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With the support of the European Commission as part of its campaign,  
**Sustainable Energy Europe 2005–2008**

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# Newsletter Education on Energy N°4

February 2009



Managing energy,  
Managing our future

Apprendre à maîtriser  
l'énergie, c'est prendre en  
main son futur

## Another year in the service of energy education



It is now 3 years since ARENE organized the European conference on energy education with over 240 people across Europe.

This has given rise to the "Energy Education Newsletter", for all stakeholders in education: teachers, facilitators and project leaders.

This newsletter aims to raise awareness and promote the best European experiences so that they can be adapted and replicated. ARENE in 2009 continues its commitment to the field of energy education with a new tool: a film promoting awareness of the practices developed in several European countries.

This project will link students from an IDF high school with fellow met in different countries and will provide an opportunity for students to develop projects for sustainable development and adopt new behaviours because to quote Theodore Monod "What little we can do, however little, we must do anyway."

All the best for an excellent year in 2009

Happy reading!

Marie-Pierre Digard,

### On the agenda

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## Special Feature

## Agenda 21 for schools

### From Global to Local



As a logical outcome of the Rio Conference and the adoption of UN Agenda 21, France developed its National Strategy for Sustainable Development in 2003. The last set of strategic plans of action to meet the 5 main aims of sustainable development, namely:

- The fight against global warming;
- The preservation of biodiversity, the environment and natural resources;
- Social cohesion and solidarity between the territories and generations;
- The development of all human beings;
- A dynamic sustainable development according to current modes of production and consumption.

Local authorities are at the heart of each of these issues. They are the ones who manage the territory and create conditions conducive to raising the awareness of many. They are encouraged to implement actions on a local level, Agenda 21, constituting real plans of action for meeting sustainable development goals.

Although they can act directly in their sphere, they cannot interfere with the activities of other institutions other than to raise awareness. Thus, some have chosen to pursue the extension of the international Agenda 21 in schools. They are invited to recognize global issues and respond with an action plan within each establishment, involving the entire school community.

### What is an Agenda 21 in school?

It is both a systematic framework for the school project and a plan of action which aims to provide practical solutions for the 5 main aims of sustainable development. In the form of projects, with specific phases, it is intended to assist schools on the road to sustainable development, gradually and in a context of continuous improvement.

The Agenda 21 school, like its big brother version for communities should be a participatory project involving the entire school community (teachers, management, technical and administrative staff, parents, students...) of which the members build and run it together.

It will involve each person on an entirely voluntary basis, who attends or runs the school. But communities and the various partners can also support the institution in its project, and thereby contribute to the effectiveness of the action with academic, technical, logistical or financial support.

The themes that can be addressed in Agenda 21 schools are numerous and varied. They include both natural heritage and biodiversity, purchasing policy, all forms of waste on the property, cultural diversity, solidarity and social cohesion, transport, health, welfare, school meals, building and international cooperation.

### *Participation: The key to success*

The basic principle of these structural approaches to sustainable development is to ensure the awareness and participation of many. Remember that the aim is above all to share a common vision of global and local issues and reflect on the best measures to be implemented in the short, medium and long term. The action taken is by no means the sole responsibility of the head teacher.

Involving early as many people as possible in the process throughout the educational community will ensure the anchorage of Agenda 21 in the long term, and the awareness of the greatest possible number and the definition of actions by those most competent. Agenda 21 is pragmatic: the actions to take are defined by those who will implement them. They should then gradually encourage others to join in.

Participation is not limited to the realization of the diagnostic and plan of action. It also extends to the evaluation of Agenda 21 for schools.

### *The different steps*

There are 4 main phases: the launch of Agenda 21 by the creation of monitoring and steering committees, the diagnostic phase, the definition of priorities and the plan of action, and the evaluation process.

The project is monitored by a steering committee composed of representatives from the educational community. It meets at the launch and conclusion of each major phase of Agenda 21. It is usually chaired by the head teacher and moderated by an "agenda 21 referee" internal to the institution. The role of the referee is very important because he or she coordinates the project.

The diagnostic phase is to make an inventory of actions already undertaken by the institution and to investigate a range of topics relating to the institution in terms of sustainable development. Naturally, the topics investigated are numerous and distinct but they often have identical purposes. For example, the question of food is not exclusively confined to the composition of menus, but extends to health issues, waste, food prices, etc.

