



Economic Analysis of Clean Energy Development in North Carolina

2025 Update

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Objectives

- **Retrospective Economic Impact Analysis**
 - Years 2007 to 2024
 - Analyze changes in consumer, utility, and government spending
 - Estimate the direct and indirect economic impacts of clean energy development in North Carolina since 2007



Background



- In 2007, North Carolina established the Renewable Energy and Energy Efficiency Portfolio Standard (REPS), the first of its kind in the Southeast. Since then, the REPS solar and energy efficiency goals have been met by utilities and the policy continues to show lasting effects.
 - REPS required electric power suppliers to meet an increasing amount of retail consumers energy demand through a combination of renewable energy resources and reduced energy consumption.
 - Program name and statute changed to Clean Energy and Energy Efficiency Portfolio Standard (CEPS) in 2023.

Key Findings (2007 to 2024)

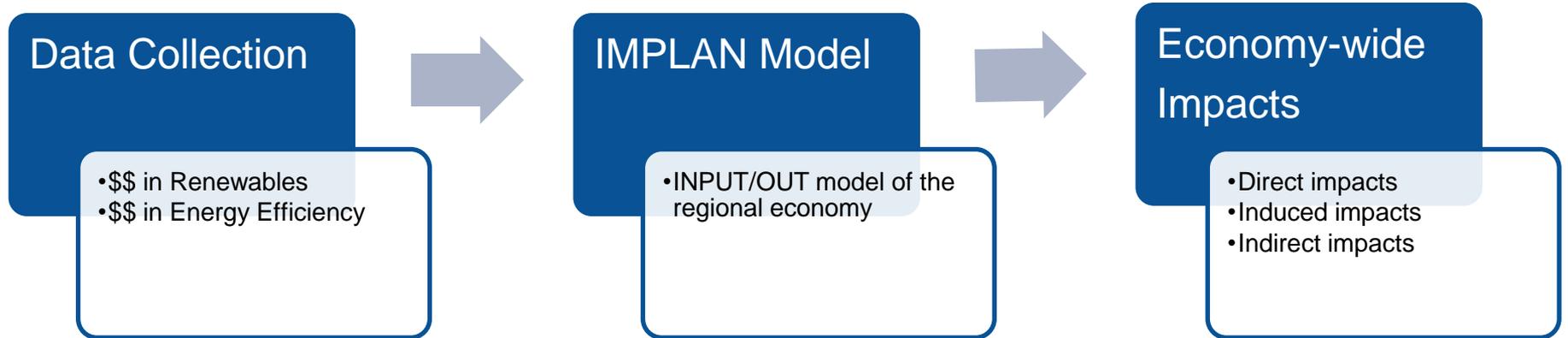


- The total economic impact in North Carolina from clean energy (renewable energy and energy efficiency) project development was \$57.8 billion.
- Approximately \$31.5 billion was directly spent on clean energy development in North Carolina.
- State incentives for clean energy—including the now expired North Carolina renewable energy investment tax credit and state appropriations for the Utility Savings Initiative—totaled \$2.1 billion. This has led to an additional \$1.3 billion in tax revenue for state and local governments.
- Renewable energy project investment in 2024 was \$748.5 million, or 29 times the \$25.7 million of investment observed in 2007.
- Clean energy development supported 256,159 cumulative job years since 2007.
- Wake, Nash, Bladen, Northampton, Cumberland, Currituck, and Mecklenburg Counties experienced the greatest amount of investment—more than \$700 million each. In addition, Duplin, Edgecombe, and Robeson Counties each experienced between \$600 million and \$700 million in investment.

