

WEEK RESEARCH



UNIVERSITÀ
DEGLI STUDI
FIRENZE

Ree-TROFIT ree_trofit

Training on Renewable Energy Solutions and Energy Efficiency reTROFITing

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Partnership
Lucense
Chamber of Commerce and Industry of Lucca

Technological Educational Institute of Crete

Chamber of Commerce and Industry Bács-Kiskun County

Chamber of Commerce and Industry Drôme

UNIFI | Interuniversity research centre ABITA Engineering College of Aarhus

Bulgarian Chamber of Commerce and Industry

European Labour Institute

Founding by
EU 'European Union under the Intelligent Energy for Europe Program' (Contr. N. IEE/09/886/S12.558310)

Keywords
Energy Efficiency, Building Retrofitting, Institutionalization, Training Model, professional qualification

REE_TROFIT aims to contribute to solve the shortage of local qualified and accredited retrofitting experts, as foreseen in the EPBD and its recast - and as indicated by various European countries in an assessment by the EC - for increasing the energy performance of the existing building stock.

REE_TROFIT will use in-house know-how and experiences of participants in carrying out vocational courses on innovative eco-building technologies to define best practices for institutionalization and implementation of vocational courses on renewable energy solutions and energy efficiency in retrofitting, set up and implementation of large-scale educational scheme in 6 MS for training more than 450 building professionals and by fostering exchange of knowledge and best practices among stakeholders. Provide suggestion to regional, national and European policy makers on how to incentivize the local retrofitting markets for full implementation of the EPBD, defining an exploitation strategy for assuring the sustainability of training beyond the project duration.

Research objectives

REE_TROFIT provides information on news and events cases and publications on energy efficient retrofittings in building specifically addressed to the project's main targets i.e. building professionals, trainers and training institutions, public authorities and citizens.

Specific information is provided for the local context by the localized site versions.

REE_TROFIT developed a training model which imparts skills and knowledge in low energy retrofitting specifically addressed to building professionals. This extremely innovative model first emphasise the experience of best practices of partnering countries and from there define an integrated training course where the formal and informal approaches coexist and complement each other, with the final objective of creating a training opportunity more adequate to the development of the building sector at a European level. The model, which refined within project three years, will seek to achieve two main objectives:

- Identify, define and describe the qualifications of professionals in the building sector, with a particular focus on low energy retrofitting and RES installations;
- Identify, define and develop innovative training courses based on a blended approach, which will allow the utilisation of a necessary mix of formal and informal training, utilising modern information technology where applicable.

Whether building professionals are preparing for a changing market, maintaining their knowhow, seeking support while working on a green building project, or simply looking to expand their green building knowledge, the REE_TROFIT model is available for training events. With the most innovative and highest-quality training program, REE_TROFIT helps green building professionals across all market sectors build the capacity to build their careers.

Results

REE_TROFIT has disseminated best practices and practical tools for easing the institutionalization and implementation of vocational courses on RES and energy efficiency in retrofitting in the project's partnering countries and beyond. REE_TROFIT has carried out institutionalized vocational courses based on the defined training model and resources in each participating country with about 450 trained and certified professionals with the goal of extending its training model and resources outside the consortium. REE_TROFIT has raised awareness of regional, national and European policy makers and provide suggestions on how to incentivize, de-bottleneck the local retrofitting markets for full implementation of the EPBD, while implementing an exploitation strategy for assuring the sustainability and massive replication of training during its lifespan and beyond.

ree_trofit
Training on Renewable Energy Solutions and Energy Efficiency in retrofitting

