Grant agreement no: IEE/07/695/S12.499394

Project acronym: SECHUrbA

Full title of the action: Sustainable Energy Communities in Historic Urban Areas

Intelligent Energy – Europe (IEE)

Interim Technical Implementation Report (IR)

Period covered: from Sept 08 to Feb 10
Due date: 31st March 2010

Start date of the action: 1st September 2008 Duration: 30 months
End date of the action: 28th February 2011

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The following Deliverables are attached with this report:

D6 - Open Event Report
- Translation into Partner Languages for country reports

D7 - Updated Report into Contexts, Constraints and Prospects in Historic Urban Communities

D8 - Intelligent Energy Application Tool – on CD

D9 - Report into Financial Mechanisms in partner countries

Additional Attachments:

A Minutes of partner meeting in Varna, Bulgaria
B Project Newsletter No 2
C Additional Language versions of partner flyers – Danish, Bulgarian, Hungarian and Greek
D Poster of Fair in China advertising project
E Information on Event in Ferrara Italy on Conservation - proposed venue for final launch/partner meeting at project end
F Information on World Housing Congress Event – and abstract of paper being presented by Labein Technalia
G Information table on partner case study buildings
H Examples of questionnaire results from Greece and UK
I Copy of Updated Project Fact Sheet and Slides
J Updated full contact list of partners
K Copy of Coordinator Euro Account showing pre-financing transfers to partners
L Project Management Workshop – outline
M Abstract by M Kikira and Elena Gigliarelli on Historic Buildings and Sustainability
N Leaflet on solar prism developed by Velux in conjunction with Cenergia

1. Interim Report Summary (2-3 pages)

1.1 Objectives of the interim period

Our Technical Progress report covered the period September 08 to June 09, and was mainly concerned with setting the scene in our various case study communities: collecting data on social, economic as well as environmental situation in each study area. GIS mapping was carried out and information on tourism, transport, housing and fuel usage were recorded. The results of this summary of our study communities can be seen in the updated **D7** document: "Constraints, Barriers and Prospects in Historic Urban Areas", attached with this report and in the case study community portfolios and GIS maps (D3 and D4) uploaded to the partner website.

This second period – from June 09 to Feb 2010 has been more concerned with the technical work packages of WP3 and WP4, but also with forming links with key actors in the area of conservation and heritage in each country and also with local authorities responsible for developing strategy in this area and overseeing planning legislation.

Work Package 3 has been lead by our colleagues at ITABC in Italy and has involved the development of the Intelligent Energy Application Tool, a piece of software that will enable key decision makers to choose the correct intervention in terms of energy efficiency and renewable energy systems when dealing with historic buildings. An electronic copy of the tool, with tutorial and list of all data currently compiled by partners is attached as Deliverable **D8**

All partners were involved with filling in data on templates produced by ITABC to gather information on the latest renewable technologies, and energy saving products. This information is then used as the basis of a database of options that the software is then able to choose from in order to give the correct intervention based on a system of Multi Criteria Analysis that judges the intervention on the chosen criteria of Cost, Efficiency and Conservation issues.

Task 1 – resulted in examples being compiled of best practice in integrating renewable energy systems into historic buildings around Europe.

Task 2 – after meetings and workshops with key actors in the field of energy efficiency, green architecture and renewable energy, ideas have been fed back into the compilation of the tool and into the summary of the situation as outlined in D7. Workshops are still to be held in communities as part of WP4 and will feed into the production of Community Climate Change Strategies.

Task 3 - the Tool as described above.

Currently the Tool is now being trialled as part of WP4 firstly at Zena Castle, and then by Labein Tecnalia on their case study building - Capilla de Las Animas in Santiago de Compostela.

Work Package 3 was extended slightly due to our taking on board an additional partner (Labein Tecnalia) to replace University College Dublin who withdrew early on in the project.

Half way through WP3, partners commenced with **Work Package 4** which begins to look in detail at the case study buildings. Under Work Package 4 all partners with case study buildings and communities begin to carry out initial energy audits of their chosen study buildings, and build up a picture of the current situation with regards to fuel usage, current state of repair, and any problems that owners are experiencing with regard to thermal comfort. At least one building

from each study area will be audited in greater detail using thermal imaging cameras and dataloggers where available.

By the end of Work Package 4 partners will have reached recommendations for each study building and show a modelled scenario whereby any recommended interventions will lead to a minimum of 40% reduction in the current carbon emissions of that building. Partners have agreed to use the nationally recognised software system for evaluating the proposed measures. In the UK for example RDSAP and SBEM can be used to give a before and after Energy Rating, as with Italy who have similar software programmes to produce energy performance certificates.

In Denmark the official tools are Be06 and "Energimærkningsordningen" for determining energy consumption. The Be06 program is used for getting planning permission for new buildings and "Energimærningsordningen" shows the actual energy consumption for existing buildings.

Greece has not yet introduced national energy certification system and software so will use commercial energy modelling software (such as TRNSYS) in order to assess the energy saving potential. All partners have agreed to show energy ratings in kWh/m² as baseline unit of measurement and present the final output in a common layout and format for WP4.

Task 1 – **Local Community Steering Group**
This group must meet 4 times during WP4 and is crucial for helping to shape the Community Climate Change strategies. It is made up of representatives from the local municipality, owners of case study buildings; representatives from the planning department and other interest groups with the communities. Some partners have already formed this group others will do so over this Spring and Summer as the work package progresses.

For Greece, the local steering group was formed at a workshop organised by CRES in September 2009 and involves representatives from: public bodies (Ministry of Culture & Ministry of Environment, Energy and Climate Change), associations (Hellenic Property Federation, Hellenic Society for the Protection of the Environment and the Cultural Heritage, the Unification of the Archaeological Sites of Athens S.A.,), scientific parties (National Technical University of Athens, Chemical Eng. Department, Buildings Restoration Unit) and municipalities (Rhodes and Athens municipality

Task 2 – **Desk based Research on Existing financing mechanisms**

An overview of financing mechanisms in each partner country has been compiled by ALESA – energy agency in Italy. They produced a template to collect data on current funds and grants available in each country to add to the report. A copy of this report – **D6** is attached . As information on additional funds become available this document will be expanded and details will be put onto the project website as a valuable resource.

Tasks 3 – 7 of WP 4 are still in progress and will culminate in the presentation of each community's climate change strategies at the 5th partner meeting in Hungary in September 2010.

