Connecticut

Department of Economic and Community Development

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CONNECTICUT'S OFFSHORE WIND STRATEGIC ROADMAP

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For more information on Connecticut's Offshore Wind Strategic Roadmap, contact Connecticut's Chief Manufacturing Officer, **Paul Lavoie, at paul.lavoie@ct.gov**.

INTRODUCTION

Connecticut's Offshore Wind Strategic Roadmap outlines the state's commitments to offshore wind energy as well as its strategy for a thoughtful expansion of this critical renewable energy.

Developing clean energy that is affordable, reliable, and resilient

Diversifying the state's energy sources can increase the reliability of Connecticut's electric grid — and reducing the state's dependence on fossil fuel resources can help decrease Connecticut's energy costs.¹ Offshore wind is just one of the many clean energy sources helping to decarbonize Connecticut's electric sector and mitigate the effects of climate change. The offshore wind industry also presents a significant opportunity to create jobs and boost local economies across the state.

Establishing a central hub for offshore wind activities in the region

Under the leadership of Governor Ned Lamont, Connecticut has committed to a 100% zerocarbon electricity supply by 2040.² As part of this commitment to clean energy, Connecticut has played a notable role in the growth of the U.S. offshore wind industry over the last several years. The state has strategically pursued offshore wind solicitations, authorized procurements, and invested in infrastructure to encourage industry growth.

*Connecticut has committed to a 100% zero-carbon electricity supply by 2040.*²

These efforts have established Connecticut as a central hub for offshore wind activities in the region, including both initial staging and assembly (known as marshaling), as well as ongoing manufacturing and maintenance.

Updated transmission systems are also a critical aspect of the state's transition to clean energy. Connecticut's Department of Energy & Environmental Protection (DEEP) is working to build out these systems and improve grid reliability and resilience. Additional details on these efforts are available in DEEP's Integrated Resources Plan, which is updated and published every two years.³

The Biden administration has set ambitious goals of installing 30 gigawatts (GW) of offshore wind capacity by 2030 and 110 GW by 2050.³



U.S. Secretary of Energy Jennifer Granholm visits the Connecticut State Pier, one of two marshaling sites for offshore wind projects on the East Coast. Photo credit: Ørsted

Setting ambitious targets for offshore wind capacity at the federal level

At the federal level, the Biden administration has set ambitious goals of installing 30 gigawatts (GW) of offshore wind capacity by 2030 and 110 GW by 2050.⁴ The Biden administration is also targeting a carbon pollution-free power sector by 2035 and a net zero emissions economy by 2050.⁵ These ambitious objectives recognize the immense potential of offshore wind energy in the U.S.

To achieve these goals, the U.S. federal government has taken notable initial steps to:

• Streamline the permitting and regulatory processes required for the development of offshore wind projects;

- Support research and development initiatives that drive innovation and reduce the cost of offshore wind technology;
- Offer financial incentives, such as tax credits and grants, to attract private investment, encourage public-private collaboration, and offset the large upfront costs associated with offshore wind development.

The federal government — particularly the U.S. Departments of Energy, Commerce, and Interior has been actively engaging with coastal state governments, local communities, and industry leaders to facilitate the deployment of offshore wind projects. This collaboration ensures that projects align with environmental considerations and respect the interests of coastal communities as well as promote local job creation.

WHY CONNECTICUT

Connecticut's focus on regional collaboration, supportive policies, and strategic infrastructure investments has positioned the state as a key player in the offshore wind industry in the United States.

Location: Proximity and unobstructed access

Given its prime geography, Connecticut possesses both proximity and direct water access to federal lease areas that will soon host a number of wind farms in the Atlantic Ocean. Connecticut's deepwater ports have unobstructed access to these areas, with neither height restrictions due to bridges nor harbor access restrictions due to narrow channels or hurricane barriers.

Investment: Public and private collaboration

Connecticut has leveraged public- and private-sector investment to modernize its previously underutilized port infrastructure — and these investments have already had significant results.

