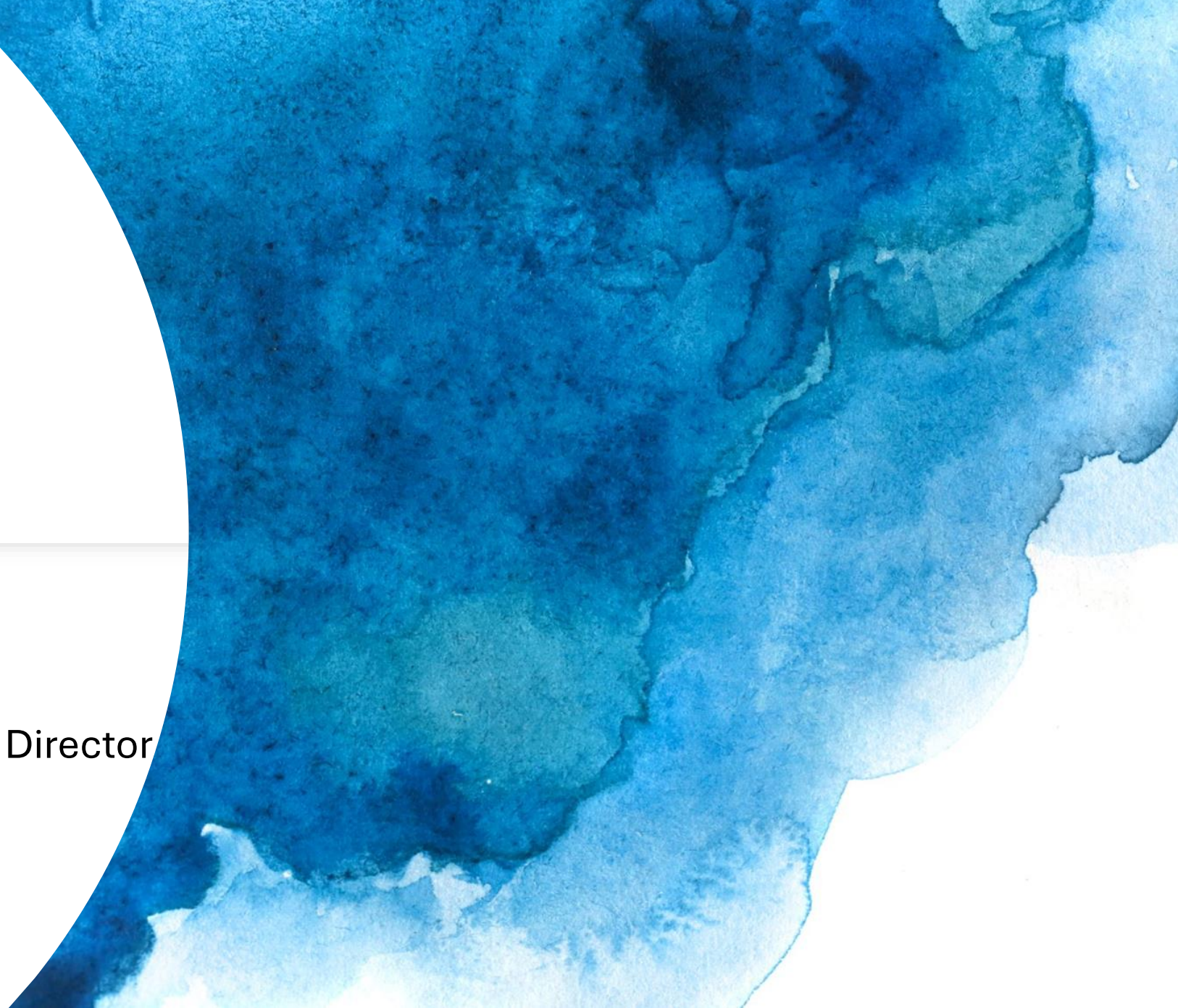


Why Wind Works!

Adrienne Esposito, CCE Executive Director

Julie Tighe, NYLCV, President



United Nations Report 2023

“Human Activities through emissions of greenhouse gases have unequivocally caused global warming.”

