

Date: 8/6 2009



ENVIRONMENT & INNOVATION:

Theme 2007/2009

Climate change:

Let's save energy!

Final Project Report

Environment and Innovation

1. Delegation Identification

Country:	Denmark
Organisation:	Danish Outdoor Council
Project Name:	Environment & Innovation - A project to promote schools' innovative environmental problem-solving By International Eco-Schools Programme (FEE) in partnership with Toyota Motor Europe
Activity Name:	Solar panels and innovation
Date:	8/6 2009

2. School Identification

School Name / Group of Schools Name:	Hedegårdenes Skole
Address:	Københavnsvej 34 4000 Roskilde
Region:	46314221
Telephone:	46351901
Fax:	http://www.hedegaardenesskole.skoleintra.dk
E-mail:	
Website or Project website:	
Contact person for this project:	Henrik Vandrup og Bjarne Larsen
- Position in school	Department leader and Teacher
- Direct email	Henrikv.vandrup@mail.tele.dk or larsenborre@ofir.dk
- Direct telephone	46314225
Type of school (kindergarten, primary, secondary, etc.):	Bhkl til 9. klasse

Date: 8/6 2009

Age of students involved in the project:	6 - 16
Number of students directly involved in the project:	350
Total of students in the School:	350
Number of staff/teachers directly involved in the Project:	Have received the Danish outdoor council's green flag
Total of staff/teachers in the School:	55
Other participants involved (individuals and/or organizations) and the number of them:	Within the school The school board Outside the school The environmental department of Roskilde municipality: Sia Bosen Trine Keinicke Bent Oslev The energy suppliers' of Roskilde municipality: Robert Jensen Gaia solar: Martin Roikjer
The other participants role:	The participants have been most helpful in advising and supervising our work with this project. Furthermore The energy suppliers' of Roskilde municipality have been helping us with the more practical side of working with the instalment of the solar panels. Gaia Solar is the company, that delivered our Solar panels
Rural / Urban setting:	<input type="checkbox"/> rural <input checked="" type="checkbox"/> urban
Other relevant information: (maximum 100 words)	

3. Project Identification

Project Title	Environment and innovation
Project keywords	Solar panels and sustainable development in education
Project Summary (maximum 100 words)	We want to work on four fronts: 1. Specifically, to reduce electricity demand through solutions where we use alternative sun to charge mobile phones and

	<p>portable PCs.</p> <p>2. To raise awareness among our students the value of environmental awareness through the construction of an environmental / sustainability laboratory with various activities such as weather, low solapparater to boiling water, etc.</p> <p>3. We would also like to work on refurbishing one of our buildings on the land register so it is entirely consistent with the latest technology in the field.</p> <p>4. Based on the eco-council work, we will spread awareness of sustainability and resource use in classes and possibly. Let's works culminate in an inter-week, when the whole school is involved. We, as a part of this pan-week work with measurements of energy and water consumption, etc. In the homes of our students.</p>
<p>Introduction and outline of the challenge addressed by your schools or group of schools.</p> <p>(Please submit a description of the problems that your project addressed. How was the situation prior to the project?)</p> <p>(maximum 1 page)</p>	<p>We have received a lot of help and support from the Environmental department and the power company in Roskilde, who have been very helpful in sharing knowledge and expertise, and helped with practical implementation of the project. Unfortunately, we have been unnecessarily delayed because of licensing procedures in the construction and facilities management</p>

4. Project Description

<p>Project description</p> <p>Please include also the following points:</p> <ul style="list-style-type: none"> . Phases of the project; . Calendar/timing of the school project; . Financial information / budget needed. <p>(maximum 2 pages)</p>	<p>The project will take place in the school year 08-09</p> <p>Mode stages:</p> <p>1. Concept development and clarification, we clarify the relevant environmental measures to be undertaken include through environmental check of the school and review of relevant opportunities to reduce energy consumption.</p>
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	<p>Environment check is completed and the school has received a report containing a series of recommendations, which we will work continuously to implement.</p> <p>2. Follow-up of environmental checks including replacement of the resource-consuming equipment with more environmentally friendly appliances, etc.</p> <p>3. Building environmental / sustainable laboratory combined with work on behavioural changes in the entire school.</p> <p>(Is primarily a measuring station, which will include measuring devices for use to read various weather phenomena and to measure the consumption of different kinds. It must include the weather station, but also apparatus for analysing the use of power and heat. Moreover, it could also be used for computing the measurements made. Computers should also be part of this.</p> <p>In addition, we will work on developing a series of activities and materials that can be used to create awareness about sustainability and resource savings including apparatus for login the production of power.</p> <p>4. A theme Week which will be the highlight of the project (will probably take place in 09)</p> <p>5. Working with waste and composting - including restoring the ecological circuits: home composting - environment have</p> <p>Responsibility for the export of the project lies in the established committees.</p> <p>The project will be maintained both through the fixed installations (solar, etc.) which in themselves are saving, as well as providing a complete laboratory, which allows for specific educational activities that lead to higher consciousness.</p> <p>The project has environmental</p>
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	<p>improvements through the recommendations such as the environment allows checked through the use of alternative energy to the tasks normally only available for download from the wall outlet (charge of mobile and portable PCs).</p>
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5. Project Implementation

