

**MINUTES**  
**MASSACHUSETTS CLEAN ENERGY TECHNOLOGY CENTER**  
**BOARD OF DIRECTORS MEETING**

**November 15, 2022**

**Attendees:**

**Directors:** Secretary Bethany Card (EEA), Chair  
Patrick Woodcock (Commissioner, DOER)  
Tom Galvin (Director, RES Hydro)  
Dr. John Cook (President, Springfield Technical Community College)  
Bob Haber (Principal, Proficio Capital Partners)  
Mark Fuller (Designee of Secretary Michael Kennealy, HED)  
Kaitlyn Connors (Designee of Secretary Michael Heffernan, ANF)  
Terry Moran (Executive Director, Massachusetts Workforce Alliance)  
Michael Rybicki (Designee of Secretary Rosalin Acosta, LWD)

**Staff:** Jennifer Daloisio (CEO)  
John Hitt, Esq. (General Counsel and Secretary)  
Rachel Perez (CFO and Treasurer)  
Alexandra Zaltman (Chief of Staff)  
Galen Nelson  
Connor Crowley, Esq.  
Michelle Beadle  
Rachel Ackerman  
Erica Hines  
Ariel Horowitz  
Jeremy Belknap  
Edward Hsieh  
Jordan Meier  
Susan Mlodozeniec  
Jennifer Robinson  
Daniel Heinrichs  
Rees Sweeney-Taylor  
Amy Barad  
Rhys Webb  
Teresa Faulisi  
Veronica Tait  
Jessica Hiltz  
Orly Strobel  
Ngoc Tran  
Jennifer Applebaum  
Elizabeth Cleveland  
Kathryn Niforos  
Megan Lieu

Nils Bolgen  
Meg Howard  
Corrin Moss  
Peter McPhee  
Hilary Flynn  
Heather Roe  
Camilla Bacolod  
Elizabeth Youngblood  
Thomas Chase  
Tim Griffin  
Jade Lu  
Alyssa Urella  
Mary Reddy  
Anastasia Miner  
Madison Zelif  
Maeve Singer  
Ian Campbell  
Kelsey Read  
Michael Pasqua  
Emily Pittsley

**Other Attendees:** Undersecretary of Energy and Climate Solutions Judy Chang (EEA)  
Daniel Gatti (Director of Clean Transportation Policy, EEA)

The one hundred-seventh (107<sup>th</sup>) meeting of the Massachusetts Clean Energy Technology Center (“MassCEC”) Board of Directors (the “Board”) was held at 10:00 am on November 15, 2022 jointly at MassCEC’s office at 294 Washington Street, Boston, MA 02108 and via remote video conference. All participants could hear and be heard by each other throughout the meeting.

Secretary Card observed the presence of a quorum of the Board and called the meeting to order at 10:16 am.

**I. Approval of Meeting Minutes from the October 27, 2022 Meeting of the Board of Directors**

As the first order of business, the Board reviewed the draft minutes. Upon a motion made by Mr. Galvin and seconded by Dr. Cook, the following roll call vote was taken at 10:17 am:

Secretary Card: Yea  
Dr. Cook: Yea  
Mr. Galvin: Yea  
Commissioner Woodcock: Yea  
Ms. Connors: Yea  
Mr. Fuller: Yea  
Mr. Moran: Yea  
Mr. Rybicki: Yea

Mr. Haber: Yea

With 9 yeas and 0 nays it was unanimously VOTED, without further discussion or abstention, at 10:18 am:

**To adopt the October 27, 2022, Board Meeting Minutes, in the form provided to the Board.**

**II. Update from Chair Secretary Bethany Card and CEO Jennifer Daloisio**

Secretary Card provided the Board with several updates, including information regarding the \$3.76 billion economic development bill recently signed by Governor Baker, including a breakdown of the energy related initiatives within that bill and the funds allocated to each. In particular, Secretary Card noted \$100 million allocated for port infrastructure, indicating this would give additional funds for offshore wind port investments.

Ms. Daloisio provided the Board with an update regarding some recent success of companies in MassCEC's investment portfolio, namely Ascend Elements, Inc. (f/k/a Battery Resourcers Inc.) and Solstice Power Technologies, Inc. In both cases, Ms. Daloisio noted that MassCEC assisted these companies at critical junctures during the early stages of the COVID-19 pandemic as part of MassCEC's BRIDGES Program. Ms. Daloisio reiterated for the Board that Ascend recently received a \$480 million grant from the U.S. Department of Energy to build a battery recycling plant in Kentucky, as well as raising a \$200 million Series C equity round. In the case of Solstice, Ms. Daloisio explained the Company was acquired by MyPower Corp, a US subsidiary of Japanese conglomerate Mitsui & Co, and as part of this acquisition MassCEC would be receiving up to a 1.8X return on investment.

**III. Corporate: Signature Authority Approval for Controller**

Ms. Daloisio then explained to the Board that historically the Board has approved signature authority for MassCEC's controller position for in the amount of \$10,000 and under for credit card authorizations and signing checks and payments. Ms. Daloisio noted that MassCEC had recently hired Jennifer Robinson as the organization's Controller, and so was seeking for the Board to provide Ms. Robinson with signature authorization consistent with the authority granted to previous employees in her position.

Upon a motion made by Dr. Cook and seconded by Mr. Galvin, the following roll call vote was taken at 10:25 am:

Secretary Card: Yea  
Dr. Cook: Yea  
Mr. Galvin: Yea  
Commissioner Woodcock: Yea  
Ms. Connors: Yea  
Mr. Fuller: Yea  
Mr. Moran: Yea

Mr. Rybicki: Yea  
Mr. Haber: Yea

With 9 yeas and 0 nays it was unanimously VOTED, without further discussion or abstention, at 10:26 am:

**To approve the delegation of the Executive Director's signatory authority for MassCEC to Jennifer Robinson, Controller, for purposes of signing checks and authorizing credit card payments in an amount of \$10,000 and under.**

#### **IV. Clean Transportation: Program Strategy and Program Authorization**

Secretary Card then invited Rachel Ackerman, MassCEC's Program Director for Clean Transportation, to present on program strategy and to request an authorization for MassCEC's Clean Transportation Program.

Building off her presentation from the September 2022 meeting of the Board, Ms. Ackerman reminded members of the Board that transportation represents the largest emitting sector of GHG emissions in the Commonwealth, as well as the strong correlation between air pollution and environmental justice (EJ) and low-and-moderate income (LMI) areas. Ms. Ackerman also presented the Board an overview of the Clean Transportation team's strategic planning process, as well as the major barriers staff see to electrification of the transportation sector (namely, regulations, lack of access to support, technological issues, and adoption). Ms. Ackerman explained that staff consider various strategies for addressing these barriers.

Ms. Ackerman indicated that staff incorporated the Commonwealth's overall plan regarding transportation into MassCEC's planning, particularly drawing from the 2030 Clean Energy Climate Plan (CECP). Ms. Ackerman highlighted the major transportation focuses from the 2030 CECP, noting which focuses overlap with MassCEC's activities versus ones that will be implemented solely by the Department of Energy Resources (DOER) or the Department of Environmental Protection (DEP). Ms. Ackerman then noted the some of the major quantitative goals for the transportation sector set forth in the 2030 CECP versus the current status in 2022, in particular identifying that the Commonwealth is seeking to have approximately 900,000 passenger electric vehicles (EVs) on the road in 2030, versus the 48,965 currently on the road today. A brief discussion ensued between Ms. Ackerman and members of the Board regarding available inventory of EVs, the purchasing habits of commercial entities, partnerships/training with dealerships for the sale of EV, and the proportion of Tesla vehicles in the current EV count.

Ms. Ackerman proceeded to note some of the recent state efforts to support the 2030 CECP's transportation strategies, and provided an overview of FY23 funding priority program areas across EEA agencies based on a shared understanding of priorities and program areas for each to approach. Ms. Ackerman explained that DOER will continue with vehicle rebates through MOR-EV and MOR-EV Truck, DEP would be focused on charging station rebates and implementing California's Vehicle Emission Standard for 2025, and MassCEC would continue

existing programs (ACT School Bus and ACT4All) while also focusing on adoption of E-bikes, promoting use of EVs in the vehicles-for-hire industry, and providing consumer support during EV purchase(s). Ms. Ackerman then highlighted how MassCEC's plans aligned with the transportation focus areas of the 2030 CECP.

Ms. Ackerman then presented staff's request for the authorization to expend \$27,716,666 allocated towards the programming focuses of the Clean Transportation Program, \$23,716,666 of which are funds to be provided by DEP in coordination with EEA, in combination with the \$4,000,000 authorization originally requested by staff for the Clean Transportation Program in September 2022. Ms. Ackerman provided approximate dollar value allocations for this total, as well as the FY23 Clean Transportation Program budget.