1.2 Achieved results and lessons learnt until the interim

- Project Website created and maintained
- Partner forum set up and used for discussion and sharing of material
- External Advisory Committee nominated and being used for advice

- A project flyer was produced in all partner languages – copies of the Greek, Danish, Bulgarian, Hungarian and Italian flyer as well as English version is attached
- Social, economic, environmental picture of study communities
- Data collected on planning legislation in each partner country
- Information on protected buildings and conservation areas in each country
- Intelligent Energy Application Tool
- Database of new technologies and materials for RUE and RES
- Report on Financial Mechanisms for RUE and RES
- List of grants and funding mechanisms for RUE and RES
- Links formed with key players within the Energy Efficiency and Renewable Industry along with actors from national heritage associations
- Links made within local communities with local action groups
- Formed relationships with local municipality planning and conservation departments
- Energy audits in historic buildings commenced and progressed

3 Main preliminary lessons emerging from the project:

1. There is much that can be done in terms of energy savings within historical buildings that need not be expensive and can be acceptable to conservation officers. But particular attention needs to be paid to the types of materials which work well with historic buildings – in general more natural, traditional materials won't damage the building fabric and allow it to function as it was intended. Most conservation rules allow that as long as an intervention is removable and not visible it will be acceptable in terms of legislation.

2. There is little knowledge about renewable energy technologies amongst the public but also amongst those working in local authorities and in particular planning departments. Education and information is needed to make the debate more relevant. The collection of available RUE and RES technologies and projects related to historic buildings seems to be a valuable (and needed) knowledge source, especially if developed in the form of an interactive and user-friendly database

3. Too little funding available to spend on renewable energy systems and even less for energy efficiency interventions. Also lack of knowledge amongst public on how to access that funding and what grants are available.

1.3 Identified problems and corrective actions taken in the interim period

a. Problem: lack of support from some of the supporting partners in each country. The impact of this has been increased pressure and hours spent by lead partners.

Corrective actions: There has been a change in staff at supporting partners AEDA and at Szentendre municipality so we look forward to seeing an increase in activity there.

b. Problem: Difficulty in obtaining cooperation from case study building owners/managers. Impact has lead to a lack of relevant data in some cases.

Corrective Action: More use of buildings owned by the local municipality ensures access and more detailed data already kept by energy managers of those buildings.

c. Problem: Questionnaire – very difficult to get public to fill out questionnaire. Perhaps it is too long and detailed for most people

Corrective Action: To wait until hold community workshops and fill in the questionnaire with the person present to guide them through the process. Possibility to develop a shorter, compact version of the questionnaire.

1.4 Main activities until the end of the action

The main emphasis now until the end of the project will be on producing recommendations for our case study buildings and producing our Climate Change strategies for our study areas.

Our Community Climate Change strategies will be presented at a launch event in Hungary during our 5th partner meeting and members of our External Advisory Committee amongst others will be invited to feed back on each strategy.

Reports for each case separate case study building will be produced by lead partners showing recommendations for energy savings within those buildings, including any recommendations for renewable energy systems that could be integrated. Recommendations will have been approved by planning departments to ensure they fit with current local legislation.

The Intelligent Energy Application tool will have been trialled by some partners and also feedback will have been received from local authority planning departments.

The evaluation of the project data and production of the SECHURBA guide will also be a key outcome.

The **SECHURBA award** will have been designed by UBBSLA our partner from Bulgaria who is in charge of WP6 – the communication and dissemination work package. Each study area community will propose a case study that has achieved the most (assisted by the local steering groups) and these nominated buildings and areas will be judged by the External Advisory Committee who will give the award. It has been decided by the consortium that there will be one award for individual buildings and one for the community as a whole that achieves the most in terms of energy saving within their area.

In the area of communication and dissemination all partners will continue to provide UBBSLA with regular updated information on legislation affecting historic buildings and on-going up dates as to progress being made within our case study communities, so this can be included in the partner website. We would like the website to become a useful tool and show effectively lessons learnt throughout the project, and on-going issues in this important and topical area.

2. Consortium management until the interim date (1-2 pages)

The feedback from the First Technical Progress Report, and action taken

1) "The project website could be improved by removing technical expressions (e.g. work programme, work package, deliverable, etc."

This has now been mainly done and we are in the process of making the website easier to use and more interactive. It will be on-going work as we get more results from the project that are able to be presented on the website.

2) "It has been noted that WP3 is slightly delayed, but as discussed, this delay will not jeopardise the overall project timetable."

WP3 has been completed satisfactorily and the delay did not cause problems to the project process. Our new partner, Labein Technalia are due to trial the software tool developed under WP3 in the coming months.

3)" It has been noted that some hours for WP2 were reallocated from EMI to Shropshire Council".

EMI have continued to need assistance with completing deliverables under WP2, but now have more staff allocated to the project and their involvement has increased.

4) "It has been noted that partner UCD has been replaced by partner Tecnalia-LAB".
5) "In terms of the slow response from partners to the Co-coordinator it is important that you follow-up and persist on deadlines in order to keep the project on track. It is sometimes an effort, but nevertheless necessary"

More use of Skype for conference calls between lead partners and work package leaders will be made to ensure deadlines are adhered to.

Additional comments from partners:

"Management of a project with a range of partners is a difficult job for the coordinator and the outputs highlighted above can be seen as a success of the management from the coordinator. However, this project is being delivered in partnership and as such responsibility should be taken by all partners to deliver out puts on time so the coordinator does not need to spend excessive time chasing for work.

Partners must also be aware that if deliverables are to be delivered in English (where not first language) they should be finished with suitable time to be checked by an English speaking partner to ensure high quality reports are able to be submitted.

Project meetings have been well organised by all partners so far and the agendas developed by the coordinator have meant all issues and project actions have been dealt with efficiently".

3. Progress of work plan and achievements until the interim date (10-12 pages)

3.1 Progress and achieved results per work package against initial objectives

Work Package 1 – Management (lead partner: MEA)

Task 1: Project Management and reporting:

This work package is ongoing but all planned activities have been delivered:

Objective	Comment
Reporting	On-going
Communication between partners	Could be improved see comments below under Task 4.
Distribution of funds	Initial pre-financing payment distributed
Project working area	Partner Forum
Deliverables achieved on time.	So far

Task 2: Steering Committee

The Steering Committee is made up of the following partners :

ITABC (Italy); ALESA (Italy); EMI(Hungary); CRES (Greece) and MEA (UK); UBBSLA (Bulgaria)

A brief meeting is held the evening before the full partner meeting, and minutes uploaded to the forum and sent to the project officer. It is a useful way of making certain decisions quickly and discussing how the format of the meetings on the following days.

Task 3: Project Meetings:

After successful Kick-off meeting in Shrewsbury during the initial project period, and then 2nd partner meeting in Copenhagen, the 3rd partner meeting was held in Varna, Bulgaria in September 2009.

