



UNIVERSITY of WASHINGTON

**The Carbon Leadership Forum, in partnership with more than 30 industry leaders, announces breakthrough tool to easily evaluate carbon emissions of building materials**

*As the world builds the equivalent of an entire New York City every month, reducing the carbon emissions of materials is an imperative*

SEATTLE– September 23, 2019

The Carbon Leadership Forum, in partnership with a coalition of more than 30 forward looking and innovative building industry leaders announce that they have taken on a long-elusive goal – measuring and reducing the carbon footprint of building materials. The result is the Embodied Carbon in Construction Calculator (“EC3”), an open source tool for architects, engineers, owners, construction companies, building material suppliers and policy makers to compare and reduce embodied carbon emissions from construction materials.

Between now and 2060 the world’s population will be doubling the amount of building floor-space, equivalent to building an entire New York City every month for 40 years. Most of the carbon footprint of these new buildings will take the form of embodied carbon — the emissions associated with building material manufacturing and construction. As a result, owners, designers, engineers and contractors are turning their attention to building materials and seeking information on these products so they can make informed, smart choices. This task has been fraught with problems – from the lack of data to data too complex to evaluate.

In response to this problem, Skanska USA and C Change Labs conceived of a solution that would enable the building industry to easily access and view material carbon emissions data, allowing them to make carbon smart choices during material specification and procurement. Initial development was jointly funded by Skanska and Microsoft, who determined that an open platform would provide maximum impact for the industry and society at large. To accelerate development of this solution, the Carbon Leadership Forum incubated the project with strong leadership and additional financial support from Autodesk, Interface, the MKA Foundation and the Charles Pankow Foundation, lead sponsor and grant manager. Subsequently, more than 30 other industry-leaders joined in.

“Our mission is to accelerate the transformation of the building sector to radically reduce embodied carbon,” said Kate Simonen, director of the Carbon Leadership Forum and professor in the College of the Built Environments at the University of Washington. “The EC3 tool is a great example of what can happen when our passionate and collaborative network comes together around a need.”

Industry sponsors include: Grant Administrator Charles Pankow Foundation; Pilot Partners Alexandria Real Estate Equities, Magnusson Klemencic Associates, Microsoft Corporation, Perkins and Will, Port of Seattle, Skanska USA, Walter P Moore and Associates, Inc., and Webcor; Association Partners: American Concrete Institute (ACI) Foundation, American Institute of Architects (AIA), American Institute of Steel Construction (AISC) and the BlueGreen Alliance; and Material Partners: Armstrong Ceiling and Wall Solutions, BASF Corporation, CarbonCure Technologies, Interface, Inc., Kingspan Group, and USG Corporation.

Additional support is provided by Technology Partners including Autodesk, Climate Earth, Sustainable Minds and Tally; EC3 Tool Methodology Partners: Arup, Brightworks Sustainability, Central Concrete Supply Co., Inc., Climate Earth, Katerra, KieranTimberlake, LeMessurierr, LMN Architects, National Ready Mixed Concrete Co., Owens Corning, Thornton Tomasetti, Urban Fabrick, WAP Sustainability and WRNS Studio. View the full list of collaborators at [www.carbonleadershipforum.org](http://www.carbonleadershipforum.org).

### **The EC3 Tool: A Closer Look**

Increasingly the building industry and owners are becoming aware that materials matter and are seeking ways to evaluate the emissions associated with making these materials, but they have not had a reliable or efficient way to compare them. As a result, while awareness and a desire to enact change have been high, few have found an avenue to effectively examine and evaluate the available material choices. The EC3 tool, an open-source tool, simplifies this complex problem and will allow users to easily see the embodied carbon impacts of the materials before consumption. Now users will have the information they need to make more informed decisions on embodied carbon, allowing them to enact positive change. Details on the EC3 tool will be made available November 2019. Collaborating partners will be demonstrating the product at Greenbuild, November 19-22, 2019 at the Georgia World Congress Center, Atlanta, GA.

### **Learn more**

For more information on the Carbon Leadership Forum and the EC3 tool, including links to our partners' announcements visit [www.carbonleadershipforum.org](http://www.carbonleadershipforum.org)

Visit [www.buildingtransparency.org](http://www.buildingtransparency.org) and register to have access to the EC3 tool. The tool will be released November 19, 2019.

List of all collaborators, including spokespersons, media contacts and quotes, available upon request.

Additional embodied carbon resources:

- Watch short video: [Bill Gates on manufacturing emissions](#)
- View World Green Building Council report '[Bringing Embodied Carbon Upfront](#)' released September 23, 2019

## **About the Carbon Leadership Forum**

The Carbon Leadership Forum, built on a collective impact model, has amassed the largest network of architects, engineers, contractors, material suppliers, policy makers and academics to reduce the carbon impact of materials in buildings. Together, we have developed an extensive body of research and resources necessary to inform and empower our members, while building a robust collaborative network – the Embodied Carbon Network – that is inspiring and connecting our members to enact change. This has resulted in member-led initiatives, including the recent structural engineers embodied carbon challenge (SE 2050) and the development of the EC3 Tool. For more information visit: [www.carbonleadershipforum.org](http://www.carbonleadershipforum.org)

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