PORT COMMUNITIES AND OFFSHORE WIND ENERGY DEVELOPMENT

A study of New Bedford (MA), New London (CT), and Turner Station (MD)

In cooperation with Old Bedford Village Development Corporation, NAACP–New London Branch, and the Turner Station Conservation Teams

June 2026

BOSTON UNIVERSITY

THE UNIVERSITY OF RHODE ISLAND

UNIVERSITY OF DELAWARE

Key Takeaways

1. Past measures of energy justice have been created through "top down" processes, rather than community driven.
2. In study locations, "community" is defined at a local and personal scale (family, neighborhood, and city).
3. Community members welcome benefits from offshore wind development, but they do not want to sacrifice affordability, environment, public health, or community character.
4. Jobs and job training are important, but community members value quality of jobs as much as quantity.
5. Community members desire better communication and more personal engagement in decision making.
6. A history of broken promises shapes reactions of these communities to this new industry.

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Turbine installed at Revolution Wind Project (photo: Orsted)

Context: Offshore Wind

How Offshore Wind Energy Works

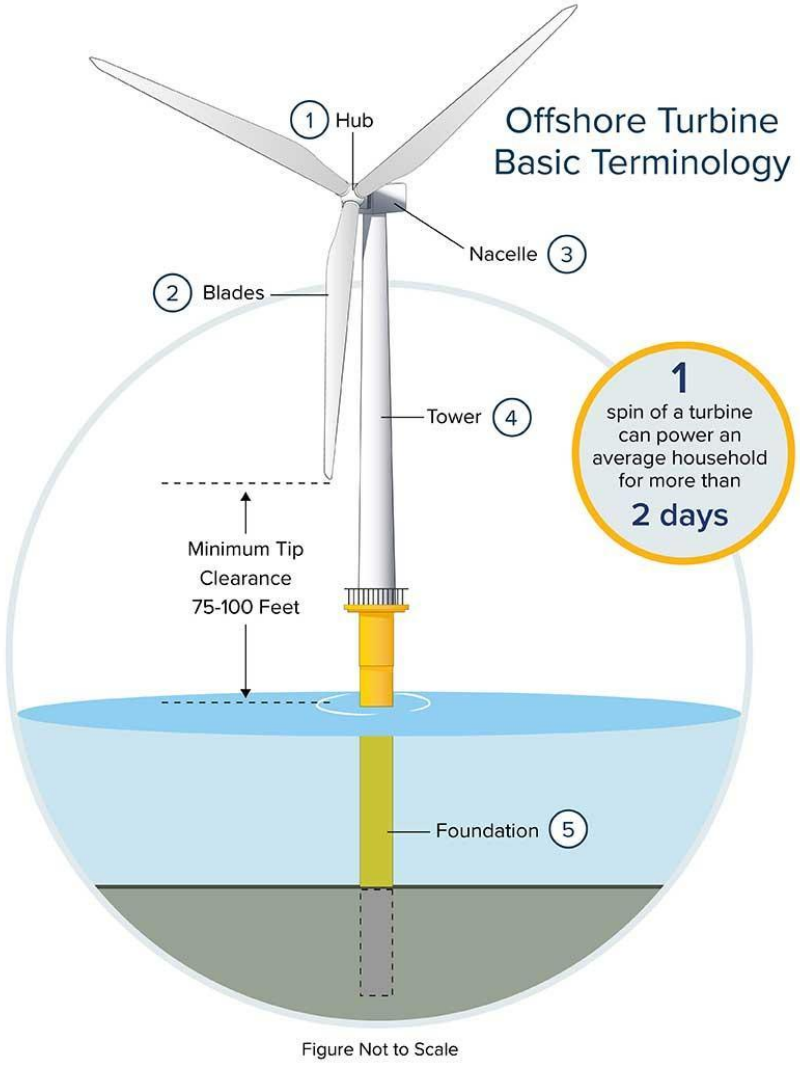


Image: NYSERDA

Modern **turbines** typically produce up to 10-12 megawatts (MW) of electricity. These machines have blades longer than a football field and can be more than 800 feet tall.

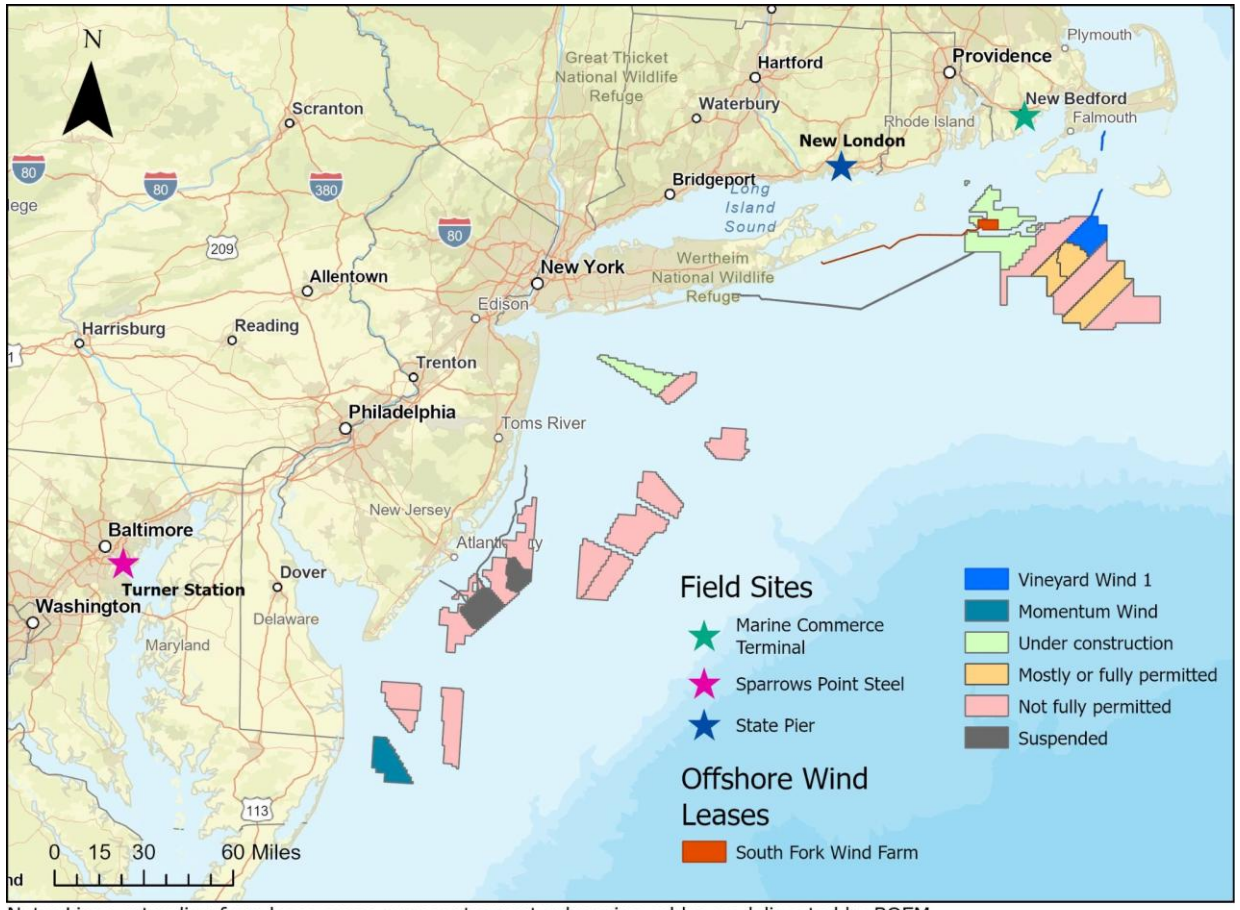
Turbines are connected by cables buried in the ocean floor. Cables bring electricity to shore, where they connect into the power grid.