Minutes of this meeting are included in the attachments and some photos shown below of the partner meeting held at the UBSSLA offices in Varna.

A 4th partner meeting has since been held in Athens, but will be reported on in the Final Report.

Task 4: Communication:

Communication between all partners is sometimes difficult due in part to partners' other responsibilities beyond this project and in part some partner's limited use of the forum. The forum is a very useful resource and when it is used effectively issues are quick to be discussed by many partners, however partners should remember to check the forum more regularly to ensure they are involved in all discussions, and ensure that it is set up correctly to ensure any responses to topics are sent to email in-boxes.

Skype found to be useful tool for on-line messaging and conference calls.

Task 5: Quality Control

The External Advisory Committee was nominated at the beginning of the project – made up of key experts from the lead partner countries.

Some lead partners have been making use of the advice on hand of their Advisory Committee members. In the UK MEA have held 2 meetings with Dr Tim Yates, Technical Director at BRE and also linked with a project being run by English Heritage and had useful meetings with representatives there who are also Advisory Committee members.

In Greece, Productive cooperation with the representative from the Ministry of Environment, Energy and Climate Change (Mr Ganasoulis) and member of the External Advisory Committee has been established with regard to looking at the overall legislative framework, the potential inputs from SECHURBA project, the use of the Intelligent Tool and many other issues regarding the project progress.

Work Package 2 – Context, Constraints & Prospects in Historic Urban Areas

(Lead Partner: EMI)

This work package has now been completed with the final deliverable (D7) attached to this report. There have been some concerns and issues with the work package lead on this, however this was addressed by a transfer of hours to another partner, staff changes and support

from all partners and although there were some delays in deliverables they are now completed and form a useful resources for the project.

Task 1: Community Portfolios – the context

Documents showing an initial assessment of the partner case study areas have been uploaded to the project website.

Task 2: Desk based Research

This has been on-going throughout the project, and many results of this work can be seen in the templates produced under WP3 and included on the CD accompanying this report

Task 3: Consultation – Key Actors and Target Groups

Liaising with key local actors was helped by the Open Events that have now been held in each study community (these are summarised in the attached report – **Deliverable D6** – which is also accompanied by a translation of the open event in each country in their native language)

In Greece, the workshop described in D6 document has been organised and held by CRES (and not by AEDA as stated in the contract) as it was decided to firstly organise an introductory workshop to potential target group organisations and then proceed to the organisation of the formal open event. Therefore, the 'open event' organised by AEDA was scheduled for the 22nd of March 2010 and will be reported in the final report. This will give the opportunity to also present the Intelligent Tool (as WP3 has been progressed) and gain valuable feedback on its structure and potential use.

Good links have been made between the Coordinator and other projects in the UK; a monitoring exercise with regard to u-values of solid brick walls is underway in some of the UK case study buildings in partnership with English Heritage.

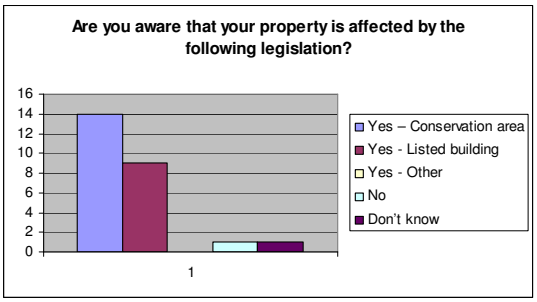
Typical heat flux sensor and room temperature measurement locations. The experiment will measure internal, external and surface temperature to study the u-values of solid brick walls in occupied dwellings

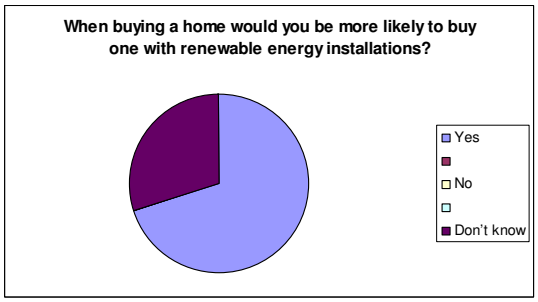
Links and meetings have also be held with the Diocese of London who are carrying out similar work in an effort to make their Churches and church buildings more sustainable.

Task 4: Community Involvement

Questionnaire – this has not been very successful so far, in that the quota of 200 questionnaires has been hard to achieve. It has been decided to carry out the rest of the questionnaire gathering at local community workshops to be held over the summer 2010 during WP4

However, some initial results that are emerging do produce some useful patterns (see examples below), and a summary document of results achieved so far in Greece and the UK is included in the attachments to this report.





Bulgarian results have been uploaded in a PDF analysis, both in Bulgarian and English to the project website

Task 5: Collation and Feedback

Much new data has been added to the original report – **D7 on Context, Constraints and Barriers in Historic Urban Areas.** A copy of the latest report is attached as with deliverables.

Also research on legislation and up-to-date policies emerging in each partner country is being collated and will be added to the section entitled– "Historic Cities" on the partner website.

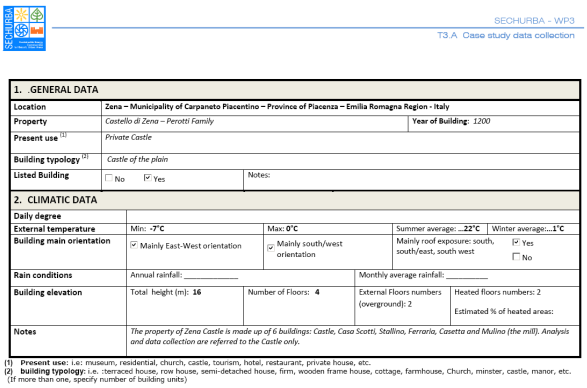
Outputs of this task were to get an appreciation of planning, social and economic contact of the historic urban areas being studied and look at opportunities that might be emerging for developing sustainable technologies within these regions. Under WP3 many of these new technologies have been collated and PDF versions have been uploaded to the partner website in the download section

Work Package 3 – Technical Solutions for Sustainable Energy in Historic Urban Areas

(Lead partner: ITABC)

After some initial delays in this work package due to the loss of a partner it has now been delivered successfully with the tool now under trial by other partners.

