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Decentralised Energy

# Upskilling for low-carbon heating in the private rented sector

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# MEES

- ⊙ Any domestic privately rented property which is:
  - ⊙ Legally required to have an EPC
  - ⊙ Let on certain tenancy types
- ⊙ Where these two conditions are met, a landlord must ensure that the MEES standard is met (or exceeded)
- ⊙ Where the property remains substandard, the landlord is required to register an exemption on the PRS exemptions register or face a penalty

# MEES: Exemptions

- ⊙ Landlords can apply for an exemption (logged on a register)
- ⊙ Exemptions:
  - ⊙ Cost cap: £3,500 incl. VAT
  - ⊙ Improvements made to the property, but it remains below an E EPC rating
  - ⊙ Wall insulation (cavity and solid wall) cannot be installed.
  - ⊙ Unable to gain consent from a third party (planning, mortgage lenders, tenants and superior landlords)
  - ⊙ Installation of measures would reduce the market value of the property by more than 5%
  - ⊙ New landlords
- ⊙ Exemptions valid for 5 years

# MEEES: cost cap and funding options

## ⊙ **Cost cap:**

- ⊙ Landlords not required to spend more than £3,500 (including VAT)
- ⊙ If property cannot reach EPC E for £3,500, all improvements up to that amount must be made.
- ⊙ Landlord then needs to register an 'all improvements made' exemption.
- ⊙ 3 ways of funding improvements

## ⊙ **Option 1: Third party funding**

- ⊙ Third-party funding to cover the full cost of improving the property to EPC E (or beyond)
- ⊙ Landlord does not need to invest
- ⊙ Cost cap does not apply
- ⊙ ECO4, GHG LAD

# MEEES: cost cap

## ⊙ **Option 2: Combination of third-party funding and self-funding**

- ⊙ Third-party funding secured, but it is:
  - less than £3,500, and
  - not enough to improve the property to EPC E
- ⊙ Landlord may need to top up with their own funds to the value of the cost cap

## ⊙ **Option 3: Self funding**

- ⊙ If landlords are unable to secure any third party funding, they need to use their own funds to the value of £3,500
- ⊙ Landlords do not need to spend up to £3,500 if the property can be improved to EPC E for less
- ⊙ If it would cost more than £3,500, landlords should install all recommended measures within that amount, then register an exemption

# Improving the energy performance of a property: fabric first

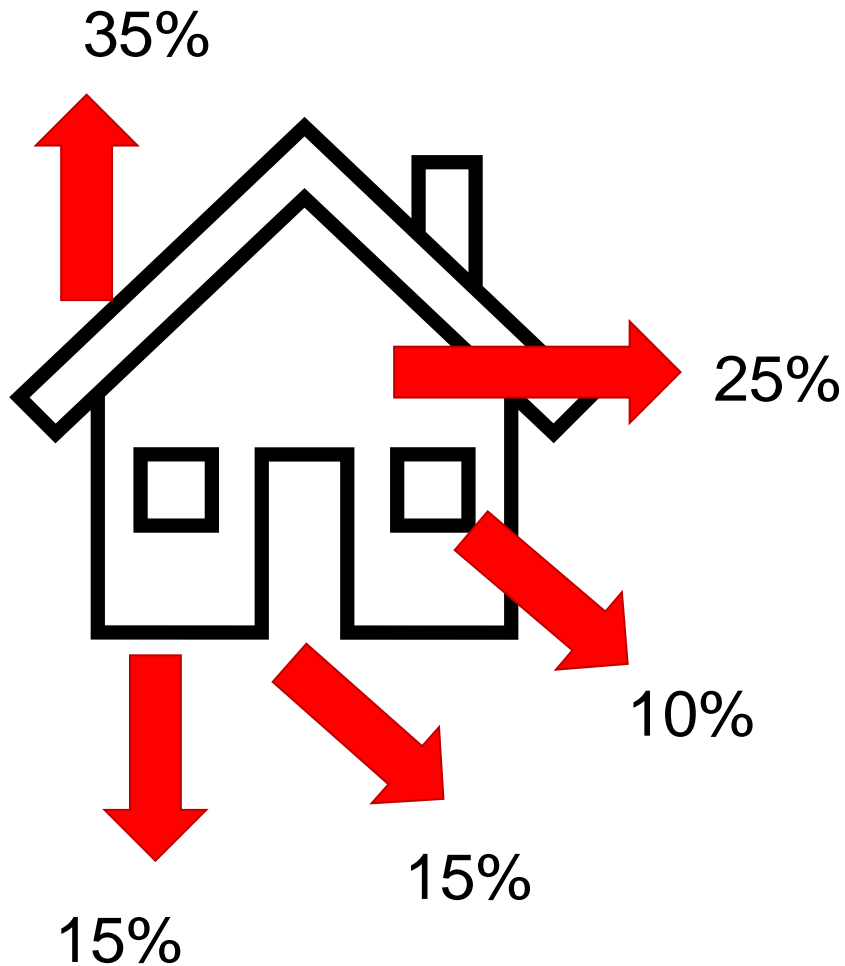


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# Heat loss



◎ Where is heat lost in a typical property?

