

Domestic energy and fuel poverty

The Environment Committee is investigating what the Mayor can do to reduce domestic carbon emissions and fuel poverty, to inform the development of 'Energy for Londoners' and other relevant policies.

Background

Households need energy to keep warm, for cooking, lighting, washing and to power communications and other appliances. Energy is therefore essential to well-being and quality of life. However, energy has both a financial cost to the household and an environmental cost in carbon and other emissions.

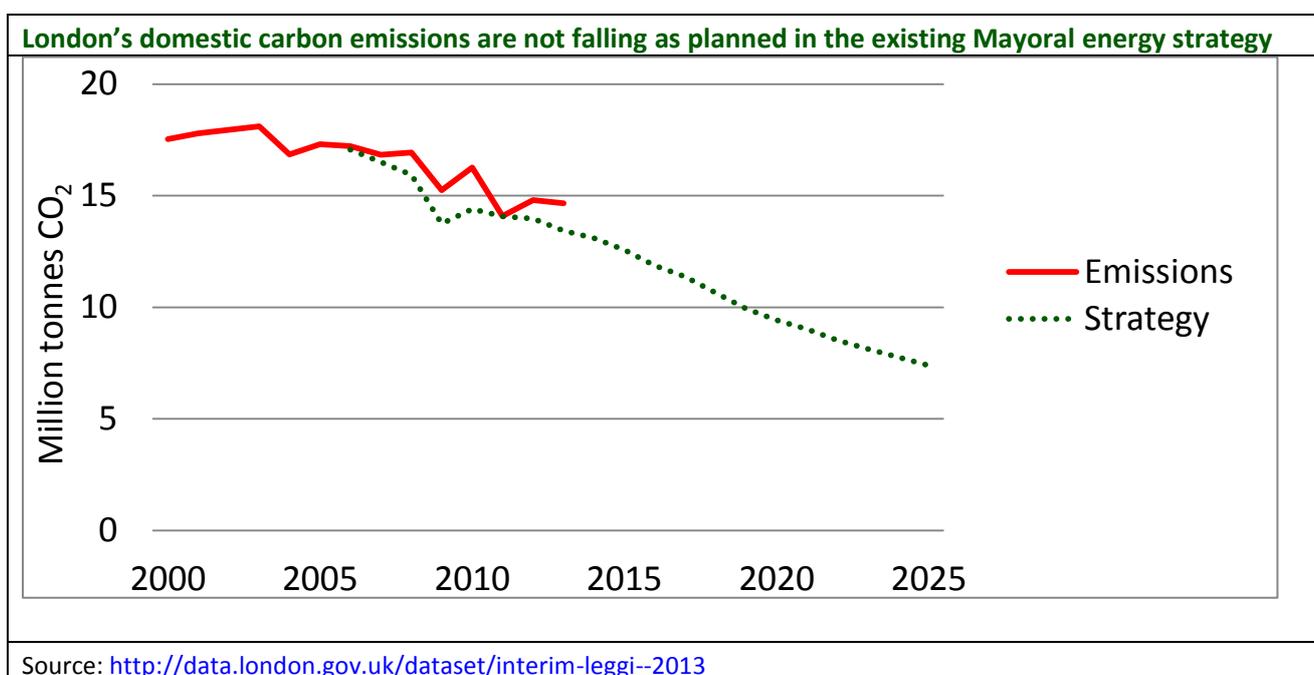
Energy prices can vary by supplier and tariff, as well as over time. Cheaper energy brings a benefit to the household, but may encourage greater energy use and bring an environmental cost.

Likewise the environmental 'price' of energy (emissions per unit) can vary, such as between high-carbon fossil fuels and low-carbon renewables. However, cleaner energy may come at a higher financial price.

On the other hand, reducing energy use brings both social and environmental benefits. Household energy use can be reduced by factors such as how well the building is insulated and how efficient are the household appliances. It can also be reduced by people's day-to-day choices and behaviours, though there are limits to the choices people have – warmth, lighting, cooking and cleaning, for instance, are basic needs.

