

# DAVIES-CROOKS ASSOCIATES ENVIRONMENTAL ACTION PLAN

## **2025 ECAP**



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#### Introduction

Davies-Crooks Associates (DCA) is a mission driven consulting and adaptive re-use development practice focusing on lowering our climate impacts on the planet. We support AEC industry leaders, government, and non-profits for creating impact at scale.

We choose to engage in projects that we believe will leverage industry change, showcase lower carbon and environmental improvement examples, and to ultimately enable the scaling of these ideas to other projects.

Founded in 2023, we started DCA by pursuing our own adaptive re-use project, called Hubbard's Corner. This commercial development in Seattle has retail and office programs within. Hubbard's Corner was featured in the September 2023 issue of ENR magazine as a living laboratory for showcasing next generation lower carbon construction.

Beyond our own development efforts, we are consulting to industry leaders on lower carbon construction and policy. This includes private client engagements with national and international footprints, as well as government policy support at the local, state, and national levels. We are also actively engaged in several national and international non-profits that are advancing a more sustainable and lower carbon future.

## Davies-Crooks Associates

#### **Company Leadership**



Don Davies, PE, SE - Co-Founder/Principal

An industry champion for the promotion of urban density and low-carbon construction and a 2023 ENR top 25 news maker, Don helped found the Carbon Leadership Forum, Building Transparency, and the MKA Foundation. He is currently leading the ClimateWorks Low Carbon Concrete Task Force, is the Interim Executive Director at Building Transparency, and has been inducted into the UC Berkeley Academy of Distinguished Alumni. The past president of Magnusson Klemencic Associates, Don has designed the structures of projects in 18 countries and more than 50 major metropolitan centers. More than 25 projects include performance-based seismic designed towers.



Joan Crooks - Co-Founder/Principal

A long-time environmental leader and climate activist with three decades of experience in the non-profit sector. As CEO of Washington Conservation Action, Joan helped shape and pass many of Washington's environmental and climate laws and policies. She also led numerous efforts to help elect state and local officials who support climate action. Joan continues to collaborate with the League of Conservation Voters and state level organizations on climate action. Partnering with her husband Don Davies, Joan is focused on accelerating action to reduce the climate impact of buildings. She is interested in making policies work on the ground and removing barriers to rapid, positive change.



#### 2024 ECAP Accomplishments

#### Education Goals:

Share what we have learned through Hubbard's Corner and other projects through a minimum of six presentations. Audiences to include design firms, trade associations and academics and students. Presentations will focus on Whole Building Life Cycle Analysis reporting and opportunities and EPD use.

Expand our knowledge beyond structural systems and their embodied carbon footprints through research and networks. Learn about MEP embodied carbon topics, especially about refrigerant fugitive emissions and what is being done, and what can be done, about them.

#### **Education Results:**

18 Presentations made to various organizations. These included:

- Eco-Building Guild Hubbard's Corner, Living Laboratory for De-Risking Material Innovation, 01/24
- JTM Construction Embodied Carbon, Changing our Decision-Making Process, 01/24
- World Steel Association Meeting Steel's Embodied Carbon Advantage, 03/24
- Los Angeles AIA Hubbard's Corner Heading Toward Zero, How Close Can We Get Today? 05/24
- University of Washington Carbon Leadership Forum, Hubbard's Corner Heading Toward Zero, How Close Can We Get Today? 05/24
- White House Cement Industry CEO and Leadership Roundtable, 06/24
- New Zealand Steel Association Building Sustainability into Construction LCA's & Embodied Carbon Wellington, Christ Church, Auckland, 07/24
- RMI/NRDC Chicago Regional Lower Carbon Concrete Summit with White House Closing Remarks 08/24
- ASHRAE 181.9 The Changing Landscape of LCA's, 09/24
- RMI/NRDC/NRMCA Los Angeles Regional Lower Carbon Concrete Summit with White House: Bringing Lower Carbon Concrete Forward, 09/24
- **RMI/NRDC** Boston Regional Lower Caron Concrete Summit with White House, 10/24
- Keller Concrete Bringing Lower Carbon Concrete Forward, 09/24
- US-China Circular Economy Experts Group on Building Materials Government Briefing, 10/24
- Australia Steel Galvanizers Association The Business Case for Resilience and Longevity, 10/24
- ACI Fall Conference Competitive Bidding with Double Bottom-Line Evaluations 11/24
- **Greenbuild** We Can't Wait Until 2050, Reaching Zero Embodied Carbon Today 11/24



#### Measuring and Reporting Goal:

Conduct a WBLCA on our project Hubbard's Corner and report the findings. Making the material quantity and embodied carbon data from the project public information that will be posted on our website.

Expand the above WBLCA from an initial embodied carbon focus to include operational carbon data after one year of building operations. Data collection will occur in 2024 to support the 2025 analysis revision.