Currently, turbines and towers are manufactured in Europe and shipped to ports in the U.S., where they are prepared for installation.

Staging of turbines components at New Bedford Marine Commerce Terminal (photo: WBUR)

Turbines installed at the Vineyard Wind 1 project (photo: Associated Press)

Offshore Wind Energy in the US



Note: Lines extending from lease areas represent export submarine cables as delineated by BOEM.
Created by Shannon Howley. Sources: BOEM Offshore Wind Lease Outlines (February 2025); Esri, TomTom, Garmin, FAO, NOAA, USGS (c) OpenStreetMap contributors, and the GIS User Community.

The first U.S. offshore wind energy project (5 turbines) was constructed off the coast of Block Island (RI) in 2016.

The U.S. Bureau of Ocean Energy Management (BOEM) has leased large areas off the east coast to private companies for potential wind energy development. BOEM also manages federal permitting of projects.

To meet electricity needs and clean energy standards, states solicit companies holding leases to propose projects. Selected projects are awarded long-term contracts.

In 2026, four projects are producing electricity; others are under construction. Political uncertainty, public opposition, and supply-chain issues have delayed projects.

For a current, interactive map, see: https://offshorewindpowerhub.org/

Study Overview

Study Rooted in Tenets of "Energy Justice"

Recognition Justice

What interests and values in are recognized or denied recognition in energy development?

Procedural Justice

How are different voices included in or excluded from energy decision making?

Distributive Justice

How are burdens and benefits of energy projects distributed?

Study Overview

In 2024, three universities began a 5-year grant from the U.S. Department of Energy (DOE).

Goals of the study were to:

1. Develop indicators of energy justice in three port communities affected by offshore wind energy development.
2. Track the performance of the industry on those community-based indicators.
3. Share results with the community, policy makers, and industry practitioners.

DOE prematurely terminated the project in October 2025.

Project team touring State Pier in New London, CT

The Research Team

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Members of the research team and community partners during a team meeting in New London

New Bedford , MA

A partner organization in each study location coordinated outreach and shared background on their communities.

Community Partners:

Old Bedford Village Community Development Corporation (New Bedford, MA)

NAACP New London Branch (New London, CT)

Turner Station Conservation Teams (Turner Station, MD)

