

Hosted by London Councils  
59½ Southwark Street  
SE1 0AL



**LBEG Winter Meeting  
Tuesday 28<sup>th</sup> January 2020**

**Responding to the Climate Emergency  
Minutes**

Kindly sponsored by



**Attendees**

Leeann Kenny	Barking & Dagenham
Neil Luscombe	Brent
Zak Ajia	Bromley
Ritu Kumar	Ealing
Andrew Whelan	Enfield
Anthony Meanwell	EON
Peter Schofield	GEP Environmental
Glyn Mountford	GEP Environmental
Maria Yashchanka	Greenwich
Shaun Spencer	Hackney
Risa Wilkinson	Haringey
Saeed Atlas	Harrow (Chair)
Rodrigo Perez Matabuena	Islington
Gonzalo Jimenez	Kensington & Chelsea
Andy Morgan	Kent County Council (LASER)
Yulia Treskova	Lewisham
Kate Hand	London Councils
Jacob Adekunle	Redbridge
Rachael Mills	SE <sup>2</sup> (Secretariat)
John Mitchinson	Southern Housing Group
Ian Watts	Sutton
Ollie Catchpole	Surrey County Council
David Esdaile	Tower Hamlets
Beata King	Transport for London
Quinten Babcock	Transport for London
Anis Robinson	

## Apologies

Maria Yashchanka	Greenwich
Kal Saini	Hammersmith & Fulham
Graeme Low	Islington
Ian Almeida	Richmond & Wandsworth
Martin Keane	Royal Hospital for Neuro-Disability
Chris Little	Westminster

All the presentations from the meeting are available to download at:  
<https://www.lbeg.org.uk/meetings/our-last-meeting-28th-january-2020/>

### 1. Welcome, Introductions and Opening Remarks

Saeed Atlas, LBEG Chair

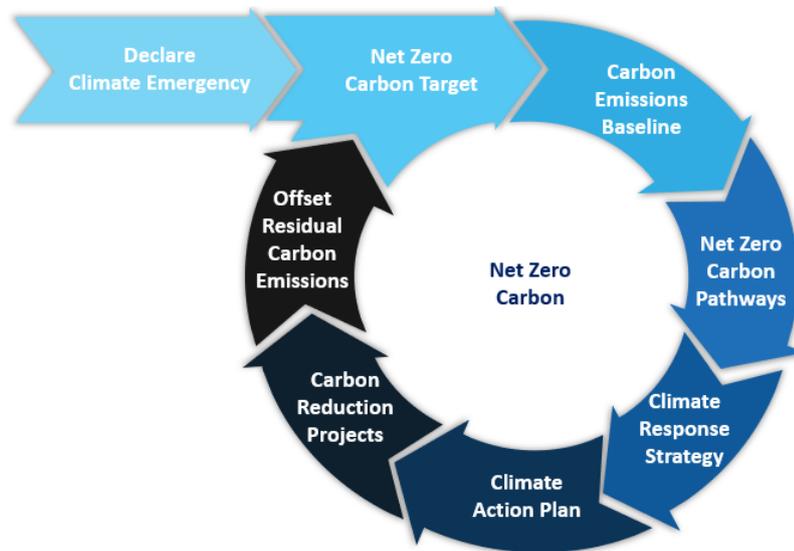
- 2019 was a busy year. 75% of LAs have declared a Climate Emergency: we have had to work hard to get senior buy-in and to commit more resources. This is now on top of our day-to-day job, so we'll be even busier than before. The LBEG Committee have agreed to focus on the climate emergency for coming meetings.
- There's confusion about what zero carbon / net carbon / carbon neutral / carbon offsetting means for your targets. It would be useful to have clarity on this to help senior management and Council leadership.
- The Future Homes Standard consultation closes on 7<sup>th</sup> February. LAs have concerns regarding removing the ability to charge a carbon offset fund. **Graeme Low has drafted a consultation response on behalf of LBEG: please submit your comments.** We also need the GLA to take a tougher position. **RM to circulate headlines from GLA response.**
- We're delighted that so many different London Boroughs are here today. We're also very pleased to be joined by London Councils and are keen to work together. Many thanks to the London Councils for hosting today's meeting.

