

Greater London Authority Response to Ofgem *Call for Input: Future of local energy institutions and governance*

June 2022

This consultation has been submitted by the GLA's Infrastructure Coordination Service and Environment Team.

The Greater London Authority (GLA) welcomes Ofgem's call for input on the future of local energy institutions and governance. The transition to net zero and rapid changes anticipated for the UK's energy system means that new thinking is required to ensure energy systems respond to local priorities and are optimised to facilitate growth, decarbonisation and the best interests of energy consumers and wider stakeholders.

The GLA believes that such thinking requires taking a holistic approach to planning across electricity and gas networks, transport, and the built environment, so that the supply, transport, and use of energy are considered holistically. The complexity of doing this and the likely local variation (e.g., densely populated, and mixed-use areas of cities like London are far more likely to benefit from heat networks) means that comprehensive, bottom-up local planning is likely to be necessary. This element of local planning is new to the energy system and will need the energy system to evolve to take account of local government institutions and boundaries (e.g., the GLA's area is mainly covered by UKPN for electricity distribution but also by SSEN, and in the case of gas, two gas distribution network operators - Cadent and SGN).

The GLA, and London's boroughs are keen to engage with shaping the transition to more local energy planning and to play their part in this future. However, the technical nature of current energy network planning is a barrier to effective engagement, and we look to Ofgem to support and enable greater levels of engagement (e.g., we welcome UKPN's proposals to support local energy planning through its local authority support service and hope this proposal will be supported through the RIIO-ED2 Business Planning process).

This *Call for Input* represents a good starting point for continued dialogue and refinement of a preferred approach. As a key principle, any future framework must account for local circumstances, and we stress the need for flexibility in approach, linked to institutional and governance capacity of particular regions, capabilities to participate, and local priorities.

In the case of London, the majority of change taking place in energy systems is happening locally, framed by the Mayor of London's 2030 net zero target at the strategic level, as well as unique characteristics of London's energy system. Distributed energy and digital technologies are unlocking new opportunities for citizens and market participants, in areas such as local generation and flexibility services, and efforts are underway by the GLA and London boroughs to facilitate more active interventions to plan local energy systems and coordinate activities, establish trials of new technologies, and collect evidence.

Enabling regions such as London to move faster to net zero, through unlocking the right arrangements has potential to bring benefits at the national level, lowering costs for GB

consumers and mitigate the effects of regions that progress more slowly with decarbonisation. In this regard, we argue that there needs to be acknowledgement of the role that regional / devolved authorities like the GLA can play, in terms of an elevated role under any future framework.

The GLA would welcome the opportunity to work with Ofgem to contribute to the design of a framework that works for the London context, delivering on the Mayor of London's priorities and the needs of Londoners. It is essential we (GLA and Ofgem) work collaboratively with stakeholders such as London's DNOs and other major actors to map out London's role, recognising London's unique value proposition. To give a sense of the scale of opportunity, research undertaken by Imperial College and the Carbon Trust found that investing in additional flexibility within Greater London delivers £500M savings to London directly in reduced distribution costs per annum, and over £900M additional wider system savings per annum nationally¹. This include providing flexibility to the national system (from a range of sources, including large scale heat networks, battery storage and potentially vehicle to grid); and through demand side measures achieved in part through Mayoral policy levers such as the London Plan. Through ongoing dialogue, we hope to clarify which roles the GLA, and London boroughs are best placed to support alongside other system stakeholders and identify resources and additional powers that may be required to realise the vision.

Energy System Planning

We agree much of the future transition will occur on the distribution network, and that efficient (fastest and lower cost) decarbonisation across London's buildings can only be delivered with hyper local planning know how, established stakeholder relationships at local levels; in conjunction with the necessary technical input from others – e.g., DNO, DSOs, DSO+ and GDNs, and other major actors such as Transport for London and London's boroughs.

The Mayor of London has identified a preferred "accelerated green" pathway to reach net zero by 2030². This pathway provides an overarching strategic vision for London's future energy system in terms of technology mix and scale of decarbonisation ambition; however, plans need to be established at local scales to spatialise the pathway and identify programmes of investment and arrangements for flexibility markets and energy system operation.

The Mayor's objectives are referenced in the ED2 plans of London's distribution network operators; however, we are concerned that these plans do not fully respond to the scale of future challenge, and there are different planning horizons at the transmission and distribution network level. More work needs to be done to better coordinate different levels of decarbonisation ambition and have this ambition reflected in investment planning. This, for example, is evident in West London currently, where capacity constraints at the transmission level are impacting localised capacity, compromising growth and

¹ <https://publications.carbontrust.com/flex-gb/analysis/>

² <https://www.london.gov.uk/what-we-do/environment/climate-change/zero-carbon-london/pathways-net-zero-carbon-2030>

decarbonisation initiatives³. In order for the UK to meet its 2050 targets, London should be enabled to deliver an accelerated target, in order to pave the way for other regions to follow.

