



Energy Training for Building Construction Workers for Low Energy Buildings

BUILD Up Skills QualiBuild



## Report Title: Roadmap Implementation and National Roll-Out: Sustainable Funding Plan

Report No: D6.1 v3.0

Report Published Date: Aug 2016

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Co-funded by the Intelligent Energy Europe Programme of the European Union

Document history				
V	Date	Organisation	Author	Description
1.0	July 2016	LIT	P. Cullen	Initial version
2.0	July 2016	LIT	C. Lynch	Final draft for review
3.0	Aug 2016	LIT	P. Cullen	Final Version

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## Executive Summary

The QualiBuild project is part of the EU's Build Up Skills programme which is aimed at upskilling the construction workforce across Europe, particularly with regard to energy efficiency in building construction. The Build Up Skills Ireland (BUSI) project which preceded the QualiBuild Project identified the need for enhancing the knowledge of construction workers in Ireland and of those who train them. It also identified the need to develop a mechanism or register, through which those with the required knowledge and skills could be identified and acknowledged by others in the construction sector, or those who would require their services.

The QualiBuild project which was a response to the BUSI review, was, therefore, primarily focused on three key areas.

1. First, the design and piloting of a training programme – Foundation Energy Skills (FES) - for construction workers to upskill their knowledge in energy efficiency and associated construction techniques.
2. Second, the development of a course to train-the-trainer and upskill those charged with delivering the FES programme.
3. Finally, the development and piloting of a skills register for construction workers.

While these were the three key elements of the project, however, another important element of the project was to examine how the programmes developed and piloted during the project would be rolled out at a national level.

The successful rollout of the training programmes requires a number of key things –

- 1) An organisation willing and able to take on the responsibility and coordination function for the roll-out
- 2) Finance to pay for the programme delivery
- 3) Organisations willing to deliver the training courses
- 4) The development of a mechanism, such as the Construction Worker Skills Register, which would make it worth the while of construction workers participating in the courses and

- 5) The continuous promotion and highlighting of the programme and the register and of their importance.

Based on costs associated with the delivery of the FES Pilot Training Programme and from feedback received from trainees and their employers, it is likely that future training courses could be self-funding. Interestingly, trainees and their employers both agreed on the fee which should be payable for the course and both parties expressed a willingness to pay for the training. Furthermore, subsidisation of training costs (20-30% reduction) would be available to employers by way of the Skillnets programme which would reduce the cost to participants and employers. Skillnets is funded through the Irish National Training Fund. Employees can attend a range of Skillnets courses at no cost to themselves once their employers join a training network. Approval has now been granted for the setting up of a Skillnet to allow the roll-out of the FES programme.

Various other financial mechanisms which might support the cost of training were also explored. This report addresses potential financial mechanisms.

REPORT 6.1

SUSTAINABLE FUNDING

## Report 6.1 Sustainable Funding

### 1.1 Background

A core gap identified during the Build Up Skill Ireland (BUSI) Status Quo Report research and Roadmap development was that a common understanding and knowledge of energy principles, in particular those applied to low energy buildings, was lacking across operatives and craft workers in the building construction sector. One of the main deliverables of the QualiBuild Project was the development and delivery of a Foundation Energy Skills (FES) training programme.

The FES learning materials were developed and the course was piloted and rolled-out nationally. Training took place at a number of training centres across the country. The project objective was to train 200 workers. 195 participants successfully completed the programme – a 97.5% level of achievement.

The analysis of the National Status Quo Report and consultation undertaken under BUSI also identified the need to up-skill trainers involved in construction-related craft apprenticeship training to reflect the new emphasis on energy performance of buildings. Another project deliverable was, therefore, to develop an up-skilling programme (Train the Trainer) and materials to support 100 craft trainers in the delivery of FES training for construction workers. 57 participants successfully passed the Train the Trainer Course. This was a relatively low rate of achievement. It was clearly related to the major down-turn in the construction industry in Ireland which had occurred in the recent past. This gave rise to a reduction in those who were willing to continue to engage in the training of construction workers as a profession. There is evidence within the Institute of Technology sector, that when the number participating in construction industry courses declined by such a substantial amount that many of those who had been lecturers in construction-related departments, changed their focus and either obtained new jobs or became lecturers in other areas. Most of these were not interested in returning to training of construction sector members.

