A grassroots campaign taking action against mammoth fuel bills and working towards an affordable, sustainable and democratic energy system

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Fuel Poverty Action response to GLA Estate Regeneration Consultation

Thank you for the opportunity to comment on your Draft Good Practice Guide to Estate Regeneration.

We are glad to see that this document begins with presenting regeneration as an option, not a default, and makes a clear commitment to meaningful consultation.

In many – probably most – cases, this consultation will mean that estates will be refurbished and not demolished. In some, it may be key to ensuring that regenerated estates are good places to live. We are here concerned with what that means in relation to heating and energy efficiency.

Whether refurbished or rebuilt, estates need heating systems and energy efficiency improvements that will keep us warm without costing the earth either in cash or environmentally. **Recent experience shows that schemes that are commissioned with many fine words and promises, and even with consultation processes apparently in place, totally fail to achieve this goal, to the extent that many residents on regenerated estates are afraid to use their heating at all, and there has so far been at least one death of a tenant who was struggling with his heating bills.**

In an effort to address the gap between promises and reality, we highlight some examples of where things have gone wrong in relation to heating on regenerated estates. We are sure you have many other such examples. Clear protocols, eg on consultation, resident advocates, etc can go some way to addressing this gap, if they are brought in with a clear intention on the part of the GLA and local authorities to relentlessly defend their residents' interests and to ensure that they have the tools to defend themselves, and if they are based on respect and resources for tenants' and residents' associations and their elected representatives (please see submissions by London Tenants Federation and by members of the Radical Housing Network). It is important also to pay attention to the built-in incentives and business relationships that create injustices in the first place, in projects involving multiple private interests.

We have two headline "asks":

1) The Guide should make clear that residents should be given detailed written guarantees of the outcomes they are entitled to expect, and what sanctions and reparations will be imposed on developers, suppliers etc if these standards are not met. Reparations for inadequate

performance and unfulfilled contract obligations should go not only to a local authority but to the residents directly affected. This will make consultations more meaningful and will be an important lever for residents to use in bringing regenerated estates up to a good standard once they are built.

2) Equally important, we believe it should be an established principle that architects, developers and, for instance, energy supply companies, who want to take part in regenerating estates must be disqualified until they have solved any major problems that they are responsible for on existing estates, while local authorities responsible for poor commissioning and monitoring should be closely monitored. It is appalling, for instance, to see PRP architects potentially involved in creating further havoc. And District Heating networks (see below) can only fulfil their potential if designed, installed, and operated by people who have proved that they a) know how to do it and b) are committed to a good outcome for residents and the environment. To keep allowing the same known parties to repeatedly make the same mistakes – or to rebuild or supply heat to estates for profit, one estate after another, with no accountability for what results – is to invite disaster.

We address below other issues related to monitoring, consultation and information for residents.

Energy efficiency and renewable energy

Bringing homes up to standard on energy efficiency must be central to regeneration policy. Minimum standards for both new builds and existing housing remain legally mandatory, although undermined by regulatory changes and by central government cuts to insulation programmes. There is always a need to be guided by tenants' preferences – eg on the trade-off in some solid-wall homes between room size and insulation in cases where external cladding is not a good option. But **the potential for retrofitting insulation and the effect that would have on people's quality of life should be fully taken into account in any consultation exercise on whether to refurbish or regenerate an estate. There are also exciting possibilities for retrofitting renewable energy sources, for instance ground-source heat pumps (see below).**

It is important to note that demolition and regeneration do not necessarily lead to better standards of energy efficiency.

On 10 February this year at a London Estates Forum, a representative from Orchard Village Estate in Rainham questioned why his estate had been rebuilt at all, with what is due to be 555 homes at a cost of £80 million, when the existing 515 homes could have been insulated and brought up to Decent Homes standard for a total of £4 million.[1] This regenerated estate, designed by architects PRP, has suffered leaks, mould, collapsing staircases, missing insulation, missing fire breaks, sewage problems, and toxic fumes that residents believe are seriously affecting their health (and more - see Guardian, 6 February 2017). Residents here pay astronomical prices for heating, in cold, draughty, uninsulated homes, and endure long waits for hot water.