The diagnostic can be organized in several ways. In all cases it must be shared by as many different participants as possible and there must be a consensus before deciding on certain courses of action.

In view of the results, the steering committee must prioritize the issues, identify what should be improved compared to the existing system, and investigate further action. Set out as a project, the plan indicates the project leader for each action, the implementation period, the resources deployed, and the particular challenge to which it responds.

The school is not alone: within the steering committee or in a supporting role at any stage in the process, external stakeholders are also involved. Energy suppliers, waste management or water supply, transport companies and of course local authorities all play a part.



For more information, visit the site of the 21:  
<http://www.comite21.org> (website in french)

# The feedback

The initiatives on Agenda 21 schools are becoming more numerous. They cover all types of schools: primary schools, secondary schools, universities, training centers , etc.

## Paris schools



The Regional Center for Pedagogical Documentation (CRDP) in Paris calls for the implementation of Agenda 21 for schools. Its partners the Local Education Authority, the city of Paris, ADEME and Institut de l'Ecologie en

Milieu Urbain (the Urban Ecology Institute) (IDEMU).

*“The Paris CRDP offers educational tools for primary school teachers. This measure introduced in 2008-2009 in some schools will be expanded to as many as possible, so that Parisian students can become the creators of a 21st century based on sustainability and solidarity.”*

*Bernard Garcia, Director of the CRDP de Paris*

To this end, the CRDP has been online since November 2008, with a website enabling schools wishing to enroll in the implementation of Agenda 21, to pool their information. At the present time there are 4 participating establishments in the 13th, 16th, 18th and 19<sup>th</sup> districts in Paris.

These institutions are supported by the website in their projects. They can find general information on Agenda 21 of the city of Paris, the steps to follow and a timetable. They can also find there the various challenges that can be addressed concerning:

- Climate
- The conservation of resources and the balance of nature
- Responsible development
- Social cohesion
- Participation for all

In May 2009 an interim report will be made at an event at the City Hall. The classes involved will present their school and initiate projects for the years 2009-2010.

Visit the website at: <http://crdp.ac-paris.fr/agenda21/> (website in french only)

## Secondary Schools in Alsace



The General Council of Bas-Rhin took the initiative to launch Agenda 21 for schools in certain of its establishments. A steering committee consisting of heads of schools, members of the rectorate and the school inspectorate of Strasbourg, and the General Council of Bas-Rhin and Haut-Rhin has been established to monitor and guide the work done by environmental consultants.

From this work emerged the 2005 **Guidelines for the implementation of Agenda 21 in institutions**, which as its name suggests will serve as a starting point for any school wishing to join in a concrete sustainable development project. In 16 sheets such as “Sustainable buying habits and consumption”, “Water”, “Social Engagement”... it offers tools tailored to schools.

From 2005 to 2007, 8 pilot schools in Alsace tried out the process, so that in 2007 it was incorporated into the educational policy of the General Council of Bas-Rhin. And during the last school year 12 new secondary schools in Alsace were included in the Agenda 21 implementation process.

With the experience of past years, other accompanying tools were created and appear in the 2008 update. Tested and validated these tools provide assistance for those who want to initiate the process. For the 1st schools to join, results are given to show the positive actions.

The example of the College of Fortschwihr is significant because in the report in 2008, it announced the actions carried out in 2006-2007. Thus we learn that it decided to address the themes of “openness to difference”, “Strengthening solidarity behaviour”, “knowledge and protection of their surroundings” and “to share knowledge with greatest number of people possible”.

You can find the complete 2008 report by clicking the following link:

[Agendas 21 school Site, Department of Bas-Rhin](#) (website in French)

Contact: Marc MEINAU – 0033 3 88 76 62 75

*Feedback from Secondary schools in Alsace by Marc  
MEINAU, youth education advisor,  
Bas-Rhin General Council*

*What was the trigger in the General Council for trying out Agendas  
21 in schools?*

The Department of Bas-Rhin is itself engaged in such an approach. It is normal that it encourages schools under its control, to implement actions to promote sustainable development.

*What are the main lessons that you get the first feedback?*

The total involvement of the school head is needed. The process is fragile. Contract based on any objective and the only voluntary, it is asleep or off depending on fluctuations in the team.

*How important is energy in this process? And especially energy education?*

Half of the institutions are working on this theme. This is for several reasons:

- It is perceived as one of the most “urgent” sustainable development issues;
- Action in this area allows for quick and measurable results;
- It allows you to save money;

In addition, the department is experimenting with incentives for energy saving schools.