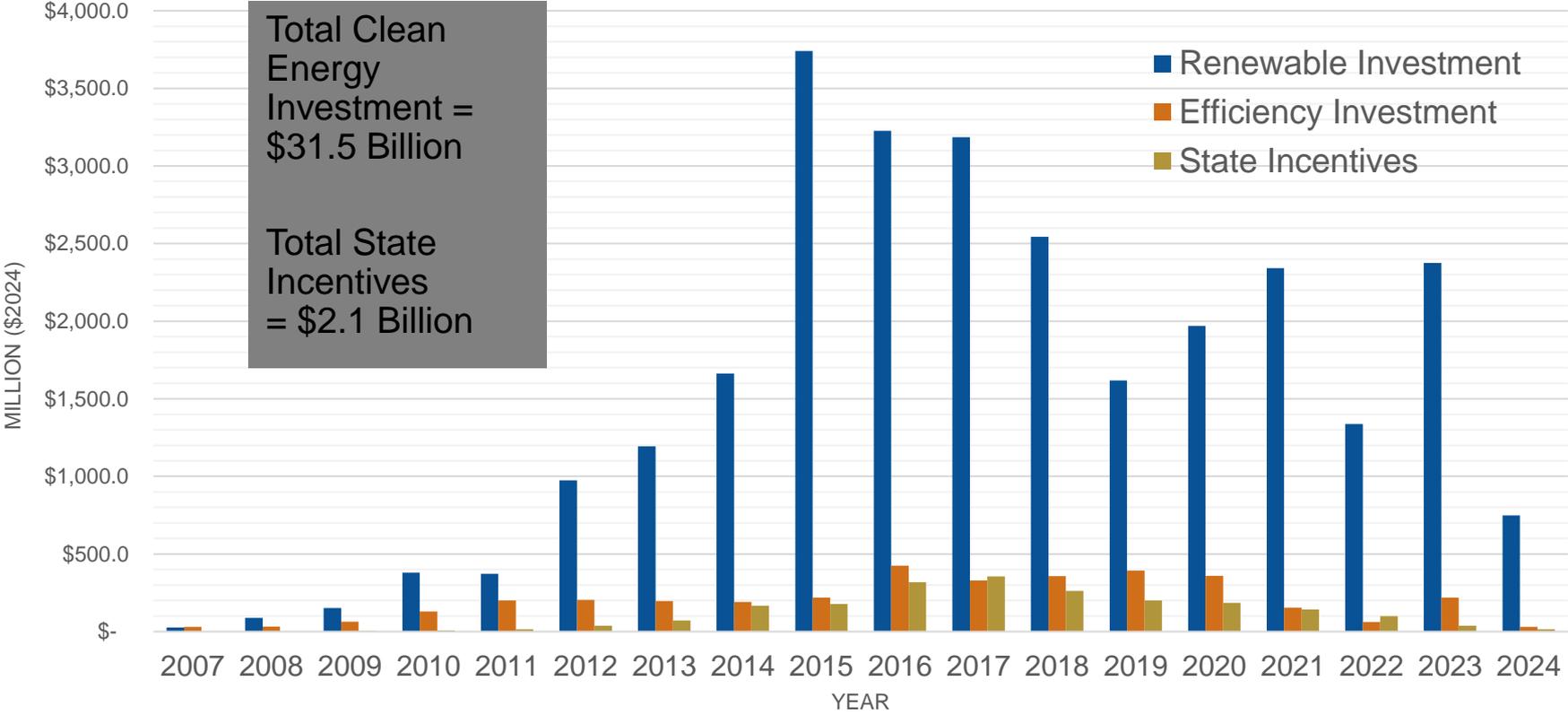
Retrospective Economic Impact Analysis



Economic Impact Methodology

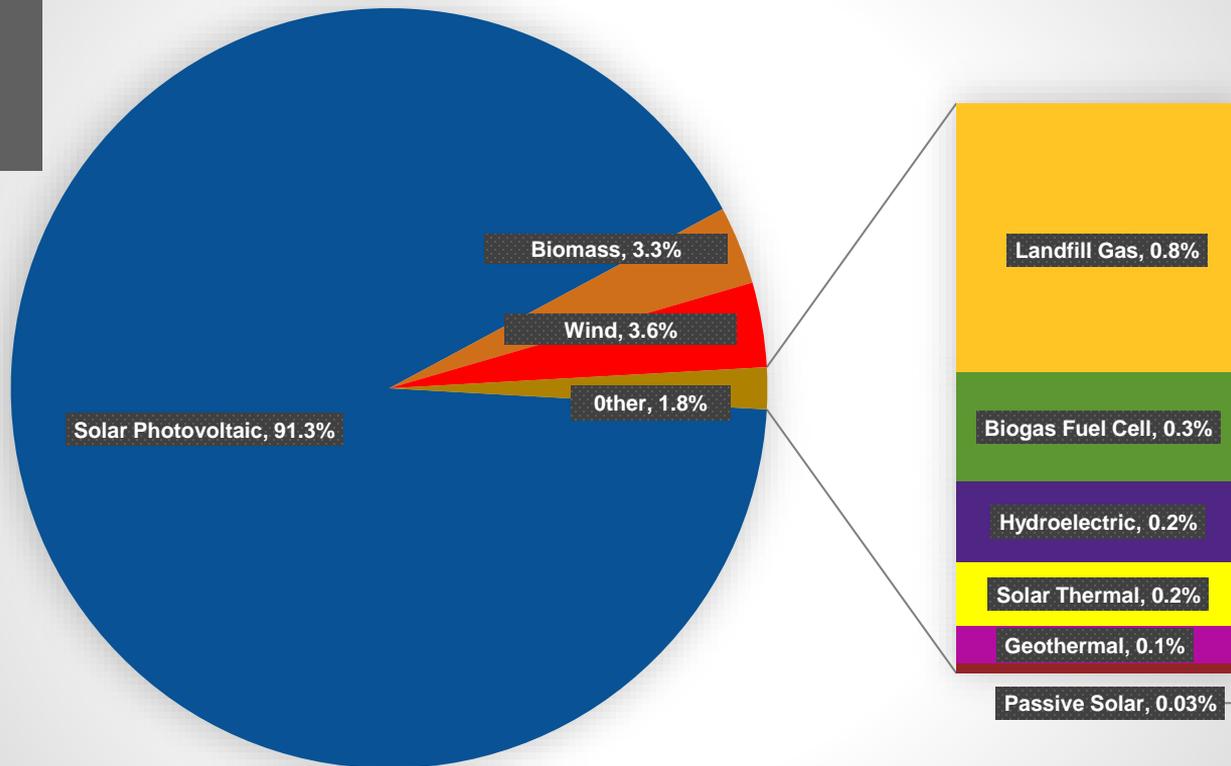


