



Retro Fit for Zero Carbon

Can we achieve it,
and can we afford it?

Presented By
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&
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This project refers to typical red sandstone Victorian Tenement properties built around 1900

First Some Background Information

Initially a Red Sandstone Repair Project

- Previous repairs deteriorating - 35 years old
- Red Sandstone delaminating
- Pointing needing to be replaced
- Masonry falling into Gardens



Four Red Sandstone Victorian Properties

DUMBARTON ROAD



SCOTT STREET



Complex Project....Reason

Mixed Tenure Buildings which made the project a bit more problematic as opposed to having blocks of just tenanted properties

Comprising of :-

- Tenants
- Owner Occupiers
- Private Landlords
- Commercial shop units



Four Commercial units below in Dumbarton Road

- ❖ Pub
- ❖ Barbers
- ❖ Mini market
- ❖ Bakery



Protective walkway around 4 closes and a row of commercial properties to protect general public

- License from West Dunbartonshire Council
- Cost of the walkway incurred by DPHA
- Weekly Health and Safety checks and administration





Specialist Stonework Survey Carried Out





Architects carried out an assessment of the red sandstone properties

Produced a report for the Board of Management with recommendations on how to address the issue of stonework repairs throughout the sandstone stock



Procure
Contractor to
Carry out the
repairs to the
Stonework

The Valley Group Successful Contractor

Access additional
funding from the big 6
utilities

Criteria for HEEPS
funding from WDC to
assist owners to meet
with the cost of
repairs



No funding available for the commercial shop units from West Dunbartonshire Council

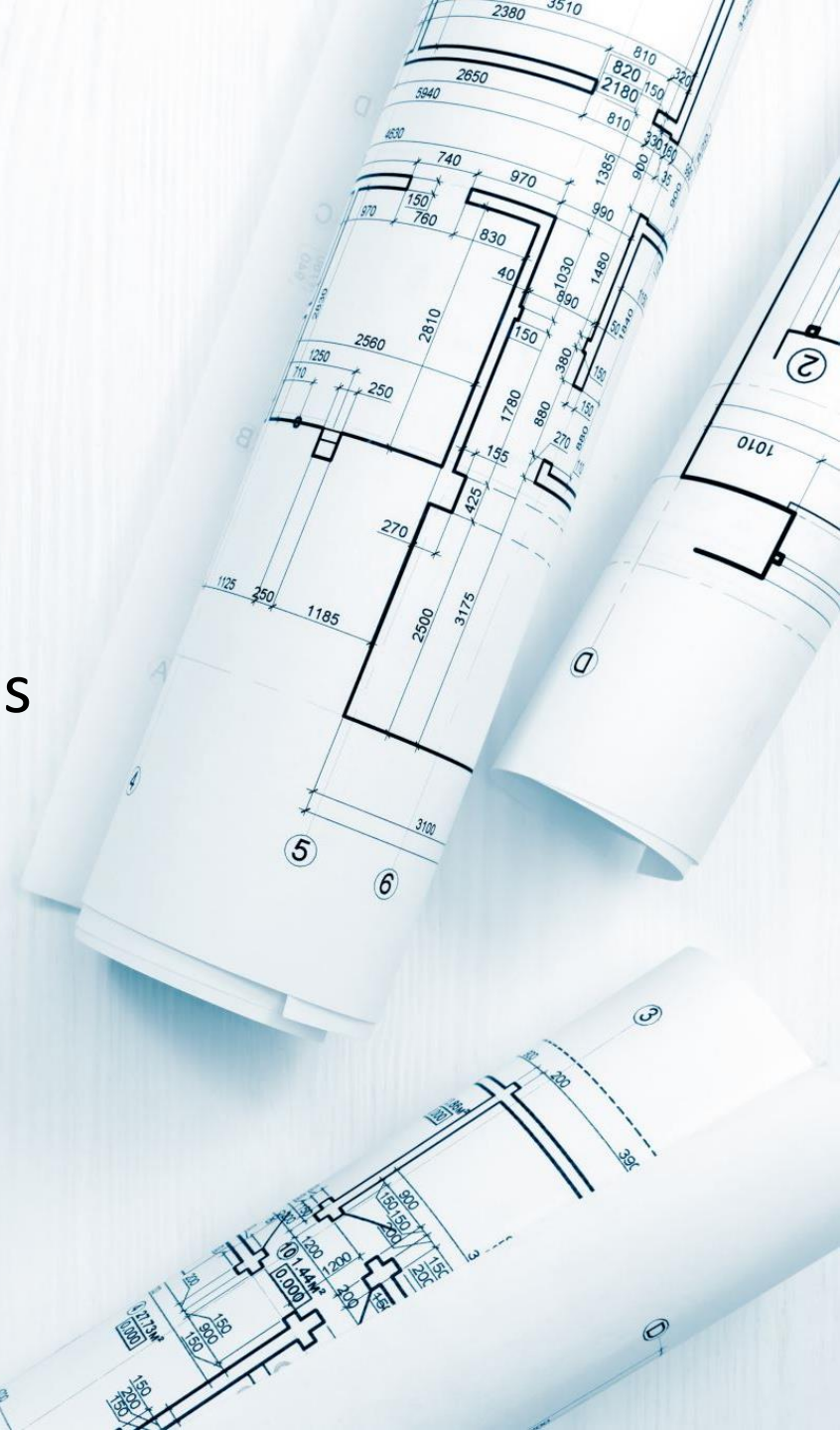
Only in Glasgow has funding be made available to commercial units for this type of work from the City Council

No other LA provides commercial funding assistance



The Stonework repairs grew into a much bigger complex project.
The two options available:
1. Stone repair alone, or
2. Stone repair with Internal & External wall Insulation

By wrapping the building with internal and external insulation, would allow the owners to access Home Energy Efficiency Programmes for Scotland grant funding (HEEPS) from West Dunbartonshire Council of £7,500 towards their costs. And allow the buildings to be more energy efficient.



