

# South Fork Wind Farm

## Fact Sheet

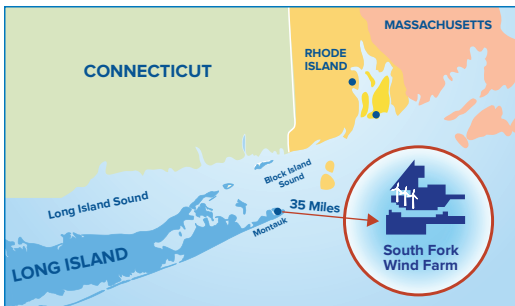


### LIPA Procures Energy from New York’s First Offshore Wind Farm

In January 2017, the LIPA Board of Trustees approved a Power Purchase Agreement (PPA) to buy energy from New York’s first offshore wind farm. The project was the result of a 2015 Request for Proposals (RFP) to meet growing energy demand on Long Island’s South Fork.

After a year-long process engaging the private sector for the best ideas, LIPA and PSEG Long Island evaluated 21 proposals, including detailed cost-modeling and engineering analysis. The result was a portfolio of projects—including New York’s first offshore wind farm, New York’s largest utility-scale batteries, new energy efficiency programs, and transmission enhancements—to address the South Fork’s energy requirements.

The South Fork Offshore Wind Farm was originally proposed as a 90-megawatt project. In November 2018, LIPA agreed to purchase an additional 40-megawatts of clean energy from the project—extra energy available from improving turbine technology. The additional energy was the lowest cost renewable energy ever on Long Island at the time.



### Long Island’s South Fork Offshore Wind Farm

The South Fork Offshore Wind Farm will produce a total of 130-megawatts of energy and is located 35 miles east of Montauk Point—out of sight from Long Island’s beaches. The project will provide enough renewable electricity to power 70,000 homes and offset 300,000 tons of carbon emissions each year.

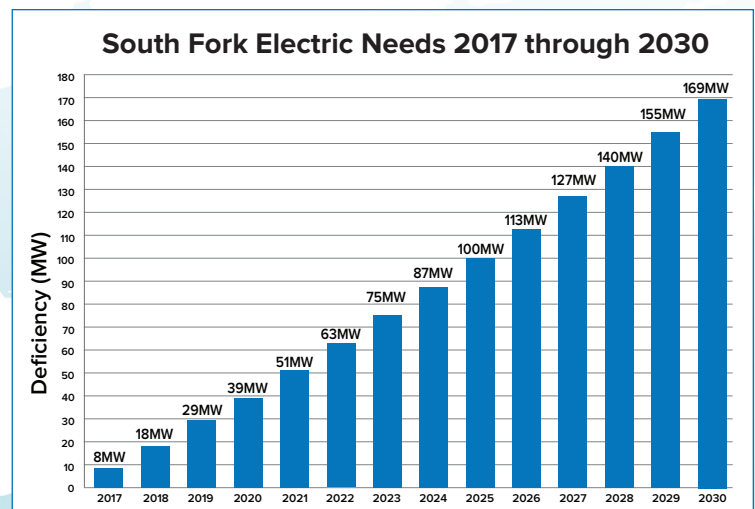
The wind farm is contracted to begin operation in December 2022.

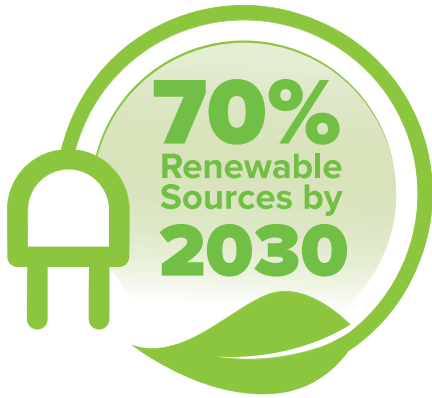


### Long Island’s South Fork Needs New Sources of Energy

The South Fork needs new sources of transmission and generation to meet its electric demand, which is growing faster than any other place on Long Island. Electric load has reached a point where it exceeds the capability of the existing transmission lines serving the area, requiring temporary generators to meet the needs of the community.

