

Solicitation Offshore Wind Works: 2023.2 Offshore Wind Workforce Grants

OSW-2023-05

Date of Issue: November 14, 2023

Proposals Due: Batch 1 - February 2, 2024 Batch 2 - April 26, 2024

Total Funding Available: \$8 Million

All proposals must be submitted to: <u>offshorewind@masscec.com</u>

I. SUMMARY

The Massachusetts Clean Energy Center ("<u>MassCEC</u>") seeks to increase the Commonwealth's capacity to develop a Massachusetts workforce capable of contributing to the planning, deployment, and operations & maintenance of offshore wind farms in southern New England as well as to support the manufacturing of offshore wind components and its related supply chain. With the construction of the Vineyard Wind project having commenced its offshore operations in 2022, and other projects queued up to follow—including SouthCoast Wind—there is an increasingly urgent need to ensure that there is a qualified, well-trained, safe and diverse workforce to plan, build, operate, and maintain these projects.

Through this solicitation (the "<u>Solicitation</u>"), MassCEC seeks to competitively select and fund qualified applicants or applicant teams to implement projects that advance offshore wind workforce development in the Commonwealth. Funding is available for projects under three (3) separate tracks.

Track 1: Workforce Development Programming. Proposals for new workforce training initiatives, expansion of ongoing initiatives, or a workforce-related study. MassCEC highly encourages proposals to incorporate project elements that advance Diversity, Equity and Inclusion ("<u>DEIJ</u>") principles.

Track 2: Workforce Infrastructure. Proposals for the construction, purchase, expansion, or upgrade of workforce- or training-related equipment, technology, and/or facilities to better meet the needs of the offshore wind industry.

Track 3: Worker Training for Offshore Wind Port Terminals (Sponsored by Vineyard Wind). Proposals for workforce development initiatives that specifically target maritime workers to ensure the Massachusetts labor pool is adequately prepared to work within an offshore wind terminal.

Each Track has a separate Application Form, so applicants must be clear about which Track they apply to. Applicants may submit multiple proposals, each under a single Track, provided that the proposals are for distinct projects. Proposals that respond to high priority industry needs and opportunities will be prioritized through this Solicitation. Specific focus areas for Track 1 under this Solicitation are identified in detail in Section IV below.

MassCEC encourages consultation and collaboration between existing training programs and/or providers such as vocational schools, community colleges, labor unions, offshore wind industry developers, turbine and component manufacturers, workforce development organizations, community support organizations, and supply chain companies.

Up to \$8 Million Dollars is available for awards under this Solicitation. There is a preferred maximum award amount of \$300,000 for projects under Track 1, a preferred maximum award amount of \$2,000,000 for projects under Track 2, and a preferred maximum award amount of \$1,000,000 for projects under Track 3. MassCEC may increase or decrease funding at its sole discretion.

MassCEC will review and award proposals within two batches. Proposals that are submitted on or before February 2nd, 2023, by 5 pm EST, will be reviewed in batch 1. Proposals submitted after February 2nd, 2023, and on or before April 26, 2023, by 5pm EST, will be reviewed in batch 2.

II. ABOUT MASSCEC

MassCEC is a state economic development agency dedicated to accelerating the growth of the clean energy sector across the Commonwealth to spur job creation, deliver statewide environmental benefits and to secure long-term economic growth for the people of Massachusetts. MassCEC works to increase the adoption of clean energy while driving down costs and delivering financial, environmental, and economic development benefits to energy users and utility customers across the state.

MassCEC's mission is to accelerate the clean energy and climate solution innovation that is critical to meeting the Commonwealth's climate goals, advancing Massachusetts' position as an international climate leader while growing the state's clean energy economy. MassCEC is committed to creating a diverse, equitable, and inclusive organization where everyone is welcomed, supported, respected, and valued. We are committed to incorporating principles of diversity, equity, inclusion, and environmental justice in all aspects of our work in order to promote the equitable distribution of the health and economic benefits of clean energy and support a diverse and inclusive clean energy industry. MassCEC strives to lead and innovate in equitable clean energy and climate solutions.

III. BACKGROUND AND CONTEXT

MASSCEC OFFSHORE WIND WORKFORCE DEVELOPMENT

MassCEC works to advance the Commonwealth's goal to responsibly develop cost-effective offshore wind and realize the associated economic benefits of this new industry. MassCEC's offshore wind program has three (3) primary areas of focus: (1) *Planning, analysis, and engagement* – advancing technical projects and stakeholder engagement on marine wildlife, fisheries, habitat, metocean, and transmission; (2) *Sector development* – expanding manufacturing, suppliers, services, and infrastructure, and growing a well-trained and highly-skilled workforce; and (3) *Research and innovation* – support and collaboration for offshore energy research and technology innovation.

To inform strategic, evidence-based workforce development initiatives and activities that meet the needs of both the emerging offshore wind industry and jobseekers, MassCEC conducts targeted research and analysis. Following the landmark 2016 bill, *An Act to Promote Energy Diversity*, which authorized the first commercial scale competitive procurement for cost-effective offshore wind energy, MassCEC partnered with Bristol Community College, UMass Dartmouth, and the Massachusetts Maritime Academy to quantify and analyze the workforce training and educational program needs and opportunities afforded by the emerging offshore wind industry. The resulting *2018 Massachusetts Offshore Wind Workforce Assessment* (the "2018 Workforce Assessment") examined workforce needs and economic impact associated with 1,600 MW of offshore wind development, provided information

on the education, skills and health and safety credentials required, and highlighted opportunities for Massachusetts to address needs and begin preparations for developing a well-trained and highly-skilled workforce.

Building on the 2018 Workforce Assessment and to further examine the workforce required to complete the first 1,600 megawatts of Massachusetts offshore wind (the Vineyard Wind and Mayflower Wind projects), MassCEC commissioned the 2021 Offshore Wind Workforce Training & Development in Massachusetts Report, developed by BW Research Partnership, which provides a deeper examination of capabilities and opportunities in the offshore wind workforce. Specifically, the 2021 report quantifies offshore wind occupations to identify strengths and potential gaps in labor supply – information that was used to develop a career pathways mapping resource on MassCEC Clean Energy Careers Training & Education Directory. These maps serve as a visual tool for guidance counselors, workforce boards, jobseekers, and others to better understand specific job opportunities in offshore wind, as well as the various pathways for entering and advancing through the industry.

In 2022, the National Renewable Energy Laboratory ("<u>NREL</u>") released the <u>U.S. Offshore Wind Workforce</u> <u>Assessment</u> which evaluated current and future workforce needs for offshore wind on a national scale and recommended actions to bridge gaps in training programs. Specific gaps identified include safety training programs and union-led training programs.

In 2020, MassCEC convened the Offshore Wind Works Community of Practice ("<u>CoP</u>") to foster communication and collaboration in this workforce training ecosystem. In 2022, MassCEC hired a professional facilitator team to support the growing CoP and to conduct an assessment of MassCEC's Offshore Wind Works portfolio of investments. The assessment included the review of materials related to regional and national offshore wind workforce needs, grantee scopes of work and deliverables, interviews with grantees, and an examination of offshore wind workforce development activities in six (6) other states. A summary of the findings and recommendations is in Attachment A to this Solicitation. Several key points from the four (4) offshore wind workforce assessments mentioned above include:

- While Massachusetts is well prepared to support the offshore wind industry for many
 occupations, there are several high priority occupations in offshore wind for which the
 Commonwealth will need to produce or attract new talent, including skilled trades, operations,
 and maintenance (O&M) technicians, and water transportation. Additionally, many of these
 workers will need additional training to work in an offshore environment.
- There is a need to raise awareness in the workforce and especially in minority, low-income, and environmental justice communities about the opportunities in offshore wind.
- There is currently no official industry training standard and creating standardized safety training for offshore wind energy workers is a high priority to ensure a well-trained workforce is available to build projects.
- Strategic investments in key courses and physical facilities are needed to provide workers with the appropriate industry-recognized safety and technical training.
- Efforts should be focused on the identification of developer and Tier I suppliers' specific workforce qualifications, credentials, and capabilities needs and the continued development

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and enhancement of the programs, courses, and trainings necessary to meet these needs. These needs should be communicated to workforce development providers as they become known.