Planning Permission

West Dunbartonshire Council will not allow changes to the front elevation of the properties, so internal insulation was the only alternative for the facade of the buildings.



Asked the Question
of the Scottish Govt
about grant funding
to assist Dalmuir
Park HA with the
cost of the project

Scottish Govt Funding Available

Scottish Housing
Net Zero Heat
Fund
£200 million

“Fabric First”
Application





Looked for additional funding options to assist
owner occupiers & commercial owners

No other funding was available either locally or
nationally - Big Six Utilities funds were exhausted.

Made an Application for Funding to the Scottish Govt



what are other words for lengthy process?



rigmarole, fuss, fuss and bother, bother, commotion, trouble, folderol, ado, pother



Thesaurus.plus

Funding Application timeline with the Scottish Government



Feb. 2022 Initial application made to SHNZ Heat Fund.

Nov 2022 Awarded Grant for tenanted property's - £151k

Pandemic - contract retendered. 28% increase in costs; previous contractor was successful again

Mar 2023 Additional funding application made

May 2023 Further award of £127k match funded with DPHA

Work commenced early July 2023

Carbon Reduction Assessment

The Carbon Reduction Assessment demonstrates that through the introduction of internal and external wall insulation, heat energy demand and heat carbon emissions will be reduced by around 28%.

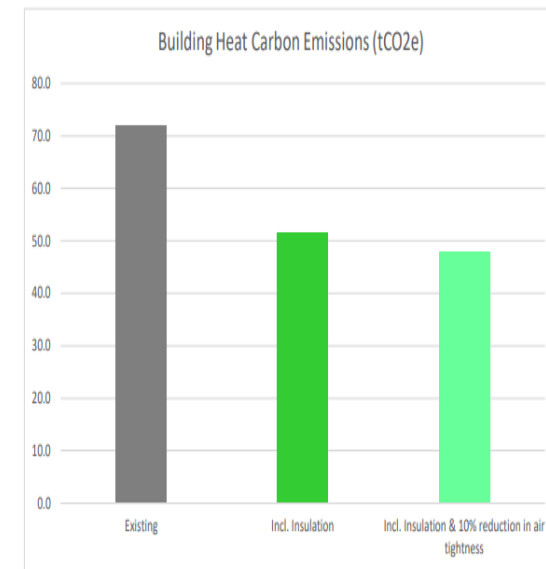
In reality, a greater reduction of 33% is likely to be achieved through the associated improvement to air tightness that the works will provide.

Dumbarton Road Carbon Reduction Assessment

Executive Summary

The Carbon Reduction Assessment demonstrates that through the introduction of internal and external wall insulation, heat energy demand and heat carbon emissions will be reduced by 28%. In reality, a greater reduction of 33% is likely to be achieved through the associated improvement to air tightness that the works will provide.


Project Name	Dumbarton Road
Project No.	0574
Date	14/09/2022
By	David MacConnell



Methodology

Dynamic Simulation Modelling was carried out to ascertain the heat demand of the blocks as they are existing and then again with the introduction of the internal and external wall insulation, as identified in the images below.

Energy Performance Certificate

A photograph of a white wind turbine against a dark night sky filled with stars. The Milky Way galaxy is visible on the right side of the image, stretching from the bottom right towards the top right. The turbine's tower and nacelle are visible, with the blades extending outwards.

Energy Efficiency Rating Improvement From a Band D or C to Band B

Internal wall insulation with finished plasterwork



Work has been carried out with Dalmuir Park HA Tenants remaining in situ

Only one tenant out of 30 flats has had to be decanted for internal insulation to be installed

No complaints from owners or tenants

Works completed on programme





Project is in its final stages and will be complete by the middle of December weather permitting

One of the more successful IWI/EWI Projects experienced by Grant Murray Architects and confirmed by Scottish Government


Retro fit for Zero Carbon can we achieve it? YES

CONTRACTOR LIAISON OFFICER



DPHA DEDICATED PROJECT TENANT LIAISON OFFICER



The background of the slide is a close-up, slightly blurred image of several British 50-pound banknotes. The notes are stacked and overlapping, with the portrait of Queen Elizabeth II visible on the top note. The colors are muted due to a dark overlay.

Can we afford to retro fit
on our own?

The Financial Figures. Project £665,000 inc VAT

Costs inc VAT.

Repairs cost to date **£295,304**

Stonework **£55,630**

IWI /EWI no Vat **£239,674**

Owners charge **£82,000**

Commercial charge **£130,000**

Professional Fees **£36,304**

Protective walkway **£16,000**

Funding to date

HEEPS funding (UNDER REVIEW) **£37,500**

SG grant received **£147,652**

Scotland's ambitious climate change legislation sets a target date for net zero emissions of all greenhouse gases by 2045.

Can we afford it ?



The net zero target will only be achieved if significant additional funding is made available from the Scottish Government

A close-up photograph of a vinyl record spinning on a turntable. The record is in motion, creating a blurred effect. The background is dark with numerous warm, golden bokeh lights of varying sizes, creating a soft, atmospheric glow. The turntable's tonearm and stylus are visible in the foreground, partially obscuring the record.

Thanks for
Listening...

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