[1] 555 homes due on completion of stage 4; so far there are only 387. It was argued that the £4m was not available.

Meanwhile a residents' representative from the new-build Passive Close estate, also in Rainham, reported that residents are paying £100 a month in heating costs and £100 a month in electricity. The New London Development website, billed as "London's live development directory" has this summary for Passive Close promises: "51 affordable rented family houses and apartments, all set to meet London Housing Design Guide Standards and also 'Passivhaus' standards, thus providing a high level of occupant comfort while using very little energy for heating and cooling. It will be the first Passivhaus Certified entirely affordable housing scheme in the UK."

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Your consultation document suggests that "doing nothing", retaining existing homes instead of regenerating, should be seriously considered and weighed up as a possible option. A**ction is imperative where people are living in draughty, damp, or poorly insulated homes – but that action may mean insulation which is relatively low cost and much less disruptive compared to demolition and rebuilding. It may also mean introducing renewable heat on existing estates, without demolition, as is being successfully done in many places.**

District Heating

The points below are an expansion of points raised previously in our response to the City for All Londoners consultation. We are aware that this may require its own section in the Good Practice Guide to Estate Regeneration. Adequate heating, and fuel poverty, are important enough to warrant this attention, whether an estate is regenerated or not.

Driven by the need to reduce carbon emissions, the London Plan envisages 25 per cent of the heat and power used in London to be generated through the use of localised decentralised energy systems by 2025. This means regenerated estates will overwhelmingly be heated by heat networks.

We are concerned to ensure that efforts to save carbon

a) are not at the expense of particular groups of customers who are likely to suffer fuel poverty, including social housing tenants, private rented sector tenants, and residents of all tenures on regenerated council housing estates, who may be made to carry an unfair burden in financing infrastructure on behalf of us all; and

b) are designed and implemented in an accountable way which ensures that savings in carbon – and in household bills – really materialise, and are not just promises used to get new projects off the ground.

Great care is needed to ensure that your commitment to localised energy is implemented in a way that brings genuine benefits to its customers and other Londoners, in view of the very serious problems that have so far emerged in many such schemes.

<u>Background</u>

Heat networks have great potential to save both on carbon and on bills, particularly when compared with what is an increasingly common alternative: direct electric heating, convenient and low cost for developers, and safe for high-rise blocks, is inordinately expensive for consumers and,

using present power stations, very costly for the climate as well. Communal heating has often served its users very well over the decades – to the degree that when it is decommissioned, residents can be plunged into fuel poverty, and left cold. Anna Eagar, who sits on the Board of the Heat Trust, tells the story of a bingo club in the Cranston area of LB Hackney London, where participants who lived on an estate in Charles Square were warm in their homes one year, and the next year were freezing, having been cut off from their communal system and placed on a gas central heating system they felt was too expensive to use. FPA have supported residents on Myatts Field South estate in Lambeth, who have fought long and hard to prevent this disaster happening to them. LB Lambeth has been determined to move this estate onto individual boilers, going so far as to take tenants to court to get these installed, and sadly only a minority of tenants are still holding out to keep their precious "communal". We are glad to see in the London Plan a commitment to identify and safeguard existing heating and cooling networks.

Many new heat network users, too, are happy with their systems, and prefer it to their previous heating system (as reported for instance by Changeworks). The Cranston experience above led residents of other local estates to campaign for their own, council-owned, retro-fitted district heating, ultimately successfully established as Shoreditch Heat Network.

