Mayflower Wind Project

- 19 Technical Reports and Plans to Support COP Development
  - Benthic survey plans
  - Benthic infauna sample analysis and video analysis for epifauna
  - Visual impact assessment
  - Terrestrial archaeology/historic properties
  - Seagrass
  - Essential Fish Habitat
  - Air quality/emissions
- Permitting
  - **To date:** Filed MEPA ENF and EFSB petition
  - **Upcoming:** MA MEPA EIR, Ch 91/ WQC, State/local wetlands, Section 106 consultation, NMFS EFH consultation, OCS Air Permit, Army Corp 404/10

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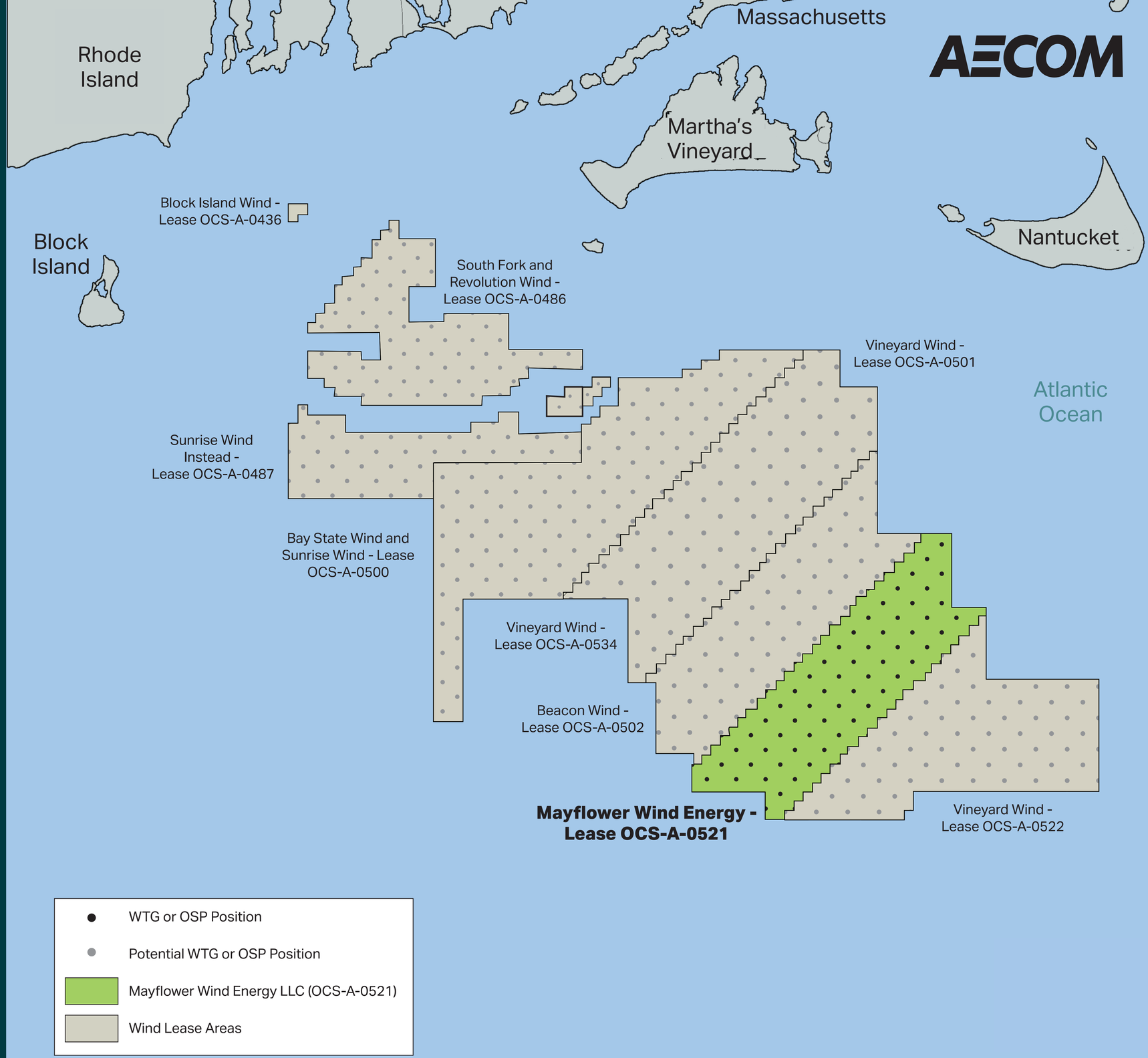

