Researching energy efficiency for
European historic urban districts

HISTORIC SCOTLAND
ALBA AOSMHOR

EFFESUS PARTNER HISTORIC SCOTLAND

GENERAL INFORMATION

Funded by the European Commission

SEVENTH FRAMEWORK PROGRAMME

EFFESUS partner Historic Scotland

This publication is a web publication and is available for free download from the Historic Scotland website:
www.historic-scotland.gov.uk/effesus

This publication should be quoted as:
EFFESUS partner Historic Scotland:
General information

Front cover image: historic centre of Santiago de Compostela, Spain, one of seven cities hosting an EFFESUS case study

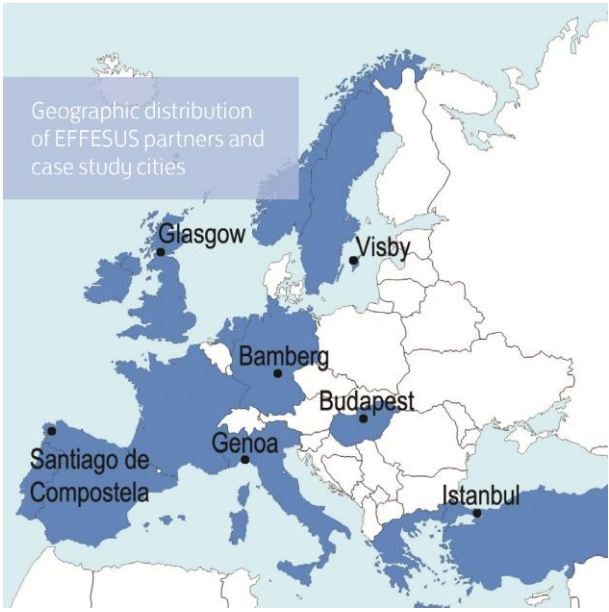
You can contact us at:

Historic Scotland
Conservation Directorate
Longmore House
Salisbury Place
Edinburgh EH9 1SH

Phone 0131 668 8600
Email hs.conservationgroup@scotland.gsi.gov.uk
Web www.historic-scotland.gov.uk/conservation

The EFFESUS research project is receiving funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement no. 314678.

Project overview



EFFESUS is researching the energy efficiency and sustainability of European historic urban districts and investigating measure and tools to make significant improvements whilst protecting their heritage value. Historic districts are an integral, important part of European cultural identity and heritage. Improving their energy efficiency sensibly will help to protect this heritage for the future.

EFFESUS will develop new technologies; produce a software tool to inform decisions on improvement measures; provide training and awareness activities; and demonstrate its results in real case studies in seven historic districts. EFFESUS is a research project funded by the European Commission, running from 2012 to 2016 and involving 23 partners from 13 European countries.

EFFESUS will produce a Decision Support System, a software tool to help make informed decisions about improvement measures suitable for historic districts. The decision making will be supported by a multi-scale spatial data model, a categorisation of historic buildings and a repository of energy efficiency retrofit solutions.

EFFESUS will also develop and implement new and adapted technologies and systems which are cost-effective and technically and visually suitable for use in historic buildings and urban districts. These technologies will include aerogel insulation products, secondary window solutions, thermal insulating mortars and radiant reflective coatings; intelligent energy management systems, adapted particularly for historic buildings; and systems for energy generation from renewable sources suitable for installation within historic urban districts.

EFFESUS will demonstrate in case studies the applicability of its technological developments and the suitability of its software tool. The case studies will be located in the historic cities of Bamberg (Germany), Budapest (Hungary), Genoa (Italy), Glasgow (United Kingdom), Istanbul (Turkey), Santiago de Compostela (Spain) and Visby (Sweden).

This document provides a brief overview about the EFFESUS project and Historic Scotland's role as one of 23 project partners. This document will be supplemented by annual briefings about the project activities Historic Scotland has been involved in. These documents are available on Historic Scotland's website

www.historic-scotland.gov.uk/effesus

General project information about the EFFESUS is available on the project's website, where you can download project flyers (in English and 12 other languages) and a project fact sheet. On that website, you can find out more about forthcoming EFFESUS outreach and training events, and you can sign up for a free email newsletter.

www.effesus.eu

EFFESUS partner Historic Scotland

Project details

Acronym:	EFFESUS
Project title:	Energy Efficiency For EU Historic Districts' Sustainability
Funding programme	7th Framework Programme For Research And Technological Development (FP7) of the European Commission
Grant agreement	no. 314678
Project period	2012 to 2016
Number of partners	23 partners from 13 countries
Lead partners:	Tecnalia, Spain, and Fraunhofer Gesellschaft, Germany
UK partners	3 Scottish partners as the only UK partners
HS as partner	Historic Scotland, acting as part of the Scottish Government
Overall budget	approx. 6.8 mio. €
Overall EU contribution	approx. 5.0 mio. €
Co-funding by partners	approx. 1.8 mio. €
HS budget	approx. 163,000 € (i.e. a yearly average of 40,750 €)
EU contribution to HS	approx. 128,000 € (i.e. a yearly average of 32,000 €)
Co-funding by HS	approx. 35,000 € (i.e. a yearly average of 8,750 €)
Note on co-funding	Co-funding can be in the form of funding 'in-kind'.

Other Scottish project partners

Further to Historic Scotland, two other Scottish project partners have joined the project consortium, as the only UK partners.

