## **Dr Paula Morgenstern comments**

Page: <u>Draft New London Plan</u>

Section: N/A

- 1. 'Operational Zero Carbon' by 2030 for all new buildings this moves beyond the current definition of a 'design prediction' using a 'percentage CO2 reduction', to deliver actual operational and measured zero carbon buildings.
- 2. An absolute kWh metric to allow the full range of stakeholders involved in the design, operation and delivery of our buildings to understand and therefore fully contribute to reducing energy consumption. ?
- 3. Adding a 'Be Seen' stage to the energy hierarchy we fully support the inclusion of energy monitoring, this is seen as fundamental to achieving operational zero emissions and thus should be elevated into policy SI 2A. ?
- 4. Energy strategies to demonstrate future-proofing to 'Operational Zero Carbon' on-site by 2030 we support clause 9.2.10i of the draft London Plan, but believe leaving it until 2050 will only encourage further lock-in to fossil fuel and urban combustion pollution. ?
- 5. Addressing whole life embodied carbon to be explicitly included in Policy SI 2 to drive innovation addressing what will become the largest building carbon emissions challenge once operational carbon is reduced. ?
- 6. A zero emissions by 2030 transition plan to be provided for all district heat/energy networks, alongside disclosing energy usage and efficiency data to ensure that networks are part of the solution to delivering operational zero emissions. ?
- 7. The heating hierarchy to be renamed and rearranged to emphasis the changing priorities of a trajectory to a zero carbon London.?
- 8. The importance of minimising energy demand peaks to be strengthened.
- 9. 'Mayor's Energy Advocates' to be available for boroughs to assist in ensuring sustainable design is embedded, as a parallel to the Mayor's Design Advocates. ?

Page:	Policy SI2 Minimising greenhouse gas emissions
Section:	<u>N/A</u>
Α	
All new buil	dings should be zero carbon emissions ?in operation by 2030.?This differs from the GLA definition of net zero carbon.
Proposed wording:	
A. Major development should have zero carbon emissions in operation by 2030. This means reducing carbon dioxide emissions from construction and operation, and minimising both annual and peak energy demand in accordance with the following energy hierarchy	
Move monitoring into the energy hierarchy and re-phrase to include the word "verify".	
Proposed wording:	
A. Major development in accordance with the following energy hierarchy:	
1) Be lean	
2) Be clean	
3) Be green	
4) Be seen: monitor, verify and report on energy performance in use.	
В	
Remove "will be expected to", to prevent?ambiguity.	

Proposed wording:

B. Major development should include a detailed energy strategy to demonstrate: how the zero-carbon target will be met within the framework of the energy hierarchy; and [text removed] to monitor and report on energy performance.

С

Remove "in meeting the zero carbon target". This over-represents the impact a 35% reduction beyond Building Regulations would have on achieving zero carbon.

Remove "aim to" and introduce "a minimum of" to provide a clear level of performance.

Proposed wording:

C. [text removed] A minimum on-site reduction of at least 35 per cent beyond Building Regulations is expected. Residential development should [text removed] achieve a minimum of 10 per cent, and non-residential development should [text removed] achieve a minimum of 15 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided:

- 1) through a cash in lieu...
- 2) off-site... "

Page: Policy SI2 Minimising greenhouse gas emissions

Section: N/A

Ε

Additionally the below should be added into SI 2	
E. Referable schemes should undertake a nationally recognised life cycle carbon assessment.	
Swap the word "demand" for "consumption".	
Include clarification on monitoring and reporting techniques in the SPG.	
Proposed wording:	
1. The move towards zero-carbon development requires comprehensive monitoring of energy consumption and carbon emissions to ensure that planning commitments are being delivered. Major developments are required to monitor and report on energy performance [text removed] to the Mayor for at least five years via an online portal to enable the GLA to identify good practice and report on the operational performance of new development in London.	
i)	
i) Alter wording to include a 2030 zero carbon requirement.	
Proposed wording:	
i. Proposals explaining how the site has been future-proofed to achieve zero-carbon on-site emissions in operation by 2030.	
g)	
g. Reword text to encourage variety and innovation in applications.	
LETI strongly feel the word 'response' should be replaced with the word 'management'	
Proposed wording:	

peak energy demand. h) h. Remove "proposals for" and ask design teams to "demonstrate". Swap the word "demand" for "consumption". Add the words "monthly and reported" for clarification. Proposed wording: h. Demonstrate how energy consumption and carbon emissions post-construction will be monitored monthly and reported annually (for at least five years). k) k. Strengthen wording to take into account the whole life-cycle of materials as well as the initial embodied carbon. Consider?bringing life?cycle carbon into policy though the addition of a clause in policy SI2. Proposed wording: k. Report on embodied carbon and provide proposals to minimise whole life cycle carbon. D Swap clauses a. and b. and re-phrase to include energy sharing and efficiency measures. Merge clauses c. and d.

g. To anticipate infrastructure capacity challenges for a growing London, submit proposals for energy demand management and reductions in

Merge clauses e. and f. and re-phrase.

Proposed wording:

- D. Major development proposals within Heat Network Priority Areas should have a communal heating system.
- 1) the heat source for the communal heating system should be selected in accordance with the following low carbon heating hierarchy:
  - 1. connect to an energy sharing network through the capturing and using of waste heat and/or use of available local secondary heat sources. ?
  - 2. connect to a local existing or planned heat network where it is demonstrated to be running efficiently, the cost of heat to occupants is comparable to national average heating fuel costs, and there is a zero emissions transition plan in place to ensure that the development achieves zero carbon emissions in operation (if it is not already fossil fuel free). ?
  - 3. generate clean heat and/or power from zero-emission sources (examples include: solar technologies, heat pumps and energy storage powered by renewables). ?

use low emission combined heat and power (CHP) (where suitable for size and demand of development)? or ultra-low NOx gas boilers (in areas where legal air quality limits are exceeded all development proposals must provide evidence to show that any emissions related to energy generation will be equivalent or lower than those of an ultra-low NOx gas boiler). If the development uses fossil fuels then a zero emissions transition plan must be in place to ensure that the development achieves zero carbon emissions in operation by 2030.?

Page: Policy SI3 Energy Infrastructure

Section: N/A

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