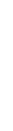
“Human caused climate change is already affecting many weather and climate extremes in every region across the globe.”





Climate Impacts

According to NOAA, between January and August of this year, the country experienced a record-breaking 23 separate disasters, that contributed to the deaths of 253 people and each reported damages exceeding \$1 billion with a total economic cost of \$57.6 billion this year.



Hurricane Ida Remnants : September 2021



At least eight people in Queens died after the remnants of Hurricane Ida brought New York City to halt with record-breaking rainfall and flooding.

Seven people — who ranged in age from two- to 86-years-old — died as floods overcame their basement-level homes in Queens Wednesday,

Canada Wildfires: Impacts Locally



In Canada 27 million acres have burned since last year.

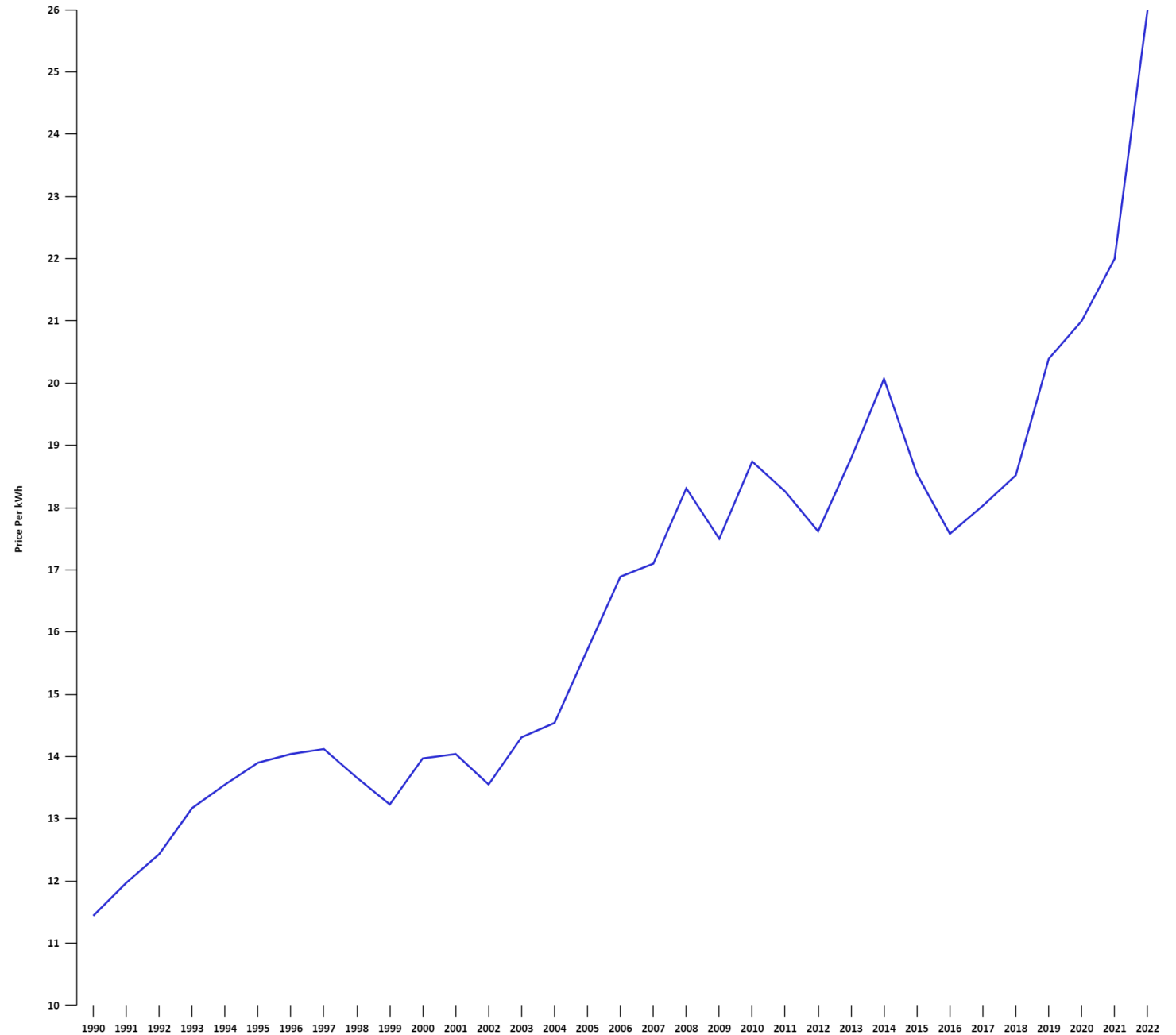
Climate change has made hot, dry and windy conditions like those that fueled Canada's blazes at least twice as common as they would otherwise