One of the objectives of the QualiBuild Project was to hand over the above deliverables plus the Construction Workers Skills Register (CWSR) to a national body/agency which would take

on the responsibility for rolling-out said training programmes to an estimated 60,000 to 100,000 building construction workers currently employed in the sector and also manage and operate the CWSR.

In order for this objective to be achieved, it was recognised that a sustainable funding model would be required.

## 1.2 Introduction

An analysis of current funding mechanisms in Ireland and the EU was carried out to ascertain the most suitable funding mechanism that would be sustainable into the future. The main focus was on the Foundation Energy Skills Programme (FES) as an estimated 60,000 Building Construction Workers (BCWs) were identified in a previous project (BUSI Status Quo Report) as having significant gaps in their construction knowledge –specifically in the area of Energy Conservation/Efficiency. This figure of 60,000, however, related to a period when the construction sector was at a low ebb and the figure may be closer to 100,000.

It was assumed for this report that there are sufficient trainers trained (57) from the Train the Trainer Programme to deliver a future National Roll-Out of training for 60,000 to 100,000 workers. If, due to the increases in the number of construction workers, additional trainers do need to be trained in the future then IT Blanchardstown or IT Sligo would be best placed to deliver any additional courses due to the experience in delivering the original Train the Trainer Pilot Programmes.

The QualiBuild Project incurred some unforeseen delays with some of the Project Work Packages and the plan to hand over the deliverables at the end of the project was unfortunately not finalised, though discussions have been commenced with SOLAS the national body most appropriately placed to undertake the task, and the respective Government Departments. However, in order to maintain the momentum developed during the project and FES pilot scheme, an interim solution to continue delivering the FES course (albeit on a limited scale) is currently being developed.

The exact details of the interim solution such as course costs, quality assurance, training centre locations etc. are still being finalised but it is expected that agreement will be found amongst the interested parties and that the course will be rolled out again in Sept/Oct 2016.

The preferred long-term solution is for SOLAS to take over responsibility for the National Roll-Out. A meeting with senior SOLAS staff which was held close to the completion of the QualiBuild project suggested that SOLAS would, if the circumstances were appropriate, consider bringing the FES and Train the Trainer programmes within its remit. These circumstances would include the provision of funding to allow SOLAS to undertake the project and a consensus amongst the relevant Government departments that the project should be implemented.

### **1.3 Existing and Potential Sources of Funding**

As part of the identification of a sustainable funding model, existing and potential sources of funding were reviewed.

#### **1.3.1 Direct payment for training by building construction workers and their employers**

One of the most straightforward mechanisms for funding the roll-out of the FES and, indeed, the Train the Trainer programmes is by direct payment by the participants. In the course of the evaluation of these programmes construction worker participants indicated that they would be willing to pay as did their employers. Participants on the Train the Trainer programmes indicated a similar attitude. If this is reflective of the industry in general, then the greater part of the cost of the programmes could be generated in this way. If assistance were provided through a dedicated Skillnet programme, then this would reduce the cost and, in effect, act as a small subsidy to the cost of the programme delivery.

#### **1.3.2 The National Training Fund (NTF)**

The NTF<sup>1</sup> is mainly resourced by a levy on employers of 0.7% of reckonable earnings of employees in certain employment courses, which is collected through the PAYE/PRSI system.

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<http://www.education.ie/en/Publications/Corporate-Reports/Financial-Reports/1>

This is used to fund the Skillnet programme amongst other things and, as noted above, Skillnet might be used as a mechanism for assisting the delivery of the programmes in question.

