

OFFICE OF PERFORMANCE MANAGEMENT AND OVERSIGHT

REPORTING AGENCY OVERVIEW

Reporting Agency Overview

Provide Information below for the Agency for Fiscal Year 2019

Reporting Agency Name

Massachusetts Clean Energy Center

General Description

The Massachusetts Clean Energy Center (MassCEC) is dedicated to accelerating the success of clean energy technologies, companies and projects across the Commonwealth, while creating high quality jobs and long-term economic growth for the people of Massachusetts.

Agency Mission

The Massachusetts Clean Energy Center's mission is to grow the state's clean energy economy while helping to meet the Commonwealth's clean energy, climate and economic development goals.

Agency Budget funded by the Commonwealth of Massachusetts

None

Agency Total Budget (*including Commonwealth of Massachusetts funding*)

\$46.6 million

Does the Agency have additional mandatory reporting requirements? - select Yes or No

Yes

If Agency has additional mandatory reporting requirements - provide Details.

The Massachusetts Clean Energy Center is governed by a board of directors consisting of 12 directors (7 ex officio and 5 appointed by the Governor). The Board has also established three subcommittees (compensation committee, audit committee, and investments committee). The Massachusetts Clean Energy Center reports to and holds meetings with the full board and the committees at least 15 times per year. Furthermore, pursuant to the Massachusetts Clean Energy Center's enabling legislation the center shall annually submit a report setting forth, relative to its operations, its receipts and expenditures during such fiscal year and its assets and liabilities during the fiscal year to the governor, the secretary of administration and finance, the comptroller and the clerks of the house of representatives and senate, who shall forward the same to the house and senate committees on ways and means, the joint committee on economic development and emerging technologies, the joint committee on telecommunications, utilities and energy and the joint committee on environment, natural resources and agriculture annually on or before August 15.

The center shall annually, not later than August 15, submit to the governor, the joint committee on telecommunications, utilities and energy, the joint committee on economic development and emerging technologies and the senate and house committees on ways and means a report detailing the expenditure and investment of monies from the fund and the trust fund over the previous fiscal year, the ability of the fund to meet the requirements in section 35FF of chapter 10 and the ability of the trust fund to meet the requirements in section 9, and any recommendations for improving the ability of the board, the center and the fund and trust fund to meet such requirements.

The center shall annually, no later than August 15, submit to the governor, the joint committee on telecommunications, utilities and energy, the joint committee on economic development and emerging technologies and the senate and house committees on ways and means a report detailing the commonwealth's clean energy sector. The report shall include, but shall not be limited to, an examination of the growth rate of the commonwealth's clean energy sector, including the number of in-state jobs and businesses.

OFFICE OF PERFORMANCE MANAGEMENT AND OVERSIGHT

REPORTING AGENCY ENABLING LEGISLATION

Reporting Agency Enabling Legislation

Provide details for all Agency Enabling Legislation.

Include: Mass General Law; Session Law (published in the Acts and Resolves); House Bills; Senate Bills (examples: Economic Development Bill)

General Law Citations: The General Laws are laws that are general in nature and are organized by subject. Private companies publish "annotated" editions of the General Laws. Notes are included at the end of each chapter and section of these editions, which include when the law was added and revised.

Acts and Resolves Citations: Acts and Resolves are yearly compilations of laws passed by the Massachusetts General Court, the state's legislature. These laws are arranged chronologically. These session laws provide the exact text of the law passed by the legislature, including what chapters and sections of the General Laws should be changed.

1

Citation for Legislation

MGL Chapter 23J

Link to Legislation

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter23J>

2

Citation for Legislation

MGL Chapter 10 Section 35FF

Link to Legislation

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter10/Section35FF>

3

Citation for Legislation

MGL Chapter 25 Section 20

Link to Legislation

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter25/Section20>

OFFICE OF PERFORMANCE MANAGEMENT AND OVERSIGHT
REPORTING AGENCY'S FISCAL YEAR 2019 GOALS & TARGETS

Reporting Agency Fiscal Year 2019 Goals & Targets

All reporting agencies must provide 5 Agency Goals and Targets for Fiscal Year 2019.

Goal #1

Agency Fiscal Year 2019 Goal # 1

Increase the Deployment of Clean Energy

Metric Fiscal Year 2019 Goal # 1 will be measured by

1) Number of Clean Energy Systems Supported, 2) Capacity (Megawatts) Installed, 3) Funding Leveraged (\$), 4) Number of Private Entities Impacted, 5) Number of Public Entities Impacted

Metric Source

Clean Heating & Cooling Programs (Residential, Low-Moderate Income, Commercial); HeatSmart Mass; SolarizeMass; Commonwealth Organics-to-Energy; Mass Solar Loan Program; Clean Energy Adoption Initiatives, Commonwealth Hydro Program; Commonwealth Wind Program; Offshore Energy Program; Affordable Clean Residential Energy; DeployMass

Target for Fiscal Year 2019 Goal #1

1) Number of Clean Energy Systems Supported (6,670), 2) Capacity Installed (64 megawatts), 3) Funding Leveraged (\$95 million), 4) Number of Private Entities Impacted (939), 5) Number of Public Entities Impacted (91)

Was Fiscal Year 2019 Goal #1 Achieved? (*yes, no, partially*)

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

1) Number of Clean Energy Systems Supported (8,572), 2) Capacity Installed (102 megawatts), 3) Funding Leveraged (\$159 million), 4) Number of Private Entities Impacted (2,350), 5) Number of Public Entities Impacted (84)

Goal #2

Agency Fiscal Year 2019 Goal # 2

Drive Clean Energy Innovation

Metric Fiscal Year 2019 Goal # 2 will be measured by

1) Funding Leveraged (\$), 2) Number of Private Entities Impacted, 3) Number of Public Entities Impacted

Metric Source

Accelerate Mass Program (Accelerators + Graduates); Clean Energy Innovation Network Grants; Community Microgrid Program; Hackathons; International Collaboration; InnovateMass Program; IncubateMass Program; Catalyst Program; AmplifyMass Program; Wastewater Treatment Pilot Program; Clean Transportation Study & Other Activities; Accelerating Commonwealth Energy Storage Program; Moon Island Project; Market Research; Equity Investments; MassVentures (START) Program; Follow-On Investments; Sponsorships and Memberships of Clean Energy Innovation Assets Across the Commonwealth

Target for Fiscal Year 2019 Goal # 2

1) Funding Leveraged (\$21 million), 2) Number of Private Entities Impacted (152), 3) Number of Public Entities Impacted (78)

Was Fiscal Year 2019 Goal # 2 Achieved? (*yes, no, partially*)

