

# Energy Efficiency Programs and Workforce in New Jersey

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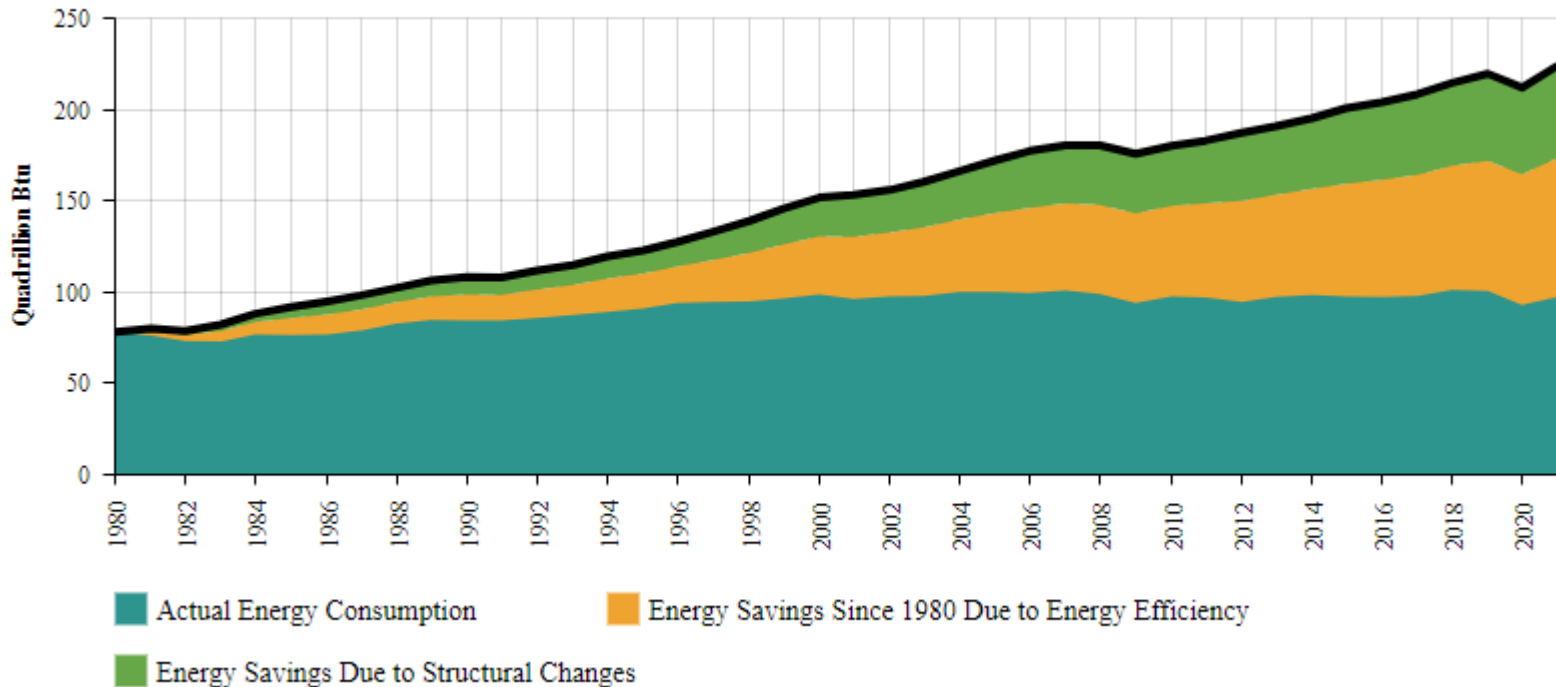
*November 12, 2024.*



# The Rising Demand for Energy Efficiency

## "More benefits are possible in an Efficient World (IEA)"

Projected Total Energy Consumption at Energy Productivity of 1980

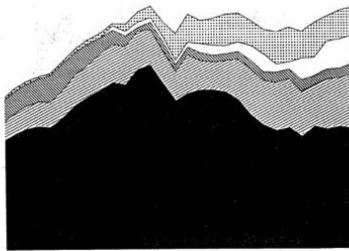


- Energy consumption (and carbon emissions) would be 78% higher without EE investments.

