

Please find here our stories of success!

### **ISIS Gallarate plans the sustainable re-building of Aquila (Italy) after 2009 earthquake**

ISIS Gallarate is a school involved in long term projects connected to environment support and Energy conservation. This is why the school has been developing a lot of initiatives in its territory, by hosting and promoting events. It launched the local EGS Forum with stakeholders involved in energy saving, environmental protection and eco-sustainability. The EGS Forum involved Gallarate's Local Administration, Varese Province and Lombardia Region. The EGS Forum allowed the presentation of a project concerning the construction of a multifunctional centre in Assergi (L'Aquila – Abruzzi Region, Italy) hosting a nursery and primary school together with the laboratory for activities of the Gran Sasso Institute (INFN). ISIS Gallarate was engaged during the implementation of the forum and was involved in the project. It is the project of a model school, belonging to Aquila's rebuilding plan after the 2009 earthquake and at the same time a concrete example of public building fully energy independent. Students and teachers from the Thermo-Electrical and Surveyor courses together with companies from various fields, developed new, innovative, technological solutions. A great number of students, from different schools, were introduced to this type of technical solutions with the aim of spreading knowledge about the protection of the environment and opportunities for energy saving.

### **Imagine the fuel saving potential by "simply" thinking when driving**

Austrian schools of agriculture and forestry piloted an approach to raise awareness about clever driving. The Styrian clever driving competition was developed within the Intelligent Energy Europe Project EGS, which intends to raise awareness about energy efficiency and saving in European schools and use schools unique position to act as multipliers in energy saving and intelligent use of energy.

In the competitions, students of agriculture and forestry have to finalise two tracks: A slalom track with loading and unloading the front shovel of the tractor and a round track with several movements of the tractor with trailer. But to win not only best-time counts: The main influence on the ranking is given by low fuel consumption when mastering the tracks, and also the results of a theoretical part are considered.

After month of preparation starting with teachers instructions, lectures and lessons as well as a lot of practice and pre-competitions with students in schools, the first clever driving competition in the Austrian province Styria took place at March 25th 2010 in the EGS partner school LFS Grottenhof-Hardt.

Eight schools of agriculture and forestry (7 from Syria, 1 from Burgenland) were represented by their teams (four students each) to award the Styrian champions. In parallel also in Upper Austria and in Carinthia competitions were organized by partner schools. All in all approximately 20 schools with about 60 teachers and 500 students were involved in the preparation within the schools.

On 31st August 2010 the first Austrian competition was organized whereby the EGS team closely collaborated with partners from economy, media and stakeholders: "Landtechnik Zentrum"/John Deere Tractors, media partner "Der fortschrittliche Landwirt", "klina:aktiv mobil" an initiative of the Federal Ministry for Agriculture, Forestry, Environment and Water Management.

The "laudatio" to winners and price ceremony was hold by Mr. Niki Berlakovic, Federal Minister for Agriculture, Forestry, Environment and Water Management what underlines the importance and impact of the "clever driving" pilot project.

The next clever driving competition will be organized also in 2011 - after the end of the EGS project, which underlines the sustainability of this initiative driven by the Intelligent Energy Europe project EGS.

### **“Recycling Papier spart Energie” (COOL PAPER: Recycling Paper - Energy Saving)**

As a result of the EGS School Forum organised at Viscardi Gymnasium in Fürstenfeldbruck (Germany), students developed a project and implemented it with success within EGS.

The objectives were to create awareness for scarce resources and CO2 reduction needs, to raise awareness how to save energy, water and resources and to inform young people how to consume “smarter” (greener) and protect the climate. As target groups the students recognized

the whole “School family” (school administration, teaching and technical staff, students, families, parents’ association), the District’s administration and regional politicians.

Their main activities were to move out prejudices against recycled paper (not useable for photocopier; grey not white etc.), to find new marketing ideas for recycled paper, to implement the marketing ideas in a class project, to buy recycled paper for the school administration and the district administration, to encourage students (and their families) to use recycled exercise books etc. and to raise the amount of sold exercise books made of recycled paper.

Teachers, technical staff and administration as well as 1000 students were involved and informed during school breaks (awareness raising, clearing prejudices). The school and district administration were encouraged to buy recycled paper for the photocopiers (administration). The teachers and students changed 5 old exercise-books and as an incentive got one new in return for free. They were as well called on to buy new exercise-books (made of recycled paper) at the beginning of the next school year (students and teachers) and had the chance to win small priced donated by SMEs and other local stakeholders.

