



Demystifying Net Zero Program Agenda

Thursday, May 27th, 2021
9:00 AM – 3:30 PM

Presented by The Massachusetts School Building Authority

Welcome to the MSBA's Demystifying Net Zero. The Program will be divided into four chapters:

- Technology to Achieve Net Zero
- Paying for Net Zero
- Operating Net Zero
- Assembling the Right Team

The program will run from 9 AM to 3:30 PM followed by an optional 30-minute question-and-answer session. There will be one ten-minute break in the morning and one in the afternoon, with a half-hour break for lunch at midday.

The agenda is as follows:

Welcome and Introduction

Jim MacDonald, *Chief Executive Officer, MSBA*
Barbara Hansberry, *Director of Strategic Planning, MSBA*
Matthew Connolly, *Director of Project Controls, MSBA, Moderator*

Chapter One – Technology to Achieve Net Zero

Defining Net Zero and Energy Use Intensity

Kate Bubriski, *Director of Sustainability Performance, Arrowstreet*
Jana G. Silsby, *Principal, DLR Group*

Demystifying Net Zero – How Technology is Progressing

Julia Nugent, *Principal, HMFH Architects*

Technology Basics

Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
Wayne E. Mattson, *President, Griffith & Vary Inc. Consulting Engineers*

Defining Environmental Justice

Kai Palmer Dunning, *Buildings & Community Solutions Associate, NEEP*

Building Architecture as New Technology

Dan Arons, *Principal, Perkins Eastman*
James Jordan, *Partner, Ai3 Architects*
Pip Lewis, *Principal, HMFH Architects*
Julie Rahilly, *Associate, Ai3 Architects*
Jana G. Silsby, *Principal, DLR Group*

Closer Look at Solar

Dan Arons, *Principal, Perkins Eastman*
Kate Bubriski, *Director of Sustainability Performance, Arrowstreet*
Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
James Jordan, *Partner, Ai3 Architects*
Pip Lewis, *Principal, HMFH Architects*
Julia Nugent, *Principal, HMFH Architects*
Julie Rahilly, *Associate, Ai3 Architects*
Jana G. Silsby, *Principal, DLR Group*
Larry Spang, *Principal, Arrowstreet*

Closer Look at Heat Pumps; Ground Source and VRF

Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
Wayne E. Mattson, *President, Griffith & Vary Inc. Consulting Engineers*

Air Source vs Ground Source

Dan Arons, *Principal, Perkins Eastman*
Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
James Jordan, *Partner, Ai3 Architects*
Wayne E. Mattson, *President, Griffith & Vary Inc. Consulting Engineers*
Julia Nugent, *Principal, HMFH Architects*
Michael Quinlan, *Senior Project Manager, Compass Project Management*
Chair of Medfield School Building Committee
Julie Rahilly, *Associate, Ai3 Architects*
Kris Weeks, *Net Zero Projects Manager, Cambridge Public Schools*

Batteries and Back-up Generators

Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
Julia Nugent, *Principal, HMFH Architects*

Specifications and Requests for Services

John Balfe, *Manager of Buildings & Community Solutions, NEEP*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
Kris Weeks, *Net Zero Projects Manager, Cambridge Public Schools*

Concluding Thoughts on Chapter 1

JD Head, *Director of School Operations, Acton Boxborough Regional School District*

Chapter Two – Paying for Net Zero

Paying Over Time

Kate Bubriski, *Director of Sustainability Performance, Arrowstreet*
Carolyn Day, *Senior Associate, Perkins Eastman*
Julia Nugent, *Principal, HMFH Architects*
Wayne E. Mattson, *President, Griffith & Vary Inc. Consulting Engineers*
Michael Quinlan, *Senior Project Manager, Compass Project Management, Chair of*
Medfield School Building Committee
Julie Rahilly, *Associate, Ai3 Architects*
Jana G. Silsby, *Principal, DLR Group*
Larry Spang, *Principal, Arrowstreet*

Capital Costs, Construction Costs, and Maintenance Costs

Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
Wayne E. Mattson, *President, Griffith & Vary Inc. Consulting Engineers*