Task 1: Desk Based Study

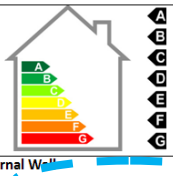


SECHURBA – WP3
T3.A Case study data collection

1. GENERAL DATA				
Location	Zena – Municipality of Carpaneto Piacentino – Province of Piacenza – Emilia Romagna Region - Italy			
Property	*Castello di Zena – Perotti Family*		Year of Building: *1200*	
Present use (1)	*Private Castle*			
Building typology (2)	*Castle of the plain*			
Listed Building	☐ No ☑ Yes	Notes:		
2. CLIMATIC DATA				
Daily degree				
External temperature	Min: -7°C	Max: 0°C	Summer average: ...22°C	Winter average:...1°C
Building main orientation	☑ Mainly East-West orientation	☑ Mainly south/west orientation	Mainly roof exposure: south, south/east, south west	☑ Yes ☐ No
Rain conditions	Annual rainfall: _____		Monthly average rainfall: _____	
Building elevation	Total height (m): 16	Number of Floors: 4	External Floors numbers (overground): 2	Heated floors numbers: 2 Estimated % of heated areas:
Notes	*The property of Zena Castle is made up of 6 buildings: Castle, Casa Scotti, Stallino, Ferraria, Casetta and Mulino (the mill). Analysis and data collection are referred to the Castle only.*			

(1) **Present use:** i.e: museum, residential, church, castle, tourism, hotel, restaurant, private house, etc.
(2) **building typology:** i.e. :terraced house, row house, semi-detached house, firm, wooden frame house, cottage, farmhouse, Church, minster, castle, manor, etc. (If more than one, specify number of building units)

A study into available technologies and other projects involved in this field was carried out by all partners and the results presented in templates that were designed and produced by ITABC (T1.A: Data base of relevant IEE projects and others initiatives; T1.B: Best practice from EU member states; T1.C: List and review of potential RUE and RES applications; T1.D: RUE and RES selected applications in historic buildings and communities). Copies of all this data can be found in the attached CD produced by our partners at ITABC. As previously mentioned all this data will be made available for download from the partner website as a useful resource including links to projects of interest.

5. BUILDING ENERGY BALANCE (if available)		
Surfaces	**Total Covered area (vertical surfaces) CA (m^2) = 818,5**	**External walls area EA (m^2) =** 2.350,0
Volumes	**Total Volume V (m^3) = 7.843,5**	**Heated Volume HV (m^3) = 4.840,0**
Energy efficiency category	 A B C D E F G **High Energy performance** ☐ "A" (<30 kWh/mq) ☐ "B" (<58 kWh/mq) **Standard** ☐ "C" (<87 kWh/mq)	**Non – Energy efficient** ☐ "D" (<116 kWh/mq) ☐ "E" (<145 kWh/mq) ☐ "F" (<175 kWh/mq) ☐ "G" (>175 kWh/mq)
Heat transfer (U-Value) W/(m^2K)	**External W=**	**Roof =** **Ground floor =** ☑
Energy Index	Energy exchanges - heat transfers **Qt** (kWh/y) = Energy dispersal - ventilation **Qv** (kWh/y) = Energy exchanges - radiance (solar gain) **Qs** (kWh/y) = Energy from internal supply (energy from equipment in building) **Qi** (kWh/y) =	
Building Energy Balance	Qh = Qt + Qv - Qs - Qi ---> Qh =	
Notes	Information concerning "Energy efficiency category", "heat transfer", "Energy index" and "Building Energy Balance" are not available	

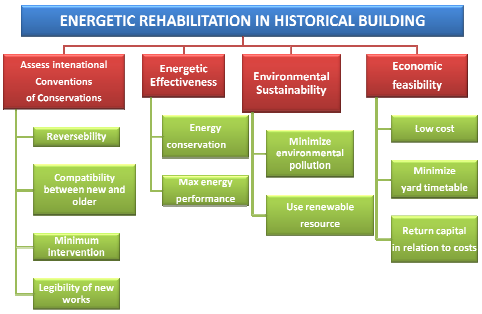
Task 2 : Consultation – Key Actors and Target Groups

This has been on-going throughout the project, and will increase during Work Package 4 as Steering Groups are formed using some of the key actors already consulted for material and recommendations gathered during compiling the templates mentioned above

Task 3: Design of Intelligent Energy Application Tool for Historic Buildings:

Much hard work was done by our colleagues at ITABC and their in-house consultant to develop the tool. Again the results and tutorial on how to use it are presented on the CD attached.

The software uses at its core the system of Multi-Criteria Analysis which takes judgements from key experts in the field to make decisions on appropriate interventions in historic buildings.
These decisions may be based on economics, sustainability or economic efficiency amongst other options. The judgement options can be seen represented in the templates labelled T3.A: Case study data collection, which were produced by each partner using their case study buildings as examples. Some of these templates are still to be completed as further investigations are carried out during the building energy audits that are taking place over this next period during Work Package 4.



Work Package 4 - Sustainable Energy Buildings & Communities – Case Studies

(Lead partner: CRES)

Task 1 : Local Community Steering Group

Local steering groups have been formed for some partners as reported in WP3/Task 1 section of this report. Regular meetings with the whole group or with individual experts have been held in order to commence developing the Community Climate Change Strategy and also to report feedback on the Intelligent Application Tool.

For example in Bulgaria the Local Community Steering Group consists of one engineer, one architect, one representative of a heating equipment manufacturer, one lawyer, representatives from
Varna and Balchik municipalities and a representative of a construction company. So far the Local community steering group has met four times. The topics discussed were related to the legislation concerning protected buildings, EE financing, local requirements, controlling authorities. The members of the steering group took active participation in the organisation and implementation of the Open events in Varna and Balchik in September 2009. The fourth meeting of the Local Community Steering Group was held in November, 2009 and was dedicated to the forthcoming energy audits of the chosen buildings.

Task 2: Desk-based Research on existing financing mechanisms

A form was created by ALESA and sent to all partners to collect details of current funding available within partner countries and regions for financing RUE and RES. The form asked to specify whether the funding was specifically community related; the financing authority, links to the website and brief details about the funding and how to apply.

Building on the data received from partners, ALESA (Chieti's local energy agency) put together a report (**Deliverable D9, attached with Deliverables**) on the current state of financing within the partner countries.