The deficiency projected in the 2015 South Fork RFP is shown in the chart. Current projections are consistent with those at the time of the RFP.





## New York’s Clean Energy Goals

Governor Cuomo’s Climate Leadership and Community Protection Act is a nation-leading clean energy and jobs agenda that calls for New York to obtain 70% of its electricity from renewable sources by 2030 and a carbon-free electric grid by 2040. New York has also committed to a minimum of 9,000MW of offshore wind by 2035. LIPA’s share of the statewide offshore wind goal is over 1,000MW. The State’s clean energy goals have interim targets that increase each year along the path to those milestones. The South Fork Offshore Wind Farm is an important part of Long Island meeting our share of the statewide goals. As the price of clean energy continues to decline, and the interim targets increase, LIPA will procure additional clean energy projects each year.

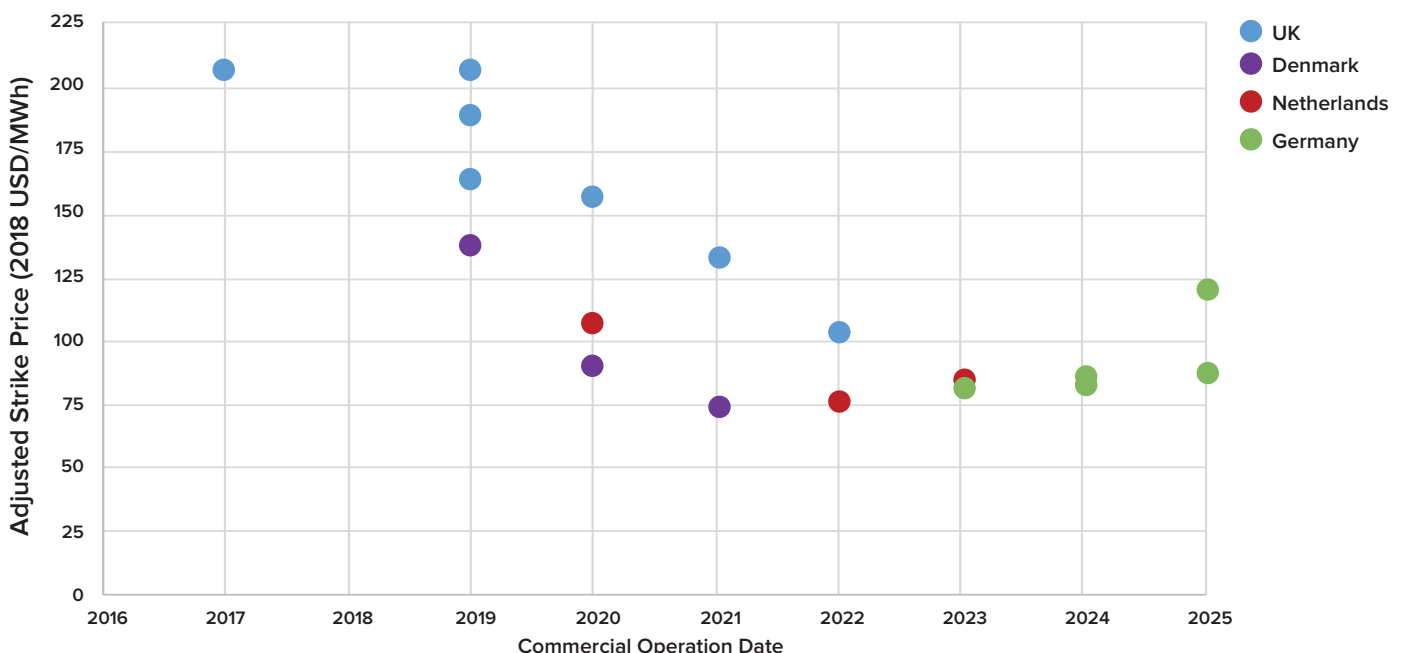


## New Offshore Wind Industry

Over the last two years, coastal states like New York, Connecticut, Massachusetts, Maryland, New Jersey and Rhode Island have approved 4,836MW of offshore wind projects and set procurement targets for over 20,000MW of offshore wind.

