

TOWARDS A SUSTAINABLE GLOBAL PHYSICAL RESOURCE MANAGEMENT

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Abstract

Current approaches to physical resource management in systems of production and consumption and waste management face several sustainability challenges. Indeed, the current isolated approaches in different systems for waste management, waste reduction and resource management appear to be insufficient in a global sustainability perspective. Furthermore, current approaches fail to recognize issues relating to global equity and justice.

Addressing broad sustainability challenges linked to increasing inflows and outflows of physical resources is a vital challenge in today's globalized production and consumption chains with their multitude of actors and institutions. These actors and institutions have an important role in a sustainable global physical resource management system. This research explores such actors and institutions and their roles and responsibilities to foster a holistic approach to physical resource management that includes the global sustainability concerns associated with: increasing inflows of physical resources to the human activity system and increasing outflows of (waste) resources to the natural stocks assimilating these outflows.