Carbon emissions

Carbon emissions from domestic energy use are a large fraction of London's total carbon emissions, and must reduce to achieve the Mayor's target contributions to national and global climate change mitigation efforts. However, emissions from London's homes are not falling at the pace envisaged in the Mayoral strategy (set by the previous Mayor, but the current Mayor's goals are if anything more ambitious).



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Fuel poverty and cold homes

Fuel poverty exists when a household must spend a large proportion of its income (historically defined as ten per cent) on energy needs. More than one in ten London households is fuel poor.¹ It is clearly a factor in overall poverty and its associated costs in well-being and social inclusion.

Whether because of energy affordability, or because of an absolute inadequacy of heating compared to heat loss in the building, many people live in homes that are cold in cold weather. This can have serious effects on both physical and mental well-being. There are thousands of ‘excess winter deaths’ each year in London, with cold homes a significant contributing factor.

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.

Mayoral work

The Mayor has a statutory Climate Change Mitigation and Energy Strategy (the existing strategy from the previous administration is to be replaced by an overall Environment Strategy required to have climate change mitigation and energy content – a consultation draft is expected in spring 2017). Within the strategy, relevant work streams include:

- the RE:NEW project to promote energy efficiency retrofits to existing homes
- Support, via the Decentralised Energy Projects Delivery Unit (DEPDU), for local generation
- Work to combat fuel poverty, such as advice on entitlement to help with fuel bills and on tariffs

The main current work stream, the RE:NEW project to promote energy efficiency retrofit in homes, is currently in the last year of a three-year phase (to summer 2017) using mainly European funding. With the scarcity of private household funding (see Non-GLA actors, below), it has focused on social landlords. However, the social renting sector is being affected by local authority funding cuts, Right to Buy and rent caps, which have reduced the willingness or ability of the social sector to invest in retrofit, so progress is thought to be below target – in common with other parts of England.

The current Mayor’s manifesto set out plans for a not-for-profit Energy for Londoners company, which would (among other things) provide a comprehensive range of energy services to help Londoners generate more low-carbon energy and increase their energy efficiency. It also pledged to promote smart meters and work with the industry to accelerate their rollout. Smart meters offer households the chance to understand and control their energy use more effectively. A further manifesto pledge was for a strategy for solar energy.

Early discussions within the GLA suggest that ‘Energy for Londoners’ may initially bring together ongoing GLA work on energy, retrofit, renewables and fuel poverty, and then could also accommodate new work on these areas. The feasibility of a fully licensed not-for-profit energy supply company is being looked into.

¹ 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.

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Non-GLA actors

The Government has established national schemes to promote energy efficiency in homes, including the Energy Company Obligation (ECO), which 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. ECO has been reduced in size from its original annual funding pot, and is due to be replaced in 2017. 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.

The end of the Green Deal, scaling back of ECO and relatively low delivery of ECO in London are part of a situation in which energy efficiency retrofit in London is not reaching the numbers of homes, or installing the numbers and types of measures, required by the Mayor's strategy.

Local authorities have significant roles to play, including as landlords, as providers of advice and support to vulnerable people, and as enforcers of housing standards, for example in the private rented sector.

There are many relevant third sector organisations, including the Energy Saving Trust, National Energy Action, the Association for the Conservation of Energy, Citizens Advice and others. These provide advice and guidance, and some help with grants and funding.

The energy supply sector is significant too. As well as the large retailers and generators, there are others at the community scale. For example, Repowering London has projects in Brixton (which the previous Environment Committee visited and used as a case study in its solar power investigation) and Hackney.

Previous Assembly work

The Environment Committee's engagement with recent 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.² Energy efficiency and retrofit has been further explored in *Plugging the Energy Gap*³ and in work on the delivery of the Mayor's Climate Change Mitigation and Energy Strategy.⁴ The 2015 report *Bring Me Sunshine* explored the role of domestic solar panels.⁵

Work specifically on fuel poverty began under the Health and Public Services Committee with *In From the Cold* in 2012,⁶ but was inherited by the Health and Environment Committee later that year and has been discussed by the Environment Committee since.⁷

² <https://www.london.gov.uk/about-us/about-us/london-assembly/london-assembly-publications/lagging-behind-insulating-homes-london>