### 2. Net Zero Carbon Pathways

Peter Schofield and Glyn Mountford, GEP Environmental

- When we talk about 'net zero carbon' we mean reducing emissions as close to zero as possible and then offset residual emissions.
- The UK has taken an international lead to set a net zero carbon emissions target by 2050 (Scotland net zero by 2045, Wales 95% net zero by 2050). The Committee on Climate Change thinks net zero can be achieved at no extra cost to the previous 80% target.
- The transition to net zero carbon will require a concerted effort and action by all: we need to accelerate the rate of change. There will still be some emissions by 2050: this is what will have to be offset – eg sequestration through afforestation and CCUS. Think about setting your own shorter-term carbon budgets to help plan your trajectory.
- The Tyndall Carbon Budget Tool shows a pathway for London Authorities. Carbon emissions need to half even within the first carbon budget - a real challenge! We need to stay within 203.5MtCO<sub>2</sub> for the period 20020 to 2100, equal to an emissions reduction on average by a minimum of 12.5%. Normally we would use up this carbon allowance within 7 years!
- LAs are responding by declaring a Climate Emergency, recognising that climate change presents a risk and acknowledging that measures so far are not enough. It's a signal of intent that Council and community need to act. Common features include:
  - Setting a net zero carbon target & deadline (usually Council by 2030 and Borough by 2050)
  - Development of a Climate Response Strategy and/or Climate Action Plan

- Express a willingness to collaborate with local people, organisations and businesses
- Call to Government to provide support and take action
- GEP take an iterative approach to net zero carbon



You don't have to approach things in this order and you can do more than one thing at once: action is key. We encourage a pro-active approach, based on annual performance monitoring and requiring engagement across the council.

- The key challenges to achieving net zero carbon are:
  - Calculating the carbon emissions baseline and pathways: setting the scope, accessing data, ensuring accuracy
  - Strategy and action plan: short time frame, optimum mobilisation of resources, ensuring projects will achieve net zero carbon
  - Carbon reduction projects: quick wins already achieved, need projects that deliver best carbon cost-effectiveness
- GEP can support you through climate change and carbon consultancy, and energy saving in buildings and transport. This can be called off the LEP Additional Services Framework until March 2020.
- Case study: decarbonisation of heat in buildings - St Andrews University District Heating Network
  - Different situation to London Boroughs (eg 6.5MW biomass boiler) but some of the solutions have relevance.
  - GEP called in to optimise further carbon savings and maximise the use of the biomass heat network: technical feasibility, business case development and funding application support.
  - Challenges: restraints on heat flow capacity, local boilers still in circuit acting as heat loss, early morning peaks met by gas boilers (smoothing demand profile), potential to connect to other low carbon heat sources, opportunity for improved controls and fabric.
  - Solutions include: relocated some of the boiler capacity to the energy centre (85% saving potential – 900tCO<sub>2</sub>), improved utilisation of the biomass boiler (increased thermal storage capacity – saving potential 500tCO<sub>2</sub>), substantial savings in gas boiler maintenance, heat pumps (sea water, ground), control improvements. Everything met 8-year payback requirements.

Q1: What level of CO<sub>2</sub> is deemed as a success to maintain global temps to below 1.5 degree sea rise?

A1: Don't know, but happy to find out!

Q2: Are there many examples of sea water heat pumps up and running? We do have Thames access.

A2: Not really but the university is quite innovative so prepared to take a risk. Location is perfect for them and the building already had filtered sea water intake. There are some other examples in Scotland: we're hoping this project will be an exemplar. Funding is a challenge as low carbon technologies can have a low return on investment, so you have to bundle projects together.

Q3: How do you cope with biomass pellets?

A3: We weren't involved in that project, so not that au fait with how it's performing, but we can find out.