The newly improved State Pier Terminal in New London, Connecticut, is the first active heavy-lift deepwater port with unobstructed ocean access that meets the marshaling port requirements of the offshore wind industry. The State Pier Terminal is one of only two marshaling facilities on the East Coast that are currently assembling wind turbines for deployment. With a renowned terminal operator running the facility and a world-leading wind developer as its first anchor tenant, the State Pier Terminal in New London, Connecticut, has established itself as a pioneer in offshore wind installation operations.

Manufacturing: Advanced supply chain and workforce

As production and maintenance of offshore wind components increasingly shifts from Europe to the U.S., Connecticut has a long–established advanced manufacturing industry that is well positioned to support offshore wind. Connecticut is renowned for both its advanced manufacturing supply chain infrastructure and highly trained workforce.⁶

For decades, Connecticut has been a manufacturing hub for the defense and aerospace sectors, including submarines, jet engines, and helicopters. By leveraging existing supply chain infrastructure and its highly trained workforce, Connecticut is positioned to support additional manufacturers and incentivize the expansion of in-state manufacturers into the offshore wind industry.

Innovation: Critical research and investment

Connecticut is known for its strong academic network, much of which is already conducting innovative research into offshore wind technology, mitigations for environmental impacts, and other critical topics.

The state offers both two- and four-year degrees across 17 in-state locations. Connecticut is also home to the **University of Connecticut (UConn)** one of the top public research universities in the U.S. — and **Yale University**.⁷ Connecticut State Colleges and Universities (CSCU) is the state's community college system and is consistently ranked among the top in the nation. The state also operates a robust network of technical high schools, known as the Connecticut Technical Education and Career System (CTECS).⁸ Through its various research programs and partnerships, Connecticut continues to support cutting-edge research and development for the offshore wind industry.

CONNECTICUT'S STRATEGY FOR OFFSHORE WIND

Connecticut's goal is to build on its existing assets to become a global leader in the offshore wind industry.

In 2019, Connecticut authorized the procurement of up to 2,000 MW of offshore wind energy by 2030 the equivalent of **30% of the state load and the largest authorization** by load of any state in the region at the time.⁹ The Connecticut Department of Energy and Environmental Protection (DEEP) then estimated that an additional 3,745 to 5,710 MW of offshore wind would be needed to meet the state's 2040 zero carbon goals.¹⁰

As Connecticut fulfills its existing procurement commitment and assesses future procurement potential, the state is positioned to **strategically capitalize on the economic potential** of this developing industry.

Four strategic pillars

This roadmap provides direction for the sustainable and equitable growth of Connecticut's offshore wind economy and focuses on four strategic pillars:

Infrastructure & Real Estate: Leverage Connecticut's deepwater ports to expand the state's offshore wind marshaling, operations and maintenance, and other support capabilities.

Supply Chain: Increase regional capabilities and coordination across the offshore wind supply chain, with a focus on resiliency, equity, and affordability.

Workforce: Expand Connecticut's existing workforce development programs to ensure that local workers — including those in historically disadvantaged communities — can prepare for and connect with high-quality jobs in the offshore wind industry.

Research & Development: Partnering with the state's extensive network of innovative academic and investment institutions to promote research activities related to offshore wind.

To implement these tactics, the state is announcing the launch of the Connecticut Wind Collaborative (CWC), a new public-private organization focused on advancing the offshore wind industry in Connecticut (see 'Implementation' on p. 21).

A NOTE ON COLLABORATION AND EQUITY

The U.S. offshore wind industry is larger than any one state, and Connecticut is committed to collaborating with partners at all levels: regionally with Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; nationally; and globally.



Partnering with states at the federal level

Connecticut has been an active participant in the Federal-State Offshore Wind Implementation Partnership, a collaboration between the White House National Climate Advisor; the Secretaries of the Interior, Energy, Commerce, and Transportation; and the governors of several East Coast states.¹¹ The Partnership is focused on building a strong domestic supply chain for offshore wind along with wellpaying jobs.

Supporting underserved communities

Connecticut is also prioritizing industry development that provides measurable economic results for

minority populations and historically underserved communities in the state. Equity is a key component of the state's existing workforce initiatives.