Clean Energy Investment in North Carolina, 2007–2024

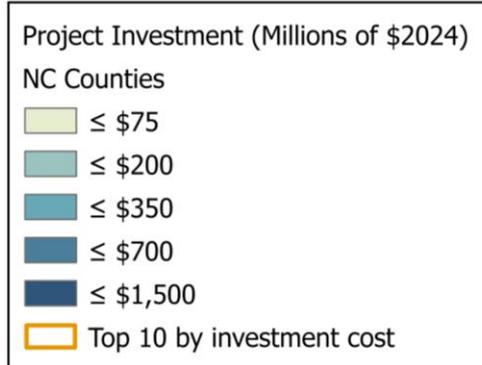
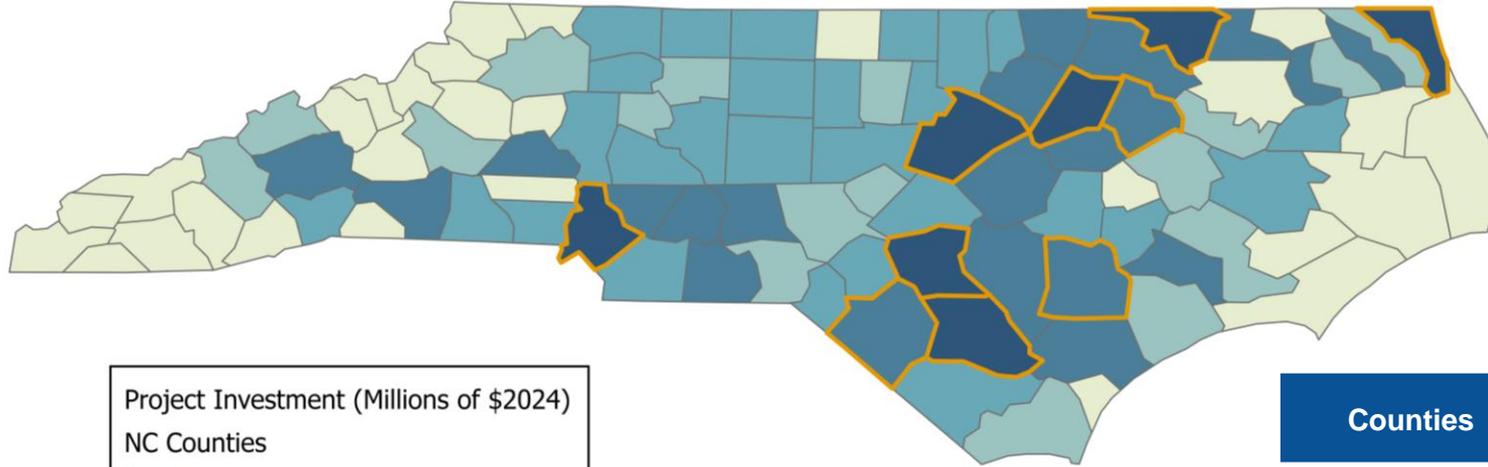


