A public database for pollution prevention technologies in the tanning sector

A. Rius[1], J. Soler[1], R. Puig[1], J. Font[1], Ll. Ollé[1], E. Monfà[2].

[1] Igualada Leather Technology School. Universitat Politècnica de Catalunya.
[2] Centre per a l'Empresa i el Medi Ambient

Corresponding address:
Antoni Rius
Pça. del Rei, 15. 08700 Igualada Spain
Tf. +34 938035300
FAX +34 938031589
e-mail: arius@euetii.upc.edu

Abstract

The technology database that we present was created with the aim to make accessible to the potential users a search tool on pollution prevention technologies for the different industrial sectors. Nowadays, the technology database includes information for the following sectors: tanneries, textile, pulp and paper, metallurgy and metal platting. Hence, different universities and consultancy firms have reviewed its content and notified the companies being part of it of the aim of making the database of public access.

The goal of this database is assisting users on available technologies without that implying on the part of the Ministry of the Environment and Housing of the Government of Catalonia or their public companies neither any recommendation on the suitability of the technologies compiled, nor ensuring the results of their application. The viability of applying each technology will have to be assessed case by case.

The database, organised in subsectors, processes, waste flows, pollutants and technology types, allows for performing simple or advanced search including the aforementioned fields and others, as well as by key word.

Accessing the Technology Database is public and free of charge for both those interested in using the database and institutions as well as centres wishing to take part in it. It can be consulted in several languages: Spanish, Catalan, French and English.

Introduction

The regional activity centre for cleaner production (RAC/CP)

The "Centre per a l'Empresa I el Medi Ambient"[1], previously named Centre for Cleaner Production Initiatives (CCPI), was designated by the Contracting Parties to the Barcelona Convention in 1996 as Regional Activity Centre for Cleaner Production (RAC/CP). Since then, is one of the six Regional Activity Centres (RAC) in the/within the Mediterranean Action Plan[2].

Each one of these centres is responsible for/is concerned with a specific thematic area. The main goal/objective of the RAC/CP is the promotion and dissemination of prevention, the reduction of pollution at source in the industrial sector, as well as the giving of technical support to the Contracting Parties and the institutional organisations.

The RAC/CP is situated in the city of Barcelona (Spain)

The mediterranean action plan

The Action Plan for the Protection and Development of the Mediterranean (MAP) strives to protect and improve the environment and to foster development in the region, based on the sustainability principles. It was adopted in 1975 by 16 Mediterranean States and the EC, under the auspices of the United Nations Environment Programme (UNEP)[3]. Its legal framework comprises the Barcelona Convention adopted in 1976 and revised in 1995, and six Protocols to ensure its application, covering specific aspects of environmental protection.

MAP covers aspects such as coastal zone management, pollution assessment and control, protection of ecosystems and preservation of bio-diversity.

In 1996 the **Mediterranean Commission on Sustainable Development (MCSD)** was established as an advisory board and a forum for dialogue. Its aim was to submit to the Contracting Parties and the MAP Secretariat proposals to promote sustainable development and to define a regional strategy of sustainable development according to the principles of Agenda 21.

What is cleaner production?

In accordance with the United Nations Environment Programme (UNEP), Cleaner Production is understood to mean: "The continual application of an integrated environmental prevention strategy in processes, products and services, with the aim of reducing risks for humans and the environment, to increase the company's competitiveness and guarantee its economic viability".

Cleaner Production allows:

- savings to be made in raw materials, water and energy.
- The disposal, reduction and/or replacement of hazardous materials.
- The reduction in quantity and hazardousness of waste and emissions.

Advantages of cleaner production

Reduction of risk to the environment, health and of industrial accidents.
Economic savings on raw materials, water and energy.
Savings in waste flow management and treatment.
Improvement of corporate image.
Better quality of the product.
Fewer products which do not conform to specifications.
Rationalisation of the work structure.
Improvement of routine habits and rethinking of processes and procedures.
Optimisation of processes and resources.
Fulfilment of the company's environmental requirements and a commitment to its sustainable development.

Unlike end-of-pipe treatments, pollution prevention at source can be applied to the different stages of the productive process in most industrial processes.

The database

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Hence, different universities and consultancy firms have reviewed its content and notified the companies being part of it of the aim of making the database of public access.

The goal of this database is assisting users on available technologies without that implying on the part of the Ministry of the Environment and Housing of the Government of Catalonia or their public companies neither any recommendation on the suitability of the technologies compiled, nor ensuring the results of their application. The viability of applying each technology will have to be assessed case by case.

The database, organised in subsectors, processes, waste flows, pollutants and technology types, allows for performing simple or advanced search including the aforementioned fields and others, as well as by key word.

Accessing the Technology Database is public and free of charge for both those interested in using the database and institutions as well as centres wishing to take part in it.

Any individual or party who desires to make public either a technology, equipment or material allowing for reduction and/or recycling of pollution at source may request including the former to this database, or that the technologies already made public are either modified or widened (cema@cema-sa.org).

The accessibility to the database is free through the web page[4].

It is possible to make searches in the data base thorough the engine of the own web. In order to make a search it is possible to use the following fields to find the desired technology:

Type of technology: end-of-pipe treatment, good housekeeping practices, new equipment, new materials, new process, recycling at source, treatment of incoming water.

State of development: applied, marketing, research

Sources: several companies, research centres, universities and administration

Suppliers: several companies, research centres, universities and administration

Once a technology has been choose from the database the "Technology description" is shown in the screen. This information includes:

Title
Type
Equipment
Other equipment
State of development
Sources
Other sources
Suppliers
Other suppliers
Technical information
Advantages
Disadvantages
Implementation
Minimisation
Technology applications

Acknowledgements

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References

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