A. Proctor Group Ltd., Blairgowrie, Perthshire

- manufacturer and supplier of advanced construction products
- small- or medium-sized enterprise (SME)
- contact person: Iain Fairnington
- website / email: www.proctorgroup.com technicl@proctorgroup.com

Dennis Rodwell, St. Boswells, Scottish Borders

- conservation architect and heritage expert
- small- or medium-sized enterprise (SME)
- contact person: Dennis Rodwell
- website / email: www.dennisrodwell.co.uk dennis@dennisrodwell.co.uk

Proposed project outcomes

Main outcome

- Decision Support System, a software tool to support the strategic decision process to improve the energy efficiency and reduce carbon dioxide emissions from historic districts

Other outcomes

- Development of advanced retrofit solutions (incl. materials and fabric solutions; intelligent energy management systems; renewable on-site energy generation)
- Overcoming technical and non-technical barriers to the uptake of retrofit measures
- Outreach, education and training

Project setup

The project has 10 distinct work packages (WPs), which are again split into work tasks (WT). Historic Scotland is only working in the work packages and work tasks listed below and is leader for WT6.4.

WP1 Creating a structured categorisation for the European building and urban stock and a multiscale data management model

- WT1.1 Identifying and collating existing data sources
- WT1.2 Developing impact indicators
- WT1.3 Identifying and evaluating European and national policies and legislation relating to energy efficiency and cultural heritage conservation

WP2 Creating a repository of existing and replicable technologies for energy efficiency improvements

- WT2.3 Collecting of best practice
- WT2.4 Recovering old architectural solutions and strategies

WP6 Developing the software tool Decision Support System

- WT6.4 Validating the Decision Support System *(this work task is led by Historic Scotland)*

WP7 Demonstrating in real case studies

- WT7.2 Implementing of case study projects

WP9 Education, awareness, dissemination and training

- WT9.1 Develop group-specific concepts for stakeholder dialogue
- WT9.2 Public awareness raising

How EFFESUS supports Historic Scotland strategic priorities

Historic Scotland's strategic priorities and key commitments (as per its Corporate Plan 2012-2015)	**Historic Scotland's participation in EFFESUS supports these strategic priorities and key commitments by**
• *championing Scotland's historic environment.*	• ensuring that project outcome from EFFESUS are relevant to a Scottish heritage context.
• *contributing to sustainable economic growth.*	• supporting a Scottish business, A. Proctor Group, to become an EFFESUS project partner to develop new high-performance insulation products suitable for use in traditional buildings
• *managing Scotland's historic environment creatively.*	• developing a software tool to support the decision making process for retrofitting historic urban districts to improve their energy performance and reduce their carbon intensity.
• *supporting the transition to a low carbon economy.*	
• *seek further ways to harness digital and other technologies as conservation and planning tools, to the benefit of the historic environment and its understanding.*	
• *focus our research programme on ways to improve the energy efficiency of traditionally-built buildings.*	• working in a research project investigating the energy efficiency of historic urban districts
• *work with our partners to facilitate access to the expertise they require in locally managing the historic environment, making best use of the resources available.*	• contribute to the stakeholder engagement of the EFFESUS project and its outreach and dissemination activities, in the form of conferences, seminars, training courses etc.
• *share our expertise with owners, regulators and developers to ensure that the creative management of the historic environment is at the heart of regeneration and place-making.*	
• *disseminate the results of our research of our research and work with stakeholders to encourage sustainable use, reuse and adaptation of the historic environment …*	
• *work with international colleagues to ensure Scotland contributes meaningfully to the global conservation and heritage community.*	• working in a European research project with 23 partners from 13 countries and other international project affiliates from a large variety of fields of work.

Contacts

General information about EFFESUS

Please visit the EFFESUS project website at www.effesus.eu where you can sign up for a free email newsletter or contact the project by email at request@effesus.eu

Information about Historic Scotland's participation in EFFESUS

Technical contact and project lead:
Carsten Hermann, Senior Technical Officer, carsten.hermann@scotland.gsi.gov.uk

Administrative, financial and legal contact:
Mary Fitzgerald, Head of Management Accounts, mary.fitzgerald@scotland.gsi.gov.uk

Involved intermediary senior management:
Ewan Hyslop, Head of Sustainability, Research and Technical Education
Roger Curtis, Technical Research Manager

Involved top senior management and contract signatories:
Myriam Madden, Director of Finance
David S. Mitchell, Director of Conservation

Information about FP7 projects with participation of the Scottish Government

Historic Scotland is an agency of the Scottish Government. Contractually, the EFFESUS project partner is the Scottish Government, with Historic Scotland acting on its behalf.

Legal Entity Approved Representative (LEAR) for the Scottish Government:
Eddie Turnbull, Deputy Director / Head of eHealth

Glasgow case study

One of the seven case studies will be carried out in Glasgow, to demonstrate the suitability and usability of new high-performance insulating products, developed by another Scottish project partner, A. Proctor Group. The insulating products are for backfilling cavities behind wall finishes in tenement buildings. The case study is coordinated by Historic Scotland with Glasgow City Council.

Contact Glasgow City Council:
Daveed Barceló i Batllori,
david.barcelo
@drs.glasgow
.gov.uk

EFFESUS partner Historic Scotland

Available at **www.historic-scotland.gov.uk/effesus**

General information

Activities 2012/13