Direct Spending in Clean Energy Development by Technology, 2007–2024

Renewable Energy Direct Investment = \$27.9 Billion

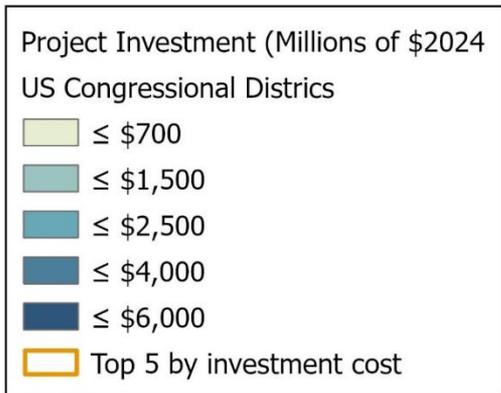
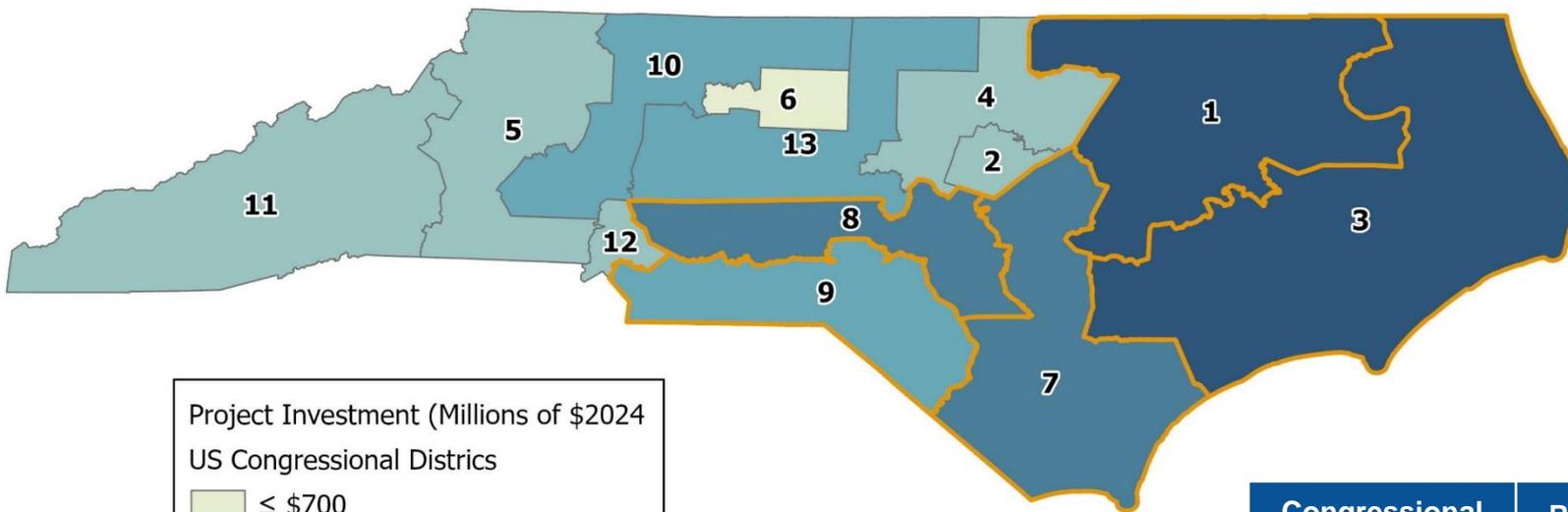