### **1.3.3 European Social Fund**

The ESF<sup>2</sup> provides co-financing for a range of training courses to meet the needs of unemployed persons or other job-seekers, including those in receipt of or eligible for jobseekers payments or credits.

The fund is delivered via the Programme for Employability, Inclusion & Learning (PEIL) 2014-2020 and is the only ESF Programme in Ireland for this period. PEIL contains a total budget of €1.153 billion. The ESF will contribute €542.43 million, the EU Youth Employment Initiative budget will contribute €68.145 million and the Exchequer will contribute €542.43 million.

### **1.3.4 The European Globalisation Adjustment Fund (EGF)**

The EGF<sup>3</sup> was established in December 2006 to support workers made redundant as a result of major changes in global trade patterns and its purpose is to provide supports to redundant workers to improve their employability and to assist them back into employment. The fund covers education and training programmes, career advice and guidance, and enterprise supports. Receipt of EU EGF funding is conditional on provision of matching national funding. At the end of 2015 Ireland had made 10 successful applications to the EGF, seven of which have now closed. Three of these applications covered almost 9,000 workers and apprentices made redundant in three sectors of the Construction Industry<sup>4</sup>.

### **1.3.5 Energy Companies & Financial Institutions**

As part of research for this report a number of Energy Companies were approached and sounded-out on their willingness to contribute to a 'publicly administered training fund' with the view that it would provide financial assistance in helping fund the National Roll-Out of FES and other future Specialist Training Courses. Many of these organizations already fund worthy causes (charities, sports, the Arts etc.) through sponsorship and state their commitment to energy efficiency in their marketing and advertising. They were first approached on the subject of sponsorship at the recent SEAI Energy Show at the RDS Dublin.

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<sup>2</sup> <http://www.esf.ie/en/>

<sup>3</sup> <http://www.education.ie/en/The-Department/Management-Organisation/Skills-Development/EGF-Managing-Authority.html>

<sup>4</sup> <http://egf.ie/egf-programmes/closed-programmes/construction/>

However, it soon became apparent that Energy Companies view the idea of sponsorship as a way to connect with their existing customers and also a route to forge relationships with potential customers. The only return on investment for sponsorship that the QualiBuild Project Team felt they could offer or guarantee the parties that were approached was to present them with a route for addressing their Corporate Social Responsibility and also presenting the possibility for Company Brands/Logos to be displayed on learning materials. So although all companies concerned were positive about the need for quality training the return offer was not deemed sufficiently attractive for financial commitment through sponsorship to be made.

A high street bank was also approached to gauge its interest in sponsoring the FES training programme. This was based on the view that if the bank were lending self-build mortgages to their customers it would be in its interest that quality trained construction workers would undertake those works. Like the Energy Supply Companies the bank was very positive about the FES training programme but unfortunately there was a limited budget for sponsorship and because self-build mortgages were only a small part of the overall business it felt unable to commit funds towards sponsorship of FES. While it is acknowledged that this is only a small sample of financial institutions, it is felt that the response from this institution is likely to be reflected in that of others.

### 1.3.6 Paritarian Social Funds in the Construction Industry

Paritarian funds for Vocational Training have been established between the social partners in the construction industry in some of the more progressive EU states such as Belgium, Denmark and Germany. These countries believe that if 50% of turnover is achieved through the labour of the workers, qualified workers are **essential** for the future of the sector. Currently there are two Paritarian funds in Ireland: - Construction Industry Monitoring Agency (CIMA)<sup>5</sup> and the Construction Workers Pension Scheme (CWPS)<sup>6</sup>. CIMA's role is to investigate complaints of non-compliance with the Registered Employment Agreement (REA)<sup>7</sup> and CWPS allows employers to fulfil their legal obligations under the REA to provide pension, sick pay

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<sup>5</sup><http://paritarian-funds-construction.eu/fund.php?id=15&cat=&country=&kw=&adv=&offset=1>

<sup>6</sup> <http://www.cwps.ie/>

<sup>7</sup> [http://www.siptu.ie/media/media\\_16837\\_en.pdf](http://www.siptu.ie/media/media_16837_en.pdf)

and death in service benefit cover for their employees and it gives its members the opportunity to build up valuable pension benefits for their retirement. (The Supreme Court has subsequently declared REAs which set pay rates for certain sectors, unconstitutional<sup>8</sup>.)

