



# Birmingham Smithfield – a Zero Emission City global pilot

Harnessing rezoning to address the wider challenges that cities face

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## Executive Summary

A 'ZEC'- Zero Emission City is a concept devised and being tested by the World Business Council for Sustainable Development (<http://action2020.org/business-solutions/zero-carbon-cities>) being tested in three global locations, one being Birmingham, UK.

The ZEC looks to create a sustainability framework to help direct an entire re-generation project, which for Birmingham, was Smithfield.

In Birmingham, Natural Capital was added to this global framework and has now been adopted by WBCSD.

The complexity of this development, in seeking such multiple outcomes- required an alternative funding model- this was the unique Liveable Cities contribution.

## Success Metrics

- The World Business Council for Sustainable Development have added natural capital as a vital element to their global ZEC framework.
- The whole scheme has been subject to an assessment by the Natural Capital Planning Tool, a national trial being led by University of Birmingham.
- The financing of the entire project will be reviewed using the Urban Investment Portfolio approach, upon the appointment of the Preferred Bidder.

## About

Smithfield is the most prestigious development in Birmingham; advertised globally to attract the right caliber of developer. The

site is to become a vibrant and successful place; between the Bullring, the knowledge hub and creative quarter, and linking to the High Speed 2 (HS2) terminus.

The masterplan informed by the WBCSD's ZEC is at the forefront of the City's green ambitions and a statement of intent for the future.

The experience of working alongside the WBCSD team for 18 months was inspirational and brought real additionality and assurance to such an ambitious future vision.



Urban Investment Portfolio model, QASER, UCL

## Challenges

A significant challenge was how to build an effective partnership- based on mutual trust- across such a diverse grouping of city politicians, external-international business leaders, developer agents and city planners, and the Liveable Cities research team.

What was recognized early on was the range of expertise in the room. The WBCSD had made the offer to Birmingham as the city's long-term ambitions met the long-term ambitions for global business- with the ZEC model as the ideal bridge between the two worlds.

WBCSD's ZEC model when they arrived did not contain reference to natural capital; whereas the city of Birmingham were national leads on this topic. So there was a growing recognition from the WBCSD team that in fact their global model would be

strengthened with this addition. The Liveable Cities research programme had discovered just how important a factor natural capital was to the future of cities.

The largest challenge came around finance and how to package such an aspirational development in today's world, with today's market. There seemed no precedent for this level of ambition funded through private finance.

The risk to the project was significant- as the long-term globally based aspirations for city living contained in the ZEC model would be severely watered down- if the delivery mechanism were to be determined through today's financial models. The inspiration and alternative approach was provided by Liveable Cities.

## Goals

The first goal was how to influence the Smithfield masterplan and the ZEC framework and for both to acknowledge the importance of natural capital. The Liveable Cities research had shown how vital access to nature was for the individual in cities and the multiple values natural capital can release to help address the multiple challenges faced by 21st century cities.

## How has this research helped?

The Liveable Cities research programme looked at the prospect of an eco-system serviced city and asked what that would look like. This has provided a rich research vein and narrative about the vital connections between people and nature in cities and focuses primarily on welfare and wellbeing. However the more you examine the evidence, the deeper that connection becomes, to the point where it is a fundamental part of being human and therefore should be seen as an essential right for people to be able to access a living natural environment. As Smithfield contains a core element of family housing- this became a large part of the solution.

Liveable Cities research had also looked at the complexities of urban planning and how it accounts for nature. University of Birmingham is leading a UK national trial of a Natural Capital Planning Tool which takes an ecosystems approach at the master plan stage. Through a series of tests against ecosystem outputs from the finished scheme it is possible to create a net positive final outcome without impacting viability, this is now built into Smithfield.

Liveable Cities research concerned itself with all the challenges faced by 21st century cities today- one of which is how you finance sustainable cities. UCL led on this research with vast experience of working with the European Investment Bank on creating a multiple capital urban portfolio approach. Here the combination of financial and non-financial values are co-delivered across a scheme by packaging different elements together and targeting specific investment categories; such as Natural Capital Finance, Impact Investment and Circular Economy.

## Results

The final Smithfield proposal informed by the Zero Emission City framework- and the Liveable Cities research programme- was of the highest caliber and merited world-wide advertisement; as the stated intent of Birmingham's aspirational future. Smithfield now provides a benchmark in the city of how to approach major developments; highlighting the potential synergistic advantages of working collaboratively with business leaders and informed by world leading research, and with the acknowledgement of the importance of natural capital.

The Liveable Cities Finance models, led by UCL, has shone a light on the future. There is now a much wider appreciation of the direction of travel for development in the city and the global potential there is for taking a different financial approach- moving away from business-as usual. This is very significant as the planning process, the governance ambitions and the restrictions of financial models, have all held back sustainable city developments globally. The ZEC was created to challenge this position. Smithfield has shown that the world is very close to crossing this Rubicon.

**“Smithfield is an urban redevelopment site with the potential to become an international reference case. The Birmingham Smithfield redevelopment site was identified as an ideal testing ground for this collaboration. As a landmark inner-city development, the project offered the scale and timeline for BCC to work with the partner companies so that they could provide their expertise directly to the city.”** Roland Hunziker - WBCSD, Director, Sustainable Buildings and Cities.

**“Working with the World Business Council for Sustainable Development, through its Zero Emission Cities programme, we have been able to articulate the priorities for Smithfield in a coherent way, identifying what it is we want to prioritise and the outcomes we want to achieve for the citizens of Birmingham. But this hasn't been undertaken in a commercial vacuum; we also want to ensure that Smithfield is a development that will provide return on investment whilst simultaneously providing high quality office space and a healthy living and working environment.”** Councillor Lisa Trickett - Cabinet Member for Clean Streets, Recycling and Environment Birmingham City Council