Distribution of Renewable Energy (RE) Investment Across North Carolina Counties



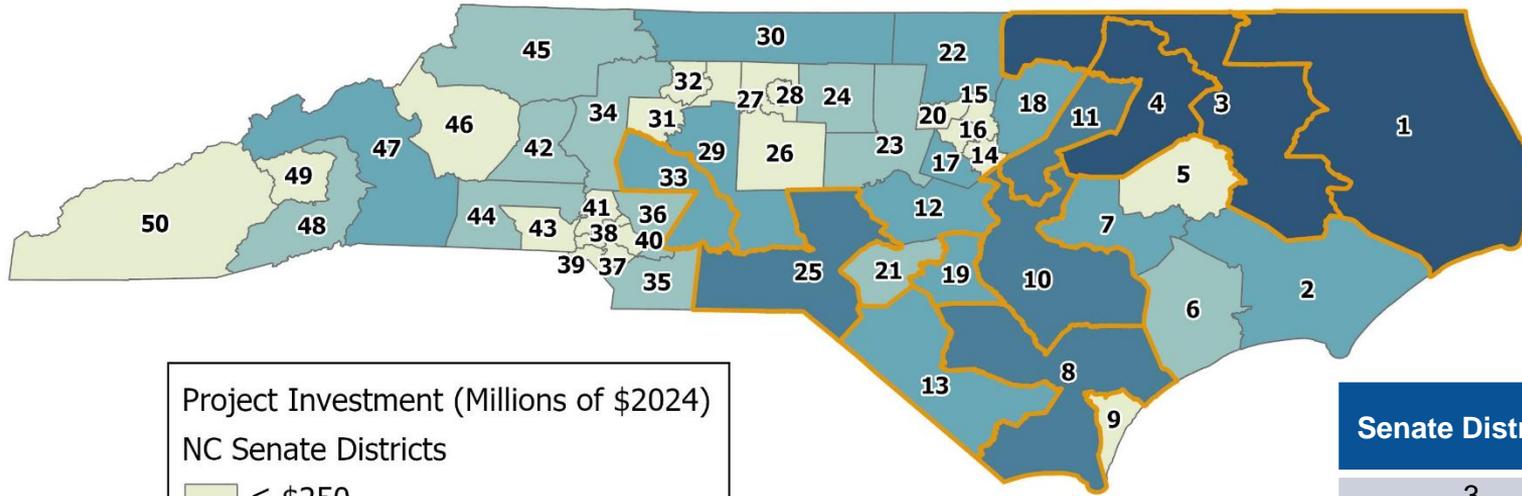
Counties	RE Investment (Millions of \$2024)
Wake	\$1,269.1
Nash	\$986.8
Bladen	\$984.2
Northampton	\$969.2
Cumberland	\$888.5
Currituck	\$757.9
Mecklenburg	\$736.2
Duplin	\$691.4
Edgecombe	\$616.0
Robeson	\$608.5

Distribution of Renewable Energy Investment Across North Carolina Congressional Districts



