

THE PROVINCE OF BOLOGNA LIKE A COMPANY

Case study 1

Ms. Mara D'Amico, Mr. Paolo Molinas

APAT

Agency for Environmental Protection and Technical Services

Summary

- Introduction
- EMAS started with TANDEM
- TANDEM today
- How does EMAS work
- EMAS benefits
- Conclusions

Introduction

The province of Bologna

The Province of Bologna is in the North of Italy in the Emilia Romagna Region.

Bologna is the Regional capital and the major cultural centre.

The Province of Bologna is home to 60 Local Authorities and visited by people who come to work, study, shop and relax.



Introduction

The double role

The Province of Bologna plays a double role, it manages the territory through institutional tools (regulations, statutes, decisions, authorizations) and it carries out activities that involve the consumption of energy, water, materials, waste and emissions...



Introduction

Some figures

Over 1000 employees

44 controlled company

65 school buildings

73 warehouses

35 traffic management
warehouses

1500 Km road network

4000 cubic metres of methane
per year

11 million Kilowatt/hour each
year

160.000 cubic metres of water
per year

EMAS started with TANDEM



The History

TANDEM is a Life environmental Project co-financed by LIFE programme of the European Commission aimed at checking EMAS applicability to Local Authorities.

In 2002 the Province of Bologna started with TANDEM and produced some guide lines to apply to itself an eco-management system.

After 3 years of testing in December 2004 gained the ISO 14001 certification and in the 2005 the EMAS Registration.

EMAS started with TANDEM



Today the Province of Bologna leads a network called “Open Group” of over 60 Local Authorities that tries to find solutions to the still unsolved problems concerning EMAS implementation.

APAT is Open Group’s membership

To read more about TANDEM project:

http://www.provincia.bologna.it/emas/tandem_english.html

How does EMAS work in the province?

The structure

Committee and **Council** of the Province of Bologna choose the political approach that the administration must adopt

Steering Council takes decision, organizes the staff training, builds the network between interested parties, proposes specific projects, solves environmental problems

EMAS working group, *the real heart of the eco management system*, analyses data, identifies problems, decides how to solve problems, manages the environmental review, the environmental management system and keeps updated the environmental statement

How does EMAS work in the province?

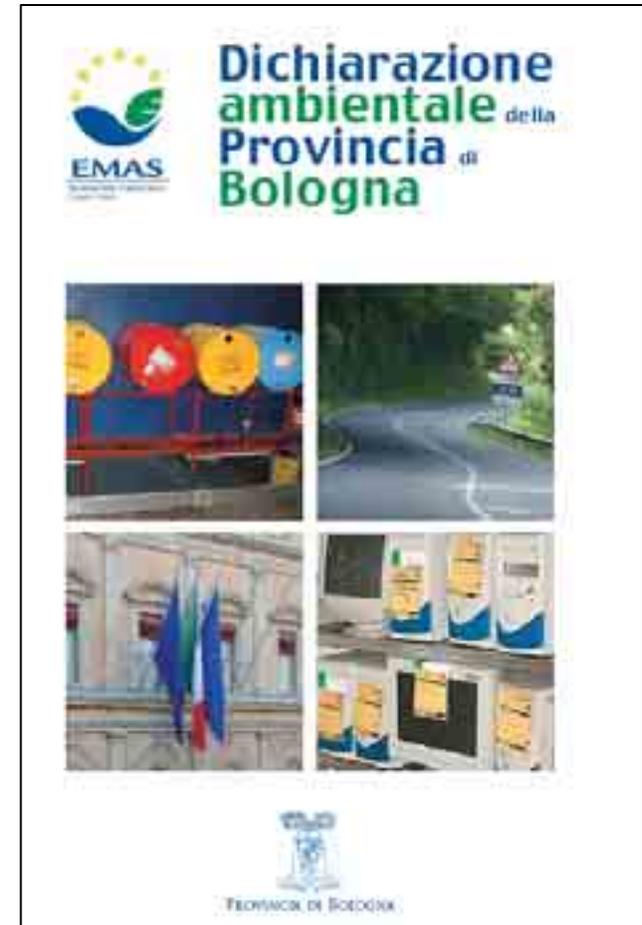
The environmental review

The EMAS working group identifies the environmental aspects and impacts associated with the activities.

These aspects are:

Direct Aspects arising directly from the Province's activities

Indirect Aspects arising as a result of Province policies, planning, decisions.



