

Recent & Upcoming Events,
In-person & Virtual, Regarding
Offshore Wind, Salem Port
Development, Living Green Expo.....

By

John Hayes, Chair, SERC

For April 2023 monthly meeting of SERC

Salem Offshore Wind Terminal Project Meeting - Third Public Meeting

In association with AECOM and the City of Salem, Crowley will be hosting a public meeting on the Salem Offshore Wind Terminal Project on Tues May 2, 2023

POSTED ON: APRIL 26, 2023 - 8:31AM

Salem Offshore Wind Terminal Project Meeting - Third Public Meeting

In association with AECOM and the City of Salem, Crowley will be hosting a public meeting on the Salem Offshore Wind Terminal Project:

**Salem Academy Charter School
Norman H. Read Gymnasium, 16 Lynch Street, Salem, MA 01970
Tuesday, May 2, 2023
6:00 – 7:30 PM**

The Salem Offshore Wind Terminal Project is a private-public partnership between the City of Salem and Crowley to develop, build and operate the state's second major offshore wind port.

Crowley will transform a 42-acre former coal power plant site in Salem along Derby Street and Fort Avenue into a multi-faceted terminal for marshalling, staging and transport of offshore wind turbine components. We are excited to partner with the City of Salem and Commonwealth of Massachusetts to support New England's renewable energy development. Building one of the region's first facilities to support the port and offshore wind infrastructure will provide many community benefits, including investment and jobs.



Salem Offshore Wind Terminal
Join our next Public Meeting:
Salem Academy Charter School, Norman H. Read Gymnasium,
16 Lynch Street Salem MA 01970
Tuesday, May 2, 2023, 6:00 PM

We invite you to learn more about the Salem Offshore Wind Terminal project at our upcoming public meeting on Tuesday, May 2, 2023, at 6:00 PM.

Visit www.salemoffshorewind.com to learn more.
There will be a virtual option for participating in this meeting. Virtual attendees may pre-register using the following link:
https://us02web.zoom.us/join/register/AVN_vK67D-bQQP9pV_I76x7BA

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Crowley is ready to begin this long-term project and federal support, providing many benefits for the community:

- Job opportunities during and after construction
- Investment in improvements to port infrastructure
- Opportunities for community development initiatives
- Reduction in the Commonwealth's carbon footprint

To learn more about this project, visit our website at www.salemoffshorewind.com

Hi 🙋 do you have any questions?

¡Hola! 🙋 ¿Tiene alguna pregunta?

Community-Wide Meeting on Offshore Wind Port Development

Tuesday, May 2nd 6pm. Hosted by Crowley
Salem Academy Charter Gym & Virtual



SAFE Members -

May 2nd 2023

6pm

After the May Day event in Lynn on Monday, May 1st, please make a point of coming out to the May 2nd hybrid *Community-Wide* meeting hosted by Crowley.

When: Tuesday, May 2nd at 6pm

Where: Salem Academy Charter School, Norman H. Read Gymnasium, 16 Lynch Street Salem MA 01970 or VIRTUAL

- **Translation in Spanish is available**
- **Childcare will be provided by Angela's Daycare at the meeting**
- **Light refreshments will be available**

Virtual attendees may [pre-register here](#). In person attendees, shoot me an email to confirm your attendance.

6pm

Register in advance for the virtual option.

REGISTER



2023 Salem Living Green Expo

Saturday, May 13, 2023, from 10 am – 1 pm / Old Town Hall,
32 Derby Square, Salem, MA

The Salem Chamber of Commerce and the City of Salem Sustainability and Resiliency department invite businesses and organizations to participate in the 2023 Salem Living Green Expo. The Expo will bring together green industry professionals, city departments and consumers from Salem & the North Shore regions to discuss products, services, and information. The fair is free to attend and will be held in and around Old Town Hall and Derby Square. There is limited space for participants at the fair, the organizers will review applications and payment will be refunded if applicant is not selected.

Our Goal: Promote products, services and information that encourage healthier, more sustainable consumption and lifestyles for businesses and families.

Additional programming: There will be exhibitor talks upstairs in Old Town Hall, EV's on display, as well as a free documentary screening at the National Park Visitor Center.

2023 Promotion & Publicity:

- Business listing in program, social media & website
- Promotion to Salem Chamber members and the local business community, residents
- Press releases to media outlets
- Promotional marketing to all Salem public school students
- Salem Chamber e-Newsletter, social media & City communications




MASSACHUSETTS
SIERRA CLUB

Municipal Climate Action Plan Panel

Date and Time:

Thu, May 4, 2023; 12:00 PM - 1:00 PM (Local Time)

 [Add to Calendar](#)

Organized By: Massachusetts Chapter

Location: Virtual

Event Organizers:

Emma Brown

emma.brown@sierraclub.org

Sam Lambert

sam.lambert@sierraclub.org

With recent climate wins at the federal and state levels, there are many reasons to feel excited—and overwhelmed. Municipalities across the state have an opportunity to be real leaders in the fight against climate change through climate mitigation and action plans. This program is designed to **help you learn from other officials about planning and implementing Climate Action Plans**. Sierra Club is excited to host three panelists to share their