The Belgian Fund for vocational training in the construction industry is a good example of a self-supported Paritarian organization funded by a levy of 0.6% of the aggregate wage mass of all construction workers<sup>9</sup>.

Meetings were held with a senior representative of the Irish Congress of Trade Unions (ICTU) to discuss the possibility of setting up a Paritarian Training Fund. It transpired that this idea was not new and had been discussed in the recent past with representatives of both the employers (namely the Construction Industry Federation - CIF) and the ICTU. The idea suggested at that time was that a portion of the monies collected from Safe Pass registration would be ring-fenced for future training programmes. Unfortunately, this idea never gained traction and was subsequently abandoned as recession took hold of the economy. It may be appropriate to revisit the idea as the revival of the fortunes of the construction industry takes hold.

### **1.3.7 Levy on Construction Materials**

There was a proposal to place a levy on certain aggregates to meet costs accrued from the scheme to carry out remediation works on homes affected by pyrite<sup>10</sup>. This levy was never imposed after objections from CIF and other interested parties and the cost of remedial works was subsequently borne by the state. With that in mind, it is highly unlikely that the imposition of levy on construction materials as a means of generating income for funding the FES training programme would be received favourably by the construction industry.

However, the issue of placing a levy on construction materials is about to be revisited again. A former Government Official has been asked to head a panel of experts looking into why concrete blocks used in buildings in Co. Donegal and Co. Mayo are disintegrating. Blocks have been tested and found to contain an inordinately high level of muscovite mica, low cement

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<sup>8</sup> <http://www.rte.ie/news/2013/0509/391278-court-finds-employment-agreements-unconstitutional/>

<sup>9</sup> [http://paritarian-funds-constructon.eu/content/files/03\\_josgijbels.pdf](http://paritarian-funds-constructon.eu/content/files/03_josgijbels.pdf)

<sup>10</sup> [http://www.pyriteboard.ie/getattachment/Publications/2012-12-18-Press-Release-Pyrite-Final-\(1\).pdf.aspx](http://www.pyriteboard.ie/getattachment/Publications/2012-12-18-Press-Release-Pyrite-Final-(1).pdf.aspx)

content and high water/cement ratios. Who will bear the cost of paying for remedial works will be hotly debated and the imposition of a levy on materials is bound to be proposed again.

### **1.3.8 Building Products Manufacturers**

During the pilot phase of QualiBuild some of the larger insulation manufacturers supplied the materials for the demonstration models free gratis. They also generously allowed their facilities to be used for the purpose of air tightness demonstrations. A considerable capital cost saving could be made towards future training costs if these industry specialists continued to show the same good will and supplied materials to training centres for demonstration models for free. The products required for demonstration models include: - external doors and window frames, insulation products, roof and wall membranes, airtight tapes, adhesives and primers and blower door equipment.

While discussions are ongoing over the long-term National Roll-Out of FES these companies and manufacturers could have a major role in assisting the short-term bridging solution (i.e. the proposed limited roll-out of FES commencing Autumn 2016) by continuing to allow their premises be used for demonstration purposes.

### **1.3.9 Tax Breaks**

Discussions with employers revealed them to be favourably disposed towards tax breaks, the consensus being that if they were allowed write a percentage of training costs off against company profits it would incentivise them to invest more in upskilling their workforce.