Yes

Fiscal Year 2019 Goal # 2

Results - *or* - Details if not achieved

1) Funding Leveraged (\$60 million), 2) Number of Private Entities Impacted (170), 3) Number of Public Entities Impacted (94)

Goal #3

Agency Fiscal Year 2019 Goal # 3

Support the Clean Energy Industry Workforce

Metric Fiscal Year 2019 Goal # 3 will be measured by

1) Number of students supported; 2) Number of companies supported; 3) Number of women and minorities participants; 4) Number of community college participants; 5) Number of elementary schools supported

Metric Source

Learn & Earn Program; Clean Energy Activity Days; Clean Energy Internship Program; Clean Energy Internship Vocational Program

Target for Fiscal Year 2019 Goal # 3

1) Number of students supported (1,700); 2) Number of companies supported (255); 3) Number of women and minorities participants (375); 4) Number of community college participants (42); 5) Number of elementary schools supported (10)

Was Fiscal Year 2019 Goal # 3 Achieved? (*yes, no, partially*)

Partially

Fiscal Year 2019 Goal # 3

Results - *or* - Details if not achieved

1) Number of students supported (1,035); 2) Number of companies supported (245); 3) Number of women and minorities participants (583); 4) Number of community college participants (18); 5) Number of elementary schools supported (2). This goal was only partially achieved due to fewer applications from elementary schools for the Clean Energy Activity Days program. This in turn resulted in fewer overall students supported.

Goal #4

Agency Fiscal Year 2019 Goal # 4

The Massachusetts Clean Energy Center's overall mission is to grow the state's clean energy economy. In the furtherance of that mission, we track, and aim to increase, the number of clean energy jobs and businesses in the state on an annual basis.

Metric Fiscal Year 2019 Goal # 4 will be measured by

Quarterly updates to the Board of Directors on year to date progress on target metrics for FY19; Quarterly updates to the Board of Directors on quarterly budget reforecasts; Independent financial statement audit presented annually to the MassCEC Board of Directors and submitted to the Massachusetts State Legislature; Further development of the Massachusetts Clean Energy Center strategic plan to ensure the Massachusetts Clean Energy Center's program planning, prioritization methodologies and approaches are utilizing ratepayer funds in the most beneficial manner; Continue to maintain public confidence in the use of ratepayer dollars by coordination with the Administration to ensure best practices are followed, including but not limited to, ensuring the public's access to records, developing programs that are responsive to feedback solicited from relevant stakeholders, and making programs accessible to low and moderate income consumers.

Metric Source

These are internal operational initiatives and priorities for Fiscal Year 2019.

Target for Fiscal Year 2019 Goal # 4

To increase the amount of workers and clean energy establishments in Massachusetts from 2018

Was Fiscal Year 2019 Goal # 4 Achieved? (*yes, no, partially*)

Yes

Fiscal Year 2019 Goal # 4

Results - *or* - Details if not achieved

Over 1,500 clean energy jobs were created and 172 establishments were added.

OFFICE OF PERFORMANCE MANAGEMENT AND OVERSIGHT

PROGRAM & INITIATIVE OVERVIEWS, GOALS & TARGETS

Provide program information, goals, and targets for all agency programs and initiatives that connect with economic development and that receive funding from the Commonwealth of Massachusetts.

Program / Initiative Information, Goals, Targets

Program / Initiative

Program Overview

Name

Clean Heating & Cooling (Residential)

Program / Initiative Website Link - if one exists

<http://www.masscec.com/residential/clean-heating-and-cooling>

Description of Program / Initiative

The Massachusetts Clean Energy Center's Clean Heating and Cooling Residential programs offer rebates to support the installation of renewable heating, hot water, and cooling technologies at homes across the Commonwealth. The Program includes a number of sub-programs to increase the adoption of clean heating and cooling technologies including, Air-Source Heat Pumps, Modern Wood Heating, Solar Hot Water and Ground-Source Heat Pumps and a Woodstove Changeout Program. Part of the program is focused on serving low and moderate-income customers as well.

Fiscal Year 2019 Budget

\$9,465,000.00

Total Fiscal Year 2019 Budget expended

\$12,725,262.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support the installation of renewable heating, hot water, and cooling technologies in residential buildings.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Supported; Capacity (Megawatts) Installed; Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Supported (5,630); Capacity Installed (50 megawatts); Number of Private Entities Impacted (487); Number of Public Entities Impacted (3); Leveraged Funds (\$53 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Supported (7,387); Capacity Installed (75 megawatts); Number of Private Entities Impacted (835); Number of Public Entities Impacted (1); Leveraged Funds (\$88.7 million)

Program / Initiative

Program Overview

Name

HeatSmart Mass

Program / Initiative Website Link - if one exists

<http://www.masscec.com/heatsmart-mass>

Description of Program / Initiative

HeatSmart Mass seeks to increase the adoption of small-scale clean heating and cooling technologies (air-source heat pumps, ground-source heat pumps, central biomass heating and solar hot water) in participating communities through a competitive solicitation process that aggregates homeowner buying power to lower installation prices for participants. The Program aims to help 1) drive down the installation cost and 2) increase deployment of residential and small-scale commercial clean heating and cooling installations through a group purchasing model.

Fiscal Year 2019 Budget

\$400,000.00

Total Fiscal Year 2019 Budget expended

\$327,173.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Increase the adoption of small-scale clean heating and cooling technologies (air-source heat pumps, ground-source heat pumps, central biomass heating and solar hot water) in participating communities

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (11); Number of Public Entities Impacted (11)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (11); Number of Public Entities Impacted (6) - We budgeted for the possibility of getting either individual communities or groups of communities participating in the program. There were fewer applicants from groups of communities, which is why our public entities impacted result was a bit lower.

Program / Initiative

Program Overview

Name

SolarizeMass

Program / Initiative Website Link - if one exists

<http://www.masscec.com/government-non-profit/solar>

Description of Program / Initiative

The program is a community-based education, outreach and group buying program that allows residents to band together to save money on solar electric systems.

Fiscal Year 2019 Budget

\$175,000.00

Total Fiscal Year 2019 Budget expended

\$72,708.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Increase the adoption of solar electric systems in participating communities.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Supported; Capacity (Megawatts) Installed; Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Supported (125); Capacity Installed (1 megawatt); Number of Private Entities Impacted (5); Number of Public Entities Impacted (5); Leveraged Funds (\$1.8 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Supported (114); Capacity Installed (1 megawatt); Number of Private Entities Impacted (2); Number of Public Entities Impacted (10); Leveraged Funds (\$2.6 million). This goal was only partially achieved due to challenges in some of the larger communities around solar adoption, which resulted in a lower number of Clean Energy Systems Supported. Additionally, many of the communities chose the same installer, which resulted in fewer Private Entities Impacted.