Whether on refurbished or regenerated estates, the potential for new networks to use waste heat sources like the London Underground, as at Bunhill, Islington, is also very exciting, as is the opportunity to use renewable energy on a large scale (always bearing in mind that biomass is not necessarily genuinely renewable, and, depending on its source, can cause more carbon in the atmosphere than the fossil fuels it replaces). You are no doubt aware that many local authorities and housing associations round the country are introducing Ground Source Heat Pumps on both existing and regenerated estates, as the basis of communal or district heat networks (Clifford Lamb Court in Manchester seems to be a widely used exemplar, where heating costs for residents are reported to have plummeted since the change).

Groups of residents who collectively choose a heat network should have that option available.

It is however essential that new networks now being developed, and the ones that have been installed in the past few years, should be made to work for the people who have to use them. This has not always been the case, and **we are very concerned that what is seen as a GLA directive to install heat networks "wherever possible" – as a default – can lead to them being installed in places where alternatives could be less expensive for consumers and for the environment, or being installed in places where they *are* the best option, but badly, or on poor terms for the users**.

We have been working closely with residents on Myatts Field North estate, a regenerated estate neighbouring the Myatts Field South cited above but experiencing the opposite problem: they have a communal heating system that they now do not want (for a comparison between the two, see Inside Housing). The residents report frequent outages, unpredictable water temperatures, overheating, failing remote access meters, and appalling customer service which reflects the fact that the supplier, E.ON, knows its customers cannot switch: the contract lasts for 25 years for leaseholders in the "Oval Quarter", and for council tenants, for 45 years. Despite this being a new-

build estate with good insulation, bills are very high, and much more than the residents would have expected to pay if they had gas boilers. A number have decided not to use their heating at all and have bought electric heaters, or gone cold. Concerted attempts to get these issues resolved, over the course of four years, have run up against the way responsibility is fragmented between the local authority, E.ON, and the development consortium.

A gentleman on this estate was recently found dead in his flat, after going repeatedly to the estate office, complaining that he could not afford his heating bills. A neighbour said he was constantly fretting about his bills, and had stopped eating, trying to make one day's meals stretch over several days.

The gap between promises and reality has also become a gap between what residents experience and official reports about their estate. The Heat Network Development Unit in 2016 published Detailed Project Development Documents, with Myatts Field as a case study illustrating the success of public-private shared leadership, with "an umbrella framework linking performance, default, remedies and continuity in supply across the two schemes, and ensuring the Council, its tenants and private residents should see uninterrupted supply of heat into the future."[2] The 2016 Housing Forum document "Altered Estates: How to reconcile competing interests in estate regeneration"reports on Myatts Field/Oval Quarter in similarly glowing terms.[3]

We submitted a response to BEIS's consultation in preparation for the release of Heat Network Investment Project (HNIP) funding, highlighting the reality on Myatts Field, and, with residents' representatives, we went to BEIS about this. We are hopeful of progress on this estate as a result, but clearly this process will not be replicated all over London. The problems, however, appear to be quite typical. We have been in touch with residents in Greenwich, Hackney, Haringey, Havering and Ruislip, as well as in Lambeth, who feel they are trapped in a nightmare and are desperate to find a solution. The Orchard Village, Havering, residents have been forced to resort to court action to try to resolve the heating and other issues. Some others, too, are trying to get legal redress for obvious injustices, but so far have found the cards stacked against them.

A Communal Heating Systems Review produced by Lewisham's Housing Select Committee in May 2015 was based not only on residents' experiences but on the experience of a series of key figures from commercial and public bodies and experts active in the industry, including the GLA's own Peter North. This report gives an analysis of the problems – and good practice – and a list of recommendations that in our view must not be ignored. On a national level, Which?, and the CAB, report very similar issues with heat networks; the Changeworks report cited above was more positive overall but still reflects some of these problems, and a new report by Changeworks with the Centre for Sustainable Energy, and funded by Joseph Rowntree Foundation, will be published shortly, flagging up a series of problems experienced by local authorities and residents, with suggested solutions.