- Partnerships with industry representatives or other workforce development providers should be facilitated to build a cohesive and comprehensive ecosystem. Fostering partnerships will help to develop formal referral relationships among entities and ensure interested parties who may not fit into one program are not forgotten.
- There are many different occupations in offshore wind and building and expanding the pipeline
 of potential workers to the offshore wind industry and connecting them to employment
 opportunities should be a top priority. The Commonwealth's Vocational Technical High Schools
 are a unique and proven framework for early engagement, training, and job-matching.
 Massachusetts should also leverage its existing higher education assets to develop new offshore
 wind curricula and pathways through existing course offerings for both undergraduate and
 graduate degrees.

Under the <u>Offshore Wind Works ("OSWW") initiative</u> MassCEC has conducted five (5) funding solicitations since 2017, resulting in forty-four (44) awards totaling over eleven million two hundred thousand dollars (\$11,200,000) to twenty-four (24) different institutions engaged in a broad range of workforce training efforts. Our 2021 solicitation focused exclusively on DEIJ projects intended to advance access to training opportunities for members of underrepresented populations. A full list of the OSWW grantees and a short summary of each project can be found in Attachment B of this Solicitation.

THE VINEYARD WIND OFFSHORE WIND ACCELERATOR PROGRAM

As part of its selected bid in the first Massachusetts procurement for long-term energy contracts, Vineyard Wind committed to fund and otherwise support specific initiatives designed to maximize offshore wind industry development in Massachusetts and provide benefits to local Massachusetts communities. A central piece of these commitments was the establishment of a \$15 million Offshore Wind Accelerator Program (the "Accelerator Program"), which includes:

- a \$10,000,000 <u>Industry Initiative</u> to accelerate the development of the offshore wind supply chain, businesses, and infrastructure in the Commonwealth by integrating existing and new Massachusetts businesses into the supply chain, and expanding offshore wind industry infrastructure and supply chain;
- (2) a \$2,000,000 <u>Workforce Initiative</u> to support recruiting, mentoring, and training of Massachusetts residents for careers in the Commonwealth's new offshore wind industry and to address key gaps and barriers in current offshore wind workforce development offerings in the Commonwealth; and
- (3) a \$3,000,000 <u>Wind and Whales Initiative</u> to develop and demonstrate innovative methods and technologies to enhance protections for marine mammals and support regional monitoring efforts as the Massachusetts and US offshore wind industry grows.

Vineyard Wind designated MassCEC to administer, manage, and oversee the Accelerator Program, and Vineyard Wind and MassCEC executed an agreement in September 2021 to guide the Accelerator Program.

Pursuant to the Accelerator Program Agreement, Vineyard Wind has established the Windward

Workforce Initiative. The purpose of this initiative is to support recruiting, mentoring, and training of Massachusetts residents, particularly of Southeast Massachusetts, and working with community colleges and other organizations, for careers in the Commonwealth's new offshore wind industry and address key gaps and barriers in current offshore wind workforce development offerings in the Commonwealth through measures that include, but are not limited to, continued funding support for the development and advancement of training and educational programs to meet identified needs and fill gaps and programs and initiatives that build a Massachusetts offshore wind workforce that is diverse, equitable and inclusive and also provides specific training programs, such as globally recognized certifications for offshore wind technicians, and component OEM certifications.

IV. PROGRAM GOALS, APPROACHES, AND PROJECT SCOPE

PROGRAM GOALS AND APPROACHES

MassCEC's goals for offshore wind workforce development are to advance Massachusetts as a national leader and innovator in offshore wind workforce training and education, to incorporate DEIJ elements (see Section V, Potential Barriers) into training and education initiatives in the Commonwealth, and thereby develop a well-trained and highly skilled workforce with an emphasis on diversity and safety. Through this Solicitation, MassCEC aims to foster and expand initiatives for offshore wind workforce training and development throughout the Commonwealth.

MassCEC employs the following approaches to achieve this goal:

- Conducting targeted research and analysis to inform strategic, evidence-based workforce development initiatives that meet the needs of both the emerging offshore wind industry and jobseekers;
- Engaging directly with offshore wind industry to seek advice and guidance on workforce development to ensure Massachusetts efforts align with their needs, while also tailoring efforts to align with the state and regional landscape;
- Investing in and leveraging resources for essential, high-need training and educational programs to meet identified needs and fill gaps;
- Incentivizing proactive DEIJ elements in all Offshore Wind Works grants;
- Convening, supporting, and facilitating practitioners and stakeholders—including industry, academia, training providers, workforce development organizations, community-based organizations, and others—to share information, ideas, challenges, and best practices relating to offshore wind workforce training; and
- Engaging closely with workforce experts, community-based organizations, environmental justice advocacy groups, and other stakeholders to proactively support programs and initiatives that build a Massachusetts offshore wind workforce that is diverse, equitable, inclusive, and just.

PROJECT SCOPE

MassCEC invites applications for projects under three separate tracks that inform, create, support, and/or expand offshore wind workforce development initiatives in Massachusetts and/or deliver workforce training for offshore wind to workers and students with emphasis on expanding opportunities for underrepresented populations. Funding availability, preferred maximum award sizes, and cost share requirements are presented in Section VI.

DIVERSITY, EQUITY, INCLUSION & JUSTICE ELEMENTS

The development of a new clean energy industry in the Commonwealth represents an opportunity for an equitable rollout of career pathways. Through this Solicitation MassCEC seeks to support initiatives that will increase access for underrepresented populations (Priority Groups, as defined in Section V) to training programs that will enable individuals to compete for offshore wind jobs. Projects that place an emphasis on DEIJ elements will be viewed favorably in the evaluation process.

Priority Group Access to Training

It is recommended that each proposal for a Workforce Development and Training Project under Track 1 include DEIJ elements in the form of goals, incentives, specific tasks, and funding allocations designed to broaden access to training programs for individuals in the identified Priority Groups. Examples of incentives that can be provided include tuition reduction or waivers, scholarships, travel support, housing support, and childcare. For proposed studies, applicants are encouraged to incorporate DEIJ considerations into their study scopes and the composition of their study teams.

Priority Group Employment

Applicants are expected to make good faith, commercially reasonable efforts to identify and hire qualified persons from Priority Groups for work associated with their proposed projects and to require the same of their contractors and subcontractors.

The intention of this provision is to include qualified labor from local communities and Priority Groups in the Project hiring process but not to limit participation solely to such communities.

Diversity, Equity, and Inclusion in Contracting

MassCEC encourages contracting for work on an awarded project in a way that strengthens and increases business opportunities for diverse business enterprises (such as minority, women, Portuguese, veteran, service-disabled veteran, lesbian, gay, bisexual and transgender [LGBTBE], and disability-owned businesses, as defined by the Commonwealth of Massachusetts Operational Services Division's Supplier Diversity Office).

The Applicant shall Seek to identify diverse business enterprises; obtain proposals, bids, qualifications, and/or quotes for work on their proposed project; and to award such work as commercially reasonable. Massachusetts Supplier Diversity Office maintains a Directory of Certified Businesses at: https://www.diversitycertification.mass.gov/BusinessDirectory/BusinessDirectorySearch.aspx The

Applicant shall require its contractors to also make similar good faith efforts for contracting with diverse business enterprises.

The intention of this provision is to include qualified diverse business enterprises in the proposed projects but not to limit participation solely to such enterprises.

