

MAG Passivhaus for the Public Sector

*The importance of good
design: Reducing Risk,
Cost and Carbon*



MINISTERIAL ADVISORY GROUP
ARCHITECTURE AND THE BUILT ENVIRONMENT
FOR NORTHERN IRELAND



DfC

Department
for Communities
www.communities-ni.gov.uk



**QUEEN'S
UNIVERSITY
BELFAST**



Passivhaus
Trust



Agenda

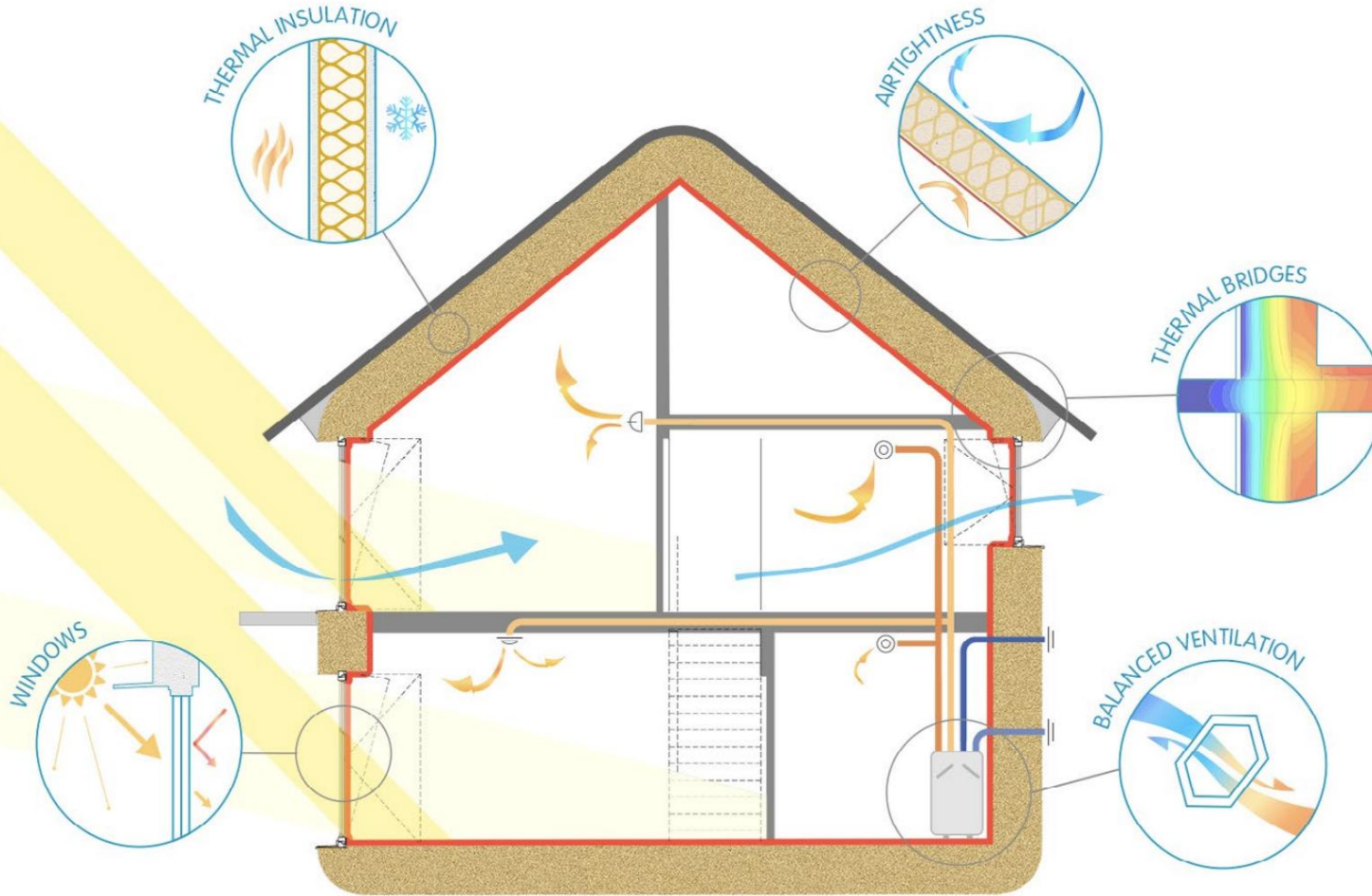
- 9.30** **Andrew Haley | MAG Chair | Welcome**
- 9.45** **Ann Marie Fallon, UK Passivhaus Trust**
Caroline Ashe Brady, Passive House Association of Ireland
- 10.00** **Sally Godber, Director WARM Consultants**
Sharing real-world experience as a Passivhaus Certifier, focusing on lessons learned and reflections from public sector clients on Passivhaus delivery
- 10.30** ***Q/A session***
- 10.45** **Jennifer Whitty Tuath Housing**
Presenting public-sector housing delivery experience and focusing on implementation, organisational learning, and outcomes
- 11.15** ***Q/A session***
- 11.30** **Nathan Campbell, Queens University Belfast**
Exploring how Passive House principles support the university's zero-carbon estate strategy, with lessons applicable across education, health, and wider public-sector campuses.
- 12.00** ***Q/A session***
- 12.15** **Nicola Donnelly, Head of Architecture Branch; Department for Communities**
- 12.30** **Lunch**



