



**Project: TRAINENERGY**  
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## **Impact Analysis**

### **Deliverable 7.6**

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## 1 Introduction

The aim of this analysis is to identify how much the training courses impact on the market. This is done by analysing the feedback from the given courses, the results from the survey asking the tradesmen in general and the impact to each institute.

## 2 Impact in each country

The impact of the TRAINENERGY project is individual in each country. It is very hard to assess the impact on the whole European market due to missing instrument and budget to do a full Europe wide survey.

### 2.1 Germany

#### 2.1.1 Impact for the Individual

The impact for the individual tradesmen can be measured by the feedback given after the course. The feedback of the participants showed clearly that they had the feeling that their knowledge has increased and the course had been found valuable. Most participants praised the practical demonstrations of the course. Most participants were just tradesmen (without having a master- or engineer degree, Building energy rating assessor, etc.), which are the target group. To get a positive feedback from this group means that the developed material and its presentation is in general right.

An online survey was started after the course to determine the dissemination of the course among the target group. Also questions about the need of such a course were given.

It was clearly stated that the tradesmen thought they do need such training and are willing to participate in such a course. It is also obvious that we have a gap between well trained "Gebäudeenergieberater" (Building energy rating assessor) and the usual craftsmen in Germany. This gap will be filled in future with the "Gebäudeenergiwerker" how we called the Trainenergy course in Germany.

#### 2.1.2 Impact for Institute

Being a centre of vocational excellence for timber constructions and finishing and offering courses usually only for carpenters, we were forced to think about other trades in this project. We had to find external teachers for certain modules that could not be handled by our own staff. The problems regarding the interaction of the different trades on the building site had to be looked at from the other end and not just from our point of view.

This project was an eye opener for us and lead to a more active interchange with vocational centres and institutes focused on other building trades. The course will be given every year now, if possible even more often than only once a year depending on the number of people participating the courses. The need for this kind of course is there, the question is if companies are willing to release their staff in this time when there is a lot of work to do.

### 2.1.3 Impact of Certification

The certification process is not finished yet.

By choosing the ZertBau for the certification a well known and highly anerkanntes system is going to be used. One of the reasons ZertBau was chosen is the relative short time needed to get a course certificated. The other possibility would have been the certification by the Chambers of Commerce. This would have meant an even longer time to get a certification for the course.

The certification of the course will certainly help to market the course. Participants can use this official certificate to demonstrate their advanced knowledge. Employers will have a higher motivation to release their employees for a two week course if they can document the knowledge level of their employees and therefore their company afterwards.

The fact that the building industry is very busy right now doing retrofitting could cause a run onto the courses on the one hand side. On the other hand it could mean that the companies can not afford to release their employees for two weeks.

### 2.1.4 Integration of other Institutes

The Trainenergy project was presented at two meetings of the network of competence centres for building. The attendant centres were very interested in the project and some of them want to offer this course in their facility. The following competence centres are in contact with us:

Handwerkskammer Bildungszentrum Münster (HBZ)  
48163 Münster  
[www.hbz-bildung.de](http://www.hbz-bildung.de)

Berufsförderungswerk der Südbadischen Bauwirtschaft GmbH  
77815 Bühl  
[www.komzet-bauen.de](http://www.komzet-bauen.de)

Handwerkskammer Trier (HWK Trier)  
54292 Trier  
[www.hwk-trier.de](http://www.hwk-trier.de)

Ausbildungszentrum-Bau in Hamburg GmbH (AZB)  
22309 Hamburg Homepage  
[www.azb-hamburg.de](http://www.azb-hamburg.de)

Handwerkskammer Osnabrück-Emsland  
Berufsbildungs- und TechnologieZentrum Osnabrück  
49088 Osnabrück  
[www.kompetenzzentrum-versorgungstechnik.de](http://www.kompetenzzentrum-versorgungstechnik.de)

Berufsförderungswerk e.V. des Bauindustrieverbandes  
Berlin Brandenburg e.V.  
03052 Cottbus  
[www.bfw-bb.de](http://www.bfw-bb.de)

We are confident that the first courses can be offered in winter 2011/2012, soon the certification process has been finished.

#### 2.1.5. Others

A problem that still exists and we are unable to solve is to reach the craftsmen. They can be reached indirectly through their companies. This means the owner of the company can decide if he passes on the information about our course or not. We have not found a direct way to address the craftsmen.