TRACK ONE – WORKFORCE DEVELOPMENT PROGRAMMING

Applicants may propose one or more of the following project types:

- Workforce Development and Training Project: Applicants may propose to establish or expand an existing workforce development or training program. Applicants can propose to build capacity to conduct training, fund members to receive industry specific training, and/or create an introductory pathways program for offshore wind. For these projects, Applicants are encouraged to include DEIJ elements as described below.
- Access to Opportunity Project: Applicants may propose a DEIJ focused project that aims to help mitigate, reduce, or eliminate existing barriers to entry (see Section V) in the offshore wind industry for members of Priority Group(s) or provide targeted exposure, career guidance, support, and/or counseling to individuals in the identified Priority Group(s) pursuing a pathway into the offshore wind industry.
- **Study**: Applicants may propose a study related to workforce or diversity in offshore wind that will inform either the planning and implementation of workforce training and development programs in the Commonwealth or industry practices related to workers and worker safety. For these projects, Applicants are encouraged to include DEIJ elements as described below.

Proposed projects under Track 1 should fall into one of the four focus areas outlined below.

FOCUS AREA 1: SKILLED TRADES

In July 2021, Vineyard Wind and the Southeastern Massachusetts Building Trades Council signed a project labor agreement, which solidified labor unions and skilled trades' role in constructing the 800 MW Vineyard Wind 1 windfarm. This agreement involves more than 20 Massachusetts-based local labor unions and creates more than 650 union jobs. MassCEC is seeking proposals to support the readiness, capabilities, and capacity of our skilled trade partners for the specific needs of offshore wind though such activities as:

- sustaining the pipeline of workers entering the skilled trades through education, outreach, recruitment and related efforts;
- supporting opportunities for skilled trades workers to gain experience and earn the certifications and credentials necessary for work in offshore wind; and
- supporting industry partnerships that provide training and employment opportunities for labor unions.

FOCUS AREA 2: CAREER AND TECHNICAL EDUCATION

Career and Technical Education ("<u>CTE</u>"), as represented by Massachusetts vocational-technical ("<u>Voc-</u> <u>Tech</u>") schools and other organizations, are a critical pathway into the offshore wind workforce that has not been well developed in the Commonwealth. In 2020, Massachusetts established the Career Technical Initiative, aimed at training 20,000 skilled trades workers over four years to help close skills gaps and meet the needs of businesses across the Commonwealth. This initiative creates additional opportunities for both young people and adults through three teaching shifts a day at Voc-Tech schools. MassCEC is seeking proposals to build upon the Career Technical Initiative to enhance CTE training in offshore wind through:

- curriculum development;
- hands-on training opportunities;
- apprenticeship opportunities for graduates; and
- the establishment of an educational and training pipeline into skilled trades that are especially applicable to offshore wind.

FOCUS AREA 3: SECONDARY AND HIGHER EDUCATION

Establishing a pipeline of students from Massachusetts schools into offshore wind and the clean energy sector will require building interest in those careers while young people are in middle and high school. Through this type of programming, high school students with an interest in the industry can make informed choices about courses and programs they pursue, including the choice to attend a career and technical high school. MassCEC is seeking proposals to develop educational programming focused on introducing middle and high school students to offshore wind. These programs can be delivered through curriculum units, after-school programs, summer camps, career fairs or any other form.

Our nation-leading college and university system in Massachusetts provides a strong foundation for development and expansion of two- and four-year undergraduate and graduate degree programs to supply technical, professional, and scientific workforce for the offshore wind industry across the region. Several institutions have existing curricula, certificates/degrees, or accreditation related to various occupations in offshore wind. MassCEC is seeking proposals to support the development and expansion of offshore wind specific programs and curricula, focusing on technical, engineering, environmental science, project development, and other professional services at degree-granting institutions.

FOCUS AREA 4: WORKER SAFETY

While many of the career opportunities involved in the construction and operation of an offshore wind farm already exist onshore, individuals in those professions will require specialized training to work at sea. As identified by the 2022 NREL *U.S. Offshore Wind Workforce Assessment,* the standardization of safety certifications for people working at sea is required to ensure training programs meet the desired industry requirements. MassCEC seeks proposals that will support the development and offering of certified safety training courses aimed at individuals in the offshore wind industry. MassCEC also seeks proposals for comprehensive research projects that benefit the offshore wind industry through increased awareness of offshore safety best-practices, evaluations, and recommendations.

TRACK TWO - WORKFORCE TRAINING INFRASTRUCTURE

Applicants may propose a project to construct, purchase, expand or upgrade workforce- or trainingrelated equipment, technology, and/or facilities to better meet the needs of the offshore wind industry

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and a specific workforce training program. Workforce training for offshore wind frequently requires specialized infrastructure to simulate various aspects of installation and service operations, including wind turbine components, vessels, construction equipment, safety training setups, and other elements of an offshore wind farm. Infrastructure can support physical or virtual training. Under Track 2 this Solicitation supports proposals for the procurement and installation of such specialized infrastructure, with solid justification and a robust cost-share participation for infrastructure to be procured and operated by private companies.

PLEASE NOTE: Projects under Track 2 will be funded through federal funds from the **American Rescue Plan Act of 2021 ("ARPA")**. Because of the federal funding behind the awards, Track 2 projects will be subject to federal reporting and compliance requirements. Additionally, MassCEC is required to expend all ARPA funds awarded under Track 2 prior to **December 31, 2026**, and therefore, will require final invoices to be submitted to MassCEC for these funds well in advance of the December 31, 2026 deadline. As a consequence of ARPA funding, there are federal pass-through requirements in the Sample Agreement in Attachment F that are unique to ARPA funding. Applicants are strongly encouraged to review all relevant provisions in the Sample Agreement in Attachment F.

Example Projects:

- Civil site work.
- Renovation, upgrade, and/or modification of existing buildings.
- Renovation, upgrade, and/or modification of utilities or existing infrastructure.
- Procurement, installation and/or commissioning of permanent electronic training systems, e.g., vessel operations simulators or virtual reality systems.
- The planning, procurement, and installation of fixed training facilities or specialized equipment, for example:
 - a pool to offer offshore wind industry training such as Global Wind Organisation Basic Safety Training or Helicopter Underwater Escape Training; or
 - equipment to facilitate training in the manufacture, installation, or maintenance of offshore wind turbines and associated wind facility components.

MassCEC grant funding is **not available** for purchase of land, existing buildings, or other physical infrastructure existing at the proposed project site.

TRACK THREE - WORKER TRAINING FOR OFFSHORE WIND PORT TERMINALS

Up to \$1 million is available for awards under this track. Applicants may propose projects that advance the training and certification needs of maritime workers at offshore wind ports in Massachusetts communities that host key offshore wind facilities or companies. Projects under Track 3 will be funded through the Vineyard Wind Offshore Wind Accelerator Fund and administered by MassCEC. Companies that perform stevedoring operations and/or operate terminals in offshore wind ports are encouraged to apply under this track.

MassCEC and Vineyard Wind anticipate that a successful training program application may cover scopes of work needed for stevedoring operations, best-practice health, safety and environment

("HSE") standards, or upgrade/acquisition of equipment to allow stevedores to respond to the needs of offshore wind port use.

Example Projects:

- A training program to provide port and maritime workers with standardized HSE training, standardized signaling training, and other required trainings for work in an active offshore wind port.
- The procurement of a crane or other infrastructure required to train port or maritime workers and that will be utilized by the applicant to train Massachusetts workers for offshore wind roles.