Beacon Wind Project

- Developed Site Assessment Plan (SAP)
- Prepared Construction and Operations Plan (COP)
- Stakeholder Engagement and Planning
- Fisheries Outreach
- Tribal Liaison, Qualified Marine Archaeologist (QMA), On-board Survey Rep
- Obtained Incident Harassment Assessment (IHA), Prepared Survey Plans
- Federal and State Approvals,
- Developed Benthic and Essential Fish Habitat Survey Design/Protocols
- New York Article VII Permitting Support
- Innovative geographic information system (GIS) Tools including Portal

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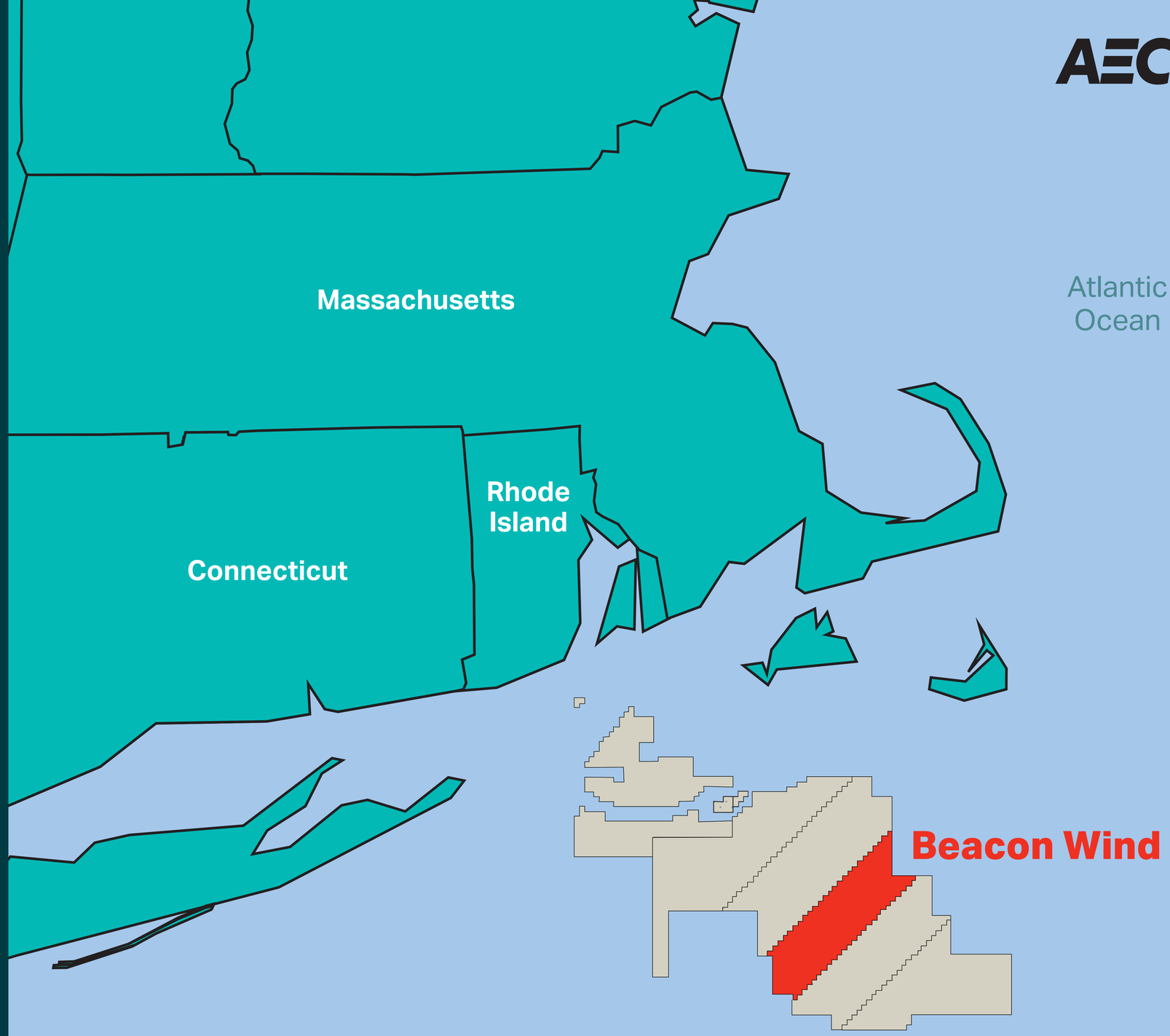
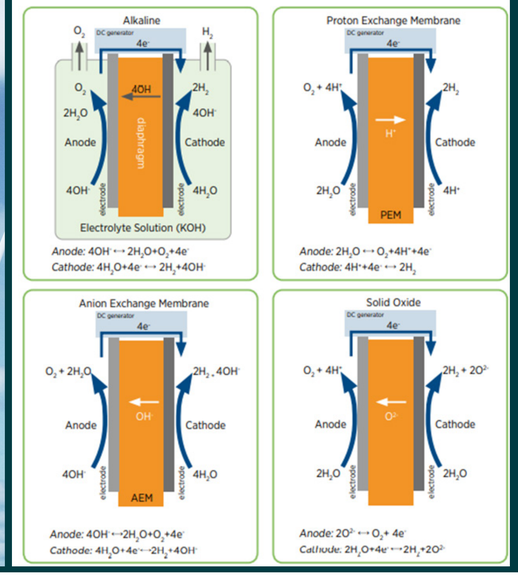
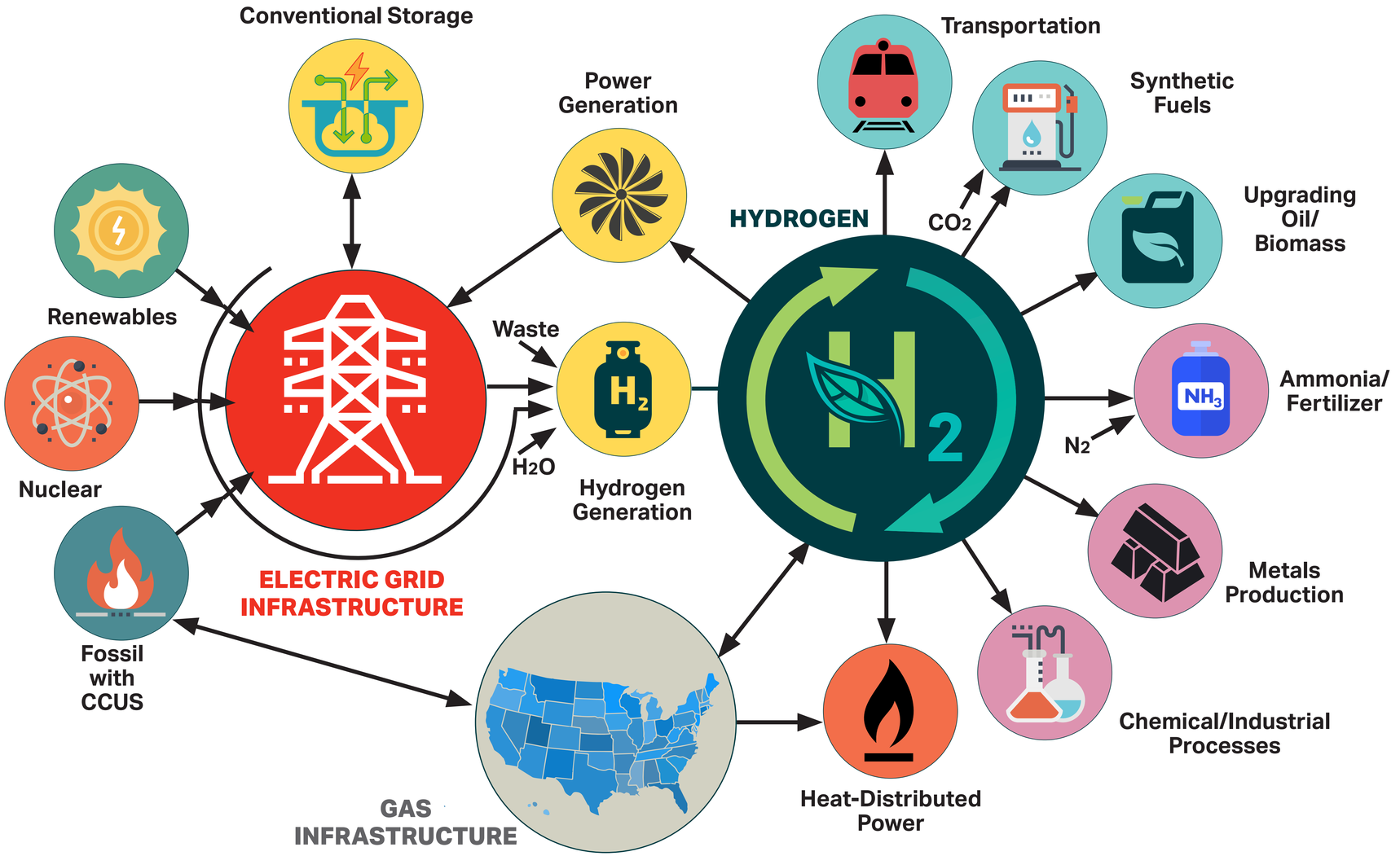