This autumn we proposed to the GLA a survey of heat customers on Myatts Field North estate; this appears to have led to a possible London-wide survey. We believe this is urgent, to prevent really

[2] P.92 of the Arup guidance document
[3] http://www.housingforum.org.uk/resources/influencing/housing-forum-reports/altered-estates-2016

damaging mistakes being repeated all over the city.

The problems

The specific problems District Heating customers experience seem to stem from a number of **structural issues**, which are not yet widely known but are bound to become so.

(a) **The absence of regulation**. We understand that the government is refusing to regulate the industry on the grounds that this would deter investment in it, and the investment is needed in order to reduce carbon emissions. However, because it is unregulated, the carbon emission reductions may turn out to be a mirage: we are not aware of many statistics on carbon savings from existing schemes and given the very evident inefficiencies in many systems, including overheating, oversizing, poor insulation, poor balancing, maintenance and monitoring, etc, they are extremely unlikely to come near what is promised at the time of procurement. Without any equivalent for Ofgem, the only protection is the industry's own voluntary self-regulating body, the Heat Trust, the remit and powers of which are quite limited. Most suppliers do not even belong to it, and those that do are still beyond any control comparable to that exerted in other industries. Companies like E.ON, regularly fined millions by Ofgem for their behaviour in the regulated energy market, are free to supply heat without any equivalent independent oversight or sanctions.

The GLA obviously cannot make up for the lack of legislation, but can impose conditions (see below), and can actively press the Government to regulate this industry.

(b) **Lack of consultation**. In Myatts Field there was extensive consultation – however unsatisfactory in its outcome - before the estate was regenerated under a PFI contract (See Hodkinson and Essen (2015) in the *International Journal of Law in the Built Environment*[4] for this and more information relevant to the present consultation). The decision to install a heat network, however, appears to have been taken at the last moment without any consultation at all. The first existing tenants knew about the change was when they they received notices requiring them to give access to engineers to fit new heat network pipework and devices to their homes. Besides dictating their heat supply, being forcibly connected to a district heating system meant losing their gas cookers; the new induction hobs did not work with traditional Caribbean style "Dutch pot" cookware and do not fully allow traditional ways of cooking that involve using a naked flame. However, they were told that they could face eviction if they did not sign the agreement.

Such unilateral action on heating is arguably illegal: council residents have a legal right to consultation over changes to their energy supply. According to the Electricity and Gas (Internal Markets) Regulations of 2011, tenants and leaseholders are entitled to connect to any energy supplier they prefer, unless the estate's supply infrastructure is unable to support it or if doing so would lead to a severe economic impact on the landlord. Under

[4] http://eprints.whiterose.ac.uk/85448/1/Hodkinson_Essen_2015.pdf

Section 105 of the Housing Act 1985 and Section 20 of the Landlord and Tenants Act 1985 existing council residents therefore must be consulted by their landlord about proposals that interfere with their rights to choose an energy supplier by changing the established energy supply infrastructure.

At the same time, residents should not be forced by regeneration to give up existing heat networks, and groups of residents who collectively choose a heat network should have that option available.

(c) **Lack of information.** Meanwhile, new residents moving onto estates whether as leaseholders, freeholders, under shared ownership, or whatever, are widely uninformed about what they are buying into. We have heard similar stories from residents of Myatts Field, Orchard Village, and an estate in Greenwich, which featured in an Observer article (5 Feb 2017). In all these cases, the supplier is a member of the Heat Trust. But again, the reality differs from promises. The Heat Trust Rules on Information to Prospective Heat Customers are:

- To maintain an up-to-date Heat Customer Information Pack for distribution to prospective Heat Customers, estate agents, letting companies, and other interested parties on request and for inclusion in the Heat Customer Supply Arrangements.
- A Heat Customer Information Pack must include: up-to-date heat tariff information including the current Standing Charge and Unit Charges for the property or type of property at the Registered Site, indicative annual Heat Energy consumption and Heat Bill; terms and conditions of the Heat Energy Supply Agreement, or a standard copy of the Heat Energy Supply Agreement for the Registered Site and; information explaining the protection available for a Heat Customer under the Independent Complaint Handling Service, the contact details and the Website link.