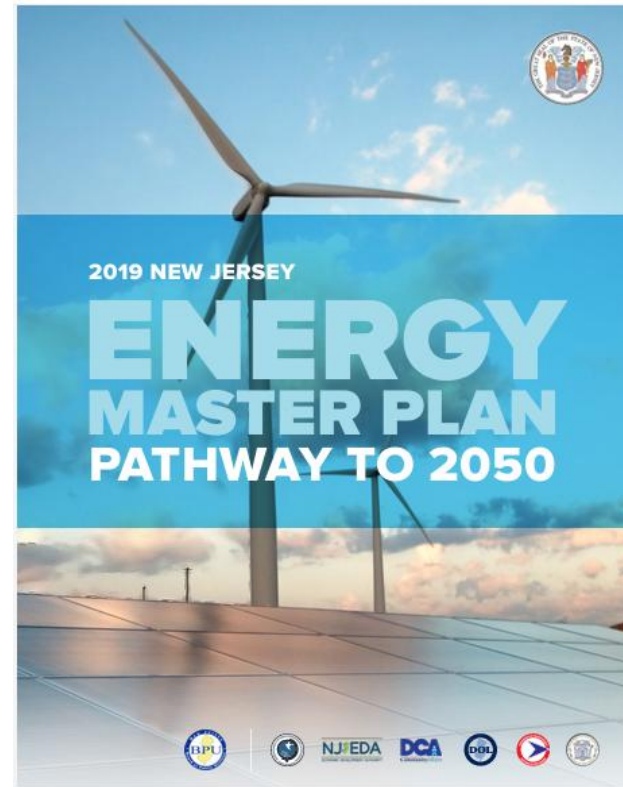
# NJ Policies: Energy Master Plan

## 1991 New Jersey Energy Master Plan

November 1991

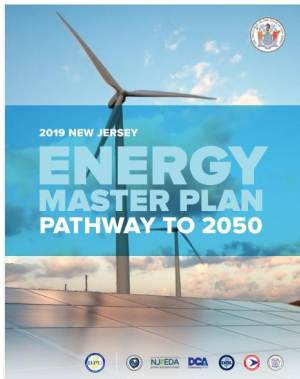


State of New Jersey  
Board of Regulatory Commissioners  
Department of Environmental Protection and Energy  
Department of Community Affairs • Department of Human Services  
Department of Transportation • Department of Health • Department of Treasury



New Jersey is statutorily ([EMP statute](#)) required to create an Energy Master Plan (EMP) every 10 years and to update it every three years.

# NJ Policies : Energy Master Plan



- EMP '19 : 100% Clean Energy by 2050. Executive Order No. 315: **100% Clean Energy by 2035.**
- **Strategy 3.** Maximize Energy Efficiency and Conservation and Reduce Peak Demand
- **Strategy 4:** Reduce Energy Consumption and Emissions from the Building Sector
- **Strategy 6:** Support Community Energy Planning and Action with an Emphasis on Encouraging and Supporting Participation by Low- and Moderate-Income and Environmental Justice Communities
- **Strategy 7:** Expand the Clean Energy Innovation Economy

# NJ Policies and BPU EE Programs

- **Clean Energy Act (C.48:3-87.9** Public utility to reduce use of electricity, natural gas in territory.)
  - Each electric public utility shall be required to achieve annual reductions in the use of electricity of two percent of the average annual usage in the prior three years within five years of implementation of its electric energy efficiency program.
  - Each natural gas public utility shall be required to achieve annual reductions in the use of natural gas of 0.75 percent of the average annual usage in the prior three years within five years of implementation of its gas energy efficiency program.
- **EE Triennium (3-yr Implementation Cycle)**
  - Utility-Run Programs
  - Utility and State-Run Programs
  - State-Run Programs (NJ's Clean Energy Program)

# Federal Policies

- Inflation Reduction Act (IRA) – Homes
  - IRA Rebates
  - IRA Training for Residential Energy Contractors (TREC)
- Infrastructure Investment and Jobs Act (IIJA) of 2021
  - EE Conservation Block Grant (EECBG)
- Justice40

# Utility-Run EE Programs

- Triennium – 3-yr Implementation Cycle
  - Triennium 1
    - 07/21 - 12/24
    - Budget **\$2B** (\$2.6B when including Comfort Partners, the low-income EE program jointly administered by the BPU and utilities, and pre-CEA “legacy” utility programs)
  - Triennium 2
    - 01/25 - 06/27
    - Budget **\$3.75B**

