Promoting Intelligent Energy Education at schools

Overview of relevant results from the Intelligent Energy Europe programme

Martin Eibl
Project Officer
Executive Agency for Competitiveness and Innovation
Intelligent Energy – Europe in a nutshell

> €730 million from 2007-13

> Supports EU renewable energy and energy efficiency policies and helps reach the 2020 targets

> Encourages the uptake of proven intelligent energy solutions

> Is not a technology development programme, unlike FP7

> Works to make Europe more competitive and innovative
Where does the IEE programme stand?

Over 500 IEE-supported projects across Europe, more than 3,000 participants from 30 countries...

- Energy efficiency
- Renewable energy sources
- Integrated initiatives
- Energy-efficient transport
Intelligent Energy education – Background


> Key action ‘Intelligent Energy Education’ open in Call for proposals 2004 – 2009
  > Priorities:
    > Contribute to the development of intelligent energy education in primary, secondary and higher education
    > Make young generations adopt intelligent energy behaviour
    > Sharing and disseminating good practices across countries in the European Union

> Key action ‘Consumer behaviour’ in Call 2010 and 2012
Energy Education projects and initiatives funded by IEE programme

> 20 projects in primary, secondary and higher education implemented by over 200 organisations from 27 Member States (+4) involving over 10,000 schools
  - teaching material for all age groups
  - train the teacher programmes
  - e-learning courses and computer games
  - experimental tool kits
  - greater access to energy education material
  - animated cartoons
  - campaigns

> ManagEnergy Education Corner – portal for children, teacher and parents

> U4energy – European school competition (2010 -2012)
> Easy-to-remember slogan to encourage pupils to « flick the switch » or turn off all lights and electrical devices when leaving a room or not in use.

> 705 schools and 280,000 students directly participated in the campaign with a further outreach to 6,933 schools and 308 education boards/authorities.

> Methodology and different materials developed ready to use in school campaigns (comics, poems, songs).

www.flicktheswitch.eu
‘Rainmakers’ story book in three parts for primary school pupils in 10 languages

40,000 children read the ‘Rainmakers’

600 schools and 1,300 teachers involved

Educational material and games to complement books

www.kids4future.eu

www.rainmakers-eu.eu
Young Energy Savers

> Series of fun and exciting animation cartoons to raise awareness on energy efficiency, renewable energy and sustainable transport amongst children aged 5 - 8 years

> Complementary teaching packs and resources for use in schools

> Broadcasted in 18 countries reaching 25 million households

www.animate-eu.com
www.myfriendboo.com
Young Energy People

> Energy agencies, secondary schools and businesses working together towards improved energy sustainability

> 43 schools in 7 countries participating with 1,042 students directly involved + 30,000 through dissemination activities

> Increased competence building amongst pupils about energy efficiency, renewable energy sources and climate changes, related skills and their applications to real life and the workplaces

www.youngenergypeople.com
ManagEnergy’s Education Corner

> A free online database for parents, teachers and local energy actors

> Supporting information and links to energy education websites providing energy management tools, case studies, lesson plans, activities, games, animations, videos, award schemes and more.

> Energy Magic" - web pages for children aged 7-11

> "Energy - It's Your Future!" - web pages for children aged 12-16

[http://learn-energy.net](http://learn-energy.net) (23 languages)
European school competition – u4energy

> EU initiative under the patronage of the Commissioner for Energy, Mr. Günther Oettinger

> Core objectives:
  > Increase energy efficient behaviour amongst young generations
  > Mobilise schools and their stakeholders to address energy efficiency and share best practice

> 3 competition categories:
  > Best energy efficiency measures at school
  > Best teaching actions on efficient energy use
  > Best school campaign on energy efficiency

> 2 cycles of competitions over school years 2010 -11 and 2011 -12

> www.u4energy.eu (25 languages)
Lessons learnt

> There is a wide range of high quality material for extra-curricula lessons on intelligent energy education

> Accompanying in-service training of teachers is essential and works best if linked to formal professional development (credits)

> Systematic integration of energy education material into national curricula remains difficult → too crowded, lack of time, competing priorities

> Motivation of teachers is a barrier due to their exposure to increasing time and performance pressures which required them to focus on core curricula activities
Recommendations

> IEE programme has contributed innovative teaching solutions leading to increased awareness of students and teachers, but more needs to be done to enable education sector and young generation to help achieving EU 2020 policy targets (in particular, on energy efficiency) and on a decarbonised society by 2050 (roadmap 2050)

> Future activities should focus on:
  > Engage students through competence building activities (skills development linked to career opportunities and job market needs)
  > Extra-curricula activities stimulating peer learning (e.g. use of innovative social media and smart technology)
  > Building capacity amongst teachers through pre-service training
More information?

http://ec.europa.eu/intelligentenergy