Task 3: Selection of Technical Solutions

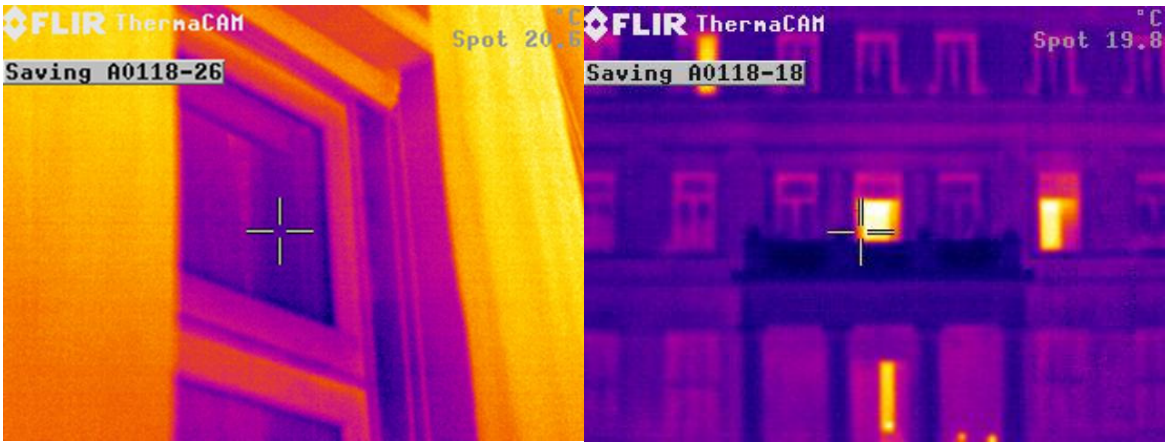
The Intelligent Energy Application tool developed under WP3 will be trialled under this work package and used to establish recommendations for the case study buildings.

Before this happens for all partners, the tool will be trialled by Labein Tecnalia on their case study building and also by VIVECA at their case study – Zena Castle
.
Also, local authority planning departments and other targeted to historic buildings evaluation organisations will be asked for feedback on the tool which will be sent to the work package lead of WP3, for any fine tuning of the tool. Valuable feedback on the tool development will be also reported by the allocated subcontractors of CENERGIA as described on the project contract (Nielsen & Rubow Architects, WP4/Task 3).

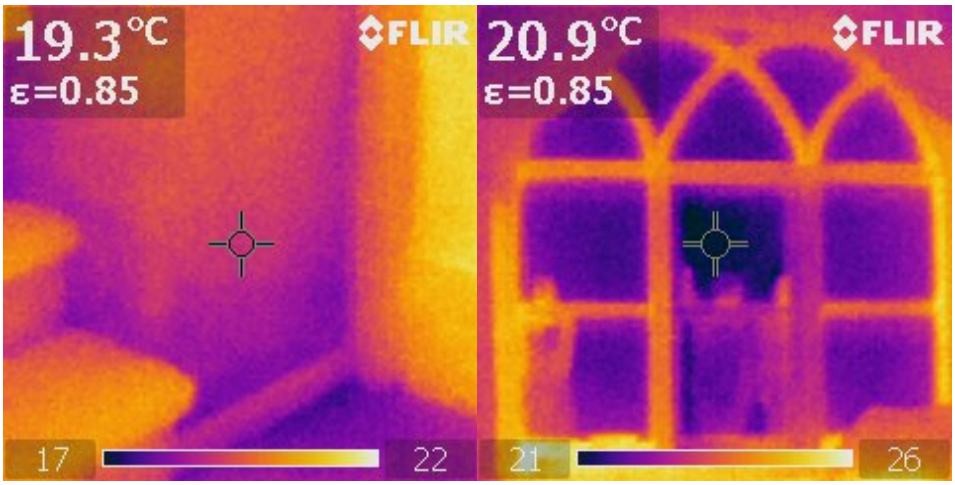
Task 4: Energy Audits

The identification of potential case studies and auditing processes has been already commenced. In the following pages is an indicative list of the potential case studies, showing the interesting variety of buildings, ages, architectural characteristics, operational profiles, etc.

Some preliminary thermographic photos are as follows:



Athens city Hall infrared shots (energy audit conducted on January 2010).



Thermal images of 14th Century cottage being studied in Shrewsbury area.

A table outlining case study buildings for each community can be found in attachments

More detail on the case study buildings can be found on the Templates – T3A included in the tool, on the attached CD

Task 5: Development of Financing Solutions

In Greece, the financing incentives to refurbish a historic building are limited and mostly focused on special loans and tax reductions. Grants for RES and RUE will be shortly available for energy efficiency municipal buildings; therefore specific historic buildings might benefit from this national program.

In the UK there exists the Heritage Lottery Fund which is available for historic buildings and also external heritage areas. But also within the case study area, MEA has been liaising with a number of companies in an effort to get some products installed in case study buildings as sponsorship. So far, a new gel-based draughtproofing product is hopefully being installed in Shrewsbury Library so efficacy can be monitored.

Other funding streams available in each partner area are outlined in **D9 – Financing Mechanisms report attached to the report.**

Task 6: Implementation plan: Historic Community Climate Change Strategies

These are not yet complete and will be assembled with the help of our Steering Groups during WP4. Each community's strategy will be presented at a launch event in Hungary during our 5th partner meeting, due to take place in September 2010. See details below as outlined in the project proposal:

Task 7: Community Synthesis Launch

"A community launch event will be combined with the 4th project meeting (in Hungary, hosted by EMI) which takes place towards the end of WP4. External experts and members of the External Advisory Committee will be invited meaning that not only will each community be able to present the structure of their plan, but also receive valuable comments and feedback before completing their Historic Community Climate Change Strategies. The launch event will, if possible be scheduled to combine with a European / International event in the sustainability and historical field in order to achieve wider feedback.

IIa. Outputs of this work package:

- Agreement between partners and planning bodies on how RUE and RES will be dealt with positively by the planning system
- The development of these pilot and exemplar sustainable energy communities within historic urban areas
- Involvement and cooperation of local communities in a pioneering project, and development of new relationships with communities elsewhere in the EU
- Increased understanding and awareness within communities of sustainable energy opportunities and benefits
- A highly replicable and transferable mechanism for delivering a 'historic sustainable energy community' in the form of 'Historic Community Climate Change Strategies'
- Sustain savings in CO_2 as a result of the project being community-led, in addition to long-term changes in awareness, attitude and behaviour

- Plan reduction of 40% in consumption and CO_2 in at least five (5) 'Beacon Buildings', and the implementation of RUE/RES in at least three (3) further buildings and/or one community-level projects"

Work Package 5 – Evaluation Criteria and Historic Excellence (Lead MEA)

Yet to be commenced.

Tasks 1: Quality Assurance and evaluation criteria

This work package is due to start in April 2010, but some liaison with the External Advisory Committee with regards to feedback so far on the project has been undertaken (as outlined above)

Task 2: Historic Excellence

A publishable summary report will be developed, which will indicate directly the real achievements and the historic excellence within the project scope, as well as the pilot communities' initiatives

.
The SECHURBA award – currently at the designers (lead by UBBSLA) who are devising different designs for the consortium to choose.

