




Maine International
Trade Center



Maine
Offshore Wind
Initiative



Maine's Offshore Wind Opportunities



With its record of pioneering offshore wind innovation, proximity to the abundant wind resource of the Gulf of Maine, and a growing demand for clean energy across the region, Maine is poised to take a leadership role in a fast-growing offshore wind industry.

Why Offshore Wind?

Offshore wind (**OSW**) is the renewable generation of energy created by harnessing the force of wind out at sea. OSW is expected to generate \$1 trillion in global investment by 2040, and \$70 billion in the US in the next decade alone. Through Governor Mills' bipartisan-supported legislation, Maine is set to move to 100% renewable energy by 2050. The benefits this industry will have from the international stage to right here in Maine cannot be overstated.



**\$1
Trillion**

in global investment
by 2040



**\$70
Billion**

in the US in the
next decade



**100%
of Maine**

on renewable energy
by 2050

What is MITC?

Maine International Trade Center (**MITC**) is Maine's leading source for international business assistance. We help connect Maine companies with local and international partners to get the guidance, education, and funding they both need to succeed on a local and global scale. We work in close partnership with the Maine Governor's Energy Office (**GEO**) and are a key stakeholder in the Maine Offshore Wind Initiative.

Why Maine?

Maine's offshore winds sustain some of the highest speeds in the world. Our winds, along with the **depth of our waters** (Maine is home to **three intermodal deepwater ports in close proximity to the Gulf of Maine**), our distance to the East Coast's high-density urban population centers and other **high-demand markets**, our position as a **global technology and manufacturing leader**, our dozens of colleges and universities producing OSW talent, more than **a decade of local innovation**, our **top tier R&D testing facilities** in floating offshore wind technology, and our enterprising and **engaged citizenry**, give Maine a natural, important, and exciting role in the OSW industry.

Maine is seizing this opportunity at the state level—and we're looking to the future by empowering local schools to educate students on this up-and-coming industry, creating curriculum for engineers, field support, vessel builders, and more.

“Currently, the University of Maine at Orono has the largest floating offshore wind research, engineering and development team in the United States.”

— Dr. Habib Dagher, P.E., Executive Director of the Advanced Structures & Composites Center at the University of Maine.



Supply Chain Basics

Offshore wind relies on a vast supply chain network. MITC can help connect your business to the OSW ecosystem so you can start supplying components and services for OSW projects, from the local level all the way to international projects. We cultivate fruitful long-term partnerships between firms and developers, and we can't wait to get you involved.



Countless Opportunities in Offshore Wind

The OSW supply chain involves a range of companies of all sizes to deliver products and services for OSW projects during every phase of project development. These project phases generally include siting and development, manufacturing, construction and installation, and operations and maintenance.

OSW projects are executed through contracted partnerships between developers and tiered suppliers:

TIER

1

Suppliers who contract directly with a developer to deliver major contract packages.

Examples of Tier 1: Foundation Suppliers, WTG Suppliers, Offshore Substations, Cable Suppliers, Installation Contractors, and Onshore Substation Suppliers.

TIER

2

Subcontractors or vendors for the above Tier 1 suppliers.

Examples of Tier 2: Secondary steel fabrication, tower manufacturing, electrical components, cable protection, and crane suppliers.

TIER

3

AND
BEYOND

There is a growing and evolving need for a wide array of vendors and goods and services providers, including marine and port services, tool and fuel suppliers, support vessels, local support and maintenance services, and many more.

Phases of a Wind Farm

Outlined below is a four step phased approach for the successful implementation of an offshore wind farm. This diagram represents the work that needs to be completed at each stage to have a successful operating wind farm. Throughout the four stages, over 120 different types of jobs will be utilized, highlighting the importance of an extensive supply chain network.



 Planning Phase	~2-5 Years
Concept & Feasibility	
Feasibility Studies	Pre-FEED/FEED
Technology Selection	Preliminary Schedule
Site Investigations	Preliminary Budget
Conceptual Design	Financing Strategy
Model-scale Wave Tank Test	Regulatory Requirements
Design, Engineering & Contracting	
Basic Design	Final Budgets
Execution Strategy	Financing
Tendering	Project Organization
Supplier Selection	Setup
Contract Negotiations	T&I Strategy
Contingency Sizing	Final Wind Farm Layout



Execution Phase

3
Years

Procurement, Construction & Installation

Ramp-up Project Team
Detailed Design
Detailed Schedule
Workshop Design
Execute Contracts

Fabrication
Transportation
Installation
Application of Certification

Commissioning, Testing, Close & Transfer

Testing
Acceptance
As-built Documentation
Close Contracts

Document Project
Transfer to Operations
Ramp-down Project Team



Operating Phase

3-30
Years

Operation & Maintenance

Operation

Scheduled and Unscheduled
Maintenance



Decommissioning Phase

~30
Years

Procurement, Construction & Installation

Planning and Execution of
Decommissioning Activities

**Maximize your ROI.
Minimize your footprint.**

“As a company located in Central Maine, we are proud to be able to support this project [Vineyard Wind 1] and provide unique and exciting career opportunities here in the Northeastern part of the U.S.”

– Brian Langlais, President of Ironhouse, on his company being selected to perform the commissioning Management Services for the Nation's first commercial-sale offshore wind project.

Maine's Commitment to Responsible Offshore Wind

Maine remains fully invested in our state's maritime industries, fisheries, traditions, communities, and environment. We aim to explore thoughtful development of floating offshore wind energy in the Gulf of Maine in a responsible manner. Our goal is to ensure productive collaboration across industries.



A Mutually Beneficial Industry

By preparing today to engage with the offshore wind industry, your business benefits—and so does the state of Maine and the rest of the East Coast. While you gain access to current and emerging export opportunities, your involvement helps Maine identify and build out its OSW supply chain to secure our state's energy future. Maine works best when we work together, at the state, regional, and national levels.

Collaboration with surrounding states and national agencies has made Maine a leader in OSW. We want to continue to use these relationships to power up Maine and remove our dependence on foreign oil and gas—securing our state's energy future while simultaneously creating jobs that boost our local economy.



Financial Support

Maine is here to help companies engaged in OSW. Eligible companies can receive up to \$15,000 in reimbursements to grow domestic sales through the Domestic Trade Expansion Program (DTEP). Maine companies can receive up to \$20,000 in reimbursements through the State Trade Expansion Program (STEP).

To learn more about how your company can benefit from these funding opportunities, visit: mitc.com/business-support/industries/renewables/.



Why Start Today?

The **Planning Phase** for an OSW project can take up to 5-7 years. The **Execution Phase** can take up to 3 years. And the **Operating Phase** can last nearly 30 years. Be ahead of the curve and know the opportunities that are available for your business now, in five years, ten years, and long term.





Learn more about the ways your company can get registered in our offshore wind supply chain database and connect with your peers today. Visit: mitc.com/business-support/industries/renewables/

Contact MITC for more information at: offshorewind@mitc.com



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