

## Policy Framework to Dramatically Reduce Embodied Carbon in Cities Developed to Respond to Climate Goals

*A policy framework for reducing embodied carbon in infrastructure, buildings and construction is being developed by the Carbon Neutral Cities Alliance and Bionova Ltd, in cooperation with Architecture 2030. The framework will enable cities to adopt and implement policies to reduce embodied carbon, or carbon from materials and construction, a necessity to meet climate goals.*

**Helsinki, Finland / Chicago, U.S.** – The Carbon Neutral Cities Alliance (CNCA), a collaboration of leading global cities working to achieve carbon neutrality by 2050 or sooner, and Bionova Ltd, specialists in construction carbon management, announce a project delivering policy tools for cities to meet and exceed the World Green Building Council's [embodied carbon reduction goals](#). The project will be delivered in cooperation with Architecture 2030, a built environment energy and climate change think-tank, and guided by 10 world-leading CNCA member-cities, including Copenhagen, Helsinki, Oslo, San Francisco, Seattle, Toronto, Vancouver and others.

Globally, a growing urban population is causing unprecedented demand for construction. By 2050, urban building and infrastructure construction worldwide is expected to increase dramatically; unless decisive action is taken, construction in cities will generate 100 gigatons of embodied carbon<sup>1</sup>.

The ***City Policy Framework for Dramatically Reducing Embodied Carbon*** project, supported by the Rockefeller Brothers Fund, Construction Climate Challenge hosted by Volvo Construction Equipment, Finnish Ministry of Environment and others, will develop a policy framework that identifies and ranks the most effective policies that cities can enact to reduce embodied carbon in construction.

The Framework will review all applicable embodied carbon-reducing policy tools for cities, and rank them based on expected carbon impact, cost-efficiency and their legal basis, considering differences between jurisdictions and legal and regulatory systems in different countries. Through this, cities can choose the highest impact policies available and accelerate implementation.

"This is the new frontier for city-based climate action, and has the potential to be a serious game changer for our climate-leading cities", said **Johanna Partin, Director, Carbon Neutral Cities Alliance**. "By tackling new construction – which cities are uniquely positioned to do, holding legal and regulatory powers through zoning and land use policies – cities can dramatically reduce a substantial source of carbon emissions. This project points a transformational path forward for our cities, setting a new standard for what's possible".

"We're extremely pleased to deliver this project with CNCA", said **Panu Pasanen, CEO of Bionova Ltd**. "CNCA cities' level of ambition makes sure this ground-breaking research is put directly into practise, and has the level of impact necessary to meet global climate goals", he continued.

The policy framework will be launched in spring 2020 at Architecture 2030's CarbonPositive'20 Conference and Expo in Los Angeles, followed by technical assistance to cities to support the practical implementation of the policies in the framework.

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<sup>1</sup> Carbon emissions from construction materials and machinery manufacturing, their transport, construction process, use and disposal at the end of life are referred to as embodied carbon. This includes emissions from manufacturing, such carbon-intensive materials as steel and cement, as well as use of fuels in transport and construction machinery.

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**Carbon Neutral Cities Alliance (CNCA)** is a collaboration of leading global cities working to achieve carbon neutrality by 2050 or sooner — the most aggressive GHG reduction targets undertaken anywhere by any city. CNCA is a fiscally sponsored project of the Urban Sustainability Directors Network. For more information: [www.carbonneutralcities.org](http://www.carbonneutralcities.org).

**Bionova Ltd** is a firm of construction carbon specialists operating globally out of Finland. Bionova works with construction carbon regulations, research and standardisation. Bionova is also the developer of the world-leading construction life-cycle assessment software [One Click LCA](#). For more information: [www.oneclicklca.com/about-bionova-ltd/](http://www.oneclicklca.com/about-bionova-ltd/).

**Architecture 2030's** mission is to rapidly transform the global built environment from the major contributor of greenhouse gas emissions to a central part of the solution to the climate crisis. For more information: [www.architecture2030.org](http://www.architecture2030.org).