The building and community who have achieved most during the project will be nominated by the consortium and judged by the External Advisory Committee.

Task 3: SECHURBA Guide

A SECHURBA Guide will be produced, including the evaluation and practical application of the tools and methods developed within the project, for public view and distribution in key target groups. They will also be presented at an EU conference (D21).

Work Package 6 – Communication and Dissemination

(lead partner: UBBSLA)

This work package is ongoing but the branding is now in use by all partners and provides the project with recognition.

Task 1: Project Logo & Style guide

The Project logo is now being used on all project literature and will form the basis for the design of the SECHURBA award. The project logo was designed by ITABC partner

Task 2: Project Website

The website was produced very successfully by UBBSLA and is now in the process of being updated to reflect some of the lessons learnt and information gathered during the last 18 months of the project.

It introduces not only the SECHURBA project, but also contains some additional information, which project consortium finds interesting and useful for the users, such as Relevant EU and national papers, the impact of historic cities in different EU countries, and some statistical data. One of the most useful features of the website is the feedback option through using our "Advice form" – an easy to use form, which gives the user the possibility to contact any project partner promptly and effectively. Currently some of the features are still in a process of preparation and completion. Most of the deliverables are uploaded in the "Download" section, ready to be accessed by visitors.

The possibility of having a search facility on the site is being considered and a counter for number of visitors of the website.

Task 3: Project Flyer

The flyer has now been produced in all partner languages (apart from Spanish which is not a requirement) and copies of the flyer in Greek, Danish, Hungarian, Bulgarian and English are attached with this report for information.

Task 4: Articles

This is an on-going task, and when articles or presentations are produced they are sent to the coordinator to collect and sent to UBBSLA to upload both to the partner forum and to the website.

I will attach some recent articles and posters further to those submitted with Technical Report to include:

- A poster showing presentation on the project by ITABC in Chinese
- Paper being submitted by Labein to the World Housing Congress in October in Spain (copy of paper and outline of conference attached)
- Talks have been given by the Coordinator at the following events:
    - EU Connects Seminar in Birmingham on Project Coordination
    - MA in Historic Conservation at the Ironbridge Institute
    - Seminar on Historic Buildings and Sustainability in Snowdonia held by the National Trust and the Royal Town Planning Institute
    - Breakfast seminar of West Midlands Constructing Excellence club
    - Talk to Stratford-upon-Avon Town Council and Transition Town Stratford
- Paper submitted to Conference 'Improving Energy Efficiency in Commercial Building Conference (IEECB'10)' which will take place in April 2010 in Frankfurt / Germany, titled: "Energy Efficiency in Historic Buildings, the case study of the National Theatre of

Rhodes, Greece and of the Zena Castle, Italy", Authors: Maria Kikira (CRES), Elena Gigliarelli (ITABC)

- 4th International Congress "Science and Technology for the Safeguard of Cultural Heritage of the Mediterranean Basin" 6th - 8th December 2009 Cairo, Egypt
- Improving Energy Efficiency in Commercial Buildings (IEECB'10) (proposed by Maria)
- Energy Efficiency in Historic Buildings, the Case Studies of the National Theatre of Rhodes, Greece and of The Zena Castle, Italy (M. Kikira, A. Paraskevopoulou, E.Gigliarell)
- UBBSLA has produced several articles, which were issued in its monthly bulletin. The bulletin is being distributed amongst the member municipalities (21 in total) and some local institutions and partner organisations

Full copies of PowerPoint presentations are available on request.

UBBSLA has produced several articles, which were issued in its monthly bulletin. The bulletin is distributed amongst the member municipalities (21 in total) and some local institutions and partner organisations. Electronic copies are available on the partner website.

Task 5: European Conference: "An existing European Conference will be identified that this project can use to disseminate findings and results to key actors in sustainable energy technologies, planning officers, organisations and municipalities in partner and particularly non-partner countries. The Conference will be used to present the project experience, best practice case-studies, and facilitate knowledge-transfer and capacity building on sustainable energy in historic urban areas in other regions."

The conference : "*"XVII Restauro – Salone dell'Arte del Restauro e della Conservazione dei Beni Culturali ed Ambientali" or* Exhibition of Art Restoration and Conservation of Cultural and Environmental Heritage " has been suggested for this purpose.

A small synopsis showing ITABC stand at the fair in 2009 is attached.

It has been recommended to launch the SECHURBA findings in combination with our final project meeting, but it takes place in March 2011 and the project ends February 2011.

The advice of our Project Officer is that the project would need to be extended by a month for this to happen, and would require a new grant agreement. Further discussion is needed by the consortium as to whether this should happen.

Task 6: SECHURBA & EU Networks

Some initial links have been made with the Histocity Networks, URBACT and the Portico project but further work is needed in this area.

Task 7: VIDEO production:

A 20-minute VIDEO will be produced for presentation at the final European conference, showing the energy and environmental prospects in historic urban areas, the real community case studies and actions taken, interviews from responsible community and task leaders, enriched with significant visual material from all historic areas

Newsletters - The 3rd newsletter is due later this month, but a copy of the second project newsletter is attached with this report for information. The newsletters are also downloadable from the project website.

Work Package 7 – Common dissemination activities (lead MEA)

Regular contact is maintained between MEA and the financial and project officer in Brussels and minutes of all partner meetings are sent as updates. The project officer also has a password to access the partner forum.

The coordinator has given a number of talks and briefings regarding the SECHURBA project over the last 18 months. This includes being invited to talk to about managing European Projects at an event held by EU Connects in Birmingham for organisations submitting funding bids for IEE funding and looking for partners to form consortiums to submit bids.

Other talks have been given at Historic Buildings Conferences hosted by the National Trust and English Heritage; Construction company events; to a local university MA in Historic Conservation course and to Councillors of other local authorities covering historic areas.

Copies of all PowerPoint's are available on request.

Two articles have also been submitted to the EACI publication Intelligent Energy News

Updated versions of the project slides and publishable summary are attached with this report and will also be sent directly to the relevant EACI department as outlined in the guidelines.

3.2 Deviations from the project work plan

There have been some problems with the study area of Athens because of lack of interest amongst residents in historic buildings due to other social and economic problems. Some of these problems are due to the difficulty in approaching the community due to high number of immigrants and disaffected population

In Bulgaria the Local Community Steering Group insisted on changing the initially chosen pilot buildings of Varna. The reasons why UBBSLA's team agreed to swap the buildings were:

- the Drama Theatre Building and the National Arts school buildings are actually national properties, but not municipal ones. Therefore, the municipality will not consider as reasonable to co-finance a project, which provides benefits to non-municipal ownership.
- One of the goals of the project – active participation of the community by financial contribution to the measures performed in the pilot buildings would be almost impossible to be completed when it comes to non-municipal buildings. The community population identifying itself rather with the community belongings than the national ones.