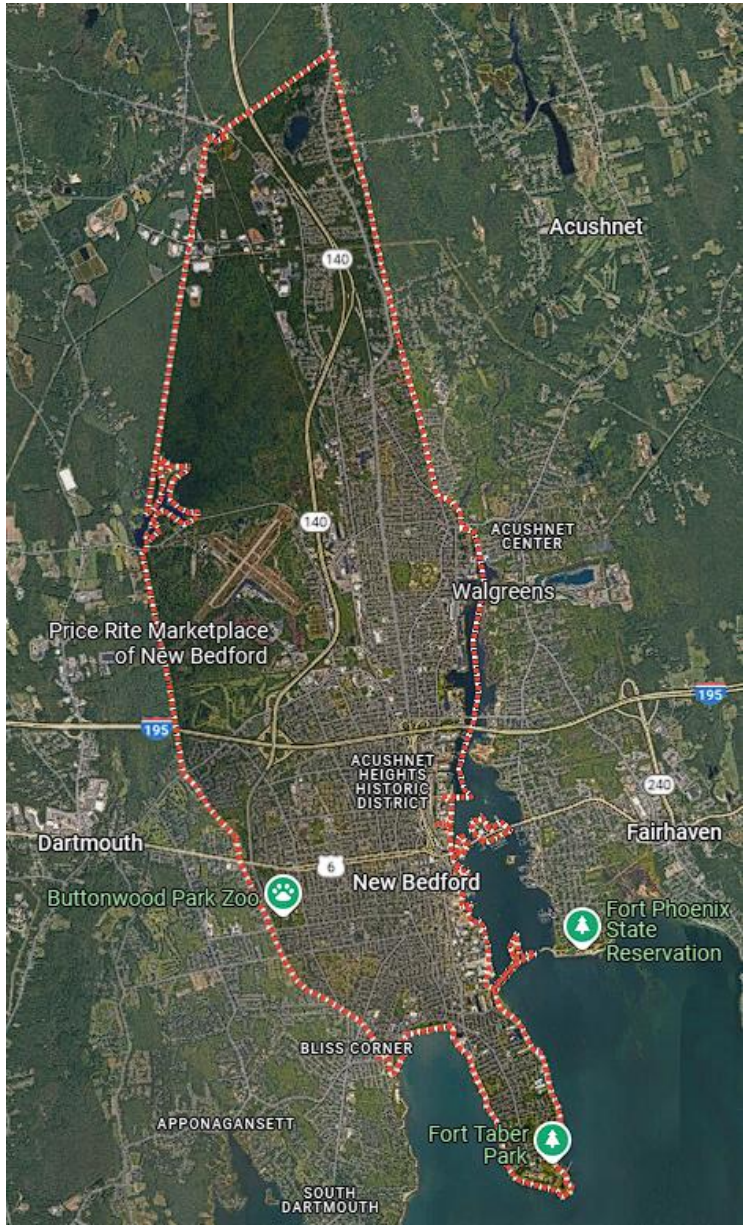
Study Communities

New Bedford, MA

Photo: New Bedford Light

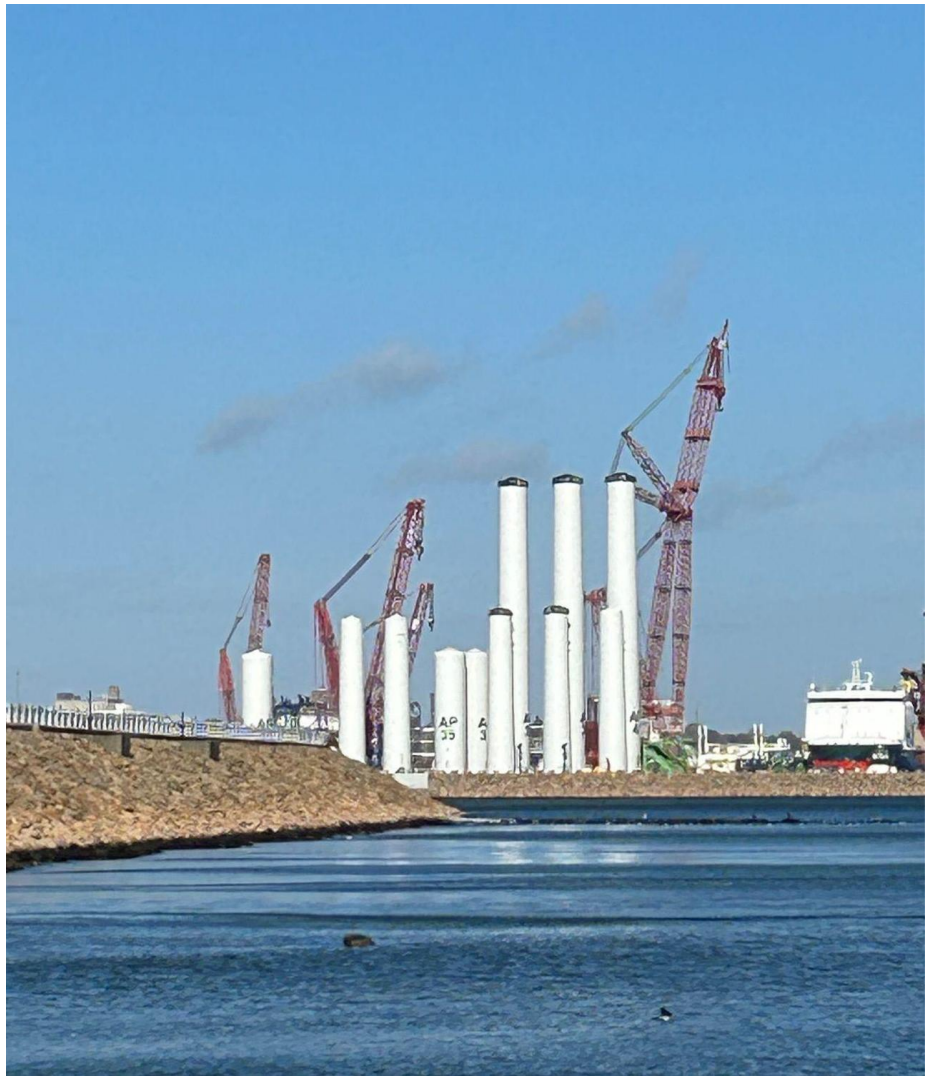
New Bedford

- City located on southern coast of Massachusetts with total population of ~101,000 (2020)
- Home to most productive fishing port on the East Coast, New Bedford boasts a long history of maritime industries. Historical importance of whaling industry earned the municipality the nickname the "City that Lit the World."
- Multicultural history and global connections through Cape Verdean and growing Hispanic population
- Although impacted by mid-century redevelopment efforts and industrial pollution, New Bedford has a long history of civic engagement for racial and environmental justice, which continues today.



New Bedford and Offshore Wind Energy

- Through port redevelopment and construction of the Marine Commerce Terminal, New Bedford positioned itself as hub for offshore wind industry activities.
- The Foss Marine Terminal opened in late-2024, providing a deepwater berth
- New Bedford served as primary staging area of turbine components for Vineyard Wind 1, one of the first large-scale offshore wind energy projects in the U.S.



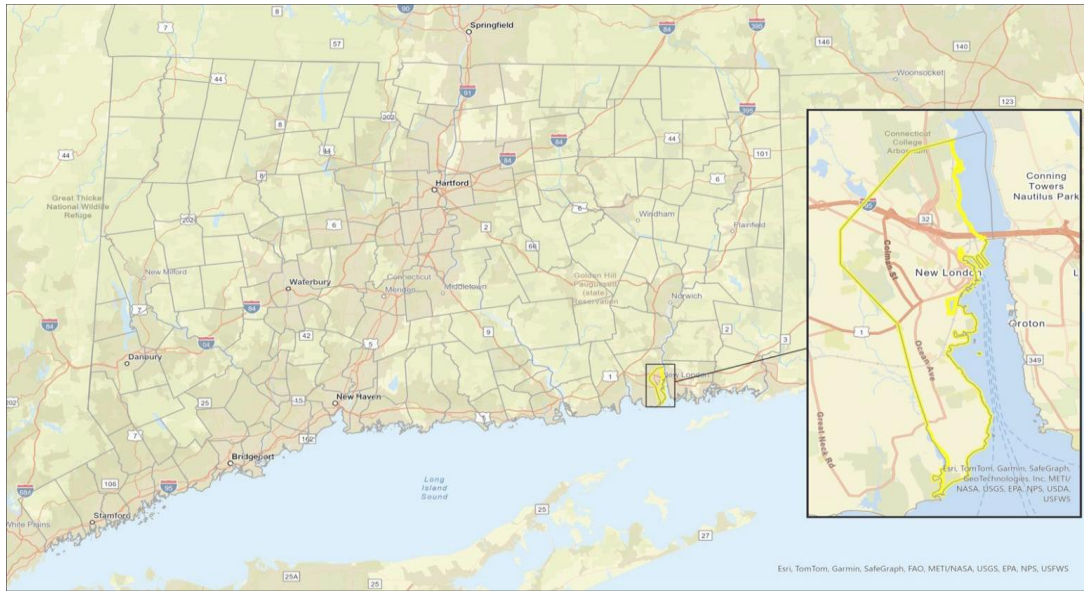
New London, CT

New London

- Located on southeastern coast of Connecticut, New London is a historically important city with a population of ~27,000 (2020).