The Home Renovation Incentive (HRI) Scheme<sup>11</sup> is an example of a tax break. This scheme runs from the 25<sup>th</sup> October 2013 to 31<sup>st</sup> December 2016 for homeowners and from 15<sup>th</sup> October 2014 to 31<sup>st</sup> December 2016 for landlords. The HRI Scheme provides for tax relief for Homeowners and Landlords by way of an Income Tax credit at 13.5% of qualifying expenditure on repair, renovation or improvement works carried out on a main home or rental property by 'qualifying' Contractors. In order for a contractor to achieve qualifying status they must prove to the Inland Revenue that their tax affairs are in order, namely: - provide proof of Vat Registration, Tax Compliance, Tax Clearance Cert. or RCT Rate Notification.

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<sup>11</sup> <http://www.revenue.ie/en/tax/it/reliefs/hri/>

Another good example of a tax break is Film Relief<sup>12</sup>. This scheme was introduced (in 2015) to act as a stimulus to the creation of an indigenous film industry in the State, creating quality employment opportunities and supporting the expression of the Irish culture. The scheme provides direct support to film producer companies in the form of a tax credit. The scheme is provided for in Section 481 of the Taxes Consolidation Act 1997 (as amended).

Tax Relief is also available at the standard rate of income tax for tuition fees paid by or on behalf of students who attend an approved programme of study which must be at least two years in duration.

## **1.4 Existing and Potential Schemes which could contribute to the FES training**

### **1.4.1 Skillnets**

Skillnets was established in 1999 and is funded from the National Training Fund (NTF) through the Department of Education and Skills (DES). Skillnets actively supports and works with businesses in Ireland to address their current and future skills needs. Skillnets funds a wide range of training networks that provide subsidised training to companies and employees and free training to unemployed people through a number of key programmes. All types of training and development are eligible for funding except for training that is mandatory by law. Skillnets subsidise the training costs of employers by 20-30%. All costs for employees are paid by employers and Skillnets. It is worth noting that should the FES course become mandatory then subsidisation for employers through Skillnets would no longer be available.

### **1.4.2 Construction SME Skillnet**

The Construction Industry Federation (CIF) has created a Training Network with funding from Skillnets Ltd. and has established the Construction SME Skillnet<sup>13</sup> Group. The CIF have identified that training in the areas of Health and Safety, Building Regulations and Lean Construction are needed by their members. This Skillnet is funded by CIF member companies and the Training Networks Programme, an initiative of Skillnets funded by the National Training Fund through the department of Education and Skills.

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<sup>12</sup> <http://www.revenue.ie/en/tax/ct/film-relief.html>

<sup>13</sup> <http://csmeskillnet.ie/>

### 1.4.3 Construction IT Alliance

The CITA Skillnet<sup>14</sup> is promoted by the Construction IT Alliance Limited (CITA) which has a constituent membership in excess of 100 companies representative of all the major sub sectors of the Construction Industry.

The network focuses on ICT training needs within the Irish construction industry and target organisations include Architects, Clients, Engineers, Main Contractors, Professional Institutions, Quantity Surveyors, Sub-Contractors and Suppliers. In 2015 CITA Skillnet provided support for non – IT related training for construction and related sectors.

CITA Skillnet is funded by member companies and the Training Networks Programme, an initiative of Skillnets Ltd. funded from the National Training Fund through the Department of Education and Skills. Training grants received by CITA Skillnet enable the network to provide a discount of up to 30% on most ICT Training courses to member companies.

CITA Skillnet also provides training to the unemployed.

### 1.4.4 Recognition of Trainees/Building Construction Workers' Tickets

The reintroduction of a Registered Employment Agreement or equivalent (notwithstanding the constitutional difficulty that this might cause) would pave the way for a Construction Workers Skills 'Ticket' to be recognised in the same way that say plant operator's tickets or banksmen or scaffolder's tickets are. General Operatives would then quickly see the potential value of the FES training. The rate of pay of an operative who has a specialised construction ticket such as the Construction Skills Certification Scheme is usually higher than that of one who hasn't – even where there isn't a Registered Employment Agreement. Operatives would definitely be more inclined to make some contribution to their training costs if it was likely to improve their rate of pay. For example, the employee contribution could cover the Registration Fee as is sometimes the case with Safe Pass training. The Safe Pass Registration fee is €23.00. Note that it is a condition of renewal of the Registration Card that card holders must update their safety awareness training every four years.