Program / Initiative

Program Overview

Name

Mass Solar Loan Program

Program / Initiative Website Link - if one exists

<http://www.masssolarloan.com/>

Description of Program / Initiative

Provides incentives to low and moderate income Massachusetts residents in the form of subsidized loans provided through a network of local banks and credit unions to make it easier for those residents to obtain low-interest loans to fund the installation of solar electricity systems for their homes.

Fiscal Year 2019 Budget

\$5,570,000.00

Total Fiscal Year 2019 Budget expended

\$4,826,604.00

Details of additional funding sources

Elements of this program are funded from Alternative Compliance Payment (ACP) funds provided by the Massachusetts Department of Energy Resources. About \$793,000 of the fiscal year budget was from ACP funds.

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Assist residents to obtain low-interest loans to fund the installation of solar electricity systems for their homes.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Supported; Capacity (Megawatts) Installed; Number of Private Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Supported (720); Capacity Installed (6 megawatts); Number of Private Entities Impacted (90); Leveraged Funds (\$19 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Supported (766); Capacity Installed (7 megawatts); Number of Private Entities Impacted (87); Leveraged Funds (\$23.6 million)

Program / Initiative

Program Overview

Name

Clean Energy Adoption Initiatives (formerly Solar Adoption Initiatives)

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

Multiple initiatives targeted at increasing adoption of residential and commercial-scale clean energy systems through the development of information resources, industry trainings and engagement of market sectors.

Fiscal Year 2019 Budget

\$308,000.00

Total Fiscal Year 2019 Budget expended

\$233,000.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Provide trainings and resources to increasing adoption of residential and commercial-scale clean energy systems.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted; Number of Training Hours Offered

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (165); Number of Public Entities Impacted (46); Number of Training Hours Offered (34)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (938); Number of Public Entities Impacted (46); Number of Training Hours Offered (706)

Program / Initiative

Program Overview

Name

Commonwealth Hydro Program

Program / Initiative Website Link - if one exists

<http://www.masscec.com/hydropower>

Description of Program / Initiative

The program seeks to increase the output of the Commonwealth's hydropower assets by providing grants to ecologically-appropriate projects that can be implemented quickly and efficiently. Applicants may request funding in the following activity areas: 1) Upgrade of existing hydropower facilities to increase energy generation, such as turbine replacement or refurbishment; installation or upgrade of automated controls; replacement of wooden flashboards with rubber skirt/inflatable crest gate systems; enhanced fish or eel passage (in conjunction with measures to increase generation); 2) Development of new conduit hydropower facilities; or 3) Feasibility studies for any of the types of projects listed above.

Fiscal Year 2019 Budget

\$755,400.00

Total Fiscal Year 2019 Budget expended

\$838,000.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Increase the output of the Commonwealth's hydropower assets.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Supported; Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Supported (3); Number of Private Entities Impacted (2); Number of Public Entities Impacted (1); Leveraged Funds (\$950,000)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Supported (2); Number of Private Entities Impacted (3); Number of Public Entities Impacted (1); Leveraged Funds (\$1.1M)

Program / Initiative

Program Overview

Name

Clean Heating & Cooling (Commercial)

Program / Initiative Website Link - if one exists

<http://www.masscec.com/business/clean-heating-and-cooling>

Description of Program / Initiative

The Massachusetts Clean Energy Center's Clean Heating and Cooling Commercial Programs offers rebates to support the installation of renewable heating, hot water and cooling technologies at facilities across the Commonwealth. The Program includes a number of sub-programs to increase the adoption of clean heating and cooling technologies including Air-Source Heat Pumps, Modern Wood Heating, Ground-Source Heat Pumps, and Solar Hot Water.

Fiscal Year 2019 Budget

\$1,996,867.00

Total Fiscal Year 2019 Budget expended

\$7,733,679.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support the installation of renewable heating, hot water and cooling technologies at non-residential facilities across the Commonwealth.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Support; Capacity (Megawatts) Installed; Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Support (111); Capacity Installed (5.44 megawatts); Number of Private Entities Impacted (77); Number of Public Entities Impacted (17); Leveraged Funds (\$8.6 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Support (211); Capacity Installed (19 megawatts); Number of Private Entities Impacted (320); Number of Public Entities Impacted (15); Leveraged Funds (\$30 million).

Program / Initiative

Program Overview

Name

Commonwealth Organics-to-Energy Program

Program / Initiative Website Link - if one exists

<http://www.masscec.com/commonwealth-organics-energy>

Description of Program / Initiative

The program advances the deployment of anaerobic digestion and other technologies that produce energy from non-woody biomass. This is accomplished through the provision of grants for construction projects as well as grants for studies and other technical services necessary to develop projects. The program supports not only new digesters with energy production, but the addition or upgrade of biogas-fueled combined heat-and-power systems at pre-existing anaerobic digestion facilities.

Fiscal Year 2019 Budget

\$1,200,000.00

Total Fiscal Year 2019 Budget expended

\$95,623.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Advance the deployment of anaerobic digestion and other technologies that produce energy from non-woody biomass.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Support; Capacity (Megawatts) Installed; Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Support (3); Capacity Installed (1 megawatt); Number of Private Entities Impacted (2); Number of Public Entities Impacted (1); Leveraged Funds (\$1.2 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Support (0); Capacity Installed (0 megawatt); Number of Private Entities Impacted (1); Number of Public Entities Impacted (1); Leveraged Funds (\$23,787). The goal was partially achieved because the project timelines for these technologies can be quite long, so MassCEC did not receive applications for design and construction projects in FY19. This resulted in lower expenditure of the budget and no clean energy systems directly supported.

Program / Initiative

Program Overview

Name

Offshore Energy Program

Program / Initiative Website Link - if one exists

<http://www.masscec.com/offshore-wind>

Description of Program / Initiative

The Massachusetts Clean Energy Center's Offshore Wind strategy centers on accelerating the responsible development of offshore wind projects and increasing the role of Massachusetts companies, institutions, and workers in the offshore wind industry. Toward this goal, the Massachusetts Clean Energy Center is leading an array of initiatives and technical analyses in close collaboration with policy makers, regulators, developers, industry and stakeholders. These initiatives are designed to establish baseline environmental data to support the permitting process, reduce development and deployment risks, advance innovation, and increase jobs and economic activity in the offshore wind sector.

Fiscal Year 2019 Budget

\$1,910,000.00

Total Fiscal Year 2019 Budget expended

\$357,182.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Accelerate the responsible development of offshore wind projects and increase the role of Massachusetts companies, institutions, and workers in the offshore wind industry.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (8); Number of Public Entities Impacted (2); Leveraged Funds (\$750,000)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (9); Number of Public Entities Impacted (0); Leveraged Funds (\$1,500). The goal was only partially achieved because MassCEC was not selected for a Department of Energy award (of which \$1 million was set aside in the program budget). Additionally, there was a delay in releasing the Request for Proposals for fisheries studies, which is now happening in FY20.

Program / Initiative

Program Overview

Name

Affordable Access to Clean and Efficient Energy

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

Programs targeted at alleviating the high cost of energy for low-income populations through competitive grants to organizations serving low income residents.

Fiscal Year 2019 Budget

\$4,100,000.00

Total Fiscal Year 2019 Budget expended

\$5,350,000.00

Details of additional funding sources

Elements of this program are funded from Alternative Compliance Payment (ACP) funds provided by the Massachusetts Department of Energy Resources. The FY19 budget expended includes \$1.1 million of ACP funds.

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Help to alleviate the high cost of energy for low-income populations through clean energy solutions.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Supported; Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Supported (72); Number of Private Entities Impacted (90); Number of Public Entities Impacted (2); Leveraged Funds (\$10 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Supported (87); Number of Private Entities Impacted (142); Number of Public Entities Impacted (2); Leveraged Funds (\$12.4 million)

Program / Initiative

Program Overview

Name

Equity Investments and Follow-on Investments

Program / Initiative Website Link - if one exists

<http://www.masscec.com/innovate-clean-energy/investments-program>

Description of Program / Initiative

Supports early stage and growth companies in development and commercialization stages via convertible debt and equity investments to help Massachusetts-based cleantech companies grow, reach key milestones, and create jobs. Provides follow-on investments in existing portfolio companies through transition to later funding stages on way to commercialization.

Fiscal Year 2019 Budget

\$2,755,000.00

Total Fiscal Year 2019 Budget expended

\$973,283.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support early stage and growth clean tech companies in development and commercialization stages.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Leveraged Funds (\$); Total Invested (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (9); Leveraged Funds (\$4 million); Total Invested (\$2.7 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (8); Leveraged Funds (\$16.5 million); Total Invested (\$973,283). The program was under budget due to fewer initial equity investments and some follow-on investments that were delayed and will likely occur in FY20.

Program / Initiative

Program Overview

Name

Learn and Earn

Program / Initiative Website Link - if one exists

<http://www.masscec.com/learn-and-earn>

Description of Program / Initiative

The program provides grant funding to schools for programs that prepares Massachusetts high school students for clean energy careers and clean energy/science, technology, engineering, and math (STEM) majors in higher education. Through participation in the program, students also make connections to clean energy employers and project sites.

Fiscal Year 2019 Budget

\$605,000.00

Total Fiscal Year 2019 Budget expended

\$390,517.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support school programs that prepare Massachusetts high school students for clean energy careers and clean energy/science, technology, engineering, and math (STEM) majors in higher education.

Metric Goal #1 will be measured by

Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Public Entities Impacted (3); Leveraged Funds (\$72,000)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Public Entities Impacted (3); Leveraged Funds (\$72,000)

Program / Initiative

Program Overview

Name

On-the-Job Training and On-the-Job Training Vocational

Program / Initiative Website Link - if one exists

<http://www.masscec.com/clean-energy-internship-program-0>

Description of Program / Initiative

The program (also known as the Clean Energy Internship Program) facilitates the placement of Massachusetts community college and four-year college students and recent graduates who are considering career opportunities in clean energy, in paid, full-time summer internships as well as paid, part-time academic year internships across the state. This program also includes a pilot workforce development initiative that helps place skilled labor of vocational high school students in paid clean energy internships during the academic year.

Fiscal Year 2019 Budget

\$3,752,000.00

Total Fiscal Year 2019 Budget expended

\$3,624,368.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Facilitate the placement of Massachusetts college students, recent graduates, and vocational high school students in paid clean energy internships across the state.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Leveraged Funds (\$); Number of internships funded

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (230); Leveraged Funds (\$840,000); Number of internships funded (600)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (244); Leveraged Funds (\$837,662); Number of internships funded (618)

Program / Initiative

Program Overview

Name

Clean Energy Activity Day

Program / Initiative Website Link - if one exists

<http://www.masscec.com/clean-energy-activity-day>

Description of Program / Initiative

The program funds Clean Energy Activity Days at Massachusetts elementary schools (kindergarten – eighth grade) to participate in the Massachusetts Clean Energy Center's Clean Energy Activity Day. The day offers specialized activities with a hands-on learning opportunity for students either at the students' current place of education or at a clean energy business or organization.

Fiscal Year 2019 Budget

\$150,000.00

Total Fiscal Year 2019 Budget expended

\$17,910.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support specialized activities with a hands-on learning opportunity for students at a school or clean energy organization.

Metric Goal #1 will be measured by

Number of Public Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Public Entities Impacted (10)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Public Entities Impacted (3), Number of Student Supported (361) This goal was only partially achieved because there were fewer schools that applied to participate in the program than were anticipated at the beginning of the fiscal year.

Program / Initiative

Program Overview

Name

Offshore Energy Workforce

Program / Initiative Website Link - if one exists

<http://www.masscec.com/offshore-wind>

Description of Program / Initiative

Program designed to increase Massachusetts workforce capacity to participate in offshore wind manufacturing, deployment and operations.

Fiscal Year 2019 Budget

\$400,000.00

Total Fiscal Year 2019 Budget expended

\$721,454.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Increase Massachusetts workforce capacity to participate in offshore wind manufacturing, deployment and operations.

Metric Goal #1 will be measured by

Number of Public Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Public Entities Impacted (1)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Public Entities Impacted (4); Private Entities Impacted (2); Leveraged Funds

Program / Initiative

Program Overview

Name

InnovateMass

Program / Initiative Website Link - if one exists

<http://www.masscec.com/innovatemass>

Description of Program / Initiative

The program provides grants for demonstration projects that offer the most innovative, effective and impactful clean energy solutions, helping companies and their technologies move closer to commercialization.

Fiscal Year 2019 Budget

\$2,085,000.00

Total Fiscal Year 2019 Budget expended

\$1,528,423.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support demonstration projects for innovative clean energy solutions, which help companies and their technologies move closer to commercialization.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Leveraged Funds (\$); Average Technology Readiness Level Increase

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (10); Leveraged Funds (\$700,000); Average Technology Readiness Level Increase (1)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (8); Leveraged Funds (\$504,140); Average Technology Readiness Level Increase (1); Clean Energy Systems Supported (4); Public Entities Impacted (1). The goal was partially achieved because fewer projects were awarded in FY19 than initially budgeted for.

Program / Initiative

Program Overview

Name

Advancing Commonwealth Energy Storage

Program / Initiative Website Link - if one exists

<http://www.masscec.com/advancing-commonwealth-energy-storage-aces-0>

Description of Program / Initiative

Supports projects aimed at piloting innovative, broadly-replicable energy storage use cases/business models with multiple value streams in order to prime Massachusetts for increased commercialization and deployment of storage technologies. The Advancing Commonwealth Energy Storage Program will help direct the Commonwealth's first substantial investments in energy storage projects that demonstrate the benefits of storage to Massachusetts ratepayers and the electric grid.

Fiscal Year 2019 Budget

\$85,000.00

Total Fiscal Year 2019 Budget expended

\$217,465.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Direct the Commonwealth's first substantial investments in energy storage projects that demonstrate the benefits of storage to Massachusetts ratepayers and the electric grid.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (1); Number of Public Entities Impacted (41)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (94); Number of Public Entities Impacted (72). The metrics were higher than anticipated because MassCEC facilitated National Fire Protection Association trainings on energy storage and an energy storage stakeholder series.

Program / Initiative

Program Overview

Name

Microgrid Challenge

Program / Initiative Website Link - if one exists

<http://www.masscec.com/community-microgrids-program>, <http://www.masscec.com/energy->

Description of Program / Initiative

The program, which is a pilot effort that started in FY18, seeks to catalyze the development of community microgrids throughout Massachusetts to lower customer energy costs, reduce greenhouse gas (GHG) emissions, and provide increased energy resilience.

Fiscal Year 2019 Budget

\$750,000.00

Total Fiscal Year 2019 Budget expended

\$72,693.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Facilitate the development of community microgrids throughout Massachusetts.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (3); Number of Public Entities Impacted (10)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

No

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

There were no awards made in FY19. MassCEC is planning to review the results from the FY18 pilot projects to inform the future program design.

Program / Initiative

Program Overview

Name

Catalyst Program

Program / Initiative Website Link - if one exists

<http://www.masscec.com/catalyst>

Description of Program / Initiative

The program provides grants and business mentoring to researchers and early-stage companies looking to demonstrate initial prototypes of their clean energy and water technologies

Fiscal Year 2019 Budget

\$1,060,000.00

Total Fiscal Year 2019 Budget expended

\$1,060,000.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support researchers and early-stage companies looking to demonstrate initial prototypes of their clean energy and water technologies

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted; Average Technology Readiness Level Increase

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (10); Number of Public Entities Impacted (4); Average Technology Readiness Level Increase (1)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (13); Number of Public Entities Impacted (2); Average Technology Readiness Level Increase (1). The actual metrics were slightly altered from the target because more awards were made to startup companies and fewer awards were made to universities than originally anticipated.

Program / Initiative

Program Overview

Name

Accelerate Mass

Program / Initiative Website Link - if one exists

<http://www.masscec.com/acceleratemass>

Description of Program / Initiative

The first element of this program is focused in providing funding for recent accelerator graduates to achieve commercial milestones and successfully obtain private investment funding. The second element of this program is focused on supporting Massachusetts accelerator programs directly with assistance in operational funds and innovation startup scholarships, to provide startups with greater opportunities to participate in an accelerator program.

Fiscal Year 2019 Budget

\$795,000.00

Total Fiscal Year 2019 Budget expended

\$386,840.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support accelerators directly and the companies that graduate from accelerator programs.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (19); Leveraged Funds (\$367,000)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (7); Leveraged Funds (\$3.4 million). The actual metrics are different than the target metrics because the program only made one Phase 1 investment in FY19 as well as fewer Phase 2 investments.

Program / Initiative

Program Overview

Name

Incubate Mass

Program / Initiative Website Link - if one exists

<http://www.masscec.com/innovate-clean-energy/incubatemass>

Description of Program / Initiative

Provides funding to incubators that are catalyzing and supporting startup companies to create jobs and promote the commercialization of new clean energy and water technologies.

Fiscal Year 2019 Budget

\$375,000.00

Total Fiscal Year 2019 Budget expended

\$425,633.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support incubators in Massachusetts that assist clean energy and water technology companies.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (4); Leveraged Funds (\$562,000)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (4); Leveraged Funds (\$9.2 million); Public Entities

Program / Initiative

Program Overview

Name

ReHeat Mass Program

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

Supports a public awareness campaign and industry development partnerships to increase the awareness, adoption, and cost-effectiveness of renewable thermal technologies, which includes air-source heat pumps, ground-source heat pumps, biomass heating, and solar hot water.

Fiscal Year 2019 Budget

\$688,000.00

Total Fiscal Year 2019 Budget expended

\$190,076.00

Details of additional funding sources

This program is fully funded with Alternative Compliance Payment (ACP) funds provided by the Massachusetts Department of Energy Resources.

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Annual increase in the number of visits to a dedicated renewable thermal website.

Metric Goal #1 will be measured by

Google analytics

Target for Fiscal Year 2019 Goal #1

Develop a baseline for metrics and plan of action for the program. Release a public awareness survey to determine baseline awareness and then will seek to increase awareness for the next fiscal year through targeted marketing efforts.

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

The timing of program launch is expected in FY20. In FY19 we developed some landing pages for clean heating and cooling solutions and completed a survey for baseline consumer and commercial awareness of these technologies.

Program / Initiative

Program Overview

Name

Clean Energy Hackathons

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

Provides sponsorship for university and industry hackathons and offer a clean energy prize. Hackathons are a hub for new ideas and innovation.

Fiscal Year 2019 Budget

\$25,000.00

Total Fiscal Year 2019 Budget expended

\$21,065.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support university and industry hackathons that provide clean energy prizes.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (8); Number of Public Entities Impacted (1); Leveraged Funds (\$37,500)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (6); Number of Public Entities Impacted (0); Leveraged Funds (\$480,000). Some of the actual metrics are slightly below the target metrics due to a slightly lower award rate than anticipated at the beginning of the year.

Program / Initiative

Program Overview

Name

International Collaboration

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

Host international policy/government delegations, start-ups, companies, consulates, regulators etc. to provide an overview of Massachusetts Clean Energy Center and the cleantech and water ecosystem in Massachusetts.

Fiscal Year 2019 Budget

\$10,000.00

Total Fiscal Year 2019 Budget expended

\$20,083.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Increase MassCEC's interaction with international policy/government delegations, start-ups, companies, consulates, and regulators interested in clean energy.

Metric Goal #1 will be measured by

Number of Private Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (1)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (1); Leveraged Funds (\$100,000)

Program / Initiative

Program Overview

Name

Wastewater Treatment Plant Technology Demonstration Program

Program / Initiative Website Link - if one exists

<http://www.masscec.com/water-innovation>

Description of Program / Initiative

Program provides targeted grants for demonstrating innovative wastewater treatment technologies at publicly-owned wastewater treatment facilities. The objective is to reduce energy demand and accelerate innovative technologies to market.

Fiscal Year 2019 Budget

\$800,000.00

Total Fiscal Year 2019 Budget expended

\$809,556.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support innovative wastewater treatment technology demonstrations at publicly-owned wastewater treatment facilities

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (5); Number of Public Entities Impacted (5); Leveraged Funds (\$500,000)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (9); Number of Public Entities Impacted (7); Leveraged Funds (\$575,406)

Program / Initiative

Program Overview

Name

Market Research

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

This program focuses on conducting timely research and study into specific topics that will inform the clean energy industry and policy makers of markets and barriers, inform the Massachusetts Clean Energy Center's program development, identify clean energy economic opportunities and/or increase public understanding of the clean energy economy.

Fiscal Year 2019 Budget

\$380,000.00

Total Fiscal Year 2019 Budget expended

\$58,319.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Inform the clean energy industry of markets, opportunities and barriers, and inform program development.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (2); Number of Public Entities Impacted (2)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (1); Number of Public Entities Impacted (0). The actual metrics were lower than expected because MassCEC decided not to move forward with a study.

Program / Initiative

Program Overview

Name

AmplifyMass

Program / Initiative Website Link - if one exists

<http://www.masscec.com/amplifymass>

Description of Program / Initiative

Provides grants to Massachusetts-based companies and university teams receiving federal and other sources of funding for clean energy related efforts. The program supports research and development in the Commonwealth across a broad set of recipients for different clean energy and water technologies and attract federal and other sources of funding into the state.

Fiscal Year 2019 Budget

\$2,700,000.00

Total Fiscal Year 2019 Budget expended

\$2,736,739.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Supports research and development in the Commonwealth and attract federal and other sources of funding into the state.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (10); Number of Public Entities Impacted (5); Leveraged Funds (\$13.5 million)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (16); Number of Public Entities Impacted (8); Leveraged Funds (\$27.4 million)

Program / Initiative

Program Overview

Name

Market Development

Program / Initiative Website Link - if one exists

<http://www.masscec.com/request-proposals-moon-island-engineering-design-consultant>

Description of Program / Initiative

Supports the development and commercialization of emerging clean energy technologies that have the potential to greatly benefit the infrastructure and ratepayers in the Commonwealth and/or transform its energy landscape. One such initiative is to support a solar photovoltaic plus energy storage system at the Boston Fire Department training facility on Moon Island. The system will primarily be used to demonstrate, inform and support the development of storage fire safety codes, standards and training for adoption by municipal authorities having jurisdiction and other pertinent storage industry stakeholders and will secondarily be used to provide energy resilience benefits to the training facility.

Fiscal Year 2019 Budget

\$500,000.00

Total Fiscal Year 2019 Budget expended

\$30,700.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Increase the development and commercialization of emerging clean energy technologies.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Support; Number of Public Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Support (1); Number of Public Entities Impacted (1); Leveraged Funds (\$250,000)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Support (0); Number of Public Entities Impacted (1); Leveraged Funds (\$0). The actual metrics are lower than the target metrics due to a delay in awarding a project, which took place in FY20 instead of FY19.

Program / Initiative

Program Overview

Name

DeployMass

Program / Initiative Website Link - if one exists

<http://www.masscec.com/deploymass>

Description of Program / Initiative

DeployMass facilitates the adoption of clean energy or water innovation technologies at public agencies, public academic institutions and municipalities to support the growth and development of Massachusetts-based companies with the goal of reducing costs for public agencies, public academic institutions, and municipalities.

Fiscal Year 2019 Budget

\$50,000.00

Total Fiscal Year 2019 Budget expended

\$73,000.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Increase the adoption of clean energy or water innovation technologies at public agencies, public academic institutions and municipalities.

Metric Goal #1 will be measured by

Number of Clean Energy Systems Support; Number of Private Entities Impacted; Number of Public Entities Impacted

Target for Fiscal Year 2019 Goal #1

Number of Clean Energy Systems Support (3); Number of Private Entities Impacted (3); Number of Public Entities Impacted (3)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Clean Energy Systems Support (1); Number of Private Entities Impacted (2); Number of Public Entities Impacted (2); Leveraged Funds (\$25,000). The actual metrics were slightly different than the target metrics because the program underwent a redesign in FY19, resulting in fewer awards than anticipated.

Program / Initiative

Program Overview

Name

Conferences, Sponsorships, and Memberships Support

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

This program focuses on supporting the key clean energy and innovation entities and events across the Commonwealth.

Fiscal Year 2019 Budget

\$250,000.00

Total Fiscal Year 2019 Budget expended

\$365,721.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Strategically sponsor, participate, or support clean energy organizations or events.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Number of sponsorships and memberships (partnerships)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (56); Number of sponsorships and memberships (partnerships) (50)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (44); Number of sponsorships and memberships (partnerships) (34). MassCEC entered into fewer partnerships, sponsorship, and memberships than anticipated at the beginning of the year.

Program / Initiative

Program Overview

Name

Clean Energy Innovation Network

Program / Initiative Website Link - if one exists

N/A

Description of Program / Initiative

Provides support for clean energy research and development institutions, aligned innovation agencies, and business councils that complement the Massachusetts Clean Energy Center's clean energy industry support efforts. This program includes support for MassVenture's START program, Fraunhofer Center for Sustainable Energy, and Northeast Clean Energy Council.

Fiscal Year 2019 Budget

\$1,772,500.00

Total Fiscal Year 2019 Budget expended

\$500,000.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Support clean energy research and development institutions, innovation agencies, and business councils.

Metric Goal #1 will be measured by

Number of Private Entities Impacted; Leveraged Funds (\$)

Target for Fiscal Year 2019 Goal #1

Number of Private Entities Impacted (5); Leveraged Funds (\$1,372,500)

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Partially

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

Number of Private Entities Impacted (2); Leveraged Funds (\$0). Actual metrics were less than the target metrics due to a delay in a large award, which was awarded in FY20 instead of FY19.

Program / Initiative

Program Overview

Name

Commonwealth Wind

Program / Initiative Website Link - if one exists

<http://www.masscec.com/commonwealth-wind-0>

Description of Program / Initiative

Grant funding and technical assistance for residential, industrial and public facilities for appropriately-sited wind energy development in Massachusetts.

Fiscal Year 2019 Budget

\$80,000.00

Total Fiscal Year 2019 Budget expended

\$8,000.00

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Provide assistance, when needed, for appropriately-sited wind energy development in Massachusetts.

Target for Fiscal Year 2019 Goal #1

The program has reserved funding for FY19, but there are no construction or feasibility studies in the pipeline for fiscal year 2019 and no awards are expected to be made.

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

The program adds value to the industry by providing appropriately-sited wind energy projects with technical assistance as needed.