Members of the Board proceeded to ask a series of questions, each of which was answered in the ensuing discussion.

[Ms. Connors departed the meeting at 11:00 am.]

Upon a motion made by Commissioner Woodcock and seconded by Dr. Cook, the following roll call vote was taken at 11:07 am:

Secretary Card: Yea  
Dr. Cook: Yea  
Mr. Galvin: Yea  
Commissioner Woodcock: Yea  
Mr. Fuller: Yea  
Mr. Moran: Yea  
Mr. Rybicki: Yea  
Mr. Haber: Yea

With 8 yeas and 0 nays it was unanimously VOTED, without further discussion or abstention, at 11:08 am:

**To authorize the expenditure of up to \$27,716,666 for a total of \$35,716,666 for the Clean Transportation Program, and further to authorize MassCEC's Chief Executive Officer (i) to enter into contracts and issue individual awards under the program in a manner consistent with the staff memorandum and (ii) to make program modifications, including modifications to award levels, provided that such modifications are consistent with the program goals set forth in the staff memorandum.**

#### **V. Clean Transportation: Program Update – ACT4All**

Ms. Ackerman provided the Board with an overall FY22 metrics scorecard for the Clean Transportation program and transitioned to a program update regarding ACT4All. Ms. Ackerman explained that ACT4All has funded ten equity-focused clean transportation projects with approximately \$4.86 million in total funds across the topic areas of E-bike incentives, vehicles-for-hire incentives, broadening the EV consumer base, and high-mileage, low-radius

fleets. Ms. Ackerman noted that ACT4All is focused on increasing clean transportation access and decreasing transportation burden in EJ and LMI communities. Ms. Ackerman highlighted planning and capacity building support, community-based partnerships and events, and translation services as the major equity strategies used to bring people into the ACT4All program.

## **VI. Update: Production Tracking System.**

Next, Secretary Card introduced Erica Hines, Senior Program Director for the Production Tracking System (PTS) at MassCEC, to provide the Board with an update regarding the PTS. Ms. Hines began by explaining that the PTS supports programs and initiatives developed and implemented by DOER, with MassCEC operating the PTS, a central database for tracking renewable energy systems and technology in the Commonwealth, pursuant to a memorandum of understanding between MassCEC and DOER. Ms. Hines noted the PTS is funded by DOER, with the goal of driving adoption and use of affordable clean energy systems in the Commonwealth.

Ms. Hines explained the PTS is responsible for tracking data that is converted into renewable energy certificates (RECs), and that 1-megawatt hour of production generates 1 REC, which has independent monetary value. Ms. Hines noted that energy suppliers in Massachusetts meet annual obligations by acquiring qualified RECs created and traded in a marketplace. Ms. Hines noted the various stakeholders involved in the process, including DOER, system owners, MassCEC, and NEPOOL, and their various roles relative to the PTS system. Ms. Hines explained that MassCEC's role overall is to collect renewable energy system installation and production data, independently verify this data for reasonableness to provide assurance to the REC marketplace, and provide customer support (noting her team manages over 40,000 users and actively works with approximately 16,000). Ms. Hines identified the various forms of systems involved in the PTS and RECs generated from PTS data, as well as noting the overall volume of systems reporting to the PTS.

Ms. Hines noted that the financial impact of the PTS was approximately \$675,805,830 to date based on the top three consumer revenue programs managed by the PTS (SREC I, SREC II, and Clean Peak Standard (CPS)). Ms. Hines explained that her team undertook significant projects in 2022 and this work will continue ahead in 2023, highlighting PTS system enhancements such as an automated change request tool and automated meter swap tool, as well as updating the CPS REC calculation code.

Ms. Hines proceeded to provide the Board with a detailed overview of the CPS Program, noting that Massachusetts was the first in the nation to approve and implement a clean peak standard as a market mechanism designed to reduce emissions and cost by: (i) shifting clean energy to peak demand times; and (ii) reducing demand at peak times. Ms. Hines noted that multipliers in the CPS are used to align the generation of CPECs (RECs associated with the CPS) with time periods and resource attributes of the highest impact.

Commissioner Woodcock offered the Board information regarding demand related regulations and incentive programming in the Commonwealth and across the US. Ms. Daloisio

stressed the complicated nature of the PTS team’s work, particularly in recent years with preparing the PTS for CPS in a secure manner.