Adds in professional interest magazines reaches only a few craftsmen directly because these magazines are rather expensive, can be only subscribed to and not bought in a newsagency and are usually not passed around to the workers on the working floor in a company.

Posters in the institute do reach only those who are on vocational training already. It is unlikely that these craftsmen are allowed to visit another course in a short time again.

Websites regarding vocational training are often not visited by the craftsmen.

Radio- or TV-spots are far too expensive to be used to promote a course.

The only direct way is to send a brochure via mail to people that have attended vocational courses in the past. This number is certainly limited and does not reach those who have never been in a course yet.

## 2.2. United Kingdom

The work package 7 encompasses the work of the following:

- Targeting a group of 500 persons - craftsmen trained - a total of 500 certificates to be awarded in the project through out the EU countries
- Producing a total 500 evaluation reports of the test courses from the 6 countries involved
- Offering 2 presentations / country at relevant umbrella organisations in each country.
- Updating the internet sites of each of the training providers used in each consortium.
- Producing articles in specialised publications (10 articles to be produced by partners with TRAINING PROVIDER role) Typically Newsletters to the umbrella organisations (Chamber of Crafts, Professional Associations of SME's in the construction trade, networks, organisers of trade fairs and exhibitions)

The evaluation reports demonstrate tangible evidence of the impact of the project with the learners attending the courses in the relevant countries. Overall, a small amount of learners thought that they had a poor competence in the area of the energy performance of buildings. The vast majority thought that they had a good competence. Despite this, an overriding majority of attendees also thought that their level of competence was very good after the course, and that the training was very good too. This would indicate that all of the learners did learn from the course and significantly more than they expected to.

Consequently, the courses can be viewed as a significant success in the aim of communicating the EU Energy Performance Buildings Directive and its consequential contents to crafts/trade people throughout the member states involved.

The summary of the received completed questionnaires were very positive and in turn praised the practical training, equipment, content, and facilities in all. Therefore, from the summary and individual comments, indications suggested that the learners felt equipped to provide improved energy efficient solutions in the construction of dwellings. In addition, the

learners also felt that they had a better understanding of the impact of their own work on the energy efficiency of a building, but also the impact of other crafts on the energy performance of a building too.

Some feedback offered told us that they felt that the courses should have been longer in duration as they all wanted to know more about the topics presented.

In all, the success of the project has improved the understanding of:

- how the crafts people work in a building
- how the crafts people work with each other and between each other in a building
- how they understand and view the European Buildings Performance Directive in a more positive manner
- the reason why specific regulations in the individual countries exist and their implication in the industry

Such has been the success, that teaching colleagues are using the material to extend an understanding in their teaching of related subjects in their day to day work. Also, attendees have either enrolled or attended further courses in the institutions.

## 2.3 Spain

### 2.3.1 Impact for the Individual

People who completed the course in Valencia (Spain) stated that they were generally satisfied with contents, facilities, trainers and materials. However some of them mentioned that some aspects should be covered with more details or that the duration should be different. Most of them said that they thought that the courses would help them to develop their professional careers in the future.

### 2.3.2 Impact for Institute

Some participants showed interest in attending similar courses to the one organized within the Trainenergy project to deepen their knowledge in some areas. AIDICO department is taking this interest into consideration to develop further training actions.

AIDICO also got involved in IEE-BUILDUP initiative with the BUILD GREEN project, which aims to develop the Spanish roadmap to train craftsmen in the construction branch in all energy-efficiency related issues. The consortium is led by the Labour Foundation for Construction Sector (FLC) and includes as partners the Spanish National Qualifications Institute (INCUAL) and General sub-directorate of building innovation and quality, a public entity attached to the State Department of Housing, Ministry of Public Works.

### 2.3.3 Impact of Certification

Our course was finally recognized by the local Education Authority as a course and certificates were issued by AIDICO but including the local Education Authority logo as well. The recognition was not the reason for participants to enroll the course, as this recognition was not confirmed when advertisement started, however it might help to attract attendees in the future.

#### 2.3.4 Integration of other Institutes

So far no other organization has communicated us plans to implement a course based on Trainenergy training programme, but AIDICO would be very pleased to cooperate if any institute or private center did. Feedback received from organizations was positive.

