

CEO Forum
"Energy Innovation for Smarter Cities"
held by The Housing Forum and Bouygues UK
5th December 2016 in London



This Forum was attended by senior figures from the Greater London Authority, housing associations undertaking major regeneration and development projects, master planners and energy specialists and hosted by senior delegates from Bouygues UK.

Key words: *modular construction, energy performance guarantee, master planning, value chain*

The findings of the Forum are:

- In London, the south east and major cities, many housing associations will be building large developments, in new settlements at scale of up to 5,000 homes.
- The GLA will produce a new energy strategy "Energy for Londoners" in 2017 with the aim of zero carbon and a better energy deal for Londoners by 2050 making this a good time to engage with London councils.
- On the schemes it has built and is maintaining, Bouygues UK is now able to deliver Energy Performance Guarantee contracts for heating and domestic hot water. The scheme operation and maintenance is carried out by Bouygues Energy & Services UK, its sister FM company.
- This guarantee will benefit landlords with a secured heat tariff and tenants with reduced energy bills.

- Developed for new build schemes so far, the Energy Performance Guarantee for retrofit can be a good model as the condition and running costs of the property are known at the start.
- Devolution in larger UK cities offers regional opportunities for construction and energy businesses.
- Overheating, especially in urban areas, can have as great an impact on well-being as low temperatures.
- Whole life cost considerations should influence the proportionate level of initial capital investment but these considerations are not routinely addressed.
- Modular solutions can accommodate technical innovation when parties work together and share issues at design stage and at building stage.



Fabienne Viala, on behalf of hosts Bouygues, set out the group's ambition to assist the major drive to build more homes in the UK supported by the company's long-term investment in innovation and R&D. Bouygues were established 60 years ago and now have all group activities represented in the UK. The company has a focus on construction solutions and has developed a range of measures to bring innovation and affordable technology into smarter cities –these are; connected modern communities using quality of design, engineering and technology. Modular construction gives speed and improves quality and can succeed with good insight into the market and fully integrated design and technical solutions which fit a community setting.

Maxime Hugonnet set out Bouygues UK's approach to Energy Performance Guarantees. Innovate UK have assessed a wide ranging gap in energy performance. The consequence of poor building efficiency and lack of precision is an avoidable cost for landlords and owners plus a significant impact on residents. There may be several causes including over sizing of energy centres at design stage, installation quality, complexity and lack of meters which prevent residents using energy systems fully. The Energy Performance Guarantee (EPG) is a means of securing the heat tariff and volume consumption, and in doing so, remove risk. A specific value chain has been developed to overcome the performance gap. The EPG scheme began some 6 years ago in Paris and is now available in France and Switzerland and is currently progressing specific opportunities in London. EPG is a financial guarantee, if the heat consumption turns to be higher than the level predicted in the contract, Bouygues pays the difference.

Brendan Kilpatrick covered energy aspects of master planning in dense urban areas. The factors which now have to be interlinked include health and wellbeing, climate change, growth, and ageing. There are a large number of stakeholders to take into consideration. Community energy planning will form a central part of future master planning and will see a move away from gas to electricity and heat storage in homes which will influence the physical layout.

The following attendees took part in the CEO Forum on Energy Innovation for Smarter Cities:

- 🏠 Fabienne Viala, Chairman, Bouygues UK
- 🏠 Lionel Christolomme, CEO, Bouygues UK
- 🏠 Darren Gill, Regional Managing Director, Bouygues UK
- 🏠 Maxime Hugonnet, Manager at Bouygues Group
- 🏠 Edward Peeke, Group Commercial Director, Bouygues E&S UK Limited
- 🏠 Richard Fagg, Deputy Managing Director, Linkcity
- 🏠 Shelagh Grant, Chief Executive, The Housing Forum
- 🏠 Andy von Bradsky, Chairman, The Housing Forum
- 🏠 Alexandra Willey, Head of Regeneration Projects, Affinity Sutton
- 🏠 Alan Wright, Partner, bptw partnership
- 🏠 Tim Attwood, Director, Conisbee
- 🏠 Daniel Barrett, Lead - Smart Environments & Innovation, Greater London Authority
- 🏠 Theresa Borsuk, Senior Partner, Pollard Thomas Edwards
- 🏠 Richard Mussell, Managing Director, Rund Partnership
- 🏠 Jim Martin, Executive Chairman, Martin Arnold Ltd
- 🏠 Jacqueline Esimaje-Heath, Director of Land & Business Development, East Thames
- 🏠 Mark Hutchison, Director of Energy Services and Mechanical and Electrical Design, Silver
- 🏠 Emma Brown, Regional Development Manager, Southern Housing Group Limited
- 🏠 Irene Craik, Levitt Bernstein
- 🏠 Mark Fowler, Director, MDA Consulting Limited
- 🏠 Lettice Swan, Business Development Executive, MDA Consulting Limited
- 🏠 Brendan Kilpatrick, Senior Partner, PRP

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