Following the discussion process and the local attitude to the historic heritage, UBBSLA took a decision to appoint as pilot buildings the suggestion of the Local Community Steering Group, which was approved by the representatives of Varna municipality and the City council. The pilot buildings of Varna will be the Municipal Art Gallery and an Administrative Municipal Building, both protected and dating from the beginning of the last century.

3.3 Interim review of deliverables – *Assess deliverables listed in Annex I of the grant agreement against results achieved until the interim date, give reference to appendix table 1 of the interim technical implementation report.*

The deliverables are outlined in Table 1 of appendix but here are a few key points emerging:

D3, D4 and D5 – all outputs of Work Package 2 have been more complex and difficult to achieve than initially thought. The data gathering was more difficult than imagine, particularly in the case of getting overall energy usage data at a community scale. This meant that producing the D7 report on historic urban areas was quite hard to achieve.

Greece as previously outlined had difficulties communication with the residents in their study area due to other social and economic issues, and so questionnaires were very hard to get filled in. However, initial results as attached are showing some interesting patterns.

UK had difficult with some case study buildings dropping out of the project, and getting access to necessary data. However, with the inclusion of the Library owned by Shropshire council this will be much easier to obtain necessary access and data.

Only 4 out of the 10 Victorian houses in Albert Street case studies finally agreed to be audited. And only 3 of these are taking part in the u-value monitoring exercise. But good data is still hoped to be gathered through this project, and collaboration with English Heritage.

D8 – the Intelligent Energy Application Tool. This Work Package was very successfully lead by ITABC who produced templates to collect data from all partners and coordinated the work package very effectively.

D9 – financing mechanisms has produced some interesting data on grants in each country but again can be add to as the project progresses.

The next deliverables will be concerned with the auditing process; recommendations for energy reduction in case studies and trialling the tool.

Evaluation of data gathered so far will begin in April 2010 with MEA leading, and will culminate in the production of the SECHURBA guide.

The local Community Climate Changes Strategies will also begin to emerge over the summer months after full consultation with local steering groups and local authority departments.

3.4 Interim review of performance indicators – *Assess performance indicators listed in Annex I of the grant agreement against impacts of the action achieved until the interim date*

Specific Objectives	Result Indicators:	Quantification of success:
▪ Local context analysis: barriers, and constraints in social, energy, environmental, economic parameters	Examine a minimum of: 5 historic buildings in 10 different local communities in 7 EU countries & 3 local communities as a whole, learn from past projects, use best practices and avoid replication of mistakes. At least 6 people per steering community group	Indicators for barriers, constraints and potentials for different case studies and local contexts across participating countries and EU. See Report D7 Map the 10 case study communities and develop their profile and characteristics See D3 and 4 GIS maps Collect at least 200 questionnaires per community / country and identify at least 2 relevant initiatives per country (WP2) still on-going
▪ Financial and technical sustainable development measures for energy and carbon saving beyond EU legislative requirements	Identify financial and technical opportunities for historic communities and expand the measures for funding to link energy with culture. Identify energy saving potential in historic buildings and communities See D9 Report	Initiate new financing schemes and community involvement in the funding programmes for at least 10 communities / buildings and define for at least 3. Work beyond EU requirements Intelligent Energy Application Tool (WP3) See Tool on CD attached
▪ RUE and RES planning guidance for historic urban areas, at building and community scale, energy and CO2 reduction	Examine at least 5 RUE and 3 RES technologies for application guidance in historic building and community scale On-going as part of WP4	Study improvements in energy performance (from 30-60% energy saving) and CO_2 reduction (minimum 30% reduction) for at least 5 'beacon' buildings per community (WP5) On-going as part of WP4 and 5
▪ Increase competitiveness among participating communities	Introduce SECHURBA award and nominate to 2 communities and 3 buildings. Publicising of 'Historical Excellence' Will be nominated under WP5	Succeed a structured plan of a minimum 40% energy saving and CO2 reduction and 20% RES use for the awarded communities. Will be produced as audit reports and recommendations under WP4
▪ Establish community commitments	Increase community role and active involvement throughout project duration Local Steering Groups will be active during WP4 and feed into local community climate change strategy	Ensure a minimum of €10,000 investment plan per community Some movement on this in terms of sponsorship by companies giving free products to case study buildings. Results of this will be included in Final Report
▪ "Culture and history to technological development and climate change" guide	40 page guide, summarising all project's objectives and outcomes, including energy and CO_2 indicators Will be produced under WP5	Reach at least 2000 people / organisations across EU out of project partner countries and 1000 per participating country
▪ Strong dissemination and promotion plan, ensuring replication and transferability	Expect the 7 participating countries, to reach at least another 3 (incl. 1 New MS country). Ensure dissemination to local and European	At least: 5 key actors to consult at national level, 50 people at open events (WP2) per community, Events outlined in Report Attached

	level (3 Ministries per country & 2 associations)	50 hits / month on website, 2 articles published per country, 200 attendants at European Conference, 5 shows of project VIDEO (WP6), visit 6 historic areas / buildings (WP1) Each partner meeting involves such visits
▪Establish strong cooperation links between research and practice in the field of energy and culture	Achieve an integrated and multilateral approach to historic buildings and communities, with involvement of most key actors and target groups	8 scientific and technical centres to work with 10 municipalities / communities, for a period of 30 months Outlined under Key Actors and Target Groups

Community actors across the project are all keen to see the outcomes from this project and the "Economic Situation" many communities find themselves in has aided interest in RUE and RES applications from a financial point of view, adding to the importance of this project.

In the UK further guidance and information has been produced by a range of organisation on historic buildings and RUE / RES technologies so for the project to provide a usable guide specific to the areas and a tool highlighting the most appropriate range of options will be a timely resource.

4. Work plan for the next period (2-3 pages)

4.1 Planned activities in the next period – *Give an outlook on planned activities for the period until the next report (on-going work packages, tasks per partner, due deliverables), consider any strategy developed in section 3.2.*

The key activities as outlined above for this next period will cover the auditing of the case study buildings, recommendations for energy reduction and possible integration of renewable energy systems. The Tool produced under WP3 will be used in some case study buildings to reach these recommendations.

Before and after energy ratings will be given for all buildings by partners, based on relevant energy modelling software in their countries.

