



Fundamentals of Energy Renovation for Traditional Buildings: CPD Lecture Series 2019-2020

Funded by Sustainable Energy Authority of Ireland (18/RDD/363)

Interested in learning more about the risks, challenges and rewards of renovating traditional buildings for improved energy performance?

Need more guidance on how to ensure your energy renovation project complies with the new building regulations?

And what about embodied carbon and the rebound effect? How can practitioners account for these issues in the concept design phase of energy renovations?

The Fundamentals of Energy Renovation for Traditional Buildings lecture series has been developed by the Heritage Council and Carrig Conservation International Ltd to answer these questions and more. The lecture series is open to qualified building professionals and Continuing Professional Development (CPD) credits will be provided by the Royal Institute of the Architects of Ireland (RIAI) and Engineers Ireland (EI). The lecture series has also been endorsed by the Society of Chartered Surveyors (SCSI).

Lectures will be delivered by leading professionals from Ireland, the UK and Europe, giving attendees access to the latest research, case studies and best practice guidance. Attendees will also be supported by an online resource with suggested readings, speaker presentations and practice quizzes to test knowledge and comprehension.

Registration fees cover 5 full days of lectures (6 each day), which will run from 8:30am – 5:30pm on the following dates:

Friday, 1 November 2019	Friday, 17 January 2020
Friday, 15 November 2019	Friday, 31 January 2020
Friday, 29 November 2019	

Spaces are limited, so early registration is encouraged. Please register through the [Heritage Council website](#).

The lecture series will be held at [Richmond Barracks, Dublin 8](#). Further course details available at: <https://ertb.teachable.com/p/fundamentals-of-energy-renovation-for-traditional-buildings/>.

The attendance fee for the full 5-day course is €400, which has been generously subsidised by funding from the Sustainable Energy Authority of Ireland (SEAI) Research, Development and Demonstration funding programme.

With support from:



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Lecture Topics

The following 10 modules will be delivered over the 5 days of the lecture series (2 modules per day).

1. HISTORIC BUILDINGS & CLIMATE CHANGE: MITIGATION & ADAPTATION

- 1.1. High-level responses to climate change – *Peter Cox, Carrig Conservation International Ltd.*
- 1.2. Climate Change Adaptation Plan for Built & Archaeological Heritage – *Dr Cathy Daly, University of Lincoln*
- 1.3. Challenges, risks and rewards of energy renovation – *Chris Morgan, Scottish Ecological Design Association*

2. INTRODUCTION TO TRADITIONAL BUILDINGS AND CONSERVATION PRINCIPLES

- 2.1. How traditional buildings work – *Carl Raftery, Dublin City Council*
- 2.2. Condition assessments and surveys of traditional buildings – *Frank Keohane, Chartered Building Surveyor*
- 2.3. Conservation principles and practice – *Jacqui Donnelly, Dept of Culture, Heritage & the Gaeltacht*

3. THERMAL EFFICIENCY & MOISTURE MANAGEMENT

- 3.1. Measuring the thermal efficiency of traditional buildings – *Joseph Little, Technical University Dublin*
- 3.2. Moisture movement and potential hygrothermal risks – *Colin King, UK Centre for Moisture in Buildings*
- 3.3. Case Study: New Court, Trinity College, Cambridge – *Dr Caroline Rye, Archimetrics Ltd.*

4. UPGRADING BUILDING SERVICES & INTEGRATING RENEWABLE ENERGY SOURCES

- 4.1. Introduction to low carbon energy sources and heating solutions – *Lis O'Brien, Limerick Institute of Technology*
- 4.2. Managing the design of mechanical and electrical installations – *Edith Blennerhassett, ARUP*
- 4.3. Case Study: Decarbonising National Trust Properties – *Keith Jones, UK National Trust*

5. LOW-RISK, HIGH-IMPACT ENERGY RENOVATION WORKS

- 5.1. Draughtproofing, airtightness and ventilation – *Niall Crosson, Ecological Building Systems*
- 5.2. Thermal improvements for historic windows & doors – *Dr Nessa Roche, Dept of Culture, Heritage & the Gaeltacht*
- 5.3. Insulating and ventilating roofs, attics and floors – *Evangelia Angelaka, Historic Environment Scotland*

6. SOLID WALL INSULATION

- 6.1. Introduction to solid wall insulation for traditional buildings – *Dr Rosanne Walker, Trinity College Dublin*
- 6.2. Risks and challenges of solid wall insulation – *Dr Valentina Marincioni, UK Centre for Moisture in Buildings*
- 6.3. HES Refurbishment Case Study 27: Holm Farm Cottage – *Dr Moses Jenkins, Historic Environment Scotland*

7. COMPLYING WITH BUILDING REGULATIONS & TAKING A BALANCED APPROACH TO RENOVATION

- 7.1. Recent changes to the Irish building regulations – *Seán Armstrong, Dept of House, Planning & Local Government*
- 7.2. Energy renovation, planning & building control – *Pat Nestor, Dublin City Council*
- 7.3. Life cycle assessment & embodied carbon - *tbc*

8. PROJECT COORDINATION AND RISK MANAGEMENT

- 8.1. Strategic methodologies & decision making tools – *Nigel Griffiths, Sustainable Traditional Building Alliance*
- 8.2. Coordinating energy renovation works on site – *Tomás O'Leary, MosArt*
- 8.3. Building Renovation Passports – *Marion Jammet, Irish Green Building Council*

9. REDUCING THE ENERGY PERFORMANCE GAP

- 9.1. The Rebound Effect – *Dr Ray Galvin, University of Cambridge*
- 9.2. Post-occupancy handover – *Dr Michelle Agha-Hosseini, British Services Research & Information Association*
- 9.3. Post-occupancy monitoring and evaluation – *Janice Foster, Glasgow School of Art*

10. DEALING WITH KNOWLEDGE GAPS AND UNCERTAINTIES IN PRACTICE

- 10.1. Renovation Triggers – *Karl Purcell, Sustainable Energy Authority of Ireland*
- 10.2. Sources of further training – *Course Representatives*
- 10.3. Expert Panel and Q&A on Dealing with Knowledge Gaps and the Future of Training – *Special Guests*

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This lecture series has been developed in consultation with the following organisations:



An Roinn Cultúir,
Oidhreachta agus Gaeltachta
Department of Culture,
Heritage and the Gaeltacht



An Roinn Tithíochta,
Pleanála agus Rialtais Áitiúil
Department of Housing,
Planning and Local Government



Dublin City Council
Comhairle Cathrach Bhaile Átha Cliath

