



# Clean Energy Powers **North Carolina**

**REPORT**



## Introduction

**North Carolina is making significant strides in the clean energy sector, with wind and solar providing nearly 10% of the state's electricity.**

The state's utility-scale clean energy capacity, currently at 6,433 MW, is set to grow significantly by 2030 and is powered in part by over \$15 billion in investments. And the sector – which currently employs nearly 10,000 North Carolinians – is poised for further expansion.

By 2030, the state plans to add an additional 8,000 MW of utility solar, 1,400 MW of land-based wind power, and 2,500 MW of battery storage, representing a near doubling of total clean power investment. This growth will drive job creation, increase tax payments, and generate substantial land lease payments.

# Today...

Nearly

## 10%

of NC's electricity provided by solar and wind

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North Carolina ranks

## #4

in the nation for solar deployed

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Nearly

## 10,000

North Carolinians work in solar, wind, and storage

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## \$15 billion

of total investment into utility-scale clean energy

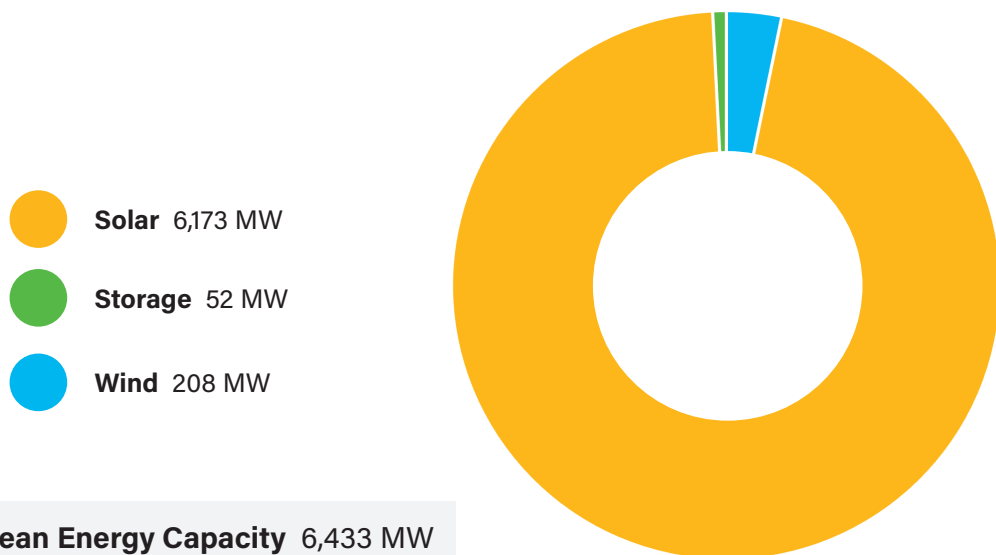
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# North Carolina's Clean Energy Economy

Today, **9.4% of the state's electricity** comes from wind and solar. This is enough electricity to power **1.1 million homes** in North Carolina.

## Utility-Scale Clean Energy Capacity

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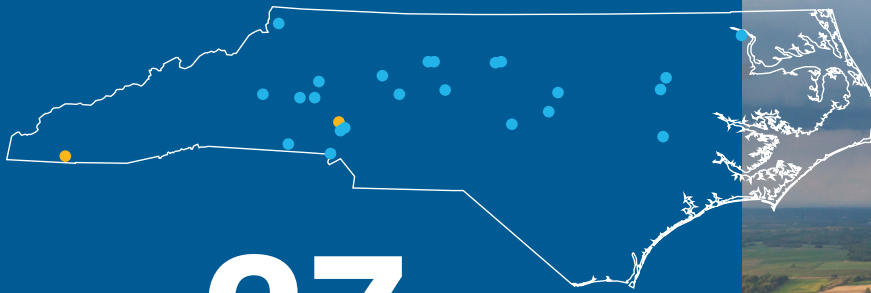
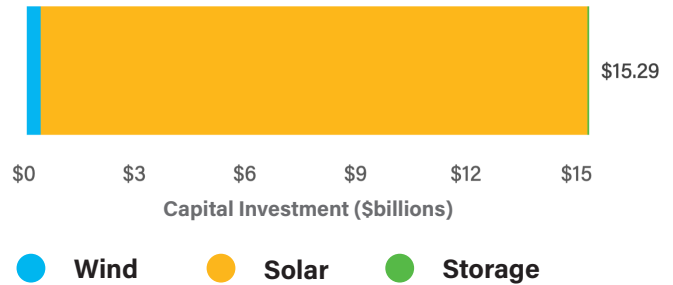
As of July 2023, North Carolina's total clean energy capacity stands at **6,433 MW**. That's enough electricity to power the equivalent of **1.1 million homes** – or more than all the homes in The Triangle.