In Europe, the offshore wind industry is experiencing fast growth, with over 18,000MW of projects already installed. The increased investment and improving technology is rapidly reducing cost as shown below. The offshore wind market in the United States is following a similar trend, as shown on the next page.

### Europe’s Offshore Wind Costs Maintain Falling Trend Adjusted prices from European offshore wind auctions



\*Prices for Denmark, Netherlands, and Germany exclude transmission costs.





## Bill Impacts and Total Cost

LIPA approved New York's first off-shore wind farm to deliver clean electricity to an area that needed power.

The South Fork Project Portfolio, which includes New York's first offshore wind farm, two utility-scale battery storage systems, and new energy efficiency programs will cost an average residential customer on Long Island between \$1.39 and \$1.57 per month.

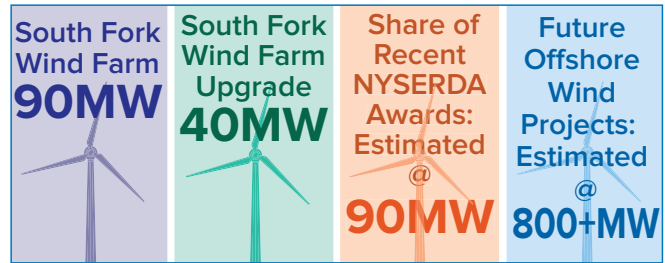
Prices for offshore wind have decreased rapidly as the market has grown, as shown below. LIPA's future offshore wind purchases, which will total over 800MW, will cost less as a result. As shown to the right, LIPA will also buy an estimated 90MW of offshore wind from the recently announced 1,700MW of New York State projects.

The price for the 90-megawatt South Fork project starts at 16 cents per kWh, and the price for the 40-megawatt project starts at 8.6 cents per kWh. Both prices escalate at an average of 2% per year for 20 years.

As LIPA is an electric utility, LIPA buys the energy, capacity, ancillary services, and renewable energy credits from the project. This is different than some projects where the contracting entity is only purchasing the

## Long Island's Share of Offshore Wind Energy

LIPA will responsibly buy offshore wind over time to meet New York's climate goals