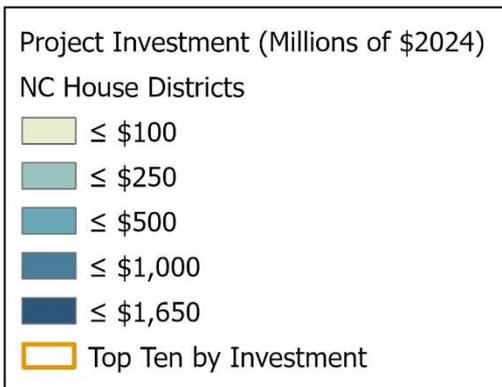
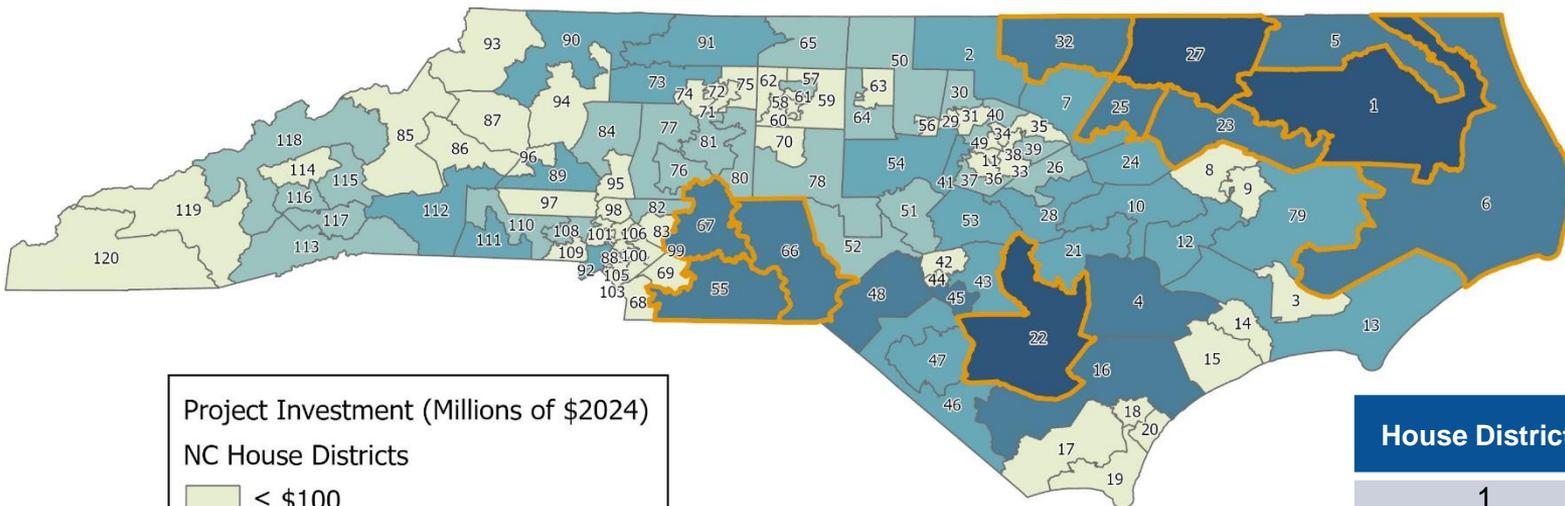
Congressional Districts	RE Investment (Millions of \$2024)
1	\$5,685.7
3	\$4,017.3
7	\$2,883.5
8	\$2,794.3
9	\$2,231.8

Distribution of Renewable Energy Investment Across North Carolina Senate Districts



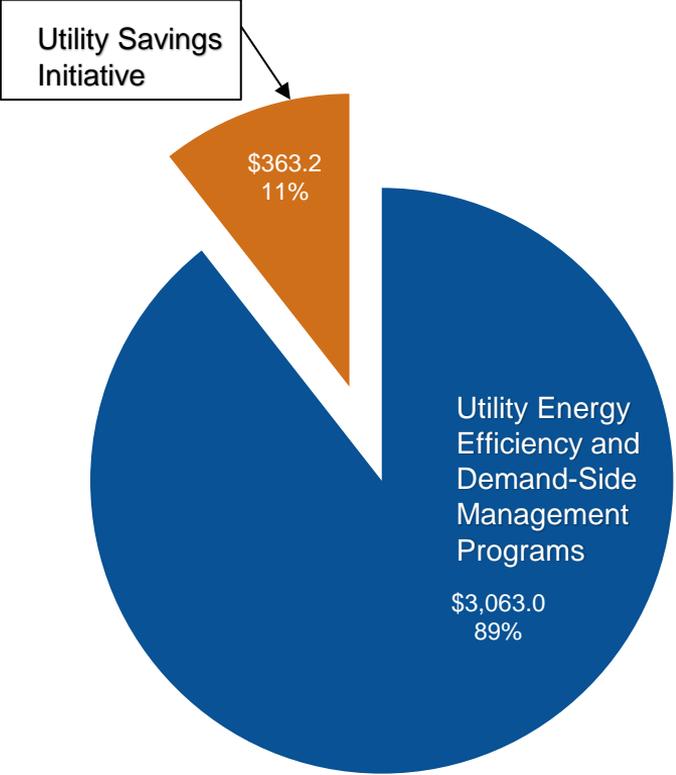
Senate Districts	RE Investment (Millions of \$2024)
3	\$2,477.9
1	\$2,355.4
4	\$1,737.2
10	\$1,495.5
11	\$1,267.9
25	\$1,209.2
8	\$1,206.5
13	\$919.1
33	\$902.1
19	\$869.1

