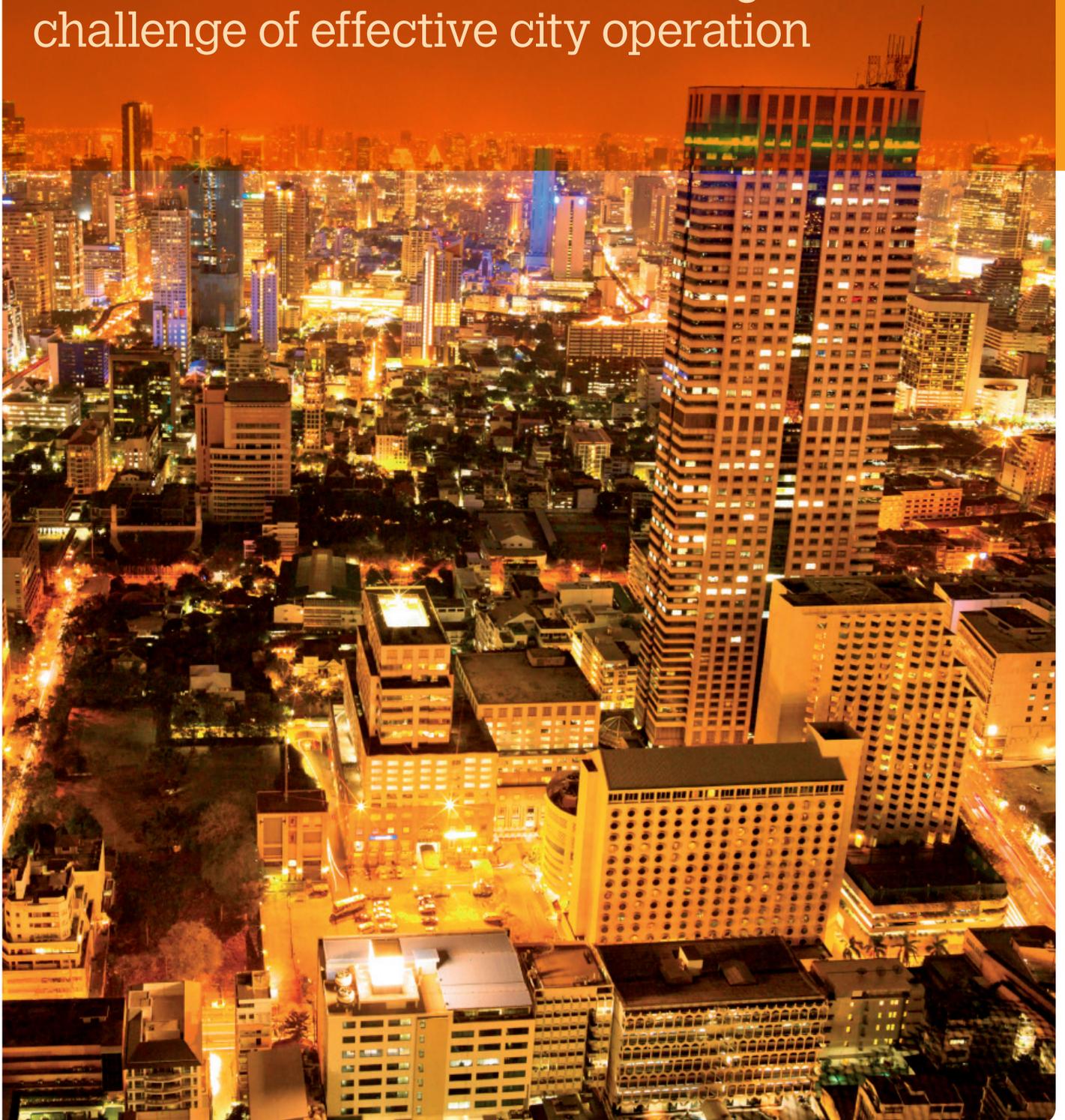


The BRE Trust Future Cities Programme

Active collaboration to meet the global challenge of effective city operation



70% of the world's population will be living in urban environments by 2050



The Future Cities programme

The challenge for future cities is to gain all the positive benefits of being vibrant, creative hubs whilst reducing and managing the potential problems.