- ◎ Roof: 35%
- ◎ Walls: 25%
- ◎ Doors: 15%
- ◎ Floors: 15%
- ◎ Windows: 10%

◎ Options to reduce heat loss:

- ◎ Insulation
- ◎ Draught protection
- ◎ Glazing and door upgrades

# Loft and roof insulation



## ⦿ Insulation options:

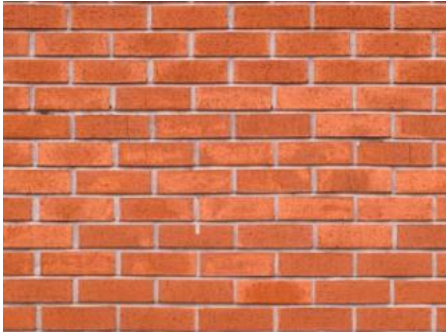
- ⦿ Loft (pitched): mineral wool between joists
- ⦿ Flat roof: rigid insulation material

## ⦿ Costs and savings (loft insulation – mineral wool):

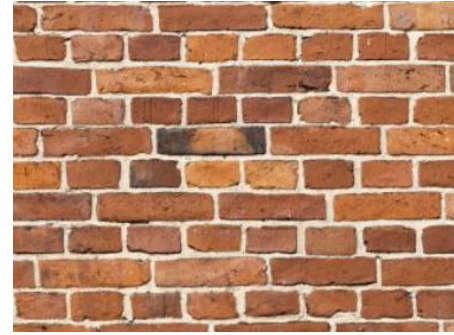
Property type	Cost	Annual bill savings (£)	Annual carbon savings (kgCO <sub>2</sub> )
<b>Detached bungalow</b>	£890	£590	1,000
<b>Mid terraced house</b>	£590	£330	560
<b>Semi detached house</b>	£640	£355	610
<b>Detached house</b>	£890	£590	1,000



# Cavity wall insulation



Cavity wall



Solid wall

- ⦿ Insulation options: Mineral wool fibre, polystyrene or polyurethane beads or ureaformaldehyde foam
- ⦿ Costs and savings (cavity wall insulation):

Property type	Cost	Annual bill savings (£)	Annual carbon savings (kgCO <sub>2</sub> )
Mid-floor flat	£395	£180	305
Detached bungalow	£800	£310	530
Mid terraced house	£580	£235	395
Semi detached house	£1,000	£395	670
Detached house	£1,800	£690	1,200

# Solid wall insulation

- ⦿ Insulation options: externally or internally clad
- ⦿ Costs:
  - ⦿ External: £12,000
  - ⦿ Internal: £8,500
- ⦿ Savings (external):



Property type	Annual bill savings (£)	Annual carbon savings (kgCO <sub>2</sub> )
Mid-floor flat	£240	410
Detached bungalow	£420	720
Mid terraced house	£315	540
Semi detached house	£540	910
Detached house	£930	1,600

# Floor insulation



- ⦿ Insulation options:
  - ⦿ Suspended timber: mineral wool or rigid insulation between joists, or sprayed foam
  - ⦿ Solid floor: rigid insulation material
- ⦿ Costs : £1,600 - £2,900 (suspended timber floor)
- ⦿ Savings (suspended timber floor):

Property type	Annual bill savings (£)	Annual carbon savings (kgCO <sub>2</sub> )
Detached bungalow	£195	335
Mid terraced house	£75	125
Semi detached house	£110	190
Detached house	£180	310

# Windows

- ⊙ Replacement of single glazing offers the greatest energy saving
- ⊙ Options include double or triple glazed windows
- ⊙ Costs:
  - ⊙ Set of A rated windows £7,500
- ⊙ Savings:
  - ⊙ Single to A rated double glazing:
    - £195 per year
    - 330kg of CO<sub>2</sub> per year
  - ⊙ Single glazing to A++ rated double glazing:
    - £235 per year
    - 405kg of CO<sub>2</sub> per year

# Small measures

## ⊙ Draughtproofing:

- ⊙ Relatively cheap and only small savings, but can make a big difference in terms of thermal comfort
- ⊙ Avoiding draughts from gaps and cracks round windows and doors and floorboards
- ⊙ Examples:
  - Window and door compression or wiper seals
  - Door draught excluders
  - Secondary glazing

## ⊙ Insulating loft hatches

## ⊙ Insulating hot water tanks and pipework

## ⊙ Installing heating controls (TRVs, thermostats & timers)

## ⊙ Installing chimney balloons

# Important: Ventilation

- ⊙ Air needs to flow in and out of a house
- ⊙ Ventilation options:
  - ⊙ Underfloor grilles or air bricks
  - ⊙ Wall vents
  - ⊙ Trickle vents on windows (modern windows)
- ⊙ A good installer will make sure that these are not filled or blocked
- ⊙ Need advice? Speak to your Building Control colleagues (Building Regulations Part F)

Questions?



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