#### Conferences on energy efficiency

Conference of Energy Renovation: rules and tools

April 19, 2012

University of Extremadura Polytechnic Cáceres

Conference on energy innovation and efficiency in buildings

June 29, 2012

INTROMAC. - Technological Institute of Ornamental Rocks and Building Materials Cáceres



#### EnEf Projet Newsletter Edition 03 July 2012

### Dissemination of the project in Spain

The project EnEf and immediate operation of their learning platform respectively have been presented in two conferences on energy efficiency, held both in the city of Cáceres.

# • Conference of Energy Renovation: rules and tools

The first conference took place on April 19, 2012, and treatment standards and tools for evaluating energy efficiency, with the presence of the Institute of Engineering Mechanical and Industrial Management from Oporto (Portugal).

# • Conference on energy innovation and efficiency in buildings

The second conference took place at the headquarters of INTROMAC on June 29, 2012. The objective of the seminar was to provide an approach to the specialist field of research applied to the building sector as well as tools for their participation in R & D related to energy efficiency in buildings.



#### Education and Culture DG

## Lifelong Learning Programme



This project has been funded with support from the European Commission. This comunication reflects the views only of the author, and the Commission cannot be held reponsible for any use wich may be made of the information contained therein.

### EDITION 03 JULY 2012

# **EnEf Project Newsletter**

# Access to learning platform EnEf



# Through the website of project EnEf

www.enef-project.eu

you can access the learning platform, with a click on the link to the training content of the Tab "Learning Platform".

#### PILOT TEST OF PLATFORM

Now, the learning platform is testing "pilot". You can take part in the pilot test accessing the platform and complete a questionnaire.

#### THE LIFELONG LEARNING

The lifelong learning, today, has become a must for professional development in any work place. Since the introduction in the literature the term learning throughout life (lifelong learning), continuing education took a new concept and importance.

(Electronic Journal of Research and Innovation and Socio).

# EnEf Learning Platform

With the creation of the learning platform EnEf is to create a European area of lifelong learning.

The lifelong learning is understood as the set of training activities that are developed by companies, workers or their organizations, aimed at both improving skills and the retraining of workers employed, which allow the compatibility of increased competitiveness of companies with the individual worker training.

Training is understood as a process of empowerment and development of the individual in relation to their profession. Even pretend a process that eliminates the differences between what an employee can offer from their skills, experience and skills accumulated and what is required by their occupation.

(Manual for the process of assessment, design and evaluation of a Company Training Plan. - Institute for Machine Tools. Basque Country. Spain).

### In this edition

- EnEf Learning Platform P.1
- Content of the EnEf learning platform P.2
  - 3D Simulation Tool P.3
- Dissemination of the project in Spain P.4

GET A VISIT www.enef-project.eu

Here are ENEF project objectives, among which is the creation of an online learning platform:

• To set up new methodologies and build up training modules in line with European standards concerning energy efficiency in buildings

• To develop an accessible training approach available by an e-Learning platform

• To create visual elements and virtual simulations being able to visually show the different choices about Energy efficiency and their impact on energy saving/consumption in a building

• To provide examples and exchange of Best practices

• To assure a wide dissemination of the project products and results

It attempts to address the lack of knowledge of business and construction agents using new methodologies and the creation of training modules according to European standards, trying to capture the commonalities of the different applications in different participating countries.

### Interface learning platform

Once entered into the platform through the website EnEf, you can access training modules the folder "EnEf from multilingual" and access the 3D simulation tool from the folder "EnEf 3D" too.

the folder "EnEf Inside multilingual" and once selected a training module in any of the languages, on the left of the screen shows a summary index of the contents of the training module that lets you browse the different items.

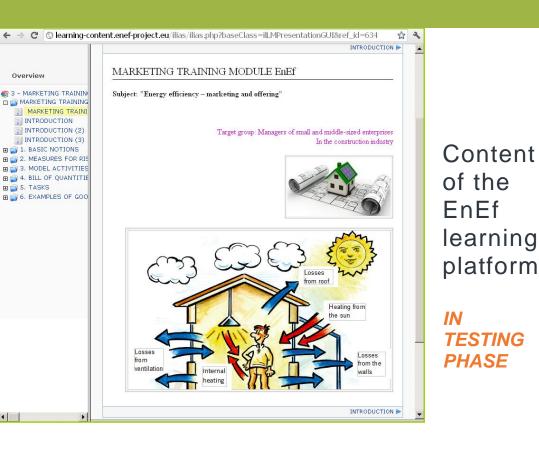
At the end of the content of each training module there is a link with the corresponding test. There is also direct access to the evaluation tests from the folder "Content" in each language.

