

Implementation of the Cleaner Production Programme on the example of Poland and Ukraine

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Abstract

The publication addresses an important and highly relevant research area, as Cleaner Production remains one of the key instruments supporting sustainable development, environmental protection and the long-term competitiveness of enterprises operating in resource- and energy-intensive sectors. It addresses the development of CP in Poland and Ukraina and it combines theoretical foundations with practical examples. It presents the main instruments and practices, to an extensive case study illustrating its application in industry.

The theoretical part provides the review of the evolution of Cleaner Production, tracing its origins from early environmental protection approaches focused on end-of-pipe solutions to modern preventive and integrated strategies, presenting multiple definitions, interpretations and classifications of Cleaner Production. There is also presentation of the principles, implementation phases, drivers and benefits of Cleaner Production. The authors emphasising its preventive character, life cycle perspective and continuous improvement logic.

The section devoted to Cleaner Production practices, including eco-design, eco-materials, green technologies, environmental labelling and eco-efficiency, further strengthens the applied dimension of the work presents examples from Poland and Ukraina. A lot of attention is devoted to the case study of the Cemex Poland Group, which constitutes a highly valuable illustration of Cleaner Production implementation in practice makers.

The implementation of cleaner production in Ukraine and Poland is gaining increasing importance as both countries strive to reduce environmental impacts, improve resource efficiency, and align their industrial practices with European Union sustainability standards and circular economy principles.

Keywords: Cleaner Production, Sustainable Development, Resource Efficiency, Eco-design