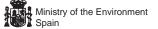


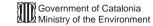
París, 184, 3r - 08036 Barcelona (Spain) Tel.: +34 93 415 11 12 - Fax: +34 93 237 02 86

E-mail: cleanpro@cema-sa.org http://www.cema-sa.org











## Regional Activity Centre for Cleaner Production (RAC/CP)

Albania

Algeria

Bosnia and Herzegovina

Croatia

Cyprus

Egypt

Greece Israel

Italy

Lebanon

Libya

Malta

Monaco

Morocco

Slovenia

Syria

Tunisia

Turkey

E.U.

Palestinian Authority\*

\*As observers at the meetings of the MAP

# THE ECONOMICALLY AND ENVIRONMENTALLY SOUND ENTERPRISE:

#### The Regional Activity Centre for Cleaner Production

Traditionally, enterprises have resorted mainly to end-of-pipe treatments as a measure for reducing the environmental impact generated by their activity.

However, these solutions are not sufficient and require investments that have no other benefit than the mere fulfilment of environmental regulations.

In order to **compete on an international market** with increasingly more demanding environmental and quality requirements, the Mediterranean economic sector must integrate eco-efficient criteria in its decision-making processes that apply to its production process as well as its products and services.

The success of this approach will include adopting pollution prevention alternatives capable of generating **business efficiency opportunities** related to the use of resources and the achievement of an integral control of the environmental impact of the product, from the design stage to the end of its life cycle, in order to improve not only the efficiency but also **the image of the enterprise** in the eyes of its competitors and consumers.

The existence of a body to promote the dissemination and exchange of knowledge and initiatives carried out in the different economic sectors of Mediterranean countries is the key to promote

**the adaptation of regional enterprises** to new requirements of competitiveness that include the eco-efficient criteria.

## **CLEANER PRODUCTION**

Application of an integrated preventive environmental strategy applied to production processes, products and services in order to increase global efficiency and reduce risks for humans and the environment. (UNEP) The Regional Activity Centre for Cleaner Production (RAC/CP) acts within the Mediterranean Action Plan (MAP) as an operational unit to promote pollution prevention by:

- disseminating eco-efficient options and techniques
- offering technical support and advice to regional states and institutions
- being based on cleaner production as one of the basic tools

## THE REGIONAL ACTIVITY CENTRE FOR CLEANER PRODUCTION (RAC/CP)

Created in 1994 by the Ministry of the Environment of the Government of Catalonia, the Centre for Cleaner Production Initiatives (CCPI) became a specific unit within the Management Programme for Toxic and Hazardous Wastes with the purpose of promoting the principles and advantages of reducing pollution at the source among businesses.

In 1995, the governments of Spain and Catalonia signed an agreement of cooperation in order to promote the use of cleaner technologies in Spanish industry through CCPI. The activities carried out as the result of that agreement are approved by a Bilateral Monitoring Commission, which approves and supervises those activities.

In that same year and at the IX Meeting of the Contracting Parties to the Barcelona Convention, the Government of Spain proposed to the Mediterranean Action Plan (MAP) that the CCPI become the Regional Activity Centre for Cleaner Production (RAC/CP). This offer was accepted at the Extraordinary Meeting of the Contracting Parties held in Montpellier in 1996.

In 1998, in order to better carry out its role, CCPI was given its own legal status and was registered as a corporation with public capital. Two years later, in 2000, its name was changed to the current Centre for the Enterprises and the Environment (CEMA).

CEMA plays a triple role: in Catalonia and as part of the Ministry of the Environment of the Government of Catalonia, working directly with industries and business sectors; within Spain, as institution of technical support to the Ministry for the Environment; and at the level of MAP, as RAC/CP.

The work programme of RAC/CP is set by the Bilateral Monitoring Commission, formed by representatives of the governments of Spain and Catalonia, taking into account the recommendations of the Contracting Parties to the Barcelona Convention.

Ordinary activities of RAC/CP are financed by the Spanish government. The participation of RAC/CP in other MAP activities and special activities are carried out using a mixed system of financing with a specific contribution in each case.



## **ROLE OF THE RAC/CP**



## Participate in the activities of MAP and the MEDITERRANEAN COMMISSION ON SUSTAINABLE DEVELOPMENT (MCSD)

RAC/CP co-operates, within the framework of MAP, in those activities that promote and encourage the prevention of pollution, mainly of industrial origin, in the Mediterranean region.

