

Cold and damp homes

The Environment Committee is investigating cold and damp homes in London. The investigation will focus closely on current Mayoral policies around energy efficiency which could impact cold and damp homes in London.

Cold and damp homes

A quarter of London's homes that have been given an Energy Performance Certificate since 2009 have the worst energy ratings of E, F or G.¹

A YouGov and Shelter poll, found that 39 per cent of London's private renters have experienced damp or mould in their homes in 2016, while 26 per cent experienced poor insulation or excess cold.²

Cold homes and wellbeing

Cold homes can have serious effects on both physical and mental well-being. Homes can be cold due to energy affordability, or because of an absolute inadequacy of heating compared to heat loss in the building. There are thousands of 'excess winter deaths' each year in London, with cold homes a significant contributing factor.

Fuel poverty exists when a household must spend a large proportion of its income on energy needs. The Government's fuel poverty definition has recently changed, to comprise both income poverty and energy costs higher than typical for the household type. 11 per cent of London households met this definition in 2014. More than one in ten London households is fuel poor.³ It is clearly a factor in overall poverty and its associated costs in well-being and social inclusion.

Fuel poverty and vulnerability to cold are distributed unevenly across the population, with risk factors including income, housing condition and existing medical conditions or disabilities. Older people are most likely to experience several of these risk factors.

Energy efficiency

Hard to heat homes are a challenge for carbon reduction as well as quality of life. London's homes produce over a third of the city's greenhouse gas emissions – 13.4 million tonnes of CO₂ in 2014. Domestic energy efficiency can reduce both fuel poverty and carbon emissions and a number of mayoral (and national) policies and programmes have focused on this.

Damp and mould

Damp and mould are both unpleasant to live with and dangerous to health.⁴ They are commonly associated with hard-to-heat homes. Damp can cause mould to form, lead to

¹ <https://www.london.gov.uk/decisions/md2235-energy-londoners-homes-energy-efficiency-programme>

² https://england.shelter.org.uk/media/press_releases/articles/60_of_london_renters_forced_to_live_with_unacceptable_conditions_including_vermin-infested_damp_or_dangerous_homes2

³ According to government figures using the 10% of income definition, 13 per cent of London homes were fuel poor in 2009; GLA figures, using a measure of fuel poverty taking account of housing costs and from 2008, give a fuel poverty level of 24 per cent. The Government's fuel poverty definition has recently changed, to comprise both income poverty and energy costs higher than typical for the household type. 11 per cent of London households met this definition in 2014.

⁴ <https://www.nhs.uk/common-health-questions/lifestyle/can-damp-and-mould-affect-my-health/>

Cold and damp homes

staining/damaging wallpaper, wall surfaces, window frames, furniture and clothing. The mould and its spores carry the musty smell that is often associated with a damp house.

There are three types of damp found in homes: condensation, penetrating damp and rising damp.⁵ Condensation will be the primary focus of this investigation as it is most likely to be a problem in cold homes.

Condensation is water vapour from the air inside the home, condensing on cool surfaces. Water vapour is generated in homes through many day-to-day activities including, cooking, boiling the kettle, showering, drying clothes inside.

Sometimes residents are advised they can reduce or solve the problem by changing behaviour at home, by using less water or leaving windows open for a short time each day. However, this is not often possible, especially if it requires opening windows during the middle of winter or if a property has no outdoor space for everyday tasks such as drying clothes.

Other measures to prevent condensation include keeping houses warm, or installing soft furnishing such as carpets, curtains and wallpapers which have thermal linings or underlay.

However, poorly-designed or -fitted energy-saving measures can increase condensation. Incomplete insulation can lead to cold spots which attract condensation. Measures which reduce ventilation can also cause condensation dampness. The Property Care Association has warned that poor quality design and installation of retrofit insulation could cause problems and exacerbate dampness.⁶

Penetrating damp is classed as any water that finds its way inside from the outside. It can occur at all levels of the building. If cavity wall insulation is fitted poorly, rain can penetrate the outer wall and get the insulation wet, which results in moisture being transferred to internal walls and causing damp problems.⁷ Penetrating damp can also be caused by poor fitting or damage to other exterior components, perhaps associated with energy efficiency works.