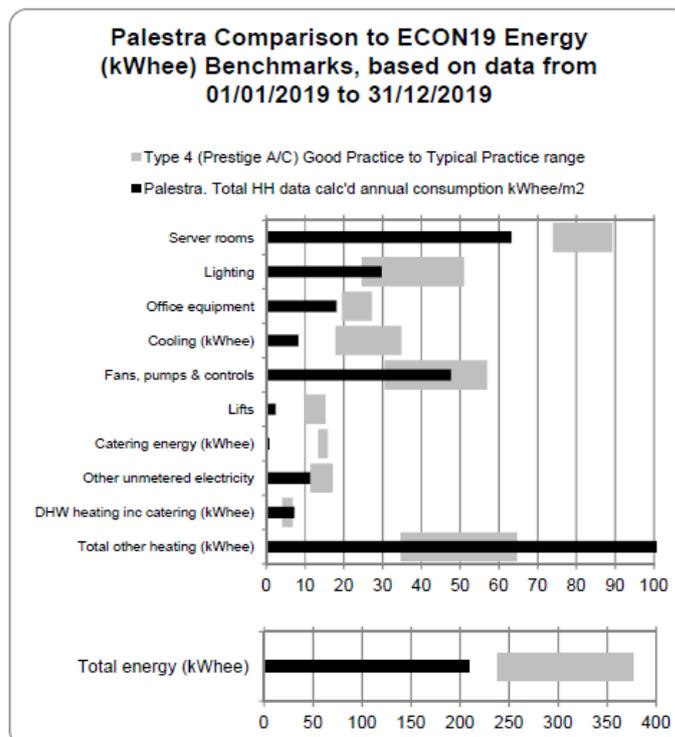
Q4: Are there alternatives to biomass for heat networks? There's not enough time to get this up and working within our zero carbon targets timescales.

A4: There's lots of talk about heat pumps, though again not without problems. We also need to be looking at electric heating and hydrogen.

### 3. Member Case Study: TfL, EON and Palestra

Quentin Babcock, TfL

- The brief for the 2008 Palestra fitout included reduce running costs, minimise energy and water usage, improve BREEAM rating to Excellent, maximise tri-generation and maximise recycling, all to payback within TfL's lease period. Lots of technology was installed BUT it didn't work: the DEC was G182 (82% higher than a standard building). We were generating and exporting too much power without getting paid for it.
- In 2013, TfL commissioned Verco to investigate. They recommended the system (fuel cell, CHP, etc) be turned off while an energy performance contract via REFIT was procured. This got us to an F quite quickly and we're now at D93. However, UKGBC says that all office buildings need to be at B40 to hit the 2050 targets (all office buildings), which is a significant challenge. The improvements save us £500k/year (for a £1.5m investment)
- We've been working with EON to improve the hot water pipework and gas CHP. Commissioning was key to make sure it works when it needs to.
- How low can we go?



- Surely, we should just be switching stuff off? We've found that the base load doesn't go down enough when unoccupied, costing us £100k/year. It will cost £1m to replace all lighting with LEDs but we're already maxed out on Salix funding. We've got a similar baseload story in our new building in Stratford which is all LED: we're wasting £37k, which is better but not brilliant. We're now looking at how to get staff to change their behaviour and have launched a 'Destination Green' campaign: we've got the data but how do we get people to engage?
- We need designers and occupiers to think holistically. [Design for Performance](#) (DfP) is a Better Buildings Partnerships project, based on the Australian NABERS initiative. It's an iterative process where the design simulations are used to set the initial control strategy which is then fine-tuned and compared back to the simulations to optimise the control strategy during commissioning. Design performance is contractually linked into operations. We also need a 'Managing for Performance' scheme, linking to FM contracts in existing buildings.

Q1: How old is the building?

A1: 2005 – which is depressing! It's all swanky glass but the performance is poor.

Q2: Is BREAAAM for in-use or design?

A2: Both – but DECAs are more useful and easier to make comparisons. Last night LETI launched an [Embodied Carbon Primer](#) which you may find useful: we want to influence the GLA. We want to derisk from TfL perspective and so used REFIT funding to get guaranteed savings. If EON didn't deliver the contracted performance, they'd have to make payments back to TfL.

Q3: How did you fund REFIT?

A3: It was funded by London Underground, as part of a 9 building programme. We did 22 office buildings in 2011 but are still under from the Mayor to do 100 buildings. We entered into another contract in 2017 with Engie to do roof mounted solar (it's important however that the buildings work properly first)

Q4: What about the wind turbines?