KEY CONSIDERATIONS IN PROJECT DESIGN

While not exhaustive, the list below highlights relevant design considerations and best practices for workforce training and development projects:

- Industry Partnerships: OEMs and Tier 1 suppliers (i.e., manufacturers of major components for a wind facility) require technicians and other workers to have specialized training in addition to the basic safety and technical training all offshore wind workers will need. Proposals that support partnerships between OEMs and/or Tier 1 suppliers with local organizations or institutions (e.g., training providers or facilitating organizations) to develop curriculum, implement specialized technical training programs, and/or sponsor select workers or apprentices for brief periods to get on-the-job experience at windfarms either in the U.S. or abroad can improve chances of success. MassCEC seeks proposals that demonstrate a history of engagement with the offshore industry in the form of guidance, mentorship, or partnerships. A successful applicant will understand the needs of the industry and have consulted with stakeholders to inform their proposed project.
- **Training Provider Partnerships:** Partnering with another offshore wind or clean energy training provider to supplement the trainings or services being offered can be a great way to diversify your programming.
- **DEIJ Partnerships:** Applicants may wish to supplement their in-house project team with a partner or contractor to provide specialized assistance in developing and/or implementing DEIJ elements of the project. (See:

https://www.diversitycertification.mass.gov/BusinessDirectory/BusinessDirectorySearch.aspx)

- **Determining Focus Populations:** Applicants should aim to be specific about who the targeted population for the training or educational programming is. Applicants are encouraged to identify key Priority Groups (as defined in Section V) that will be targeted and explain how individuals will be recruited and retained.
- Addressing Barriers: From the initial outreach all the way through retention services, applicants are encouraged to design programming that mitigates barriers. Strong outreach plans will include ways to connect with individuals who may be difficult to reach via traditional avenues due to various factors, such as language barriers, lack of digital access, and distrust/cultural stigmas. Members of the target populations may lack prior support and experience to compete for initial job openings and advancement opportunities successfully. Thoughtful, engaging, accessible, and well-integrated work readiness or soft skill training components are critical to

participant success. Additionally, applicants are encouraged to explore strategic usage of training stipends, paid on-the-job learning, and initial wage subsidies combined with ongoing mentorship and support service during the early period of placements.

- Geographic Location: Most of the in-person training being offered through previous awards has been focused in the Southcoast. Applicants should consider the geographic area they intend to serve and strive not to limit their programs to only those in a certain region. Consider the needs of individuals from across the state when looking at potential barriers (as identified in Section V) to participation and designing the program.
- **Designing for Success**: Strong workforce development programs typically strive for at least 80% completion, 70% placement of participants in target occupations within 30 days after completion, and 60% retention of participants in target occupations 12 months after initial placement. For applicants seeking to serve participants with higher initial barriers, it is helpful to reference any comparable outcome data. In cases where the proposed target rates for a program are lower than 80%/70%/60%, applicants are encouraged to detail strategies and support that can lead to increased outcomes over the performance period of the grant.

V. APPLICANT ELIGIBILITY AND PROGRAM DEFINITIONS

TRACK ONE AND TRACK TWO

Applicants may be an individual company, organization, or institution, or a team of such entities. Applicants are encouraged to engage with, partner with, and/or demonstrate support from the offshore wind industry, including developers and other companies, and/or Massachusetts-based training or educational providers with Existing Programs (as defined in Attachment B). The lead applicant must fall into at least one (1) of the following categories:

- A community-based nonprofit organization with 501(c)(3) status and located in Massachusetts;
- A public government entity;
- An accredited Massachusetts school;
- An accredited Massachusetts higher education institution offering two (2) or four (4) year degrees;
- A local labor union; or
- An established private workforce training provider or other private company doing business in Massachusetts in partnership with an organization, entity, school, institution, or union that falls under one of the categories listed above.

While the primary geographic area of focus for the Solicitation is Massachusetts, MassCEC recognizes the regional nature of the local workforce, with workers residing in one state but working and/or seeking employment in a neighboring state. Thus, MassCEC will consider projects that foster offshore wind workforce collaboration with neighboring states. While co-applicants may be from outside the Commonwealth, the lead applicant must be a Massachusetts-based entity.

MassCEC strives to support organizations, companies, and entities that consciously work to create a diverse, equal, and inclusive work environment. MassCEC encourages such partners to have a Diversity, Equity & Inclusion ("DEI") policy to encourage hiring of a diverse team, provide equal and fair treatment for all team members, and ensure a workplace environment where all team members feel valued and have the opportunity to fully participate in creating organizational success.

TRACK THREE

Applicants may be an individual company, organization, or institution, or may be a team of such entities. Applicants must demonstrate experience and capabilities for working within ports and terminals in Massachusetts and operational competency related to stevedoring, rigging, signaling, line handling, vessel loading and offloading, and HSE standards. Applicants are encouraged to engage with, partner with, and/or demonstrate support from the offshore wind industry, including developers and other companies, and/or Massachusetts-based training or educational providers with Existing Programs (as defined in Attachment B).

During the review process, priority will be given to Massachusetts-based entities. However, Applicants who are not based in Massachusetts but serve Massachusetts ports or whose workforce consists in large part of Massachusetts residents are also eligible under **Track 3**.

PROGRAM DEFINITIONS

For the purposes of this Solicitation, MassCEC defines Priority Groups and Potential Barriers as follows.

PRIORITY GROUPS

For the purposes of this Solicitation, "<u>Priority Groups</u>" is defined to include the following:

- individuals from Environmental Justice ("EJ") Neighborhoods or low-income communities;
- members of federally recognized or state-acknowledged tribes;
- members of underrepresented communities in the clean energy workforce; and
- current or former workers from the fossil fuel industry ("Fossil Fuel Workers").

Environmental Justice Neighborhoods: Defined by the <u>Massachusetts Department of Energy and</u> <u>Environmental Affairs (EEA)</u>, Environmental Justice Policy as neighborhoods (U.S. Census Bureau census block group data for minority criteria, and American Community Survey (ACS) data for state median income and English isolation criteria) that meet one or more of the following criteria:

- the annual median household income is not more than sixty-five percent (65%) of the statewide annual median household income;
- minorities comprise forty percent (40%) or more of the population;
- twenty-five percent (25%) or more of households lack English language proficiency; or
- minorities comprise twenty-five (25%) or more of the population, and the annual median household income of the municipality in which the neighborhood is located does not exceed one hundred and fifty percent (150%) of the statewide annual median household income.
 - "Minority" refers to individuals who identify themselves as Latino/Hispanic, Black/African American, Asian, Indigenous people, and people who otherwise identify as non-white.

- "Low-income" means median household income at or below sixty-five percent (65%) of the statewide median income for Massachusetts, according to federal census data.
- "English isolation" refers to households that are English Language Isolated according to federal census forms or do not have an adult over the age of fourteen (14) that speaks only English or English very well.
- To see census block groups that meet the Environmental Justice definition, see Environmental Justice Map Viewer.

Federally Recognized and State-Acknowledged Tribes: Defined by the <u>US Department of the Interior</u> <u>Bureau of Indian Affairs</u> as a federally recognized tribe that is an American Indian or Alaska Native tribal entity that is recognized as having a government-to-government relationship with the United States, with the responsibilities, powers, limitations, and obligations attached to that designation, and is eligible for funding and services from the Bureau of Indian Affairs. <u>Massachusetts' Commission on Indian Affairs</u> (MCIA) assists Native American individuals, tribes, and organizations in their relationship with state and local government agencies, and more information can be obtained from their website and office support line.

Fossil Fuel Workers: Current and former workers from the fossil fuel industry, including but not limited to: (i) oil and propane dealer employees, including fuel delivery truck drivers; (ii) oil, gas, and propane heating technicians, sales, and administrative staff; (iii) gas station attendants; (iv) gas station equipment repair staff; and (v) gasoline car repair staff, and natural gas pipeline contractors.

POTENTIAL BARRIERS

For the purposes of the Solicitation, MassCEC has identified potential barriers to entry and participation in the offshore wind workforce ("<u>Potential Barriers</u>") to include, but not be limited to:

- Childcare and/or other caregiving costs;
- Transportation costs;
- Vehicle and/or public transportation access;
- Lack of a driver's license;
- Lack of a high school diploma or GED;
- Tool/equipment purchase costs;
- Training fees, tuition, or other educational costs;
- Access to Internet and computers or other connective devices;
- Opportunity costs of time spent in training or educational programs;
- Housing and/or food insecurity;
- Short- and medium-term impacts from the COVID-19 pandemic;
- Lack of support systems providing guidance and raising awareness to make training/educational programs and job opportunities more accessible and achievable;
- Cultural barriers; and
- Language barriers.

