

DEFINING AND MONITORING ECO-EFFICIENCY INDICATORS VALUED FROM DIFFERENT PERSPECTIVES

Topic III; PRESENTATION

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At the initiative of the Romanian Government a six-month project was developed in order to define, quantify and starting implementation of basic eco-efficiency and environmental indicators.

Applied to industry, those indicators related to material (biotic and abiotic) intensity, water and energy intensity [1], as well as environmental performance indicators were defined that are applicable to different industrial processes and/or products.

In 2007 a UNIDO project for sustainable development of tourism was initiated in Romania and Bulgaria.

For the Tourism industry the meaningful indicators regard the energy, water and chemical specific consumption and specific wastewater discharges and waste generated [2].

Four industrial branches participated at the implementation stage with their selected processes: Pulp and Paper branch (cardboard production), Chemical industry (Ammonia synthesis), Metallurgical industry (Lead oxide production) and Textile industry (Cotton fibers dyeing) and seven hotels entered in 2007 as demonstration units. Cleaner Production (CP) Assessment was carried at the selected processes level. Improvement options of no-cost, low- and medium-costs were identified and their implementation initiated. The industry-specific indicators were calculated at the beginning (level 0) and after six months (level 1). Processes from different industries showed different improvement potential, so that the number of CP approved measures varied between 2 (Lead oxide) and 20 (Ammonia synthesis). Although some indicators varied significantly from one branch to another (e.g. water and electricity intensity), it was interesting to find that some others situated at comparable values for all four industries.

The hotel units are being under assessment and “level 0” was calculated and benchmarked with international values.

The results were intended to be used at the Government level (Ministry of Economy and Ministry of Tourism) and also at the branch level, in setting a starting point for benchmarking between industries at the national economy level and between units within the branch.

One important outcome of the national project was issuing the Guidelines for promoting Eco-Efficiency in industrial development, which the Ministry of Economy publicized and was the starting point for more national and international projects.

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