- Thomas Barrasso - Director of Sustainability - Dept. of Planning & Community Development, Brookline, MA
- Peter Dunbeck - Chair of Sustainable Westborough - Town of Westborough
- Julie L. Gagen - Sustainability Coordinator - Town of Weston

The Climate Action Plans of the panelists' towns are below:

- [Brookline Climate Action Plan](#)
- [Westborough Climate Action Plan](#)
- [Weston Climate Action & Resilience Plan](#)

Vineyard Wind Partnership for Salem Harbor Port

Project would create hundreds of local jobs at new port facility constructing offshore wind turbines

POSTED ON: SEPTEMBER 30, 2021 - 11:43AM

Vineyard Wind, a joint venture between Avangrid Renewables, a subsidiary of AVANGRID, Inc. (NYSE: AGR), and Copenhagen Infrastructure Partners (CIP), today announced that the company has entered into an agreement with the City of Salem and Crowley Maritime Corporation to create a public-private partnership aimed at establishing Salem Harbor as the state's second major offshore wind port. The agreement, part of the "Commonwealth Wind" proposal, is contingent upon the company winning an award by the state of Massachusetts, which is currently evaluating offshore wind procurement bids.

Vineyard Wind estimates that the project would create up to an estimated 400 full time equivalent (FTE) job years during the revitalization of the port and up to another 500 FTEs over the first five years of operation for construction and staging for wind projects and also day-to-day port operations, for a total of 900 FTE job years.

"As offshore wind continues to expand, new purpose-built ports will be key to the success of this industry. By constructing the nation's first purpose-built offshore wind port in New Bedford, Massachusetts has been leading the way. With a new offshore wind port in Salem, the Commonwealth can ensure that it is ready to face the demands of a rapidly growing industry" said **Lars T. Pedersen, CEO of Vineyard Wind**. "With both New Bedford and Salem capable of delivering port operations needed for offshore wind, the state can ensure that both the South Coast and the North Shore can benefit from the creation of new highly skilled and good-paying jobs, something that will cement Massachusetts' position as a leader in the new and growing offshore wind industry."

"This partnership is a great example of how sites that once supported coal can be transformed into sustainable infrastructure to support the state's economic transition," said **Bill White, Head of Offshore Wind for Avangrid Renewables**. "Commonwealth Wind is a transformational project that provides economic opportunity and clean electricity for Massachusetts, facilitated by this important partnership with the City of Salem and Crowley."

Under the terms of the proposed agreement, Crowley Maritime Corporation, through its New Energy subsidiary Crowley Wind Services, will purchase the 42 acres surrounding Salem Harbor Station, currently owned by a subsidiary of Footprint Power LLC, and will serve as the long-term offshore wind port operator for the site.



Hi 🙌 do you have any que

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¡Hola! 🙌 ¿Tiene alguna pregunta?



# Salem Wind Port

Salem Harbor Port Authority

April 6, 2023 1700

## Agenda

- INTRODUCTIONS
- CURRENT PROJECT STATUS
- COMMUNITY OUTREACH
- ENVIRONMENTAL IMPACT
- OPERATIONS
- CONCLUSION
- QUESTIONS AND ANSWERS

## Salem Port Development



- Port Design/Construction
- Port Operations
- Vessel Operations and Management



- First lease holder at the port, once construction is complete.
- Will use the site for marshalling of Offshore Wind component parts



City of Salem

- Salem Harbor Port Authority
- Cruise Operations
- Community Benefits Agreement

# Required Permits & Status



| Agency                                               | Scheduled Date                                                                                    |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Local</b>                                         |                                                                                                   |
| Salem Conservation Commission                        | NOI – February 2023 - Open                                                                        |
| Salem Planning Board                                 | Submit April 2023                                                                                 |
|                                                      |                                                                                                   |
| <b>State</b>                                         |                                                                                                   |
| Executive Office of Energy and Environmental Affairs | MEPA Certificate (EENF-Nov. 2022) on Single Environmental Impact Report – SEIR – April 2023       |
| Massachusetts Department of Environmental Protection | Chapter 91 License and Dredge Permit – April 2023<br>401 Water Quality Certification – April 2023 |
| Massachusetts Office of Coastal Zone Management      | Coastal Zone Management Federal Consistency Review – April 2023                                   |
|                                                      |                                                                                                   |
| <b>Federal</b>                                       |                                                                                                   |
| U.S. Army Corps of Engineers                         | General Permit (USACE Section 10, 103, 404, and 408) – In progress                                |
| Federal Aviation Administration                      | June 2023                                                                                         |
| U.S. Environmental Protection Agency                 | June 2023                                                                                         |



# Phasing & Timeline

The Salem Offshore Wind Terminal will be developed over the course of 3+ years. We anticipate the following timeline that is subject to change.