At the same time as the audits are being carried out, the Local Community Steering Groups will be meeting and asked to feed into a strategy to put together recommendations that can be submitted to local authorities, and linked in with any action plans already in existence regarding climate change and local sustainability issues.

Suggested topics of the workshops will include:

- Funding issues surrounding RUE and RES
- Planning legislation with regards renewables and listed buildings and conservation areas.
- Information and advice for local residents regarding RUE and RES
- Local Council strategies for future carbon reduction targets.
- Inclusion of historic buildings in the local authority energy planning

MEA will start the process of data gathering and evaluation so that patterns, and useful data can be collated in advance of the SECHURBA guide. The list of technologies and interventions compiled during WP3 will be built on and presented on the partner website to form a useful database that users can search for technologies and materials, find suppliers, and have an idea of when to implement and of cost.

The funding streams assembled as part of D9 will be added to, as new programmes and funding streams become available.

The draft community strategies will be presented to an invited audience during our 5th partner meeting in Hungary. The External Advisory Committee members will be invited to give feedback.

The website will be regularly maintained to give updates to the project and to case study buildings and any improvements that have started to take place, or any funding commitments made.

4.2 Planned meetings and dissemination activities

Our next project meeting as outlined previously will be hosted by EMI and Municipality of Szentendre and will include a day's launch event where project partners will present their community climate change strategies.

Before this occurs each partner will have held workshops in their local communities and used these to feed into a draft strategy, which will then be guided by local steering groups to completion.

Appendices to the Interim Technical Implementation Report

Table 1: Updated list of submitted deliverables since starting date

Del. N° [1]	**WP N°** [1]	**Deliverable name** [1]	**Month of completion** [1]	**Submission with report** [2]	**Deliverable uploaded at website?** [3]
D1	WP1	Partner forum on website	3	Technical PR	No
D2	WP1	Nomination of External Advisory Committee	2	PR	No
D3	WP2	Case study community portfolios	5	PR	Yes
D4	WP2	Case study area GIS Maps	4	PR	Yes
D5	WP2	On-line questionnaire	4	PR	Yes
D6	WP2	Local Community Open Events	12	IR	Yes
D7	WP2	Report : "Contexts, constrains and prospects in historic urban areas"	5	PR and IR updated version	Yes
D8	WP3	Intelligent Energy Application Tool	16 (inc agreed extension)	IR(CD)	Yes (PDFs)
D9	WP4	Financial Prospects Report	17	IR	Yes
D10	WP4	Energy Audit reports	22	FR	No
D11	WP4	Historic Community Climate Change Strategies	25	FR	No
D12	WP4	Community Synthesis Launch	24	FR	No
D13	WP5	Evaluation criteria reporting	26	FR	No
D14	WP5	Historical Excellence publishable Summary	26	FR	No
D15	WP5	SECHURBA award design and display	20 & 27	FR	No
D16	WP6	SECHURBA Guide	27	FR	No
D17	WP6	Project Logo	6	PR	Yes
D18	WP6	Project Website	6	PR	Yes
D19	WP6	Articles	Whole duration	PR & IR	Yes
D20	WP6	Project Flyer	6	PR & IR	Yes
D21	WP6	Attendance at European Conference on SEC	28	FR	Yes
D22	WP6	SECHURBA & EU Networks	30	FR	Yes
D23	WP6	SECHURBA Newsletters	6, 12, 18, 24, 30	PR, IR & FR	Yes
D24	WP6	Video on SECHURBA	27	IR	Yes

[1] This information must be identical with your List of Deliverables in Annex I of your grant agreement.

[2] Please indicate the report with which you have submitted the deliverable (PR1, PR2, ...).

Table 2: Indicative state of advancement of hours per partner, per work package between 1st Sep 08 – 28th February 2010

Work Package	Actual/ Planned Achievement	Total Partners	MEA	SC	ITABC	VIVECA	CRES	AEDA	ALESA	CHIETI	EMI	SZENTENDRE	UBBSLA	LABEIN*	Cenergia
WP1 Management	Actual Planned	1997 1949	485 258	123 120	180 170	113 146	150 270	102 102	125 137	65 105	212 128	85 175	188 180	40 44	129 114
WP 2 Context, Barriers & Constraints	Actual Planned	1522 1465	175 97	114 87	210 211	84 50	212 153	78 78	95 100	30 48	201 328	60 66	148 152	40 20	75 75
WP3: Technical Solutions	Actual Planned	1571.5 1477	132 160	6.5 15	384 330	126 90	232 265	50 50	54 57	10 15	140 90	27 40	150 150	80 75	180 140
WP4 Sustainable Buildings & Communities	Actual Planned	1439 1907	36 95	14 20	45 65	6 60	304 616	166 150	124 177	30 66	349 207	61 207	145 180	110 96	49 64
WP5 Evaluation Criteria & Historic Excellence	Actual Planned	234 360	6 0	0 0		0 0	0 140	0 0	0 0	0 0	185 130	43 90	0 0	0 0	0 0
WP6 Communication & Dissemination	Actual Planned	1292 1294	119 92	12 20	127 95	89 80	110 195	85 83	52 55	35 52	225 180	86 150	280 224	20 21	52 47
WP7 Common Dissemination Activities	Actual Planned	55 42	55 42	0 0		0 0	0 0	0 0	0 0	0 0		0 0		0 0	- -
Total Action	Actual Planned	8105 8595	1007 744	270 262	946 871	418 426	1008 1639	481 463	450 526	170 286	1312 1063	362 728	911 886	290 256	480 445

* estimated as project manager for Labein away from office until beginning April

Table 3: Updated list of main persons in charge of the action

No Changes in key personnel in charge of Actions.

Updated version of the publishable summary slides and project fact sheet

Please find attached and emailed to :

EACI-IEE-REPORTS@ec.europa.eu http://ec.europa.eu/energy/intelligent/implementation/index_en.htm.

If necessary, please up-date the summary slides of your project with your achievements made so far and send a separate electronic version of these slides to EACI-IEE-REPORTS@ec.europa.eu. Please regard the guidelines for the creation of project slides provided at http://ec.europa.eu/energy/intelligent/implementation/index_en.htm.

Copy of the deliverables produced during the interim period, if not already submitted with previous report

The following Deliverables are attached with this report:

D6 - Open Event Report
- Translation into Partner Languages for country reports

D7 - Updated Report into Contexts, Constraints and Prospects in Historic Urban Communities

D8 - Intelligent Energy Application Tool – on CD

D9 - Report into Financial Mechanisms in partner countries

Interim Financial Statements for each beneficiary

Please see attached financial statements for each partner organisation and MEA's financial statement plus the coordinator's financial summary.