Reference number 1382

Fuel Poverty Action Response to London Plan Matter M67: Sustainable Infrastructure

SI2 -- Greenhouse Gases

M67. a): Clarity, justification and sufficiency of this section

Be seen: We are glad for the addition of "be seen": it is essential to monitor, verify and report on energy performance. Londoners are totally cynical about the gap between stated intentions and what is implemented. In putting forward proposals for a heat network, for instance, it is all too easy for developers, ESCOs and social housing providers, to promise energy efficiency, low-carbon affordable heating systems, and renewable generation (solar panels, biomass boilers) which simply fail to materialise or are installed but never work. There are no repercussions. But **for "be seen" to be effective**,

a) Stringent monitoring of outcomes in practice must be matched by effective **sanctions** or other repercussions if promises are not met.
b) The monitoring should include **community feedback**, and should facilitate input from residents and residents associations. Residents are best placed to know what is really happening. Yet (despite Hackitt) they are not only not being listened to, they are also being systematically disempowered, with residents associations replaced by hand-picked forums, or locked out of community rooms. Threats and intimidation of active spokespeople are very real, and can be effectively in silencing complaints, especially from anyone who is in rent arrears.

Wherever boilers are oversized, pipework poorly insulated, or systems unbalanced, inefficiencies mean that projected carbon savings are likely to be unrealised.

Zero carbon target: Clearly, a city where new buildings carbon emissions are reduced by only 35% is not a "zero carbon" city. Even if a financial equivalent were to go to reducing carbon elsewhere in London, that **65% of emissions would still be there**, bringing the concept "zero-carbon" into disrepute. And the residents in these buildings do not get intended energy efficiency savings in terms of their warmth and fuel bills, undermining health benefits.

Moreover, as shown by the 2016 GLA report, most of these offset monies are not so used and many are not even collected, undermining local and neighbourhood plans. We can see that offsets could be useful eg for funding community energy but until there is a way to verify actual energy-use reductions in practice they will be seen as just another development cost that is ultimately passed on to residents.

2030: We endorse the proposal in LETI's response to the London Plan that 2030 should be **"**a key milestone is ensuring all new buildings operate with zero emissions, reflecting parallel thinking in Europe, the USA and the World Green Building Council." This would include "a zero emissions by 2030 transition plan to be provided for all district heat/energy networks, alongside disclosing energy usage and efficiency data."

SI 3 Energy infrastructure

Heat networks still a default: The GLA appears to have accepted that with grid decarbonisation gas CHP no longer represents a green option, and will generally be ruled out because of air quality problems, at least until technology improves. There is as yet no clarity about what alternative energy sources can reliably and affordably replace gas CHP, particularly as non-CHP systems cannot offset costs by the sale of electricity. Yet heat networks remain the default option in the London Plan.

The requirement to prioritise heat networks inevitably influences developers, and local authorities, without the skills, time or incentive to go beyond a "norm".

No customer protection: At the same time there is in the Plan no link to required standards of customer protection, either for heat networks or for alternatives like air pumps, and no move to escape the domination of private interests or bring the industries under public control. Both would greatly impact planning decisions, as well as outcomes, and should be included.

M67.c): Is the list of "items to be identified" in energy masterplans comprehensive?

No.

1) The list almost exclusively focuses on heat networks, despite the welcome addition of 11A and the mention of solar, wind, biomass and other technologies elsewhere in the policy. There is no requirement to compare the relative strengths of different options in terms of carbon emissions, cost, reliability, air quality, noise, space, overheating risks, and adaptability as technology changes.

There is nothing about consultation, with present residents or with residents expecting to be rehoused after regeneration, or about giving residents information about heat networks.

It is not reasonable to expect Londoners to embrace, live with, and pay for, technology for which no convincing evidence or argument has yet been presented. Any such argument should be open to robust challenge and debate, to avoid a situation where a case is made on faulty information. The same, of course, should apply to other technologies, including gas boilers and electric heating. **The need for any option chosen to be one with public acceptance is widely acknowledged** (see eg here) **but rarely affects policy**. Whatever path is chosen will require substantial change and disruption. To accept this we, the public, need to know that it will not make us cut back on other essential spending to pay energy bills, that our heating will be reliable, and that we will be given the information required for meaningful consultation.

There is no instruction to consider how energy efficiency in a development may affect the choice of heat options. Nibe air pump boilers designed for well insulated European homes are failing miserably in the UK. Energy needs should fall dramatically under a strategy that begins with being "lean" but this is not reflected in the presumption of DH.

On energy efficiency itself, there is no instruction, at least in this section, to consider suitable materials for insulation and in some cases cladding. Grenfell has exposed risks not only of fire but of oil-based materials that are toxic, especially, but not only, when they burn.

2) Assuming a heat network *is* chosen, the "masterplan" list makes no mention of customer protection, in terms of cost or - equally important - reliability and customer service.