This information should be provided to prospective new customers prior to them signing a long-term heat agreement. However, many people moving in who are deemed to have entered an agreement by the fact of receiving heat and paying bills, have stated that they never saw a Heat Information Pack and were not properly informed about the contractual terms, tariff and service charges, and service standards by estate agents, freeholders, or anyone else, before or during the purchase of their new properties. Many say that a welcome pack when they move in is the first they hear of a district heating system. Others know of it but are misled into believing that their heating costs will be better – and certainly no worse – than they were with an individual gas boiler. This proud promise was written into earlier district heating contracts and was, for example, on E.ON's Community Energy website until challenged by a case taken to the Advertising Standards Authority; we suspect it is no longer being included in contracts, nor is it now on the Heat Trust website.

Some, who are now considering selling – in part because of the costs and unreliablility of the heat network itself – are worried about how their district heating might affect the sale price, and whether they are obligated to tell prospective buyers of this potential detriment.

The fear of such issues becoming common knowledge on the property market – and the obligation for suppliers, estate agents, freeholders and local authorities to provide full and accurate information and guarantees on heating to potential buyers of private homes on regenerated estates, should act as a discipline on councils, developers, and on the district heating industry, and help ensure that promises are kept.

(d) **Systems for inspection and monitoring** are often sorely lacking. In Myatts Field monitoring is supposed to be carried out by the Myatts Field North Residents Association and PFI Monitoring Board (MFN RAMB), a conglomerate of residents, local authority, and estate management/construction firms that is totally ill-equipped for this responsibility. The result is huge pressure on hard pressed volunteer residents, attempting to confront a multinational corporation.

Customers must overcome divisions between on the one hand those in social housing, often on very low incomes, and on the other hand, people who were well enough off to find a deposit for a London home – but who may still struggle each month to cover a massive, and unplanned-for heat service charge on top of their mortgage ("I knew nothing of the heat charge until I read the welcome pack they left on my kitchen worktop").

The divisions between residents are often compounded by the multitude of contractors involved: in construction, in management, in repairs, in heat production and the primary network, etc., with a multitude of opportunities for buck-passing and inaction, and no one taking overall responsibility. It seems inevitable that the layers of contractors and sub-contractors must also add to the costs which are ultimately passed on to residents.

(e) **More haste less speed.** An editorial in Heat Networks Vanguards Newsletter, October 2016, suggested that heat networks are being rolled out in the UK at a speed that is not commensurate with the complicated arrangements and adjustments they require. It also questioned the transparency of public finance through the Heat Networks Investment Project.

(f) **Local Authorities do not often have the necessary commissioning experience**, **know-how, or resources to get a good deal from the private companies** that design, install, and run heat networks, or to monitor them in operation and enforce contracts. Some are more committed than others to getting and enforcing a good deal for their residents (and protecting their own investment). **They then may fail to effectively and knowingly monitor schemes, or to impose the necessary penalties when residents are being failed. They may altogether reject responsibility for customers who are not their own tenants but leaseholders or part-owners who have bought homes in a development** whose heat comes from a scheme which they commissioned.

(g) **There is an engineering deficit**. We are not technical experts, but have been informed that Heat networks cannot work efficiently without correct sizing, diversity, balancing, pipe insulation, thermal stores, etc. We've been told that in the UK systems are often much too

large, and also that if something isn't working, an engineer is often dispatched who just turns up the output through the controls, destroying any balance and increasing costs and fuel use. If heat networks are not well designed and run efficiently**,** they do not produce savings in carbon and are not economical to run.

(h) **Heat networks are expensive**, and under the present system of financing them, so is the heat they produce for their customers. A network may be more efficient than individual gas boilers, but there is also the initial investment to pay back. With investors typically expecting to make back their investment in something like 25 years, and with a limited number of customers, it is a big ask to expect prices to compare with prices for gas, where the pipes and other infrastructure were laid down and paid for decades ago, and where costs are spread among far more customers.