VI. AVAILABLE FUNDING AND COST SHARE REQUIREMENTS

MassCEC has allocated Eight Million Dollars (\$8,000,000) in funding for project awards under this Solicitation, and established preferred maximum award amounts and cost share requirements as set

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forth in this table. MassCEC may increase or decrease funding at its sole discretion. MassCEC will consider highly competitive proposals requesting award amounts in excess of the preferred maximum award amounts, however, such proposals must clearly demonstrate their value proposition and make a strong case as to why funds exceeding the preferred maximum are necessary.

	Track 1	Track 2	Track 3
Available Funding	\$2,000,000	\$5,000,000	\$1,000,000
ARPA Funds	No	Yes	No
Preferred Maximum Award per Project	\$300,000	\$2,000,000	\$1,000,000
Minimum Cost Share (Private Entity)	1:1	1:1	n/a
Minimum Cost Share (Public Entity)	0.25:1	0.25:1	n/a

All proposals under Track 1 and Track 2 must demonstrate a commitment to cost-sharing as MassCEC looks to leverage shared resources with limited funding. Specifically, project proposals submitted by private entities will require a one-to-one (1:1) financial match. All other proposals must demonstrate a minimum twenty-five percent (25%) cost-share, which can comprise financial contributions, in-kind contributions, or a combination thereof. Projects with greater levels of cost-share will be prioritized in the selection process. Proposals lacking any cost-share may be considered but must make a clear case for why including a cost-share is not possible or would be prohibitive. In-kind cost-share includes non-monetary contributions to project activities that are not covered by grant funds. Examples of in-kind cost-share can include but are not limited to: personnel time devoted to project activities, facility space used for project activities, materials and supplies necessary for project activities, etc. There is no cost share requirement for proposals under Track 3 of the Solicitation.

If a proposal requests funds for support services (e.g., services to help individuals overcome Potential Barriers such as childcare costs, fees to get a driver's license, programs to help individuals get a GED, etc.), the applicant must clearly document and explain the basis for determining the amount to be made available and how these services will directly support Priority Group(s)' participation in the proposed project. The applicant shall provide these details on support services and associated budget in Attachment D of this Solicitation.

VII. Timeline

Action Item	Target Dates
Release of Solicitation on MassCEC website	November 14, 2023
Informational Webinar	November 28, 2023

Q&A Period (Questions posed via email to offshorewind@masscec.com)	Ongoing
Questions with Answers Posted to MassCEC Website	Ongoing
Proposals Due	There will be two due dates for this funding opportunity: Batch 1 - February 2, 2024, by 5:00PM ET Batch 2 - April 26, 2024, by 5:00PM ET
Notification of Award	Batch 1 - March 2024 * Batch 2 - June 2024 *
Contracting Process	Spring/Summer 2024 ** Summer/Fall 2024 **

*Denotes target date subject to change at MassCEC's discretion.

**For planning purposes, Batch 1 applicants should use July 1, 2024, as an estimated start date and Batch 2 applicants should use September 1, 2024, as an estimated start date.

VIII. HOW TO APPLY

Interested parties must submit an application to MassCEC by the date and time specific in Section VII. Responses should be provided according to the content requirements and format laid out in the Trackspecific Application Form found in Attachment D, should be descriptive but concise, and should be submitted in 11-point font. Applicants must submit the Application Form that corresponds with the correct Track number for the proposed project. The submission must be in electronic form, including a completed version of Attachment C, Attachment D, Attachment E, and other relevant attachments, and submitted via email to Lauren Farnsworth at <u>offshorewind@masscec.com</u>. **The words "2023.2 Offshore Wind Workforce Solicitation Application" must appear in the email subject line.**

Please include a brief summary of you or your organization's commitment to DEI and/or EJ principles. If available, please provide or link to any relevant materials (e.g., organization guidance documents, mission/vision statements, etc.). You may also include brief examples of initiatives, projects, or other work in which the Lead Applicant and/or Project Partners have demonstrated a clear commitment to advancing DEI and/or EJ principles.

SUPPLIER DIVERSITY OFFICE CERTIFICATION (OPTIONAL)

MassCEC is interested in understanding the composition of its applicant and awardee pool of this Solicitation. Applicants who choose to complete the Supplier Diversity Office of Massachusetts ("SDO") self-assessment tool are encouraged to provide a screenshot or printout of the results page with their application packages to support MassCEC's effort to collect data regarding the applicant and awardee pool for the Solicitation. While this is not currently a program requirement, applicant submission of the

SDO questionnaire will help MassCEC better understand the composition of our applicant base today and may influence the selection of projects in the future.

Applicants are encouraged to complete the <u>30-second self-assessment</u> as part of the Certification Program for the <u>Supplier Diversity Office of Massachusetts (SDO)</u>.

While MassCEC encourages its Program Applicants to pursue certification if eligible, MassCEC recognizes that venture-backed startups may be ineligible for certification. Because MassCEC is interested in the results of the self-assessment tool primarily for informational purposes, MassCEC requests that Applicants respond to the questions in the tool based only on full-time employees with equity stakes, rather than considering the equity owned by investors.

IX. SELECTION CRITERIA

Applications will be reviewed in two separate batches after each batch due date specified in Section VII. MassCEC reserves the right to accept, reject, or place applications on hold based on a threshold review of clarity, completeness, and credibility of the application.

MassCEC staff may contact applicants to request supplemental information prior to formal review. MassCEC may also request an interview with applicants. External reviewers may also be consulted for input, recommendations, and/or with specific questions. All proposals submitted in response to this Solicitation that satisfy the threshold review will be reviewed based on the following criteria:

1. PROGRAM SUMMARY AND SCOPE

- Extent to which the proposed project demonstrates an understanding of the skills and knowledge needed for relevant offshore wind occupations and achieves the goal of meaningfully increasing Priority Groups' exposure to, participation in, and/or representation in the workforce for the emerging offshore wind industry.
- Extent to which the workforce development program/initiative, study or proposed infrastructure project provides offshore wind workforce training and development solutions that respond to high priority industry and workforce needs and opportunities, particularly those identified in the focus areas detailed in Section IV of this solicitation.

2. TEAM EXPERIENCE AND QUALIFICATIONS

- Applicant's and team members' experience and demonstrated ability to deliver high quality work for relevant projects of similar complexity in the area(s) of the proposed project.
- Quality of the applicant's and team members' performance on similar initiatives and/or their achievements on such initiatives.

3. WORK PLAN

- Presentation of a clear strategy and work plan for undertaking activities necessary to complete the project, including a sound approach to efficient and effective project management, and the extent that the strategy and work plan build upon lessons learned from similar programs which build upon the knowledge base that already exists.
- Extent to which the proposed schedule, milestones, and deliverables, goals and metrics seem appropriate, achievable and demonstrate a clear pipeline into offshore wind training, educational, and/or job opportunities.

4. COMMITMENT TO DIVERSITY, EQUITY, INCLUSION, ENVIRONMENTAL JUSTICE, AND/OR PRIORITY GROUPS

• Extent to which the Applicant and team members demonstrate a genuine and proactive commitment to diversity, equity, inclusion, and environmental justice, both internally within their organizations, and in any external programs, projects, or other work. Applicants may provide a statement to this effect as part of their proposal.

5. BUDGET

- Extent to which the requested information is provided in sufficient detail.
- Extent to which the project demonstrates a cost-efficient approach to each of the proposed tasks, and completion of the overall project at a reasonable cost.
- Efficient use of MassCEC funds, amount of cost share, and the extent to which other funds are leveraged.
- Identification of additional sources of funding if applicant is including a proposed cost-share in the proposal.