In 2017, the Property Care Association warned homeowners to consider failed or compromised insulation as a possible cause of dampness, including defects such as poor pointing and cracked render in filled cavity wall buildings.⁸

Rising damp is moisture from the ground that rises up through the walls of homes. Rising damp is not generally associated with energy-saving measures so is out of scope for this investigation.

Mayoral work

The Fuel Poverty Action Plan for London identifies how where the Mayor plans to impact fuel poverty. One main strand of this action will be to increase the energy efficiency of London's homes so they are better insulated and use less energy. The Mayor's action will be

⁵ <https://fuelpovertyresource.org.uk/focus-on/dealing-with-damp-and-condensation/>

⁶ <https://www.property-care.org/issues-retrofit-insulation-taking-hold/>

⁷ <https://www.bbc.co.uk/news/uk-wales-42165358>

⁸ <https://www.property-care.org/issues-retrofit-insulation-taking-hold/>

Cold and damp homes

focused on the private rented sector; those living in properties with Energy Performance Certificates rated F and G, and those living with a disability or long-term illness.⁹ Other strands include boosting incomes of people in fuel poverty in London and ensuring Londoners in fuel poverty have access to fairer energy tariffs:¹⁰

The Mayor's £34m **Energy for Londoners'** programme has united several workstreams aiming to improve the energy efficiency of London homes and reduce fuel poverty. The key programmes to be considered during this investigation are likely to be the Warmer Homes programme and the RE:NEW programme which has been extended to April 2019. The investigation will also consider the potential of the recently announced programme which will replace RE:NEW in 2019, currently known as the Home Energy Efficiency Programme (HEEP).

- The **Warmer Homes** £2.5m scheme makes up to £4000 per household available to live-in homeowners on benefits for a boiler replacement or repair, to improve heating controls and heating systems, insulation for walls, roofs and floors, window upgrades or draught-proofing.¹¹ Warmer Homes provides advice, home visits, and the capital-funded installation of energy efficiency measures to individual fuel poor (primarily) owner-occupier homes.¹²
- The RE:NEW programme provides technical assistance to organisations such as boroughs and housing providers to develop energy efficiency projects that deliver deep home retrofits and energy efficiency approaches.¹³ £3.6m¹⁴ will be put towards the successor programme, HEEP, to do the same over three years from 2019-2022.¹⁵ Whereas Warmer Homes provides help to fuel-poor homeowners, RE:NEW and its successor will predominantly provide support to social housing providers. The Mayor expects that 1678 homes will receive a deep retrofit by the end of the three years of HEEP.¹⁶
- Energy for Londoners also incorporates other programmes including:
 - Energy Leap – a pilot scheme to make 10 homes near-zero energy, through whole-house 'eco-refurbishments' installing insulation, solar panels, heat pumps and other measures.
 - Fuel Poverty Partnership – formed of experts across the health, social and environment sectors to deliver long-term solutions to help Londoners out of fuel poverty.

Projections of a few years ago were that Mayoral-supported programmes would be retrofitting hundreds of thousands of homes, and over a decade or two covering all of

⁹ https://www.london.gov.uk/sites/default/files/fuel_poverty_action_plan.pdf

¹⁰ https://www.london.gov.uk/sites/default/files/fuel_poverty_action_plan.pdf, p.5

¹¹ <https://www.london.gov.uk/what-we-do/housing-and-land/improving-quality/warmer-homes>

¹² <https://www.london.gov.uk/decisions/md2235-energy-londoners-homes-energy-efficiency-programme>

¹³ https://www.london.gov.uk/sites/default/files/renew_brochure_jun_2017.pdf

¹⁴ £1.8m of the funding comes from European Regional Development Fund match

¹⁵ <https://www.london.gov.uk/decisions/md2235-energy-londoners-homes-energy-efficiency-programme>

¹⁶ A deep retrofit is a whole building analysis and construction process that uses 'integrative design' to achieve much larger energy savings than conventional energy retrofits.

Cold and damp homes

London's three-million-plus housing stock. The capital funding for this work was to come from homeowners' investment and/or national government support, perhaps through pay-as-you-save finance. However, this scale of delivery has not materialised. Although retrofit in many cases would pay for itself, homeowners do not tend to take it up, perhaps because of low awareness, or the expected inconvenience of works.

