
DEDICATED TO INNOVATION

Offshore Wind Works **2023 Workforce Grants**

Informational Webinar – March 3, 2023

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Agenda

MassCEC Overview

Offshore Wind Workforce Development Strategy

Offshore Wind Works overview and prior awards

Community of Practice

OSWW 5

Questions?



MassCEC Strategic Vision

Over the next five years, MassCEC will advance the Commonwealth's climate agenda, helping the state meet its ambitious 2030 and 2050 goals while supporting economic development of the clean energy industry. MassCEC will continue to prioritize the following areas:



High-Performance Buildings: Accelerate impactful, resilient, and cost-effective electrification technologies and approaches to decarbonizing the building sector.



Clean Transportation: Foster development of clean technologies, enable new models for electric vehicle deployment, and accelerate growth of clean transportation companies.



Net-Zero Grid: Support technologies for a modernized and smarter grid and demonstrate innovative business models and market policies for delivering resiliency and risk management.



Offshore Wind: Reduce risk, increase market confidence and innovation, and support the economic development and workforce opportunities of the sector.

Across All Sectors:

 Diversity/Equity/Inclusion

 Workforce

 Technology Development

 Investments

MassCEC: offshore wind program

Reduce project risk, increase market confidence, and support the economic development and workforce opportunities of the offshore wind sector

PLANNING, ANALYSIS & ENGAGEMENT

Advance technical projects and stakeholder engagement on marine wildlife, fisheries, habitat, met-ocean, and transmission.

SECTOR DEVELOPMENT

Expand manufacturing, suppliers, services, infrastructure and grow a well-trained, highly-skilled and diverse workforce.

RESEARCH & INNOVATION

Support and collaborations for technology innovations, learn from early deployments, and expand offshore energy research.



Ports & infrastructure

- Offshore Wind Ports Challenge: \$180 million investment in offshore wind priority port redevelopment projects
- New offshore wind tax credits for (1) capital investment and (2) job creation, up to \$35 million



Workforce

- 2023 Offshore Wind Works solicitation to be released in February
 - Supporting more than 20 organizations and institutions for introductory courses, health and safety, technical training, industry and trades partnerships, undergraduate and graduate programs, Access to Opportunity (DEI)
 - Career pathways mapping and assessments examining capabilities, gaps, and opportunities



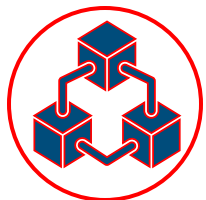
Supply chain

- New MassCEC supply chain assistance pilot program: Assess capabilities and qualifications of local suppliers, provide recommendations, deliver technical and financial support
 - Supply chain forums, “Meet the Buyer” events, work with developers, Tier 1 contractors, and partners to support B2B networking and business opportunities



Planning and analysis

- Gulf of Maine: BOEM planning process for commercial leasing in 2024
- Marine wildlife and commercial fisheries surveys and studies: Aerial survey campaign #8
 - Met-ocean data and transmission studies
 - Stakeholder engagement: Fisheries and habitat working groups; community meetings & workshops



Research and innovation

- Offshore energy innovation network, with hub in New Bedford
- GO ENERGIZE (Greentown Labs, Vineyard Wind): Environmental & digital solutions for OSW)
 - POWER-US|MA: 7 institutions integrating research into energy transition
 - National Offshore Wind R&D Consortium: US DOE, States, Developers, Industry
 - Technology development and investment programs for start-ups and others



OSW Workforce Development Strategy



RESEARCH AND ANALYSIS

Conduct targeted **research and analysis** to inform workforce development initiatives



ENGAGE

Engage directly with OSW industry to ensure programs and efforts align with their needs



INVEST

Invest in and leverage resources for essential, high-need programs to meet needs and fill gaps



SUPPORT

Proactively **support** programs and initiatives that build an OSW workforce that is diverse, equitable, inclusive, and just



CONVENE

Convene, support, and facilitate practitioners and stakeholders to share information, ideas, challenges, and best practices

Offshore Wind Workforce Opportunities



Planning and development

- Activities that precede construction, including site characterization, research, engineering, and permitting

Manufacturing and Assembling

- The ability to produce components of offshore wind turbines and associated infrastructure domestically is ramping up in the Commonwealth.

