Nearer to Zero: Central London
8th July 2014
LONDON PLAN
ENERGY HIERARCHY

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Greater London Authority
A local planning authority in England may in their development plan documents, and a local planning authority in Wales may in their local development plan, include policies imposing reasonable requirements for—

- (a) a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development;

- (b) a proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development;

- (c) development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations...”

MAYOR OF LONDON
## LONDON PLAN TARGETS

### Residential buildings:

<table>
<thead>
<tr>
<th>Year</th>
<th>Improvement on 2010 Building Regulations</th>
<th>Updated target for Part L 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2013</td>
<td>25 per cent</td>
<td>-</td>
</tr>
<tr>
<td>2013 – 2016</td>
<td>40 per cent</td>
<td>35 per cent</td>
</tr>
<tr>
<td>2016 - 2031</td>
<td>Zero carbon</td>
<td>Zero carbon</td>
</tr>
</tbody>
</table>

### Non-domestic buildings:

<table>
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<tr>
<th>Year</th>
<th>Improvement on 2010 Building Regulations</th>
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<td>35 per cent</td>
</tr>
<tr>
<td>2016 - 2019</td>
<td>As per building regulations requirements</td>
<td>As per building regulations requirements</td>
</tr>
<tr>
<td>2019 - 2031</td>
<td>Zero carbon</td>
<td>Zero carbon</td>
</tr>
</tbody>
</table>

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Mayor of London
Ensure renewable technologies proposed complement the ‘Be Clean measures’ (e.g. are complementary to CHP)

Proposals should select energy systems according to the following hierarchy:

1. Connection to existing heating or cooling networks
2. Site wide CHP network
3. Communal heating and cooling

Look for developments to exceed Part L through energy efficiency measures alone

Cash in lieu payment for shortfall (must demonstrate that target can’t be achieved on-site)

Be Green
use renewable energy

Be Clean
supply energy efficiently

Be Lean
use less energy
## ACHIEVEMENTS 2010-2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
<tr>
<td><strong>London Plan Target (%)</strong></td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25*</td>
</tr>
<tr>
<td>Number of dwellings in development</td>
<td>28,181</td>
<td>32,051</td>
<td>55,879</td>
<td>43,178</td>
</tr>
<tr>
<td>Regulated CO₂ emission reductions compared to Part L 2010 (%)**</td>
<td>33</td>
<td>33</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Regulated CO₂ emission reductions compared to Part L 2010 (tonnes per annum)***</td>
<td>35,598</td>
<td>41,136</td>
<td>59,817</td>
<td>49,474</td>
</tr>
<tr>
<td>Dwellings connected to heat networks</td>
<td>27,000</td>
<td>31,000</td>
<td>53,000</td>
<td>41,097</td>
</tr>
<tr>
<td>Total shortfall in CO₂ emission reductions (tonnes per annum)</td>
<td>-</td>
<td>4,000</td>
<td>3,592</td>
<td>216</td>
</tr>
</tbody>
</table>

*Target increased to 40% from 1 October 2013, however the new target only applied to one development determined at Stage 2 in 2013

**Average across all developments (both dwellings and non-domestic aspects)

***Total reductions across all developments (dwellings and non-domestic)
BREAK-DOWN OF SAVINGS

CO₂ reductions secured through the London Plan compared to those required by Part L 2013 of the Building Regulations
VISION MAP

OPPORTUNITIES FOR DECENTRALISED ENERGY IN LONDON

MAYOR OF LONDON

MAYOR OF LONDON
EXAMPLE SCHEME

• Bunhill Heat Network, Islington
• 2MWc CHP, 115Ml thermal store, 2km heat network
• Recovered heat from tube ventilation shaft + UKPN substation, via heat pumps to network
• Heat network extension
CO$_2$ OFFSETTING

• If developers can’t meet 35% target on-site, payment of cash-in-lieu contribution to local borough
• Only certain London boroughs currently have mechanisms in place to collect contributions – e.g. Islington, Lewisham, City of London, Kensington and Chelsea
• Sustainable Design & Construction SPG (April 2014) provides guidance to boroughs on setting up funds to manage these contributions
Many thanks