The GLA is taking a lead role facilitating local area energy planning across London, working with stakeholders, and is funding pilots at neighbourhood, borough, and subregional scales in places such as Isle of Dogs, LB Enfield, and West London (see map Annex A of active LAEP projects). Emerging evidence from these pilots suggests that such plans need to be facilitated by actors able to coordinate multiple parties involved (DNO, GDN, heat network operators etc), rather than be led by a specific party who may have vested interests. Currently, there is a lack of clarity on who this actor should be. Over the past year, the GLA has had a leading role developing initial Local Area Energy Plans using the Mayor's convening power and technical expertise at the GLA in order to kickstart this work. We would welcome a more formal mandate to coordinate such plans in order to build on the momentum already generated.

Given the complexity of London, comprising 32 boroughs plus the City of London, a future risk will be 33 different local area energy plans being developed that do not talk to each other, or add up to a strategic whole; compromising effective network planning, which extends across multiple borough boundaries given its system-level scale. The GLA is working to facilitate a strategic approach through a subregional trial in West London which brings in two DNOs and a GDN across nine different boroughs. This approach could serve as a useful model to ensure plans work off common data points and modelling assumptions, are quality assured, and integrated so as to facilitate confidence and certainty for investment.

Working with Energy Systems Catapult, the GLA intends to prepare a recommendations paper by the end of 2022 that sets out a preferred approach for taking local area energy planning forward across London over coming years, including funding and resourcing required to fully deliver such planning at scale. Going forward, the GLA and London boroughs are going to require more resourcing and funding to effectively develop and implement local area energy planning across London and realise an accelerated decarbonisation pathway. We would welcome the opportunity to work with Ofgem on this paper and its recommendations and share insights learnt throughout the process.

We note that this consultation focuses just on energy, when in practice local net zero planning considerations must span across multiple related vectors of the energy system. Including buildings (energy efficiency) and transport planning. Nationally these considerations are still siloed (for example Ofgem doesn't regulate transport or building standards) and we urgently need institutional frameworks to bring these elements together from a regulatory perspective, and on the ground through building standards and transport/land use planning frameworks. This must be reflected in whichever framework Ofgem takes. Realising net zero will require key power, heat, and EV rollout milestones to be closely aligned. Doing so requires a much more co-ordinated view at local level (in addition to sufficient powers and resources to unlock it).

³ <https://www.economist.com/britain/2022/06/02/britains-overstretched-electricity-grid-is-delaying-housing-projects>

Flexibility and system operation

We welcome the acknowledged need for fundamental system reform, including greater co-ordination of local and national flexibility markets. We agree that the current lack of co-ordination, along with relatively immature markets hinders users from participating across multiple markets and stacking value. Similarly, it's essential that these markets ensure this flexibility value flows down to consumers (particularly relevant given today's cost of living crisis).

Today's market conditions make it hugely challenging to build a flexibility business case, at a time when it needs to be built alongside the wider building retrofit, heat, and transport decarbonisation activities (taking place now). In order to meet the Mayor's 2030 target (and national commitment to decarbonise the power sector by 2035), the right market signals are urgently needed to ensure the capacity for flexibility is on the system in good time, and this should be coupled with the planning process, and identification of stakeholder roles – e.g. local authorities acting as aggregators of flexibility across a borough area.

West London could provide a useful template for a more ambitious, coordinated regional approach to flexibility, given its immediate capacity constraints over the foreseeable future. While the GLA does not have a formal role in this space currently, there is strong potential for it to be an effective facilitator toward a flexibility led solution, in partnership with boroughs, major energy consumers and generators, and other regional stakeholders including SSEN, UKPN and National Grid.

While we anticipate the bulk of the 'operation' of the system to be undertaken by network actors, supported by new digital business models and services, there is still likely a supporting role for the local and regional authorities to play. This could be in supporting consumer engagement (ensuring they're comfortable with demand side response for example), ensuring adequate arrangements are in place to support vulnerable consumers, or by helping enforce the right technology standards (including smart meters). These are inherently 'local' activities, and it's difficult to envisage how they could be addressed effectively at a national level.

Our research has also shown that certain forms of flexibility best accessed/rolled out through a trusted intermediary, such as a housing association or borough. This was illustrated through the Mayor's Home Response smart energy demonstrator project. Here, the role of a trusted local intermediary (Repowering London) was important in securing positive engagement from housing associations and their tenants.

A broader consultation observation is the limited discussion given to how the future demand side role could evolve. Further analysis and dialogue are needed here, particularly in relation to the huge potential of domestic flexibility. It's widely accepted that millions of EVs and heat pumps will be rolled out across the next decade, and its therefore essential measures are incorporated to ensure the system takes advantage of the flexibility they offer This is increasingly easily accessible – as demonstrated by the London Home Response trial⁴ and

⁴ <https://www.london.gov.uk/publications/home-response-overview>

Mayoral programmes like FlexLondon. The proliferation of digital and automation technologies has the potential to dramatically alter the role that smart flexible technologies can play in managing the system (and the nature of the system operator's role itself). Any decisions Ofgem makes must be sufficiently flexible to evolve with these wider developments.