As the workforce demands of the offshore wind industry expand, Connecticut plans to leverage existing partnerships and develop new resources to provide marginalized communities with the training opportunities needed to access high-quality jobs in the offshore wind industry. With each development opportunity, Connecticut and its partners are also carefully reviewing and preparing mitigation efforts for potential effects on coastal and marine environments as well as the residents who depend on them.



Photo credit: Department of Energy and Bureau of Ocean Energy Management

CURRENT LANDSCAPE IN CONNECTICUT

The following section highlights key policies and regulations regarding renewable energy in Connecticut, as well as notable milestones in the development of Connecticut's offshore wind industry.



Offshore wind in Connecticut

Connecticut has already positioned itself as an early mover in the offshore wind industry in support of its zero carbon and clean energy goals.

2018

Connecticut's Department of Energy and Environmental Protection (DEEP) announced its **first offshore wind project**, a 200 MW installation known as Revolution Wind, that was developed by joint venture partners Ørsted and Eversource. Connecticut's procurement from the Revolution Wind project has since expanded to a total of 304 MW.²²

2019

The bipartisan enactment of Connecticut's Public Act 19-71 authorized DEEP to procure up to **2,000 MW of offshore wind energy.**²³

Another significant offshore wind project – **Park City Wind** – was subsequently announced by DEEP later that year. The Park City Wind project is being developed by Avangrid Renewables and is slated to provide Connecticut with 804 MW of offshore wind energy.²⁴

2020

The Connecticut Port Authority and State of Connecticut — together with the port operator Gateway Terminal and the offshore wind development joint venture of Ørsted and Eversource — announced an agreement to **redevelop the State Pier Terminal in New London** into a modern, heavy-lift marine facility that also meets the staging and assembly (also known as marshaling) requirements of the offshore wind industry.²⁵

2021

The Biden administration **set a national goal** of deploying 30 gigawatts (GW) of offshore wind capacity by 2030 and 110 GW by 2050.²⁶

Economic development organizations in Connecticut **commissioned multiple studies and proposals** regarding offshore wind, signaling a



Photo credit: Ørsted

growing interest in the industry. The Chamber of Commerce of Eastern Connecticut, joint venture partners Ørsted and Eversource, and McAllister Marine Engineering prepared recommendations for how Connecticut could expand its capabilities within offshore wind.²⁷

The Southeastern Connecticut Enterprise Region (seCTer) was also chosen as a finalist in the U.S. Economic Development Administration's \$1 billion Build Back Better Regional Challenge for its proposal to build an offshore wind industry cluster within the state.²⁸

2023

The State Pier Terminal in New London became the first active East Coast offshore wind marshaling terminal with unobstructed access to the ocean, as staging and assembly operations began for the first of three Ørsted and Eversource projects commissioned by Connecticut, New York, and Rhode Island.

DEEP announced its intention to conduct **two new procurements** for grid-scale zero-carbon energy sources, including one for offshore wind for up to 1,196 MW in the aggregate.²⁹ That solicitation is anticipated to be released in 2023.

STRATEGIC PILLARS FOR OFFSHORE WIND

Connecticut's current economic development strategy for offshore wind is organized into four main pillars:









Each of the sections on the following pages summarizes key state assets within each of the pillars as well as proposed actions to spur additional economic development in each area.

These tactics will be implemented by the Connecticut Wind Collaborative (CWC), a new public-private organization focused on advancing the offshore wind industry in Connecticut (see 'Implementation' on page 21).



PILLAR 1: INFRASTRUCTURE & REAL ESTATE

STRATEGIC INITIATIVE:

Leverage Connecticut's deepwater ports to expand the state's offshore wind marshaling, operations and maintenance, and other support capabilities.