<p>Project Implementation:</p> <p>Please include also the following points:</p> <p>Innovation: How was your project was innovative and unique in solving the problem or challenge mentioned?</p> <p>. Implementation outcome- Which were the results obtained? What are the major differences between before and after implementation of your project?</p> <p>Teamwork Did your project involve a wide range of stakeholders? Who/what organisations were involved in what? Did your project create or improve teamwork?</p> <p>.</p> <p>Effectiveness – How effectively was your project implemented? Was your project implemented within the planned budget? If not, how did you compensate? Please attach a financial report (expense breakdown) Was your project implemented according to the planned time schedule? If delayed, why?</p> <p>. Environmental and societal impact - Which were the benefits to the environment, or the local community?</p> <p>. How can this project be used by other Eco-Schools? Any advise to schools which would be interested in implementing a similar project?</p> <p>. How sustainable is the solution found? How</p>	<p>Innovative:</p> <p>We see our proposal as innovative because:</p> <p>We specifically advocate using our new technology to demonstrate how we use alternative energy to recharge some very specific equipment, which normally only charged in the AC outlet.</p> <p>We create awareness about energy and environmental awareness in the laboratory, as well as through cross weeks where we create an awareness of consumption and the opportunity to bring it down to a more CO2-neutral level.</p> <p>Implementation outcome:</p> <p>Our project has unfortunately been delayed because of the previously mentioned problems with approval of the instalment of the solar system.</p> <p>Moreover, a cut of the budget and other unexpected economic events meant that we have not reached the full extent of the project yet. The rates we have to reach for the big climate summit will take place.</p> <p>We have today, however (8 / 6 2009), received message from the department or building and construction the instalment is liable to be implemented next week.</p> <p>Budget:</p>
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<p>will it be maintained in the future?</p> <p>. What were the main difficulties found during the implementation process?</p> <p>You may annex illustrations, maps, charts, etc.</p> <p>(maximum 4 pages)</p>	<p>We have received the following funds:</p> <p>Up to 50,000 kroner from the Danish Outdoor Council afhænging of jury approval of our revised project. 20,000 kroner from the free resources from Roskilde Kommune Annex: confirmation of assignment 22,600 kroner from the school's own resources</p> <p>Total: £ 97,600</p> <p>We expect in the context of the budget in the following way:</p> <ol style="list-style-type: none">1. Weather for reading and make assessments of how weather affects the production of energy. Price: 12,000 Attachments: Example of possible candidate attached.2. Installation of weather station. ca. 4000. DKK3. Solar Package 960 Wp - 50,000 of 14,600 hardware installation (the prices here are incl. VAT)4. Measuring for documentation of energy in 2000 DKK5. PC for data in 5000 kr6. Equipment for the charging of computers and mobiles: 10000 kr <p>Expected consumption, total: 97,600 kr</p> <p>As mentioned earlier we have had some financial cutbacks, resulting in some of our plans not being set in motion yet. We do however plan to go ahead in the early autumn with the implementing of the environmental lab and the weather station.</p>
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6. Dissemination Strategy

<p>Dissemination Strategy:</p>	<p>We have been in touch with the local press in relation to Roskilde</p>
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Please include also the following points:

- . How was the project communicated to the wider community?**
- . Which means of communication did you use?**
- . What was the communication /disseminations plan?**
- . Were there any training actions?**

(maximum 1 page)

municipality signed a climate agreement, which we also pointed out our own project, bathing in press release and in interviews with the Roskilde Dagblad

Additionally, we plan to invite people to arrangements where we show our results to all interested.

We will continually update the website with news from the project including the development of energy

We are also available for the climate summit in 09 with an invitation.

Signature/name of the project responsible:

Place:

Date: