

# Initial Refurbishment Ideas

Verity Close

LANCASTER WEST  
NEIGHBOURHOOD TEAM

**WT11**

 **ECD Architects**  
ENERGY CONSCIOUS DESIGN



# With us tonight



James Caspell  
Neighbourhood  
Director



Andros Loizou  
Head of Refurbishment  
Design & Delivery



Bunmi Shekoni  
Refurbishment Design &  
Delivery Project Manager



Alfie Peacock  
Refurbishment Design &  
Delivery Project Officer



Janet Hall  
Heat Network  
Engagement Manager

# With us tonight



Lizzy Westmacott  
Project Architect



Niall OCleirigh  
Architectural Technologist



Jess Scott  
Engagement Lead

# Getting to know you



# Why are we meeting?

- 1. Continue the co-design conversation**
- 2. Share our current understanding of priorities**
- 3. Discuss initial refurbishment ideas, capture ideas, concerns and questions**

In following co-design meetings we will discuss preferred options, review feedback and develop final design proposals together.

# **Our shared vision**

- 1. A 21<sup>st</sup> century model for social housing**
- 2. Homes that are carbon neutral by 2030**
- 3. Co-designed with residents, sensitively and collaboratively**

# **Stop Press: Additional funding news**

# Building Element Ownership Matrix

Building Element	Verity Close Houses & Flats (Tenanted)	Verity Close Flats (Leasehold)	Verity Close Houses (Right to Buy Leasehold)	Verity Close Houses (Freehold)
Window frame (excluding glazing)	RBKC	RBKC	RBKC	Freeholder
Balcony doors and frame (excluding glazing)	RBKC	RBKC	RBKC	Freeholder
Window glass and apparatus	RBKC	Leaseholder	Leaseholder	Freeholder

# Your priorities

**Verity Close**  
Refurbishment  
programme – flats

Draft programme

Residents' top 10 priorities are:

- 1 Kitchens
- 2 Bathrooms
- 3 Block entry system
- 4 Drainage
- 5 Soundproofing
- 6 Windows
- 7 CCTV
- 8 Roofs
- 9 Boiler
- 10 Redesign the close

**35%**  
Resident participation



**Co-design update**

Building on the Ideas Days of 2018, we have engaged over a six month period with residents from every block to establish their priorities, based on the budget secured and latest estimated costs.

We will use these priorities – together with surveys and feasibility studies undertaken throughout 2020 – to shape block-specific refurbishment programmes, and deliver a 21st century model estate.

**Verity Close**  
Refurbishment  
programme – houses

Draft programme

Residents' top 10 priorities are:

- 1 Soundproofing
- 2 Kitchens
- 3 Bathrooms
- 4 Boiler
- 5 Electrics
- 6 Gate off the close
- 7 Internal doors
- 8 Plumbing
- 9 Drainage
- 10 CCTV

**28%**  
Resident participation



**Co-design update**

Building on the Ideas Days of 2018, we have engaged over a six month period with residents from every block to establish their priorities, based on the budget secured and latest estimated costs.

We will use these priorities – together with surveys and feasibility studies undertaken throughout 2020 – to shape block-specific refurbishment programmes, and deliver a 21st century model estate.

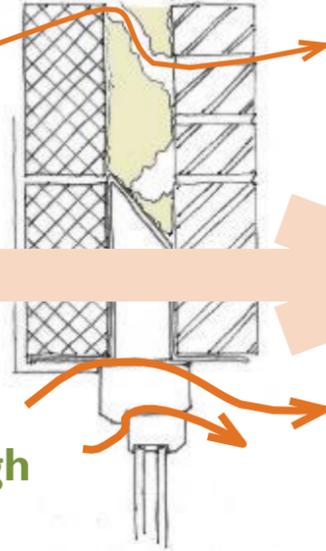


# Current energy efficiency challenges

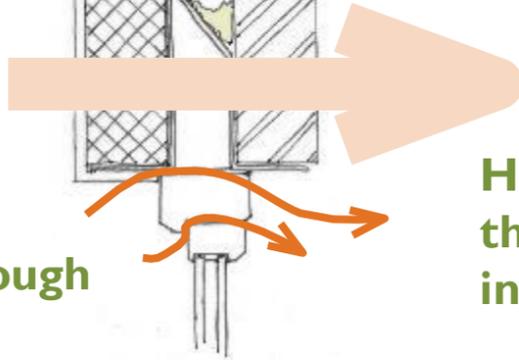


# How heat is lost now

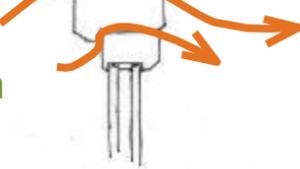
Heat lost through gaps in insulation



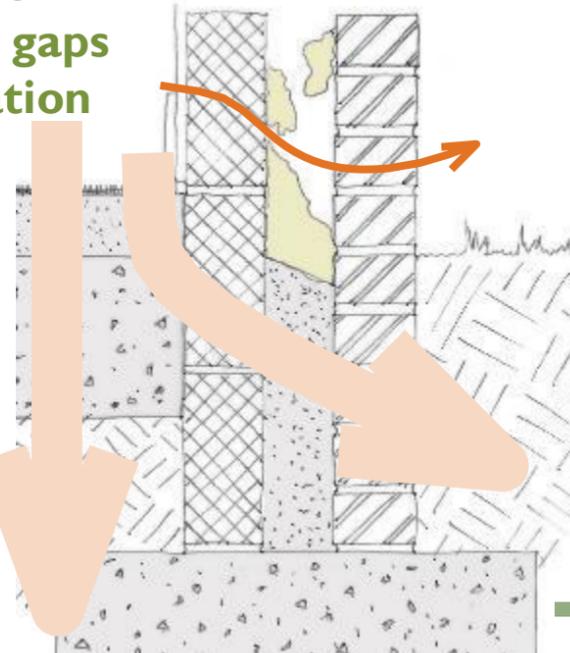
Heat lost through uninsulated lintels



Heat lost through gaps around windows

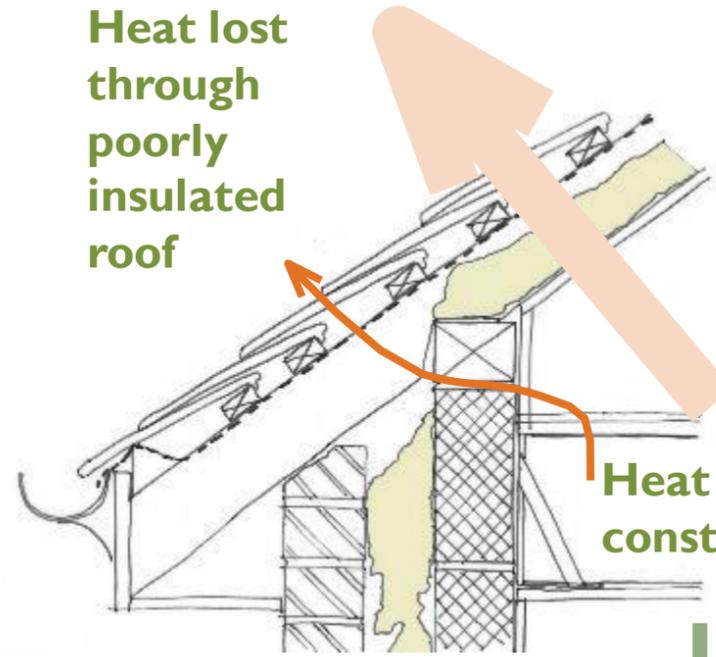


Heat lost through gaps in insulation

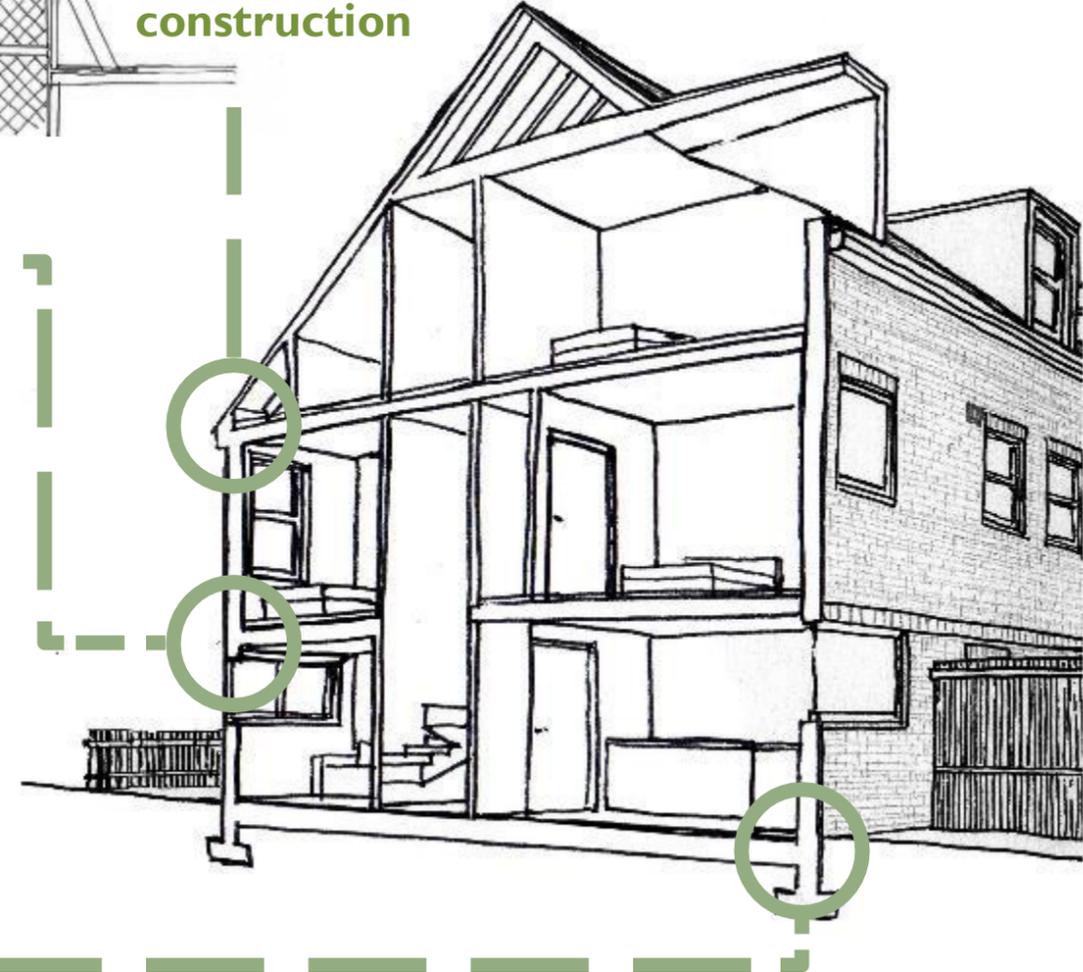


Heat lost through uninsulated floor & wall base

Heat lost through poorly insulated roof



Heat lost through gaps in construction



# Energy Performance Certificates

## Verity Close

EPC		
Rating	Homes	%
<b>A</b>	0	<b>0%</b>
<b>B</b>	2	<b>8%</b>
<b>C</b>	15	<b>57%</b>
<b>D</b>	7	<b>27%</b>
<b>E</b>	2	<b>8%</b>
<b>F</b>	0	<b>0%</b>
<b>G</b>	0	<b>0%</b>
No EPC	42	-

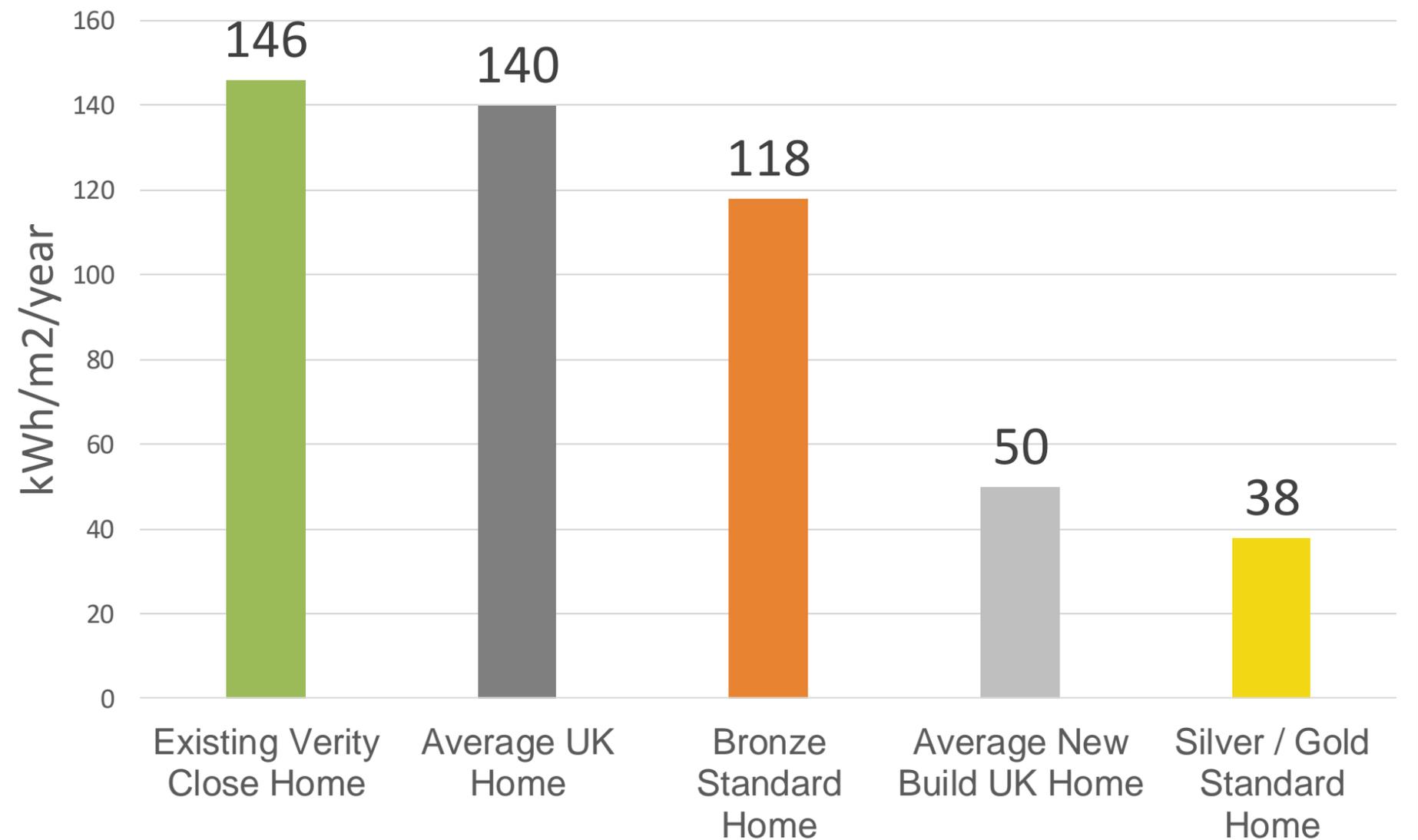
**92% of residents have reported a heating and hot water issue in the last 6 months**

- 50 to 100% of residents
- 20 to 50% of residents

Issue Type	Verity Close
General Repairs	97.2%
Heating / Hot Water	91.7%
Plumbing	80.6%
Leaks	58.3%
Intercom / Door Entry / Locks	83.3%
Electrical	11.1%
Lighting	44.4%
Windows	11.1%
Drains / Gullies / Guttering	19.4%

# Heating demand: Present and future

- Existing homes are fairly average for the UK
- Reducing energy demand will lead to more comfortable homes, reduced energy bills and fewer carbon emissions.



# Sound-proofing problems in flats and houses



# Communal entrances



# What's missing?

Is there anything  
else we need to  
know?

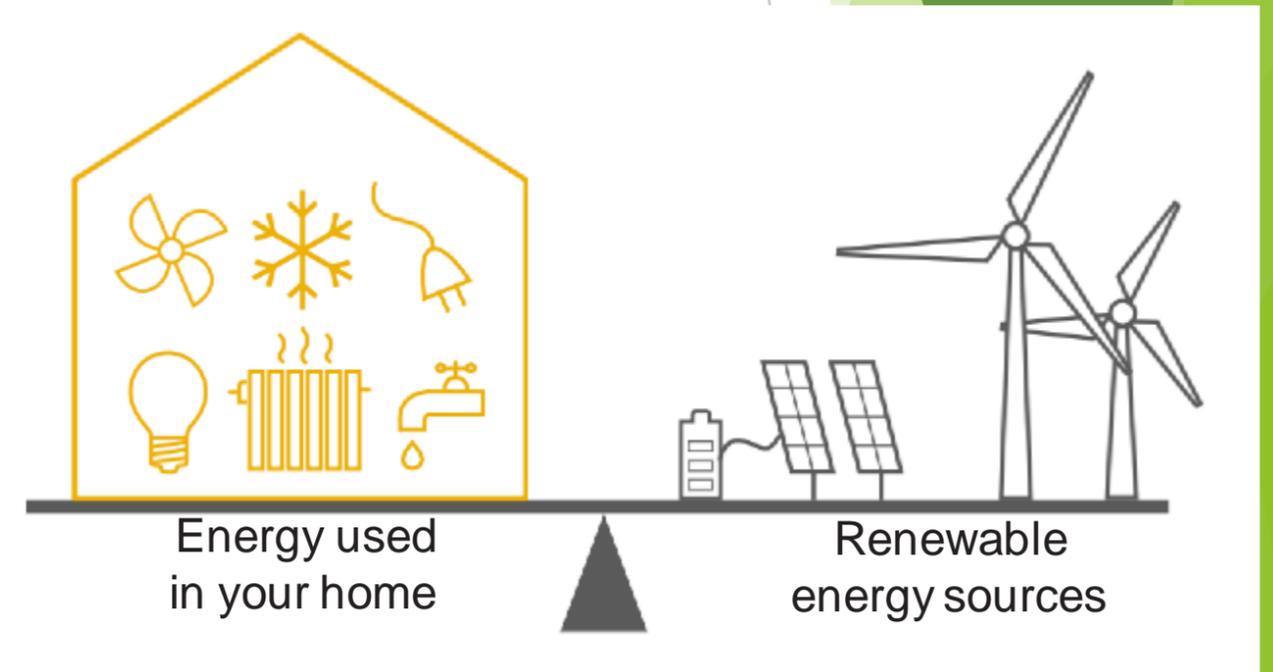


# A 21<sup>st</sup> century Verity Close

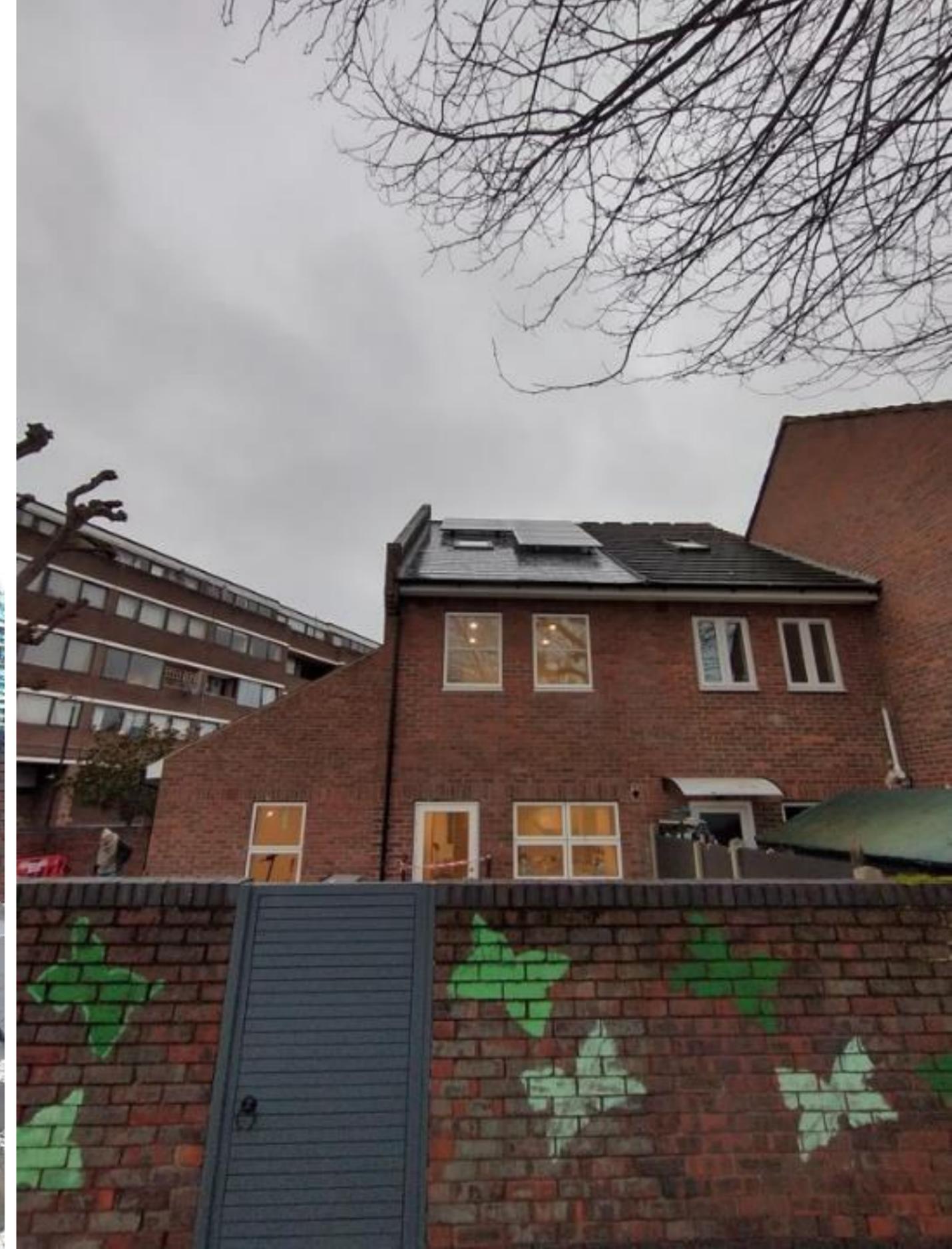
Net zero carbon – a balance between energy used in your home and what we can generate using renewable energy sources

Benefits beyond saving the planet!

- **More comfortable homes**
- **Lower fuel bills**
- **Improved air quality**



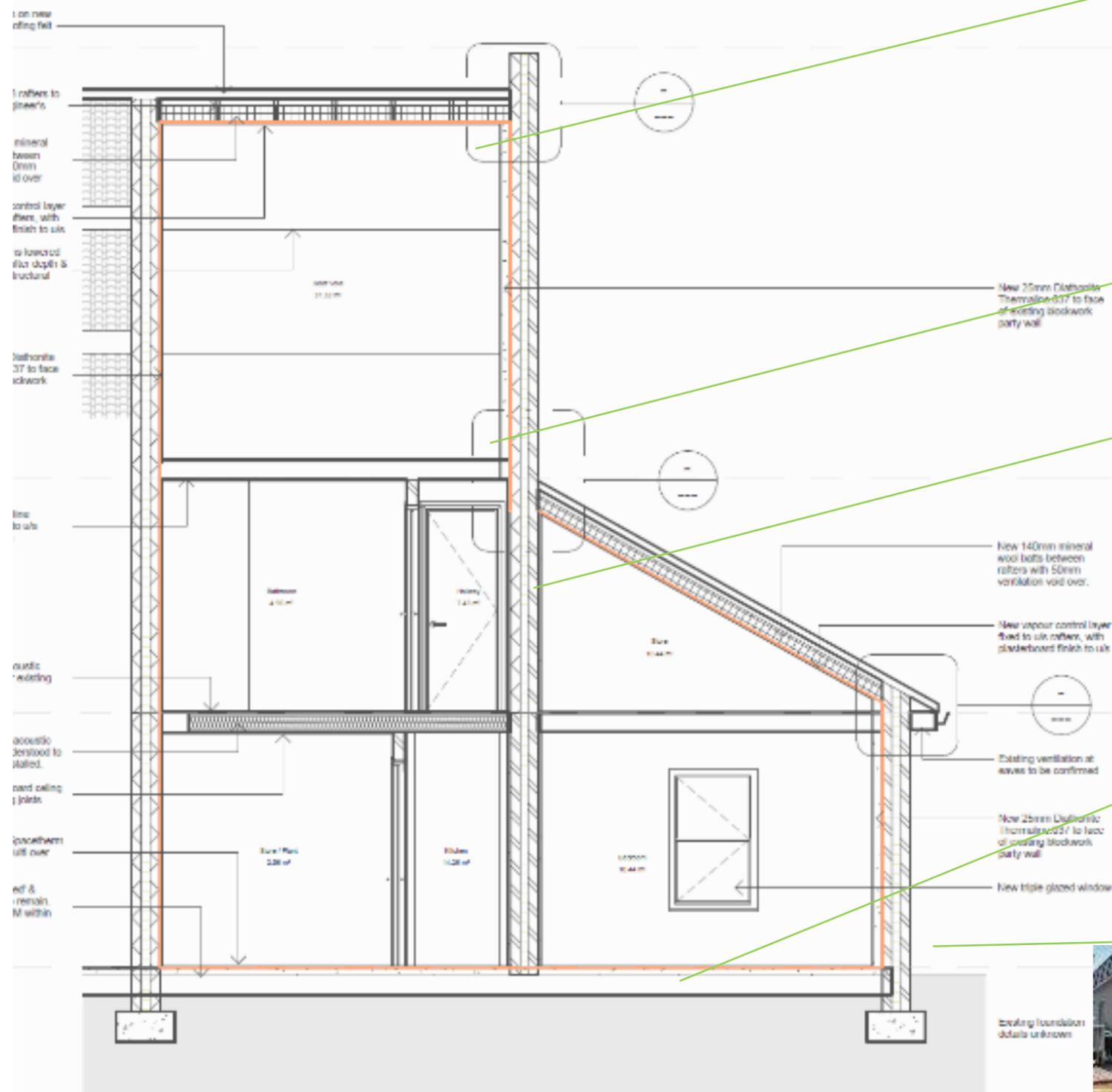
# Delivering **RBKC's first low energy council home** Verity Close



# Delivering RBKC's first low energy council home

## Verity Close

Introduction  
 Existing Homes  
**21<sup>st</sup> Century Homes**  
 Potential Improvements  
 Other Improvements  
 Summary  
 Questions



Loft and roof insulation  
**Savings: £451 per year**



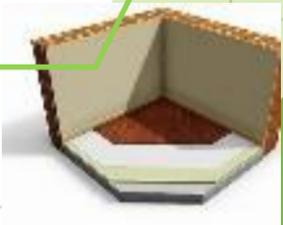
Internal Wall insulation  
**£230 per year**



Mechanical Ventilation with Heat Recovery  
**£221 per year**



Ground floor insulation  
**£50 per year**



Air Source Heat Pump



# Delivering RBKC's first low energy council home

## Verity Close



Photovoltaic Panels  
Additional energy to property

Triple Glazed Windows  
**£70 per year**



Electric Charge Point



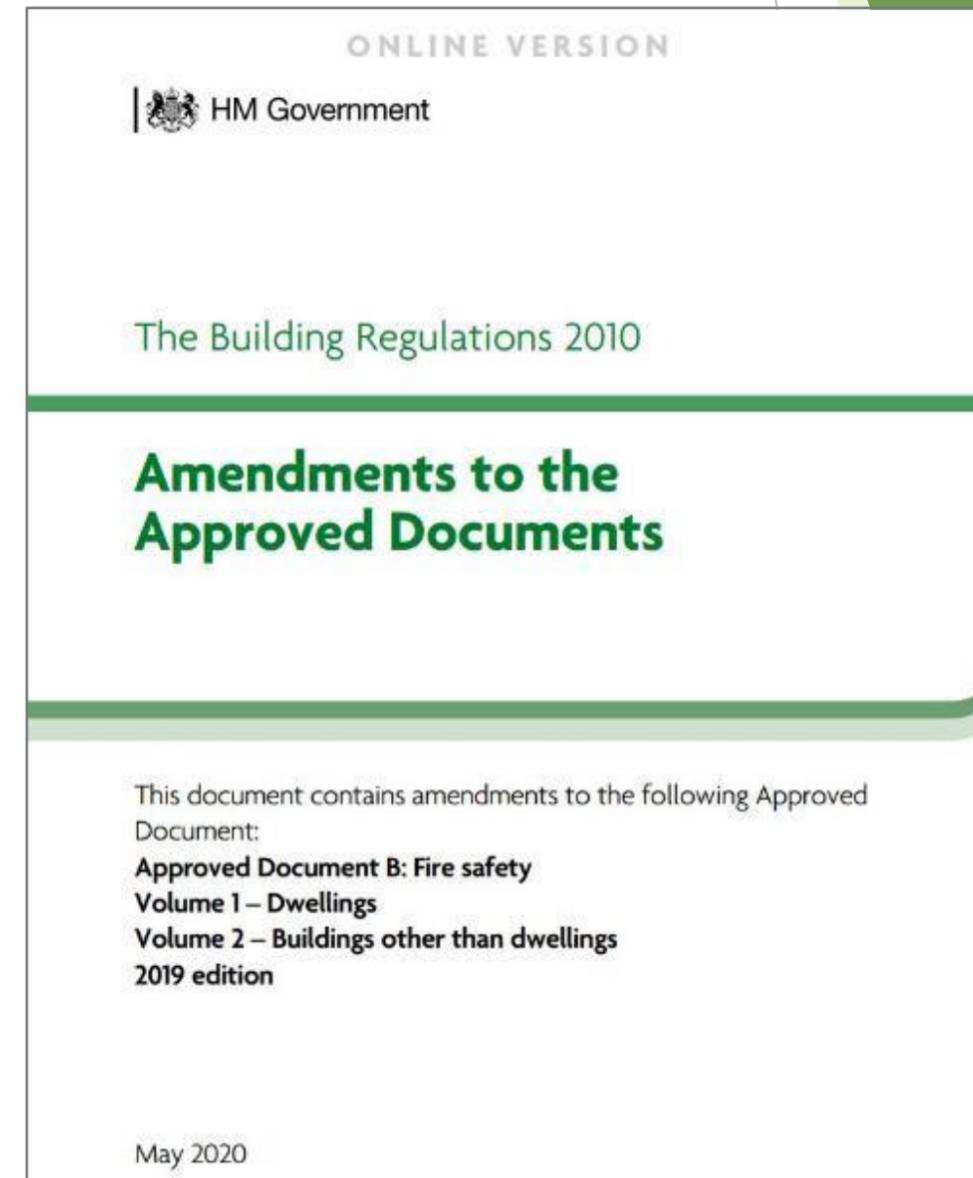
Triple Glazed Doors  
**£28 per year**



- Introduction
- Existing Homes
- 21<sup>st</sup> Century Homes**
- Potential Improvements
- Other Improvements
- Summary
- Questions

# Maximizing fire safety

- Fire safety is our priority
- An independent fire consultant has been appointed to ensure the compliance of all refurbishment works with fire safety regulations
- We will only use materials with the highest safety rating (A1 or A2) on external building layers

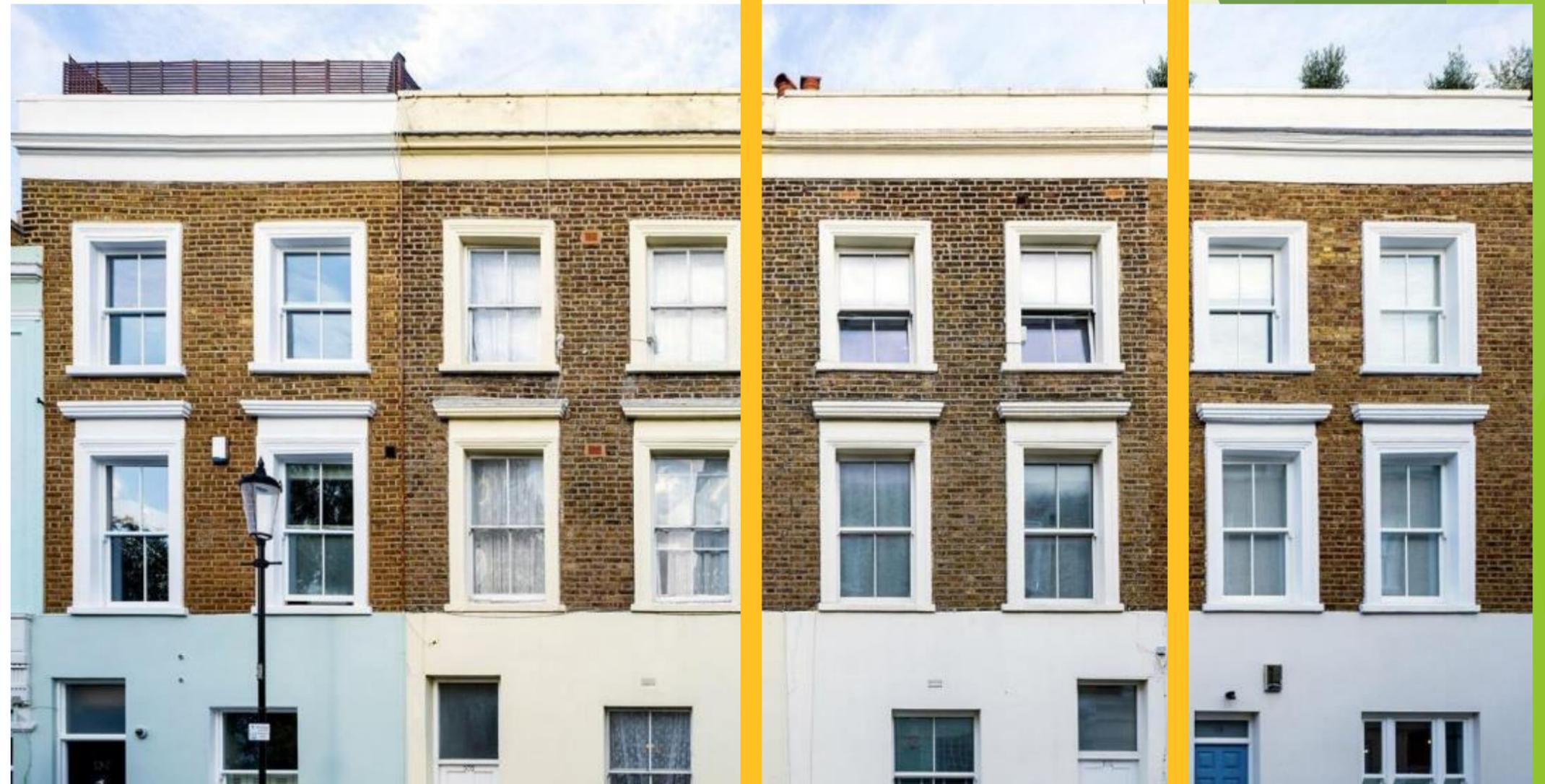


# A game!

Which one do you think is a super efficient, highly insulated house with triple glazed windows?



# This one!



# Possible improvements

Standard	Proposed Measure	Spatial Implications	Impact of Proposed Works	
			Energy Savings	Bill Savings
Bronze Standard	<ul style="list-style-type: none"> <li>● Close up cracks &amp; openings</li> <li>● Increase Loft Insulation</li> <li>● Replace Windows and some doors</li> <li>● Mechanical Extract Ventilation</li> </ul>	No permanent change, but access required to carry out improvements		£
Silver Standard	<ul style="list-style-type: none"> <li>● External Wall Insulation</li> <li>● Internal Wall Insulation</li> <li>● Roof insulation between and / or over rafters</li> <li>● Triple Glazed Windows &amp; insulated doors</li> <li>● Mechanical Ventilation with heat recovery</li> <li>● Individual air source heat pumps</li> </ul>	Internal wall insulation means loss of space to some rooms. MVHR system requires space for unit and ductwork		£££
Gold Standard	<ul style="list-style-type: none"> <li>● Photovoltaic Panels (in addition to silver standard)</li> </ul>	Inverter required internally		£££££

# Walls: Close up cracks & openings

## Bronze standard



# Roof: Increase loft insulation

## Bronze standard



# Replace windows and some doors

## Bronze standard



# Mechanical extract ventilation

## Bronze standard



# Benefits of bronze standard for you



- **Less draughty home**
- **Heat loss reduced around 1/5**
- **Less risk of mould**



# Walls: External Wall Insulation, or...



## Pros

- **Warmer homes**
- **Continuous line of insulation – avoids cold spots**
- **Less internal disruption, no decant required**
- **No internal area loss**
- **Opportunity to co-design new facades**



## Cons

- Rainwater pipes, gutters etc need moving
- Impact on gardens during works



# ...Internal Wall Insulation

## Silver standard



### Pros

- **Warmer homes**
- **External appearance unchanged**

### Cons

- Disruption inside home – decant necessary
- Less thick insulation to avoid moisture risk, therefore less effective
- Loss of internal area (1-5%)
- Impact on finishes & fittings
- Gaps in insulation at some junctions



# Roof: Insulation between and over rafters or complete new insulated roof

## Silver standard



# Windows: New triple glazed windows & insulated doors

## Silver standard

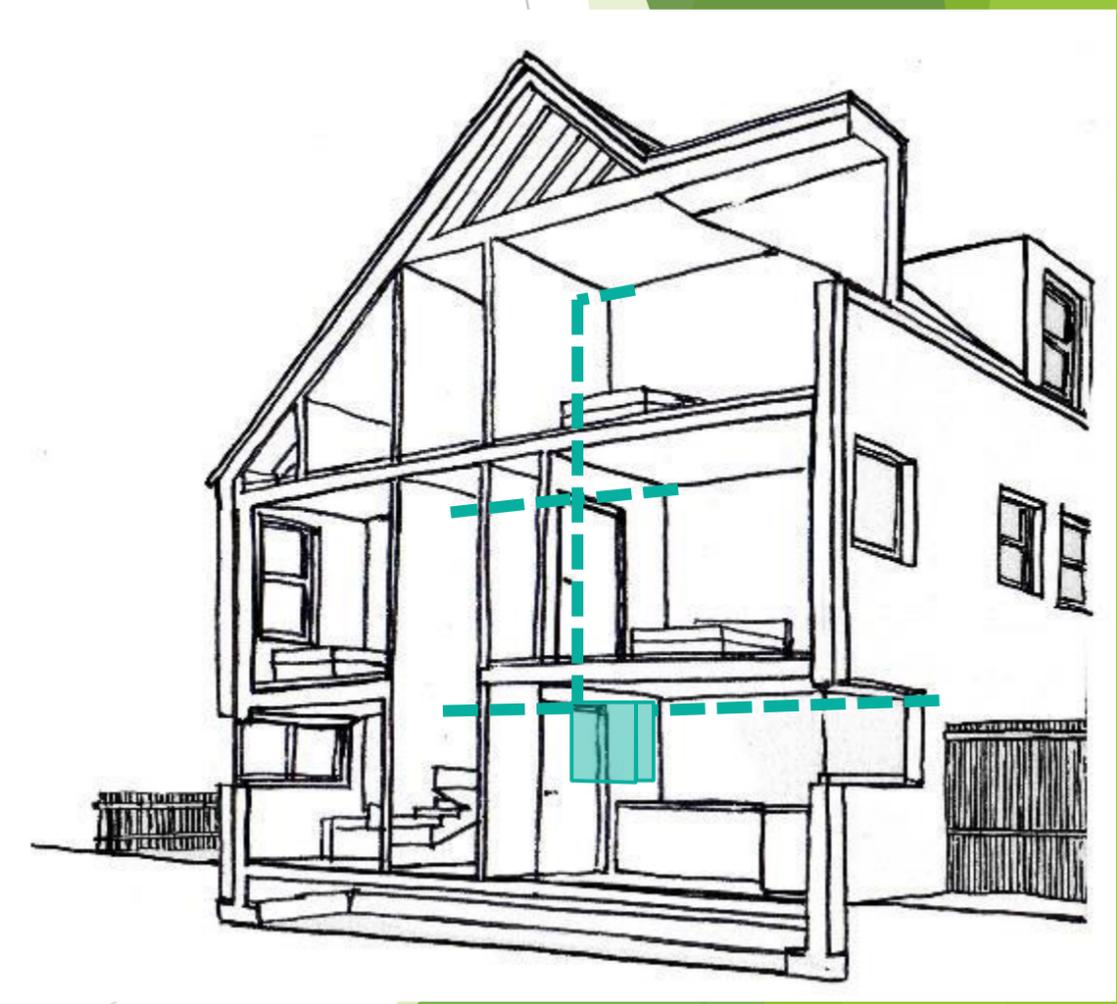
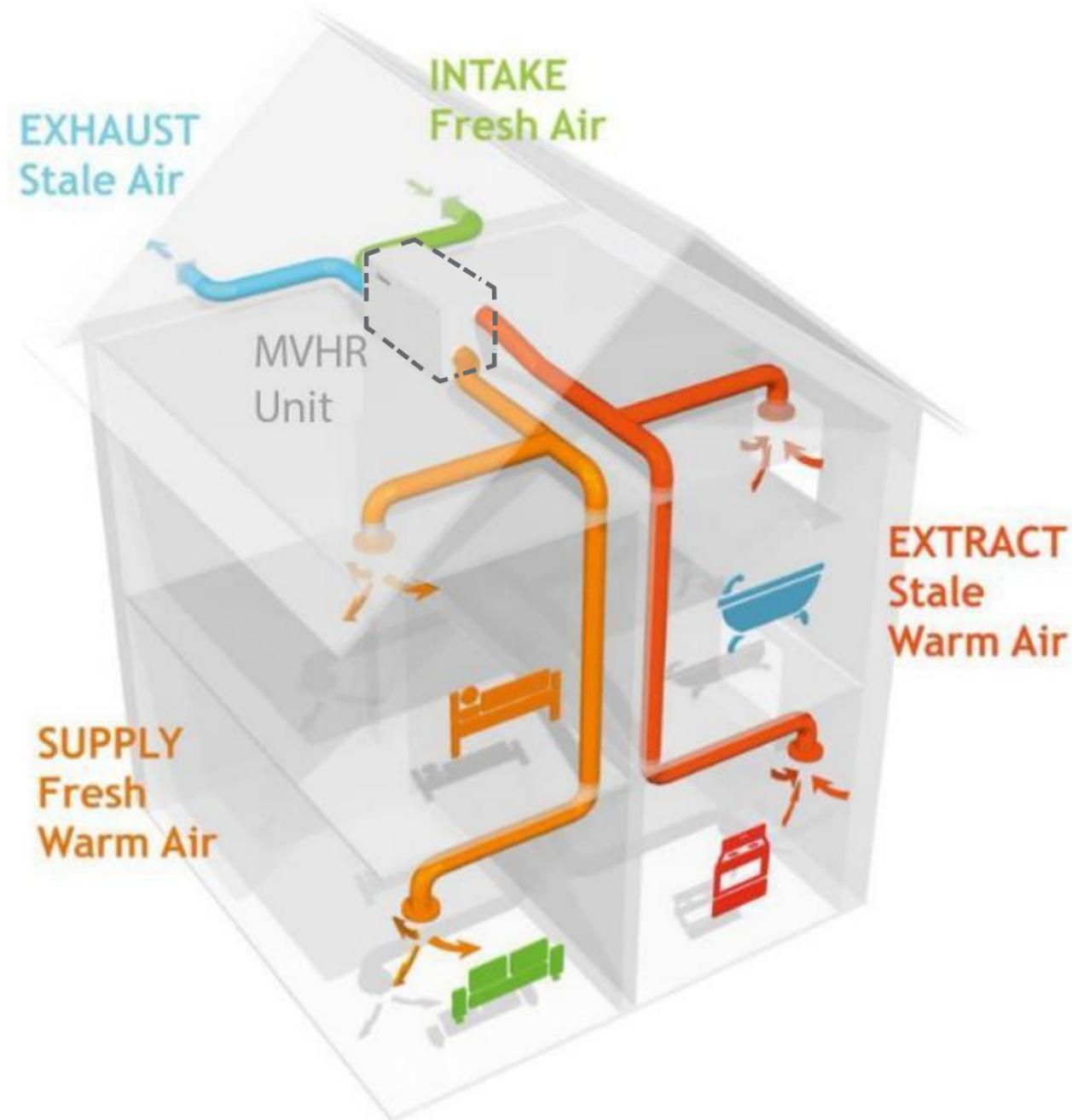


### Benefits of triple glazing

- Further reduced heat loss
- No draughts by windows
- Better sound-proofing
- Further reduced energy bills

