

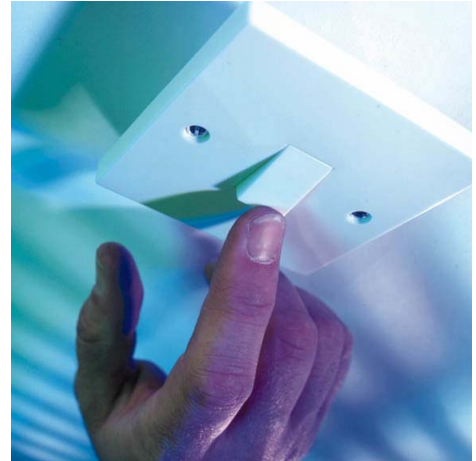


## Let's learn to save- The project of Synergy Environmental Education Regional Energy Management Agency, Slovakia

### Summary

The project "Let's Learn to save" is about synergy environmental education for the secondary schools. It has been performed in coordination with Regional Energy Management Agency in Žilina and supported by the Children of Slovakia Foundation. 16 secondary schools and 2 primary schools from Zilina and Trencin region participated in the realization of the project. The target group was mainly pupils, students and teachers but also the public mass in the region. The project, which offered a comprehensive model solution of environmental education in the secondary schools, started in July 2004.

The project education provides knowledge on how to more efficiently use electricity, water, heat and renewable energy sources. This contributes to a positive economic change for the individual schools since they will be able to evaluate their present energy situation. The project also contributes to an increased awareness of the youth.



#### End-user area

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

The project is concentrated on education and the target groups are students in secondary schools. The great challenge is to appeal this group of citizens and be able to get their attention regarding environmental and energy issues. Hopefully, these students can use this knowledge and make changes in future.

Several events have been performed in the project which the students have been participating in. The energy consumption for each school has been recorded and an economic measure has been proposed in cooperation with the management of the school.

The positive side effects in the project have let the young group of people to operate creative, working in teams, going public and to present themselves.



To increase the environmental awareness of the students in secondary school, we see as a great challenge. This is the group of citizen that in a few years will be able to influence public activities. One important aspect of the project is to inspire the young people and to let them know that the environmental situation can be changed in a better direction. The project also leads to participation by young people in public events.

## Objectives

The main objective was to offer a comprehensive model solution of environmental education in the secondary schools. 16 secondary schools and 2 basic schools in Žilina and Trenčín region participated, these schools included 6 300 students and 72 teachers.

In the project measures for saving energy was made. This was achieved by partial objectives:

- start up the process with participation of young people in public events and to develop a systematic method of the project
- to change the work habits of young people and increase their ability to work actively, creatively and also in team
- increase the skilfulness of young people to perform public events and to affect publicity,
- to form an environmental friendly life style and to educate young people in rational usage of natural sources and energies.

The objectives were achieved by the intensive co-operation by the students and pupils with help of their teachers and other volunteers.

## Process

The initial phase of the project was to develop the work materials for the students involved. Documents and material was made to be able to monitor and score data of energy consumption. Methodical manuals with individual designing activities were developed for teachers.

The students showed actual interest for and to finalise the project. Teams were created in the schools and their task was to elaborate the consumption of energy and water. The students acquired the information from teachers and volunteers and from other partners in the project (Slovak environmental agency, BIOMASA, ECOENERGY, municipalities), which they monitored.

The project implementation included monitoring the actual energy consumption in each school. During 6 weeks, the students monitored consumptions of energy and water, and the data was then evaluated in co-operation with the teachers. An energy-saving measurement was also performed.

- "Energy patrols" – students, who were responsible for switch off lamps during the breaks and after the lessons, control the flowing water on toilets, switch off computers
- Attention about saving on switches and wash dishes
- Monitoring savings.

After the finalisation of energy-saving measurements, a second monitoring was made. This monitoring was to find out how effective the real saving measurements really were. In some schools, students found defects, throughout monitoring, which were easily changed. An important objective was also to discover the economic effects. The project also covers education in the field of the environmental protection, with a particular focus on rational and more effective utilization of energy. An exhibition of creative drawings and a Student' Happening in Žilina aiming to present the students' project work and the positive influence towards the broad public in the field of energy saving were made.



## Financial resources and partners

The total budget (including any co-financing) was 10 103,34 EUR. Children of Slovakia Foundation contributed with 32,2 % of total budget, amount of 3 007,63 EUR. REMA Žilina had its own contribution to the funding of project with 67,8 % of total costs, amount of 6 845,49 EUR. Regional Energy Management Agency was project co-ordinator so all the activities were done by REMA except of subcontracts as leaflets and Manual for students and manual for teachers printings.

Partners of project, who were engaged:

- Slovak Environmental Agency – co-operation by preparation and by realization thematic hours in the field of environmental education, assistance by preparation student's events.
- BIOMASA, association of legal entities – consulting by designing the project materials and support the schools by utilizing green energy
- Civil Association ECOENERGY – co-operation by preparation and realization students' events
- Local and regional self-governments – self-governments like founders the schools, who promoted involvement in project. Involvement in project, they understood like the opportunity to improve teaching process at the schools.
- Sectorial partners: SSE, a.s., SAVE, s.r.o.

## Results

The project „Let's Learn to Save“ aimed to increase ecological thinking among young students, to increase the rational attitude to energy, to increase the self-confidence according to solve a problem in hierarchy of position and at the same time to learn to work in team. The students showed an interest in the project and they showed us, that they care about the environment.

The students had extra work to acquisition data of energy and to follow the habits of their schoolmates.

The self activity and team work by the students gave a good result. The students found out the relation between economy and energy and they showed ambition to limit the energy use at school. We assume that this ambition will spread in their sphere of families and friends.

The project resulted in a “student's manual” written by students and a “teachers manual”. The material will be distributed to all schools that are interested in the project.

Information about the project and work with Medias were in compliance with project. The Medias addressed within project were:

- TASR, Radio Lumen, Radio Frontinus, Radio ZET, regional weekly (Žilinský večerník, Žilinské noviny), bi-monthly Stavebníctvo a bývanie.

## Lessons learned and repeatability

The students contributed to the project by showing interest in continuing the project. They had possibilities to get support for their ideas and proposals by addressing public. We recorded raising interest in environmental issues while the project proceeded. Young people show ambition for preservation which can be spread to domestic and civil surroundings.

Publications created were useful for realization of the project. In the next phase of the project we are going to create model solution of environmental education. The model solution will follow backward ties from teachers, students and other members of schools public, which all have very important reminders and experiences.

The course of action is possible to use outside the area of Slovak republic, it is universal. The project can also be used in the public or corporation sphere, where it can reveal the main drawbacks of electricity utilisation and water consumption, etc.



**Contact for more information:**

Project Web Site: <http://www.remazilina.sk/index.php?action=menu2&num=15>

Organisation / Agency: Regional Energy Management Agency

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Printed reports or other literature available:

Title: Let's learn to save - leaflet (SK), Students and teachers manual (SK)

Cost: *free*