July 2023: Workers unload tower sections delivered to State Pier Terminal in New London for staging and assembly before deployment to offshore lease areas in support of Ørsted/ Eversource's South Fork Wind project. Photo credit: Ørsted

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KEY ASSETS

Deepwater ports in New Haven, Bridgeport, and New London

The National Renewable Energy Laboratory (NREL) has repeatedly highlighted the limited available infrastructure to support offshore wind activities in the United States.³⁰ Over the long term, the lack of specialized port facilities and transmission infrastructure could pose barriers to the efficient development and deployment of U.S. offshore wind projects.

For the purposes of this roadmap, a focus will be made on port infrastructure, as Connecticut's Department of Energy & Environmental Protection (DEEP) is responsible for issuing the state's Integrated Resources Plan to assess future electrical needs and identify the resources to meet those needs.³¹

In New Haven, Bridgeport and New London,

the state is working closely with the U.S. Army Corps of Engineers to carry out safety and harbor efficiency dredging projects, including a harbor deepening project to bring New Haven Harbor to a depth of -40 feet; a maintenance dredge of Bridgeport Harbor to restore the harbor depth to at least -33 feet; and ongoing maintenance of the federal channel in New London.



August 2023: Workers unload a 600-ton offshore wind nacelle at State Pier Terminal in New London. Photo credit: Quinn & Hary Marketing/ Public Relations

Port of New Haven

The Port of New Haven is the busiest port in Connecticut and second only to Boston in terms of the volume of cargo handled annually in New England.³² With convenient



rail connectivity and more than a dozen active terminals, the Port of New Haven's operators are renowned for their bulk as well as their breakbulk cargo handling capabilities.

Port of Bridgeport

- In Bridgeport, Avangrid's Park City Wind project includes commitments to establish a company headquarters, as well as to redevelop privately owned waterfront industrial property.
- In the short term, the redeveloped property will support foundation piece steel fabrication and act as an outfitting and staging area.
- Over time, the property will transition to a long-term operations and maintenance hub for the life span of the Park City Wind project.

State Pier Terminal in New London

- In New London, the Connecticut Port Authority, State of Connecticut, Ørsted, and Eversource have jointly committed over \$300 million to redevelop the 40-acre State Pier Terminal.
 - The state has committed just over \$200 million and Ørsted and Eversource have contributed nearly \$100 million to the infrastructure improvements project.³³
 Ørsted and Eversource are leasing the facility for a minimum of 10 years, with the

Connecticut Port Authority receiving lease rent of \$2 million per year and a percentage of the revenue associated with terminal operations.³⁴

- In 2019, the Connecticut Port Authority reached an impact fee agreement with the City of New London. The city receives a portion of the Authority's terminal operations revenue, as well as additional funds to offset terminal-related municipal services.³⁵
- In 2021, the City of New London and the Ørsted and Eversource joint venture signed a host community agreement guaranteeing the city at least \$5.25 million in payments over seven years.³⁶

The upgraded State Pier is the first active East Coast offshore wind marshaling terminal with unobstructed access to the ocean.

• Notable improvements include **increased available acreage** and two new heavy-lift platforms, each capable of handling loads of 5,000 pounds per square foot. The remainder of the terminal's load bearing capacity has also been enhanced to 3,000 pounds per square foot.³⁷

- The improvements benefit State Pier's long-term growth by **increasing the terminal's capacity** to accommodate heavy-lift cargo for years to come while maintaining its freight rail link.
- State Pier Terminal is **already supporting the assembly and delivery** of approximately 160 turbines for three offshore wind projects that will provide power to Connecticut, New York, and Rhode Island. Once installed, these projects will have an estimated output of 1,760 MW — enough to power more than 1 million homes.³⁷
- Staging and assembly operations at the terminal are expected to generate more than 100 well-paying jobs.³⁷



ThayerMahan bubble curtain technology ships docked at Gateway Terminal's Montville facility, located on the Thames River, two miles north of the State Pier Terminal in New London. Photo credit: ThayerMahan

PRIORITY ACTIONS

- Map existing Connecticut infrastructure and real estate for offshore wind activities and make these resources publicly available for industry members.
- 2 Increase investment in available key port and waterfront properties such as those located in and around deepwater ports in Bridgeport, New Haven, and New London.
- 3 **Conduct additional feasibility studies**, where appropriate, to determine how these assets can be maximized for offshore wind development.