*What are the benefits of Agendas 21 methodology for community education?*

It allows the various components of the institution (technical, educational, teaching, students, administration, and parents) to work around a common project in which the places and roles are distributed in another way. This is an opportunity to establish modes of hierarchical relationships, whether functional or “corporatist.”



The PACA Regional Council has been engaged in the development of Agenda 21 since 2006. In order to continue working towards its objectives of global sustainable development, the Region has included in its action plan, the development of Agenda 21 in the region’s schools.

This project will take place alongside other actions: “To protect and manage”, “Referential environmental quality of schools”, “The use of renewable energy”, “equipment recycling”, “Compost and fermentable”, “organic food in schools”, “saving energy and water in schools”...

There are 9 schools (general, technological, agricultural, vocational) that have been participating since 2007 and 10 new schools from 2008. A new experience with a training centre for apprentices (CFA) has joined the process.

Ultimately, the approach could be offered to voluntary institutions, which could draw on the methods tested in the experimental stages.

To learn more, visit the website of the PACA Region at: [PACA website](#)

Contact: Jennifer TULPIN – 0033 4 88 10 76 41



*Could you tell us a little about your school ?*



The Fécamp School Complex includes general and technical secondary school of 1350 students, a vocational sixth-form college of 540 students and a continuous training center.

180 teachers, 60 administrative and technical staff work there every day.

*What motivated you to engage your school in a sustainable development project?*

- The establishment of a technology platform on renewable energy on site was a lever and a motivating factor for getting students involved in a process of sustainable development institutions.
- Awareness raising activities already present in some projects provided a "foundation" from which to launch such a project.
- The belief in a "duty" to engage, and to get in line with regulations thanks to this undertaking (before the 2007 circular).

*How have you mobilized the members of the educational community and mainly the students ?*

For the methodology of implementation of Agenda 21, a diagnostic was carried out, and answers to the expectations of staff and students were given rapidly, thereby clarifying the facts and visibility of the action. A practical approach of which the 1st goal was to improve the quality of the living and working environment in the institution has led to the membership of "skeptics" to expand the teaching to meet the different challenges of sustainable development.

The impetus for numerous educational projects has been generated, and this has led the institution to be consistent in its approach to education for sustainable development by progressively adopting an eco-friendly policy.

It promotes a framework for sustainable development in education.

Students are involved in this process, and invest time and effort in their preparation and their everyday surroundings (enabling them to understand issues on a local level).

*How do you keep the project going over time ?*

A strong and clear management direction, integration of the procedures into the school project, and an expansion of the themes addressed are indispensable. Promoting interdisciplinary activities, maintaining the thread of the process in operation, opening up the establishment to its local territory, and working with partners (institutional, local authorities, companies, associations, etc) are points not to be neglected.

*What are the benefits seen today ?*

I'm not sure if we can speak in terms of "profit" for a project like this!

From a financial perspective, the savings on paper purchasing are significant: our consumption has halved in 4 years. It's positive because it shows that a small gesture has tangible results! Several people in the context of their duties, have taken initiatives of their own accord and now contribute to the sustainable development project.

The benefit is in terms of external recognition and the image that the institution has given: it has clearly shown its commitment and is recognized through solid partnerships or interdisciplinary projects (training in renewable energy for example).

We can also say that we are working in the spirit of the 2007 circular, a move that is long-term and that we will all promote, through demonstrations of practical applications. It is a real, dynamic, new project, and a search for new areas of exploration and application for the implementation of sustainable development education.

For more information: [The Internet school of sustainable development \(website in french\)](#)



# Eco-School Project

Precursors in the spirit of Agenda 21 schools mentioned previously, The Foundation for Environmental Education in Europe, in partnership with Eco-Packaging and the School and Nature Network, and support of the Together Foundation created a program called Eco-School back in 1994.

The principle is based on a partnership between stakeholders and partners in a school or institution in order to think and act together on 5 major environmental themes: food, biodiversity, water, energy and waste.

Eco-school provides teachers with tested materials to include in their programs. As regards partners, they benefit from creating a positive image in terms of citizenship education, an environmental approach, economic and resource development.

## Its objectives

- The integration of environmental education in the curriculum;
- Practical knowledge and awareness among students of environmental issues in their school;
- To introduce students to the direct correlation between behaviour and environmental effects;
- To promote the establishment of environmental practices within the school buildings with the involvement of elected officials;
- Feedback between participants, on a local, national and international level.