# State-wide T2 Program Budget

<b>Residential</b>	<b>\$1112M</b>
<b>Multifamily</b>	<b>\$329M</b>
<b>Commercial &amp; Industrial</b>	<b>\$2063M</b>
<b>Building Decarbonization</b>	<b>\$172M</b>
<b>Demand Response</b>	<b>\$59M</b>
<b>Workforce Development</b>	<b>\$18M</b>
<b>Others</b>	<b>\$47M</b>
<b>TOTAL</b>	<b>\$3800M</b>

# State-Run EE Programs

- NJ's Clean Energy Program (NJCEP)
  - Triennium 1: 07/21 - 12/24
    - Budget : **\$767M**
    - Programs
      - Local Government Energy Audits
      - Large Energy Users Program
      - Combined Heat and Power – Fuel Cells
      - New Construction
  - Triennium 2: 01/25 - 06/27
    - Budget : **TBA**
    - Programs
      - Same as Triennium 1

# Federal Programs

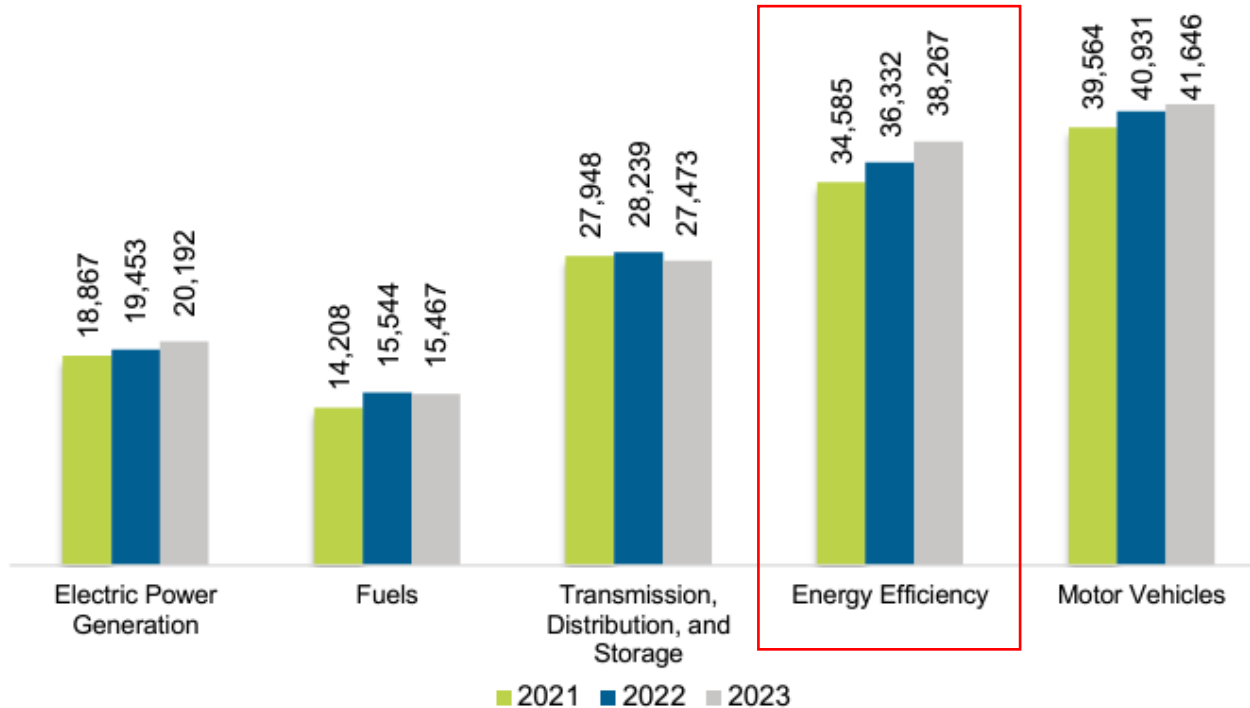
- IRA Rebates
  - Formula Funding Budget - \$190M: 2025-2031
  - Programs
    - Comfort Partners - HEAR
    - Multifamily Residential (M-RISE)
- IRA TREC
  - 2025-2029
  - Formula Funding Budget – \$3.51M

# Federal Programs

- Weatherization Assistance Program administered by NJDCA
- Infrastructure Investment and Jobs Act (IIJA) of 2021
  - EECBG
    - Budget allocation for NJ is \$2.4M