This growth is fueled by over **\$15 billion** in investments into existing utility-scale solar, wind, and storage projects. North Carolina also hosts at least **27 operating clean energy manufacturing facilities**. The solar, wind and storage sectors provide **9,631 jobs** to North Carolinians across the sector.

# Clean Energy Investment

As of Q2 2023

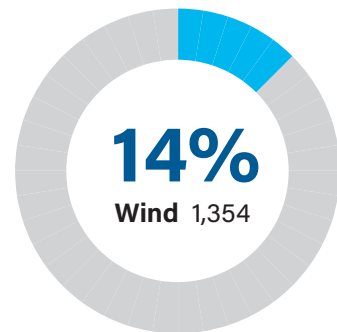
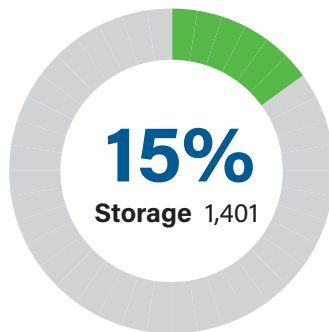
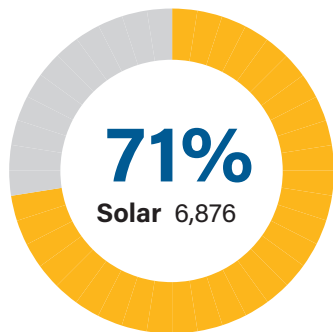
## Utility-Scale Clean Energy Capital Investment



Investments in North Carolinian utility-scale clean power total over **\$15 billion dollars**, with the majority invested into solar energy. As more projects are planned, total capital investment is expected to grow rapidly.

# Clean Energy Jobs

As of Q4 2022



**Total Jobs** 9,631

The nearly 10,000 jobs supported in the solar, wind, and storage sectors span jobs in construction, development, operations, and manufacturing.<sup>1</sup> [Learn more](#) about the breadth of jobs available across the clean energy sectors.



<sup>1</sup> <https://www.energy.gov/policy/us-energy-employment-jobs-report-useer>

## How is clean energy benefiting North Carolinians today?



*This farm has been in the family longer than we can trace back. We would never consider selling, so our solar lease is really good, and the land is really good...We know the value of clean energy, and to promote it in this area meant a lot to us."*



**Helen Livingston**  
North Carolina land owner

In Robeson County, Helen Livingston owns a 300-acre farm that has been a part of her family for generations. Between droughts and fluctuating prices, the farm has become more difficult to operate and make profitable.

When Helen was approached about leasing 44 acres of her farmland to a solar developer, she was "thrilled"; the lease would supplement her income and allow her to avoid selling the farm.

Story courtesy of [NC Sustainable Energy Association](#)

# Clean Power Local Contributions

Tax Payments (State & Local)

**\$30 million**  
annually



Land Lease Payments

**\$42 million**  
annually



**Total** \$72 million annually

Clean energy projects invest into North Carolina communities. These projects not only generate pollution-free American electricity, but provide critical revenue on the state and local level that helps bridge budget shortfalls and allows communities to plan and invest in their future. This revenue can provide enough new income to repair roads, invest in schools, and fund essential services.

