



"CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD"

Cleaner Production and Industrial Ecology: Two Important Concepts for a Sustainable Industry

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Industrial routines are embedded in unsustainable practices that are difficult to change. The complexity and uncertainties of new concepts such as Cleaner Production and Industrial Ecology are often approached with ignorance and misperception. Nevertheless, the integration of economic, environmental and social dimensions in industrial activities is increasingly perceived as a necessary condition for a sustainable society. Cleaner Production and Industrial Ecology are important inter-linked pillars in such change processes of improved economic, environmental and social performance as basis of sustainability. Cleaner Production is optimizing industrial activities from cradle to grave in single companies and Industrial Ecology, which is sometimes described as: `an integrated system, in which the consumption of energy and materials is optimized and the effluents of one process serve as the raw material(s) or energy for another process', is optimizing industrial activities between companies.

Although Cleaner Production is applied world-wide, the dissemination to go from single cases towards general application is still a time-consuming process. This is also the case for Industrial Ecology. The Industrial Ecology concept was introduced to industrial leaders as a prevention-oriented paradigm for achieving cleaner industry and more sustainable communities. Industrial Ecology is based upon both the technological and mechanical dimensions of change as well as upon understanding and working with the non-technical dimensions. Economic relations between individuals or firms are embedded in actual social networks and do not exist in an abstract idealised market. Industrial Ecology activities are shaped within such context. Illustrations of Cleaner Production and Industrial Ecology practices in the Netherlands, Sweden, and China will be presented as basis for further information-sharing and dialogue in the workshop.