What is Passivhaus?

BUILDING PRINCIPLES

By following these principles of approach, each Passivhaus building will have a project-specific solution which optimises the five key building principles:



High performance **insulation** which is optimised for comfort, energy demand and the climate zone.

Continuous, high performance **airtight** layer to minimise heat loss, eliminate draughts and maximise fabric longevity.

Thermal bridges minimised to prevent cold spots and mould.

High performance **window** specification & shading to provide optimum comfort and efficiency in summer and winter.

Quiet and efficient mechanical **ventilation** with heat recovery (MVHR) delivering high indoor air quality.

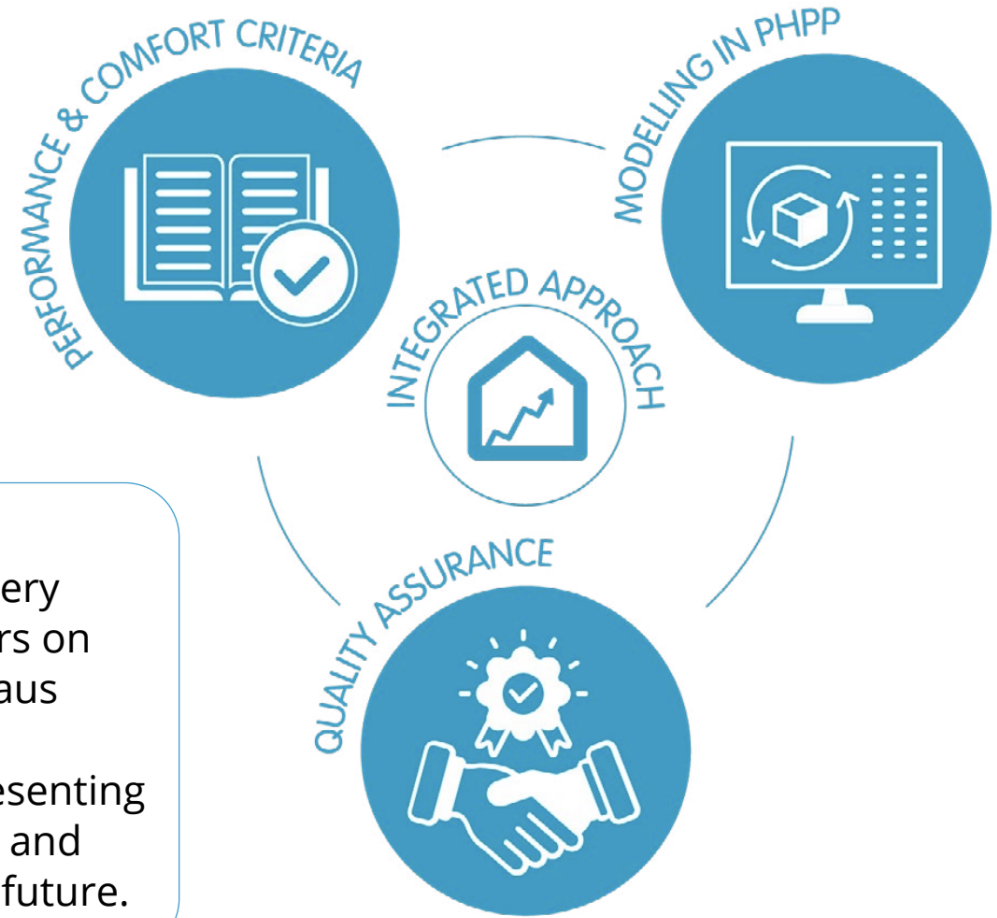
PRINCIPLES OF APPROACH

The three core principles of approach are detailed performance and comfort criteria, accurate performance modelling in PHPP, and rigorous quality assurance across design, construction, and commissioning. Together, these principles enable Passivhaus buildings to not only meet theoretical energy standards but also deliver on their real-world performance, comfort, and durability.

Clearly defined and detailed **performance and comfort criteria** which are underpinned by a strong and proven evidence base.