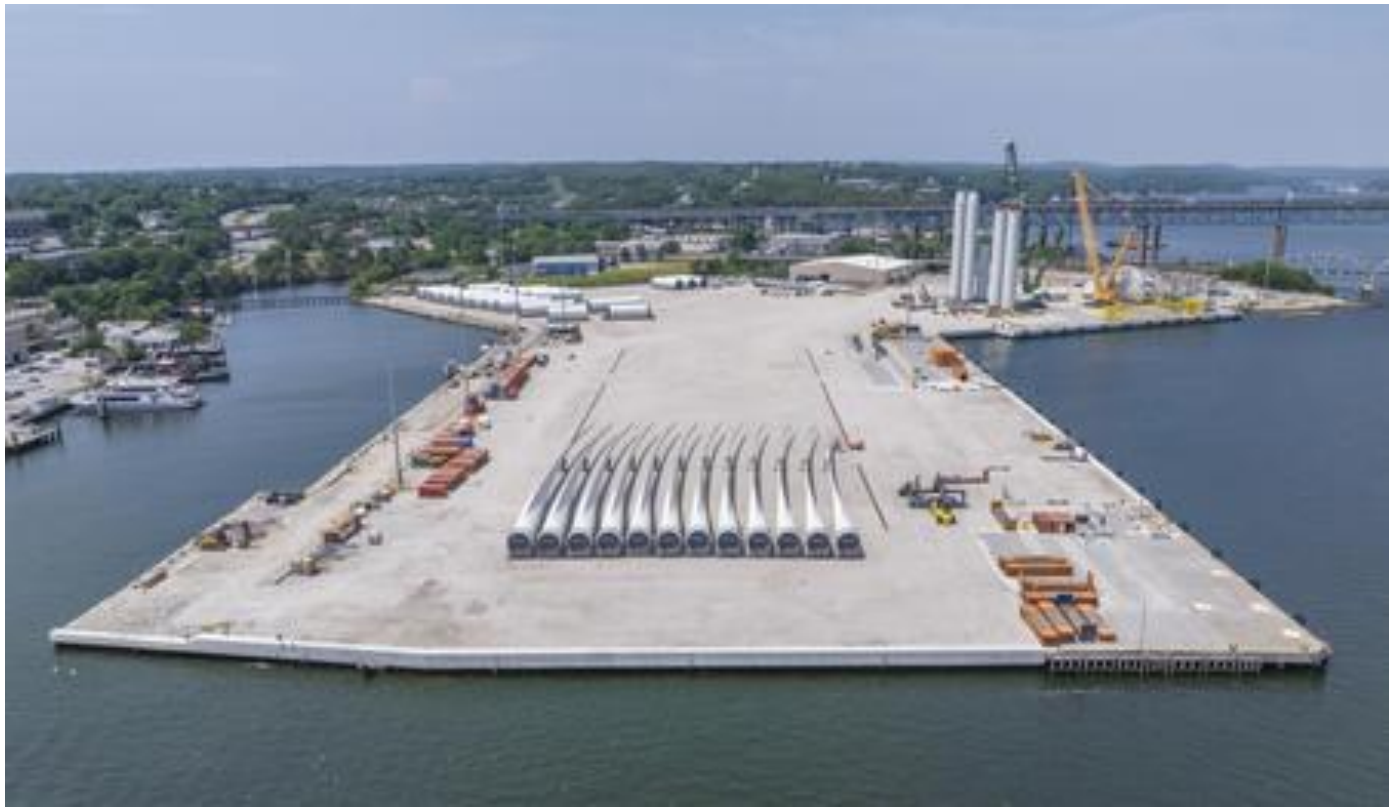
- The New London area is a hub for educational institutions and marine activities, including the US Coast Guard Academy, Connecticut College, Mitchell College, Electric Boat, Pfizer, and the Cross Sound Ferry

- Heavily impacted by urban-redevelopment of the mid-20th century, New London has long struggled to maintain a strong tax-base due to high number of non-profit/government properties within city limits



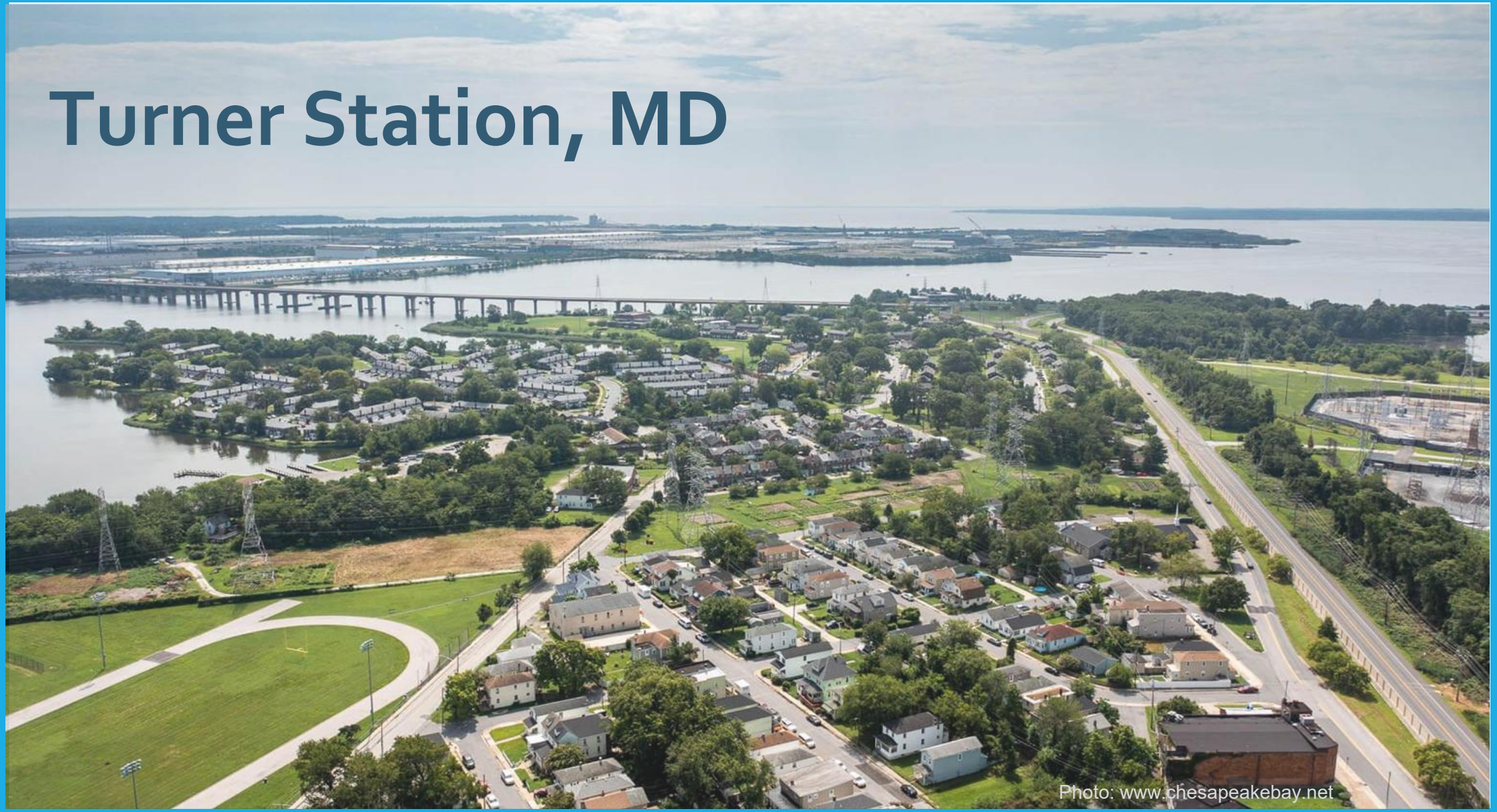
New London and Offshore Wind Energy

- State Pier, owned by the State of Connecticut and managed by the Connecticut Port Authority, was redeveloped for offshore wind energy activities in 2024.
- Developers Ørsted and Eversource have a lease for use of the pier.
- Turbines for Revolution Wind, one of the first large scale U.S. projects, were staged at State Pier.



