Eco Industrial Park Development in Rio de Janeiro, Brazil: Paracambi EIP

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Abstract

This paper presents the Eco Industrial Park (EIP) concept, an environmental management tool that is being spread in many nations around the world as an industrial model that can reconcile the three "Es" of sustainability – environment, social equity and economic efficiency - as it reorganizes industrial practices and activities in order to meet sustainable development goals.

Although being an emerging concept, there are many EIP projects being implemented, and many of them already operating in North America, Europe, Asia, Central and South America, including in Rio de Janeiro State (RJS), Brazil. This paper aims to present the development of EIPs in RJS focusing on Paracambi EIP, located in Paracambi municipality, the only pilot project to be developed in a greenfield site. This paper also presents a methodology developed for planning Paracambi EIP. This methodology was developed based on studies and projects developed worldwide. The United States Environmental Protection Agency US-EPA software Facility Synergy Tool (FaST) was a major tool used in order to plan this EIP.

Keywords: Eco Industrial Parks, Sustainable Development, Industrial Ecology, Paracambi Municipality.