## Design:

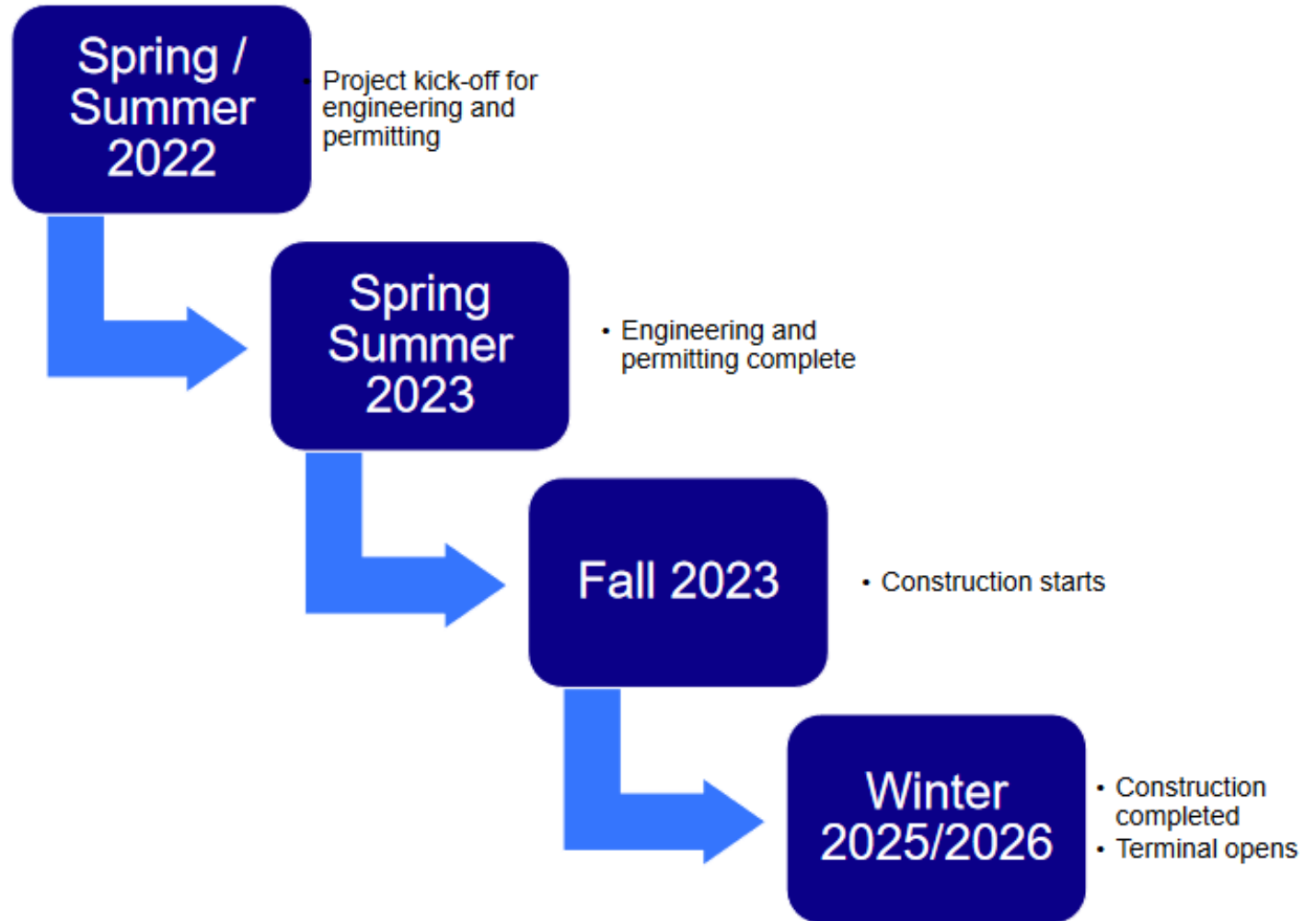
- 90% Package - April 2023
- 100% & IFC Drawings – May/June 2023

## Permitting:

- Landside permits – July 2023
- Pile Driving – July 2023
- Dredging – June 2024

## Construction:

- GC Qualifications – In progress
- GC Procurement – End Q2/Q3 2023





State and Local Climate  
and Energy Program

# Electrifying America's Ports

May 23, 2022 | 2 PM Eastern

Three audio options:

1. Listen via computer
2. Use the "Call Me" feature
3. Dial 1-415-655-0002 or 1-855-797-9485; Event number: 2428 209 1350

John Hayes referred to this 70+ slide pdf (at [epa.gov](http://epa.gov) website) during the April 2023 public forum "Salem Wind Port" (the offshore wind port development project). He did it as an FYI for the audience since SERC and SAFE have together expressed concerns regarding the need to avoid the burning of diesel (and other fossil fuels) by incoming/outgoing vessels and offloading vehicles.

# Electrifying America's Ports

## Today's Agenda

- Introduction – Andrea Denny and Jessica Daniels, U.S. Environmental Protection Agency (EPA)
- EPA Ports Initiative Resources to Support Port Electrification – Sarah Froman, U.S. EPA
- Zero-Emission Trucks and Equipment Thriving in California Ports – Leslie Goodbody and Earl Lanberg, California Air Resources Board (CARB)
- Air Quality Initiatives and Electrification Potential – Mark Messersmith, South Carolina Ports Authority (SCPA)
- Utility-Port Coordination in Tacoma – Jeremy Stewart, Tacoma Power and Graham VanderSchelden, Port of Tacoma
- Question and Answer Session

*The views expressed by speakers on this webinar are solely those of the participants and EPA does not endorse any products or commercial services mentioned in this webinar.*

## Electrifying ports to reduce diesel pollution from ships and trucks and benefit public health: Case studies of the Port of Seattle and the Port of New York and New Jersey

**Authors:** Zhihang Meng and Bryan Comer, Ph.D.

**Keywords:** port electrification, air pollution, health impacts, shore power, emissions inventory

### Summary

The Port of Seattle and the Port of New York and New Jersey (NY/NJ) are key hubs serving international and domestic shipping in the United States. To reduce port emissions, both are investing in electrification, including by installing shore power and setting goals for 100% zero-emission harbor craft and trucks. By combining a series of simple, user-friendly tools, this study estimates how port electrification could reduce emissions and how that would benefit the surrounding regions in terms of air quality and public health.