Staged OSW components (Photo: Connecticut Port Authority)

Turner Station, MD



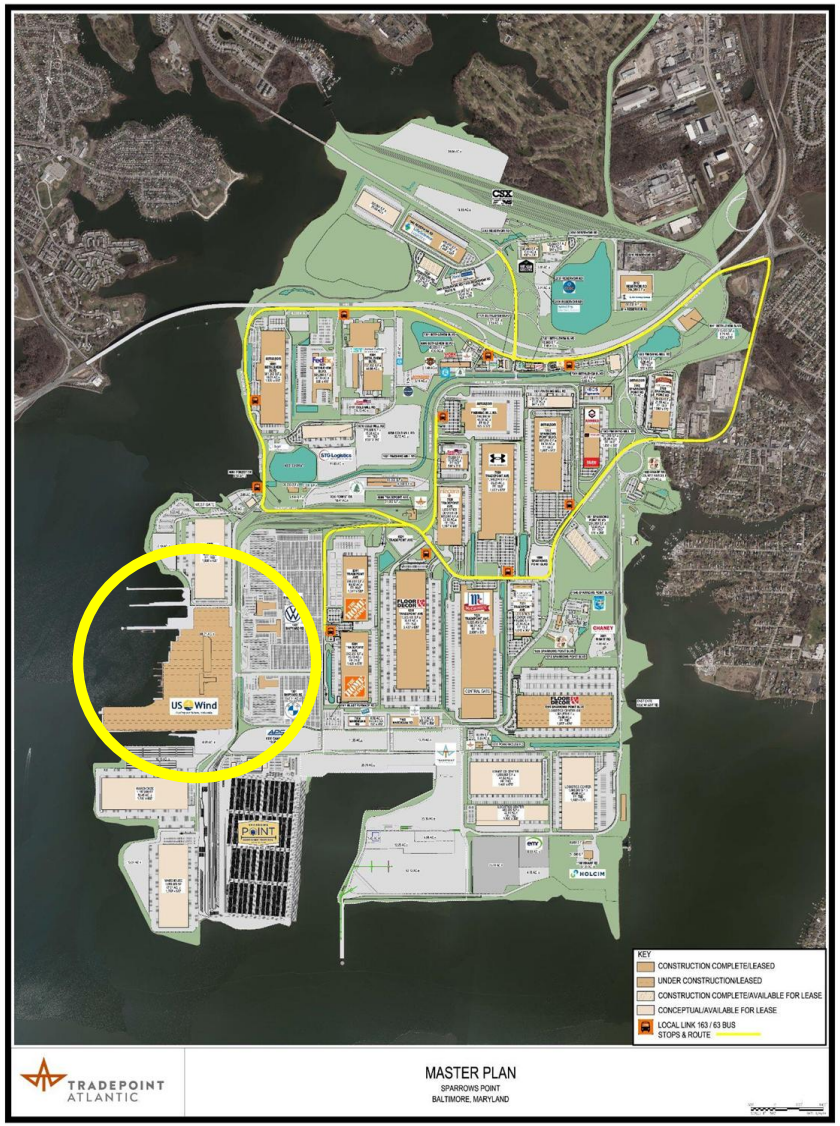
Turner Station

- **Turner Station** is a historically Black community in Baltimore County where many steelworkers lived. It is adjacent to **Sparrows Point,** site of a large steel mill which closed in 2012.
- It had a population of fewer than 3,000 people in 2022. The community still holds annual events which draw former residents and extended families back to Turner Station.

- The area suffered economic decline and population loss after the final closure of Bethlehem Steel in 2012 and the collapse of the Francis Scott Key Bridge in 2024. The neighborhood also faces environmental pollution and flooding.
- Despite challenges, Turner Station is a tight-knit and active community with strong municipal groups advocating for redevelopment and climate resilience.

Turner Station and Offshore Wind Energy

- Sparrows Point is now owned by Tradepoint Atlantic.
- In 2017, US Wind was awarded contract of offshore wind renewable energy credits (ORECs) by the state of Maryland. At this time, US Wind committed to funding port developments at Tradepoint Atlantic.
- In January 2025, Maryland's Public Service Commission approved US Wind's application for 1.7GW of offshore wind. The company reaffirmed its commitment to building "Sparrows Point Steel, an offshore wind turbine monopile facility."