6. VALUE DEMONSTRATION

- Comparison of the proposed project to other applicants' proposals; and
- Overall value proposition of proposal to local workforce participants, the broader workforce ecosystem in Massachusetts, and the offshore wind industry, including the Vineyard Wind and South Coast Wind projects selected pursuant to Massachusetts law and formal procurements.

X. CONTACT INFORMATION FOR QUESTIONS

Please submit all questions in writing to Lauren Farnsworth, MassCEC's Offshore Wind Program Manager, (<u>offshorewind@masscec.com</u>) by the date stated in Section VII above. **The words: "Question** – **2023.2 Offshore Wind Workforce Solicitation" must appear in the email subject.**

XI. GENERAL SOLICITATION CONDITIONS

NOTICE OF PUBLIC DISCLOSURE

As a public entity, MassCEC is subject to Massachusetts' Public Records Law, codified at Chapter 66 of the Massachusetts General Laws. Thus, any documentary material, data, or other information received by MassCEC from an applicant is a public record subject to disclosure. **Applicants shall not send MassCEC any confidential or sensitive information in response to this Solicitation.**

DISCLAIMER & WAIVER AUTHORITY

This Solicitation does not commit MassCEC to award any funds, pay any costs incurred in preparing an application, or procure or contract for services or supplies. MassCEC reserves the right to accept or reject any or all applications received, waive minor irregularities in submittal requirements, modify the anticipated timeline, request modification of the application, negotiate with all qualified Applicants, cancel, or modify the Solicitation in part or in its entirety, or change the application guidelines, when it is in its best interests.

This Solicitation has been distributed electronically using MassCEC's website. It is the responsibility of Applicants to check the website for any addenda or modifications to a Solicitation to which they intend to respond. MassCEC accepts no liability and will provide no accommodation to Applicants who submit an application based on an out-of-date Solicitation document.

CONTRACT REQUIREMENTS

Upon MassCEC's authorization to proceed with the proposal, MassCEC and the awarded applicant(s) will execute a contract substantially in the form of the Sample Agreements attached to this Solicitation as Attachments E and F, based on which track the applicant(s) are applying to, which will set forth the respective roles and responsibilities of the parties.

XII. LIST OF ATTACHMENTS

ATTACHMENT A: MASSCEC OSWW PORTFOLIO ASSESSMENT – SUMMARY OF FINDINGS AND RECOMMENDATIONS

ATTACHMENT B: DESCRIPTION OF EXISTING PROJECTS ATTACHMENT C: AUTHORIZED REPRESENTATIVE SIGNATURE AND ACCEPTANCE FORM ATTACHMENT D: APPLICATION FORMS FOR TRACK 1, 2, 3 ATTACHMENT E: SAMPLE AGREEMENT FOR TRACKS 1 AND 3 ATTACHMENT F: SAMPLE AGREEMENT FOR TRACK 2

ATTACHMENT A: MASSCEC OSWW PORTFOLIO ASSESSMENT – SUMMARY OF FINDINGS AND RECOMMENDATIONS

In support of MassCEC's objective to build a world-class offshore wind workforce in Massachusetts, a consultant team conducted an assessment of MassCEC's Offshore Wind Works portfolio of investments. The Portfolio Assessment Report provides an overview of grantee capacity, discusses workforce development best practices, examines investments in scale and sustainability and presents key findings and recommendations. A summary of the findings and recommendations is provided here:

FINDINGS

- There is a need to raise awareness in the workforce and in BIPOC, low-income and environmental justice communities about opportunities in offshore wind. There is general agreement among the grantees that the public has a low level of awareness of opportunities to work in the offshore wind industry and pathways to these jobs.
- There are limited referral and program options in the early stages of the career pathway. For grantees that are working on outreach and engagement, it will be important to have programs and services to which they can refer people who are interested in a career in offshore wind.
- MassCEC Offshore Wind Works grantees are eager to identify opportunities to partner, particularly in outreach, career awareness and building connections across programs. They are also interested in being aware of and connected to other workforce development programs supported by the MassCEC, including the internship program.
- MassCEC Offshore Wind Works grantees expressed an interest in introducing offshore wind careers to students as early as middle school. This would ensure that high school students with interest in the industry could make informed choices about courses and programs, including whether to attend a career and technical high school.
- Career and technical high schools are not currently engaged in the offshore wind workforce development ecosystem as primary developers and sources of talent. The career and technical high schools are a primary pathway to jobs in the advanced manufacturing and construction fields. They are also highly successful in sending students to two- and four-year colleges in fields such as engineering and business.
- **Current capacity for in-person training is concentrated in the Southcoast**. Given that most of the hiring activity is currently in the Southcoast this may be appropriate for this phase. However, it places residents from other regions at a disadvantage in accessing training without transportation assistance.
- Instructor capacity may be a bottleneck to building scale. Several MassCEC Offshore Wind Works grantees noted difficulty in hiring instructors with knowledge and expertise in offshore wind.
- The current reporting system for MassCEC Wind Works grantees does not require them to disaggregate the outcomes of students/graduates by demographic group. The most rigorous and valuable data management systems collect participant level data at enrollment, throughout the program, at placement, and for a period following placement.
- Most grantees are unclear about the developers', contractors', and operators' hiring requirements and timeframe. Grantees are reaching out to the developers, contractors and operators individually with limited success in understanding hiring requirements and timeframes; there is no structure for

sharing that information with all of the grantees. All grantees noted that the MassCEC staff have been very helpful in connecting them to industry representatives.

RECOMMENDATIONS

Working with Industry

- Consider investing in an Offshore Wind Workforce Sector Partnership or tapping into an existing partnership that could serve as a convener for the purposes of aligning workforce development efforts with industry hiring needs.
- Consider investing in an intermediary organization that can coordinate outreach, referral and workforce development programming in the southeastern part of the state and serve as a partner in helping developers, contractors and operators to meet the hiring goals in Project Labor Agreements.

Coordinating Outreach and Services to Target Populations

- Develop a more formal system for sharing program information, making referrals and incentivizing referrals to the broader ecosystem.
- As grantees present offshore wind careers to the range of youth and adult audiences, it may be more compelling to present these in the context of the opportunities in the broader renewable energy and energy efficiency economy.

Building Out the Career Pipeline

- Add offshore wind instruction and/or career exploration into the CTE curriculum in the southeastern
 region to ensure that students in relevant programs are aware of and trained for careers in offshore
 wind. While CTE high schools have been eligible to submit proposals in previous rounds of funding, it
 may be more successful to design a targeted procurement effort aimed at supporting curriculum
 development for courses that add on to existing programs of study and provide knowledge and skills
 relevant to offshore wind careers.
- Begin career awareness activities in middle school and consider a more coordinated approach to career awareness in high schools. A procurement with this focus would support the development of a middle school curriculum that introduces careers in offshore wind and provides hands-on and VR experiences. The curriculum could be used statewide by schools, higher education, industry groups and environmental and climate action groups to raise awareness of these careers.
- Develop program options for adults who need academic and skill building before enrolling in a skills training, community college or bachelor's degree program. An investment in an integrated ESOL and technical skills training program would provide adults from EJ communities with English language skill building that is contextualized to specific offshore wind target occupations and at the same time develop specific technical skills required for the occupation(s).

Disaggregating Outcome Data

• Develop data collection and analysis capacity to determine whether programs are effective for all students and to identify the need to adjust program design to ensure equitable results. Track program participant employment outcomes and disaggregate completion, certification, employment and retention outcomes by race, ethnicity and gender.

Building Partnerships Among Grantees

• Support grantees in learning more about what other programs are offering and building stronger referral and program development relationships.

Expanding Geographic Access to Programming

• Future grants designed to serve residents of communities outside of the Southcoast could include funding to address barriers to accessing in-person training that is provided in the Southcoast. This might include stipends to pay for the cost of transportation and housing. With the development of the marshaling port in Salem, MassCEC may also want to expand programming for jobs likely to be needed at the marshaling port so residents of the Northeastern part of the state can be trained to fill these positions.