We do not believe this means that networks shouldn't be built. But **why should residents of regenerated estates – often present or previous council tenants – pay more than other Londoners for a carbon saving policy that does not personally, specifically, benefit them – and in fact often leaves them with a worse service?**

It is often claimed that heat suppliers will charge no more than their customers would pay for the "counterfactual" (which in many places is currently gas). But the "cost comparator" produced by the Heat Trust is based on some very questionable assumptions. In any case, pricing at the level of the comparator is not enforced by regulation, or even by the Heat Trust. It offers no protection from extortionate tariffs and, especially, standing charges. Nor can customers switch.

(i) **The Competition and Markets Authority** (CMA) has specifically banned the Heat Trust from intervening on questions of price or length of contract, on the grounds that this would be "uncompetitive". They do not appear to see it as uncompetitive that commercial companies have 20 – 80 year monopolies to supply a whole neighbourhood.

<u>Suggestions</u>

We believe that these are issues which the GLA may be able to solve, or at least mitigate, in implementing its policy of promoting heat networks. A commitment to this must be part of any best practice guidance for regenerating estates.

We would suggest that the GLA ensure that any scheme it promotes, or as far as possible, <u>any scheme brought in with the support of a local authority must</u>

(a) be a member ("participant") of the Heat Trust

(b) **at the minimum, comply with the technical Code of Practice** laid out by CIBSE (the Chartered institution of Building Services Engineers) and ADE (the Association for Decentralised Energy) – with this compliance written into all contracts and effective penalties if the standards are not met (initially and through the years). Penalties must be

set at a level where they cannot just be absorbed, so that they genuinely determine what happens in practice. The aim then should be to move beyond this to bring London schemes up to the latest European standards.

(c) **ensure that it is genuinely carbon saving**, having considered carefully at the planning stage the best way to achieve this, and what the alternatives might be (Including insulation), and monitor what the savings are in practice once the scheme is in operation and over its lifetime. We have heard very promising news about the potential of district heating based on ground source heat with shared bore holes and heat pumps, even in high density environments.

(d) **include in any consultations prior to regeneration, fully informed discussion of potential heating systems, their pros and cons, and any guarantees.** Ideally, residents should be offered a choice, both at the time of regeneration and later. If a heat network is sufficiently attractive, customers will choose it, as they do in Aberdeen, where existing tenants are offered the choice of connecting to a heat network or sticking with storage heaters, and home-owners can opt to connect.

(e) **ensure that people buying or leasing homes on regenerated estates are fully informed** about the heat network and that contracts include a price guarantee of equivalence with the cost of gas heating, or better, based on transparent calculations and realistic comparisons.

(f) **guarantee post-construction and ongoing monitoring by suitably quailified engineers.**

(g) **have clear lines of responsibility** with one named overall responsible body, regular reporting, and effective complaints procedures, compensation, and sanctions.

(h) **offer active support for customers** – eg meeting space, independent advice, secretarial support with minute-taking, recording of problems, etc., as requested, for residents' organisations.

(i) **have a clean track record**. No company or public body should be allowed to be involved in commissioning, building or operating any new network until they have dealt with any significant outstanding complaints about networks they have already been involved in. As Lambeth councillor Jacqui Dyer, explained to BEIS, there are vulnerable people at risk here – there should be a DBS service with disclosure and barring of anyone whose track record is bad, before they are considered for public support.

At the same time, a local authority, if it is not itself operating a Heat Network (or, of course, if it is), must have in place **an effective and stringent system for monitoring its operation**, with penalties that are a genuine deterrent to bad practice.

<u>We hope you will also consider the following</u>:

(a) The GLA is well placed to facilitate and encourage exchange of experience and expertise between boroughs, and ensure that those boroughs whose residents have been unprotected understand the need to bring their practice up to the standard of boroughs who have had

engaged and consumer-focused District Heating advocates.

