

# YOUNG ENERGY 1

**Project type:** Behaviour, Game

**Time:** 2005-2006

**Target groups:** Teenagers age 13-18

**Contact information:**

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**Partners:** Eskilstuna Energi & Miljö, Mälardalens högskola, game designer Jonas Beckeman and graphical designer David Skoglund, Djurgårdsskolan i Eskilstuna

The energy awareness among young people is unsatisfied. There is therefore good reason to find new ways of informing and enthusing young people, and new methods of influencing behaviour that may contribute to sustainable development. For that reason Young Energy have explored if the youth's (13-18 years old) interest and knowledge about energy can grow with new ways of learning in combination with computer games.

# Prototype and research



## POWERHOUSE – A PC GAME

PowerHouse is a game prototype, simulating energy use in a house. To appeal to the target audience, the theme of the game is a reality TV show, in which players have to make sure that all the participants moving into the house get along, while keeping track of energy consumption. Persuasive technologies can be useful to modify behaviors related to energy usage. These technologies has been used in PowerHouse, a computer game designed to influence behaviors associated with energy use and promote an energy-aware lifestyle among teenagers. The compu-

ter game aims to influence a set of target activities in the home using several persuasive techniques. Employing the format of a reality show, the game informs implicitly and explicitly about various energy-efficient actions. The results describes our overall game design and its advantages and disadvantages in relation to the methods we have employed in the game.

## RESEARCH RESULTS

Preceding the actual game design, we conducted a pre-study to gain more knowledge about our target group - teenagers between 13 and 18 of age. This survey was carried out to learn more about their attitudes towards saving energy and gain an understanding on their knowledge of energy use in the home. The overall aim of the study was to produce a baseline of which we later can measure changes in attitude and comprehension after subjects have played our game. About 70% of the teenagers saw saving energy to be important and only 7% considered it to be unimportant. We found that the teenagers' knowledge on how much energy is being used by the different activities in the home is in general quite low.

After testing the game on the the target group we found out that persuasive technologies can be useful to modify behaviors related to energy usage.

"This is the funniest game I have played in school, but the other games I played was learning games"

One of the players

## Publications:

Katzeff, Cecilia and Torstensson, Carin (2006) **Designing for engagement in a simulation game for learning.**

Bång, Magnus; Torstensson, Carin and Katzeff, Cecilia (2006). **The PowerHouse: A persuasive computer game designed to raise awareness of domestic energy consumption**

## Young Energy 1 project participants:

Carin Torstensson (project manager), Magnus Bång (senior researcher), Cecilia Katzeff (senior researcher)

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