Construction and installation

- Pre-assembly, installation, and commissioning, with a large roles for skilled trades, organized labor, engineers, project managers, and individuals with maritime and water transportation expertise

Operations and maintenance

- Regular inspection of turbines, foundations, cables, and substations, and process of making necessary repairs or replacements

The need for OSW workforce development

2018 MASSACHUSETTS OFFSHORE WIND WORKFORCE ASSESSMENT

Construction and Installation Jobs

- 2,200-3,000 direct job-years
- 6,800-9,800 total job-years

Operations and Maintenance Jobs

- 140-250 direct annual job-years
- 960-1,700 total annual job-years

Economic Impact

- \$600-800M in direct economic benefit
- \$1.4-2.1B in total economic benefit

Priority Needs

- Skills and safety training programs
- Partnerships w/industry, schools, trades

2021 OFFSHORE WIND WORKFORCE TRAINING & DEVELOPMENT IN MASSACHUSETTS REPORT

- Deeper examination of capabilities and opportunities, building on 2018 Assessment.
- Quantifies offshore wind occupational demands on an annual basis
- Maps local labor supply for these occupations to further identify more specific areas of strength and potential gaps in local labor supply.
- Identifies and catalogs 119 distinct occupations across phases of offshore wind development

2022 ASSESSMENT OF CURRENT OFFSHORE WIND WORKS PORTFOLIO OF INVESTMENTS

OSW Workforce development investments

- **Introductory offshore wind courses and programs** - Programs to introduce the workforce (and supply chain) opportunities of OSW industry and include curricula and activities for K-12 students, college students, professionals
- **Health and safety training programs** - Programs to provide essential, industry-recognized health, safety, and maritime training, include Global Wind Organisation's (GWO) programs, medical fitness certifications, and maritime/US Coast Guard certifications and licensures.
- **Trades programs** - Programs specifically oriented to support the roles of organized labor, maritime workers, and other skilled trades for offshore wind.
- **Technical training programs** - Programs to train workers for both construction and installation and O&M scopes, including GWO, skilled trades training and apprenticeships, offshore wind power technician certificates, and associates degrees in engineering and technology.
- **Undergraduate and graduate programs** – OSW specific educational and extracurricular programs and curricula at 4-year degree and graduate institutions, focusing on engineering, project development, and other professional services.

Access to Opportunity

- In FY21, we shifted attention of the OSW workforce grant program to focus entirely on efforts to build a diverse, equitable, inclusive, and just offshore wind workforce
- *Expanding Access to Opportunity in the Offshore Wind Workforce:*
 - Increase participation of Priority Groups in existing offshore wind workforce programs
 - Reduce barriers for individuals interested in pursuing offshore wind job opportunities
 - Provide offshore wind industry exposure and/or career guidance and counseling on offshore wind career pathways for students and job seekers in Priority Groups



Previous Rounds of OSWW Grants

\$7.8 MILLION

In total awards made

4

Previous Solicitations

32

Total awards made

20

Unique organizations awarded



Community of Practice

Starting in 2023, quarterly meetings will be held remotely and in-person for all OSWW grantees and select invitees.

CoP meetings will be a place for practitioners to share, engage, and partner with other organizations.

Topics to be covered:

- Workforce demand
- Industry and regulatory trends
- Strategies for engagement with target populations
- Incorporating DEIJ into programming



OSWW Round 5

Project Types

1. **Workforce Development and Training Project**

- Example: A project that develops the curriculum for an offshore wind module for career and technical education centers to build a pathway into offshore wind for graduates.

2. **Access to Opportunity Project**

- Example: A pre-apprenticeship, pre-training, or pre-educational program that fills existing gaps in hard and/or soft skills needed to participate in Existing Programs and establishes a pipeline for successful participants to enroll in Existing Programs.

3. **Infrastructure Project**

- Example: A project to plan and construct a training facility or piece of specialized equipment used for training workers who will work on offshore wind projects.

4. **Workforce Study**

- Example: A study on the best practices for recruitment of underserved communities into the offshore wind industry.

Focus Areas

This solicitation seeks specifically to advance projects related to these areas



SKILLED TRADES



CAREER AND TECHNICAL EDUCATION



SECONDARY AND HIGHER EDUCATION



INFRASTRUCTURE



WORKER SAFETY

Priority Groups

INDIVIDUALS RESIDING IN ENVIRONMENTAL JUSTICE NEIGHBORHOODS OR LOW-INCOME COMMUNITIES

An EJ Neighborhood has one or more of the following four criteria:

- Annual median household income not more than 65% of the statewide annual median;
- Minorities comprise 40% or more of the population;
- 25% or more of households lack English language proficiency;
- 25% or more are minorities and the annual median household income is 150% or less of the statewide median.