### 2.4 Ireland

#### 2.4.1 Impact for the Individual

The feedback from the TRAINENERGY participants was extremely positive. The biggest challenge facing the course developers was to transfer knowledge of relatively complicated material to tradespeople, who had vast practical experience but very little training in energy performance of buildings or the building regulations. The feedback from the Train the Trainers course in Biberach was taken into account and the training material was heavily complemented with practical hands on experience. Eg. A thermal image camera and Blower door test equipment was purchased. The feedback highlighted the quality of the notes, and it was felt that the added practical work, benefited the learner in understanding the relatively complicated training material. There was also a common request from the vast majority of course attendees, that a follow on course would be made available to them so that they can follow on with their learning experience. The course was seen as a resounding success.

#### 2.4.2 Impact for Institute

TRAINENERGY had a very positive Institute impact. The course highlighted the need for training of tradespeople and also gave participant the courage to go on to further higher education. There was a common fear of returning back to the classroom at the beginning of the course but the consensus afterwards was that participants would like to further educate themselves. The institute had a large number of participants who in turn attended the PHASE programme (Passive House and Sustainable Energy using timber frame technology) and a number of Sustainable Energy courses including, "Introduction to Sustainable Energy Systems", "Wind Energy", "Sustainable Energy in Buildings", "Wave Energy". These courses can in turn lead to major awards in Sustainable Energy Technology or Building Services.

#### 2.4.3 Impact of Certification

During the promotion of the course with tradespeople, the most common question was "what qualification will I receive at the end of this course?" This highlighted the need to develop a module that would allow participants to apply for certification on successful completion of the course. We in turn developed the module "Building Energy Performance". The module was approved by two external experts, one industrial and the other academic". The module was subsequently approved at five ECTS (European Credit Transfer System) credits at level six on the national framework of qualifications. These credits can then be used towards major awards and are recognized throughout Europe. This was a major selling point in recruiting participants onto the course.

#### 2.4.4 Integration of other Institutes

TRAINENERGY was very beneficial in setting up links with other institutes both nationally and internationally. Within Ireland, both Tipperary Institute of Technology and Blanchardstown Institute of Technology were both directly involved in the delivery and promotion of the TRAINENERGY programme. This network has helped to develop closer ties across the country. TRAINENERGY was also very beneficial in creating links between CIT and our European partners. We in turn developed the course PHASE (Passive House and Sustainable Energy) Technology using timber frame construction, partnering with Kompetenz Zentrum Holzbau & Ausbau, and funded through the Leonardo Da Vinci Mobility programme, to send in the region of 100 students to Germany. The takeup from former TRAINENERGY participants on this course has been exceptional.

## 2.5 France

### 2.5.1. Impact for the individual

The feedback after the course:

The trainees were interested and proud to be part of a European training process.

Some of the texts were kept in English language and used by English teachers as material for their courses; this reinforced the cooperation among the training team and helped the trainees to think about mobility possibilities.

The response to the questionnaire 8.1.2 (Online-survey after the first course):

The training modules gave the trainees a wide overview of the different possibilities to provide energy efficient solutions to their clients. They admitted the quality of the necessary interaction between the different trades of the craftsmen and it became clear for them they had to work with each other. The training modules were regarded as a whole coherent pedagogical material. But they would have liked more practical training examples.

### 2.5.2. Impact for our institute and network

Did participants book even more courses?

It depended on their status and on the financing regulations and opportunities.

The training modules will be used during the next school year (2011-2012) for new training sessions dedicated to the school directors, training centres managers and their teams (internal financing by the Academy).

### 2.5.3. Impact of the certification?

Has the certification been recognised?

Yes. The certificate is delivered and signed by high school and training centres directors who are the representatives of the French ministry of education. For a significant part of the trainees the training and the certificate are part of the official curricula in the vocational paths of the building and energy saving sector. The modules have been supported by the Inspectors leading this sectoral training and they also actively participated to the information, training and dissemination of the project.

Did it help to find participants?

Yes, it helped during the project with respect to the free access to the modules.

Will it help to sell the course in future?

In the future we think that the candidates will be mainly interested by the global training and certificate which is financed by the local authorities and by the professional organizations. Nevertheless we will ask for financing for the TRAINENERGY modules themselves.

2.5.4. Integration of other institutes work?

What feedback did you get at the presentations of the project?

Some of them have been very interested in the process implemented in the frame of the TRAINENERGY project.

Some others already have implemented their own information and training materials.

All of them agreed on the relevancy and necessity of such training and materials. They asked for further cooperative work in order to create additional practical materials.

## 2.6 Denmark

### 2.6.1 Impact for the Individual

The individuals attending the courses were in general fully satisfied with the course. Some of the participants showed a great interest in the course and indicated that if we would come up with a follow-up course they would gladly participate. It is hard to judge whether this will be the case once the course gets part of our regular scheme – and the participants will have to pay at least some of the course fee.