³ <https://www.london.gov.uk/about-us/about-us/london-assembly/london-assembly-publications/plugging-energy-gap>

⁴ <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>

⁵ <https://www.london.gov.uk/about-us/london-assembly/london-assembly-publications/bring-me-sunshine-how-londons-homes-could>

⁶ https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Fuel%20poverty%20-%20Final%20report.pdf

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Scope

Given that both domestic carbon reduction and fuel poverty have been investigated by the Assembly (among many others) before, this project will focus on Energy for Londoners and what the new Mayor can do to improve GLA work in these areas. As there is a great deal of common ground between carbon reduction and fuel poverty, especially around energy efficiency, these areas are worked on together by the GLA and will both be covered in this investigation.

Energy efficiency retrofit

With the current administration in the process of reviewing energy and climate change strategy, and the expiry of the current phase of the Re:New project in 2017, there is an opportunity to influence Mayoral policy on improving energy efficiency in existing homes. The investigation could consider:

- lessons that can be learned from the GLA's experience with retrofit schemes like RE:NEW, and from retrofit work elsewhere in the UK or abroad
- what scale of retrofit is envisaged (by the current administration and by others) and how it could be delivered
- how homes are approached or targeted – for example through large landlords, on an area basis, by need or demographic, based on housing condition information, or by London-wide marketing
- what kinds of energy efficiency measures are supported, for example loft insulation, cavity or solid wall insulation, (hot) water efficiency, efficient boilers or other appliances, smart meters
- what new technologies and techniques (such as energisprong insulation or smart appliances) can bring to energy efficiency work
- what role Energy for Londoners can play, such as providing advice, brokering energy efficiency services, or providing finance
- what funding support is available and how to ensure London gets its share of ECO or other support available nationally (including any likely replacement for ECO and/or the Green Deal)

Domestic and community energy generation

There is a growing sector of decentralised energy generation, including solar panels and other energy sources on individual homes or residential blocks, and community schemes producing energy primarily for local consumption. There is potential via this sector for energy that is low-carbon and/or affordable, though this will depend on the detail of what generation is installed and how it is managed. The investigation could consider:

- how much scope there is for domestic and community generation
- what forms of generation could be involved
- how this capacity could be delivered, managed, financed, and funded in the longer term
- what environmental and affordability benefits (or costs) could come from this kind of energy
- what barriers there are to delivery and uptake
- the Mayor's work towards a solar energy strategy and how it can help households reduce bills
- what support the Mayor is providing for community energy projects

⁷ <https://www.london.gov.uk/about-us/about-us/london-assembly/london-assembly-publications/correspondence-fuel-poverty-action-london>

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Household energy prices

Energy prices vary over time and so more households are likely to experience fuel poverty if prices rise. Energy prices also vary from one provider, payment method or tariff to another. Households at risk of paying over the odds for energy include those on pre-payment meters (often those in the rented sectors and those who have in the past fallen behind with bill payments) and those less able to keep up with changing tariffs and find the best deal (often those with limited or dated literacy, numeracy, financial or IT skills). Clearly both categories may also include many who are also on lower incomes and at greater risk of fuel poverty to begin with. The investigation could consider:

- how much connection there is between more expensive energy tariffs and fuel poverty
- support available to find cheaper energy, and how this can be linked to work to promote energy efficiency – focusing especially on whether the Mayor can help
- what links there may be between energy affordability and environmental impacts
- what role community energy providers have in offering affordable tariffs
- the Mayor's work on Energy for Londoners as a potential retailer of energy to households
- what role Energy for Londoners or other Mayoral work could play in the retail domestic energy market
- examples from elsewhere in the UK such as Robin Hood Energy (in Nottingham), Bristol Energy and Our Power (in Scotland)

Energy use choices and behaviour

The energy use of a home can vary widely according to the choices and behaviours of the occupants. Many households could make significant savings by changing the way they use their heating, ventilation or hot water, for instance. The investigation could consider:

- how much scope there is through energy savings through behaviour change, especially the savings realised in practice by schemes to promote behaviour change
- what means are available to promote energy-efficient choices and how these can be incorporated into Mayoral work
- what role there is for new technologies such as smart meters and home automation

Energy efficiency in new homes

New homes are subject to energy-related standards under national policy and the London Plan (especially from 2016 the London 'zero-carbon' standard), and these standards are an important element in delivering the Mayor's targets for reducing domestic carbon emissions. Progress reporting by the mayor suggests that energy efficiency in new homes is progressing in accordance with the strategy. For this reason, and the overlap of remits with the Housing and Planning Committees in new homes standards, new homes will not be a major focus of this investigation, but will be noted for context.

