



**Towards Zero Carbon: Developing a Roadmap for the Structural
Engineering Profession and the Structural Engineering Institute, ASCE**

Northeastern University, Boston, Massachusetts

July 22-24, 2024

Monday, July 22, 2024

5:30 p.m. **Opening Reception**
17th Floor, East Village

Tuesday, July 23, 2024

7:30 a.m. **Morning Networking and Breakfast**
Interdisciplinary Science and Engineering Complex (ISEC), Lobby

8:30 **Opening Remarks**
Interdisciplinary Science and Engineering Complex, Room 102 ISEC Auditorium

Jerome F. Hajjar
*CDM Smith Professor, University Distinguished Professor, and Department Chair,
Department of Civil and Environmental Engineering, Northeastern University, and
President, Structural Engineering Institute*

Jennifer Goupil
Managing Director, Structural Engineering Institute

8:45 **The Honorable Brendan Owens**
*Assistant Secretary of Defense for Energy, Installations, and Environment Chief
Sustainability Officer, Department of Defense*

9:10 **Jude Abel**
Senior Manager, Sustainability and Innovation, Deloitte LLP

9:30 **Lance Davis**

Sustainability Architect and P100 Program Manager, Office of Architecture and Engineering, Public Buildings Service, General Services Administration

9:50

Torey Brooks

Embodied Carbon Expert, U.S. Environmental Protection Agency

10:10

Matthew Eckelman

Associate Professor, Department of Civil and Environmental Engineering, Northeastern University

10:30

Break and PHOTO

11:00

Kena David

Director of Sustainability, Consigli

11:20

Panel Discussion

Moderator: **Benjamin W. Schafer**, *Willard and Lillian Hackerman Professor of Civil and Systems Engineering, Department of Civil and Systems Engineering, Johns Hopkins University*

Brandon Williams

Product Success Manager, Sublime Systems

Max Puchtel

Director of Sustainability and Governmental Relations, American Institute of Steel Construction

Jennifer Shakun

Bioeconomy Initiative Director, New England Forestry Foundation

12:30

Lunch

1:30

Breakout Sessions

Interdisciplinary Science and Engineering Complex, Room 102 ISEC Auditorium

Jerome F. Hajjar: Charge the Breakouts

CDM Smith Professor, University Distinguished Professor, and Department Chair, Department of Civil and Environmental Engineering, Northeastern University, and President, Structural Engineering Institute

1:45

Breakout Sessions

Interdisciplinary Science and Engineering Complex and EXP

A. Resource Extraction, Materials Processing, Fabrication - Room 136 ISEC

Moderator: Benjamin W. Schafer, *Willard and Lillian Hackerman Professor of Civil and Systems Engineering, Department of Civil and Systems Engineering, Johns Hopkins University*

Recorder: Emily Lorenz, *Principal Engineer, Independent Consultant*

B. Architectural and Engineering Design - Room 102 ISEC Auditorium

Moderator: Michael Gryniuk, *Founder and Principal, Cora Structural*

Recorder: Suzanne Robinson, *Associate Principal, LeMessurier Associates*

C. Life Cycle Assessment, Databases, and Software - Room 138 ISEC

Moderator: Matthew Eckelman, *Associate Professor, Department of Civil and Environmental Engineering, Northeastern University*

Recorder: Demi Fang, *Assistant Professor, School of Architecture, Northeastern University*

D. Construction and Deconstruction - Room 140 ISEC

Moderator: Mark Webster, *Senior Consulting Engineering, Simpson Gumpertz & Heger, Inc.*

Recorder: Erika Winters-Downey, *Associate Principal and Director – Sustainable Structures, Lamar Johnson Collaborative*

E. Policy, Advocacy, and the Public - Room 142 ISEC

Moderator: Elaina Sutley, *Associate Dean for Diversity, Equity, Inclusion and Belonging, School of Engineering, and Associate Professor, Department of Civil, Environmental, and Architectural Engineering, University of Kansas*

Recorder: Luke Lombardi, *Senior Sustainability Consultant, Buro Happold*

F. Education - Room 610A EXP

Moderator: Jay Arehart, *Assistant Teaching Professor, Department of Civil, Environmental, and Architectural Engineering, University of Colorado*

Recorder: **Andrew Myers**, *Professor and Associate Chair for Graduate studies, Department of Civil and Environmental Engineering, Northeastern University*

Breakout Session Questions:

1. What are key initiatives required to drive us towards zero carbon in structural engineering: research, practice, education?
2. How are professional organizations such as SEI best able to advance towards zero carbon in structural engineering?

3:15 **Break**

3:45 **Breakout Session Reports**

Interdisciplinary Science and Engineering Complex, Room 102 ISEC Auditorium

4:15 **Discussion**

5:00 **Adjourn**

Reception and Banquet

6:00 **Reception**

17th Floor, East Village

7:00 **Banquet**

17th Floor, East Village

Wednesday, July 24, 2024

7:30 a.m. **Morning Networking and Breakfast**

Interdisciplinary Science and Engineering Complex (ISEC), Lobby

8:00 **Breakout Sessions**

Interdisciplinary Science and Engineering Complex, Room 102 ISEC Auditorium

Jerome F. Hajjar: Charge the Breakouts

CDM Smith Professor, University Distinguished Professor, and Department Chair, Department of Civil and Environmental Engineering, Northeastern University, and President, Structural Engineering Institute

- 8:15 **Breakout Sessions: Prioritizing Session**
Interdisciplinary Science and Engineering Complex and EXP
1. What are key initiatives required to drive us towards zero carbon in structural engineering: research, practice, education?
 2. How are professional organizations such as SEI best able to advance towards zero carbon in structural engineering?
- A. **Resource Extraction, Materials Processing, Fabrication** - Room 136 ISEC
 - B. **Architectural and Engineering Design** - Room 102 ISEC Auditorium
 - C. **Life Cycle Assessment, Databases, and Software** - Room 138 ISEC
 - D. **Construction and Deconstruction** - Room 140 ISEC
 - E. **Policy, Advocacy, and the Public** - Room 142 ISEC
 - F. **Education** - Room 610A EXP
- 9:15 **Break**
- 9:45 **Breakout Session Reports**
Interdisciplinary Science and Engineering Complex, Room 102 ISEC Auditorium
- 10:15 **Prioritization (Voting!)**
- 10:30 **Break**
- 10:45 **Moderated Discussion with Breakout Session Moderators and Recorders**
- 11:45 **Closing Remarks**
- Jennifer Goupil**
Managing Director, Structural Engineering Institute
- Jerome F. Hajjar**
*CDM Smith Professor, University Distinguished Professor, and Department Chair,
Department of Civil and Environmental Engineering, Northeastern University, and
President, Structural Engineering Institute*
- 12:00 **Adjourn**