15 June 2022

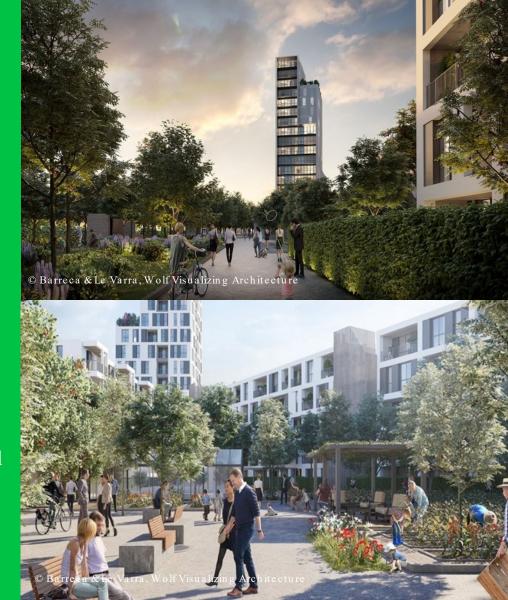
Best practices at local level on affordable carbon-neutral housing Insights from C40 cities

Paul Cartwright
C40 Cities Climate Leadership
Group



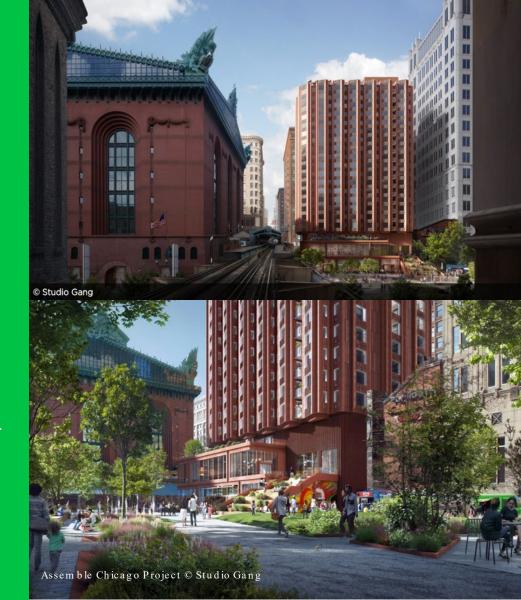
Milan

- L'Innesto Project a Reinventing Cities project, an international competition to stimulate zero carbon development
- Developing the first zero carbon social housing project in Italy
- Features pre-assembled construction and a mix of biosourced materials, on-site renewables, a low-carbon district heating network and green spaces
- Proposes an ambitious mobility strategy limiting car parking spaces (only 100 spaces for 700 tenants) and including 1200m 2 of bike garages, 10 electric car charging term in als and a shared neighbourhood car fleet



Chicago

- Assemble Chicago a winning Reinventing Cities project, the first zero carbon all affordable high-rise in Chicago
- 200 affordable homes proposed with a commitment to no use of fossil fuels.
- Proposed strategies such as the implementation of a large scale photovoltaic array producing 860,000 kWh of electricity per year.
- Promotes urban gardening and biodiversity, and minimising waste, providing a new model for sustainable development for Chicago
- No on-site vehicle parking, with priority given to that of bike parking and charging stations for e-bikes.



Santiago

- Raising energy efficiency standards in social housing through social housing procurement standards for the Metropolitan Region of Santiago
- Addressing fuel poverty 34.3% of households in urban areas in Chile are in energy poverty and there is a deficit of affordable, energy efficient housing
- Mandatory energy efficiency requirements introduced for improving thermal insulation
- Additional voluntary measures incentivised through a point system for procurement, including solar hot water systems and photovoltaic panels
- Procurement completed for the first pilot of 550 homes in 2021 to built to higher thermal efficiency standards



Boston

- Overlook Landing Project clim ate resilient, ultra energy efficient affordable housing
- All electric systems elim in ate the need for gas service and distribution piping lowering the cost of construction and maintenance
- Building design focused on energy efficiency and healthy indoor air quality – No volatile organic compound (VOCs) finishes, healthy building materials and no gas combustion in the homes
- Average energy usage 20 to 25% less than requirements for the building energy code



London

- The Mayor's program mes for decarbonising existing homes and cutting energy bills include The Retrofit Accelerator and Warmer Homes, all part of a Green New Deal mission aligned with the city's ambition to be net zero by 2030.
- Meeting this am bition requires an estimated 210,000 homes to be retrofitted per year between now and 2030
- Funding secured to support boroughs/districts within London through technical support to accelerate whole house deep retrofit
- The <u>Innovation Partnership</u> supports seven social housing providers/boroughs to deliver affordable net zero housing retrofit at scale.