From the same folder "Content" can download the training modules for use offline as well as support material such as guides, articles. videos. etc ..

#### **GIVE YOUR OPINION OF THE PROJECT**

Following the training modules, located at the bottom of the screen, there is a section 8, corresponding to the questionnaire on the project you can fill out to give your opinion. You can directly access the questionnaire through this link:

https://www.surveymonk ey.com/s/EnEf\_ENG



The learning content offers entrepreneurs and managers in the building industry the opportunity for continuous professional development.

Different areas and aspects of energy savings in buildings are presented in seven modules that are freely available to you. The modules in legislation in various European countries as well as marketing, heat insulation of facades, glazing and others.

All learning modules are available online and can be downloaded for offline usage as well.

There is an online test at the end of every learning module. The learner can perform each test anonymously and can get detailed feedback about her/his performance at the end of the test.

All modules and their respective test are available in different languages of the project partner countries: German, English, Spanish, Italian, Slovak, Greek and Bulgarian.

#### TRAINING MODULES

- 1. General Concepts
- 2. Legislación en materia de eficiencia energética en la UE
- 3. Marketing
- 4. Thermal insulation of facades
- 5. Glazing
- 6. Installations

Along with the training modules, the learning platform provides user support material for the realization of Best practices and 3D simulation tool.

#### ACCESS PLATFORM AND TAKE PART IN THE PILOT TEST!



# 3D simulation tool

As an innovative aspect in the EnEf Project, the learning platform includes an interactive 3D simulation tool of a building

This software, developed by the one of partners. Vicomtech, provides instant feedback on the efficiency of energy saving measures, that the student can be modified interactively.

This virtual building is a complement to the theoretical contents in the different learning modules that adds a new kind of graphical illustration.

The simulation presents the user a virtual building can be examined interactively from any point of view and remove or make transparent its different parts to reveal the interior.

A close-up view can show the different layers of insulation in external South-North or East-West walls, as well as roof.

#### Language · You can select any of the languages available in the list at the top right

#### Movement

- · Drag with left mouse button to rotate around the building Drag with right mouse button to rotate camera orientation
- Drag with both mouse buttons to move camera position left/right or up/down.
- · Use the mouse wheel to zoom.

#### **Right Menu** - Views

- Menus represent available points of interest
- The components can be shown or hidden with each check boy
- · The last menu tab contains controls for a few visual effects
- Bottom Panel Building control and performance
- system will simulate their effect visually and in the "performance" panel.

Start menu help

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#### Functions of the 3D simulation:

· allow SMEs to observe different practices in building industry with different energy consumption in different countries:

• be particularly useful for the development of a practical onthe-job learning, based on the simulation of best practices in the use of various energy efficient products;

· allow the calculation of energy saving and cost cutting.

#### Help

· Clicking on each will transition to the point of interest showing the necessary components. Some components can be made more or less transparent by dragging the slider bar.

· You can control the environmental conditions, energy sources, insulation, facilities, etc. and the

Loading.

Continue

### Operation of the tool

The user interface provides controls that can alter the environmental conditions: geographical location, time of day, day of year and wind speed, and building characteristics, and add or installations: remove renewable energy devices, heating, lighting, or insulation.

After any modification, the tool instantly calculates the energy related variables (air temperature, sun position, etc.) and graphically displays energy generation, heat losses and resulting energy consumption.



### Technical Requirements

#### The technical requirements to use the 3D tool are:

A Browser supporting WebGL. A good choice is Firefox or Google Chrome.

Firefox: version 4 or above. Recommended: Version 12. The latest version can be downloaded at: http://www.mozilla.org

Chrome: version 17 or above The latest version can be downloaded at: http://www.google.com/chrome.