NY Electric Prices

1990- 11.44 cents a
kilowatt

2022- 26 cents a kilowatt

120% Increase in energy
costs



We need to transition
the way we produce
energy



NEW YORK STATE LEADERSHIP

New York's Climate Leadership and Community Protection Act – Most Ambitious Climate Change law in the country, signed in 2019.

70% renewable energy by 2030.

Carbon free electricity by 2040.

85% reduction in greenhouse gas emissions, 15% carbon offsets. Powerplants cannot offset emissions.

- Net-zero carbon economy by 2050.

9,000mw of offshore wind by 2035

and 6,000 mw solar by 2025.

40% state investments to frontline/
disadvantaged communities.

Guaranteed labor protections.



Leading the Nation
on Climate Change



Wind Energy

Wind is used to produce electricity by converting the kinetic energy of air in motion into electricity. In modern wind turbines, wind rotates the rotor blades, which convert kinetic energy into rotational energy. This rotational energy is transferred by a shaft which to the generator, thereby producing electrical energy.

Example of wind farm from this phase



Vindeby

Market	Denmark
Construction	1990-1991
No. of turbines	11
Total capacity	5MW

 **2,200**

Vindeby was powering 2,200 Dan

Offshore Wind Power is not new

First offshore wind farm: Denmark
Vindeby Offshore Wind Farm was the first offshore wind farm in the world, erected in 1991 off the coast of the town of Vindeby on the Danish island of Lolland. It was decommissioned in 2017 after 25 years of useful life.



EUROPE

**28,000
Megawatts**

Source: Global Wind Energy Council





CHINA

**27,000
Megawatts**

Source: Global Wind Energy Council





WHAT ABOUT USA?

An aerial view of a coastline with green land on the left and dark blue water on the right. Several white wind turbines are visible on the land. A white banner with black text is overlaid on the water.