MEMBERS OF FEDERALLY RECOGNIZED OR STATE ACKNOWLEDGED TRIBES

MEMBERS OF UNDERREPRESENTED COMMUNITIES IN THE OFFSHORE WIND WORKFORCE

CURRENT OR FORMER WORKERS FROM THE FOSSIL FUEL INDUSTRY



Program Design

PARTNERSHIPS

- Partnerships with industry representatives or training providers can bolster your proposal by demonstrating expertise and qualifications of the Applicant team.

DIVERSITY, EQUITY, AND INCLUSION

- DEIJ elements are strongly encouraged, and proposals can benefit from identifying a Priority Group and working to address the barriers that that group may have to participating in the program.

GEOGRAPHIC LOCATION

- Strive not to limit programs to only those in certain regions. Consider the needs of individuals across the state when looking at potential barriers.

Selection Criteria

PROPOSALS WILL BE SCORED AND RANKED BASED ON:

- Program Summary and Scope
 - Does the proposed project demonstrate understanding of the skills and knowledge necessary for OSW occupations and does it respond to high priority needs identified in the Solicitation?
- Team Experience and Qualifications
 - Does the Applicant team have experience delivering high quality work and measured results in related projects?
- Work Plan
 - Does the proposed project have a clear strategy to complete the project and do the proposed schedule, milestones, and deliverables seem appropriate and achievable?
- Commitment to DEIJ and/or Priority Groups
 - Does the application demonstrate a genuine and proactive commitment to DEIJ, both internally in their organizations and in any external programming?
- Budget
 - Does the proposal include a sufficiently detailed budget, a cost-effective solution, and identification of cost share sources.
- Value Demonstration
 - What is the overall value proposition of the proposal when compared with other applicants' proposals and taking into account the broader workforce ecosystem in Massachusetts and the offshore wind industry.

Application Materials

REQUIRED ATTACHMENTS

- Attachment C: Authorized Representative Signature and Acceptance Form
- Attachment D: Application Form
- Attachment E: Sample Agreement

OPTIONAL ATTACHMENTS

- Letters of Support
- SDO Self-Assessment Results
- DEIJ Materials

SUBMISSION REQUIREMENTS

- All materials submitted by email to offshorewind@masscec.com by 5:00PM on April 28, 2023
- Include “2023 Offshore Wind Workforce Solicitation Application” in the subject line
- Responses should be descriptive, but concise

Timeline

- Webinar will be recorded and available publicly
- Questions must be via email to offshorewind@masscec.com
- Answers will be posted on the Solicitation page on MassCEC's website
- * indicates a date that is subject to change at MassCEC's discretion
- For planning purposes, Applicants should use September 1, 2023 as an estimated start date.

Action Item	Date
Release of Solicitation	February 17, 2023
Informational Webinar	March 3, 2023
Questions due to MassCEC	March 8, 2023
Answers posted by MassCEC	March 15, 2023*
Proposals Due	April 28, 2023 by 5:00 PM
Notification of Award	June 2023*
Contracting Process	Summer/Fall 2023

Facilitating Partnerships

MassCEC would like to help facilitate partnerships between organizations in the offshore wind workforce training and development space.

If you are interested in forming a partnership, we are starting a publicly-hosted spreadsheet where interested parties can find contact information for other interested organizations.

RESPOND IN CHAT WITH:

- Organization Name
- Organization Type
 - Non-profit, training organization, private company, educational institution, etc.
- Contact Name
- Contact Email
- Target sector for partnership

OR EMAIL TO: OFFSHOREWIND@MASSCEC.COM

Q & A

**Please submit questions in writing to:
offshorewind@masscec.com**

**Answers will be posted to the Solicitation
page on March 15**

Thank you!