ree_trofit Project
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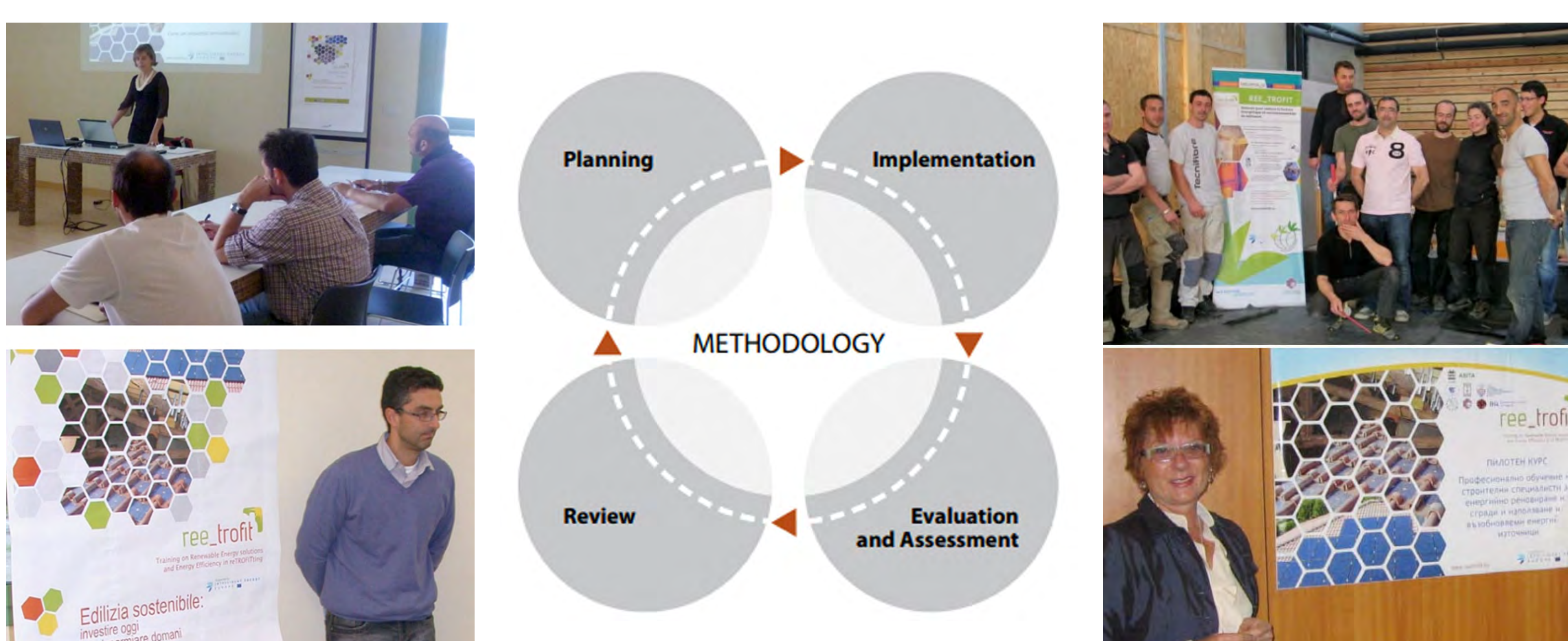
News & Cases
REE_TROFIT provides information on news and events cases and publications on energy efficient retrofittings in building specifically addressed to the project's main targets i.e. building professionals, trainers and training institutions, public authorities and citizens. Specific information is provided for the local context by the localized site versions. More general information may be available in the English site version.

Top News
Solar Decathlon Europe 2014 competition in Versailles at "La Cité du Soleil", 27/6-14/7/2014 (Monday 12 August 2013 - 4h)

Solar Decathlon Europe is an international competition among universities which promotes research in the development of efficient houses. The objective of the participating teams is to design and build houses that consume as few natural resources as possible and produce maximum waste products during their life cycle. Particular emphasis is put on reducing energy consumption and on obtaining all the necessary energy from the sun. The competing teams are all battle-ready. <http://www.solardecathlon2014.fr/en/page/versailles-2014>

	IT	DK	HU	BG	GR	FR	TOTAL										
DATA RELATED TO THE THREE BATCHES (TOTAL AMOUNT)																	
N. of delivered hours	148	54	80	36	35	41	48	48	112	90	85	49	49	91	969		
N. of participants	42	64	46	150	111	120	121	52	54	55	187	216	188	11	8	58	1483
N. of qualified professionals	34	47	32	150	101	112	118	48	50	52	164	203	182	0	0	0	1293
DATA RELATED TO THE LAST BATCH																	
General opinion about the training courses	4,4	4,5	4,3	4,3	4,9	4,5	4,3	4,5	4,5	4,5	4,6	4,2	4,6	4,2	4,2	3,8	
Acquisition of new knowledges and skills	4,3	4,6	4,1	4,0	4,7	4,2	4,1	4,5	4,4	4,6	4,3	4,1	4,3	4,1	4,0	3,6	
Job usefulness	4,2	4	4,3	4,1	4,6	4,3	4,0	4,2	4,3	4,3	4,6	4,1	4,2	4,0	4,0	3,8	
Adequacy of time dedicated to each topic	3,7	3,7	3,6	4,3	4,0	4,0	4,5	3,8	3,9	3,7	4,4	4,3	4,3	4,3	4,3	3,4	
Capability to effectively apply the knowledge or skills on the job	3,5	3,1	3,7	4,2	4,5	4,6	4,5	4,1	4,2	4,3	4	3,9	4,3	4,2	4,3	3,4	
Level of interest for the topics	4,5	4,0	4,3	4,4	4,6	4,2	4,1	4,4	4,6	4,5	4,1	4,3	4,6	4,0	4,0	3,4	
Trainers evaluation	4,7	4,6	4,7	4,5	4,9	4,8	4,5	4,8	4,8	4,9	4,6	4,3	4,7	4,5	4,4	4,1	