How does EMAS work

The environmental review: significant aspects

Direct Aspects

Energy Consumption

Paper Consumption

Transport use

Green Purchasing

Indirect Aspects

Environmental education

Administrative and planning decision

Environmental performance and practices of contractors, subcontractors and suppliers

EMAS benefits

The environmental review: Direct Aspects

Energy Consumption

Through the efforts of all employees and using cost free measures, buildings saved 9% in energy consumption:

288 cubic metres of methane

4.269 Kw/h of electrical power

Paper Consumption

100% Paper with Ecolabel

65% Recycled paper

EMAS benefits

The environmental review: Direct Aspects

Transport use

In 2007, 1000 employees choose to take advantage of the discounted tickets bus and 97 employees of the discounted train tickets; in 2005 31% of employees uses the bus to reach their workplace against 22%



Green Purchasing

The Province of Bologna introduces environmental criteria in the contracts for the supply of furniture to schools and offices; it buys as much as possible, products with low environmental impact (information technologies equipment, recycled paper, bipower cars, cleaning products etc)

EMAS benefits

The environmental review: Indirect Aspects

Environmental education

Guide to the environmental certification of farms

To support agriculture sector move from the theory to practice.

EMASorbole

It is a project that through publications, meetings, exhibitions, and events promote EMAS. After these activities in the area of Bologna the EMAS and ISO 14001 certifications have been increasing.

We have 20 Local Authorities and 4 Mountain Communities that are registering to EMAS.

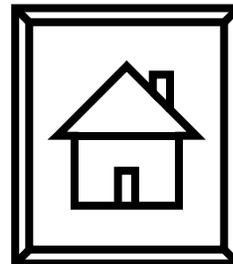
How does EMAS work How does EMAS work in the province?

The environmental review: direct aspects

Environmental education

Guide to energy save

To help employees to change their behaviour with simple rules like:



EMAS benefits

The environmental review: Indirect aspects

Administrative and planning decision

The Province administration ensures financial support to enterprises that will adopt lower pollution processes or promote eco – compatible projects;

All information about tenders in the service sector, certifications, incentives for photovoltaic solar energy, green/certificates, are available on line.

Eco industrial parks

It is a type of industrial park in which businesses cooperate each other to share resources, (such as information, materials, water, energy, infrastructures) reduce waste and produce looking to sustainability.

Example of territorial management

Eco industrial park



Emilia Romagna Region



Ravenna's industrial park

Example of territorial management

Ravenna's industrial park

Ravenna's industrial park is a community of manufacturing businesses seeking enhanced environmental and economic performance by collaborating in the management of environmental and resource issues.

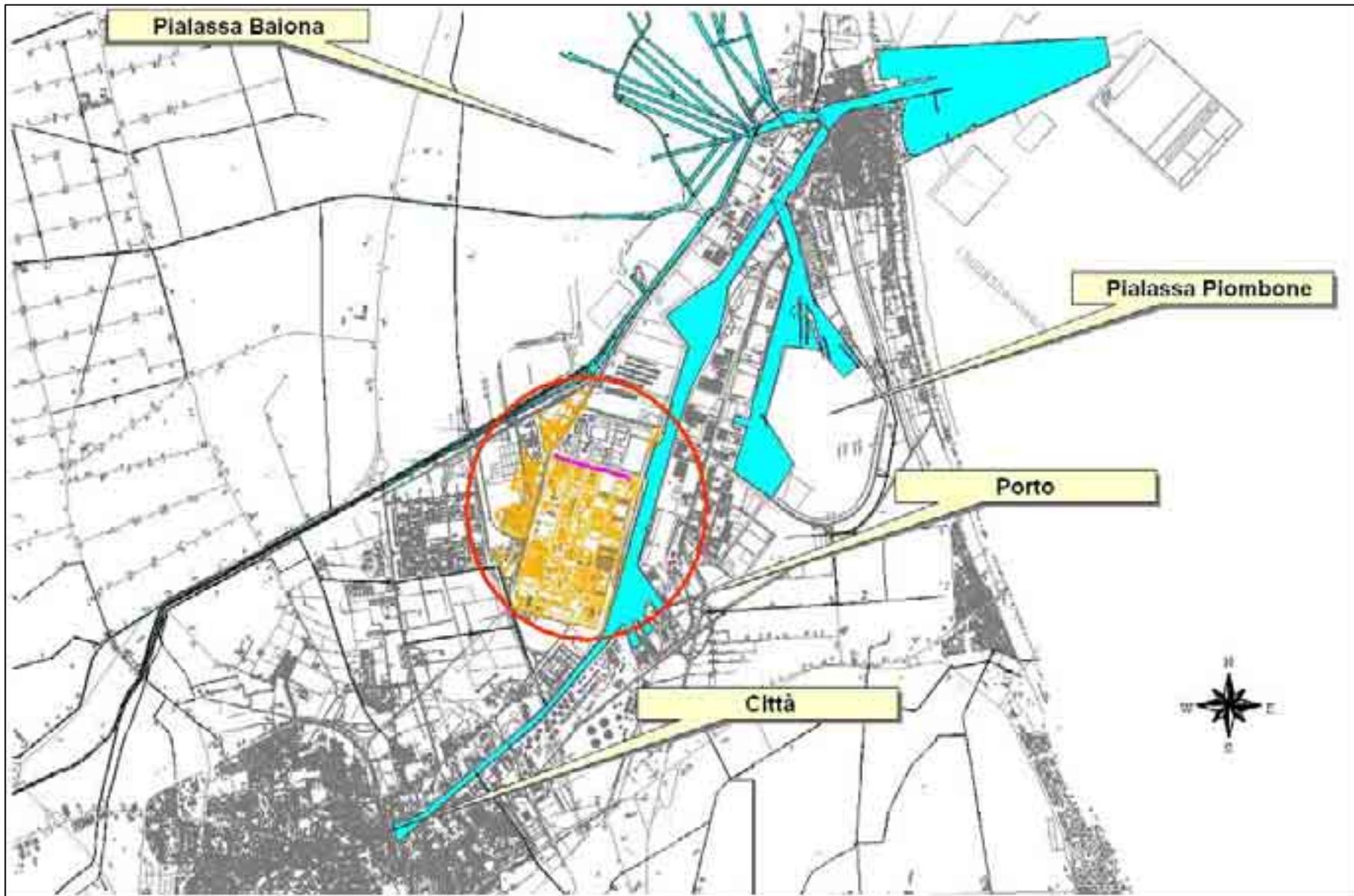
By working together, the community of businesses seeks a collective benefit that is greater than the sum of the individual benefits each company would realize if it optimised its individual performance only.

Example of territorial management

Ravenna's industrial park companies

- ALMA PETROLI
- BORREGAARD ITALIA
- CABOT ITALIANA
- DEGUSSA ITALIA
- ECOFUEL
- ECOLOGIA AMBIENTE (gruppo Hera)
- ENEL PRODUZIONE
- ENDURA
- ENIPOWER
- GREAT LAKES CHEMICAL ITALIA
- INEOS VINYL ITALIA
- LONZA
- POLIMERI EUROPA
- RIVOIRA
- YARA ITALIA
- VINA VIL
- CONSORZIO RSI – RAVENNA SERVIZI INDUSTRIALI





Example of territorial management

The Ravenna's industrial park is a pilot project implemented in the following steps:

Step 1: January 2006 - an agreement protocol was signed by:

- 17 companies all in the chemistry and energy production sector
- Emilia Romagna (Region)
- Ravenna (Province)
- Ravenna's municipality
- Labor unions
- Industrial associations
- Emilia Romagna Environmental Protection Agency

Example of territorial management

From step 1 a **working group** was established by:

- Emilia Romagna (Region)
- Ravenna's municipality
- Industrial associations
- Emilia Romagna Environmental Protection Agency

Example of territorial management

Step 2: The working group develops a **common policy** that aims to obtain a continual environmental improvement of the industrial area and to promote EMAS Registration for individual companies;

Step 3: The working group develops a **common environmental review to identify the significant aspects** for the territory and for each manufacturing sector; It investigates air quality, water management, waste management, soil, traffic pollution, etc;

Example of territorial management

Step 4: The working group develops a **common Environmental Program** that includes the following actions:

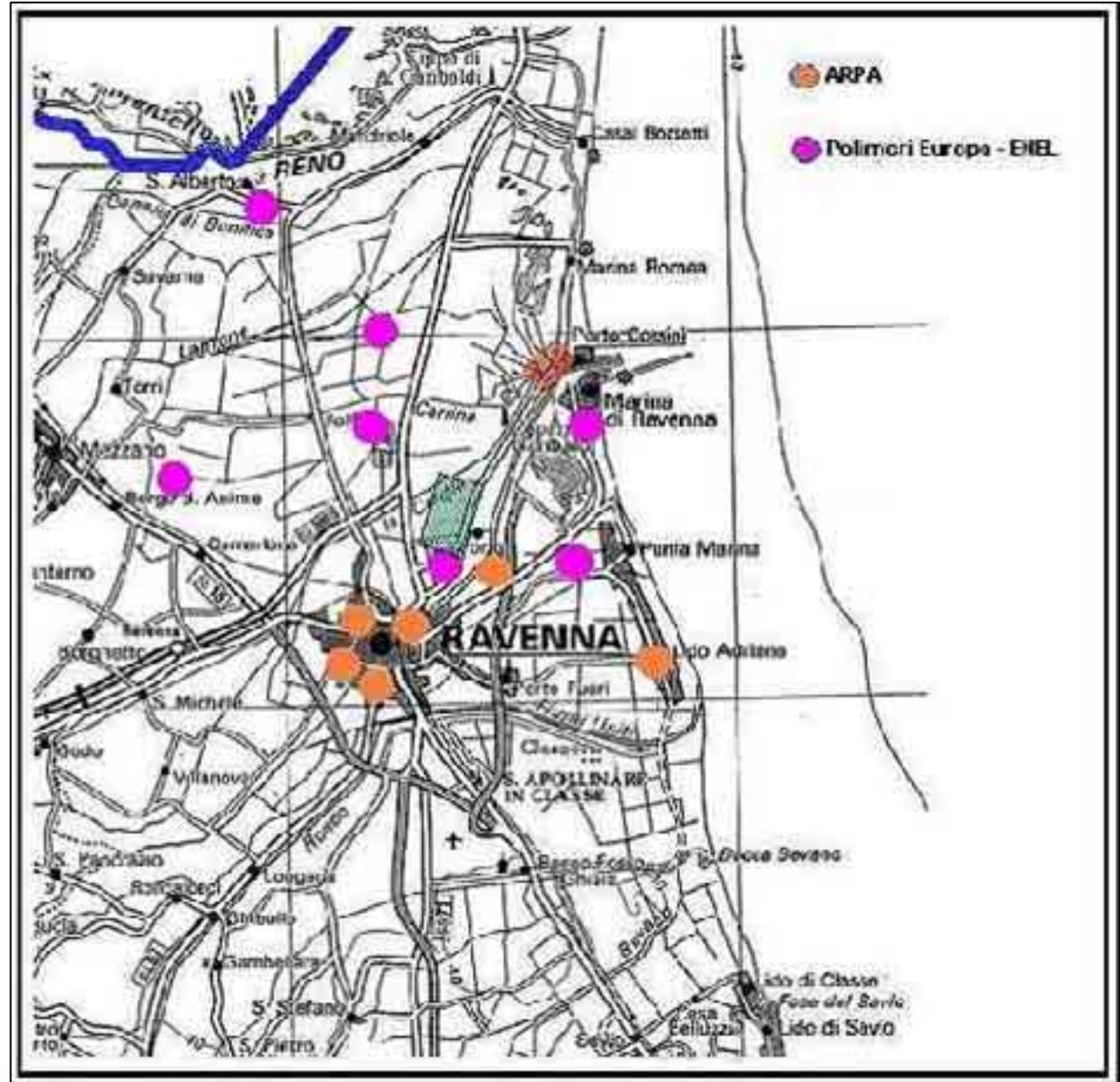
- Monitoring air quality
- Waste water management system
- Rainwater management
- 2 EMAS Registration of ENI Power and ENEL (electric power production)
- Dissemination of achieved results

Example of territorial management

Step 4: The working group develops a **common Communication plan** based on:

- Workshops to show the environmental results
- Environmental reports including relevant data in the industrial park (i.e. air, water, waste, soil, etc.)
- Website for dissemination of project results
- Participation in specific events