Program / Initiative

Program Overview

Name

Production Tracking System

Program / Initiative Website Link - if one exists

<http://www.masscec.com/production-tracking-system-1>

Description of Program / Initiative

The Renewable Energy Production Tracking System provides owners of renewable energy systems a convenient method for tracking the production of their systems so that they can earn money by participating in certain Massachusetts clean energy incentive programs. The Production Tracking System also provides the renewable energy industry and other stakeholders with data about renewable energy systems installed in the Commonwealth.

Fiscal Year 2019 Budget

\$600,000.00

Total Fiscal Year 2019 Budget expended

\$1,186,491.00

Details of additional funding sources

This program is fully funded from Alternative Compliance Payment (ACP) funds provided by the Massachusetts Department of Energy Resources.

Program Goals and Targets

Program / Initiative's

Fiscal Year 2019

Goal #1

Track the clean energy production of systems in Massachusetts and provide high-level data to stakeholders.

Target for Fiscal Year 2019 Goal #1

MassCEC has been designated by the Massachusetts Department of Energy Resources (DOER) as the Independent Third Party Meter Reader for the purpose of providing verification of Solar Renewable Energy Certificates (SRECs) for qualified generators. MassCEC's target is to continue to maintain the system for all renewable energy systems in the Commonwealth to report data to the Production Tracking System (PTS), free of charge so that it can report data to the public about the systems installed to evaluate their performance, ensure the effectiveness the Commonwealth's renewable energy programs, and to promote the growth of the industry in Massachusetts. PTS provides owners of renewable energy systems a convenient method for tracking their production so that they can earn additional income by participating in certain Massachusetts clean energy incentive programs.

Was Fiscal Year 2019 Goal #1 Achieved? - select yes, no, or partially

Yes

Fiscal Year 2019 Goal # 1

Results - *or* - Details if not achieved

MassCEC managed the annual production data for over 90,000 clean energy systems in the state.

OFFICE OF PERFORMANCE MANAGEMENT AND OVERSIGHT

PATENTS & PRODUCTS RESULTING FROM AGENCY-FUNDED ACTIVITIES DURING FISCAL YEAR 2019

Please provide details on patents & products awarded or provided by the agency during fiscal year 2019

Award Overview				Award Address Information where project/award is located			
Name of Award Program - or - Investment	Name of Recipient	Description of Award or Investment	Amount (if applicable)	Street #	Street Name	Street Ending (Avenue, Street, Lane...) spell out	Municipality of Recipient *if regional or state-wide, please indicate
This is generally an indirect result of our funding rather than direct, and therefore is not something that is "directly" resulting from MassCEC funding.							



OFFICE OF PERFORMANCE MANAGEMENT AND OVERSIGHT

POINT OF CONTACTS

Point of Contact for Head of Agency

Name

Stephen Pike

Title

Chief Executive Officer

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Exhibit A

Program	Net Funds Awarded in FY19	Award Count	Program Description
AccelerateMass - Accelerators***	\$ 286,840.00	4	Provides operational funds and innovation startup scholarships to a variety of Accelerators.
AccelerateMass - Graduates	\$ 100,000.00	2	Provides convertible grant funding to extend runway for early stage start-ups graduating from qualified accelerator programs.
Advanced Commonwealth Energy Storage (ACES)	\$ 217,465.00	2	An initiative that aims to advance the energy storage segment of the state's clean energy industry by attracting and supporting local energy storage companies, expanding storage technology markets and demonstrating the value of storage benefits for the state's power grid and customers.
Affordable Access to Clean and Efficient Energy (AACEE)	\$ 5,350,000.00	13	Programs targeted at alleviating the high cost of energy for low-income populations through competitive grants to organizations serving low income residents.
AmplifyMass	\$ 2,736,739.00	13	Provides grants to Massachusetts-based companies and university teams receiving federal and other sources of funding for clean energy related efforts.
Catalyst Program	\$ 1,060,000.00	1	Support for university teams and early stage start-ups to fund targeted proof-of-concept projects.
Clean Energy Activity Day***	\$ 17,910.00	4	Provides funding to K-8 schools to have a hands-on activity day where students can learn about clean energy from employers and build renewable energy projects.
Clean Energy Adoption Initiatives	\$ 233,000.00	6	Resources targeted at helping Massachusetts residents and business owners make decisions related to choosing solar electricity including financial benefits, siting requirements, ownership models, and installer selection. Additional efforts to improve system installation quality through education of installers and local inspectors.
Clean Energy Innovation Network	\$ 500,000.00	2	MassCEC support for certain clean energy R&D institutions and accelerators, and aligned innovation funding agencies.
Clean Energy Innovation Network Conferences/Sponsorships/Memberships***	\$ 365,721.00	44	Support to key clean energy and innovation entities and events across the Commonwealth.
Clean Heating and Cooling Programs	\$ 19,262,017.00	7598**	Funding to support installation of residential and commercial ground-source heat pumps, air-source heat pumps, and efficient biomass heating systems; funding for replacement of older, inefficient woodstoves with cleaner, more efficient models.
Commonwealth Hydro	\$ 838,000.00	5	Funding to communities and businesses for studies and construction of upgrades to increase energy generation at MA RPS-eligible hydropower facilities; also support new "conduit" hydropower facilities.
Commonwealth Organics-to-Energy	\$ 95,623.00	3	Funding to communities and businesses to evaluate anaerobic digestion projects that use sewage sludge, food waste, and other organics, and supports construction of facilities as appropriate.
Commonwealth Solar Hot Water	\$ 1,196,923.00	118	Funding to support installations of residential and commercial-scale solar thermal projects to provide domestic hot water, heating, and/or process heat.
Commonwealth Wind	\$ 8,000.00	1	Funding for feasibility studies and development of appropriately sited, cost-effective land based wind projects.
DeployMass	\$ 73,000.00	2	Provides networking and funding support to Massachusetts companies to facilitate the adoption of innovative clean energy technologies at public agencies, public academic institutions and municipalities, saving taxpayer dollars and supporting the growth and development of Massachusetts-based companies.
Equity Investments	\$ 850,283.00	4	Support early stage and growth companies in development and commercialization stages via convertible debt and equity investments.
Follow-On Investments	\$ 123,000.00	2	Provide follow-on investments in existing portfolio companies through transition to later funding stages on way to commercialization.
Hackathons	\$ 21,065.00	6	MassCEC hosts an annual Cleanweb Hackathon where teams create an app or web based platform to address energy efficiency and resource management needs, followed by an eight week mini accelerator. MassCEC also hosts an annual Women in Cleanweb Panel to address diversity in the industry and highlight successful women.
HeatSmart	\$ 327,173.00	7	The Heat Smart campaign supports community outreach and bulk purchasing campaigns for clean heating and cooling technologies.
Incubate Mass	\$ 425,633.00	8	Program provides funding to incubators that are catalyzing and supporting startup companies to create jobs and promote the commercialization of new clean energy technologies.
Industry/Annual Report***	\$ 58,319.00	4	Preparation of MassCEC's annual report and statutorily required clean energy industry report.
Innovate Mass	\$ 1,528,423.00	9	A competitive program that provides awards to applicant teams that offer the most innovative, effective and impactful clean energy solutions, helping companies and their technologies move closer to commercialization.
International Collaboration	\$ 20,083.00	1	Host international policy/government delegations, start-ups, companies, consulates, regulators etc. to provide an overview of MassCEC and the cleantech and water ecosystem in Massachusetts. Includes a pilot start-up exchange program between MA and Switzerland that begins in June 2017 - called Match.
Internship Program	\$ 3,624,368.00	390	Helps prepare the next generation of clean energy workers by connecting students and recent graduates with Massachusetts companies in need of interns and providing stipends for internships.
Learn and Earn	\$ 390,516.00	3	Program provides grant funding for job training programs that help low- and moderate-income earners build careers in the clean energy sector and attain financial self-sufficiency.