Beyond our project, DCA will engage in Product Category Rule Committees for:

- Structural Steel
- Agricultural Fibers

#### Measuring and Reporting Results:

- The Hubbard's Corner WBLCA, including operational data, was presented at Greenbuild 24. The project and its data were also shared with the Carbon Leadership Forum, as part of their 2024 WBLCA Benchmarking Case Study.
- Ongoing efforts with Smart EPD have continued for the Product Category Rule Committees of
  - o Structural Steel
  - o Agricultural Fibers



#### Scaling for Industry Change Goal:

Facilitate the pouring of five different types of ASTM C1157, zero portland cement concrete mixtures on Hubbard's Corner and report the findings.

Support a minimum of six Lower Carbon Concrete Case Study Projects with the Climate Works Foundation, testing regionally appropriate concrete mixtures that push the concrete GWP 30-60% below business-as-usual mixes on the given projects.

Work with the White House Office of Science and Technology (OSTP) to support a White House Leadership Summit of the Cement Industry; as well as three regional Lower Carbon Concrete Summits across the US.

Provide industry information and technical support to Hines Development as they update their Embodied Carbon Reduction Guide V2.

Lead the creation of a ClimateWorks Lower Carbon Concrete Guide that showcases how to responsibly bring lower carbon concrete into new construction projects.

### Scaling for Industry Change Results:

 Six Lower Carbon Concrete Case Studies were conducted through the ClimateWorks Lower Carbon Concrete Task Force. Five of these case studies, as well as a Lower Carbon Concrete Guide, were finalized and published at a website created for the public dissemination of this information.

This information can be found at: <u>https://www.lowercarbonconcrete.org</u>

- The White House held its Leadership Summit of the Cement Industry in June 2024, followed by three regional lower carbon concrete summits held in Chicago, Los Angeles, and Boston. DCA participated in the coordination and speaking at each of these events, which also included facilitating a second day tour at one of the ClimateWorks case study project sites (or one of the case study supplier plants) noted above.
- Work progressed on the Hines Embodied Carbon Reduction Guide V2, which will be launched in 2025.



#### Advocacy and Investment Goals:

Ongoing support and advocacy of the Carbon Leadership Forum, Architecture 2030, SE2050, ASCE, AISC, NRMCA, and ACI - through membership, conference and grant support, and/or direct financial contributions.

Ongoing support of environmental policy and legislative groups including the League of Conservation Voters, Washington Conservation Action, Climate Solutions, Idaho Conservation League, and Eco-Trust - through direct engagement and/or financial contributions.

Ongoing non-profit board engagements:

- Building Transparency Board of Directors
- International Living Futures Institute Technical Advisory Committee
- American Institute of Steel Construction Sustainability Committee
- American Concrete Institute Sustainability Committee
- Climate Smart Wood Group Leadership Council
- Design Futures Council Advisor

#### Advocacy and Investment Results:

- DCA has remained active and supportive to each of the noted organizations. This includes active participation within the AISC Steel Sustainability Committee, ACI 323 Lower Carbon Concrete Code Committee, ACI 301 Sustainability Committee, and the Climate Smart Wood Group Steering Committee.
- DCA is also part of the Washington State Buy Clean Buy Fair Working Group, as well in 2024 provided supporting information to Buy Clean efforts for the State of New York, and the State of California, and the State of Colorado.
- PEER Founding Member support (Embodied carbon effort lead by Columbia University, ULI, and RMI).



#### 2025 ECAP Commitments:

#### **Education Goals:**

Continue with national and international presentations that advance industry understanding of embodied carbon, and how to effectively bring it into decision making processes for the creation of the built environment. Focus less in 2025 on "why" we need to act now, and more on "how" we can responsibly, and cost effectively move lower carbon solutions forward.

- Provide a minimum of eight presentations at national or international conferences.
- Give a minimum of four guest lectures at universities of colleges.

#### Measuring and Reporting Goal:

Advance use of the Hubbard's Corner WBLCA data set to include:

- Measure operational carbon after one year of full operation (Oct. 2024 to Sept. 2025).
- Comparative evaluation of three different carbon modeling tools: OneClick, TallyLCA, C-Scale, EC3. Report these findings.

### Scaling for Industry Change Goal:

Drive leadership of the Building Transparency (BT) non-profit, supporting its stabilization, growth, and advancement.

Help bring forward progress to each of the BT programs of EC3, TallyLCA, and ODCi.

Hines Embodied Carbon Reduction Guide

- Support completion of and the launching of the Hines Embodied Carbon Reduction Guide 2.0.
- Support the creation of educational content to go with the guide's roll-out.

#### Advocacy and Investment Goal:

Ongoing advocacy of the Carbon Leadership Forum, Architecture 2030, SE2050, ASCE, AISC, NRMCA, and ACI - through membership, conference and grant support, and/or direct financial support.

Ongoing support of environmental policy and legislative groups including the League of Conservation Voters, Washington Conservation Action, Climate Solutions, Idaho Conservation League, and Carbon Leadership Forum through direct engagement and/or financial contributions.