Tower sections being offloaded at State Pier Terminal. Photo credit: Quinn & Hary Marketing/Public Relations



PILLAR 2: SUPPLY CHAIN

STRATEGIC INITIATIVE:

Increase regional capabilities and coordination across the offshore wind supply chain, with a focus on resiliency, equity, and growth.

KEY ASSETS

Well-established advanced manufacturing industry

Proactive, Supportive Manufacturing Ecosystem

Connecticut has taken a proactive approach to supporting manufacturing over the long term.

- Over 4,000 manufacturers are currently operating in Connecticut, employing over 160,000 skilled workers.³⁸
- Connecticut's Manufacturing Innovation Fund has distributed **over \$90 million** to help manufacturers develop and implement new technologies.
- Connecticut is also **the only state in the U.S.** with a chief manufacturing officer appointed by the governor.

Traditional Defense and Aerospace Powerhouse

Connecticut already has extensive manufacturing capabilities in the traditional defense and aerospace sectors and is home to flagship companies such as **Pratt & Whitney, Sikorsky**, and **General Dynamics Electric Boat**.

- The highly technical processes used by these companies to construct submarines, helicopters, and jet engines in many ways parallel the processes required to manufacture offshore wind farm components. For example, Connecticut has a demonstrated expertise in composite materials and metal fabrication.
- The state's **existing advanced manufacturing capabilities are well positioned** to support a vibrant in-state offshore wind manufacturing sector.



Strong Ancillary Support Network

Non-manufacturing firms, including engineering services, technology companies, and staffing agencies, are also critical to the development of a robust supply chain for the offshore wind industry.

• Connecticut-based companies such as ThayerMahan, Survival Systems, and Burns & McDonnell are all part of the state's thriving offshore wind supply chain.

Existing collaboration with regional offshore wind supply chain

Proven Track Record of Partnership

- The U.S. offshore wind industry is larger than any one state, and **Connecticut is already working closely with its state and federal partners** to develop an innovative, streamlined, and equitable supply chain.
- Connecticut is a founding member of the Federal-State Offshore Wind Partnership, a collection of East Coast states working closely with the White House to expand collaboration across key elements of the offshore wind supply chain. These elements include everything from manufacturing facilities to port capabilities.³⁹

A 2021 study commissioned by the Chamber of Commerce of Eastern Connecticut estimated that an 800-megawatt offshore wind project deployed from New London could create over 5,000 direct supply chain jobs and over 1,800 indirect jobs across the skill spectrum.⁴⁰

PRIORITY ACTIONS

- Work with developers, original equipment manufacturers, and Tier 1 contractors to better understand the requirements of the regional offshore wind supply chain.
- 2 Leverage Connecticut's existing manufacturing capabilities to assist existing manufacturers – and incentivize new manufacturers – into the offshore wind supply chain.
- Partner with offshore wind developers to map out Connecticut's current supply chain capabilities and demonstrate how they fit into and support — efforts across the broader region.
- Undertake a gap analysis to identify and address supply chain gaps using mechanisms such as inward investment, cooperation among Connecticut-based companies, or attraction of new business to the state.
- Jidentify and utilize funding sources, such as the Connecticut Manufacturing Innovation Fund, to invest in high-potential areas within offshore wind manufacturing.
- Engage with key audiences at the state, regional, and global levels about state leadership's commitment to offshore wind as well as the level of opportunities and resources.



ThayerMahan, headquartered in Groton, deploys Hydrotechnik Lubeck Big Bubble Curtains that shield marine mammals from harmful construction noise. Aerial view of bubble curtain in action. Photo credits: ThayerMahan



PILLAR 3: WORKFORCE

STRATEGIC INITIATIVE:

Expand Connecticut's existing workforce development programs to ensure that local workers — including those in historically disadvantaged communities — prepare for and connect with high-quality jobs in the offshore wind industry.