CONTACT INFORMATION

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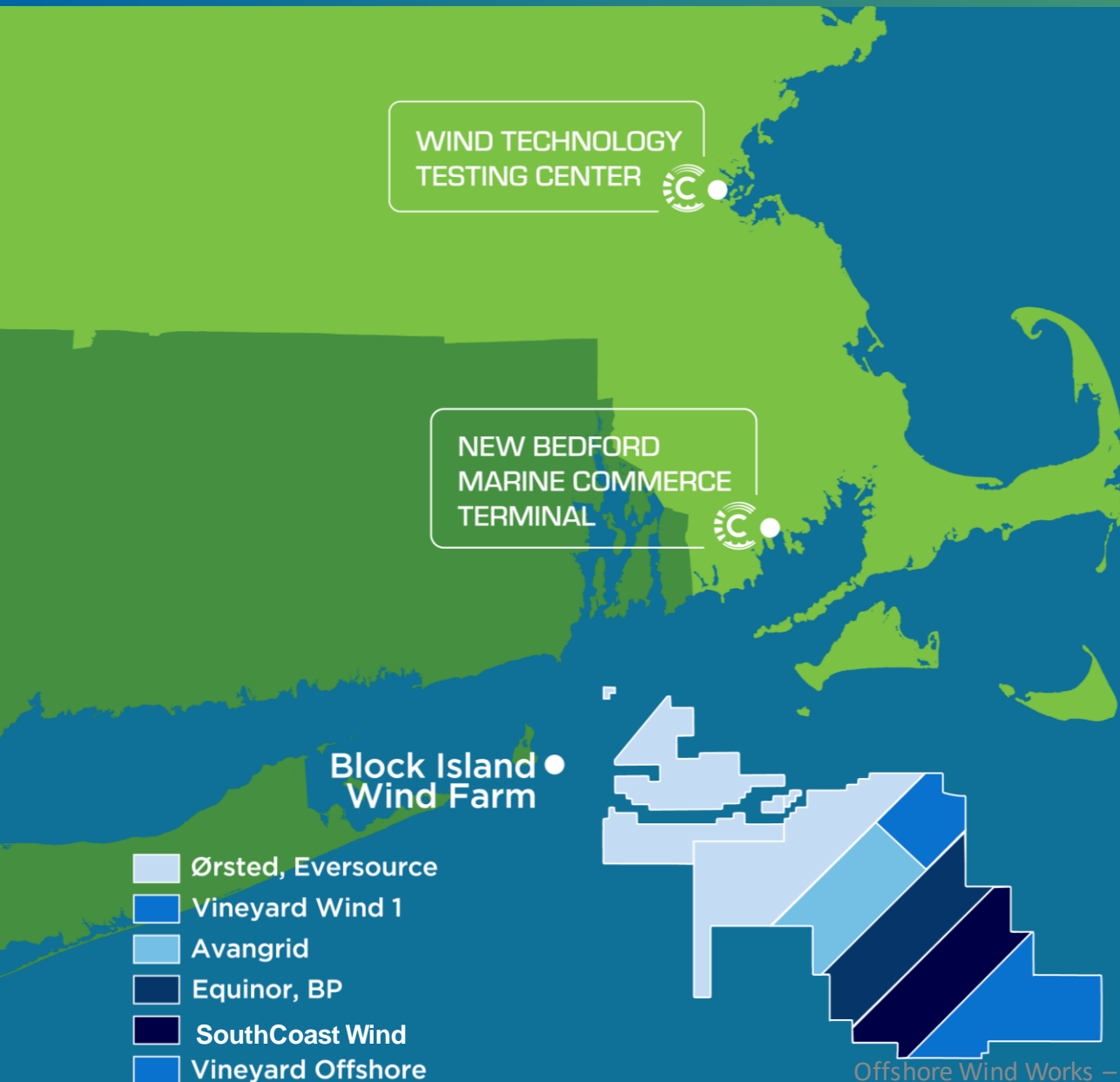
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Appendix

Massachusetts Offshore Wind Hub



LARGEST

OFFSHORE WIND AREA IN U.S., informed by a decade of stakeholder engagement, wildlife surveys, and met-ocean data collection

SEVEN

DESIGNATED LEASE AREAS with potential for more than **14 GW** of renewable wind energy to serve regional markets

5,600 MW

CURRENTLY AUTHORIZED Offshore wind will comprise bulk of generation, with 15-20 GW installed over next ~30 years

3,200 MW

SELECTED Vineyard Wind 1 (800 MW), SouthCoast Wind (1,200 MW), and Commonwealth Wind (1,200)

Projects, procurements, and pipeline



RFP #1 (2017): Vineyard Wind 1,800 MW project

- Onshore and export cable construction underway
- Operations at New Bedford Marine Commerce Terminal commenced

RFP #2 (2019): SouthCoast Wind 804 MW project

- Draft EIS in February; ROD Fall 2023

RFP #3 (2021): Avangrid 1,232 MW project & SouthCoast Wind 400 MW project

RFP #4: Release in May 2023

- Available authorization = 2.4 GW

2050 Decarbonization Roadmap

- Offshore wind will comprise bulk of generation
- 15-20 GW installed over next ~25 years



SOUTHCOAST WIND



Commonwealth Wind

