

Preface

Construction waste and safety are often perceived as two different issues by construction practitioners in Australia as they are managed by two different teams or persons in large construction sites. Nevertheless, the two issues are often put in the same tool box talks everyday with probably ten times more on safety as compared to waste. In Hong Kong, construction waste and safety are managed by the same person in a small or medium-sized construction site. Or they may be handled by two different teams if it is a mega project.

No matter how safety and waste are managed on sites, it is undeniable that there are opportunity costs in construction waste and safety management. As resources for managing safety and waste are limited, spending more on one item will leave less for others. In view of the close relationship between these two, this book perceives the issues from an economic perspective.

Chapter 1 studies the motivation behind sustainable construction waste management in Australia with regard to positive and negative incentives, goal setting and hierarchy of needs theory. Chapter 2 reviews comments from scholars with regards to construction and municipal waste in Hong Kong. Chapter 3 analyzes the static digital information about the causes of construction accidents. Chapter 4 evaluates big data problems with respect to construction safety index. Chapter 5 perceives the use of mobile apps in construction safety knowledge sharing from an institutional economic perspective. Chapter 6 reveals the supply and demand of safety regulations in China, Nigeria, Kuwait, and Ghana. Chapter 7 provides an analysis of construction safety motivations from the psychological perspective. Chapter 8 conceptualizes the construction workers' safety performance from safety climate and social exchange perspectives.

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