In this regard, RAC/CP participates in the activities of the Mediterranean Commission on Sustainable Development, founded as an advisory body of MAP, in order to present proposals and policies for action aiming at fostering sustainable development in the region.

## A MAP TOOL TO COMBAT LAND-BASED POLLUTION

MAP is structured in several units that work together, promoting environmental protection and improvement in the Mediterranean region, through various scopes of action.

Focusing mainly on industrial activity, RAC/CP uses as a central reference for its actions, the Protocol for the Protection of the Mediterranean against Land-Based Pollution (LBS Protocol).

RAC/CP participates in the Strategic Action Programme derived from the above - mentioned Protocol through the preparation of regional plans and guides that include concepts such as Best Available Techniques and Best Environmental Practices, and through capacity building activities aimed mainly at experts.

RAC/CP is a source of reference for each of the MAP countries to prepare their own National Action Plans to combat and prevent pollution.

# Working with the NATIONAL FOCAL POINTS (NFPs) on the sustainable development of the Mediterranean industry

RAC/CP works with the different member countries of the Barcelona Convention through a network of National Focal Points (NFP) designated by the Contracting Parties.

The co-operation of the RAC/CP and the NFPs facilitates the integration, in business management, of economically sound pollution prevention measures adapted to the Mediterranean context.

RAC/CP also collaborates with the Governments that have signed the Barcelona Convention, for the creation of new cleaner production centres and activities promoting a more eco-efficient production.



## **Meetings of experts**

Periodically, RAC/CP brings together experts, technicians and industrialists from Mediterranean countries, in representation of the NFPs, to analyse the production systems used by a particular sector and promote the exchange of experience, technology, knowledge and experts among the different countries represented.

The information presented and documented during the meetings is then spread nation-wide through the NFPs, in order that it may reach the enterprises that can thus profit from more eco-efficient systems.

## Promote and co-operate in PROJECTS and TRAINING activities







## A. Projects

RAC/CP actively participates in pollution prevention projects in the Mediterranean, focusing on training local experts through **train of trainers** initiatives. All this in order to contribute to capacity building of national experts who can promote and carry out eco-efficient actions locally. For this purpose, back-up material is prepared that is aimed at enterprises and institutions.

RAC/CP co-operates not only with international bodies but also in national or sub-regional initiatives promoted by enterprises and institutions that have the same goals.



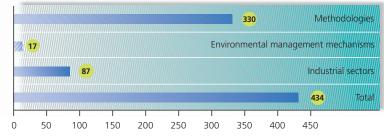


## **B.** Training activities

The training of experts in pollution prevention, who will then spread their knowledge to the industry, is the basic tool to promote the dissemination of ideas, techniques and strategies that will reconcile a wish for continual improvement of enterprises and respect for the environment.

RAC/CP co-operates and organises activities for the basic purpose of creating a body of Mediterranean experts and technicians.





\*until December 2002

# Carry out STUDIES on pollution prevention alternatives

Publications that study the trends and initiatives of the industries and Mediterranean countries linked to an economically and environmentally sustainable development, as well as sound pollution prevention alternatives.

#### A. General studies

They present and study issues related to cleaner production and sustainable development concepts, globally and on a regional scale.

## SATE OF CLEANER PRODUCTION IN THE MAP COUNTRIES:

Offers a bird's-eye view on the level of development and implementation of cleaner production in the different Mediterranean countries (agents, regulations, plans and programmes of action, and support tools, among others). It is updated every two years.

## **B. Sectoral studies**

- They offer a detailed analysis of an industrial sector and show its situation and trends in each of the Mediterranean countries.
- They are a tool to encourage the implementation of eco-efficient industries.
- They describe production processes and their environmental impact while proposing feasible pollution prevention options.







## C. Methodological guidelines

Manuals that present tools to contribute and implement cleaner production within the enterprises.

#### **Minimisation Opportunities Environmental Diagnosis (MOED)**

Methodology that allows to identify pollution prevention opportunities in the different processes and to assess possible options aiming at reducing and recycling wastewater at source.

The assessment of the industrial activity is the first step for the detection of improvement and optimisation opportunities. Through the MOED, enterprises gain in depth knowledge of their activities for the detection of pollution prevention opportunities that are technically and economically sound, in each case.

## **Programme of Good Housekeeping Practices in industries**

Based on simple and organisational production changes, and on a set of working instructions, Good Housekeeping Practices (GHP) are seen as one of the simplest and most economical tools for minimising waste, dumping and emissions.