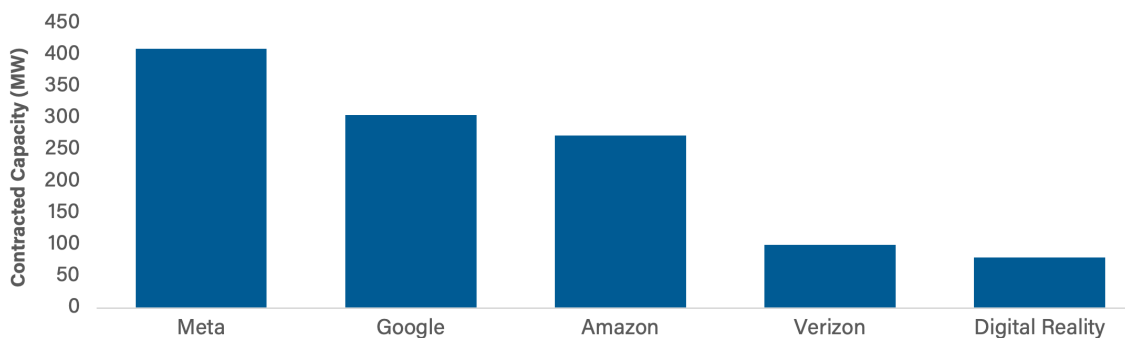
Landowners also benefit, receiving land lease payments from clean power located on their land. This allows families new avenues for income and opportunities to hold onto land passed down through generations.



# Commercial & Industrial Activity

Corporations are driving up demand for North Carolinian clean energy, with over **1,600 MW** of corporate procurement agreements.

## Top Corporate Clean Power Buyers in North Carolina



Meta, Google, and Amazon all have significant procurement agreements in NC, with Meta procuring more than 400 MW, Google procuring more than 300 MW, and Amazon procuring over 270 MW.

## How is clean energy benefiting North Carolinians today?



*We can have many more lambs per acre than if you put them on a normal pasture because of the solar panels."*

**Solar installations can even improve traditional farms.** In Montgomery County, Joel Olsen's sheep farm combines solar panels with traditional agriculture. The solar panels provide shade that helps grass grow thicker and greener than in an open field, feeding more sheep.



**Joel Olsen**  
North Carolina farmer

Story courtesy of [WFAE 90.7](#)



# Future Projections

By 2030, North Carolina anticipates adding 8,000 MW of utility solar, 1,400 MW of land-based wind power, and 2,500 MW of battery storage. This represents a near doubling of utility-scale clean power investment by 2030, with more than \$14 billion in capital investment expected.

This activity will spur job growth, increase estimated tax payments to nearly \$80 million annually, and generate over \$110 million in annual land lease payments.

## Offshore Wind

There are also three active leases off the North Carolina coast that have the potential for over 6 GW of offshore wind capacity. A recent study from the North Carolina Department of Commerce found that constructing a 2.8 GW offshore wind farm could support between 14,000 to 28,000 jobs during construction and an additional 1,000 to 2,500 full-time jobs operating and maintaining the offshore wind facility and in the supply chain.<sup>2</sup>

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## Expected Capital Investment by 2030

# \$14 billion



<sup>2</sup> [https://files.nc.gov/nccommerce/documents/files/NC-Offshore-Wind-Energy-Project\\_Economic-Impact-Analysis-2.8-GW.pdf](https://files.nc.gov/nccommerce/documents/files/NC-Offshore-Wind-Energy-Project_Economic-Impact-Analysis-2.8-GW.pdf)