Additional comments

We note this consultation is being undertaken in the context of a significant number of other reforms and projects underway which will also impact local energy system governance. These include the Review of Electricity Market Arrangements, establishing a Future System Operator, heat network zoning, Local Area Energy Planning guidance and planning system reforms as part of the Levelling Up and Regeneration Bill. We think there is a need for Ofgem to develop, with stakeholders such as GLA, other Local Authorities and interested parties, a strategic view of how these different reviews relate and impact on one another. We view the complexity of this area, and the difficulty for local and regional stakeholders to engage in the detail as a key risk and would welcome suggestions from Ofgem on how to change this.

The GLA is well positioned to utilise its convening powers to engage with relevant non-energy industry stakeholders and share insights from this engagement with Ofgem over coming months. Evidence resulting from stakeholder interviews being undertaken for the GLA's Local Area Energy Planning recommendations paper provides an initial opportunity to contribute to this wider review.

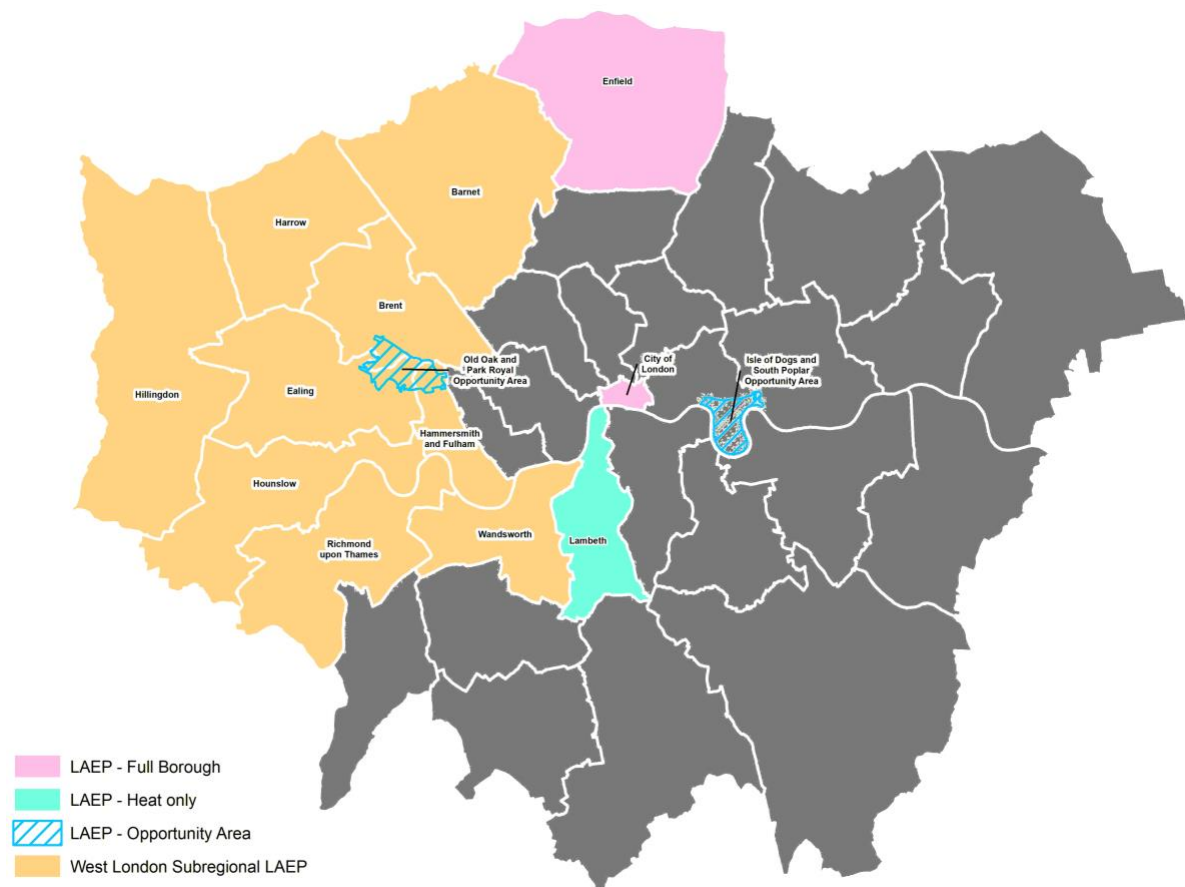
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Annex 1: Distribution of current Local Area Energy Planning activities in London



Scale	Description	Timeline for completion	Partners
Opportunity Area	Isle of Dogs & South Poplar* Old Oak / Park Royal*	July 2022 Feb 2023	GLA, boroughs, UKPN and Cadent
Borough	Lambeth (heat only) Enfield* City of London	Complete Sept 2022 TBC	GLA, boroughs, UKPN and Cadent
Subregional	West London Subregional LAEP*	Feb 2023	GLA, boroughs, SSEN,UKPN and Cadent

LAEPs marked with * are sponsored by the GLA.