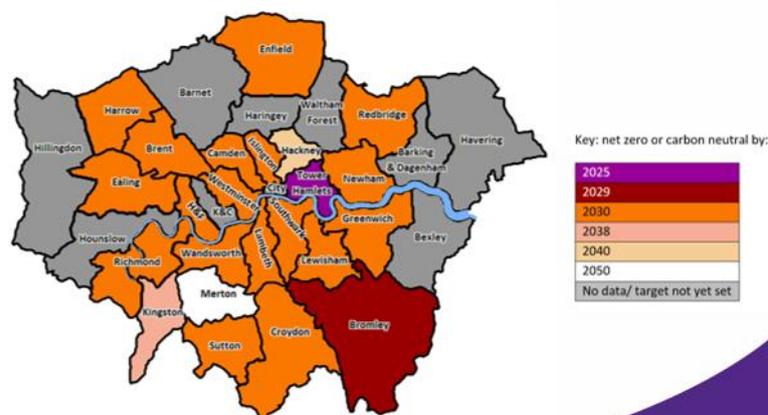
A4: 14 were originally installed by the LDA and 2 are still up there. Urban wind doesn't work.

#### 4. London Borough Response to the Climate Emergency: an overview

Kate Hand, London Councils

4.1 In December 2019, TEC & LEDNet published a [Joint Statement on Climate Change](#). London Council's Leaders' Committee have also confirmed keen interest in climate change.

4.2 26 (nearly 27!) London Boroughs have declared a climate emergency: it's remarkable what a difference those commitments make. Most declarations are for net zero carbon 2030, although Tower Hamlets way out ahead with 2025!



#### 4.3 London Councils are taking action by:

- **Borough support: guidance, data, procurement and capability.** We want to make sure we're adding value and not just telling you what you already know. We're facilitating work with the GLA to make sure everyone is well supported. A massive PR initiative is coming down the line as we need all citizens to take action to hit our targets. We're also moving towards a position on everyone using the same data set. And we're helping leaders understand what questions they should be asking and how they can govern it really well.
- **Cross-borough action: structures and coordination; joint ambitions.** The Joint Statement laid out 6 ambitions:
  - **Retrofit London:** Retrofit all domestic and non-domestic buildings to an average level of EPC B. This is a massive challenge: Boroughs need to work together to achieve this
  - **Low-carbon development:** Secure low carbon buildings and infrastructure via borough planning.
  - **Halve petrol and diesel road journeys:** Halve road journeys made by petrol and diesel via combined measures that can restrict polluting journeys and incentivise sustainable and active travel options. This is in line with Mayor's transport targets for 80% of journeys to be by public transport, cycling, walking, etc
  - **Renewable power for London:** Secure 100% renewable energy for London's public sector now and in the future.
  - **Reduce consumption emissions:** Reduce consumption emissions by two thirds, focusing on food, clothing, electronics and aviation. This is the biggest part and the most difficult as we don't have direct control: we will need residents to take action.
  - **Build the green economy:** Develop London's low carbon sector and green our broader economy.
- **National advocacy: coalition working with local government and green groups.** We need the leadership, powers and funding. Forthcoming opportunities include London Climate Action Week (July) and COP26 (November): the world will be looking at the UK and we need to show ambition and delivery.

#### 4.4 Next steps – we'd welcome your input and thoughts:

- How can we engage LBEG and colleagues on the joint programmes, in particular #4?
- How can we best engage and support around aligning borough action plans?
- What role do you think the GLA should be playing, particularly in regard to commercial and industrial energy efficiency?
- What do you want to see the government doing?

Q1: How comfortable / nervous are you that our climate change objectives will be met by 2030? Will there be enough people/money resources?

A1: If things continue to change as fast as they have in the last year, then yes. But it's up to us. Leaders and CEOs are talking about this seriously for the first time: it feels different to before – commitments have been publicly made. It won't be an easy road, but there is the political will to make it happen.

Comment: Closer alignment across the Boroughs will help. We all have similar challenges in our buildings, transport, communities. Collaboration will also help to keep the costs down.

Comment: Before we declared a Climate Emergency, it was very difficult to get senior engagement. But since then, even the Council Leader has called me! Tough targets have made senior leaders take notice and I'm now having many meetings with Chief Executive and senior leadership team: portfolio holders are taking responsibility. I'm presenting our action plan to Cabinet next month to bid for further resources. We need to think positively while also recognising it's going to be difficult on a day-to-day basis. Leaders are taking informed decisions, knowing the amount of resource required: I've been upfront with them from the beginning.

- Comment: It would be interesting to think about what our carbon budget would be as a group of London Boroughs. We also need to think collectively about how much we need to invest in renewable technologies as we probably can't do it alone: could London Councils take a lead here to help with the holistic thinking?
- Comment: We can't have all the answers now. We need to do as much as we can now, demonstrate that it's working and, I believe, more resources will come.
- Comment: How can we better link officers' groups with LEDNet? There are lots of group covering the LEDNet topics, but we do need to do it better
- Comment: We would like to have London Councils and GLA representatives at our meetings. We can feedback to you projects we're working on.
- Comment: Even Sadiq Kahn is hoping for more resources from the Government. It's very difficult to get residents to act. The Government needs to show leadership, support the supply chain and persuade citizens to change.