Distribution of Renewable Energy Investment Across North Carolina House Districts



House Districts	RE Investment (Millions of \$2024)
1	\$1,639.4
27	\$1,567.5
22	\$1,255.2
25	\$944.2
32	\$844.9
67	\$838.9
23	\$799.9
6	\$774.8
66	\$691.0
55	\$690.6

Direct Spending in Clean Energy Development by Technology, 2007–2024



Energy Efficient
Direct Investment =
\$3,426.2 million

Total Economic Impacts, 2007–2024

	Total Output ^a (Million, 2024\$)	Gross State Product ^b (Million, 2024\$)	Employment (Job - Years)	Fiscal Impacts (Million, 2024\$)
Direct economic impact from clean energy development	31,536.0	12,033.9	124,330	605.4
Direct economic impact from change in government spending	-114.9	-62.5	-621	-3.7
Secondary economic impact	26,411.7	16,515.1	132,449	681.9
Total Economic Impact^c	57,832.7	28,486.4	256,158	1,283.6

^aTotal output refers to revenue received by North Carolina individuals and businesses.

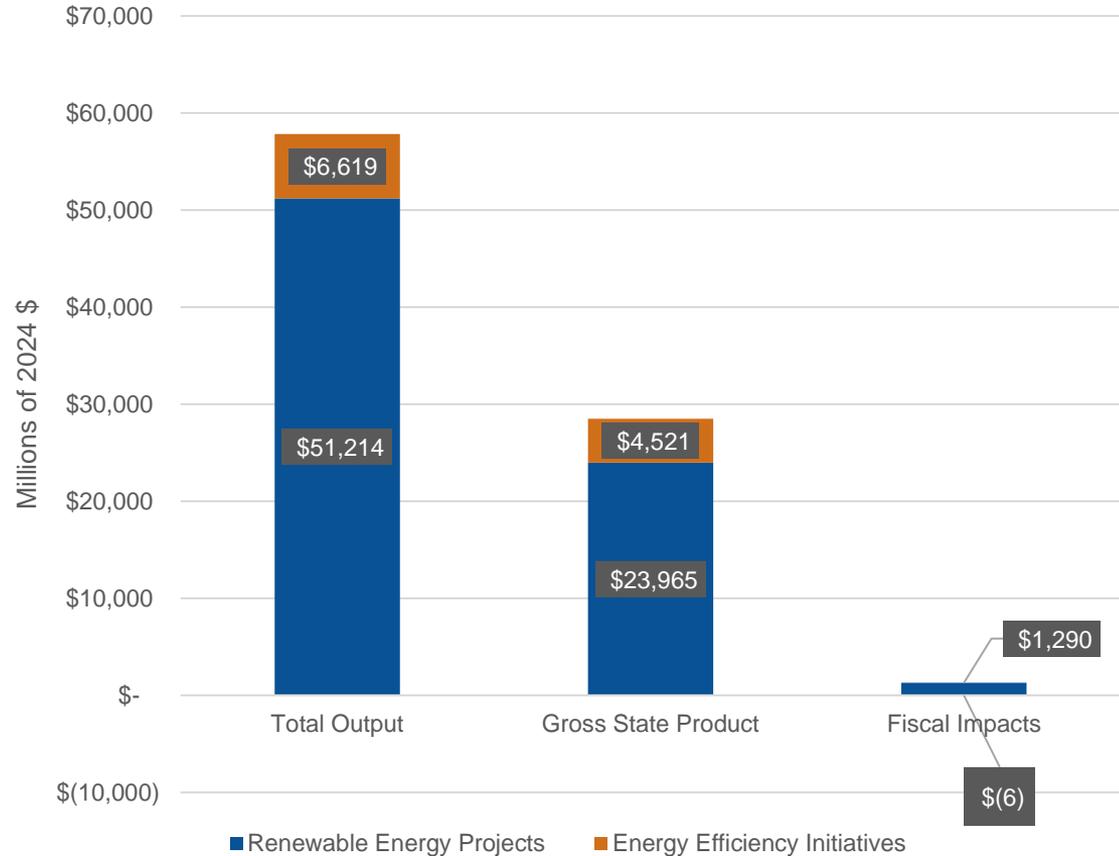
^bGross state product represents the total value added.