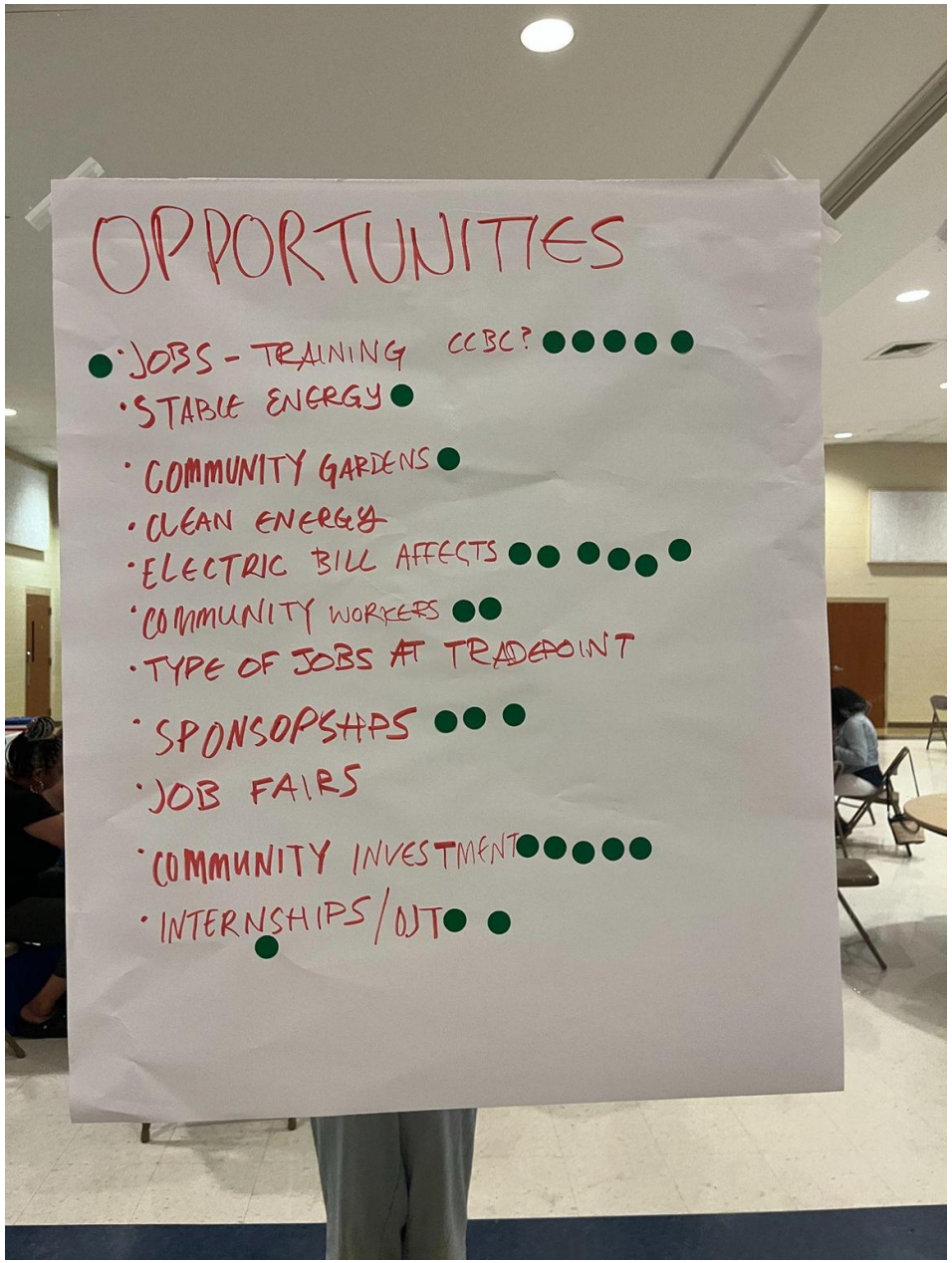


What did we do?

(Methods)

Methods

- **Community Profiles**
- **Literature Review**
  - Reviewed 527 articles
  - Cataloged 2,162 indicators
- **Community Workshops (5)**
  - Team notes from discussions
  - Flip charts with prioritization
- **Surveys (n=111)**
  - Mostly completed at workshops
  - Questions about community and issues
- **In-Depth Interviews (n=61)**
  - Recorded, transcribed, and coded
  - Identified major themes

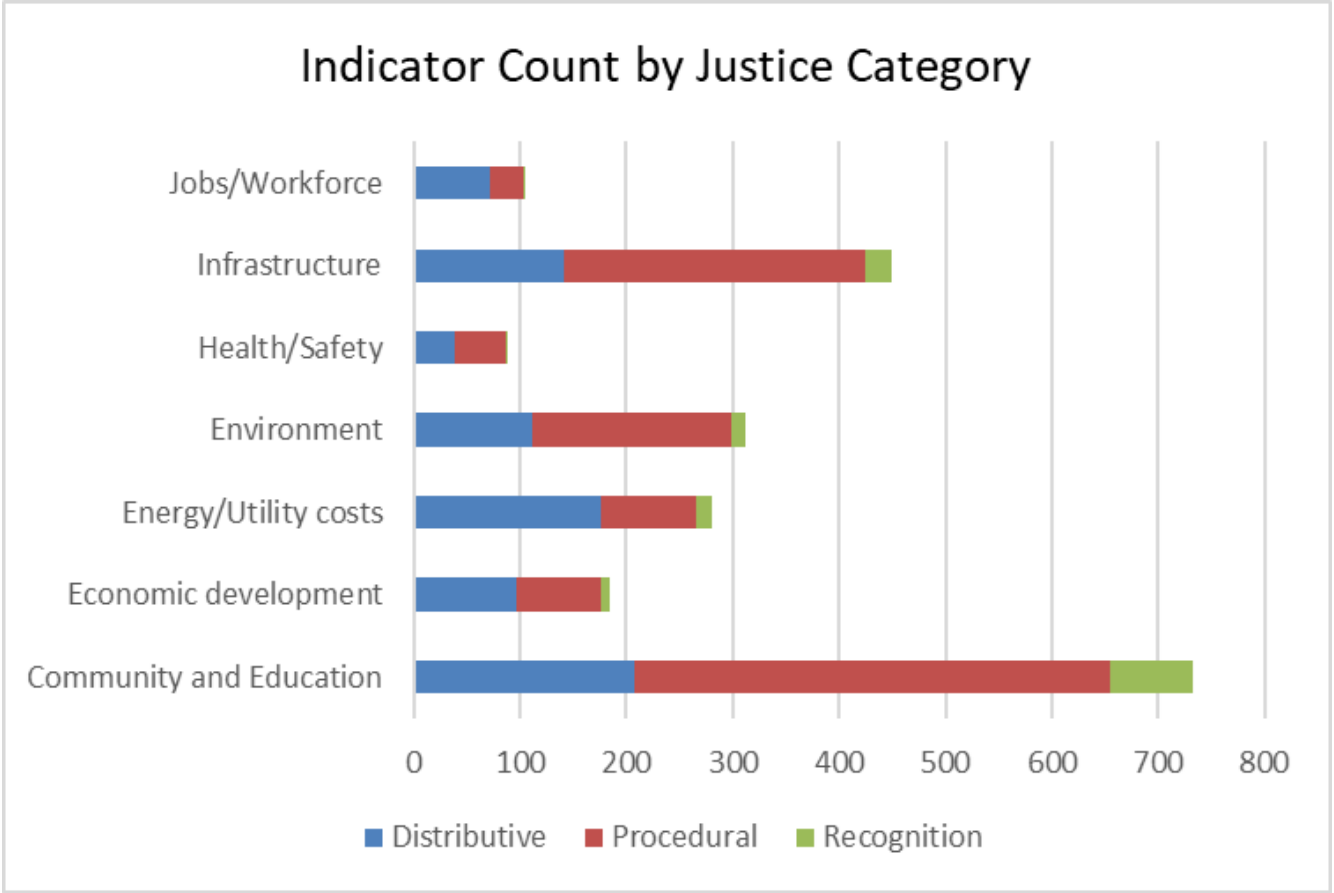


What did we learn?