**Proposed  
2023 Salem Municipal Harbor Plan and  
Designated Port Area Master Plan**

City of Salem, Massachusetts



## 2.0 Salem Harbor Planning Area Description and Background

### 2.1 Salem Harbor Planning Area

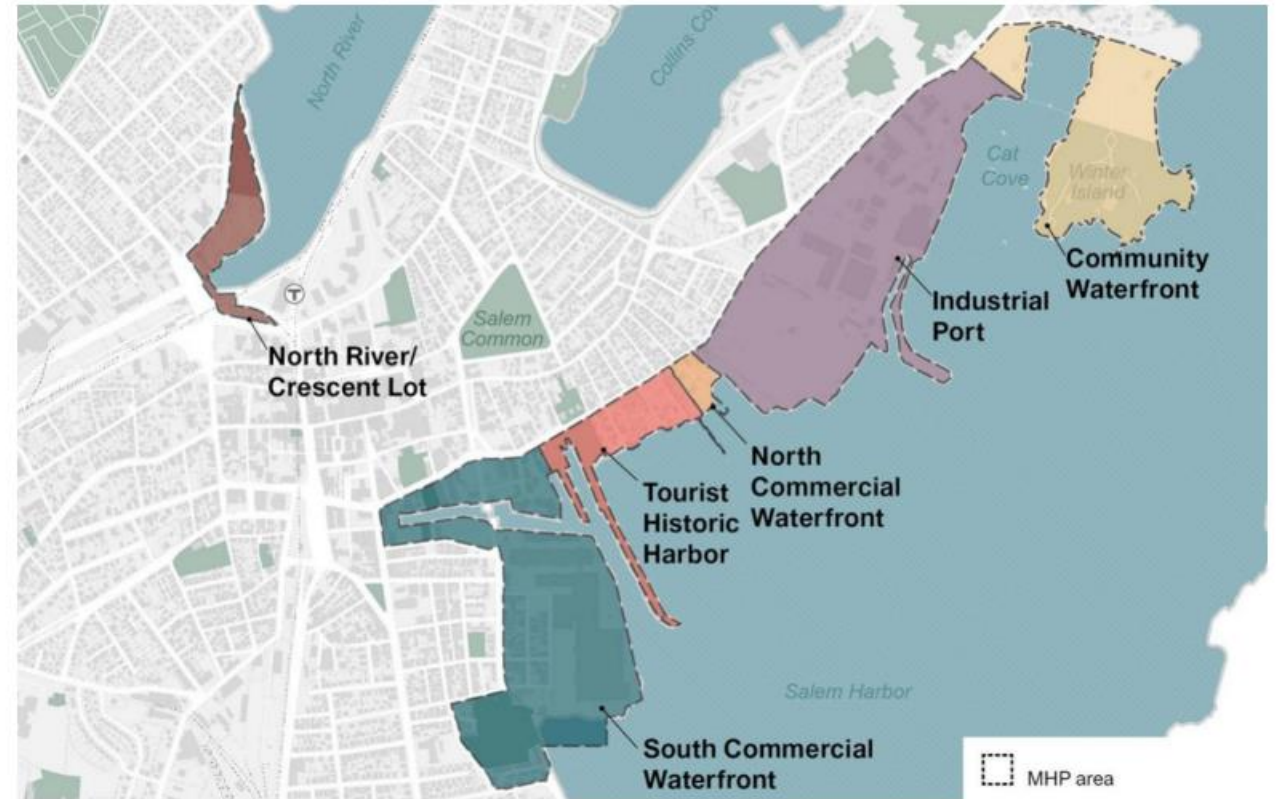


Figure 1. Salem Harbor Planning Area

The Harbor Planning Area encompasses the Salem shoreline and adjacent landside areas between Winter Island and Palmer Cove as well as landside areas along the North River from Furlong Park to North Street and across the river to the “Crescent Lot”. The upland boundary from Winter Island to Palmer Cove is defined by the public roadway closest to the water’s edge, which for most of the planning area is Derby Street and Fort Avenue. The upland boundary along the North River is defined by Franklin Street, North Street, and Bridge Street.

The overall Harbor Planning Area is divided into six districts as shown on figure 1 and defined below:

**Some comments from John Hayes, Chair, SERC - Regarding the Public Forum on Salem's Proposed 2023 Update of Its Municipal Harbor Plan Held February 7, 2023:**

Due to tonight's technical difficulties, I am entering some comments into the CHAT of tonight's zoom public meeting.

I am wearing three hats in terms of my comments: as a resident of Salem since 1993, a professor of Geography and Sustainability at Salem State University, and Chair of the City's SERC committee (Sustainability, Energy, and Resiliency Committee).

