

MAYOR OF LONDON
'A CITY FOR ALL LONDONERS'

Submission from the
Building Engineering Services Association (BESA)

Introduction

The Building Engineering Services Association (BESA) is the UK's leading trade association for building engineering services contractors, representing the interests of over 1,100 firms active in the design, installation, commissioning, control and maintenance of environmental systems in buildings.

The BESA welcomes the publication by the Mayor of 'A City for all Londoners' and is pleased to submit its response for consideration.

The key areas on which we wish to comment are:

- Skills / Careers
- Air Quality
- Better Buildings / Heating our Homes

The BESA submission

Skills / Careers (p.50)

BESA welcomes the focus in 'A City for All Londoners' towards encouraging more young people, particularly girls, to consider taking up careers in STEM subjects.

BESA is a corporate supporter of the Women's Engineering Society www.wes.org.uk and we would encourage the Mayor and GLA to actively support International Women in Engineering Day on 23 June 2017 <http://www.nwed.org.uk/>

We hope that the Mayor will encourage bodies funded by the GLA to recruit apprentices in STEM subjects, given the range of government measures announced in October intended to help employers take on more apprentices (including £60m to be spent on helping get young people from deprived backgrounds into work).

Air Quality (p.53)

We are pleased that although the document focuses on transport emissions with respect to air quality, there is a recognition that building emissions also affect air quality. We therefore welcome the proposals that all new buildings in London should be air quality positive, meaning that 'they will have to contribute actively to a progressive reduction in the total amount of London's emissions and associated exposure.'

However, we are keen that the Mayor and his team should also focus on *indoor* as well as *outdoor* air quality, as the pollution levels of external air are routinely increased once that air enters a building – a state of affairs that has been further aggravated by the increase in the airtightness requirements contained in Parts F and L of the Building Regulations. Put simply – however bad the *outdoor* air problem, the worse the *indoor* air pollution issue will potentially be.

The urgency of the problem is underlined by the fact that the UK incidence of asthma is the highest in the developed world. It is also the case that that poor indoor air quality is most harmful to children, whose lungs are not fully developed, so that the use of natural ventilation techniques in schools should be revisited as a matter of urgency.

There is a perception that indoor air that has passed through a mechanical process (fans, filters, etc) is somehow “genetically modified”, as opposed to outdoor air, which is “natural”. The reality is that efficiently conditioned indoor air is significantly cleaner and healthier than it was at the point when it entered the building.

The BESA is especially concerned that the problem of poor indoor air quality is very often “hidden”, owing to the low levels of monitoring currently being carried out, and we would urge the Mayor to provide some support, financial or otherwise, to encourage building owners/managers to install effective monitoring equipment.

The BESA also believes that there should be a duty on developers to establish the quality or otherwise of the prevailing outdoor air at the outset of a construction project, so that an informed assessment can be made of the likely magnitude of the problem once the buildings have been completed, the methods required to address such issues, and an allowance made for the attendant costs.

Better Buildings / Heating our Homes (p.61)

The BESA welcomes the Mayor’s intention to harness locally produced energy and to use more of London’s resources, such as waste heat from the London Underground. There is tremendous potential across London for the development and use of Heat Networks and we hope that the GLA will work closely with DBEIS Heat Networks Delivery Unit in this respect to encourage local authorities, social landlords and private developers.

We also support the focus on ensuring that new homes built in London are zero carbon as well as the retro-fitting of energy efficiency measures to existing homes where the measures are selected by suitability for the building and not by blanket incentive schemes.

We would like to see the GLA allowing and incentivising innovation through regulatory means, for example by reducing the constraints imposed by part L.

For new homes we would like to see a different focus on planning such that developers are accountable for the long term differential between design and actual energy use . So often the projected energy consumption of a new building on the drawing board bears little relation to its actual energy

consumption once it is up and in use. The cost both in carbon and finance of such inefficiencies are then magnified over the lifetime of the building.

Finally BESA gives a cautious welcome to the proposal to set-up the 'Energy for Londoners' scheme, covering all aspects of energy supply and efficiency. Our enthusiasm for the idea is tempered by the potentially anti competitive market effects. very high public expenditure investment that will be required which may make the scheme unviable. As an alternative, we see potential for public and private sectors to work more closely to enable distributed energy developments, whereby the GLA would take some of the risk in the civil engineering aspects and potentially alleviate construction costs such as parking suspensions, noise restrictions and logistics. Additionally the GLA might choose to pay for pipework infrastructure (particularly in connecting multiple DE schemes where commercial bodies would be unable or willing take such a high level of risk), then allowing the commercial partner to subsequently pay back the investment from energy use revenues.

Commented [TR1]: Is this factual?

Submitted by:

*Tim Rook
Building Engineering Services Association
Lincoln House
137-143 Hammersmith Road
London W14 0QL*

*T: 020 7313 4930
E : time.rook@thebesa.org.uk
W : www.besa.org.uk*