



PROJECT FORMAR

'VOCATIONAL TRAINING ON SUSTAINABLE BUILDINGS MAINTENANCE AND REFURBISHMENT'

FORMAR project standard presentation

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Overall project objectives

The overall objectives of FORMAR project is:

- To develop training resources and modules to improve the skills on sustainability issues of workers of buildings maintenance and refurbishment;
- To improve the information available for clients and owners, through the development of a guide, to support the procurement decisions related to building products and materials.

Five Units of Short-term Training (UST) regarding sustainable issues will be developed for integration in the vocational training of:

- carpenters
- painters
- bricklayers,
- building technicians
- installers of solar panels

Also a transversal unit will be developed:

- transversal unit - sustainable construction and “nearly zero energy buildings”.

Priority: Implementing ECVET for transparency and recognition of learning outcomes and qualifications

- The methodological principles of the European Credit System for Vocational Education and Training (ECVET) will be used in the development of the UST.
- The training modules (unit program and session plans) will be developed based on the description of learning outcomes, leading to qualifications, grouped by units. Procedures and criteria will be developed for assessment of learning outcomes and the development of the proposal for the allocation of credits.
- The experimentation of qualifications and quality standards for ECVET will be made in the national contexts of the partnership.

Target groups

- Workers of the building construction maintenance and refurbishment sector: carpenters, painters, bricklayers, building technicians and installers of solar panels (adult population with at least level 2 of qualification);
- Vocational training centers, professional training schools for construction sector and universities;
- Other relevant stakeholders of the building construction, maintenance and refurbishment sector.

Project details

- Duration: 36 Months
 - 1 October 2013 – 30 September 2016
- Funding: Co-funded by Leonard da Vinci Programme
- Budget: Total project budget: € 532.500,00

Project partners: 9 partners – 3 European countries

Coordinator:

- LNEG (National Laboratory of Energy and Geology) – Research Center

Partners:

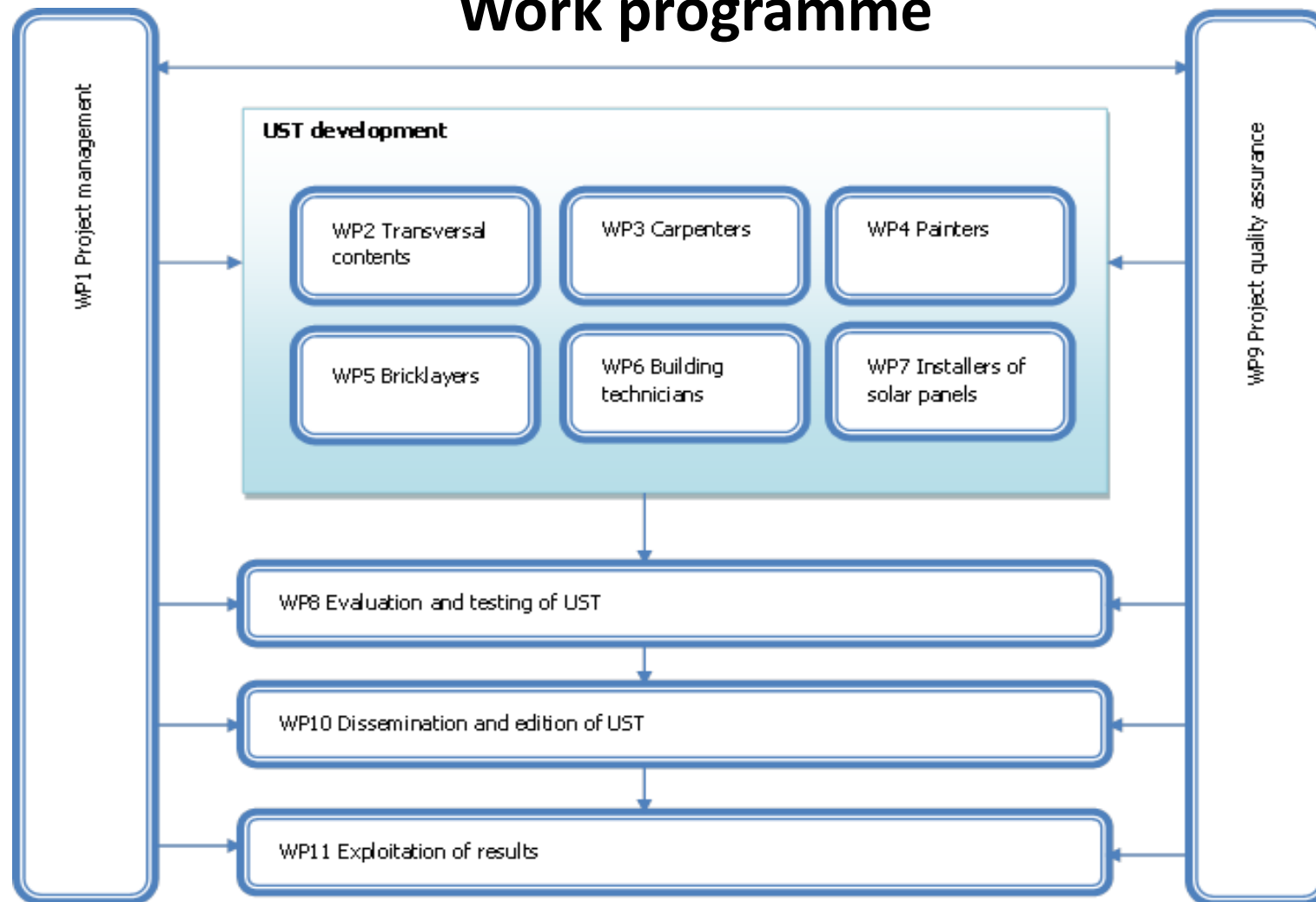
- CENFIC (Centro de Formação Profissional da Indústria da Construção Civil e Obras Públicas do Sul) - Vocational Training Center
- Bluecity Construction Lda. – private company devoted to sustainable construction
- Municipalities of Águeda and Faro
- CIRCE (Centro de Investigación de Recursos Y Consumos Energéticos) – Researcher Center
- FLC (Fundación Laboral de la Construcción) - Vocational Training Center
- NOBATEK (Centre de Ressources Technologique) - Researcher Center
- FCMB (Fédération Compagnonnique des Métiers du Bâtiment) – Vocational Training Center