KEY ASSETS

Well-trained workforce with relevant expertise

Unparalleled Talent Pool

Connecticut has one of the strongest offshore wind talent pools in the nation. The state's workforce is **ranked #4 in the U.S**. for workforce productivity and **#3 for advanced degrees**.⁴¹



Similar to its supply chain, Connecticut's advanced manufacturing workforce — especially in the defense and aerospace sectors — is well positioned to support the U.S. offshore wind industry.

Highly Technical Precision Skill Sets

The highly technical precision engineering, machining, welding, and fabrication processes overseen by employees to construct submarines, helicopters, and jet engines in many ways mirror the processes required for offshore wind farm components.

Established workforce development infrastructure

Long-Term Investment in Talent Pipeline

Connecticut has invested significantly in the organizations and resources needed to source and train its workforce for today's job market.

Connecticut's **Chief Workforce Officer** and **Office of Workforce Strategy** provide the state with a world-class workforce pipeline and work hand in hand with the Governor's Workforce Council.

• These entities partner with the state's broader ecosystem of community-based organizations, workforce investment boards, educators, businesses, labor organizations, and others to ensure that the Connecticut's talent pipeline from Pre-K to retirement — is responsive to the needs of the growing offshore wind industry. $^{\rm 42}$

Embedded Skills Training Programs

Connecticut has embedded skilled training programs into various aspects of its education system to encourage early interest and engagement with the advanced manufacturing sector.

- Connecticut's network of state colleges and universities have several technical programs supporting the aerospace, shipbuilding, and defense industries that are well suited to the needs of the offshore wind industry.
- Connecticut's **community college system** has been cited as the best in the nation.⁴³
- Connecticut's **technical high schools** are also an early-stage talent pipeline into certain offshore wind positions.

Forums to identify workforce needs

Collaborative Workforce Organizations

In addition to its existing development programs, Connecticut is also home to several workforce organizations specifically designed to promote collaboration and problem-solving.

- **Regional Sector Partnerships** in Connecticut empower business leaders in the state to identify and address shared workforce challenges. Five specific regional groups are addressing these issues across the state.⁴⁴
- The Eastern Connecticut Workforce Investment Board oversees a Manufacturing Pipeline project that provides no-cost training to potential workers to address the hiring needs of local manufacturers.⁴⁵
- The Connecticut Clean Economy Council (CCEC) will identify gaps in the clean energy workforce and ensure that the state has an adequate workforce to deliver on climate solutions, including wind.

PRIORITY ACTIONS

- Collaborate with other East Coast states such as Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont — to determine effective early education and workforce development initiatives that inform, attract, and prepare individuals for roles in the offshore wind industry.
- 2 Develop a formal partnership between Connecticut government agencies, offshore wind companies, and research institutions to drive joint workforce development and training programs as well as investment in the industry.
 - Map out the specific workforce needs of the offshore wind industry in Connecticut and incorporate them into preexisting or new training programs.

- 4 Work closely with academic and business leaders to establish a formal offshore wind pathway within Connecticut's existing workforce development infrastructure.
- Partner with developers, original equipment manufacturers, and the broader supply chain to better understand the current labor and technical shortages affecting the offshore wind industry.





Photo credit: Ørsted



PILLAR 4: RESEARCH & DEVELOPMENT

STRATEGIC INITIATIVE:

Partner with the state's extensive network of innovative academic and investment institutions to drive and promote research activities related to offshore wind.

KEY ASSETS

Strong network of academic and investment institutions

Academic

Connecticut's **state colleges and universities** offer both two- and four-year degrees across 17 in-state locations. Connecticut is also home to the University of Connecticut (UConn) — one of the top public research universities in the U.S. as well as Yale University.⁴⁶

Connecticut's **community college system**, known as CSCU, has been ranked the top in the nation.⁴⁷ The Connecticut Technical Education and Career System (CTECS) also operates 17 diploma-granting **technical high schools**, as well as a technical education center and two mechanic and maintenance programs.⁴⁸

UCONN Yale

Capital

Connecticut Innovations functions as the state's venture capital arm and is the leading source of financing and ongoing support for growing companies in the state. The organization oversees a \$100 million ClimateTech Fund specifically for innovative early-stage companies focused on energy and other topics.⁴⁹





The Connecticut Green Bank was launched through bipartisan legislation in 2011 and has since mobilized more than \$2 billion of investment into the state's green economy.⁵⁰

Robust renewable energy & offshore wind research ecosystem

UConn: A Clean Energy Leader

UConn has established itself as a national leader in clean energy and has a range of research programs dedicated to advancing offshore wind and other clean energy sources.