BOEM H_2-OSW Regulation

- Adaptation of existing BOEM / Federal Guidance for green H_2 fuel from OSW energy (H_2-OSW)
- Extensive BOEM consultation
- Environmental, Socioeconomic, Safety issues
- Business cases
- Approach to rapidly evolving technology and implementations
- Partnering for research and development
- Market-readiness and fit
  - US Federal energy policy effects
  - Strong regional variability





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Typical 10 Year Development Timeline

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Early Mover Project Status

Track 1 - OSW Farm (Sea-bed Preparation, Foundations, Turbine Installation, Cable & Sub-Stations)

Years 1-2
Lease Parcel Assessment, BOEM Solicitation & Award

Years 3-4
State PPA Solicitation, Application & Award

Years 5-7
OSW Developer – COP Development, Submission, Comment, Revise & Approve

Years 8-10
Component, Cable & Sub-Station Fabrication, Delivery, Staging, Assembly, Installation & Connections

Years 10-30+
OSW Farm Commissioning, Operation & Maintenance

Track 2 – Marine Terminal

Years 1-2
N/A

Years 3-5
Planning, Engineering, Permitting & Procurement

Years 6-7
Construction & Final Acceptance

Years 8-10
Component & Cable Delivery, Staging & Load-Out from Terminal

Years 10-30+
N/A

Track 3 - O&M Terminal

Years 1-2
N/A

Years 3-4
Planning

Years 5-7
Engineering, Permitting & Procurement

Years 8-10
Construction & Final Acceptance

Years 10-30+
OSW Operation & Maintenance

Track 4 – Vessels (Installation, Cable Laying, SOV & CTV)

Years 1-2
N/A

Years 3-5
Planning, Design & Finance

Years 6-8
Fabricate, Sea Trials, USCG Certification

Years 9
Sea Trials, USCG Certification & Training

Years 10-30+
OSW Operation & Maintenance

Track 5 – Onshore Works (Substation, Interconnect, Transmission)

Port of Albany
Turbine tower manufacturing for Empire and Beacon Wind projects

Port of Coeymans
Manufacturing of wind tower foundations

Salem Harbor
Turbine assembly and staging for Park City and Commonwealth projects

Port of Providence
Supports construction of Revolution and South Fork; manufacturing of wind tower foundation components

Brayton Point
Wind energy development center

Quonset Point
Supports construction and operation & maintenance of Revolution Wind

New Bedford Marine Commerce Terminal
Supports construction of Vineyard and Mayflower projects

New London State Pier
Wind turbine assembly hub for Revolution, South Fork and Sunrise projects

Bridgeport
Foundation, steel fabrication and final outfitting; operation & maintenance hub for Park City Wind

Port Jefferson Harbor
Operations & maintenance hub to support Revolution, South Fork and Sunrise projects

South Brooklyn Marine Terminal
Wind turbine staging and installation to support for Empire Wind and Beacon Wind

Port of Paulsboro
Monopile manufacturing facility to support Ocean Wind and other projects