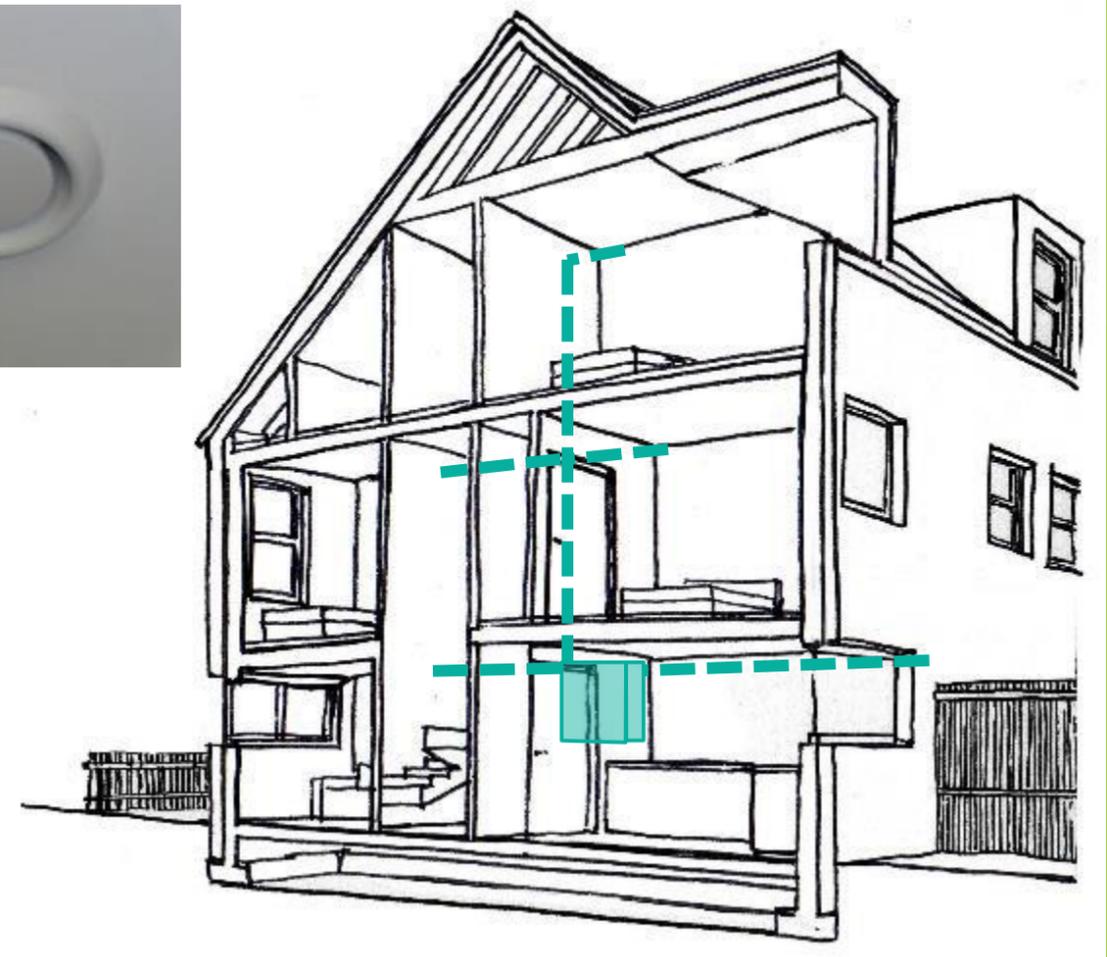
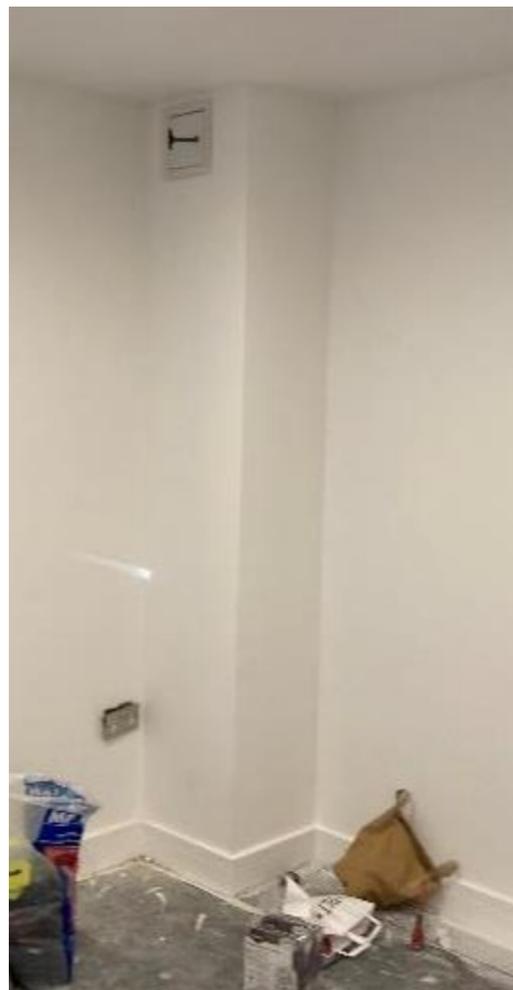


# Mechanical Ventilation with Heat Recovery Silver standard



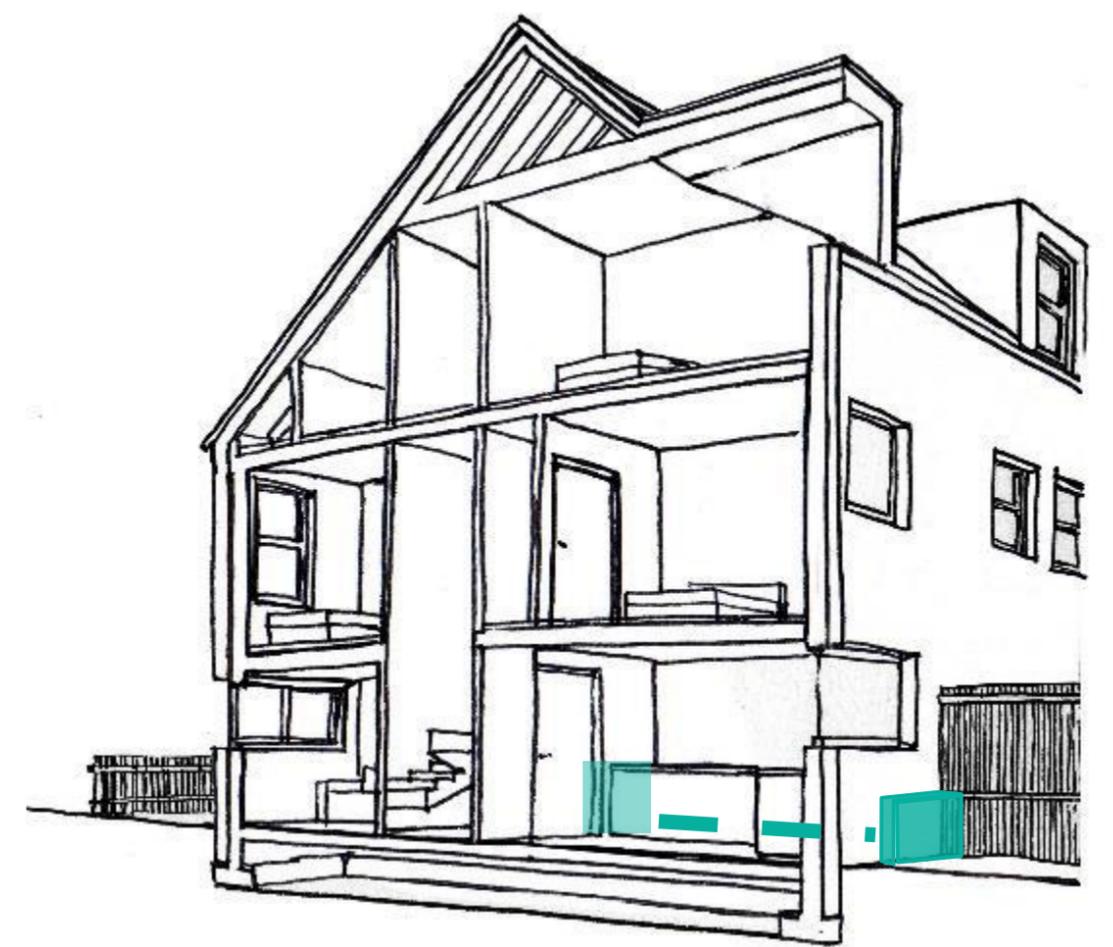
# Mechanical Ventilation with Heat Recovery

## Silver standard



# Individual air source heat pumps

## Silver standard



# Benefits of silver standard for you

## Silver standard

Standard	Proposed Measure	Spatial Implications	Impact of Proposed Works	
Silver Standard	<ul style="list-style-type: none"> <li>External Wall Insulation</li> <li>Internal Wall Insulation</li> <li>Roof insulation between and / or over rafters</li> <li>Triple Glazed Windows &amp; insulated doors</li> <li>Mechanical Ventilation with heat recovery</li> <li>Individual air source heat pumps</li> </ul>	Internal wall insulation means loss of space to some rooms. MVHR system requires space for unit and ductwork	Energy Savings	Bill Savings
			🌿🌿🌿	£££

- Draught free home
- Heat loss reduced around 3/4
- Reduced overheating
- All areas of house are warm
- No gas use, so better air quality