## 5. AOB

- 5.1 Who is using their carbon offset fund? Tower Hamlets, Kensington & Chelsea, Islington, Brent – **please let us know for our Future Homes Standard response. Let us know your ideas and also send in your own response.**
- 5.2 What's the correct terminology and definitions of carbon neutral etc? GEP Environmental suggest:
- **Net Zero Carbon** – reduce emissions as close to zero as possible and then offset residual emissions
  - **Carbon Neutral** – offsetting carbon emissions (just offsetting, not focussed on carbon reduction)
  - **Carbon Zero** – zero carbon emissions (no need to offset any emissions)
  - **Carbon Positive** – organisations export renewable energy / use carbon removal technology greater than its organisational emissions.
- We all have to decarbonise as much as we possibly can. There's a very short window to get plans in place.
- 5.3 Purchasing green electricity can help us demonstrate we've met our target on the electricity, but the premium for green electricity is rising and could cost us £350k/year. This investment doesn't help me to cut my CO<sub>2</sub> emissions: no new green capacity has been created. Could PPAs be a topic for our next meeting?
- 5.4 Could this group help with climate action planning, with proper pathway and action plans? It could help to normalise it a bit.
- 5.5 We also had an LBEG group photo taken during this meeting. The result is available at <https://www.lbeg.org.uk/who-we-are/>
- 5.6 We also asked members attending the meeting to complete a survey about future meeting topics: see the next page for results.

## LBEG Members' Survey on Meeting Topics

Completed by attendees of the LBEG meeting on 28.1.20

	Topic	How/who?	Responses (10 = high priority, 1 = low priority)													Totals	Average
			A	B	C	D	E	F	G	H	I	J	K	L			
1	Climate emergency (LBs shared actions, approaches and strategies)	Members' round table	10	10	10	4	5	10	5	8	10	10	10	8	10	110	8.5
2	Exchange of ideas, innovative projects and sharing successes on carbon reduction journey between members (quick wins)	Members' round table / presentation	10	8	8	7	6	9	6	9	10	8	8	7	10	106	8.2
3	New technologies and best practice for greenhouse gas emission reduction	External speakers	10	8	8	9	7		8	10	10	7	9	8	9	103	7.9
4	Renewable energy - funding sources and opportunities	External speakers	10	9	10	9	8	5	10	9	10	8	7	8	10	113	8.7
5	Information about the Government's recent energy and climate change legislation and policies	Representatives from BEIS, GLA, Defra, etc	10	8	6	10	1	8	10	7	10	7	9	8	10	104	8.0
6	Air quality monitoring and management for smart cities	External speakers	5	7	6	4	1		5	5	6	4	7	8	9	67	5.2
7	Energy raising awareness and behaviour change techniques	Members' round table - sharing innovative activities and techniques	10	7	9	8	9		5	7	8	7	8	6	10	94	7.2
8	Energy purchasing, performance and benchmarking	Utility companies	10	7	8	10	1	6	7	10	4	3	6	8	10	90	6.9
9	Monitoring and targeting	Energy bureau services	5	7	10	9	1		9	9	6	4	5	6	7	78	6.0
10	Metering (AMR)	Utility companies	5	6	4	8	10		8	9	4	3	5	6	4	72	5.5
11	Heat networks	Heat network companies and investment project funding services	5	9	7	7	1		9	7	4	5	10	6	2	72	5.5
12	London Power (Mayor of London's energy supply company)	GLA/internal group discussion	5	9	6	7	1	7	2	6	4	5	6	8	10	76	5.8
13	Energy cost recovery audit	Energy audit companies	5	5	6	6	2		6	7	4	6	7	6	9	69	5.3
14	Visiting energy centres and other innovating projects	Arranged by LBEG	10	9	8	7	4		10	7	6	7	8	6	10	92	7.1
15	Working more closely with the GLA's climate emergency section, London Councils and Carbon Trust	Organised by LBEG	10	9	9	5	3	7	5	8	10	8	8	8	10	100	7.7