



CARDO

Zero Carbon Retrofit

The crucial first step to Greener Homes

PROJECT

CLIENT

FRAMEWORK

DURATION

OVERVIEW

Greater London Authority

Innovation Partnership

3 years



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The Challenge

Upgrading large portfolios of housing stock to achieve net zero carbon standards is a complex challenge. A deep retrofit programme of this type and magnitude has never been undertaken, and everyone is on a steep learning curve to develop the green technology and create an efficient, accountable delivery model.



The Solution

In London, with around 50% of properties rented and half of those as social rent, the Greater London Authority (GLA) is leading the way on greening existing homes. To make it happen, they have created an 'Innovation Partnership', a procurement vehicle which brings the GLA together with social housing providers, contractors, and suppliers to research, develop and deliver the optimum low carbon retrofit solutions.

Valued at £10 billion nationwide, with £5 billion of that expected to be spent in London, the framework has been split into developmental and delivery phases.

The first three years aims at developing the green technology and design solutions, that can be commercialised through help with scaling up productivity and driving down costs to deliver the main retrofit programme. Cardo form part of a select group of specialist contractors and technology suppliers who have secured a place in the Developmental Process.



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The Solution

Over the next 3 years, we will work with preselected clients to craft a performance assured Energiesprong standard Net-Zero Whole House Retrofit solution, delivered at an economic price point.

The solution will include enhanced insulation alongside the replacement of gas boilers, typically with air source heat pumps, powered wherever possible by PV panels. Detailed planning and well-managed supply chains will be essential to minimise the financial and delivery risks of these substantial work programmes.

During this £250m developmental phase tranches of schemes will be released to verify, learn, and refine the processes. One of the first pilot schemes for Cardo is combining retrofit external/internal insulation with the replacement of kitchens and bathrooms.

This 'complete' whole house approach generates greater efficiency and importantly it consolidates the impact on residents, and they receive a tangible home improvement alongside improved energy performance.



The Outcome

GLA's Innovation Partnership connects housing providers with green technology experts in a vital first step to drive the innovative solutions needed to meet the net zero commitments.

The current front-end research and development phase provides a mechanism to understand, innovate and resolve the issues and move ahead of the game on production and processes so that everyone can benefit. It is an opportunity for social housing providers to better understand the implications and to influence the outcomes in advance of a National Framework Award in 2023.

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