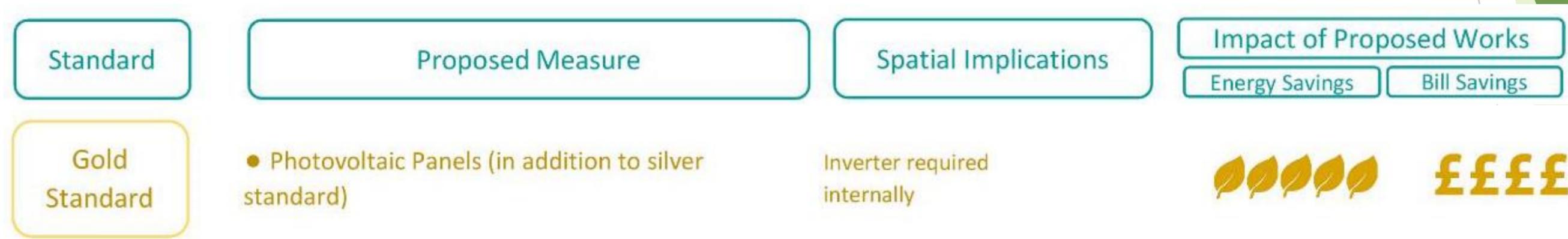
# Gold standard

## Photovoltaic panels



# Gold standard

## Benefits of gold standard for you



- Further reduction in energy bills
- Reduced carbon footprint
- Reduces likelihood of further disruption to become zero carbon



# Soundproofing

## Other improvements



- Install new insulation between joists
- Install new plywood, screwed to existing joists
- Install new acoustically absorbent layer
- Replace floor finish



# Waste Strategy & Entrances to Flats

## Other improvements

- More welcoming appearance focused on entrance door
- Smaller entrance structure but more generous space inside
- New front door with video entry system
- Slightly larger front garden space
- Work with us to design this...



# Waste Strategy & Entrances to Flats

## Other improvements

- Opportunity to encourage recycling and food waste composting
- Move dominating refuse stores from by front doors
- Create new more welcoming entrances



# Waste Strategy & Entrances to Flats

## Other improvements



# Summary

Standard	Proposed Measure	Spatial Implications	Impact of Proposed Works	
			Energy Savings	Bill Savings
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Gold Standard	<ul style="list-style-type: none"> <li>● Photovoltaic Panels (in addition to silver standard)</li> </ul>	Inverter required internally		£££££

- Other works: sound proofing, waste strategy & entrances to flats

# Any Thoughts, Ideas or Questions

Over the coming weeks, we'll discuss the benefits and implications of the different works.

But for now we'd love to hear your thoughts on the options we've presented...

If you'd like to follow anything up, contact:

Telephone: **0800 389 2005**

Email: [lancasterwestoffice@rbkc.gov.uk](mailto:lancasterwestoffice@rbkc.gov.uk)

# Next Steps: Surveys

We'd like to conduct three additional surveys so we can understand how your homes works more fully

- Measured survey
  - Thermal monitoring
  - External thermographic imaging
- (all conducted in compliance with Covid19 regulations)

These surveys will enable us to deliver the best possible refurbishment we can



# Call for volunteers #1

## Measured survey of the inside of homes

This survey records the internal layout of the flats which will assist us in the design process

It involves a surveyor spending 5-10 minutes in each room, taking measurements of walls using a laser scanner



# Call for volunteers #2

## Thermal and humidity sensors

This survey monitors thermal and energy data

It involves installing a small temperature and humidity sensor inside your flat. It takes about 5-10 minutes to install, and is left to gather data for about 3 weeks

These monitors are already in use at Treadgold House



# External thermographic images

This survey helps us identify areas of your block where heat is being lost

It takes place outside, from the afternoon and through the night. It involves surveyors using special cameras to capture images of the building's facade

We'll let you know when this survey is taking place and ask you to keep windows closed and flats warm while it is. This will help us gather the most useful information

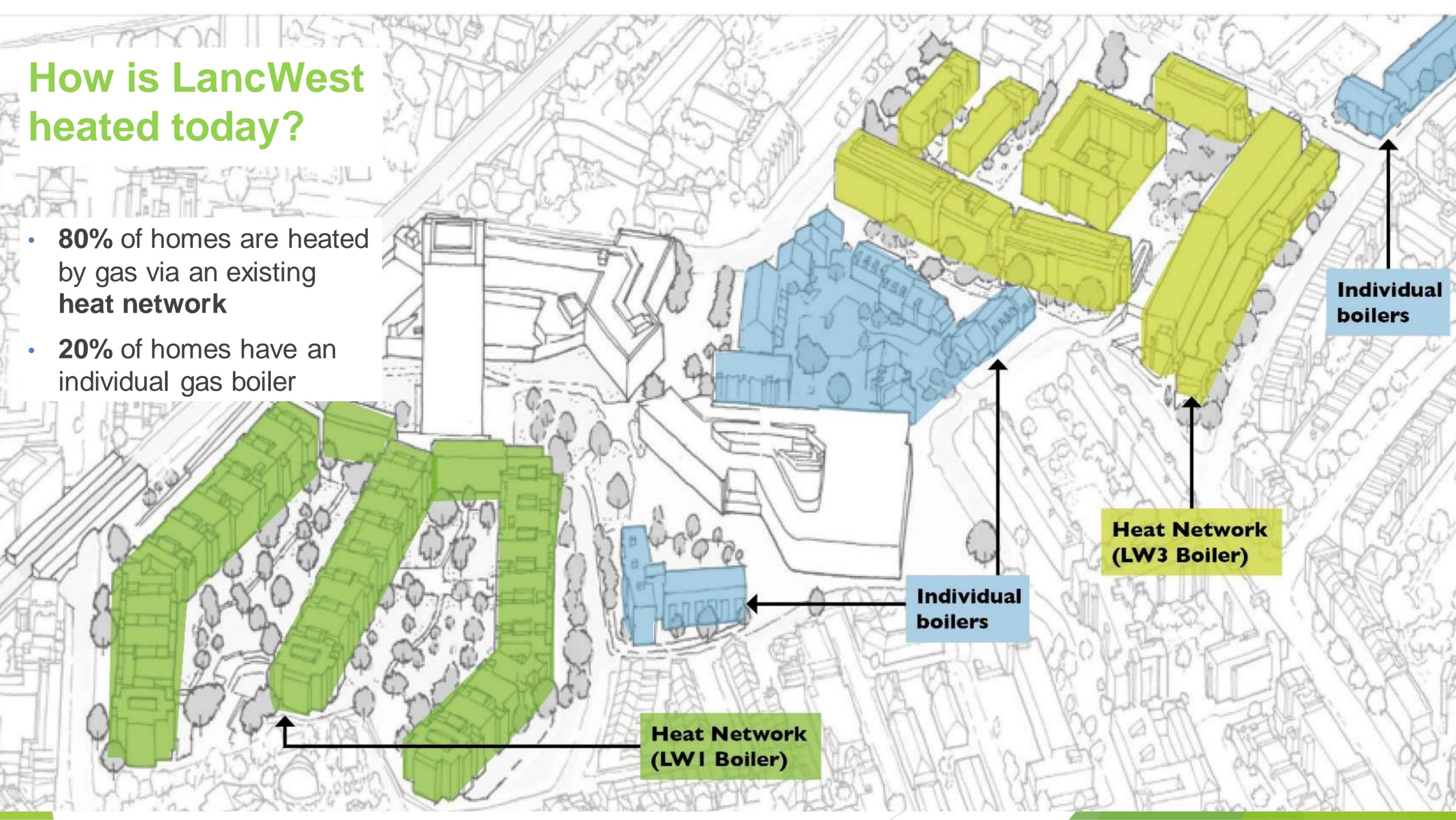


# **Your future heating and hot water options**

**Janet Hall**  
**Heat Network Engagement Manager**

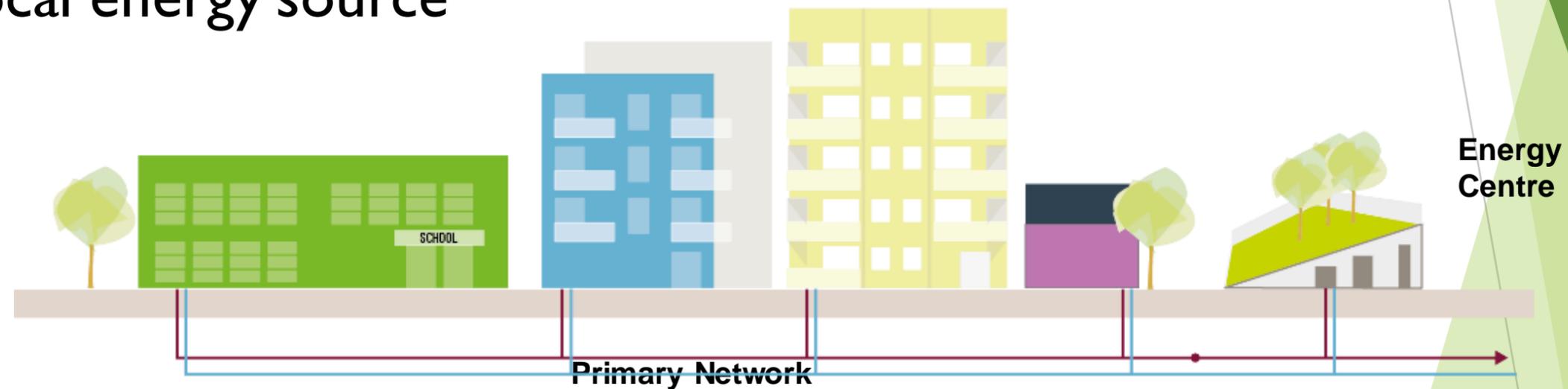
# How is LancWest heated today?

