri Lanka, and the applicability of the principles of circular economy is in the initial stage. Mostly, 3R out of 6R (reduction, reuse and recycle) principles have been applied for some of the mega-scale sustainable construction projects and the 6R principles are very new to the Sri Lankan construction industry. Lack of awareness on sustainable concepts like circular economy among construction professionals, their willingness to follow traditional project management practices and consideration only on the initial cost of a project and not on its life cycle cost are the barriers highlighted at the interviews.

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