As our cities grow in size, greater demand is placed on the infrastructures that deliver vital services. An increase in population and density means increased vulnerability to climate change, health problems, higher levels of congestion and crime. It's clear we need to look for new, innovative ways to support positive city living.

Future Cities is a three-year collaborative research programme, funded by the BRE Trust and other public and private partners, which aims to explore the challenges faced by the global built environment as more people migrate to city dwelling.

Encompassing the key areas of energy, infrastructure and wellbeing, the objective of the scheme is to generate knowledge that underpins new tools, products and services which support sustainable city operation.



What do cities need?

Energy supply and demand

Cities already consume around 70% of the world's energy and this demand is set to increase, requiring significant improvement and expansion of the current infrastructure. The Future Cities programme aims to extend current knowledge via real city demonstrators to explore opportunities in:

- Renewable energy sources and main grid integration and optimisation
- Energy use reduction, operational efficiency and interoperability.

Infrastructure

The infrastructure of our cities and the condition of our building stock impact on the delivery of vital services including waste management, transportation and communication. As buildings are upgraded to improve their performance, there is a need to monitor resource use and occupant feedback to ensure that optimum performance is maintained and then extended at a city scale.

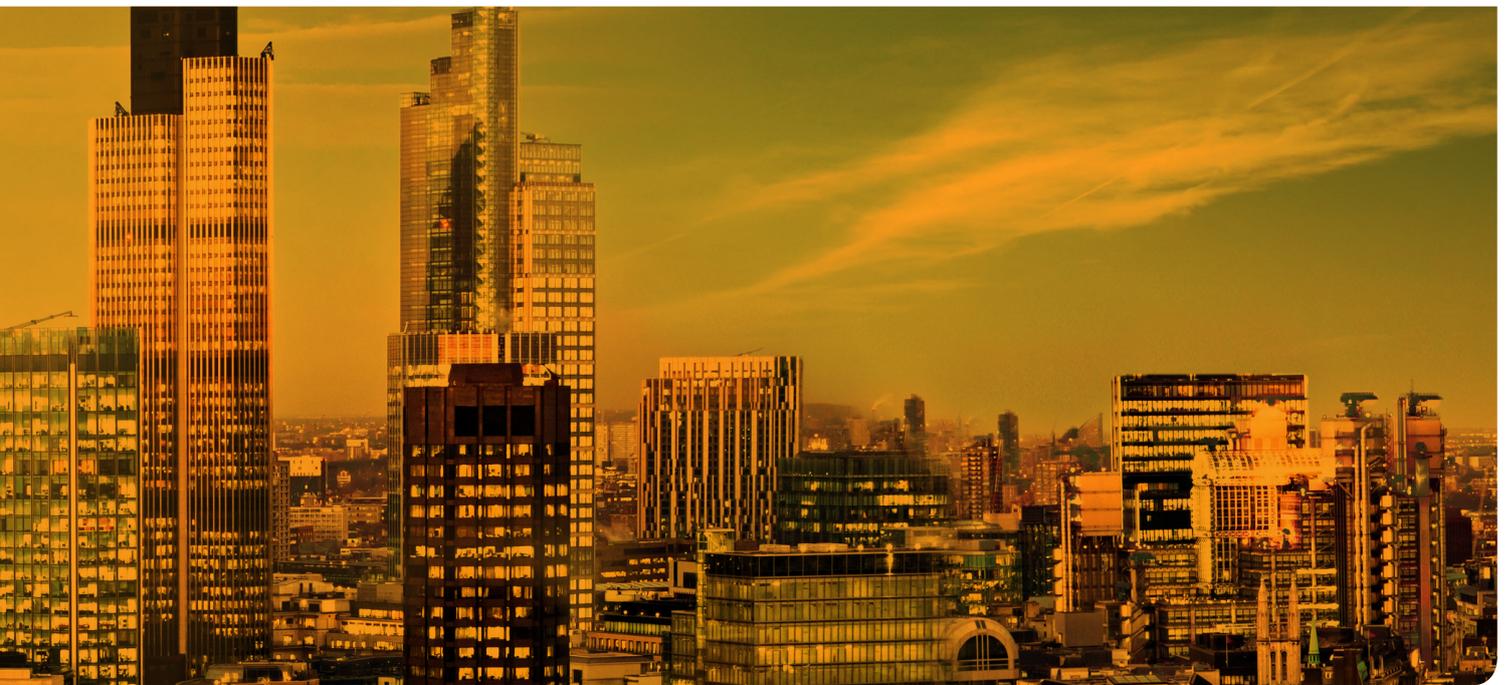
The Future Cities programme will initially focus on:

- Estate management, optimisation, upgrade and resilience
- Digital systems integration and cyber security
- Refurbishment at scale.

Wellbeing

Cities across the world are already experiencing negative health impacts as a result of an increase in population, density of buildings, pollution, temperature via the heat island effect and old, deteriorating building stock. The Future Cities programme aims to explore:

- Changing fiscal drivers in supporting healthcare for an aging population
- Adaptability of building stock to support preventative and assisted healthcare
- The impact of thermal comfort and air quality on health.



Programme focus

A key objective of the Future Cities programme is to generate new knowledge that demonstrates a validated link between the performance of the physical built environment and the influence of the people who occupy it at a city scale.

Currently, this knowledge and data is spread across the construction industry in disparate and varied formats. The programme aims to support knowledge sharing and collaborative working through a range of strategic industry partnerships. It is anticipated that these partnerships will extend to the joint delivery of new products to the marketplace in the future.



What we are looking for from partners

We are looking to engage partners who are actively seeking to address the future cities challenge; to work with us to develop a suite of products, services and knowledge that support effective city operation. We are particularly interested in hearing from:

- City leaders for whom these challenges are a reality, with real projects that could benefit from the research
- Commercial companies that are keen to actively engage with research projects to bring industry perspective and in-kind support
- Organisations that have a shared remit to drive change and innovation in the built environment
- Research groups that will bring complementary knowledge and programmes to facilitate shared working and add value, particularly from abroad.

Why get involved?

Partners in the Future Cities programme will benefit from a range of outputs including:

- New, valuable knowledge to support the development and validation of new products and services that deliver integrated cities of the future
- New business opportunities for joint exploitation in the marketplace
- Helping to create a wider network for business opportunities in the UK, Europe and across the world
- Potential leverage of additional public funding for further research and business development.

How to get involved

For more information or to discuss how you can get involved with the Future Cities programme:

T 01923 664357
E futurecities@bre.co.uk
W www.bre.co.uk/bretrust



bre

BRE

Watford, Herts
WD25 9XX

T +44 (0) 1923 664000
E enquiries@bre.co.uk
W www.bre.co.uk

The BRE Trust

The BRE Trust is the largest UK charity dedicated specifically to built environment research and education. It was set up in 2002 to advance knowledge, innovation and communication in the built environment for public benefit.

The Trust uses profits made by the BRE Group to fund new research and education programmes that will help to meet its goal of 'building a better world.' It commissions research that represents the spectrum of challenges faced by the built environment and publishes project findings which act as authoritative guidance to the construction industry.

The BRE Trust is a company limited by guarantee, registered in England and Wales (number 3282856), and registered as a charity in England (number 1092193) and in Scotland (number SC039320).

Registered office: Bucknalls Lane, Garston, Watford WD25 9XX