(Findings)

Past Work on Energy Justice Indicators

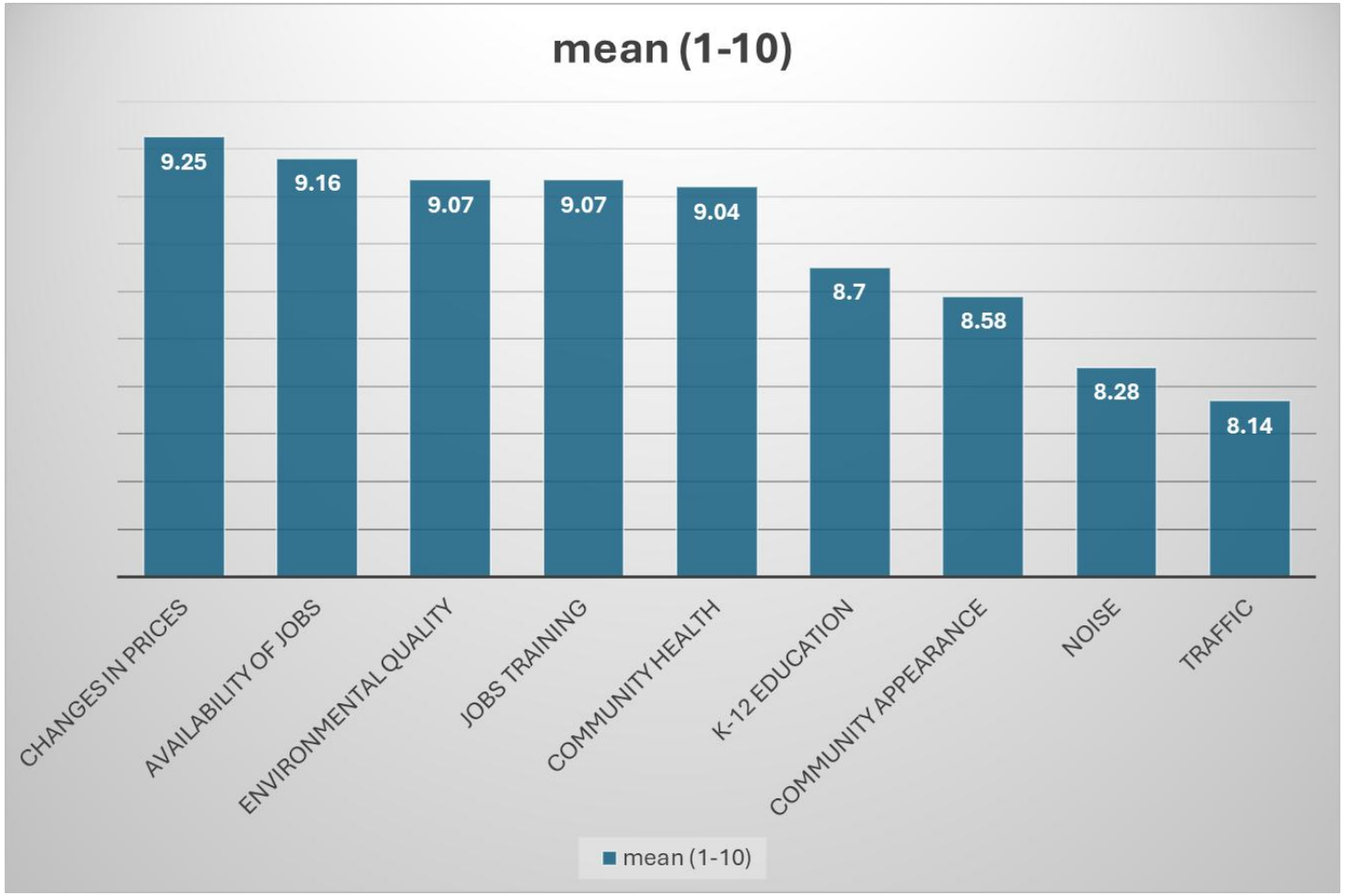
- A review of existing literature identified 527 studies and 2,162 possible ways to measure energy justice.
- Most indicators were developed through "top-down" process (by experts instead of communities).



Frequency of indicator topics in review of literature (see Amosi et al. 2025)

How to think about "Community"

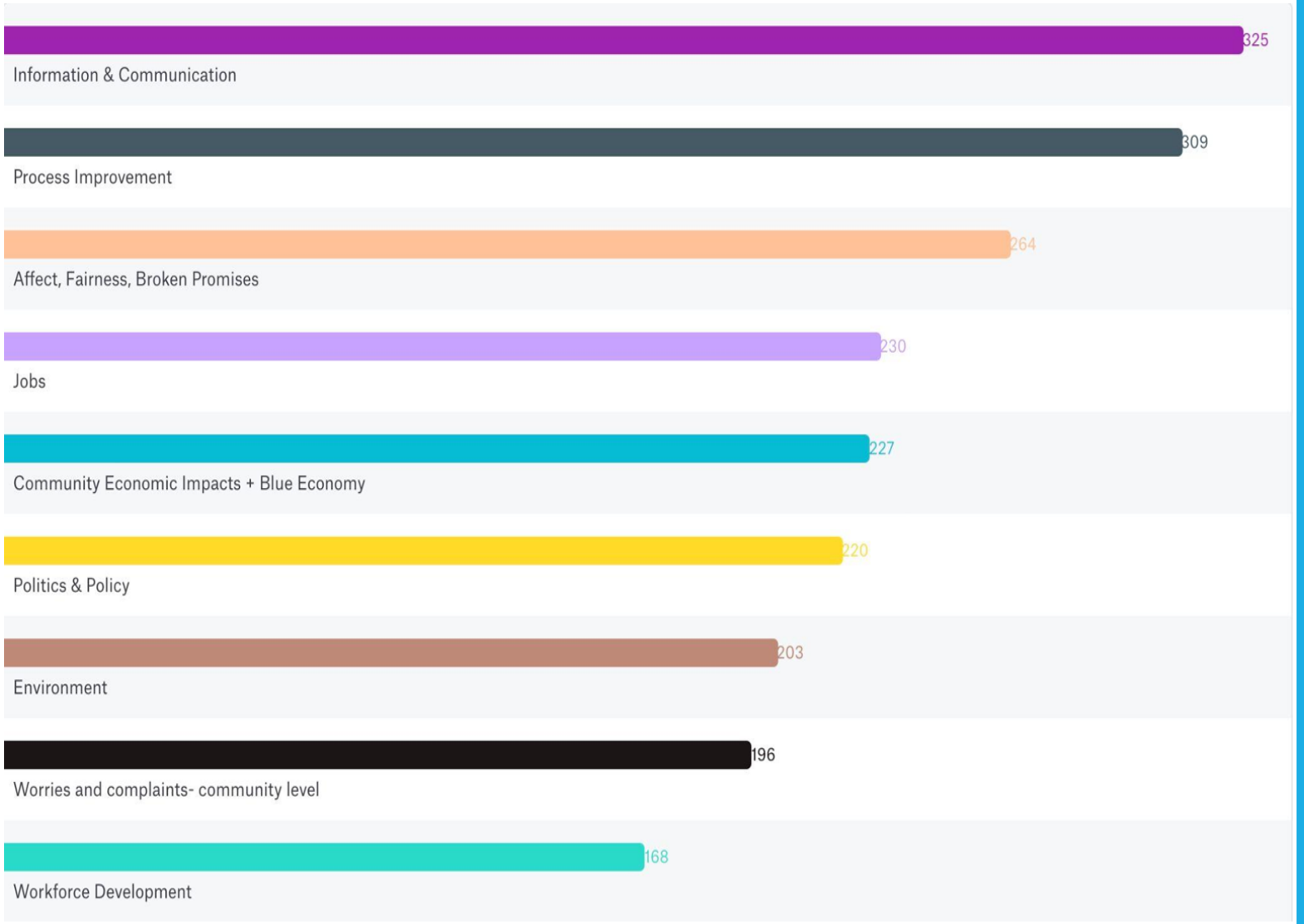
- Community is defined as **family, neighborhood, and town** more than state, region, or personal characteristics.
- Survey respondents cared most about how offshore wind development could affect prices and affordability, availability of jobs and training, and environmental/community health.