Associated partners

- The associated partners will contribute to evaluate the training resources and modules, and are the National Advisory Group (NAG).
- Can be companies, consultants, business associations, universities, training centers, and national qualification agencies.

The associated partners cannot receive funding under the multilateral projects -
Development of Innovation.

Work programme



WP1 – project management (administrative, financial and legal)

Activities :

- Implementation of project management;
- Project partner meetings;
- Elaboration and submission of reports required by Leonard da Vinci programme;
- Monitoring, controlling and evaluation of the project progress - guiding all partners in order to carry out the activities on time and in-line with budget;
- Assistance of all partners regarding technical and administrative problems;
- Organisation and performance of the required audits;
- Communication with EACEA;
- Quality assurance, decision making, conflict resolution.

WP 2 to WP 7 work packages Implementation

- the core of the work programme -
- the activities are exactly the same in each WP -

Activities:

- Analysis of needs and existing training materials;
- Identification of best practices and constraints;
- Development of training modules: unit program and session plans;
- Development of the training resources: training contents, practical exercises, and trainer's manuals;
- Development of a client's guide to support its purchasing decisions;
- Translation from English to three languages: Portuguese, Spanish and French.

Skills that the trainees will acquire at the end of the training

- **WP2** – should be able to know the basic concepts and understand the importance of sustainable construction and “nearly zero energy buildings”.
- **WP3 –WP7** - should be able to choose more sustainable products, especially through the purchase of products that contribute to improved energy performance of buildings and improved indoor air quality, and to use a set of best practices for a more sustainable application, use and end of life of these products.

WP 2 – Transversal contents

Goal:

- To develop modules and resources which include basic concepts on sustainable construction and “nearly zero energy buildings”, introduction to life cycle assessment, life cycle assessment of buildings, environmental labelling, national and European standards and regulation related to sustainability and buildings.
- Lead partner: LNEG

WP 3 - UST Carpenters

Goal:

- To develop modules and resources which include basic concepts and relevant environmental aspects of glazing and coatings, considering their types and classification, product's life cycle, labelling and standards, best practices and recommendations for the phases of purchasing, installation, use and end of life of these products.

- Lead partner: CIRCE

WP 4 - UST Painters

Goal :

- To develop modules and resources which include basic concepts and relevant environmental aspects of paints, varnishes and coatings, considering their types and classification, product's life cycle, labelling and standards, indoor air quality, best practices and recommendations for the phases of purchasing, application, use and end of life of these products.
- Lead partner: NOBATEK

WP 5 - UST Bricklayers

Goal :

- To develop modules and resources which include basic concepts and relevant environmental aspects of glazing, thermal insulation and coatings, considering their types and classification, product's life cycle, labelling and standards, best practices and recommendations for the phases of purchasing, installation, use and end of life of these products.
- Lead partner: BLUECITY

WP 6 - UST Building technicians

Goal :

- To develop modules and resources which include basic concepts and relevant environmental aspects of paints, varnishes, glazing, thermal insulation and coatings, considering their types and classification, product's life cycle, labelling and standards, indoor air quality, best practices and recommendations for the building construction or refurbishment.
- Lead partner: CIRCE

WP 7 - UST Installers of solar panels

Goal :

- To develop modules and resources which include basic concepts and relevant environmental aspects of solar thermal systems and solar photovoltaic systems, considering their types and classification, product's life cycle, labelling and standards, best practices and recommendations for the purchasing, installation, use and end of life of solar panels.