## **VII. Update: Federal Funding Opportunity Regional Hydrogen Hub**

Secretary Card then introduced Galen Nelson, MassCEC’s Chief Program Officer, to present on two federal funding opportunities, beginning with the Hydrogen “Hub”. Mr. Nelson explained that hydrogen gas is an energy carrier and can be produced through a variety of methods, with the Commonwealth being interested in green hydrogen (hydrogen generated through electrolysis leveraging renewable energy) or pink hydrogen (hydrogen generated through electrolysis leveraging nuclear energy). Mr. Nelson explained that clean hydrogen production and targeted uses (including hard to electrify end uses such as heavy-duty vehicles, marine and rail vessels, and industrial processes) are consistent with the Commonwealth’s Decarbonization Pathways report and can complement the focus on electrification of many end-uses.

Mr. Nelson explained that the US Department of Energy released an \$8 billion funding opportunity with the goal of seeding hydrogen markets around the country and reducing the cost of hydrogen. Mr. Nelson noted that the DOE intends to seed 4-6 regional hydrogen hubs around the country and that Massachusetts (through MassCEC and DOER) is part of a northeast multi-state consortium led by NYSERDA and including over 90 public and private sector partners. Mr. Nelson noted that this region’s proposal to DOE will emphasize clean hydrogen based on planned near and medium-term clean energy assets and uses aligned with the Commonwealth’s decarbonization objectives. Mr. Nelson concluded by noting there has been widespread acknowledgement that hydrogen will play a role in the clean energy future and that being part of a successful application in a likely once in a lifetime federal opportunity would be immensely useful.

[Mr. Haber departed the meeting at 11:55 am.]

## **VIII. Update: Federal Opportunity Climate Finance**

Mr. Nelson then shifted to a discussion of a federal funding opportunity related to climate finance. Mr. Nelson noted that the 2030 CECP and Commission on Clean Heat have recommended the Commonwealth set up financial support mechanisms to address climate financing gaps, particularly in the buildings sector. Mr. Nelson explained the Federal Inflation Reduction Act (IRA) established a \$27 billion Greenhouse Gas Reduction Fund at the Environmental Protection Agency to be competitively disbursed with a climate finance focus in 2023. Mr. Nelson stated that MassCEC intends to compete for this funding and has been working with the City of Boston and MassDevelopment in support of these efforts.

Mr. Nelson proceeded to provide a description of what “green banks” also referred to as “climate finance accelerators” are and the sort of activities they generally engage in. Mr. Nelson described the work MassCEC has engaged in thus far on this topic, including a series of stakeholder discussions, conducting a market assessment and developing a climate finance accelerator business plan (including looking at priority market segments, financial products and

services options, and structure options for a “green bank” entity). Mr. Nelson noted that MassCEC has engaged in ongoing discussions and coordination with MassDevelopment, given its finance and retail lending experience, and that MassCEC had partnered with the Green Ribbon Commission and the City of Boston leveraging a grant from Bank of America for its work on the market assessment and business plan.

Ms. Daloisio noted that the EPA has a request for information available with a response deadline in early December, and that MassCEC would continue to coordinate with partners on a response. Ms. Daloisio also noted that staff expects EPA to release its full solicitation in early 2023.

[Mr. Fuller departed the meeting at 12:00 pm.]

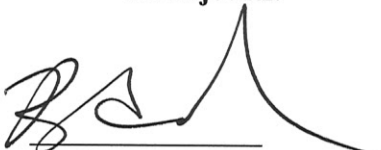
**IX. Adjourn**

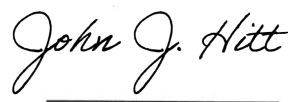
Upon a motion made by Dr. Cook and seconded by Mr. Galvin, the following roll call vote was taken at 12:06 pm:

Secretary Card: Yea  
Dr. Cook: Yea  
Mr. Galvin: Yea  
Commissioner Woodcock: Yea  
Mr. Moran: Yea  
Mr. Rybicki: Yea

With 6 yeas and 0 nays it was unanimously VOTED, without discussion and abstention, at 12:06 pm:

**To adjourn.**

  
Chairman

  
Secretary

**Public Meeting Documents and Exhibits:**

Meeting Agenda  
Clean Transportation Strategy and Program Authorization PowerPoint  
Clean Transportation ACT4All Update PowerPoint  
PTS Update PowerPoint  
Federal Funding Opportunity Regional Hydrogen Hub PowerPoint  
Federal Funding Opportunity Climate Finance PowerPoint