## INTEGRATED SUPPLY CHAIN CONSTRUCTION ECOSYSTEM MANAGEMENT

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## ABSTRACT

Agenda 21 may be considered the most significant programme of action influencing environmental policy for the Australian development and construction industry. The industry has remained one of the most rapidly expanding sectors; yet, we have seen the gradual process of exhausting natural resources and irreversible environmental degradation. Even with the introduction of numerous new environmental policies, it remains questionable as to whether real improvements have occurred across the industry. Legislative mechanisms to direct on-site environmental management appear deficient; information flows between participants along the supply chain appear to impact upon environmental management performance; and industry fragmentation remains compounded by ill-defined external, non-contractual supply chain influences that directly impact on contractual systems. Limited research has considered construction supply chain theory and environmental management particularly in reference to policy. The literature highlighted a need to develop a supply chain model which seeks to integrate chain actors and government regulators through holistic information management. The model assumes that fundamental to industry change is statutory control to mandate construction environmental management plans. However, industry change and subsequent environmental management rely upon effective information dissemination. The next stage involves model refinement, investigating barriers and enablers to widespread diffusion of such an innovative integrated environmental management system.

## **KEY WORDS**

Supply chain integration, ecologically sustainable construction, environmental policy, environmental management

## INTRODUCTION

Ecologically Sustainable Development (ESD) is an attempt to meet the needs of the current generation '...while conserving ecosystems for the benefit of future generations...' (EA, 1992). Principles of ESD were recognised approximately 17 years ago at an international level through Agenda 21, at the United Nations Conference on Environment and Development. At the Earth Summit, 176 signatory

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