Power Purchase Agreement or Own

Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
James Jordan, *Partner, Ai3 Architects*
Pip Lewis, *Principal, HMFH Architects*
Julia Nugent, *Principal, HMFH Architects*
Michael Quinlan, *Senior Project Manager, Compass Project Management, Chair of
Medfield School Building Committee*
Julie Rahilly, *Associate, Ai3 Architects*
Larry Spang, *Principal, Arrowstreet*
Kris Weeks, *Net Zero Projects Manager, Cambridge Public Schools*

Incentives, Grants, and Working with Utilities

Kim Cullinane, *Senior Energy Efficiency Consultant, Eversource Energy*
Denise Rouleau, *Lead Program Manager, Commercial New Construction, National
Grid*

Value Engineering

Carolyn Day, *Senior Associate, Perkins Eastman*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
Pip Lewis, *Principal, HMFH Architects*
Julia Nugent, *Principal, HMFH Architects*

Engagement of Students and Community

Kate Bubriski, *Director of Sustainability Performance, Arrowstreet*
Kai Palmer Dunning, *Buildings & Community Solutions Associate, NEEP*
James Jordan, *Partner, Ai3 Architects*
Pip Lewis, *Principal, HMFH Architects*
Michael Quinlan, *Senior Project Manager, Compass Project Management, Chair of
Medfield School Building Committee*
Julie Rahilly, *Associate, Ai3 Architects*
Larry Spang, *Principal, Arrowstreet*

Concluding Thoughts on Chapter 2

Kate Bubriski, *Director of Sustainability Performance, Arrowstreet*
Pip Lewis, *Principal, HMFH Architects*

Chapter 3 – Operating Net Zero

Maintain in District or Use Vendors

Carlos DeSousa, *Principal, Garcia, Galuska & DeSousa, Inc. Consulting Engineers*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
Wayne E. Mattson, *President, Griffith & Vary Inc. Consulting Engineers*
Kris Weeks, *Net Zero Projects Manager, Cambridge Public Schools*

Solar Ready

Julia Nugent, *Principal, HMFH Architects*

Chapter 4 – Assembling the Right Team

How the World is Changing

Larry Spang, *Principal, Arrowstreet*
Carolyn Day, *Senior Associate, Perkins Eastman*

Engaging Occupants and Staff

Paul Anastasi, *Manager, Maintenance and Custodial Consulting, Watertown School Building Committee*
John Balfe, *Manager of Buildings & Community Solutions, NEEP*
Kate Bubriski, *Director of Sustainability Performance, Arrowstreet*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
Julia Nugent, *Principal, HMFH Architects*
Michael Quinlan, *Senior Project Manager, Compass Project Management, Chair of Medfield School Building Committee*
Julie Rahilly, *Associate, Ai3 Architects*

Communities are Unique – How They Arrive at Net Zero

Paul Anastasi, *Manager, Maintenance and Custodial Consulting, Watertown School Building Committee*
Dan Arons, *Principal, Perkins Eastman*
John Balfe, *Manager of Buildings & Community Solutions, NEEP*
Kate Bubriski, *Director of Sustainability Performance, Arrowstreet*
Kai Palmer Dunning, *Buildings & Community Solutions, NEEP*
JD Head, *Director of School Operations, Acton Boxborough Regional School District*
James Jordan, *Partner, Ai3 Architects*
Pip Lewis, *Principal, HMFH Architects*
Sindu Meier, *Senior Associate, William Rawn Associates*
Julia Nugent, *Principal, HMFH Architects*
Michael Quinlan, *Senior Project Manager, Compass Project Management, Chair of Medfield School Building Committee*
Julie Rahilly, *Associate, Ai3 Architects*
Denise Rouleau, *Lead Program Manager, Commercial New Construction, National Grid*
Jana Silsby *Principal, DLR Group*
Larry Spang, *Principal, Arrowstreet*
Kris Weeks, *Net Zero Projects Manager, Cambridge Public Schools*

Concluding Thoughts on Chapter Four

Kris Weeks, *Net Zero Projects Manager, Cambridge Public Schools*
Julie Rahilly, *Associate, Ai3 Architects*

Closing Remarks

Jack McCarthy, *Deputy Chief Executive Officer/Executive Director, MSBA*

Q&A Discussion (Optional)