Most of the participants indicated that the course would have an immediate influence on their work – and it seemed to a large extent that our initial idea of awakening them with more concern for the energy efficiency in the building process and not least respect for other trades in this process has paid off. The questionnaire shows to a large extent these indicators, and first and foremost the questionnaire also confirmed our worries; namely that future courses will have to be based on hands-on issues. Our average Danish course participant is delighted to learn new tricks and gain competences, but it has to be practical.

The course that we delivered was very much characterized by practical examples and even project work where participants would have to work in teams. (Where the composition of different trades would allow it we would mix the groups consisting of different trades.)

In general the participants indicated that the course was beneficial for them also in the search of new positions. They indicated that they would use the certificate in their process of applying for new jobs, and they felt assured that this adequate qualification would and will help them tremendously

### 2.6.2 Impact for Institute

The impact on our institution has been very big. And the impact falls in two categories; the first one internally and the second one in outreach character, looking for new ventures and possibilities. Firstly the TrainEnergy project has led to the fact, that different departments now have a joint focus on energy saving and optimizing issues. Prior to the project and in the

particular the course, these departments would work almost independently trying their best to go solo if going at all was the case. Now after the course we have united the departments and have started creating a Centre of Excellency around Energy where the different department all have shares. Our starting point was the department of woodworking. We have used the project to break the ground for this collaboration between different departments – we have so to say taken the same medicine as we have expected our course participants to do; working across different profession barriers.

The second important outcome of the course has been our outreach. In the process of promoting the course we took at an early stage contact to both federations of employers and the respective unions. We engaged ourselves via our representative in the steering committee in a regional group that has energy on the political agenda (Energiklynge Fionia) We have held numerous meetings with the organizations partly to promote the course and partly to discuss the sustainability of the course after the funding stops. We all agree that the course has been a booster for the tradespeople and that it will affect their performance in the years to come but we need many more to join the movement. We need the involvement of these different political organisations when we are going after national funding for the continuation of the courses. We have discussed with both sides of the labor market how we could implement the course and make it mandatory for coming workers in the building sector. And our forces will now be this double perspective. Partly we will work for retraining and upgrading courses and partly we will work for a change in the curriculum for the existing educations for bricklayers, carpenters and plumbers.

Finally we are – as a consequence of the course - taking part in joint application in a so called “Green Lab” application where we will provide the hands-on lab facilities and do the in-service training part. The program is a national program under the Ministry of Labor.

### 2.6.3 Impact of Certification

The certification has not yet been approved. We have two possible paths to follow. As indicated in the project at an earlier stage the process on how to achieve formal recognition of competences has a number of implications that we are considering to follow at this stage. A more simple path would be to “adopt” the course to existing learning objectives and that would give the participants a recognized certificate but with some different learning goals – (we can alter the content 20% in respect to the already approved competences.)

We have decided to work on new set-of competences. We have patented the concept “Energihåndværker” and are currently making a domain on the internet accumulating the knowledge and the expertise that we have gathered in this field.

It was important for the course participants that they in the end got a certificate. And since we are a brand in the world of builders a certificate with our name on it – and therefore our regional Trade Committee’s name on it – this certificate in the first place will serve as sufficient proof for future employers. But in order to attract future participants we need to have the formal recognition. There is also the money matter. If we want to be able to get supporting funding from our labor market training system – a system that allocates supporting funding for skilled workers to be trained – we have to apply for this new education hence competences. Also here we are working across the college and have our department for labor market educations onboard.

It goes without saying that experience is a good teacher but certificates open doors.

#### 2.6.4 Integration of other Institutes

It has been a pleasure all the way through the project to work together with the umbrella organisations. Our stakeholders have been very positive around the project. I gathered from the very beginning that they deem this change and this option necessary for the members. In other words if the members do not change behavior and add competences we will not be able to live up to the goals formulated by the EU and the Danish government. And it takes the updated builders to reach these goals.

The building industry is very conservative. So in order to work with changes it takes more than good intentions and patience. It first and foremost takes a strong network. The project has offered an opportunity for us to come even closer to our partners in this joint effort to raise the level of competences among members. We as a provider have a vested interest in this stronger relation to the stakeholders both in terms of new clients for our courses but also for keeping abreast the general situation in the market.

Our stakeholder have been a strong asset during the entire project period.