



## Energy at school 2002/2003

### *Agenzia per il Risparmio Energetico di Ancona, Italy*

#### Summary

In April and May 2002, with the collaboration of GORGOVIVO Multiservizi Spa and Legambiente Marche, the Agency realised a cycle of lessons about energy matters in the Scuole Medie (Secondary Schools) of the Province of Ancona. The aim of those lessons was to make students aware of the importance of using cleaner sources of energy such as renewable energy sources. This project involved about 700 students and 50 teachers. 32 class-lessons and 11 visits to an Aeolian Plant were realised. Since 2003 this project has a yearly duration and has been presented in collaboration with PROMETEO SPA, the market leading natural gas selling company in the Province of Ancona.

#### End-user area

- New buildings
- Refurbishment of buildings
- Transport and mobility
- Financial instruments
- Industry
- Legal initiatives (regulations, directives, etc)
- Planning issues
- Sustainable communities
- User behaviour
- Education
- Other

#### Target Audience

- Citizens
- Households
- Property owners
- Schools and universities
- Decision makers
- Local and regional authorities
- Transport companies
- Utilities
- ESCOs
- Architects and engineers
- Financial institutions
- Other

#### Technical

- Energy efficiency
- Heating
- Cooling
- Appliances
- Lighting
- CHP
- District Heating
- Solar energy
- Biomass
- Wind
- Geothermal
- Hydro power
- Other

#### Context

Meeting with the primary and secondary schools has been carried out in the Prometeo SpA territory to promote the environmental sensibility in the young generation about cleaner energy sources, such as renewable energies according to the project "Energy at School 2002/2003", that the Agency has executed in collaboration with Prometeo SpA

#### Objectives

"Energy at School" is the main project carried out by the Agency to promote the rational use of energy and renewable sources to the young generation. This educational experience is very important for children and we hope it will contribute to increase the awareness about environmental issues.

#### Process

In the field of this project of environmental education the Agency has proposed a training workshop for a period of three days for operators, which have carried out the lessons in the schools. The Agency has chosen three operators and they have participated in a training workshop where have received all information about the plan to follow in the classroom and they have had the possibility to know directly the structure and the services of Prometeo SpA in order to show the qualified firm, which has cooperated with the project of environmental education.



The Agency has realised the necessary teaching aids for the activity, thanks to a careful bibliographic research in:

- Regional Institute of Educational Research of Marche;
- Eni SpA;
- ENEA (Authority for New Technologies, Energy and Environment);
- Benincasa Municipal Library;
- Library of the University Centre of Monte Dago;
- Audiovisual aids of State Education Service of Ancona Province.

All teaching course has been coordinated with precision to avoid superimposition and lack of homogeneity.

For the lessons in the classrooms interactive panels have been used, 90 \* 200 cm, with 30 placards concerning energetic savings at home and also with the Prometeo SpA and Energy Saving Agency logos. A3-sized cards were stamped for students of primary schools and a more detailed presentation has been prepared with power point processor for students of secondary schools. The students have also received gadgets by the Prometeo SpA (such as notebook, pens, spring catch, hats, etc.).

A folder with all documentation about energetic savings, a series of ENEA concerning sustainable development, the brochure of Prometeo SpA and the leaflet "I save energy at home" and also gadgets by Prometeo SpA have been handed out to each teacher.

The Agency has arranged the lessons thanks to a telephone desk available on office hours from which the technicians of the Agency have supported the interested teachers with logistic issues and information.

All appointments in schools have been confirmed by fax and phone on few days from the appointment. The class-lessons have lasted for one and a half hour and students and teachers have participated actively. Some lessons have lasted more than the fixed time owing to enthusiasm of students and teachers, which have asked operators many questions concerning energy matters.

## Financial resources and partners

The project was funded by PROMETEO Spa, and by the Agency fund for awareness campaign.

## Results

The project has involved about 670 students and 36 teachers. 29 class-lessons have been held out of which 10 where held in Ancona Municipality and 19 outside. The operators of the Agency have made two anonymous evaluations of the project by handing out questionnaires, one for teachers and one for children. The aim of the evaluations was to examine the level of satisfaction with the project, the public imagine of Prometeo SpA and to measure the teaching courses to improve the class-lessons.

The sample is divided into:

- 21 questionnaires of type 1 for teachers;
- 584 questionnaires of type 2 students.

Only the teachers who have had the lesson and the students who were present have been asked to fill in the questionnaire, together with some assistant teachers and teachers which have participated for personal interests.

## Lessons learned and repeatability

The project started in February when the first contacts with schools were taken. The operators worked with the lessons until the end of May. The project has achieved exactly the planned results. The participating schools were throughout the territory of Prometeo SpA activities and also the schools of San Saverino Marche, Fano and Marotta in addition to Ancona, Torrette, Pinocchio, Senigallia and Marina di Montemarciano. Margins of



improvements have been identified, both the teaching supports and the whole organisation. Given the considerable impact of the project through the territory, it will be repeated in the years to come.

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