



## INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

"KEY ELEMENTS FOR A SUSTAINABLE WORLD: ENERGY, WATER AND CLIMATE CHANGE"

### **Industrial Ecology as Strategic Tool for Environmental Policy-Making Process in Brazil**

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#### **Abstract**

Most of today's environmental policies in Brazil rely on controlling the growth of pollution by "command and control" techniques. During the last two decades, these instruments have been designed to control sources of environmental impacts using industrial zoning, environmental licensing, and emission standards. The present structure of environmental law and policy focuses almost entirely on the activities of manufacturing companies and does not recognize strategies related to pollution prevention and/or cleaner production — such as product life cycle assessment, environmental labeling, environmental management systems, interconnectivity of production process, extended producer responsibility strategy, and environmental certification — as important instruments for auto-regulation. Recognizing that environmental policy must become more focused on "command and covenant" than "command and control", this article attempts to provide an expanded perspective of environmental policy innovation based on a more holistic approach — Industrial Ecology — as a strategic tool for environmental policy-making process in Brazil.

*Keywords: industrial ecology; environmental policy; cleaner production.*

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