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<sup>14</sup> <http://www.cita.ie/training-cita-skillnet/cita-skillnet/>

Another incentive which might induce construction workers to contribute to their training costs would be Tax Credits<sup>15</sup>. If a Training Credit was introduced it could be used to reduce the tax on building workers gross pay. Alternatively, the introduction of a scheme where building construction workers could claim tax relief in respect of training costs incurred would also be attractive to site workers. The Health and Medical Expenses Relief<sup>16</sup> is an example of a scheme where costs incurred in medical expenses can be used to claim tax relief.

## The unemployed

While the focus of the QualiBuild project is on those who are employed in the construction sector, some regard must also be had to those construction workers who are unemployed. A number of programmes are available to provide up-skilling training for the unemployed. These include the following.

### Education and Training Board Courses

Some ETB courses are available free of charge to the unemployed. Given that it is anticipated that the ETBs will be major providers of the FES programme it should also be possible for them to offer some places on these courses for unemployed construction workers.

### Springboard

Springboard courses are state-funded programmes in Higher Education which are provided free of charge to the unemployed. Free places on the HE forms both of the FES and the Train the Trainer courses should be provided through the Springboard programme. A co-ordinated approach to the Springboard process by the participating IoT providers would add to the potential of these courses being approved under that programme.

### Skillnet

While the Skillnet programme is primarily targeted at up-skilling those in employment, places on a large range of courses is available to eligible unemployed persons. Since the FES course

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<sup>15</sup><http://www.revenue.ie/en/tax/it/credits/index.html>

<sup>16</sup> <http://www.revenue.ie/en/tax/it/leaflets/it6.html#section1>

has been approved under Skillnet this is likely to provide an opportunity for the unemployed to participate through this mechanism.

## MOMENTUM

MOMENTUM is another programme which has been developed to enable the unemployed to enhance their skills. MOMENTUM is a publically funded initiative delivered in partnership (collaboration) with both public and private education and training providers who have developed linkages with employers. It consists of a number of projects aimed at significantly improving the employability of individuals who are long-term unemployed, by positioning them closer to the current labour market. Projects have places available for approximately 6,500 long-term unemployed participants, 33% of whom will be Under 25 years of age.

Participants will receive training in areas with recognised skill shortages where existing vacancies have been identified. The projects will include an element of on-the job training in the form of work experience modules as well as development of the skills required to obtain and retain employment.

Given that it is anticipated that there will be a shortage of trained personnel in the Irish construction sector in the near future this is another programme that would be suitable for the roll-out of the FES to the unemployed.

## 1.5 Costings

The pilot programmes which were delivered under the QualiBuild project provided a firm basis for assessing the cost of upskilling the sector's workforce. The following outlines the costs involved as well as other relevant data which allows the feasibility of a roll-out to be assessed. The BUSI report estimated that 60,000 construction workers who would need to be trained in energy efficiency building techniques. It is likely that this figure has risen somewhat and the CSO estimated that 136,900 people were engaged in the construction sector in the second quarter of 2016. It was also estimated by the CSO in 2015 that skilled and general workers made up approximately 70% of those employed in the sector with the skilled workers amounting to about 60%. This would mean that the number of those who would require the

training referred to would number about 95,000 of whom a little over 80,000 would be skilled workers. It is also likely, however, that this somewhat over-estimates the number that need to be trained as it does not take account of those not directly involved in the construction of buildings of the type addressed in the FES course. Nevertheless, it is likely that the number of workers to be trained will be up to 50% greater than those estimated in the BUSI Report. The analysis below sets out the details of what would be involved in a number of different scenarios.