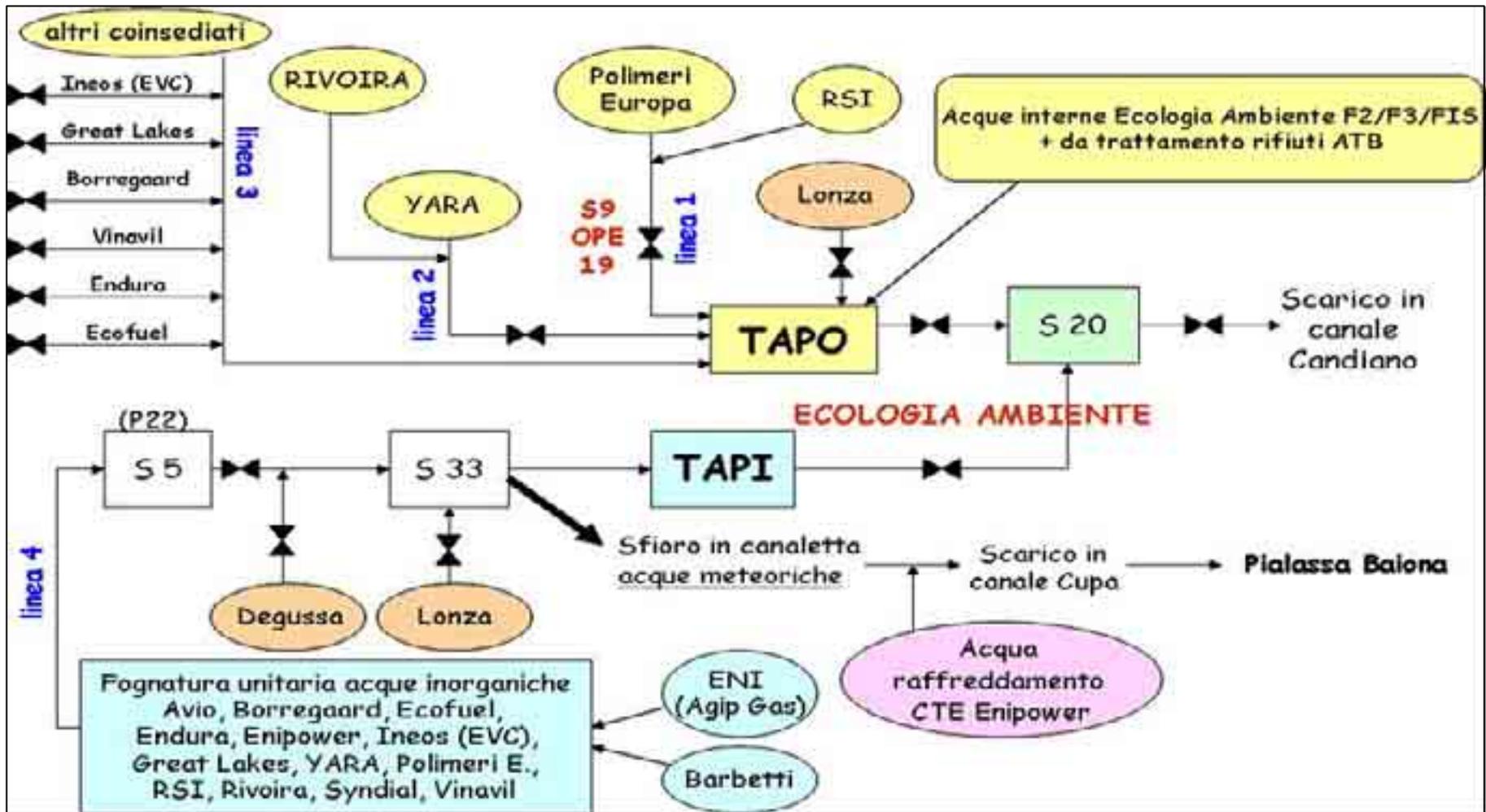
Air pollution monitoring



Water monitoring



Water waste management system



Conclusions

Companies through the eco industrial park can obtain:

- the possibility to develop a common policy
- to solve common environmental problems (traffic, water and waste management, air pollution, noise, etc.)
- the possibility to share resources, reduce water and energy consumption, and to produce a sustainable development
- to identify a working group that supports companies implementing EMAS
- a common communication strategy

Conclusions

Local community takes advantage from this project trough:

- Public and transparent information concerning the status of the environment in the area;
- Information on objectives and programs for improvement;
- Information on achieved results;
- Reliability of validated information by a 3° independent party (verifier);
- Benefits for better quality of life due to improvements supported by public authorities and other stakeholders.