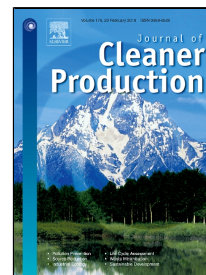


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# Concrete recycling life cycle flows and performance from construction and demolition waste in Hanoi

## Authors

Simon Lockrey<sup>a\*</sup>, Associate Professor Karli Verghese<sup>a</sup>, Dr. Enda Crossin<sup>bc</sup>, Dr. Hung Nguyend<sup>d</sup>

<sup>a</sup> RMIT University, School of Architecture and Design. Building 100, Victoria St & Swanston Streets Melbourne Victoria 3000, Australia. Email: [simon.lockrey@rmit.edu.au](mailto:simon.lockrey@rmit.edu.au) (Simon Lockrey).

<sup>b</sup> Swinburne University of Technology, Faculty of Science, Engineering and Technology, PO Box 3122, Hawthorn Victoria 3122, Australia. Email: [ecrossin@swin.edu.au](mailto:ecrossin@swin.edu.au) (Enda Crossin).

<sup>c</sup> RMIT University, School of Engineering. PO Box 71, Bundoora Victoria 3083, Australia. Email: [enda.crossin@rmit.edu.au](mailto:enda.crossin@rmit.edu.au) (Enda Crossin).

<sup>d</sup> RMIT University, School of Business and Management, 521 Kim Ma, Ba Dinh District, Hanoi, Vietnam. Email: [hung.nguyen@rmit.edu.vn](mailto:hung.nguyen@rmit.edu.vn) (Hung Nguyen).

\* Corresponding author. RMIT University, School of Architecture and Design. Building 100, Victoria St & Swanston Streets Melbourne Victoria 3000, Australia. Email: [simon.lockrey@rmit.edu.au](mailto:simon.lockrey@rmit.edu.au) (Simon Lockrey).

## Abstract

As construction increases through a rise in development in Vietnam, the environmental performance of recycling construction and demolition waste is not well documented. This paper addresses this lack of knowledge, by mapping the current recycling system and estimating recycling performance of a key component in construction and demolition waste in Vietnam, concrete. Primary data were collected directly from six Vietnamese construction enterprises involved in the life cycle of construction and demolition waste management. The results indicated that potential net environmental benefits exist for all impact categories examined if a mechanised plant were considered. Moreover, construction demolition waste may then be used for more permanent applications such as building foundations and in new building materials. The results confirm benefits to technological advancements in concrete recycling in the construction demolition waste sector. Fostering investment and interest in such strategies could be achieved by imposing clear and consistent construction demolition waste classifications, establishing clear lines of responsibility, and coordinating activities amongst key stakeholders to promote the benefits of concrete recycling. These findings consolidate the need of further research in Vietnam and other developing nations, where

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