### 1.5.1 FES Estimates & Costs

The implications of a number of different scenarios are set out below. The principal differences between the various scenarios are the number of construction workers who need to be trained and the number of years over which it is envisaged that such training would be provided.

The following are the key assumptions on which the table is based in addition to those incorporated in the table itself:

<b>Number of participants per course</b>	<b>20</b>
<b>Number of teaching hours per course</b>	<b>21</b>
<b>Cost per teaching hour</b>	<b>€70 based on IoT rates</b>
<b>Cost of manuals</b>	<b>€15 per participant</b>
<b>Number of trainers</b>	<b>60</b>
<b>Number of training centres</b>	<b>20</b>
<b>Room Hire</b>	<b>€450</b>
<b>Overheads per course</b>	<b>20% of other costs</b>

Fee per participant is €250. This is based on feedback from the course participants and employers who gave a range of between €200 and €300 as the amount they would be willing to pay.

Using these assumptions the following emerges:

Numbers to be trained	60,000	80,000	100,000
Numbers per course	20	20	20
Number of courses	3,000	4,000	5,000
Annual average number of courses over three years	1,000	1,334	1,667
Annual average number of courses over six years	500	667	834
Annual average number of courses over ten years	300	400	500
Annual average number of courses per centre over three years	50	67	83
Annual average number of courses per centre over six years	25	33	42
Annual average number of courses per centre over ten years	15	20	25
Annual average number of courses per trainer over three years	17	22	28
Annual average number of courses per trainer over six years	8	11	14
Annual average number of courses per trainer over ten years	5	7	8
Teaching hours per course	21	21	21
Cost per teaching hour (€)	70	70	70
Teaching costs per course	1,470	1,470	1,470
Other costs per course	760	760	760
Overheads @ 20%	446	446	446
Total cost per course	2,676	2,676	2,676

Average cost per course member	134	134	134
<b>Total overall operational cost</b>	<b>8,028,000</b>	<b>10,704,000</b>	<b>13,380,000</b>
Annual average operational cost over three years	2,676,000	3,568,000	4,460,000
Annual average operational cost over six years	1,338,000	1,784,000	2,230,000
Annual average operational cost over ten years	802,800	1,070,400	1,338,000
Average fee per course member	250	250	250
Total fee per course	5,000	5,000	5,000
<b>Total fee income</b>	<b>15,000,000</b>	<b>20,000,000</b>	<b>25,000,000</b>
<b>Profit</b>	<b>6,972,000</b>	<b>9,296,000</b>	<b>11,620,000</b>

From this it will be noted that, in all scenarios, there is a considerable excess of income over direct operational cost. There are, however, other significant costs which will have to be covered by this excess. These include:

- Capital investment costs
- Overall programme management, reporting and review
- Travel and subsistence
- Promotion of courses
- The recruitment and administration costs of the programme
- The costs associated with those failing to attend all the course
- The uneven distribution of class sizes
- The costs of reviewing and updating the training programme and materials (changes in Building Regs)
- The costs of upskilling new trainers
- The costs of refresher training for trainers (changes in Building Regs)
- Cost of operating the Construction Worker Skills register for the first year of registration

The capital investment costs have been estimated as amounting to the following:

### 1.5.2 Cost of Fitting-Out Demonstration Rooms

Cost of Materials: €12,650

Cost of Labour:  $40 \times 7.8 \times €18 = €5,616$  (based on 7.8 hrs/day)

Total Cost of Fit-Out: €18,266 per Training Centre

Total Cost assuming 20 training centres - €365,320

### 1.5.3 Annual Cost

It will be noted that the annual operational costs vary hugely under the different scenarios ranging from just over €800,000 to almost €4,500,000.