ATTACHMENT B: DESCRIPTION OF EXISTING PROJECTS

The following provides brief descriptions of existing and planned offshore wind workforce training and educational programs supported by MassCEC grants to date ("<u>Existing Programs</u>"). The press releases of the <u>2019</u>, <u>2020</u>, <u>2021</u>, <u>2022</u> and <u>2023</u> awards can be found on <u>our website</u>. For more information on any of these projects, please contact <u>offshorewind@masscec.com</u>.

A.I.S., Inc. (AIS): AIS provides fully trained protected species observers and certified inspectors for harbor and river dredging operations. MassCEC has awarded AIS one grant:

• **2020**: To expand their existing Protected Species Observers training program to include an onthe-water training component and to develop a new training program that improves offshore wind Operations and Maintenance professionals' understanding of regional protected species.

<u>Building Pathways, INC. (BPI)</u>: BPI provides a gateway for low-income area residents in underserved communities to access family-sustaining careers in the construction industry through apprenticeship preparedness training programs. BPI was awarded one MassCEC grant:

• **2021:** To provide four 200+ hour Pre-Apprentice General Construction training programs to women, BIPOC, transitioning veterans, disabled, disconnected or at-risk youth, and LGBTQIA+ community member participants for opportunities in the building trades industry with a focus on opportunities in the offshore wind industry.

<u>Bristol Community College (BCC)</u>: Bristol's National Offshore Wind Institute (NOWI) offers basic and advanced safety and technical training programs to prepare workers for jobs in construction, deployment, operations, and maintenance of offshore wind farms. Bristol was awarded four grants by MassCEC:

- **2019**: To establish basic safety training (BST) and basic technical training (BTT) to Global Wind Organization (GWO) standards on campus. These trainings are part of a larger initiative at BCC to develop NOWI, which will provide a variety of trainings, certifications, and educational offerings, including a certificate program and an Associate's degree relating to offshore wind.
- **2020**: To expand essential training and health certification programs at NOWI. Additionally, to conduct a feasibility study to understand the need and interest for further safety and technical training programs. Finally, to develop a Basics of Offshore Wind program.
- **2021**: To create a communication campaign and neighborhood outreach strategy in partnership with Old Bedford Village. The project will be supported by an asynchronous orientation to offshore wind course focused on entry into the sector. The project will focus on residents of New Bedford, BIPOC, women, veterans, under- and unemployed, and workers seeking to transition into offshore wind from other industries.
- **2022:** To construct the National Offshore Wind Institute (NOWI), the first purpose built offshore wind training facility in the nation. The NOWI will offer industry training programs, innovation and entrepreneurship programs, educational and virtual reality simulation all designed to train the local and regional workforce for occupations in the offshore wind industry.

• **2023:** To expand upon the Wind Works for You outreach and communication campaign. The project will bring the Offshore Wind Career Match tool to youth and young adults in New Bedford to help inform them of existing opportunities.

<u>Browning the Green Space (BGS)</u>: BGS is a non-profit focused on increasing the participation and leadership of Black and Brown people and of women in the clean energy space. BGS has received one grant by MassCEC:

• **2022:** To partner with Xodus Group to establish a post-secondary degree training program focused on placing individuals from priority groups in a two-year, paid program working on real-life offshore wind energy projects.

<u>Cape Cod Community College (CCCC)</u>: CCCC is a two-year community college located in West Barnstable, Massachusetts. MassCEC has awarded CCCC one grant:

• **2019**: To develop and deliver a suite of courses introducing students and workers to careers in offshore wind. These offerings include a non-credit *Offshore Wind 101* course and *Power of Wind* workshops for middle school students that raise awareness and interest in renewable energy technology and careers at an early stage. The offerings also include a three-course Sustainable Energy Certificate Program, which requires the courses *Introduction to Solar Energy* and *Renewable Energy, Climate, and Careers*.

<u>Fishing Partnership Support Services (FPSS)</u>: FPSS is a non-profit support service organization dedicated to improving the health, safety and economic security of commercial fishermen and their families. MassCEC awarded FPSS one workforce grant:

• **2020**: To work with the Commercial Fisheries Center of Rhode Island and the University of Rhode Island Fisheries Center to develop industry-standardized professional requirements for the safety and inspection of vessels for use in the offshore wind industry, which will allow interested fishermen to upskill and retrain for important offshore wind job opportunities that can augment their fishing incomes.

<u>Franklin Cummings Tech</u>: (FC Tech) is an urban college serving the Boston region with a commitment to student success and career readiness. FC Tech has received two MassCEC grants:

- **2021**: To partner with UMass Lowell and examine if an increased level of financial and academic support for women, people of color, and LGBTQIA+ communities will increase diversity in associate and bachelor's degree training programs for jobs in the Offshore Wind Workforce. Training programs for both technician and engineering level positions will be provided.
- **2022**: To partner with VinciVR to develop VR simulations for offshore wind construction and installation jobs as well as create refined simulations for direct drive turbines to be used in engineering classes. BFCIT and VinciVR will also purchase VR headsets and laptops so they can offer Renewable Energy Bootcamps for students in Gateway Cities or EJ populations.
- **2023**: To expand their Renewable Energy Bootcamp program with an additional eight bootcamps. The Bootcamp programs offers an introduction to offshore wind and renewable energy to underrepresented high school students at no cost.

<u>Gloucester Fishermen's Wives Development Program (GFWDP)</u>: GFWDP is a non-profit organization with a goal to promote a healthy environment and a just economy that allows local and family-owned businesses to thrive in a changing world. GFWDP has received one MassCEC grant:

• **2020**: To work with the Massachusetts Fishermen's Partnership and the Northeast Maritime Institute to recruit and pre-qualify commercial fishermen for enrollment in dedicated training and certification programs at the Northeast Maritime Institute.

International Brotherhood of Electrical Workers (IBEW) Local Union #223: IBEW aims to bring fair wages, safety on the job, and trained workers to the electrical industry. IBEW was awarded one MassCEC grant:

• **2020**: To establish a high voltage and fiber optic training program for skilled electricians at the IBEW's training facility in Taunton, in partnership with JDR Cables, a cable supplier for the Vineyard Wind 1 project.

International Association of Bridge, Structural, Ornamental, and Reinforcing Iron Workers, Local 7: Local

7 Iron Workers is a Massachusetts labor union located in Boston, MA. Local 7 Iron Workers have received one grant from MassCEC:

• **2022:** To support their members and apprentices by paying for them to acquire GWO Basic Safety Training certification and establishing a tool training program for members to obtain their Hytorc tool certification.

<u>Martha's Vineyard Center for Education & Training</u> **(MV CET):** MV CET's mission is to provide Vineyard Residents and workforce with experiences that enable them to thrive through skill building, professional development, credentialing, and life-long learning. MV CET has been awarded three grants by MassCEC:

- **2019:** To partner with Bristol Community College to provide Martha's Vineyard residents an onisland Offshore Wind Technician Certificate program. Completion of the Certificate program will give participants the skills and credentials necessary for jobs in operations and maintenance of offshore wind farms located south of Martha's Vineyard and beyond.
- **2020**: To expand the Offshore Wind Technician Certificate program to encourage high school dual enrollment in the program and to explore options for incorporating marine science and technology programming into Martha's Vineyard Regional High School's Career and Technical Education Program.
- **2021**: To launch a 24-month diversity outreach project dedicated to increasing the numbers of women and girls in offshore wind training and education. The project includes a community-wide, multi-level promotion campaign with financial support for Wind Turbine Technician Certificate, expanded high school STEM programming, and listening sessions.

