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CLEANER PRODUCTION AS A TOOL FOR SUSTAINABLE DEVELOPMENT

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Abstract

The paper is an overview on Cleaner Production considered as a tool to reach sustainable development through the continuous application of an integrated preventative environmental strategy to processes, products and services so as to reduce risks to humans and the environment.

Increased awareness of the inefficient and overall ineffective nature of pollution control technologies, and their incompatibility with the increasing emphasis on sustainable development, resulted in the emergence of pollution prevention practices. The gradual progression from *ignore* through to *prevent*, that culminated in the developments that achieve economic savings for industry as well as an improved environment for society is essentially underlined as being is the goal of Cleaner Production. It is accounted for *processes* (meaning conserving raw materials and energy, eliminating the use of toxic raw materials, reducing the quantity and toxicity of all emissions and wastes before they leave a process), *products*: reducing impacts along the entire life cycle, from raw material extraction to disposal, as well as for *services*. Cleaner Production improves process efficiency, products and services quality. The paper deals also with sustainable production, products, services carried out by ecodesign, as well as sustainable consumption and sustainable development indicators and their use in the OECD peer review processes.

Cleaner Production can be especially beneficial to developing countries and those undergoing economic transition by planning, design and management practices that facilitate innovative approaches to the reuse, remanufacturing and recycling of the limited amounts of waste that cannot be avoided. Possibilities and limitations of a comparative assessment of process technologies from a cleaner production point of view are analyzed, together with CP practices and involved stakeholders.

Evaluations of the environmental and related performances of production processes and services, and their subsequent verification and certification, can go a long way to improving the quality of decision-making regarding the uptake of Cleaner Production. It is shown that, to support a more sustainable development processes through rising overall environmental awareness, different stakeholder groups have to be tackled.

Keywords: sustainable development, pollution prevention, cleaner production,