New Jersey Wind Port
Wind turbine assembly hub; a later phase will include component manufacturing

Tradepoint Atlantic Baltimore
Offshore wind staging center and steel fabrication plant

NY
MA
CT
RI
PA
NJ
MD
DE

Block Island Wind
Revolution Wind
South Fork Wind
Baystate Wind
Vineyard Wind
Sunrise Wind
Beacon Wind
Park City Wind/ Commonwealth Wind
Mayflower Wind
Vineyard Wind
Empire Wind
Mid-Atlantic Offshore Wind
Oceans Wind East
Atlantic Shores Offshore Wind
Attentive Energy
Bight Wind Holdings
Invenergy Wind Offshore
Atlantic Shores Offshore Wind Bight
Ocean Wind

AECOM Services Provided

AECOM Services Provided

US Northeast - Marine Terminal & Offshore Wind Farm Locations

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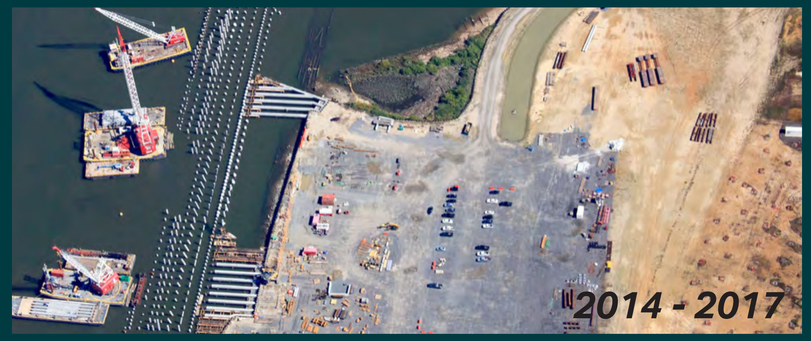
Port of Paulsboro, New Jersey

- Terminal redevelopment for general cargo (steel plate & coil) and OSW
- Site remediation concurrent with in-water and upland improvements
- EEW monopile fabrication facility

