



Sustainable Production Programme in Setúbal Region (PROSSET)—final results

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Abstract

Between 1997 and 1999, a Sustainable Production Programme was developed in the Portuguese Setúbal region. In this paper its final results are presented.

The programme included cleaner production (CP) demonstration projects developed in 10 companies located in the region and the involvement of local stakeholders, aiming at stimulating the diffusion and application of sustainable development principles in the region. The CP projects allowed the team to generate environmental, economic and social benefits for the companies, and also to achieve improvements in the quality of the regional environment. The role of stakeholders is discussed, in terms of subsequent actions taken by them.

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1. Introduction

In 1999, INETI (National Institute of Industrial Engineering and Technology), through CENDES (Centre for Sustainable Business Development, former Institute for Environmental Technologies) completed the Sustainable Production Programme in the Setúbal Region (PROSSET) which included cleaner production (CP) demonstration projects developed in 10 companies located in the region and the involvement of local actors (stakeholders), with the aim of stimulating the diffusion and application of sustainable development principles. The CP projects not only provided environmental, economic and social benefits to the companies (micro-level), but also to an improvement of the regional environmental quality (meso-level). Indeed, CENDES has complemented its work at the company level with a characterisation of the main regional environmental problems (scarcity of groundwater and lack of available

places for waste landfilling) in order to evaluate to what extent the CP strategy in businesses can contribute significantly to solve them, therefore, responding proactively to the increasing concerns for improvements in environmental protection.

The choice of the Setúbal region for this programme took into consideration the following aspects:

- The region includes a large industrial area with an important ship repair and maintenance facility and metal works, pulp and paper and cement industries. In the past decade a sharp increase in industrial activity around the automotive industrial sector centred by two major assembly plants has been registered.
- Several environmental problems have been identified, with regard to water supply and solid waste disposal. The water consumed in the region is solely from underground water resources and the level of consumption has led to an over-exploitation of the aquifers and to nitrate and chloride contamination. With regard to solid waste management, lack of available places for waste landfilling is the main problem, although there are many solutions for

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