Market Development	\$ 30,700.00	2	Support the development and commercialization of emerging clean energy technologies that have the potential to greatly benefit the infrastructure and ratepayers in the Commonwealth and/or transform its energy landscape.
Mass Solar Loan	\$ 4,826,604.00	766*	Program to support affordable financing to promote lending to residential owned solar electricity projects including projects for people with lower incomes and credit scores.
Microgrid Challenge	\$ 72,693.00	9	To accelerate the development of innovative utility-supported multi-user or community microgrids that achieve a broad range of performance objectives including energy cost and greenhouse gas emissions reductions, improved reliability and clean energy integration, and meaningful and strategic interaction with the microgrid.
Offshore Energy	\$ 1,078,636.00	19	Funding, analysis, and engagement to advance planning, permitting, and supply chain development for offshore energy.
RE Production Management Support	\$ 1,186,491.00	17	MassCEC tracking and verification of energy production to ensure state incentives (RECs) are accessed appropriately, and the sole Independent Verifier for the SREC Programs.
ReHeat	\$ 190,075.88	2	Initiative to conduct a statewide public awareness campaign for clean heating and cooling technologies.
Solarize Massachusetts	\$ 72,708.00	10	Grassroots outreach and education initiatives that allow members of participating communities and non-profits partner with solar installers to access reduce rates for solar installation through volume based discounts.
Wastewater Treatment Pilot Program	\$ 809,556.00	7	Funded through the Water Innovation Trust, provides targeted grants for demonstrating innovative water technologies at waste water treatment facilities.
Workforce Programming	\$ 2,900.00	2	Supports symposiums, networking nights and other events to promote clean energy careers and MassCEC's programs.

*For the Mass Solar Loan Program the "number of loans supported" has been used instead of "award count" to more accurately represent work completed under the program.

**For the Clean Heating and Cooling Programs the "number of systems supported" has been used instead of "award count" to more accurately represent work completed under the program.

***Newly listed on FY19 report.

Exhibit B- Loans/Guarantees & Investments

Loans & Guarantees

Company Name	Date of Investment	Security Description	MassCEC Loan/Guarantee
Electra Vehicles	10/12/2018	Convertible Note	\$ 100,000
PowerHouse Dynamics	7/25/2018	Convertible Note	\$ 35,300
PowerHouse Dynamics	1/9/2019	Convertible Note	\$ 23,000
Solar One	5/28/2019	Loan	\$ 300,000
Titan AES	1/29/2019	Convertible Note	\$ 50,000
Titan AES	6/25/2019	Convertible Note	\$ 50,000
Voda	8/8/2018	Convertible Note	\$ 250,000

Investments

Company Name	Date of Investment	Security Description	MassCEC Investment
IdleSmart	7/31/2018	Series A Preferred	\$ 600,000
OptiRTC	1/28/2019	Series B-1 Preferred	\$ 100,000
OptiRTC	1/28/2019	Series B-1 Warrants	\$ -
Sistine Solar	4/2/2019	Series Seed Preferred	\$ 250,000
Tessolar	9/11/2018	Series A Preferred	\$ 550,000
Via Separations	4/25/2019	Series A Preferred	\$ 250,000

Exhibit C

Types of Technical Assistance	Examples of Programs or Efforts
Directly develop technical reports to support the clean energy industry	Massachusetts Clean Energy Industry Report
Provide assistance to projects	Project inspections in Clean Heating and Cooling Programs and Solar PV Programs; Feasibility Studies in Water Tech Demonstration Program, Commonwealth Organics to Energy Program, and Commonwealth Hydro Program; Ground Source Heat Pump Design Reviews
Fund consultants to provide technical support to industry stakeholders	Offshore Energy Program, Energy Storage Stakeholder Series, Commercial Solar "Ask an Advisor" Service
Provide assistance to municipalities and other public entities	SolarizeMass Program, HeatSmart Mass, Commonwealth Organics to Energy Program, Wastewater Pilot Program, Offshore Energy Program
Provide assistance to companies	Catalyst Program, Amplify Mass, AccelerateMass Program, Investments Program, InnovateMass Program, Commonwealth Hydro Program, Wastewater Pilot Program, Offshore Energy Program
Provide assistance to manufacturers	Wind Technology Testing Center; Developing and hosting the Offshore Wind Supply Chain Forum at the US Offshore Wind Conference
Serve as a technical judge or reviewer	Cleantech Open Northeast, NSF SBIR, ARPA-E, MIT Water Innovation Prize, MassChallenge, Hack-a-thon
Provide assistance to local universities/research consortiums	Wind Technology Testing Center, Catalyst Program, University of Massachusetts Lowell - Fraunhofer Center for Sustainable Energy
Provide assistance to schools, colleges, or workforce	Learn and Earn Program, Clean Energy Activities Days

Exhibit D

New Bedford Marine Commerce Terminal - FY 2019		
	Budget	Actual
Revenue	\$ 700,000	\$ 582,447
Operating Expenses	\$ 3,260,212	\$ 3,101,443
Other Expenses	\$ 792,000	\$ 3,180,970
Total Expenses	\$ 4,052,212	\$ 6,282,413
Change in Net Position	\$ (3,352,212)	\$ (5,699,966)

Wind Technology Testing Center - FY 2019		
	Budget	Actual
Revenue	\$ 1,350,000	\$ 2,210,518
Operating Expenses	\$ 3,397,148	\$ 3,749,774
Other Expenses (Income)	\$ -	\$ (21,895)
Total Expenses	\$ 3,397,148	\$ 3,727,879
Change in Net Position	\$ (2,047,148)	\$ (1,517,361)