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Terms of reference

1. To examine the potential contribution of Energy for Londoners (and other Mayoral policy and programmes in the area of domestic energy) in reducing
 - a. carbon emissions and other environmental costs from domestic energy
 - b. energy bills and fuel poverty

Impact

Category	Evidence of impact
Challenging	Evaluating whether existing policies (continuing from the previous administration) are making fast enough progress at increasing energy affordability and reducing domestic carbon emissions. Highlighting GLA (or other) strategies and programmes that require improvement by the new administration.
Influencing	Identifying areas where the Mayor can improve or develop strategies and programmes for domestic energy efficiency and affordability. Encouraging other actors to support these goals.
Engaging	Providing additional channels for stakeholders to contribute to City Hall policy making in this area.

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Stages of the investigation

- 1. Further desk research** (October onwards). Could include:
 - Review of examples available from the UK and overseas in energy retrofit and/or fuel poverty
 - Assessing progress of the RE:NEW programme
 - Identifying funding sources for domestic retrofit and/or micro-generation capacity
- 2. Calls for views and information in writing** (October-November). We are especially keen to hear from:
 - The energy supply industry, including the community energy sector and regulators
 - The energy efficiency and retrofit sector
 - Local authorities
 - Public and third-sector bodies involved in promoting energy efficiency and low-carbon energy, and tackling fuel poverty
 - Academics and other independent experts
 - Individuals (or groups representing them) with experience of hard-to-heat homes, energy efficiency work or fuel poverty

Specific approaches will be made to various organisations. The investigation is also open to contributions from any other organisations or individuals. Guideline questions are set out overleaf but are not intended to restrict input: more general contributions are also welcomed.

Social media could be used to engage with a wider audience and to generate short-format input or survey responses.

- 3. A potential site visit** (to be confirmed). It could be informative to visit a site such as an energy efficiency retrofit project, if one is identified during early information-gathering.
- 4. Meeting** (November). A meeting devoted to the investigation would enable discussion with external guests, such as from the domestic retrofit sector, the community energy sector, or independent experts in energy efficiency or fuel poverty. The issues identified in this paper would form an agenda for the meeting; others may be identified from written evidence or discussion in October.

Note also that the Budget Committee is planning to discuss issues relating to European funding (in September) and the GLA budget (in November) and could pick up some questions relating to funding of GLA work beyond current commitments.

Shirley Rodrigues, the Deputy Mayor for Environment, attended the Committee's meeting in October. The meeting covered the breadth of Mayoral environment policy, but a significant section focused on Mayoral energy policy and is being used to inform this investigation.

- 5. Report** (likely to be published around February 2017). The Committee plans to publish a report setting out the findings and recommendations from the investigation. The report may identify issues for the Mayor to consider as he develops the Energy for Londoners work stream and a new Environment Strategy.
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Guideline questions for written views and information

1. As the Mayoral administration reviews the GLA's policies and programmes, what are the issues and challenges in seeking to reduce carbon emissions from London's homes and to ensure that all Londoners have affordable access to warm homes and domestic energy? You may wish to consider:
 - a. Retrofitting energy efficiency measures to existing homes
 - b. Promoting energy-efficient behaviours and choices
 - c. Low-carbon and/or affordable energy generation at the domestic or community scale
 - d. Household energy prices and tariffs, and support to find affordable tariffs

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 ensure that domestic energy needs are met affordably and with low carbon emissions? Are there policies that hinder these goals?
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.

4. How should the Mayor change policies or programmes?

Consideration could be given to the RE:NEW programme, 'Energy for Londoners', the existing Climate Change Mitigation and Energy Strategy (and these aspects of the future Environment Strategy), the London Energy Plan, the London Plan and other relevant policies and programmes.