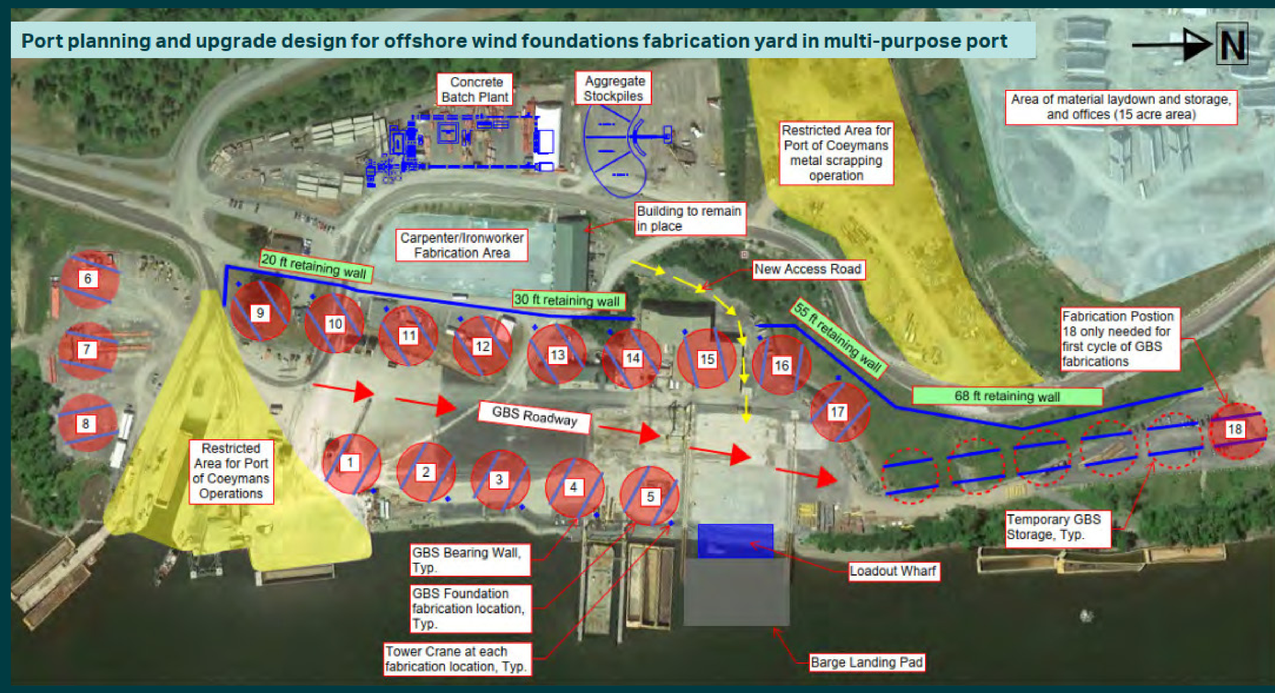
AECOM Services
2004-2017

- Feasibility study and concept design
- Environmental site investigation and assessment
- Permit applications/ State & Federal Approvals
- PM / CM services



Coeymans, Albany, New York

- Empire Wind Offshore Foundations
- Concept and Pre-FEED Services for Gravity Base Foundations Fabrication and Installation Terminal



AECOM Services
2019-2020

- Develop site production layout with concrete batch plant
- Terminal modernization and infrastructure upgrades
- Basis of Design (8,500 psf wharf)
- Identify regulatory framework
- Cost estimate for upgrades

South Brooklyn Marine Terminal, NYC, New York

AECOM Services
2019-2022

- Site Investigation & Environmental Assessment
- Sediment Sampling
- Joint Permit Application (NYState & USACE)
- Site Investigation & Surveys
- Basis of Design: Wharf Improvements include Heavy Lift + SOV + CTV
- Preliminary Engr (Civil, Marine, Geo, Elec)
- Program Management
- NYSERDA – Funding Assistance Application

Artistic rendering of concept for site development of the South Brooklyn Marine Terminal (not final) Image Equinor

Construction Timeline: 2023 - 2025

Connecticut Port Authority State Pier, New London, Connecticut

Land Reclamation, 3000 PSF Loading, OSW Component Staging

Delivery Berth - Heavy Lift Platform

Heavy-lift capable port facility that will accommodate a wide variety of cargoes, including wind turbine generator staging and assembly. Design addresses previously identified facility shortcomings, and enhance the State Pier facility and site conditions to accommodate future cargo needs and capitalize on opportunities for the State of Connecticut.

AECOM Services
2018-2023

- Environmental Site Investigation and Assessment
- Permit Applications / State & Federal Approvals
- Extension of Port Authority Staff
- Design Reviews - Heavy Lift Platforms
- CMR / Contractor Procurement
- GMP Development, Contract Administration & Permit Compliance

Construction Completion Date: Mar 2023

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New Jersey Wind Port

AECOM Services
2021-2025

Construction Management at Risk

- Preconstruction (2021)
- Construction (2022-2025)
- Heavy Lift Platforms


Credit: NJ Governor's Office

The New Jersey Wind Port will support up to 1,500 manufacturing, assembly, and operations jobs. Construction, which is targeted to start in 2021, will create hundreds of additional union jobs.

Tradepoint Atlantic, Baltimore, Maryland

Terminal redevelopment of over 200 acres and multiple wharfs and piers at an Offshore Wind Port for a component staging and assembly center, including a monopile steel fabrication facility and a subsea array cable manufacturing facility. Elements include uniform heavy lift wharfs, roll-on/roll-off berths, and pavements for staging, loading and crane operations.