(b) A report by CBx – researchers and advisers in partnership with UCL Energy Institute – recommends "financial support for energy audits of underperforming networks, to identify cost effective modifications" (Low Carbon Heat Networks. How to optimise an existing system for improving performance. They also suggest prioritising Government funding for local authority schemes that link into existing, oversized networks.)

(c) Whether the GLA could take on inspection and monitoring of heat networks.

(d) Whether the GLA could set up a unit as supplier of last resort to take over badly functioning schemes if an Energy Service Company is not performing in the interests of its customers.

(e) Whether you could require all District Heating Operators in London to provide details of their tariffs and charges, which could be published in a list to help customers compare what they are paying with district heating prices elsewhere.

(f) Finance and ownership questions should be looked at with a view to the final effect on customers and on the climate. PFI funding provided a quick fix and complied with central government policy but has proved disastrous for hospitals and other public services. In the same way, concessions handing control to private companies to design, build and/or operate heat networks for profit can help to get these networks in operation – only to become a millstone round the neck of this and future generations. We have no expertise on alternative financing but it seems clear that if organised by energy cooperatives, or municipally, or as a matter of social policy, as in Europe, heat networks could be less dependent on private companies which need to secure a 15% return on capital within a short space of time. We do not believe that, by their nature, heat networks must be the burden on their customers that many of them now are. Ofgem, which has no powers over heat networks, has recently spoken up to acknowledge the case for "a more comprehensive approach to ensuring customer protection", which as they say is "appropriate for an essential service", and has suggested not only regulation but new arrangements to cover charges and funding. Proposals put forward in an editorial in the November 2016 District Energy Vanguards Letter include municipal or community ownership, and highlight the need for a major rethink at both national and municipal level.

(g) You may be aware that the Scottish government is currently conducting a consultation on Heat and Energy Efficiency Strategies, and Regulation of District Heating. The concerns and proposals suggested even in the consultation document put them ahead of anything we know of being considered in London. We hope you will take full advantage of their considerations in working towards an integrated London-wide network of heat.

We believe the measures suggested above can go some distance towards closing the gap between the theory and practice of heat networks – between what is promised on the one hand, and what is delivered and experienced on the other. If it means that initial costs are

higher, or risks are seen as greater, this may result in fewer networks being commissioned. But if the roll out of heat networks is *not* carefully controlled, it will not bring about carbon savings anyway, and it will severely impact the residents who use it. Far better to have fewer networks but sustainable ones that their users are happy with.

Otherwise, people's health and welfare will be sacrificed for the sake of carbon savings which remain unfulfilled promises, and yet again people will be led to see "green measures" as a con, imposed at their expense.

There is, in the industry, widespread acknowledgment that district heating will not work without public acceptance. There is a real danger that in the near future it could become toxic, like fracking. You could see, for instance, people leaving networks – contractually, many leaseholders can do this – which could make the whole network financially unviable or even technically inoperable, as it is planned to work for a certain customer base. You could also see people refusing to buy homes in these developments. Homeowners on heat network estates are already worried about the resale value of their property, given the cost of standing charges.

These are real issues which absolutely must be addressed if district heating is to be a boon to Londoners and not a disaster on the scale of PFI hospitals. And addressing them is most urgent, both because heat networks are being developed at considerable speed now, and because there is a danger that problems with poorly designed and operated heat networks will lead to alternatives being installed which may be just as bad or worse. Until the necessary skills, accountability, and priorities are in place, it would be extremely damaging for decisions to be prejudiced in favour of heat networks because they are GLA policy. However, it would be equally damaging for developers to end up installing direct electric heating as an alternative – which would currently mean much higher costs to residents, more fuel poverty, and higher carbon emissions.

London can be a flagship for District Heating – but only if consumers are protected.

Thank you for your consultation and consideration of these points.

14 March 2017