We were glad to see (9.3.4) that "*The Mayor is taking a more direct role in the delivery of heat networks"* and that further guidance on heat networks will be forthcoming. Unfortunately we have not been able to find anywhere the already developed "*comprehensive decentralised energy support package"* cited. But we believe customer protection should be built into the London Plan itself.

It is the Plan, after all, that is likely to lead developers to choose heat networks. The CMA has clearly laid out the risk of customer detriment as a result of planning requirements, with "misaligned incentives" leading to "inappropriate choices and design of heat networks" and "a risk that whilst the benefits of the heat network, such as carbon savings, accrue to society as a whole, the additional costs will be borne by the customers of heat networks through higher property prices or heating bills."

It is exactly this kind of scenario that led to the disaster at Myatts Field North[1]. We can see nothing in the London Plan that would stop this happening again.

We are also concerned that the first priority in the hierarchy, connection to existing heat networks (SI3D1A), could lead to new customers being connected to networks that are failing, or existing heat customers being forced to pay for extensions of their networks. Leaseholders of Redbrick estate in Islington say this has happened to them, in connection with an otherwise unneeded overhaul of their own supply.

The CMA say that in London, "*the London Heat Network Manual indicates that heat networks . . . should be at a competitive price. However, in transposing this into local plans, London boroughs only need to 'generally conform' with these requirements.*" They say "*customers are not engaged at this stage and there is a lack of transparency*", concluding: "***there are insufficient safeguards currently in place to protect customer interests at the planning stage*.**

We therefore consider that mechanisms should be introduced which ensure greater consideration is given to the prices that will be charged to the customers of a heat network at the planning consent stage" (our emphasis).

In the Plan, for areas outside Heat Network Priority Areas, there is a recognition that choices made should "avoid high energy bills for occupants" (9.3.3). Inside HNPAs there is no such provision at all.

Not only should there be clear guidance in relation to planning priorities and permission, but the London Plan should incorporate

a) consideration of appropriate ways of funding the chosen technology, and

b) active protection for new *and existing* heat network users.

[1] See "Not Fit for Purpose" on our website

In relation to funding, a small pool of users is expected to finance an infrastructure revolution, by paying back capital expenditure, at a rate much higher than mortgage rates or government borrowing costs, and within a short time frame.

Leaseholders are among those hardest hit, not only by high standing charges but by huge capital sums required when a network requires repair, replacement, or (subject to legal battles) improvement. Many cannot find the tens of thousands of pounds demanded without warning, and to be paid over a short period of time. The commercial-rate terms are shocking, and the ”investment” nonsensical, especially for pensioners who will not live to benefit from any promised pay-back in heating costs.

This is not necessary. There is a plethora of alternative proposals for funding heat networks including municipal or community funding. After all, in Denmark local authorities and communities own 56 percent of all generation assets and, for distribution assets, 91 percent. Failing that, the different parts of the system, with different costs and life-time could be separated, as with a PipeCo. Internal pipes could be the responsibility of developers or freeholders and could be paid for, transparently, as part of the price of each home, ie financed at *mortgage* rates. A Community Interest Company could take over running a network once it’s built, instead of an ESCo. Supply and maintenance of HIUs, and metering - major costs - could be provided by a non-profit body or at least removed from the monopoly.

In relation to active protection, the GLA could play a vital role.

While many people are happy with their heat networks, all the recent surveys bear out the experience often reported to us: astronomically high bills, frequent outages, days, weeks or months without heat or hot water, and no means of redress, as in the six London estates cited in our London Plan response. Prices vary wildly. Some people keep their heating off because they cannot afford it; some buy space heaters, and pay high electricity bills but also DH standing charges as they cannot escape the monopoly.

Without customer protection, not only are Londoners at risk of going cold, or hungry, but heat networks can become unviable, as their reputation sinks and “demand risk” rises, further inflating the price of heat.

The GLA Communal Heating Customer Survey, Oct 2018 concluded that regulation would be of benefit. This is true, but customer protection certainly cannot be left to government regulation, both because nothing can (especially now) and because heat is communal, unlike gas or electricity. This is one reason why the Heat Trust and Ombudsman - similar to Ofgem’s regulatory regime - have failed to uphold standards. Problems generally affect a whole area. The solution is not so much individual remedies as

a) for TRAs to be resourced and empowered to act for residents as a whole.

b) for the GLA itself to take responsibility for what it promotes.

In the UK, heat networks often resemble PFI projects, with customers -- and sometimes local authorities too -- locked for decades into a deal where a private corporation holds all the cards, and no amount of incompetence, overcharging or unaccountability is enough to set the customer free.