Non-GLA actors

The Government has established national schemes to promote energy efficiency in homes. The Energy Company Obligation (ECO) scheme uses a levy on energy companies to provide funding for energy efficiency retrofit where the household's own finances do not cover the cost of the work. One of the targets of the ECO scheme is Affordable Warmth, or Home Heating Cost Reduction Obligation (HHCRO). Under the Affordable Warmth Scheme, three types of energy-saving improvements were available: a new boiler, loft insulation or cavity wall insulation.¹⁷ From April 2019, a new version of the ECO will come into effect. However, historically, delivery of this programme has been low, especially in London.

Properties in England and Wales rented in the private sector must hold an Energy Performance Certificate rating no lower than an E. This regulation came in for new lets and tenancy renewals from 1 April 2018. Existing tenancies will have until April 2020 to ensure their EPC rating is an E or higher.¹⁸

Those able to pay for improvement works are currently left to the market; a Green Deal loan scheme had been launched alongside ECO but it attracted relatively few takers and has been ended. Take-up is perhaps surprisingly low in the able-to-pay sector, where retrofit would bring overall savings. Low awareness, aversion to debt and expectations that works would be inconvenient are possible reasons.

Previous Assembly work

The Environment Committee's engagement with GLA energy efficiency work began with the 2008 report *Lagging Behind*, which identified the low take-up of energy efficiency work, and funding for it, in London. It recommended a model of promoting domestic retrofit using ideas piloted in Kirklees, which informed early versions of the RE:NEW programme.¹⁹ Energy efficiency and retrofit has been further explored in *Plugging the Energy Gap*²⁰ and in work on the delivery of the Mayor's Climate Change Mitigation and Energy Strategy.²¹ The 2015 report *Bring Me Sunshine* explored the role of domestic solar panels.²²

¹⁷ <https://www.gov.uk/government/consultations/energy-company-obligation-eco-help-to-heat>

¹⁸ <https://www.epcforyou.co.uk/2017/11/27/many-buildings-london-poor-energy-efficiency-will-affected-new-regulations/> and <https://www.epcforyou.co.uk/2018/02/12/energy-efficiency-standards-uk-changes-2018/>

¹⁹ <https://www.london.gov.uk/about-us/about-us/london-assembly/london-assembly-publications/lagging-behind-insulating-homes-london>

²⁰ <https://www.london.gov.uk/about-us/about-us/london-assembly/london-assembly-publications/plugging-energy-gap>

²¹ <https://www.london.gov.uk/about-us/about-us/london-assembly/london-assembly-publications/mayor-missing-carbon-reduction-targets> and <https://www.london.gov.uk/about-us/london-assembly/london-assembly-press-releases/cutting-carbon-london-2015-update>

²² <https://www.london.gov.uk/about-us/london-assembly/london-assembly-publications/bring-me-sunshine-how-londons-homes-could>

Cold and damp homes

Work specifically on fuel poverty began under the Health and Public Services Committee with *In From the Cold* in 2012,²³ but was inherited by the Health and Environment Committee later that year and has been discussed by the Environment Committee since.²⁴

In May 2017, the committee published *Getting Warmer: The Mayor's role in domestic energy and fuel poverty*.²⁵ The report called on the Mayor to reinvigorate London's promotion of retrofit take-up, especially in the rented sector.

Scope

This project will focus specifically on cold and damp homes, as the committee recently investigated domestic carbon reduction and fuel poverty. The investigation will seek to establish the scale of the issue in London and hear from Londoners living in cold and damp houses. Within this, the investigation will look specifically at damp problems caused by energy-saving measures.²⁶ The investigation will identify and assess the Mayor's current work in the area. The design and delivery of Mayoral programmes will be the primary focus of the investigation.

Terms of reference

1. To examine the problem of cold and damp homes in London, particularly by engaging directly with Londoners experiencing cold and damp homes.
2. To explore the link between energy-saving retro-fit and damp homes.
3. To identify what the Mayor is doing to address cold and damp homes in London and how he could further tackle the problem.

Impact

Category	Evidence of impact
Challenging	Evaluating whether Mayoral programmes (Warmer Homes, RE:NEW and its successor) adequately address the problem of cold and damp homes in London. Highlighting GLA (or other) strategies and programmes that require improvement.
Influencing	Identifying areas where the Mayor can improve, refocus or develop new strategies and programmes to tackle London's cold and damp homes. Encouraging other actors to support these goals.
Engaging	Providing additional channels for stakeholders to contribute to City Hall policy making in this area. Proactively engaging 'real Londoners'.