"Development of the port could affect nearby communities in many ways. How important to you are each of the following things that could be affected?"

Interview Themes

- Every interview was transcribed and analyzed to capture major themes.
- Most common themes related to:
  - improving communication
  - inclusivity of public engagement processes
  - questions about economic impacts (including jobs)



Information and Communication

"I think the companies being more transparent on their processes and their technology will help with [communities'] environmental concerns that are going on, and then for people to understand how turbines actually work." **- Interview 378**

- People desire more information about offshore wind: why it is developed, how it works, its costs, and who benefits.
- Some participants felt that communities weren't made aware of offshore wind development plans until infrastructure was arriving.
- Effective communication includes direct personal connection and reflects local needs and values.

Process Improvements

- Participants emphasized the need for consensus-building where everyone's value is recognized, not top-down directives. The need for communities to "own" or influence decisions was expressed.

- Communities desire local benefits beyond jobs, including youth opportunities, procurement of goods and services from local businesses, and investment in community infrastructure.

"It's about ownership of whatever you are developing and who has to own it. The people who are going to be affected need to be the ones who own it. So they need to be at the table in some fashion. It's not just about their legislative representative or the city manager or the mayor. You've got to go deeper than that." **Interview 212**

Jobs

"We really wanted to position ourselves in a way where we could get our young people ready for those wind jobs. But that has proven to be very difficult… navigating who are the players in this, who are the people to talk to, and where are the real opportunities." **- Interview 783**

- People desired "good" jobs which are stable, have opportunities for advancement, and lead to a career in the industry.
- People felt jobs were often given to "outsiders." For example, the high number of out-of-state license plates at the New Bedford site communicated a sense of "exclusion" for community members.
- Participants noted that jobs were not always long-term. More jobs are available during construction than maintenance phase of project.

Fairness & Broken Promises

"People talked about [the training] for years, and then after a while, I think people don't believe it, that it is coming." **- Interview 454**

- Historical experiences matter. Relationships with previous industries shape people's (mis)trust and expectations for offshore wind development.

- Across all sites, participants had a sense that big promises were made by developers and advocates of offshore wind development, but those promises were largely unfulfilled.

Community Economic Impacts

- People felt excited that the OSW industry could put their community "on the map" or revitalize their local economy.
- Desires for economic development went beyond "OSW jobs" and included increased investment in local infrastructure such as grocery stores or housing.

"I cannot tell you how many businesses, retail businesses, commercial businesses, benefited from that period of construction… I couldn't go to the barbershop without hearing my barber talk about the influx of employees and construction workers coming in for a cut. He was really excited about it."
Interview 212

Politics & Policy

We went from the optimistic hope of a once in a generational opportunity to stand up a brand-new industry… to literally taking a baseball bat to the knee and then being hit in the back of the head. Like now the offshore wind industry is laying on the ground going, Okay, I'm just going to curl up in a ball and maybe four years from now… there'll be an industry there." Interview 395

- Participants recognized that the OSW industry had been politicized for years, expressing frustration that national politics impacted local processes.
- Participants cited politics as a roadblock to industry activity, describing the on-and-off nature of OSW activity as shaped by the alternating priorities of Democratic and Republican administrations.

Environment & Climate Change

"You know, cancer and stuff is rampant still in the area, and it's not being talked about enough… I think that's one thing that would be really nice—if the business takes into consideration the people that the business would affect. If they were coming with that kind of mindset, that would be wonderful, at least for me." **Interview 217**

- Concerns about degradation to environment and impacts on wildlife were key issues for participants, but some also reflected on the ways that environmental concerns were shaped by commonly circulating mis/disinformation narratives.
- Some participants expressed concerns about potential impacts to coastal ecosystems used for recreation or subsistence activities (such as crabbing).
- Climate change was a low salience issue, with participants noting that developers marketed OSW much more in terms of economic development rather than a "green" technology.

Workforce Development

- Industry and policy participants took a long-term view of workforce development, pointing to the importance of targeting current middle and high schoolers to be job ready.
- Work-ready adults felt not enough workforce and training opportunities are available, noting that training or certification needs are unclear.
- Some pointed to tensions with labor unions, who favor bringing in regional or national union labor instead of recruiting and training local residents.

"How do you develop a workforce? Train them beginning in grade school, that, 'Hey, you guys have heard about whaling. You've heard about textiles. These are industries that made our city. Well, offshore wind has that ability to have that kind of lasting impact and generate the same kind of wealth that whaling and textiles did.'" Interview 874

Key Takeaways

1. Past measures of energy justice have been created through "top down" processes, rather than community driven.
2. In study locations, "community" is defined at a local and personal scale (family, neighborhood, and city).
3. Community members welcome benefits from offshore wind development, but they do not want to sacrifice affordability, environment, public health, or community character.
4. Jobs and job training are important, but community members value quality of jobs as much as quantity.
5. Community members desire better communication and more personal engagement in decision making.
6. A history of broken promises shapes reactions of these communities to this new industry.

Sample Indicators

The results of this study suggest potential indicators for how the offshore wind industry is meeting hopes and desires of nearby communities. The table below offers examples of indicators and how they could be measured.

Potential Indicator	Measure
Energy Costs	Percentage community households qualifying for federal Low Income Home Energy Assistance Program
Developer Role in Community	Public perceptions of the trustworthiness of offshore wind-related industries
Secondary Economic Impacts	Tax revenues generated by local businesses
Job Quality	Average wages of employees of offshore wind-related industries
Air Quality	Air Quality Index results over time

Questions and Comments?

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