1. I did hear the presentation tonight – and thought it was a bit strange that no mention was made of acknowledging that this update of the City's MHP acknowledged the climate crisis. I know it is an update of the 2008 plan and is a Master Plan for the next ten years.

I have read the Design Principles for this [update](#) and they do refer to climate change resiliency and supporting clean energy – but I would recommend that the MHP acknowledge the climate action plan, Resilient Together, which is a joint CAP with our sister city, Beverly.

I would recommend that when any new future development is referred to (such as El Centro site and Crescent site) that the city requires planning and design for future sea level rise out a minimum of a half century – and preferably to 2100. This coastal planning needs to plan for bomb cyclones (of low pressure) on higher seas during astronomical high tide (such as January 2018 and numerous other storms since then).

2) the MHP looks towards expanding cruise ship visits: does the Plan acknowledge that cruise ships of a certain largeness should NOT be permitted or encouraged?

3) with the OSW port redevelopment – and with a potential expansion of cruise ships – SERC (and SAFE) care about “cold ironing” to prevent degradation of local air quality from idling of vessels. Best Management Practices would require that ships/vessels plug into onshore sources of ‘cleaner’ electricity. The burning of diesel fuel (or other fossil fuel) from idling large vessels under certain weather conditions could really generate air pollution and degrade the air quality of the shore.

I will enter this in the Chat now.

John Hayes

Chair, SERC

# Making Offshore Wind Power Happen in New England

SERC will make a pdf of this slide presentation available to all.

Tony Rogers, April 2023, [tonyrogersemail@comcast.net](mailto:tonyrogersemail@comcast.net) Wind Energy ECA 3.1.pptx

**Tony Rogers** was a researcher in the UMass Wind Energy Center for many years, co-wrote a book on wind turbine design and engineering, was the lead technical author of the state's successful proposal for the Wind Technology Testing Center in Charlestown MA, and worked for an international wind energy consulting firm for seven years.

The slides for the presentation are [here](#) and the video is [here](#).

Courtesy of Bonnie Bain, OSW Researcher, SAFE

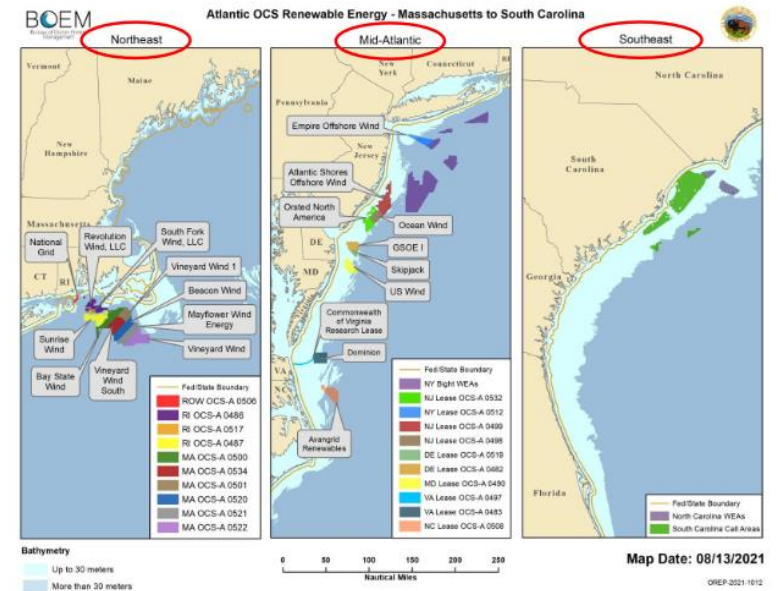
# This Presentation

- Wind power basics: What you need to know
- Offshore wind project development: How's it work?
- Questions
  
- Massachusetts offshore wind projects
- Progress and challenges
- Wind in the news
- Questions



