



KTH Land and Water  
Resources Engineering

# **SEEKING SUSTAINABILITY IN THE CONSTRUCTION SECTOR: OPPORTUNITIES WITHIN IMPACT ASSESSMENT AND SUSTAINABLE PUBLIC PROCUREMENT**

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## ABSTRACT

Growing concerns regarding sustainability have led the construction sector to adopt various policy instruments for reducing the impacts caused by construction activities. One such policy instrument includes impact assessment, which enables the construction sector to evaluate the environmental consequences of proposed developments at project (environmental impact assessment) and strategic (strategic environmental assessment) level. In recent years, the construction sector has also adopted green public procurement, which is a process whereby contracting authorities aim to procure services and products that meet environmental requirements. In certain contexts, green public procurement has extended to sustainable public procurement, which involves the incorporation of both environmental and social considerations in the procurement of services and products. Promoting sustainability in the construction sector is a significant challenge. This challenge is primarily due to the requirement of high levels of cooperation among project stakeholders, on the one hand, and a lack of coordination between project planning and implementation on the other hand. Therefore, procurement plays a significant role as it establishes the tone for the interaction between contracting authorities and contractors. The overall aim of this thesis is to bolster the knowledge of promoting sustainability in the construction sector, with the specific aim of analysing the ways in which policy instruments such as environmental impact assessment and green public procurement can be reinforced to improve the coordination between planning and the implementation of sustainability considerations. This thesis conceptualises an inter-link between impact assessment and green public procurement, and identifies the opportunities to develop the inter-link. It is appropriate to plan for green public procurement at the pre-decision phase of an environmental impact assessment. The inter-link can be strengthened by involving contractors in planning for green and sustainable public procurement. One way to involve contractors is with the aid of competitive dialogue procedure, which is a procurement procedure that allows contracting authorities to hold discussions with contractors regarding the authority's requirements. This study strengthens the conceptualisation that competitive dialogue procedure can facilitate green and sustainable public procurement. The various elements in a competitive dialogue procedure can enable the contracting authorities to ensure the consistency between the weight for environmental considerations in contract award criteria and the relevant preferences. This thesis also discusses key concerns for progress towards sustainable public procurement, which includes among others the incorporation of sustainability values in procurement decisions. In addition, this study identified certain discourses on future trends for green and sustainable public procurement. The discourses provide an opportunity for reflection, and thereby indicate that analytical support is required to develop criteria in a way that enables the evaluation of sustainable public procurement against the background of sustainability and justice regarding natural capital. Innovation must be promoted with a focus on sustainability values. Moreover, green or sustainable public procurement must be discussed between contracting authorities and contractors in light of its contribution to sustainability.

**Key words:** Environmental impact assessment; green public procurement; sustainable public procurement; competitive dialogue procedure; construction sector