# The Rising Trends in Energy Efficiency Jobs in NJ

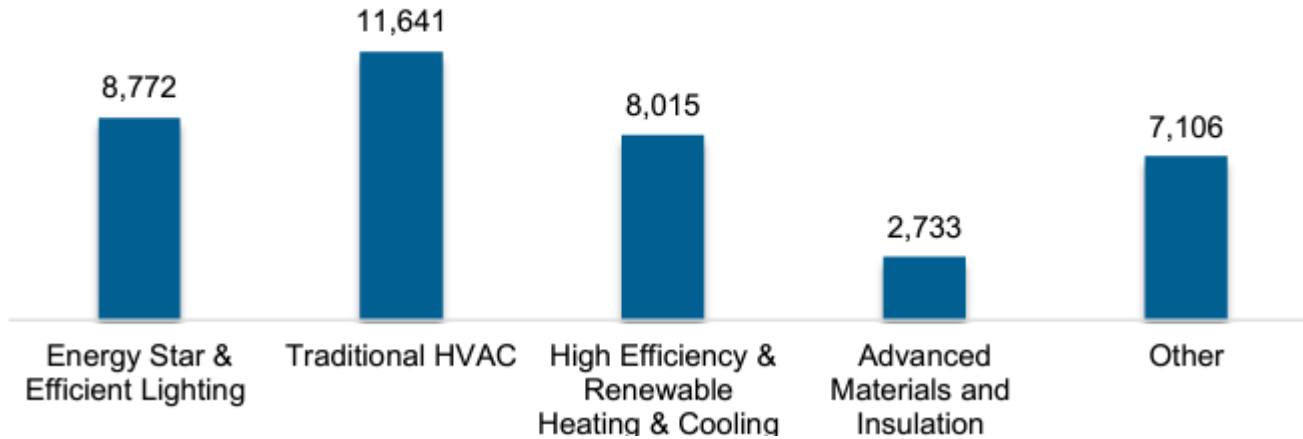
Figure NJ-1. Employment by Major Energy Technology Application



New Jersey had 143,045 energy workers statewide in 2023, representing 1.7% of all U.S. energy jobs. Of these energy jobs, **38,267 in energy efficiency, 5.3% growth from 2022 to 2023.**

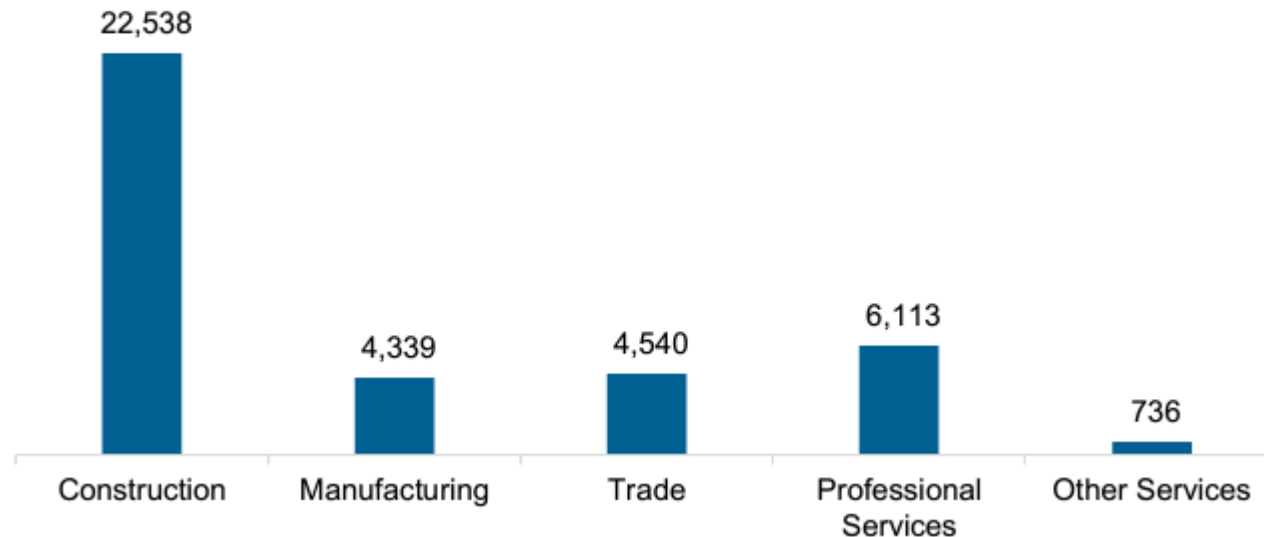
# The Landscape of Energy Efficiency Jobs in NJ