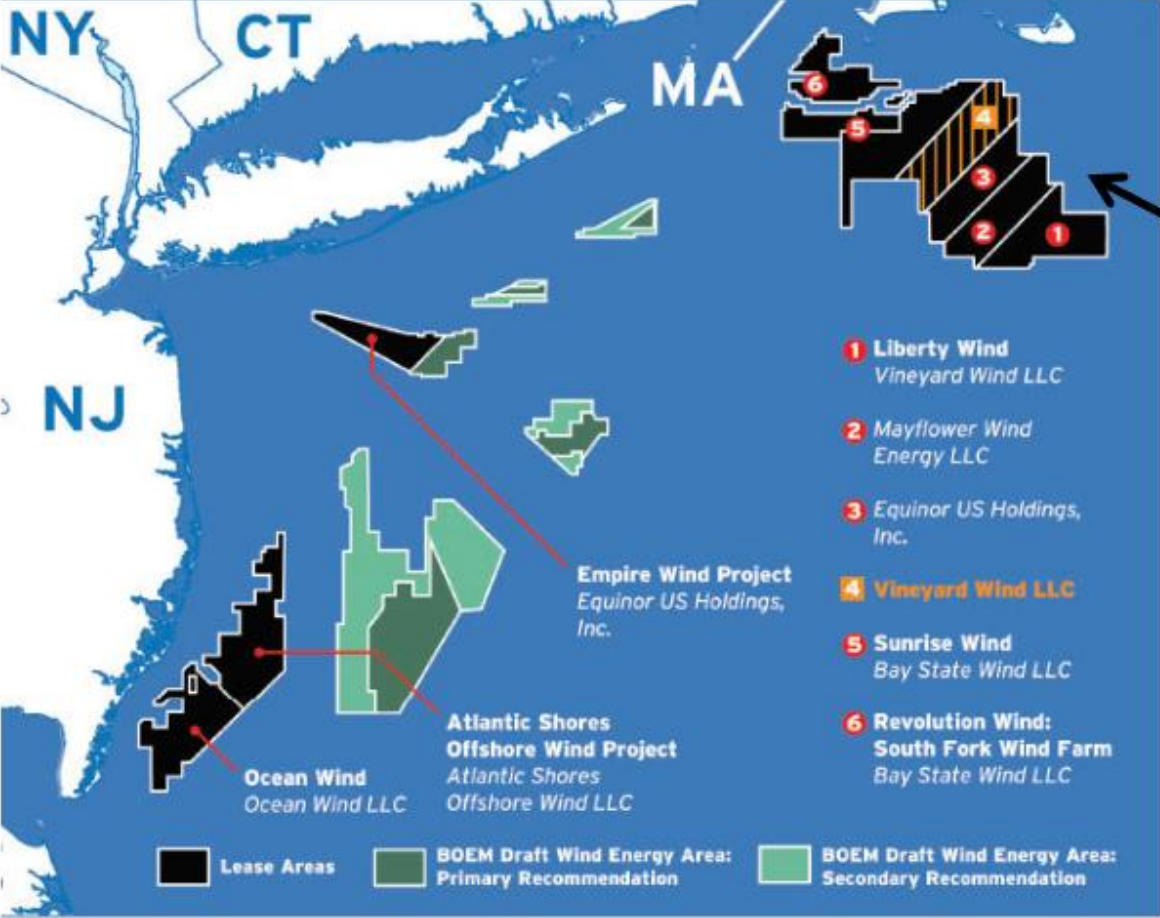
## Where are projects built?

- In Wind Energy Areas!
  - Federally-determined subsea lease areas
- Wind energy areas based on 4-year federal review including:
  - sensitive marine habitat
  - valuable commercial fishing grounds
  - shipping lanes
  - national security
  - water depth
  - stakeholder input ...
- BOEM – Bureau of Ocean Energy Management

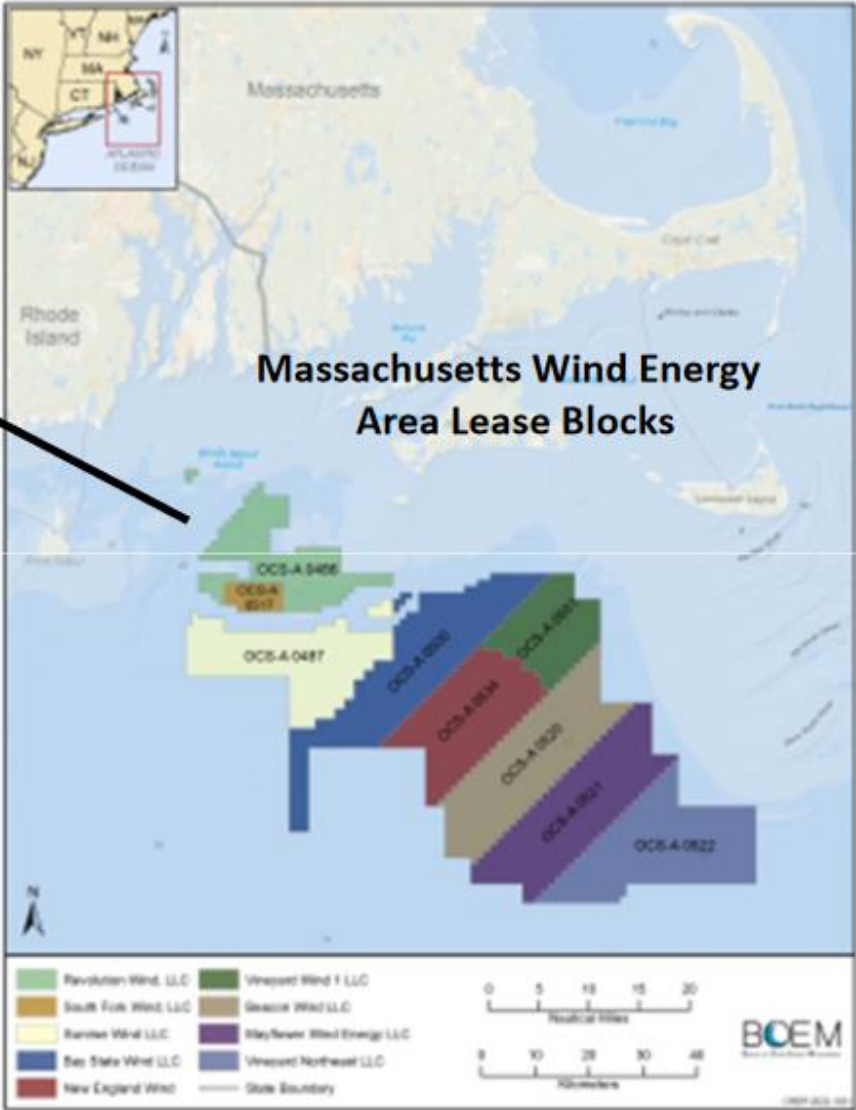




# Planned Offshore Projects



<https://www.boem.gov/renewable-energy/state-activities/massachusetts-activities>