This manual shows how industries can design a GHP Programme to achieve increased productivity, by modifying working habits and routines, while generating at the same time a minor environmental impact.

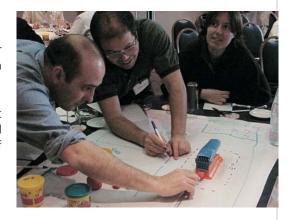


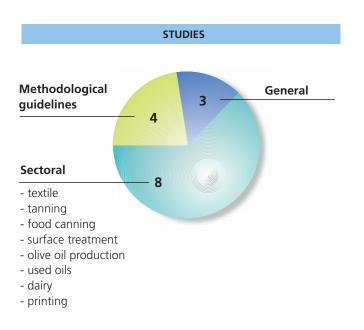
## **Working Groups**

Working groups bring together a group of enterprises from the same sector or location in order to define sound alternatives for the prevention of common environmental impacts.

The working group enterprises, with their individual MOED, participate in joint sessions aiming at analysing issues of interest and common alternatives. A final document is then obtained that reflects the overall environmental diagnosis of the sector or area under study.







## INFORM, by publishing and disseminating business news and experiences

## A. CPNews

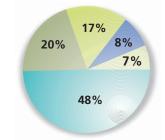
A current news journal on the activities and initiatives carried out in the countries in the region for the prevention of pollution: meetings and seminars, regulations, programmes, projects and other current Mediterranean topics.

## B. MedClean

Case studies that illustrate real examples of enterprises in the region that have carried out cleaner production initiatives, showing their feasibility through balances that include economic and environmental aspects.

#### **MEDCLEAN CASE STUDIES:** PAYBACK PERIOD OF THE **ALTERNATIVES IMPLEMENTED**

Bulletin du CARPP et ses Points Focaux Nationaux --



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	48%	

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Payback period

Balances	OLD PROCESS	NEW PROCESS
Balance of materials		
Annual generation of glue waste (kg)	860,000	473,000
Economic Balance		
Waste management costs (€/year)	65,570.42	36,060.73
Savings		
Savings in waste management (€/year)		29,509.69
Savings in water consumption (€/year)		7,212.15
Investment in installations (€)	3,005.06	

Immediate

< 1 year immediate 1-2 years

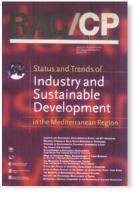
2-3 years

> 3 years

## C. RAC/CP Annual Technical Publication - Mediterranean Enterprises and Sustainability

Publication that includes technical and scientific contributions related to pollution prevention at source, focusing especially on the Mediterranean aspect of its contents.





Each edition includes articles on the outcome of research in different spheres, tools and instruments aiming at preventing the production of pollution in regional enterprises, etc.

## **D.** Leaflets and brochures

These are dissemination tools that offer graphic and summarised information and raise awareness on several issues considered of interest that are related to Mediterranean enterprises and pollution prevention.







INFORMATION

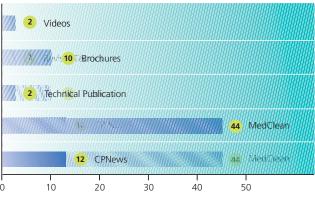
AND DISSEMINATION

#### E. Multimedia

Both as part of other publications and in order to help disseminate the contents of the various studies and articles, the RAC/CP carries out presentations in video and CD format as back-up material for the rest of its activities.

The RAC/CP web site includes an area for downloading this material.







# Promote TECHNOLOGY TRANSFER and EXCHANGE OF EXPERTS

#### Web site

By accessing the web at www.cema-sa.org, internauts will find information on RAC/CP, its activities, the regulatory framework, its NFPs network and the material it prepares and publishes.

The web site includes a section of news and links of interest and will incorporate databases of sector-related technologies compiling the various sound options on pollution prevention techniques at source. They will also be divided in processes, waste flows and type of technology, in order to make searching easier.



#### Intraweb

#### Section of restricted access to National Focal Points.

This section contains the following resources:

#### a. Database of Mediterranean experts

List of experts and professionals in the region that is divided into several categories, as a source of reference.

It includes the curriculum vitae of professionals specialised in pollution prevention in the Mediterranean region, describing their areas of experience, knowledge and activity as well as their contact details.

#### b. Debate forum

Tool for fostering open debate among the members of the National Focal Points network, carrying out enquiries on issues of interest, requesting advice and spreading information.

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