<u>Massachusetts Maritime Academy (MMA)</u>: MMA is a public college located in Buzzards Bay, MA and offers courses in maritime-related fields. MMA was awarded two grants by MassCEC:

• **2017/2018:** Two tranches of funding for fabrication and installation of a crew transfer training structure to simulate the fixed wind turbine base for crew transfer training. The structure allows workers to train in the safe transfer from floating crew transfer vessel.

- **2019**: To support the establishment Global Wind Organisation (GWO) Basic Safety Training (BST) for offshore wind, and the development of an *Introduction to Offshore Wind* course for Academy cadets. MMA began offering GWO BST in 2019, making it the first in the nation to provide the Sea Survival module, which is required for working on wind projects offshore.
- **2020**: To conduct a feasibility study to understand the need, interest, and business case for developing and delivering a crew transfer vessel operator training program, specialized helicopter transfer training, and Global Wind Organisation (GWO) Advanced Rescue Training.
- **2022**: To develop and offer a 40-hour Basic Seamanship course to the Piledriver's Union Local 56, and to develop and offer Global Wind Organisation (GWO) Basic Technical Training, Enhanced First Aid, and Advanced Rescue Training. GWO courses are an industry standard required for many offshore workers.
- **2023**: To expand, design, develop, and implement the Offshore Wind Vessel Simulation and Training Center. The Center will be a full-service simulation platform capable of training on a range of functions from basic tug handling to advanced seamanship methods.

<u>MassHire Cape and Islands Workforce Board (CIWB</u>: CIWB is responsible for overseeing all publicly funded vocational education and training programs serving the entire Cape and the Islands region. CIWB has been awarded one grant by MassCEC:

• **2023:** To integrate offshore wind topics into existing curriculum at local Voc-Techs and provide internship and co-op experiences to students. Also to allow for students to visit local offshore wind career sites and participate in recruitment events.

<u>North Atlantic States Carpenters Training Fund (NASCTF)</u>: NASCTF aims to deliver cutting-edge training and curriculum to apprentice and journey-level union carpenters. MassCEC has awarded NASCTF one grant.

• **2023:** To support the Pile Drivers and Divers Local 56 and the Millwrights Local 1121 to obtain GWO safety certifications, GWO technical certifications, and HUET certifications. In all, over two hundred training opportunities for union members will be offered.

<u>Pile Drivers and Divers, Local 56</u>: Pile Drivers and Divers, Local 56 represents over 400 pile drivers, divers, burners, riggers, bridge, wharf, and dock builders in MA. Pile Drivers and Divers, Local 56 was awarded one MassCEC grant:

• **2019:** To sponsor trade union members to get certified in Global Wind Organisation (GWO) Basic Safety Training (BST) at the Massachusetts Maritime Academy.

<u>Self Reliance</u>: Self Reliance focuses on increasing awareness of energy issues within the region, facilitate properly sited renewable energy system installation, and executing training workshops that help to increase expertise related to renewable energy. Self Reliance has been awarded one MassCEC workforce grant:

• **2021:** Self-Reliance will develop and run a 5-day, 40-hour experiential learning program that introduces the offshore wind industry to K-12 educators and students from Gateway Communities across Massachusetts through a MassCEC grant. The program centers around the KidWind curriculum.

• **2023:** To expand on the 2021 award and offer the 5-day, 40-hour experiential learning program to students for another two years. Also to develop and run multiple one-day workshops on offshore wind for students in underrepresented communities around Massachusetts.

<u>Southeastern Massachusetts Building Trades Council:</u> (SMBTC) The SE Mass Building Trades Council represents union building trades workers across southeastern Massachusetts. They have received one grant from MassCEC:

• **2022**: To partner with Building Pathways South to provide one hundred union members with GWO Basic Safety Training or an Offshore Wind 101 course. One hundred union members will also have the opportunity to participate in a DEIJ training course.

<u>STEAM the Streets</u>: STEAM the Streets is an organization which aims to inform, inspire, and activate underserved youth to pursue in-demand career paths. They have received one MassCEC grant.

• **2023:** To develop an offshore wind career module including videos on a day-in-the-life of an offshore wind professional and highlighting pathways into the industry. The module will be hosted on the free STEAM the Streets app and available to local schools for use in their curriculum.

<u>Tufts University</u>: Tufts is a private research university located in Medford and Sommerville, Massachusetts. MassCEC has awarded Tufts one OSWW grant.

• **2023:** To conduct a study aimed at identifying the obstacles to safety in installing and maintaining offshore wind turbines. Through speaking with union members, best practices will be identified and disseminated to industry practitioners.

<u>University of Massachusetts, Amherst</u>: UMass Amherst is a public land-grant research university in Amherst, Massachusetts. UMass Amherst has received three grants from MassCEC:

- **2019:** To complete initial design and development of an online offshore wind professional certificate program for graduates and working professionals. The certificate program launched in Fall 2020.
- **2021**: To attract Priority Group members to its existing Offshore Wind Professional Certificate Program through relationships with multiple university STEM programs. Recruitment will initially focus on BIPOC/ethnic minorities. Subsequent recruitment will include veterans, individuals in Gateway Cities/EJCs, and indigenous populations, and women.
- **2022:** To expand its Offshore Wind Professional Certificate program through increased outreach to priority groups, increased scholarship funding, curriculum enhancements, and industry support outreach. Also, to develop an undergraduate offshore wind overview course for UMass Amherst students.
- **2023:** To develop an online, summer course for early undergraduates that will guide students to the educational pathways that will help them achieve entry-level job-ready skills aligned with their interests within the offshore wind industry. Also to support the redesign and realignment of the website for the Offshore Wind Professional Certificate program.

<u>University of Massachusetts, Dartmouth</u>: UMass Dartmouth is a public research university located in Dartmouth, Massachusetts. UMass Dartmouth has received one grant from MassCEC.

- **2022**: To develop a paid internship and experiential learning program for students in offshore wind relevant programs at UMass Dartmouth and Bristol Community College. Internship opportunities and capstone project topics will be determined by an advisory board comprised of industry, higher education, and workforce development practitioners.
- **2023**: To develop a graduate certificate program in Ocean Observing, Modeling, and Management of Offshore Wind. Also to provide scholarships and internship support for experiential learning opportunities.

<u>University of Massachusetts, Lowell (UML)</u>: UML is a public research university located in Lowell, Massachusetts. UML has received two grants from MassCEC:

- **2020:** To build on existing offshore wind workforce research through analysis of the local labor market and current university-level educational offerings. Additionally, to develop educational content and associated credentialing to fill existing gaps.
- **2022**: To develop and provide an OSHA 30-hour construction safety and general industry training to university students, offshore wind supply chain companies, and participants in local workforce development career centers.

<u>VINCI VR (VINCI)</u>: VINCI VR works to ensure workforces can improve training outcomes by leveraging the full potential of highly realistic simulated training and to significantly lower the barrier of entry for the creation of virtual reality content. VINCI has been awarded one MassCEC grant:

- **2020:** To certify two Global Wind Organisation (GWO) courses (Basic Technical Training-Installation and Slinger Signaler) using virtual reality simulations in partnership with Siemens Gamesa Renewable Energy, an offshore wind turbine manufacturer.
- **2023:** To bring existing offshore wind virtual reality modules to students in New Bedford, Fall River, and Martha's Vineyard. Every 5th grader in New Bedford will be exposed to offshore wind through the project. Also to develop a 'day-in-the-life' VR module of an offshore wind manufacturing career.

Xodus Group (Xodus): Xodus Group is an energy consultancy organization. Xodus has been awarded one MassCEC workforce grant:

 2021: To develop and conduct a workforce program designed to provide underrepresented groups with insight on career opportunities in offshore wind, in partnership with <u>Browning the</u> <u>Green Space</u>. The program will demonstrate the pathways to industry employment through two work experience routes: internships and pre-apprenticeships. Target Priority Groups include BIPOC, women, students in Chapter 74 vocational technical education programs, and unemployed and low-income individuals.