<https://www.enr.com/articles/52482-offshore-wind-projects-move-forward-in-northeast-california>

April 25, 2023

BOEM Contact:  
[Tracey Moriarty](#)  
202.304.6476

## **BOEM Advances Offshore Wind Leasing Process in the Gulf of Maine**

*Seeks Public Input on Possible Wind Energy Development offshore  
Massachusetts, New Hampshire and Maine*

**WASHINGTON--** As part of the Biden-Harris administration's goal of deploying 30 gigawatts of offshore wind energy capacity by 2030, the Bureau of Ocean Energy Management (BOEM) today announced the publication of its Gulf of Maine Call for Information and Nominations (Call). This Call invites public comment on, and assesses interest in, possible commercial wind energy development in areas offshore Massachusetts, New Hampshire and Maine. [Read more...](#)

### **When and where**



#### **Date and time**

May 10 · 1pm - May 11 · 5pm EDT



#### **Location**

Cross Insurance Center 515 Main Street  
Bangor, ME 04401

During this April meeting, I referred to the research by SAFE that I am contributing to regarding the possible use of renewable OSW energy to create hydrogen.

# **BOEM Advances Offshore Wind Leasing Process in the Gulf of Maine**

## **Seeks Public Input on Possible Wind Energy Development offshore Massachusetts, New Hampshire and Maine**



As part of the Biden-Harris administration's goal of deploying 30 gigawatts of offshore wind energy capacity by 2030, the Bureau of Ocean Energy Management (BOEM) today announced the publication of its Gulf of Maine Call for Information and Nominations (Call). This Call invites public comment on, and assesses interest in, possible commercial wind energy development in areas offshore Massachusetts, New Hampshire and Maine.

This represents an early step in the commercial planning and leasing process, and the first required by BOEM regulations.

"BOEM is committed to transparent, inclusive and data-driven processes, and public input is essential to helping us determine areas that may be suitable for offshore wind development in the Gulf of Maine," said **BOEM Director Elizabeth Klein**. "We are still early in the planning and leasing process, and we look forward to the multiple future opportunities for engagement."

BOEM will publish the Commercial Leasing for Wind Power Development on the Gulf of Maine Outer Continental Shelf (OCS) - Call for Information and Nominations in the Federal Register on Apr. 26, 2023, which will initiate a 45-day public comment period. BOEM will accept nominations and comments through 11:59 p.m. Eastern Time on Jun. 12, 2023.

After the public comment period closes, BOEM will review and analyze commercial nominations and public comments submitted in response to the Call. BOEM will also consider information from government and Tribal consultations and the Gulf of Maine Intergovernmental Renewable Energy Task Force to further evaluate the appropriateness of the Call Area for offshore wind energy development.

"The feedback that we have received prior to this announcement has been extremely valuable in informing the process and understanding the unique dynamics that the Gulf of Maine presents," said **BOEM Project Coordinator Zach Jylkka**. "The success of BOEM's commercial leasing process hinges upon continued public input, and we are fortunate that many passionate and knowledgeable individuals and organizations are willing to share their experiences and expertise to help shape these important outcomes."

In August 2022, the Department of the Interior [announced](#) a "Request for Interest" (RFI) to gauge whether commercial interest existed in obtaining wind energy leases within an area in the Gulf of Maine comprising about 13.7 million acres.

BOEM worked collaboratively with National Oceanic and Atmospheric Administration's National Centers for Coastal Ocean Science (NCCOS) to conduct a spatial analysis of the RFI area. This analysis, in combination with public comments on the RFI, led to the creation of a draft Call Area. BOEM hosted a series of [information exchanges on the draft Call Area](#) from January-February 2023 to get feedback from Tribes, states, existing ocean users, and the general public. [The final Call Area](#), published today, reduces the RFI area to 9.8 million acres, a nearly 30 percent reduction.

# Gulf of Maine

## Overview

## Commercial Leasing

## Research Lease Application

## Resources

### What's New?

On Apr. 25, 2023, BOEM announced the publication of the Gulf of Maine's Call for Information and Nominations (Call). This Call invites public comment on, and assesses interest in, possible commercial wind energy development in areas offshore Massachusetts, New Hampshire and Maine. The publication of the Call in the Federal Register on Apr. 26, 2023, initiates a 45-day public comment period.