AECOM Services
2021-2022

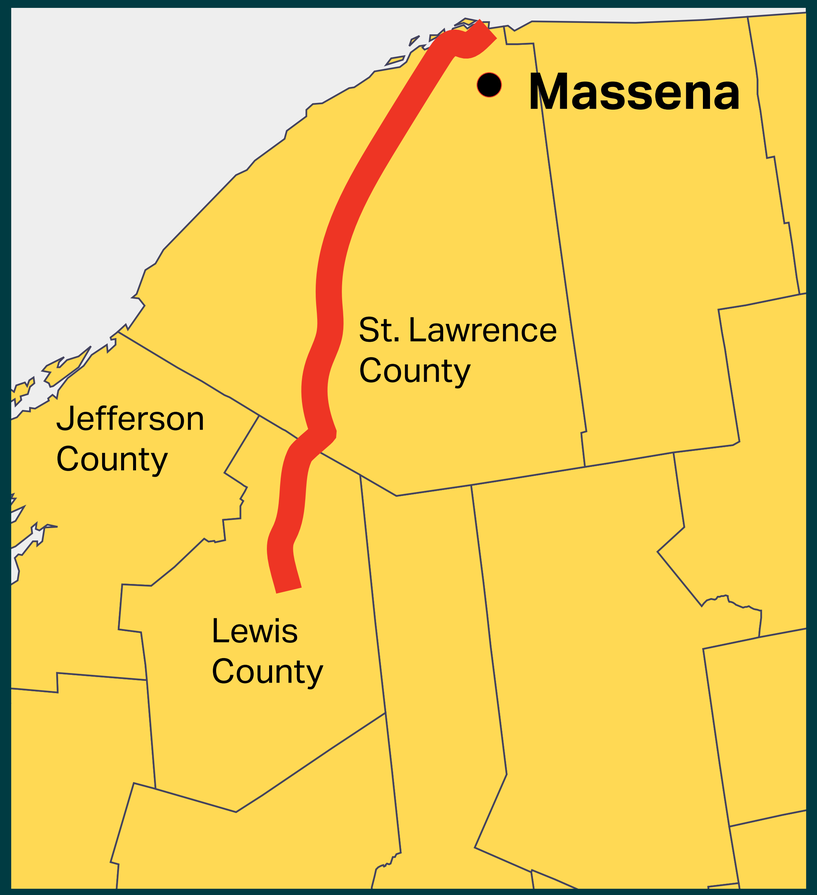
- Site Investigation & Assessments
- Grant Funding Assistance
- Environmental Permitting & Approvals
- Project & Construction Management

Smart Path Reliability Project

AECOM Services

- Project/Program Management
- Procurement Management
- Preliminary engineering and permitting support
- Contractor onboarding
- On-site Construction Safety Management
- Right of Way Agents

- Rebuilding two 86-mile-long Moses-Adirondack transmission lines
- Rebuild at 345kV, Demo 230kV



Smart Path Connect Project

AECOM Services

- Project/Program Management
- Construction Management
- Cost Estimating
- Risk Assessment and Management
- Value Engineering
- Project Management Information System
- Procurement Management
- Preliminary engineering and permitting support
- Right of Way Agents

- Rebuilding 50-mile-long transmission line
- Replace/Upgrade 10 substations
- Voltage up to 345kV

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Salem Wind Port Redevelopment

AECOM Services 2022-2025

- Site Investigation & Surveys
- Upland Improvements to Achieve 3,000-4,000 psf in the Laydown Yards
- Basis of Design – 6,000 and 4,000 psf heavy lift platforms
- Sediment Sampling Plan & Dredge Material Management
- Community Engagement and Permitting Support
- Engineering Design
- Grant Funding Assistance (Technical + BCA)

- Re-development of existing 42-acre brownfield site into a staging, marshalling and pre-assembly terminal
- This fast-track project is targeted to commence construction in summer 2023 with operations starting January 2025

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California Transmission & Permitting Feasibility Studies for Offshore Wind

AECOM Services 2022

- Confidential OSW developer
- Fast-paced pre-auction desktop analysis of California Humboldt and Morro Bay OSW lease areas
- Export cable routing constraints analysis
- Transmission system interconnection and upgrade scenarios
- Permitting landscape and strategy

- In-depth analysis studied cable routing constraints, potential landing points & onshore transmission routing to potential points of interconnection, considering marine protected areas, existing subsea infrastructure, land ownership/permitting, natural resources, community impacts to build the best possible bid package.

- Analysis of existing high-voltage transmission systems in Humboldt County/Morro Bay identified existing system capacities & developed most-likely scenarios for transmission system upgrades needed to accommodate new generation produced by OSW to provide the developers with a full view of potential costs/timelines.

- Detailed permitting study evaluated risks & opportunities with both federal and state permitting, focusing on critical path environmental review under CEQA, permitting, and federal consistency review by the California Coastal Commission.

- Detailed permitting matrices outlined federal, state & local permitting requirements for OSW-related developments in Humboldt County and Morro Bay, along with anticipated costs, timing, risks, studies & interdependencies w/ other permits.

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