Work-time and voluntary work of students, teachers, energy experts was necessary for the implementation of the project. The incentives for book swap and exercise-books were given by local stakeholders. Only a small starting budget to buy exercise-books was needed.

Conclusion: The COOL PAPER Project is a low budget project with high potential for awareness raising and behavioral change. Strong commitment from students and teachers is vital to implement the project successfully. The project has a strong potential for transferability and reproducibility. Prejudices against recycling paper can be attacked and the whole school family is able to recognize the benefits of recycling paper especially regarding CO2 reduction, water and energy savings as well as sustainable development.

### **Saving energy is simpler than you can imagine**

During the students’ training activities in Bulgaria students initiated some projects. One of the most interesting is called “Lets’ save without privations”. Its authors are Keham Mamasyan and Martina Dimitrova from class 5. They made a two-week experiment during which they measured the energy consumed in their homes every day at a particular time. The second week they deliberately turned off the lamps if there was nobody in the rooms, switched off the appliances when no one used them, took care of the air conditioners by lowering the temperature. After that

they compared the results and found out that the energy consumption in the second week was 40% at one household and 44% in the other household lower than during the first week. The next step was to compare the consumed energy in the two households and the appliances they use (energy saving lamps, washing machines, cookers, air conditioners etc.) and their class – A, A+, AAA etc.

The students calculated how much CO<sub>2</sub> they produced the first and the second week and the decreasing of CO<sub>2</sub> emissions for the whole class if every family starts doing this. On the basis of electricity used in their families during the second week they calculated how much money they saved for a week and the amount of money they can save for a month and a year and how many trees they could buy and plant in the school yard.

### **Lentmark 1: when schools and Local Administrations work together**

In the Nijmegen region, EGS partner ROC Nijmegen took advantage of the local forums to bring together relevant local stakeholders for a very ambitious task which started during EGS lifetime and will continue for some time after its end.

The Lentmark 1 project was born as initiative to use the economical crisis for exploring new skills, methods and procedures within the framework of sustainability and the European 2020 goals. At that very moment especially constructors had (and still have even in 2011) a very difficult time. They lost an important amount of work because new construction contracts have not been offered. In this situation most constructors had to fire their employees. The original idea was to create new work contracts which enabled the employers to train their employees to work with new skills, methods, materials and procedures in the framework of sustainability and the European 2020 goals. The new contracts could be developed in a regional partnership of stakeholders who are interested in developing this kind of skills and competences for employers as well as for employees. The partnership has to identify projects which meet to social goals. The projects can be realised on a local area where the city council already owns a large amount of square meters for building a new part of the city. These grounds will be developed within the next 10 to 15 years and are temporary available for all kinds of initiatives.

Thanks to national funding for experiments with unemployed youngsters the city of Nijmegen was able to fund a project idea with some € 100.000. A group of regional stakeholders (ROC Nijmegen, the higher vocational institute, regional constructors, the city council, the job centre, a local expert) selected three high educated youngster to identify a good fitting project. This project needed to meet the goals of innovation in construction (on methods, materials and

procedures etc), including youngsters and contributing to engaging new citizens to the elaboration of the new part of the city.

The three youngsters started to meet all kind of regional stakeholders and came with a list of opportunities. From that list the initiative group selected the construction of a 18 meter high watchtower, build with used materials and connecting the new part of the city with the old city centre acting as a sight line. The youngsters designed, calculated and developed the construction drawing for the tower, selected the materials (they found an old wooden building from which they could use the wood), gathered sponsors for the tower for in total another € 100.000 and selected the young unemployed people who are interested to start a career in the construction area. In this way the project had a budget of some € 200.000,00 Euro.

The city council was very cooperative in coming off with all the official permissions, this took only four months(which is at real speed). After summer break of 2010 the selection of young unemployed took three months (it was difficult to identify the right persons) and construction activities could start in December 2010. The alderman of the city council opened the official work. And then winter 2010 started, with loads of snow and a record of freezing days. A delay lasting till the end of January 2011. The work will be finished during spring 2011. Students of the ROC Nijmegen developed a website informing audiences about the watchtower Lent mark 1 and they will create a documentary about the construction. This documentary will be ready when the tower is ready, during spring 2011.

At this stage the group of stakeholders adapted a new initiative: the construction of a energy neutral house within the cradle to cradle framework. The idea at this stage is to build this house with students of the ROC in tandems with students of the higher vocational institute. At the same time the group of stakeholders is studying about an official structure for the group of stakeholders in order to have a future proof structure.