- [Call for Information & Nominations Federal Register Notice](#)
- [Call Area Shapefile](#)
- [Call Area Block List](#)
- [Call Area Nautical Chart Map](#)
- [Call Area Progression Map](#)
- [Call Area – Areas for Additional Analysis Map](#)
- [Gulf of Maine: Data Layers under Consideration for Draft Wind Energy Area Suitability Modeling](#)

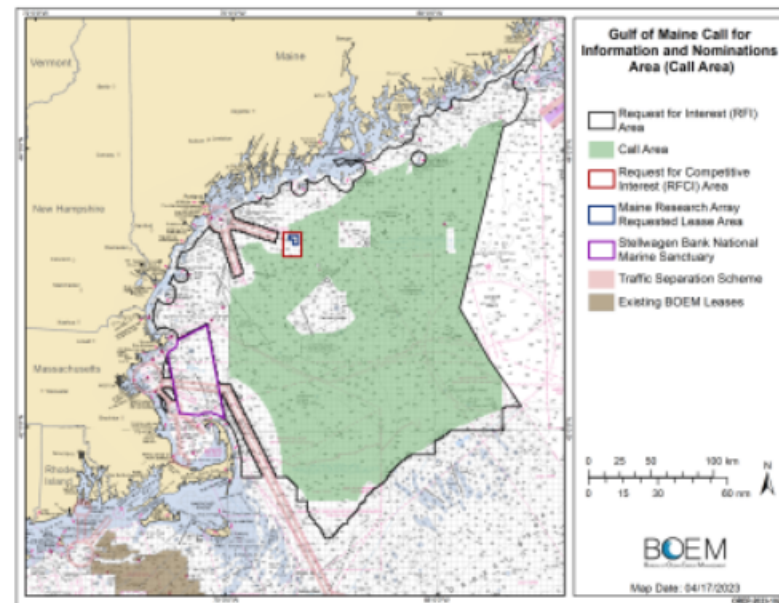
See the Commercial Leasing tab for more information.

### How to Comment

BOEM will accept nominations and public comments through 11:59 p.m. ET on June 12, 2023.



To submit comments electronically, visit:



Gulf of Maine Call Area

# Gulf of Maine Task Force Meeting - May 10-11, 2023

BOEM will hold the third Gulf of Maine Intergovernmental Renewable Energy Task Force meeting **in-person** at the **Cross Insurance Center in Bangor, ME** on May 10-11, 2023.

Established in 2019, this Task Force is composed of Tribal, Federal, state, and local government officials. It is tasked with facilitating the coordination of renewable energy planning activities on the Outer Continental Shelf in the Gulf of Maine. It serves as a forum to discuss potential issues and concerns, as well as exchange data and information about ocean resources and uses.

The public is encouraged to attend this meeting where there will be opportunity for public comment on both days.

To **register** for the meeting: <https://www.eventbrite.com/e/gulf-of-maine-intergovernmental-renewable-energy-task-force-meeting-2023-tickets-609728914597>

If you cannot attend in person, we will be providing a **livestream option** to listen to the Task Force meeting (participation and comment opportunities will be limited to those attending in person). The link to the livestream will be added to this page closer to the event.

The meeting will include:

- Updates from Task Force members
- Next steps on the Gulf of Maine commercial leasing process
  - Call for Information and Nominations
  - Additional information BOEM is reviewing as it prepares to identify draft Wind Energy Areas
- Next steps on Maine's Research Lease application.
- Useful information on key emerging topics:
  - Transmission planning
  - Offshore wind data collection activities: analysis for whales and other protected species
  - Floating offshore wind technology



Volume 9, Issue 10

October 2021

Pages 1676-1687

## Energy Science & Engineering

Open Access

MODELLING AND ANALYSIS |  Open Access |  

### How green is blue hydrogen?

Robert W. Howarth  Mark Z. Jacobson

First published: 12 August 2021 | <https://doi.org/10.1002/ese3.956> | Citations: 16

#### Funding information

Funding was provided by the Park Foundation and by Cornell University



5 minute read · December 5, 2022 3:45 PM EST · Last Updated 5 months ago

## BP doubles down on hydrogen as fuel of the future

By Ron Bousso 



SDG 13: CLIMATE ACTION

# Grey, blue, green – why are there so many colours of hydrogen?

Jul 27, 2021

## Climate hope, or hype? Here's how the world can get hydrogen right



Hydrogen is a leak-prone gas with potent warming effects that are widely overlooked.

In a talk at the 2023 South by Southwest conference, also known as SXSW, EDF climate scientist [Ilissa Ocko](#) explains this and other challenges facing hydrogen as a potential climate solution.

"We need to get it right from the start, and we need to make sure that we take care of these challenges as soon as we can so we don't have unintended consequences," Ocko says.

Watch the video to find out what it will take for hydrogen to deliver on its clean energy promise.

*Video by Kyle Decker*



# CORNELL CHRONICLE

Topics

Campus & Community

All Stories

In the News

Expert Quotes

Cornellians

## Touted as clean, 'blue' hydrogen may be worse than gas or coal

By [Blaine Friedlander](#)

August 12, 2021



“Blue” hydrogen – an energy source that involves a process for making hydrogen by using methane in natural gas – is being lauded by many as a clean, green energy to help reduce global warming. But Cornell and Stanford University researchers believe it may harm the climate more than burning fossil fuel.



# Grist

## How a new subsidy for 'green hydrogen' could set off a carbon bomb

Using electricity to make hydrogen could be an elegant climate solution — or it could prop up a dirty grid.



Grist / Getty Images



Emily Pontecorvo

Reporter

Published

Dec 12, 2022

# HEAT PUMPS

## What, Where, & How Much



0:00 / 1:09:54

CC Settings Full Screen

### Heat Pumps: What, Where, & How Much

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