NOTE: evaluation is expressed using a scale of 1 (low) through 5 (high)



PUBLICATIONS

Ceccherini Nelli L. 2016, *Energy Efficiency in Retrofitting a European Project for Training on Renewable Energy Solutions (REE_TROFIT)*, in Renewable Energy in the Service of Mankind Vol. II, Springer

Ceccherini Nelli L., Sala M. 2015, *An innovative training model for eco-building technologies in retrofitting*, Cisbat Congress Losanne, vol. 1, pp 143-148

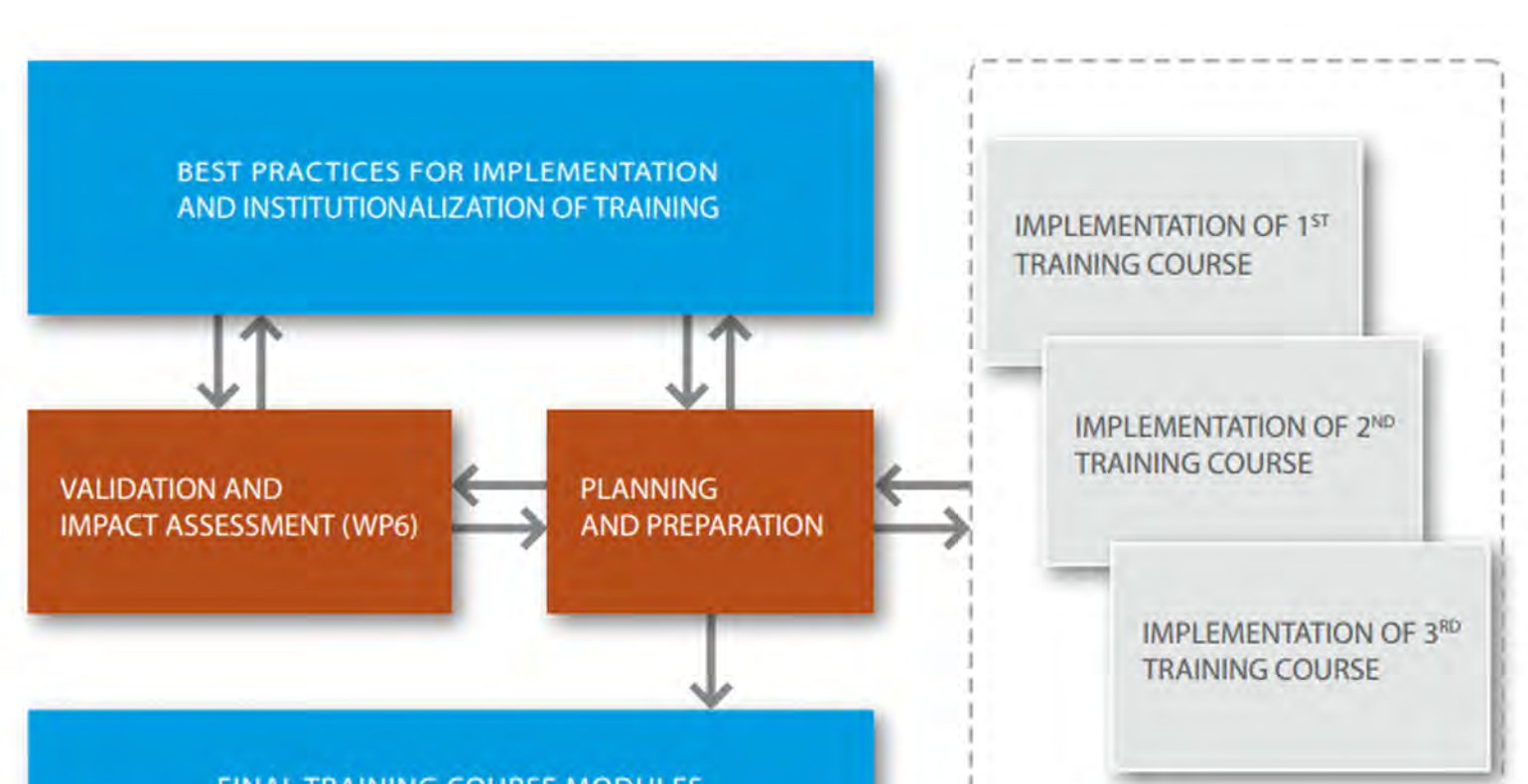
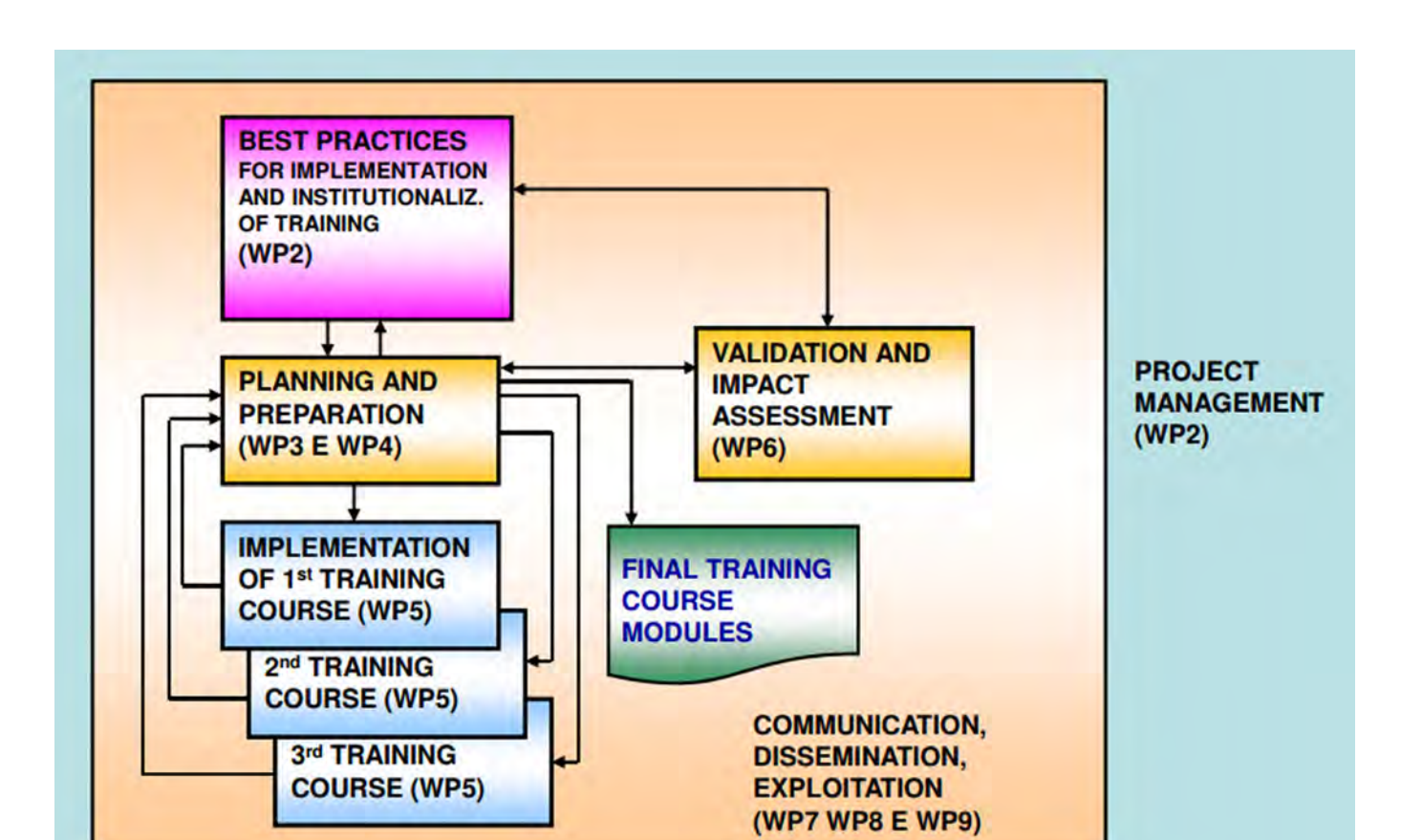
Ceccherini Nelli L. 2014, *Energy Efficiency in retrofitting an European project for Training on Renewable Energy Solutions (REE_TROFIT)*, in World Renewable Energy Congress 2014 - WREC2014, University of Kingston, London, Springer, vol. 2

Gallo P., Ceccherini Nelli L. 2012, *An innovative project on Training on Renewable Energysolutions and energyEfficiency in retrofitting (REE_TROFIT) ree_trofit*, Salford University, Salford University Press UK, pp. 123-128.

Ceccherini Nelli L. 2012, *European project for Training on Renewable Energy solutions and energy Efficiency in retrofitting (REE_TROFIT)*, in M. A. Rosen (a cura di), 2nd World Sustainability Forum, MDPI, Basel, Switzerland

Ceccherini Nelli L. 2012, *Retrofit and new PV integrated Buildings in Tuscany, Italy: case studies*, in M. A. Rosen (a cura di), 2nd World Sustainability Forum, MDPI, Basel, Switzerland

TRAINING ACTIVITIES



INTERUNIVERSITY CENTRE
ABITA

19 - 23 FEBBRAIO

FIRENZE