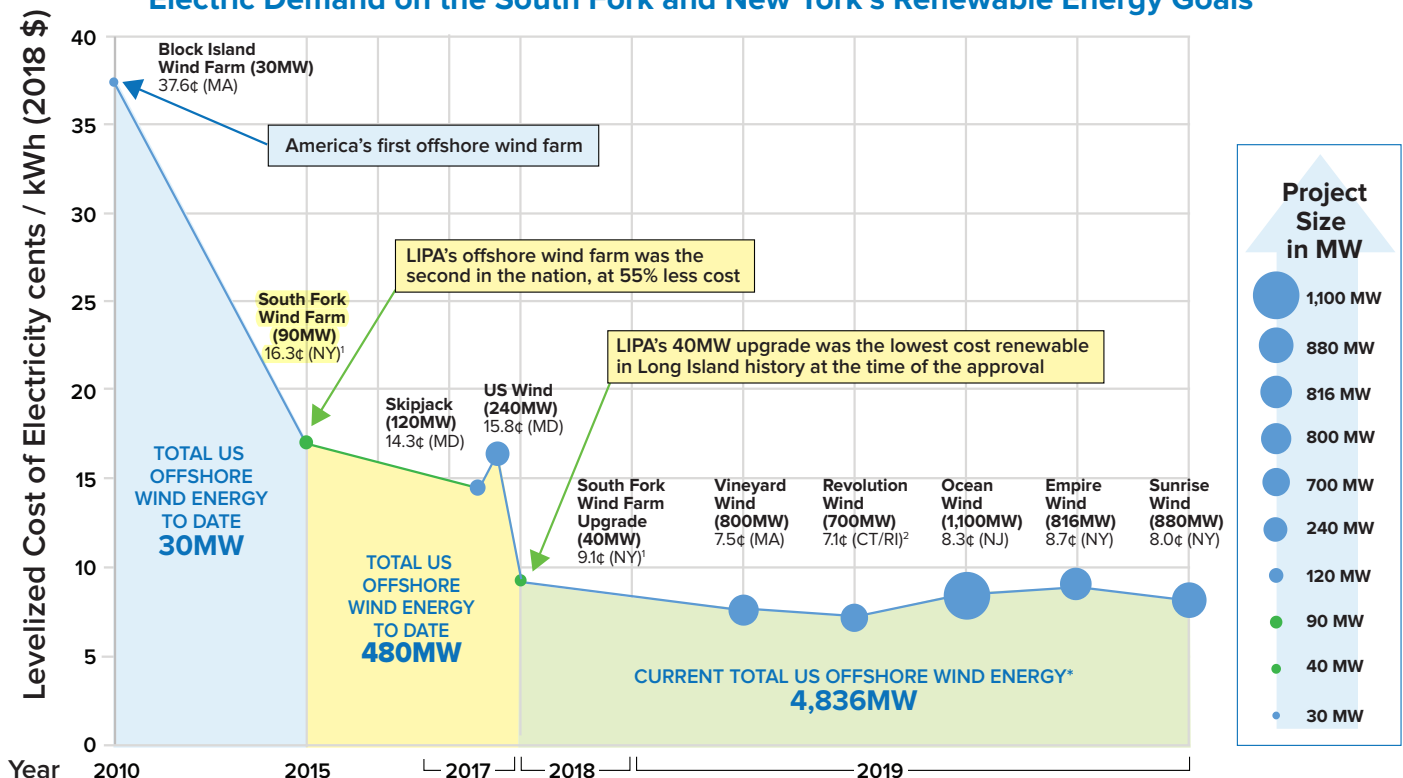


renewable energy credits, while consumers pay for the other energy attributes through the electric markets.

To compare offshore wind contracts with different timing, terms and escalations factors, the chart below provides the levelized cost of energy for each project, which includes estimates for all the amounts paid by consumers in 2018 dollars. Improving technology, a rapidly growing U.S. industry and larger project sizes are reducing cost. Project prices also vary with local windspeeds, water depth, distance to shore, and transmission cost, among other factors.

Orsted and Eversource have offered a community benefits package to the local community and discussions are ongoing. For more information, visit [southforkwindfarm.com](http://southforkwindfarm.com).

### A Developing Offshore Wind Industry South Fork Wind Farm was the Least Cost Solution to Meet Increasing Electric Demand on the South Fork and New York's Renewable Energy Goals



\*Levelized cost of electricity describes the estimated energy, capacity, and renewable attributes over the period of the contract in 2018 dollars, using a 6.5% discount rate.

<sup>1</sup>LCOE of the combined 130MW South Fork project is 14.1¢. <sup>2</sup>Revolution Wind's Connecticut contracts are not yet available; price based on Rhode Island contract.



## LIPA's Contract Approval Process

LIPA's procurement of new energy sources starts with open-source, technology neutral procurements. Our energy needs are defined in the RFP and all proposals are evaluated fully and fairly against pre-established criteria that take into account factors such as cost, project feasibility, the experience of the developer, and community considerations. The South Fork Offshore Wind Project was among 21 proposals to respond to LIPA's 2015 South Fork RFP.

The recommended projects are then brought to LIPA's Board of Trustees, who are appointed by State elected officials, for their review and approval. LIPA contracts exceeding \$50,000 are pre-audited and approved by the New York State Comptroller's Office and the Office of the Attorney General prior to becoming effective. The pre-audit by the State Comptroller's Office includes reviewing the fairness of the procurement process and competing proposals that were not selected.

## Offshore Wind Contract Details

At the time when each contract is brought to our Board, LIPA discloses the total cost of the contract as well as the impact to the average residential customer bill. The total cost of the contract is also available on the New York State Comptroller's website.

While we make every effort to conduct our business in a transparent way, there are times when it is not in our customers' interest to disclose every aspect of a power purchase agreement for a simple reason—if developers see the exact terms and conditions of each agreement, it undermines our ability to negotiate the best terms for our customers in other procurements.

In those circumstances, we disclose as much of the contract as we can and redact certain sensitive portions. Those redacted portions are available to the LIPA Board, the Office of the State Attorney General, and the Office of the State Comptroller in the conduct of their review.