The costs in year one (and possibly two) are likely to be somewhat higher due to the capital investment required and the income is likely to be somewhat lower as the programme gets off the ground. It is likely, therefore, that there would be a shortfall between income and expenditure in year one and this would need to be provided for in state funds. Over the period of the programme, however, any initial expenditure should be capable of being recouped.

## 1.6 Implementation

In addition to the availability of financial resources to deliver the required courses, it is also necessary to review the capacity of the system to deliver this number of courses.

The following sets out some of these considerations

### 1.6.1 Number of courses required, per centre and per trainer

The annual average number of courses required is shown in the table above for the different scenarios. This ranges from 1,667 to 300 depending on the numbers to be trained and the number of years over which it is envisaged that the training would take place.

The average number of courses per centre ranges from 83 to 15 depending on the scenario while the number of courses per trainer varies between 28 and 5.

83 courses per centre and 28 per trainer appear to be very demanding within current resources. It must be remembered that this is based on training 100,000 workers over three years.

A more realistic goal is likely to be the training of 80,000 workers over six years which would require 33 courses per centre per year and 11 courses per trainer.

These figures appear to be achievable though, if the ETBs are the bodies organising the recruitment as well as the delivery they will require dedicated staff to manage the administration of the courses.

However, the figures do not take into account the distribution of course provision required in particular and the availability of appropriate training resources. This will have significant implications and the averages are unlikely to reflect reality. Thus, the ETBs in Dublin the surrounding counties and the other major urban areas of Waterford, Cork, Limerick and Galway are likely to be under considerably more stress to provide the required training than are those located elsewhere in Ireland.

The figures also do not take account of the number of private providers and IoTs which might be able to take some of the load.

## 1.7 Conclusion

A number of ways of financing the roll-out of the FES and Train the Trainer programmes have been discussed above. Some of these offer the possibility of subsidising the cost of programme delivery in the medium term. However, the responses to the evaluation of the pilot programmes suggest that in the medium to long term, the Foundation Energy Skills programme can be self-funding and that very little will be needed in the way of subsidy once the programme delivery is established.

The resources for delivering the FES programme are also something of a challenge. The resources for the actual delivery of the courses available amongst those who have completed the Train the Trainer programme is probably adequate.

However, resources for the marketing, management and administration of both FES and Train-the-Trainer would need to be provided to the ETBs if they are to be the bodies primarily responsible for this aspect of the overall project.

## Acknowledgements

Lis O'Brien, Project Development Unit,

Seamus Hoyne, Flexible Learning Dept., LIT

Dermot Carroll, Project Development Unit, LIT

Derek Blackweir, QUESTUM Acceleration Centre, LIT

John Kennedy, Thurles Chamber Enterprise Centre, LIT

Derek Walsh, Project Manager, SOLAS Strategy Unit

Ray Kelly, Director of Apprenticeship and Construction Services, SOLAS

Brian Head, Project Manager, SOLAS

Brian Redmond, Manager, SOLAS

Vivian Spain, Development Officer, SOLAS

Jim Fitzpatrick, Development Officer, SOLAS

Niall Elmes, Development Officer, SOLAS

Angela Touhy, Development Officer, SOLAS

Pat O'Mahoney, ETBI

John Flynn, Programme Manager, SEAI

Philip O'Brien, President, IBCI

Kevin Sheridan, Council Member, IBCI

Claire Curley, Director of Services and Housing, Tipperary County Council

Eoin Powell, Senior Executive Engineer, Tipperary County Council

Leonard Cleary, Senior Executive Officer Housing, Clare County Council

Robert Burns, Senior Executive Engineer, Clare County Council

Ruth Hurley, Senior Executive Architect, Clare County Council

Fergus Whelan, ICTU

Colm McKernan, Homebond

PJ Dempsey, AXA Insurance

Mark Welsh, Energia

Declan Fitzpatrick, Clancy Construction

Ronan Fairbrother, Permanent TSB

Deaglan O'Donaill, Electric Ireland