^cSums may not add to totals because of rounding.

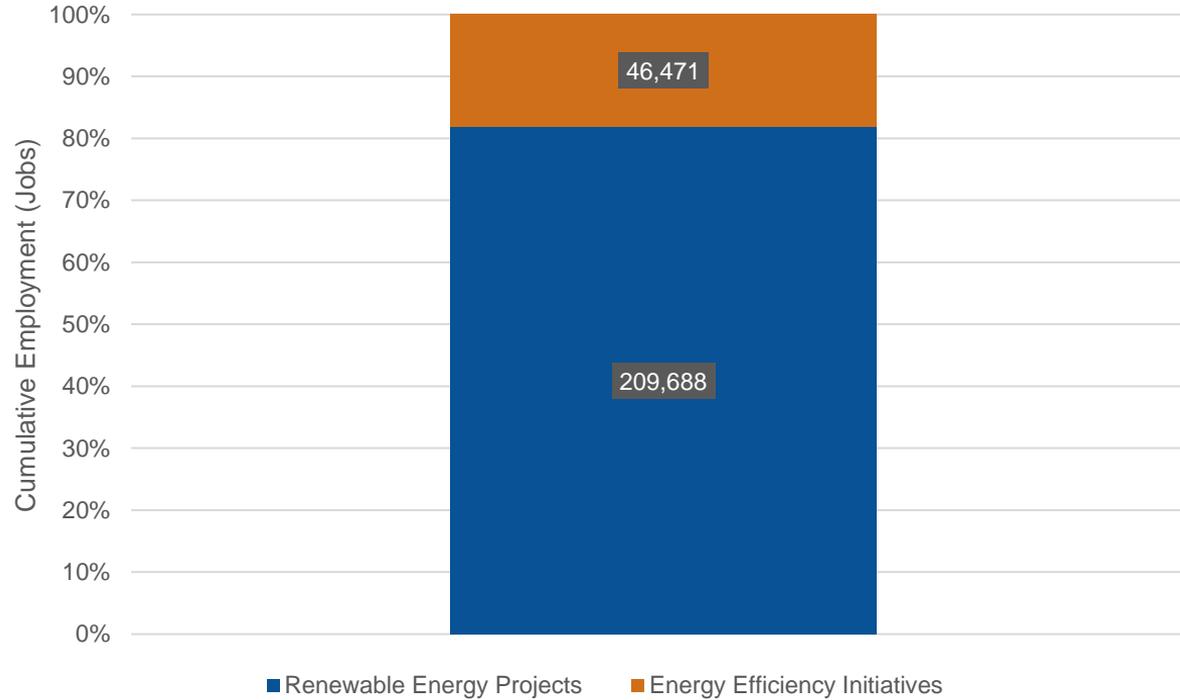
Total Economic Impacts Associated with Clean Energy Projects

Total Output refers to revenue received by North Carolina individuals and businesses.

Gross State Product is the total value added to state economy.



Total Economic Impacts Associated with Clean Energy Projects (continued)



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