Figure NJ-8. Energy Efficiency Employment by Detailed Technology Application



Energy efficiency employment was primarily found in the construction industry

Figure NJ-9. Energy Efficiency Employment by Industry Sector



Source: 2024 USEER States Report



# Projected Employment Growth in the U.S. and New Jersey from 2023 to 2024

- *"Employers in New Jersey are more optimistic than their peers across the country about energy sector job growth"*

Table NJ-1 Expected Growth by Major Technology Application

Technology	State Expected Growth Next 12 Months (percent)	U.S. Expected Growth Next 12 Months (percent)
Electric Power Generation	7.8	6.6
Electric Power Transmission, Distribution, and Storage	7.9	6.7
Energy Efficiency	8.5	8.0
Fuels	7.1	5.1
Motor Vehicles	6.8	4.5

# New Jersey Energy Efficiency Employment Projections (job-years), 2022-2031

- Energy Efficiency (buildings) -> ~70,000 job-years (net growth)
- Note: *"This forecast for job creation does not include the impacts from either the **Infrastructure Investment and Jobs Act (IIJA)** or the **Inflation Reduction Act (IRA)** which is likely to be a significant driver of future job creation" in the state*

# Expected Energy Efficiency Jobs in NJ Due to IRA

- U.S. Department of Energy (USDOE) IRA Home Energy Performance-Based Whole-House Rebates Program (HOMES) and the High-Efficiency Electric Home Rebate Program (HEEHR) alone are **expected to create 881 direct jobs\*** between 2025 - 2031.
- **Expanding and adapting existing training programs and infrastructure will be crucial to meet the anticipated demand in the near term.**



Source: NASEO WF TREC needs assessment *\*This estimate, though not including utility jobs nor occupation-specific jobs, gives a rough idea of the direct job creation potential for energy efficiency and electrification from the rebate investment in NJ.*

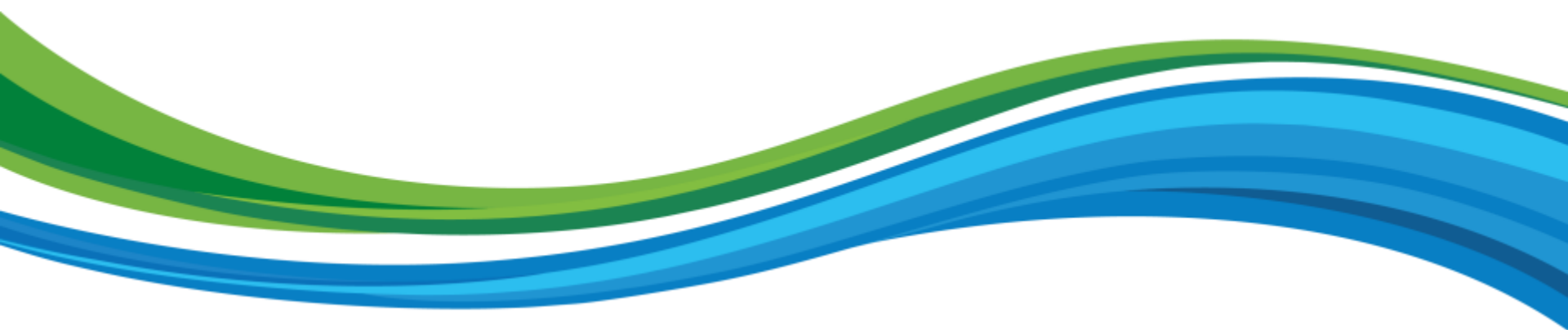
# TREC Program (IRA Funding)

- **USDOE IRA Training for Residential Energy Contractors (TREC) Grant**
  - \$3.51M funding for 4 years (entirety to training providers) [2 years + 2 years]
  - Planned focus: HVAC, Weatherization training
  - Train 400-600 contractors (2025-2028)
  - Updates: Negotiation is over, funding awaiting

# BILT vs WFD WG

BILT has evolved from a WFD WG, expanding its focus to include discussions on jobs creation in NJ and employer engagement. Historically, employer participation has been limited in the WG, but we aim to increase involvement of contractors, trade allies, and EE support industries in future BILTs. By learning directly from employers about their desired job areas, growth, skill needs, and potential partnership needs with training centers and support services, BILT will serve as a platform to connect stakeholders and drive NJ workforce development initiatives.

# Thank You!



New Jersey's  
**cleanenergy**  
program™