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POLLUTION PREVENTION, A KEY TO ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY

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Abstract

This paper is a short analysis on the impact of pollution prevention practices that can lead to important economic savings, materialized in benefits and resource preservation, since P2 shift the focus of environmental protection from end-of-pipe reactive control, to adopting preventive/proactive measures. Even though there are techniques of preventing pollution (P2) from happening, there will always be the necessity of efficiency in use, because globalization is increasing and by consuming resources without putting them back leads to scarcity of land, labor, raw materials and capital.

The scarcity problem and the impact of processes and products on the environment demand eco-efficient pathways to prevent and reduce the pollution quantity and quality, since pollution prevention programs offer sustainable alternatives that express precaution in usage of new and more toxic substances and efficiency where the level of pollution must not pass a defined level. The economic analysis is considered as the most commonly used method to determine how scarce resources should be allocated. There are sectors that may choose the cost-benefit analysis because it is easy to implement and choose the best environmental project. A more complete analysis involve performance analysis steps that contains a forecast of possible risk or factors that can influence the environment and the costs that may appear in the near future, or in the occurrence of unexpected events. Eco-efficiency has extended its coverage from being concerned with making resource savings and preventing pollution in manufacturing sector, towards innovation and competitiveness in all types of companies. It was emphasized that, based on eco-efficiency for pollution prevention analysis, companies can re-engineer or re-design their processes to reduce the consumption of resources, avoid the risk and reduce pollution, saving costs

Key words: cost-benefit analysis, eco-efficiency, life cycle assessment, performance, precaution

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