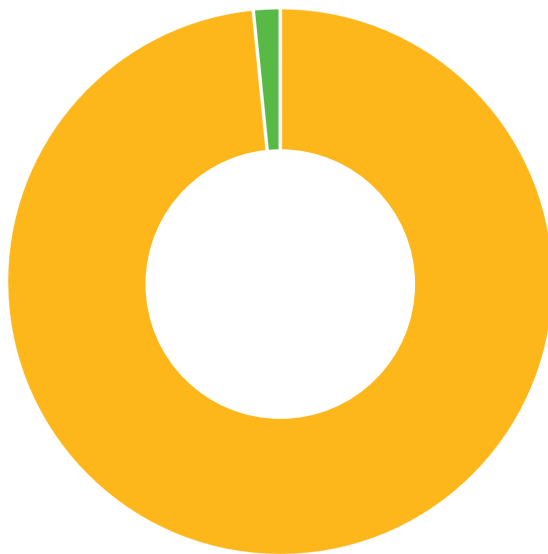


# Clean Energy Under Development

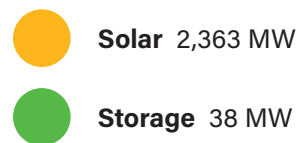
As of Q2 2023

## Clean Energy Under Development

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As of July 2023, there is nearly **2.4 GW of utility-scale solar capacity under development**. This is enough to power the equivalent of **400,000 homes** in North Carolina.



## Additional Utility-Scale Clean Power Capacity by 2030

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### Expected Clean Power Capacity

(by 2030)

**8,000 MW**

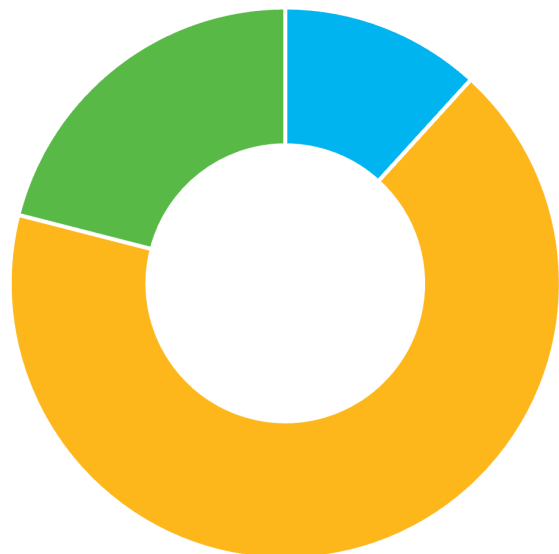
of additional solar

**1,400 MW**

of additional land-based wind power

**2,500 MW**

of additional battery storage



# Clean Power Local Contributions by 2030

*\*Estimates based on projected pipeline*

Tax Payments (State & Local)

**\$83 million**  
annually



Land Lease Payments

**\$110 million**  
annually



## How is clean energy benefiting North Carolinians today?



*During construction, there was definitely an uptick in the amount of business restaurants were having...our sales tax and occupancy tax increased pretty significantly."*

**Shelley Cox**

*Planning Director for  
Pasquotank County*

Spanning the Pasquotank and Perquimans counties, the Amazon Wind Farm US East provides over **\$520,000 per year in county tax payments, funding local schools, hospitals, police, and fire departments.** The project pays landowners with \$624,000 in payments each year, yielding a steady, predictable, and reliable income that is not dependent on weather. Avangrid Renewables, the project developer, provides extra benefits to the counties by maintaining over 60 miles of road at no additional cost to taxpayers.<sup>3</sup>

Story courtesy of Southern Alliance for Clean Energy (SACE)

<sup>3</sup> [https://sewind.org/wp-content/uploads/2022/12/NC\\_East\\_Wind\\_Economic\\_Development\\_1.26.17.pdf](https://sewind.org/wp-content/uploads/2022/12/NC_East_Wind_Economic_Development_1.26.17.pdf)

The American Clean Power Association (ACP) is the leading voice of today's multi-tech clean energy industry, representing 750 utility-scale solar, wind, energy storage, green hydrogen and transmission companies. ACP is committed to meeting America's national security, economic and climate goals with fast-growing, low-cost, and reliable domestic power.

Learn more at [www.cleanpower.org](http://www.cleanpower.org).



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