In the Mayor's "more direct role" we therefore suggest measures like the following:

- Where it cannot be satisfactorily achieved locally, the GLA **take on inspection and monitoring** of heat networks, not only in line with the commitment to monitor carbon emissions but for cost, reliability, and customer service.
- **The GLA should establish a website showing all DH networks in London** including data on tariffs and standing charges

- Developers and contractors should **not be awarded funding, planning permission or contracts** if they have failed to deliver in heat networks for which they are already responsible. Outstanding problems must be resolved first, for the benefit of both existing and future residents.

- If all else fails, the GLA should provide a **back-up guarantee** that outstanding problems from the current wild-west period of DH development will be dealt with, and they will not be left to pay the price of mistakes (or profiteering) for which they are not responsible. Experience has shown that bringing in engineers who know what they are doing, combined with smart technology and a will to improve, can lead to heat costs in such schemes being halved. If, as claimed, only a minority of DH schemes are problematic, then this will not be too great a burden. A report by CBx recommends "financial support for energy audits of underperforming networks, to identify cost effective modifications".
- **Licensing** has been considered by the Scottish government, Ofgem and the CMA. Licensing been effective in enforcing *housing* standards in some boroughs. This could be one way to ensure that firms seeking heat network contracts take effective action to rescue any human guinea pigs who may be locked in their previous failed schemes.

We have also elsewhere suggested other ways in which the GLA could make a difference:

- **Explore co-operation with and between local authorities**, facilitating and encouraging exchange of experience and expertise between boroughs, and ensuring that those boroughs whose residents have been unprotected bring their practice up to the standard of boroughs with engaged and consumer-focused District Heating advocates.
- **Give residents access to a fully funded and responsive body that will address their complaints,** and either fix the problem (permanently) or ensure that those responsible for it do so.
- Set up a unit as **supplier of last resort** to take over badly functioning schemes if an ESCo is not performing in the interests of its customers.

It was, after all, on the basis of GLA requirements that many of these schemes came into being in the first place. The effect on people's lives is unacceptable, and will make it much harder for Londoners to welcome a roll out of DH on a large scale across the city.

M67.d): the heating hierarchy in HNPAs

As noted above, there appears to be a dilemma in finding heat sources for networks. Present technology gas CHP is ruled out for air quality reasons, while no comparable alternative has yet emerged. Clearly it is right to keep options open, and consider different possibilities for different sites. In the circumstances, we wonder what is the advantage of trying to prescribe a hierarchy at all.

We are confused by 9.3.2.A and SI3 D.1.e) saying that CHP "will continue to be considered on a case by case basis", and used "only when there is a case" for it. That condition is unacceptably vague, and raises a doubt: is the intention really to continue using gas CHP after all, even with the present technology, and even though its carbon benefits have declined?

M67.g): Do the policies place sufficient emphasis on renewables and energy efficiency?

No, as outlined above re M.67c).

The energy hierarchy states that "The priority is to minimise energy demand, and then address how energy will be supplied and renewable technologies incorporated." This principle appears to be abandoned in the prescription to install a heat network. Especially but not only when sourced by CHP, heat networks are most appropriate where energy demand is high. Heat pumps work best when demand is low. Heat networks may remain the best solution but there should be an explicit requirement to consider energy efficiency and heating systems in relation to each other.

The use of renewable and waste energy in conjunction with heat networks has huge potential, and is successful in other countries. However, care is needed. The Redbrick estate, Islington is connected to the flagship Bunhill network, famous for its exciting use of heat from the Underground. Yet Rebrick leaseholders, many of them ex-council tenants, must still pay for conventional CHP boilers to meet peak demand.

Energy Efficiency is emphasised in the Zero Carbon London Plan, which spells out the urgency for the climate of acting on it *now*. Yet this imperative does not seem to be integrated with the considerations in SI3. There is nothing about block by block retrofit programmes, and nothing about the inadequacy and inaccuracy of EPC ratings. Nor does the Plan do anything to **empower residents to win insulation on their estates** - which may be old, or may be new builds where, under current self-certifying construction practices, insulation has simply been omitted by unaccountable developers. At Pembroke Park, Hillingdon, thermal imaging proves that homes are in fact, as the HA admits, "heating the street". The Residents Association has been fighting for 8 years and has only managed to get one flat insulated, where a child was at risk of dying and a legal order was obtained. When FPA sought help from the RE:NEW scheme, A2Dominion refused to co-operate and two years later residents are still cold.

SI4 cooling,

M67.e)

A crucial item, now moved down, says development proposals should "minimise internal heat generation through energy efficient design". Like energy efficiency this consideration should be integrated with the choice of, and plans for, heat networks, and the issues should be spelled out. Overheating in heat networks can be severe, making flats, or certain rooms (eg a bedroom), unuseable in summer. Residents are also frustrated about waste of heat and say "this cannot be efficient". This risk should be considered in the context of the kind of building, and surrounding built environment. The problem is not just a matter of the placing and insulation of pipework but of the

fact that to produce hot water, the system must stay on on all summer. Reducing the temperature will help but 70 degrees is still quite high.

29 January 2019