Every Passivhaus project must be modelled using the **Passivhaus Planning Package (PHPP)** for precise energy balance calculations and comfort assessments. It's both an invaluable design aid and a powerful tool for value engineering.

Quality assurance is delivered through careful verification at every stage, so that the building delivers on its performance targets. Passivhaus Certification is independent and impartial, with the Certifier representing the best interests of the building and building owners, now and in the future.





1. BUILDING PERFORMANCE

Understand what Passivhaus achieves in terms of a building's energy demand, performance gap, comfort and quality.



2. CLIMATE EMERGENCY

Decarbonisation is a critical part of our journey to net zero. Learn how Passivhaus enables the levels of demand reduction that we will need to achieve net zero.



3. HEALTH & WELLBEING

Explore how Passivhaus can address the root causes of poor housing and thus improve health outcomes.



4. PEOPLE PERFORMANCE

The improved living and working environments offered by Passivhaus can improve productivity, learning outcomes and reduce absenteeism.



5. THE FINANCIAL BENEFITS OF PASSIVHAUS

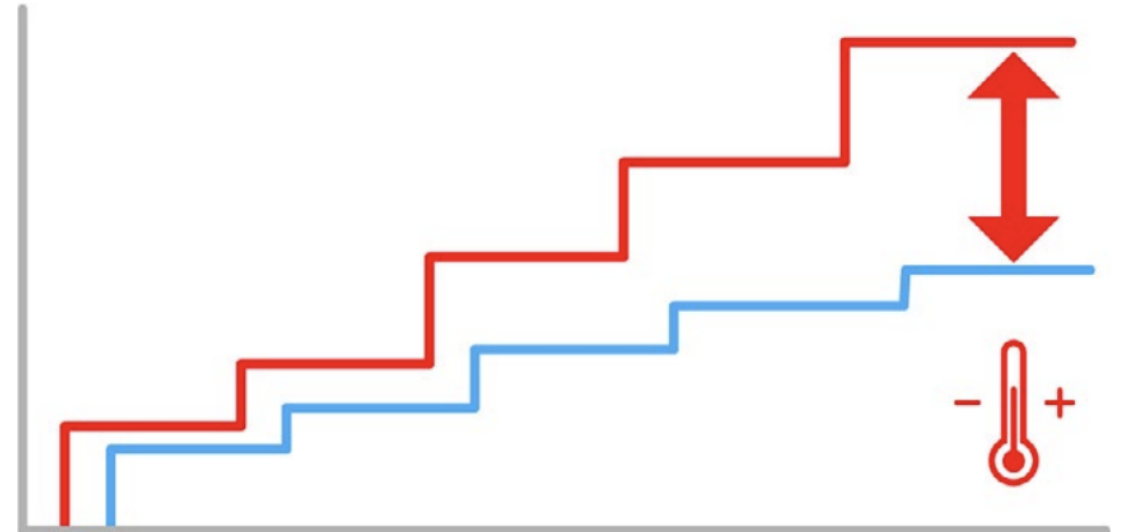
A Passivhaus building isn't just more affordable to run - it can also offer lower maintenance costs, reduced fuel poverty, and open access to green finance or better rates on mortgages.