- UConn's Connecticut Initiative on Environmental Research of Offshore Wind (CIEROW) is conducting targeted research in marine environments that may be affected by the offshore wind industry.⁵¹
- UConn has partnered with Eversource to create the **Eversource Energy Center** and conduct interdisciplinary research around power availability during extreme events.⁵²
- The U.S. Department of Energy's National Renewable Energy Laboratory (NREL) has a research partnership with UConn to further clean energy and improve grid resilience.⁵³
- UConn was also selected by the U.S. Department of Energy to establish and operate the Department's national Onsite Energy Technical Analysis and Support Center (TASC). As the national TASC site, UConn will work with a network of companies, universities, and research centers to expand the use of clean energy technologies in the industrial sector.⁵⁴

Yale Supports Clean Energy Research and Start-ups

Yale University also has a number of programs supporting research and early-stage start-ups in the clean energy space.

• The Yale Center for Business and the Environment was originally launched as a connective hub for students pursuing studies in both business and the environment. Over the years, the Center has expanded significantly and now maintains eight areas of focus, including clean energy and climate innovation.⁵⁵

• ClimateHaven is a Yale University-supported incubator that is partnering with state government, private businesses, and nonprofits to support start-up companies involved in climate innovation. The incubator provides mentorship, technical expertise, and other services to support climate-focused start-ups.⁵⁶

PRIORITY ACTIONS

- Partner with existing initiatives at in-state academic institutions to identify the areas of offshore wind research and funding that present the greatest opportunities for growth and investment in Connecticut.
- Collaborate with academic institutions across other East Coast states — including Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont — to support joint R&D initiatives to advance innovation in the offshore wind industry.
- Promote the success of Connecticut's academic and research programs dedicated to advancing offshore wind and other clean energy sources to the offshore wind industry and relevant sectors.



IMPLEMENTATION

Launching the Connecticut Wind Collaborative (CWC)

To support the execution of the initiatives outlined in this plan, Connecticut is launching the Connecticut Wind Collaborative (CWC). As a nonprofit 501(c)(3), CWC will advance the offshore wind industry in Connecticut by convening leaders from across the offshore wind industry — including government officials, private-sector executives, academics, and researchers — to foster collaboration within the state and across the region.

Activities overseen by the CWC may include:

- **Developing** additional strategies and tactics to expand the offshore wind industry in Connecticut.
- Educating key audiences in the U.S. and abroad on Connecticut's resources for offshore wind.
- **Supporting** municipalities, universities, and others with grant applications related to the growth of the offshore wind economy.

Additional details regarding the cluster and its activities will be released at a future date.

As a nonprofit 501(c)(3), CWC will advance the offshore wind industry in Connecticut by convening leaders from across the offshore wind industry including government officials, privatesector executives, academics, and researchers — to foster collaboration within the state and across the region.

CONCLUSION

Connecticut has a long and storied maritime heritage and will continue to carry this legacy into a new era as a leader in U.S. offshore wind. The adoption of offshore wind not only propels Connecticut toward its zero carbon goals but also increases energy affordability, resiliency, and reliability throughout the state.

A number of strategic advantages place Connecticut at the forefront of the offshore wind industry: its prime geographical position; its robust port assets; its well-established advanced manufacturing supply chain and skilled workforce. The state's innovative network of academic and investment institutions also continue to advance the development of offshore wind technology. Driven by the newly established Connecticut Wind Collaborative (CWC) and a collaborative spirit, Connecticut is prepared to engage with our local, national, and global counterparts as we collectively work towards a shared goal of a future powered by clean energy.

APPENDIX

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