²³ https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Fuel%20poverty%20-%20Final%20report.pdf

²⁴ <https://www.london.gov.uk/about-us/about-us/london-assembly/london-assembly-publications/correspondence-fuel-poverty-action-london>

²⁵ https://www.london.gov.uk/sites/default/files/getting_warmer.pdf

²⁶ <https://www.which.co.uk/reviews/damp/article/dealing-with-damp/what-kind-of-damp-is-affecting-my-home>

Cold and damp homes

Stages of the investigation

1. Further desk research

- Review examples from UK and overseas on how to tackle cold and damp homes
- Assessing the changes between the RE:NEW and HEEP projects
- Identifying gaps in current Mayoral policies
- Gathering information on the delivery, spending and benefits of current Mayoral programmes

2. Call for evidence and information in writing (response deadline around the end of November)

- The energy efficiency, retrofit and damp proofing industries
- Local authorities, social housing providers, housing associations
- Third sector organisation who help Londoners access help for cold/damp related issues, especially for groups most at risk – i.e. Age, 4in10, shelter, London Renters Union, Fuel Poverty Action, Citizens Advice
- Academics / independent sustainability experts
- Talk London (?) – Begin a conversation on Talk London to encourage individuals with experience living in cold and damp homes to feed into the investigation
- Survey (?) – Survey questions would be targeted to gather more numerical information about the scope of the problem in London. We could also gather information about the scale of the problem in relation to housing tenure to ascertain if Mayoral programmes focus on the correct housing sectors.

3. Site visit (November). A date in November will be found for a site visit. The site visit is one opportunity to engage with residents who have or still are experiencing damp in their homes. The site visit could include a roundtable to enable a wide range of Londoner's voices are heard. Options for a site visit:

- Visit an estate experiencing damp due to inadequate energy efficiency installation or which has taken steps to rectify damp as an unintended consequence of retrofit, e.g. Peabody Thamesmead estate.²⁷
- Organise a visit with the Environment Team to see the results of a Warmer Homes installation.

4. Meeting (December). This will be an opportunity for the members to discuss the topic with GLA officers and external guests. The issues in this paper will form part of the agenda for the meeting, and further items for discussion will be identified from the call for evidence and site visit. Guests could include:

- a housing association such as Clarion,
- a London Borough with a large housing stock and regeneration programmes,

²⁷ <https://passivehouseplus.ie/blogs/breaking-the-mould-in-thamesmead>

Cold and damp homes

- independent energy efficiency and retrofit experts, such as UK Green Building Council, Sustainable Homes or Parity Projects.
5. **Findings report** (?) The committee could publish a findings report in December or January, to highlight emerging findings from the site visit and Talk London responses. Any survey findings could also be included in the findings report. In this case, any recommendations are likely to be made in the final report which would be published later in the year (February).
 6. **Report** (likely to be published around February 2019). The committee plans to produce a full report to set out the findings and recommendations from the investigation. The report may identify issues for the Mayor to consider as he develops Energy for Londoners further.

Suggested Questions

1. What are the key issues or challenges to making London homes easier to heat and avoiding associated damp? You may wish to consider:
 - a. Price of work to improve or correct cold and associated damp
 - b. Identification of homes most in need of work
 - c. Availability of support (financial or otherwise) for installing energy-efficiency measures
 - d. Quality of work to improve energy efficiency and reduce or avoid associated damp

If you could provide or point to specific evidence or evaluations, that would be very helpful.

Views and information about issues and challenges varying across London, or in specific parts of London or for specific groups of Londoners, are welcomed.

2. How, and how well, do the Mayor's current policies and programmes help promote energy efficiency measures in London homes? You may wish to consider:
 - a. To what extent the right homes are being reached and the number reached
 - b. The benefits of the work done, such as warmer or drier homes, reduced energy bills
 - c. Any problems or unwanted effects of the work done, such as reduced ventilation or induced damp
 - d. The programme costs and spending
3. What new or different ideas and approaches could improve the Mayor's policies? Are there examples from other parts of the country or the world?

If you could provide or point to specific documents setting out these ideas or approaches this would again be very helpful.