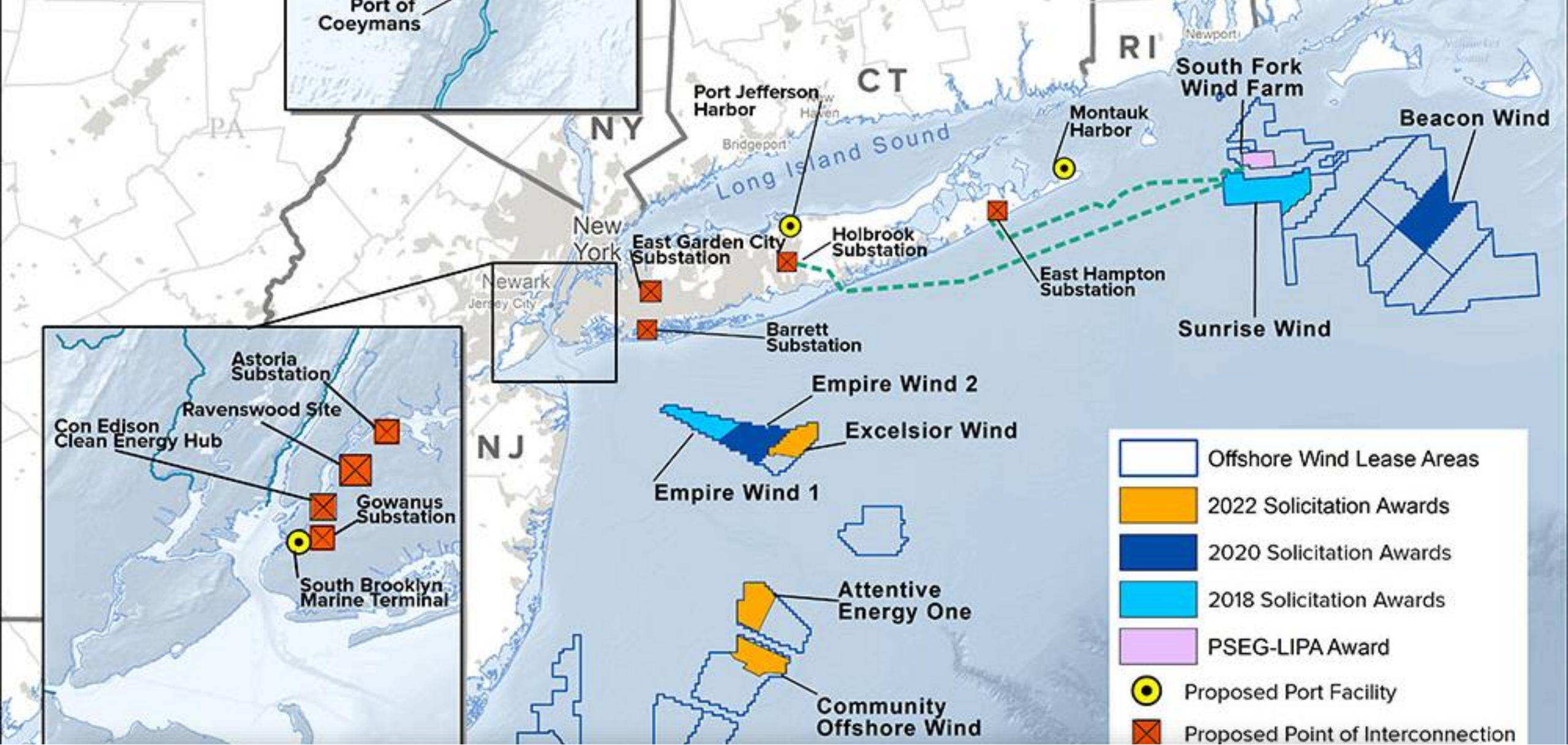
UNITED STATES

42
Megawatts

Source: Global Wind Energy Council









NY's First Offshore Wind Farm

South Fork Wind broke ground in February 2022 and is currently under construction.

They will install 12 turbines 30+ miles off Montauk and build a cable connection from the turbines to a substation in East Hampton via Wainscott beach.

Project	Capacity	Location	Review Process	Completion
South Fork Wind Farm	130 mw 70,000 homes	35 miles off Montauk, connects to East Hampton	Approved by BOEM, under construction	Expected to be operational the end of 2023
Empire Wind 1	800+ mw 500,000 homes	20 miles off the Rockaways, connects to South Brooklyn Marine Terminal	Federal review launched in 2021	Expected to be operational by 2026
Empire Wind 2	1,260 mw 600,000+ homes	Off the south shore of LI, connects to Island Park	Federal review launched in 2021	Expected to be operational by 2026
Sunrise Wind	880 mw 500,000 homes	30 miles off Montauk, connects to Holbrook	Federal review launched in 2021	Expected to be operational by 2025
Beacon Wind	1,230 mw 600,000+ homes	50 miles off Montauk, connects to Astoria via cable under LI Sound		Expected to be operational by 2028





New Projects Announced:

Attentive Energy

- 1,404 MW anticipated to enter commercial operation by 2030
- Enough electricity to power more than 700,000 homes annually

Community Offshore Wind Developer:

- 1,314 MW anticipated to enter commercial operation by 2030
- Enough electricity to power more than 650,000 homes annually

Excelsior Wind Developer:

- 1,314 MW anticipated to enter commercial operation by 2030
- Enough electricity to power more than 650,000 homes annually