- **80%** of homes are heated by gas via an existing **heat network**
- **20%** of homes have an individual gas boiler



# What is a heat network?

It is a system that supplies heat to several buildings via pipes connected to a local energy source



Renewal and replacement is required of the two heat networks, which today supply 80% of LancWest heating

# Future Heating Co-Design

Feb / March 2021

Technical teams are doing surveys to find out *what is possible*. Here we are testing if we can take heat from waste water!

March / April 2021

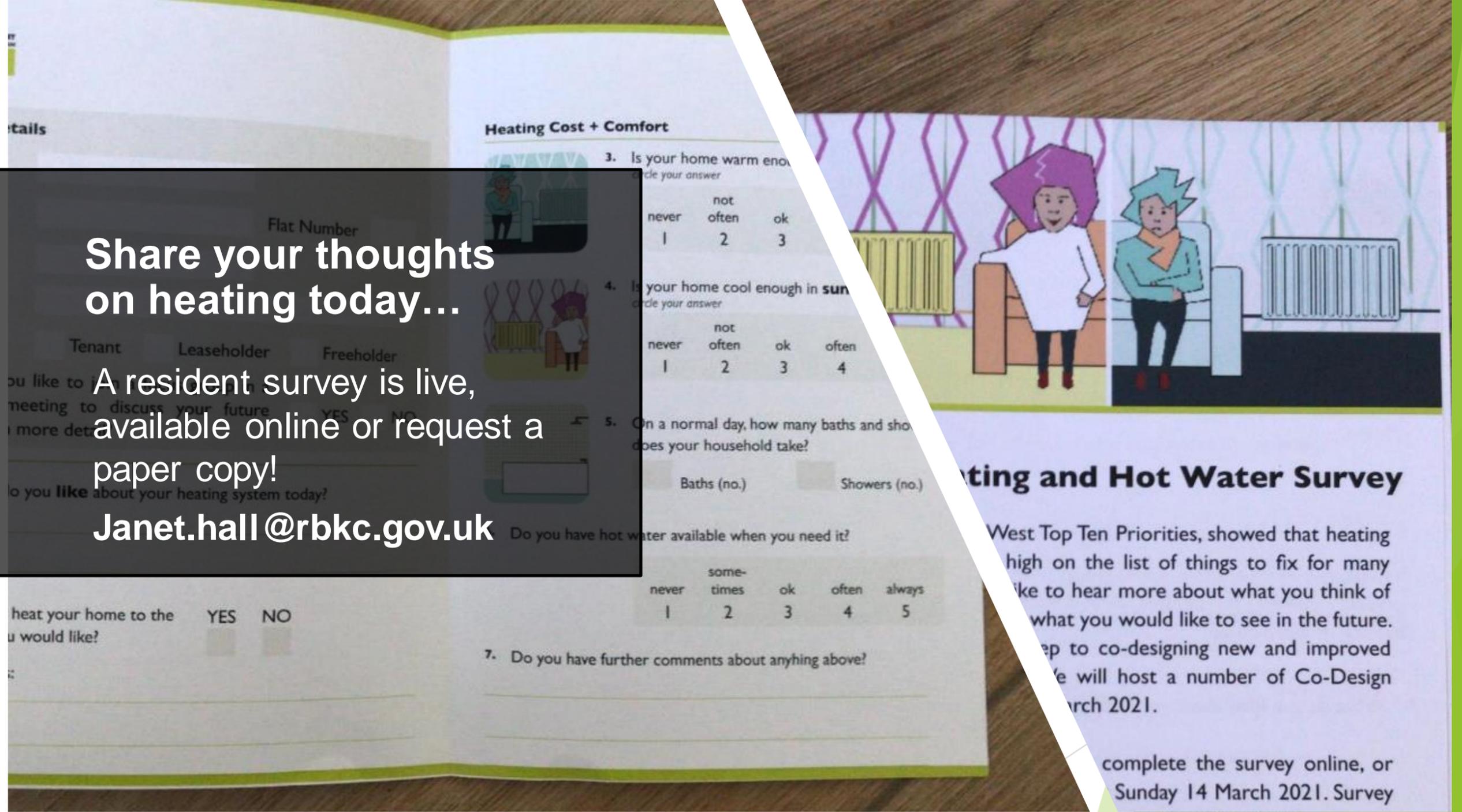
We will share the heating options for resident review and co-design



Share your thoughts  
on heating today...

A resident survey is live,  
available online or request a  
paper copy!

[Janet.hall@rbkc.gov.uk](mailto:Janet.hall@rbkc.gov.uk)



### Heating and Hot Water Survey

West Top Ten Priorities, showed that heating high on the list of things to fix for many. We like to hear more about what you think of what you would like to see in the future. We are happy to co-designing new and improved services. We will host a number of Co-Design sessions in March 2021.

complete the survey online, or on Sunday 14 March 2021. Survey

# Continuing the conversation...

Future co-design meetings will focus benefits and implications, and the look and feel of the buildings

Before our next meeting we will share with you

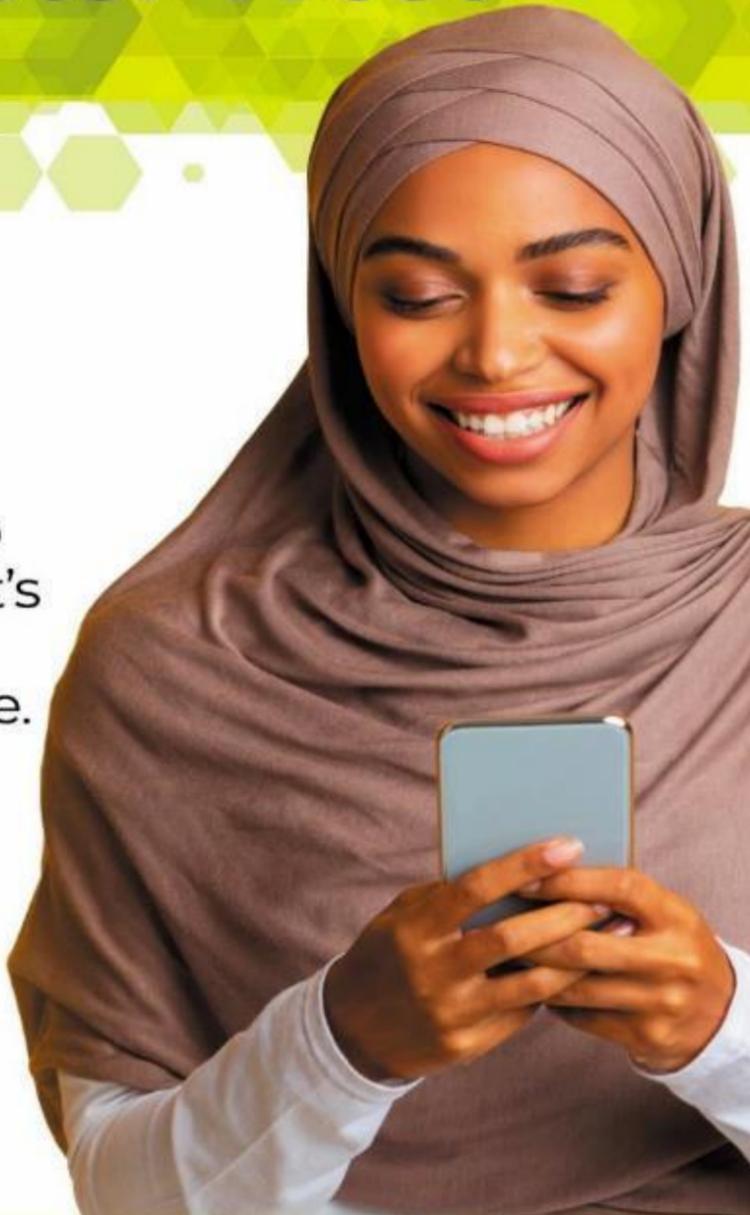
- **Summary letter and leaflet**
- **This presentation**
- **Feasibility report in print and online**
- **Pop-up event and 1-2-1 surveys**

# Subscribe to our new resident enewsletter Lancaster West News



Be the first to  
find out what's  
happening  
where you live.

Subscribe using the  
QR code or the link in  
our Instagram biog.



# Resident Enewsletter



SCAN ME

Please specify  
which block you  
live in when  
subscribing, to  
allow us to send  
out block  
newsletters in  
the future.

# Thank you for joining us!

## Any final questions, thoughts or ideas?

Your feedback is important

If you'd like to follow anything up, contact:

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Email: [lancasterwestoffice@rbkc.gov.uk](mailto:lancasterwestoffice@rbkc.gov.uk)