



**INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI
SHORT ABSTRACT OF THESIS**

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Implementation Framework for Procuring Municipal Waste Management Projects – The Case of Indian Public-Private Partnerships

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SHORT ABSTRACT

Municipal Solid Waste (MSW) infrastructure has received little attention to understand the sectoral nuances and experience concerning the delivery of these assets and services. In this context, a study has been undertaken to study the positive and normative governance structures in keeping with the sectoral nuances. Firstly, attention has been given to understand why and when PPP is opted in practice and with what expectations. The results show that there is fundamentally a different behaviour in this sector on the usage of PPP and results that are achieved. Secondly, waste treatment is one of the components of the MSW supply chain which there is hardly any infrastructure across India. Hence, attention is devoted to understand the influence of technology choice in the risk profile of the PPP treatment projects. The findings stress that governments need to appropriately weigh the risks in the energy from waste projects to conclude how to deal with market and human factors particularly related to the PPP aspects of the public service. One specific nuance revealed while carrying these objectives is that MSW sector has a network structure for which difference procurement options are possible. This begs inquiry on how the urban local bodies need to make decision in this context. Using economic and organisational theories such as transaction cost economics, agency theory, and auction theory, a conceptual framework that can explain results of past (failed) projects and can suggest predictions to practitioners in the decision making of future projects. This framework is validated using six longitudinal case studies. The findings validate the framework and offer deep insights on the behaviours of the MSW projects from the perspective of bundling.