## Organising the project

In accordance with Agenda 21 for schools, the Eco-School forms a monitoring committee, which oversees the entire process. It should be composed of teachers, the director of the institution, students, representatives from local associations, parents... This is not exclusive; any of the actors and partners of the school can be part of the monitoring committee.

At the beginning of the year the Monitoring Committee has the responsibility of choosing the theme for the coming school year. Following this, a diagnostic survey is conducted with the help of the questionnaires in the accompanying manual (downloadable from the website [www.eco-ecole.org](http://www.eco-ecole.org)).

The diagnostic can then be used to establish a plan of action (what to do and how?). Students are involved in its development, but also in the implementation and evaluation. This diagnostic phase is a great way to raise awareness.

## Objectives

All the work done results in an “Eco-Code” that describes the behavioural codes adopted by individuals and groups in and around an Eco-School. Each year a new item is added to the code according to the topic chosen.

This project is long-term. To retain the Eco-School label, an audit takes place annually in the establishment. In 5 years the 5 main themes are discussed, but the program can develop around other topics such as : transport and mobility, health, fair trade, local and international solidarity, responsible consumption depending on the needs and motivations of the school.

As an indication of its effectiveness, the program created in 1994 is now located in 45 countries and includes nearly 25 000 schools.

For more information, click on the following link:

[Eco-School website \(in french\)](http://www.eco-ecole.org)

Stavros Dimas, European Commissioner for the Environment, encourages secondary school teachers to address climate change in their class and wishes to encourage students to sign a commitment to reduce CO<sub>2</sub>.

## The tools proposed

In order to assist teachers in this approach, different tools have been created to stimulate discussion with high school students:

- **A guide for students**, very informative and filled with illustrative diagrams that enable awareness of the impact of climate changes and global warming on our lifestyles;
- **A PowerPoint presentation** developed by the Swedish meteorologist Martin Hedberg, summarizing the challenges of climate change clearly and concisely;
- **Ideas for discussion**, 4 worksheets allow classes to discuss various issues related to climate change in an interesting and interactive way;
- **EPAEDIA, Environmental encyclopedia**, the European Environment Agency (EEA) has prepared this encyclopedia to inform the public of environmental news on our continent;
- **V Gas Energy, computer game** to simulate the volume of greenhouse gases produced by our lifestyles. It also contains a virtual library on the topic of climate change;
- **Young Europeans and the environment**, an informative site focuses on water, waste, air and nature, topics on which the EU has decided to step up its efforts.
- **ManagEnergy** is a database of online educational tools for teachers and pupils aged 7 to 11 and 12 to 16 years. It is an initiative of the Directorate General for Energy and Transport of the European Commission.

All of these tools are available for free downloading or sending by e-mail:

- <http://epaedia.eea.europa.eu/index.php>.
- e-mail to receive V GAZ: [vgas@irc.it](mailto:vgas@irc.it)
- [http://ec.europa.eu/environment/youth/index\\_fr.html](http://ec.europa.eu/environment/youth/index_fr.html);
- ManagEnergy for teachers: <http://www.managenergy.net/kidscorner/te2.html>
- And for students: <http://www.managenergy.net/kidscorner/en/o11/o11.html>

## The Eco-Mobility kit

ARENE Ile-de-France, along with two regional "Partners for eco-mobility, from school to university" and Vivacités Île-de-France produced this kit to encourage the development of eco-mobility education.

It brings project leaders methodological and operational support, to design, organize and conduct educational activities on sustainable mobility for children aged 5 to 11 years both in and outside class.

This kit is intended for anyone wishing to develop educational activities on the theme of eco-mobility or to promote, encourage and facilitate teaching projects on mobility, whether teachers, special needs educators, facilitators, National Education supervisors and academic advisors, local authorities, parents' associations, foundations, insurance, etc.



It aims to encourage the use of alternative transport and to help children become eco-mobile citizens. To do so, it is necessary to sensitize and educate them about eco-mobility to contribute to behavioural change.

## The kit comes in the form of a box containing:

- an instruction booklet on how to establish and lead an educational project on eco-mobility;
- an activity guide with 20 complete activities presented in the form of activity sheets. It includes a multi-criteria grid to easily select activity sheet, and 20 worksheets classified by objective:

- ▶ Understand the challenges of eco-mobility;
- ▶ Know the different alternatives;
- ▶ Learn how to run the city;
- ▶ Use an alternative means of transport;
- ▶ Choose your means of transport;
- ▶ Participate in the construction of an eco-mobile city .