6. SOCIAL RETURN OF INVESTING IN PASSIVHAUS

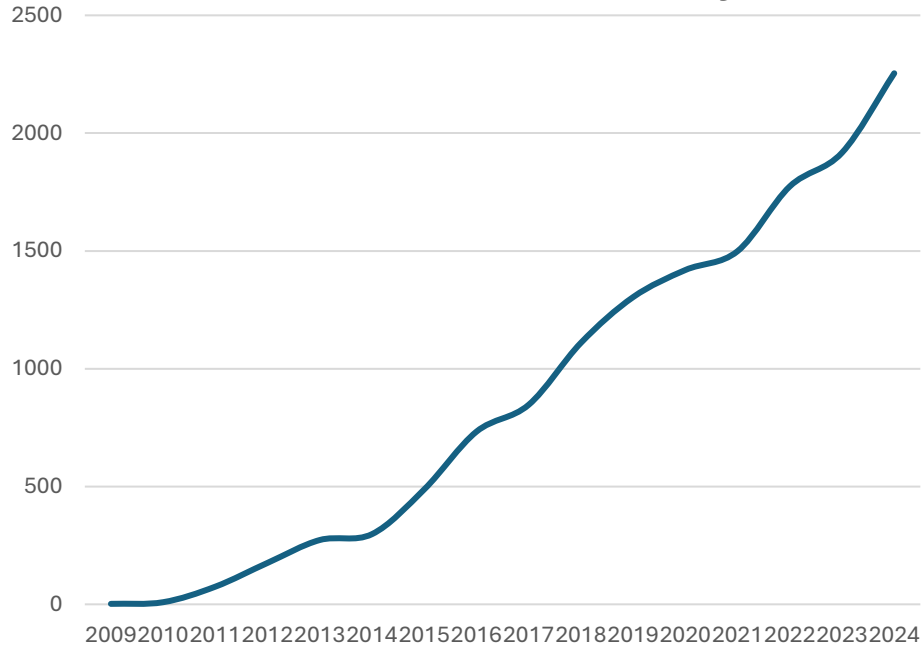
Improved wellbeing and productivity reduce the load on health and social care and gives people better life chances. These are potentially some of the biggest and most far-reaching benefits. While they are often difficult to quantify, they cannot be ignored.

ELIMINATING THE PERFORMANCE GAP



Passivhaus Trust – Certified projects as at '24

No. of PH units cumulatively



> 470
GB CERTIFIED PROJECTS

> 2200
GB CERTIFIED DWELLINGS

370,600 m²
TFA CERTIFIED

> 8000
UNITS IN DEVELOPMENT



Further Learning

You are warmly invited to Queen's University's annual

SUSTAINABLE CONSTRUCTION CONFERENCE

MATERIALS MATTER:
A DEEP DIVE INTO MATERIAL INNOVATION, CIRCULARITY, AND LOW IMPACT DESIGN.

TUES 24TH FEBRUARY 2026
8.45 AM - 1.15 PM
Mandela Hall, One Elmwood,
Queen's Student Union,
77 University Road,
Belfast, BT7 1NF

ZEB Summit

Registration is now open!
Promocode: EARLYBIRD26

23 September 2026 | RDS, Dublin 4

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28TH INTERNATIONAL PASSIVE HOUSE CONFERENCE 2026

Driving Transformation with Energy Efficiency!
24 - 25 April, 2026
Essen | Germany

< Lectures
Exhibition
Networking
Excursions >

www.passivehouseconference.org

Organiser and cooperation partners:

Passive House Institute, PASSIVE HOUSE Association, PASSIVHAUS Austria, universität innsbruck, KLIMA BÜNDNIS, IR+ REN+HOMES, AchieVE ZEB, NRW.ENERGY ACLIMATE, Ministry of Economic Affairs, Industry, Climate Action and Energy of the State of North Rhine-Westphalia

Passivhaus Trust CONFERENCE 2026

Scaling affordable comfort and resilience

18 Nov | London + online

Passivhaus Trust 2026 CONFERENCE



Online
Lunchtime
Series 2026

25th March

Small Scale Public Projects

22nd April

Large Scale Public Developments

21st May

Public Sector Housing Delivery