This UST for installers of solar panels can be applied to two different training itineraries: installers of solar thermal systems and installers of (solar) photovoltaic systems.

- Lead partner: LNEG

WP 8 – Evaluation and testing of UST

Goal :

- To evaluate and test the work developed in WP 2 to 7. The results of evaluation and testing will be used to improve the UST.

Evaluation Activities:

The evaluation will be done in two steps in each country:

- A first evaluation - performed by the associated partners (the National Advisory Groups in each country), on-line (website) and in 2 evaluation workshops per country. The evaluation workshops will be organized by CENFIC in Portugal, by CIRCE/FLC in Spain, and by NOBATEK/FCMB in France.
- A second evaluation - will be done by other relevant stakeholders that will be identified by the project team in each country.

WP 8 – Evaluation and testing of UST (cont.)

- In Portugal, the second evaluation will be organized by the project partners CM Águeda, CM Faro and LNEG. In Spain, the second evaluation will be organized by CIRCE and in France by NOBATEK.

Testing Activities:

The testing will be done in classrooms and will be organized by the vocational training organizations of each country that are projects partners (CENFIC, FLC and FCMB).

This WP includes also the establishment of the national advisory group in each country.

- Lead partner: CENFIC

WP 9 – Project quality assurance

Goal:

- To ensure the quality of the processes and outcomes produced under FORMAR project
 - Includes the development of a Quality management plan.

The main benefits of the quality management plan is to increase effectiveness in the consortium to enhance stakeholders satisfaction, researching and understanding their needs and expectations, control the quality of the deliverables and measure the quality of the results.

The quality management plan will be settled in the kick-off meeting between all partners, and will be revised in all project meetings.

- Lead partner: LNEG

WP 10 – Dissemination and Edition of UST

Goal:

- To lay down the foundations for an effective internal and external communication and to spread the instruments built in the project to interested stakeholders at local, national and European level; also necessary to maximize the exploitation potential of the project results.

Includes the development of a Dissemination and Exploitation Strategy (DES) – divided in Dissemination plan and Exploitation plan.

Also includes on-line edition of all training resources and the edition in paper format of the client's guides, developed in WP 2 to 7 (final versions).

- Lead partner: BLUECITY

WP 11 – Exploitation of results

Goal:

- To maximize the exploitation potential of the project results and allowing the maintenance of the project website and the update of the developed products after the Leonard programme funding.

Includes the integration of the training modules in National Catalogue of Qualifications in each country.

The project will develop tangible products (training resources, clients' guides and tutorial videos) with potential commercialisation.

- Lead partner: CENFIC

Key targets

- UST training modules – 24 documents (6 per country + 6 in English)
- UST training contents (power-points) – 24 documents (6 per country + 6 in English)
- UST trainer's manuals – 24 manuals (6 per country + 6 in English)
- UST client's guide – 24 guides (6 per country + 6 in English) (online and printed version)
- UST tutorial videos – 3 videos (1 per country)
- National advisory groups – 3 groups (1 in each country)
- Evaluation workshops – 13 workshops (5 in Portugal, 4 in Spain, 4 in France)
- Classroom testing sessions – 3 tests (1 in each country)
- Quality management plan
- Dissemination and exploitation strategy
- Final workshops – 2 workshops (Spain and France)
- Final Conference – 1 in Lisbon

Key targets (cont.)

- Participation in scientific/technical conferences – 7 participations
- Scientific papers – at least 3 papers
- Partnership meetings – 6 meetings (2 in each country)
- Technical and financial reports – 2 reports

Project innovative character

- Enabling the trainees to take into account new prescriptions related to the sustainable construction and “nearly zero energy buildings”;
- Making the connection between the area of sustainability, the construction sector and pedagogical concerns related to the need of appropriate qualified professionals;
- Providing an opportunity for the development of the training itineraries more consistent through a transnational cooperation, allowing the adaptation of existing skills to the demands of the present job market, increasing the employability and the labour mobility;

Project innovative character (cont.)

- Allowing a joint reflection on the state of the art, analysis, comparison and improvement of the existing educational practices and how to integrate the sustainability issues;
- Providing the project partners with an innovative common European approach, adjustable to their national contexts;
- Considering the methodological principles of the European Credit System for Vocational Education and Training (ECVET) in the development of the UST, allowing its subsequent integration in the ECVET.

Time plan

WORKPLAN AND WORK PACKAGES																												Management	MNGT												
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Type of action:	Multilateral Project			36 months																																					
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