**The kit includes :**

- a **tool box** with tools for teaching and evaluation and related activity sheets to guide activities
- a **directory** of financial, technical and teaching partners
- a **list of teaching materials** with a selection of tools on mobility and transport
- a **glossary with definitions**, in alphabetical order of words and expressions used in the kit and about mobility and transport.

*7 themes are addressed in this fun, informative and educational kit :*

- **environment,**
- **the territory,**
- **traffic,**
- **health,**
- **citizenship,**
- **modes of transport,**
- **the “home-school” journey.**

You will also find a game board, playing cards as well as a historical mural and informative posters.

The kit is available to download on the site ARENE: [www.arenidf.org](http://www.arenidf.org)  
 Contact: **Hélène SANCHEZ (0033 1 53 85 61 70)** and **Céline MEUNIER ( 0033 1 53 85 61 68)**

*“The Energy- and water- saving” demonstration apartment in the city of Besançon*



*An eco-citizenship project*

The city of Besançon, having noticed a continual increase in water and energy consumption, and waste generation, wanted to educate citizens about best practices for the environment.

In association with the Energy Info point of the Council of Architecture, Planning and Environment in the Doubs department and the national energy agency, the city of Besançon created an apartment of 70m<sup>2</sup> that can show in a playful and very educational way, the impact of energy and water consumption on bills.

*Local citizens get involved*

This apartment, lent by the local housing association, Grand Besançon Habitat, was developed in a area with a social vocation.

Indeed 90% of these units are council housing. Some families residing in the town pay more charges due to waste than rent, and unpaid energy bills increased by 23% within 3 years.

This pilot project has not only a goal to raise awareness about eco-citizenship, but clearly includes social objectives in the light of increasing insecurity.

And in order to have a real participatory role, the local district, Fontaine Ecu, was asked to support this project, called ‘Eco-Fontaine, and you?’ For example, the hip-hop influence frescoes that line the walls of the apartment were painted by local youth with the help of a graphic designer.

## The different themes

Visitors to the apartment follow an educational programme that emphasises 3 main themes:

- Water management: teaching visitors through easy-to-apply ways of using less water for the same tasks (flow speed reducer, economical flush, advocating short showers etc.);
- Energy management: a preliminary investigation was conducted to better understand the messages to convey to the target population. Emphasis was placed on the awareness of the multiplication energy-use points (lighting, cooking, heating, and any electrical equipment in ever-greater numbers);
- Waste management; awareness about sorting and choosing more environmentally-friendly products with less packaging.

With a cost of equipment of 8 600 € and a cost for the year 2007 of 29 000 €, this fun and educational project has helped hundreds of people save on their bills and reduce their environmental impact.

To see the results of this project, there is an assessment of changes in visitors' behaviour as well as the changes in energy and water consumption in a sample of people.

To learn more: [the eco-apartment](http://the-eco-apartment.com) site



*European Energy Week  
from 9 to 13 February 2009*

As part of the campaign "Sustainable energy Europe", the Directorate-General for Energy and Transport of the European Commission is holding the 3rd edition of the only European Energy event. It will take place from Monday 9 to Friday 13 February 2009 in Brussels and in several other European cities.

Many events will take place over the weeks before and after this European energy week. These conferences, workshops, seminars, etc., which share the common theme of renewable energy, performance and energy management and the interest of combining everyone's efforts towards a more sustainable energy.

*"Education and training needs for a zero carbon society"*

The European Commission has made a number of commitments in the fight against climate change and the field of energy management. It has also reached the conclusion that its objectives can only be achieved with a comprehensive program of education and training in the areas of renewable energy and energy efficiency.

Thus, all day on 11 February 2009 and during the Energy Week, the Commission organized a conference bringing together a number of experts from the education and energy sectors. Dubbed "the need for education and training in a zero carbon society", it will bring together representatives from industry, education and some institutions. They will contribute to the work of the Economic and Social Committee on this issue, commissioned by the Commissioner Andris Piebalgs.

The conference will be held in Brussels on 11 February 2009 from 9.00 to 17. The detailed program and address can be obtained by clicking here.

For all events: <http://www.eusew.eu>