

# New York State Energy Planning Board

## New York State Energy Efficiency and Renewable Energy Potential Study

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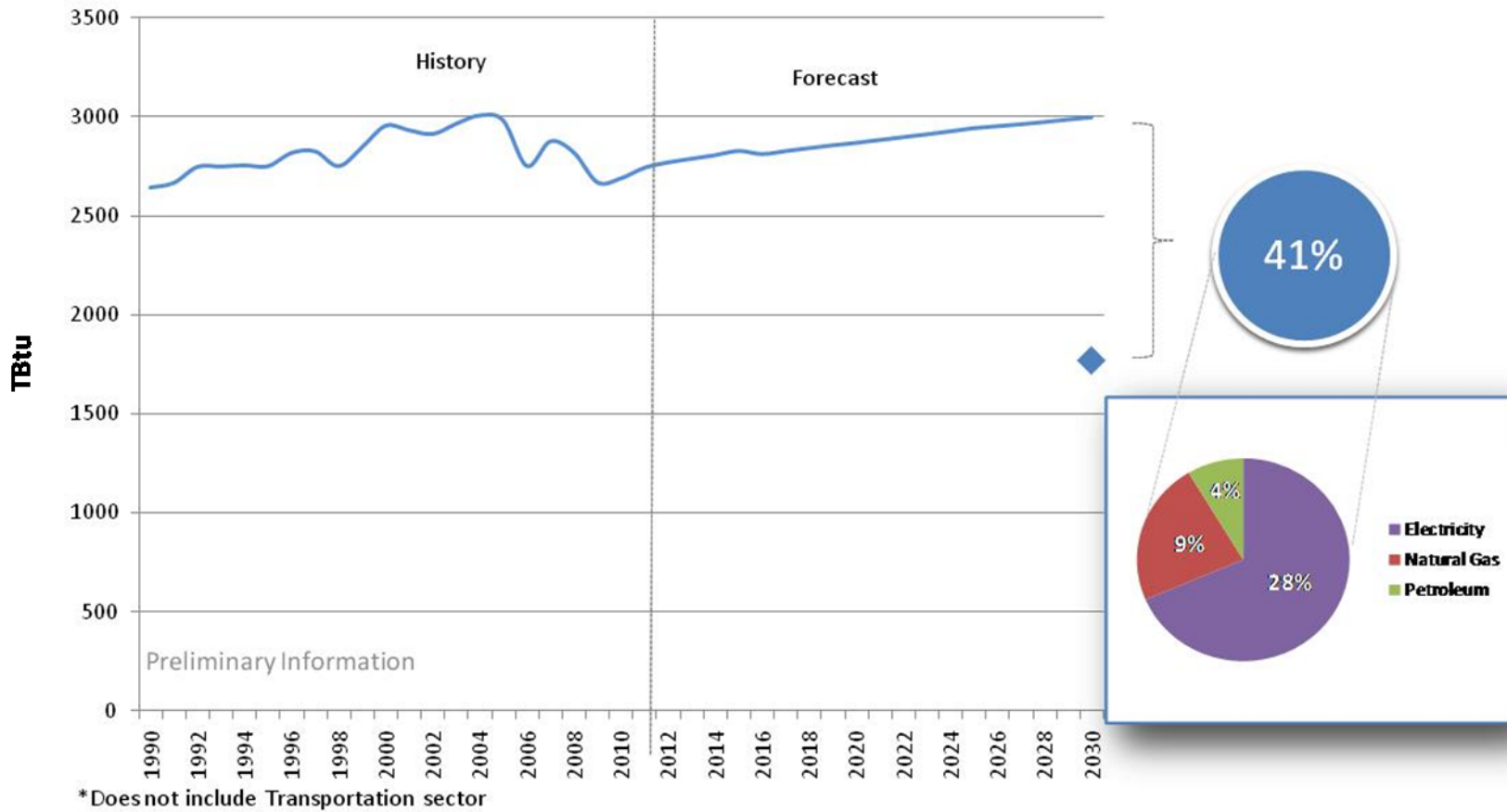
# Study Objective

- Develop a quantitative assessment of the long-term technical, economic, and achievable potentials for:
  - End-use energy efficiency improvements and conservation opportunities applicable to electricity, petroleum, and natural gas use in the residential, commercial, industrial, and government sectors; and
  - Renewable energy, including grid-level electricity generation and customer-sited production of electricity and thermal energy

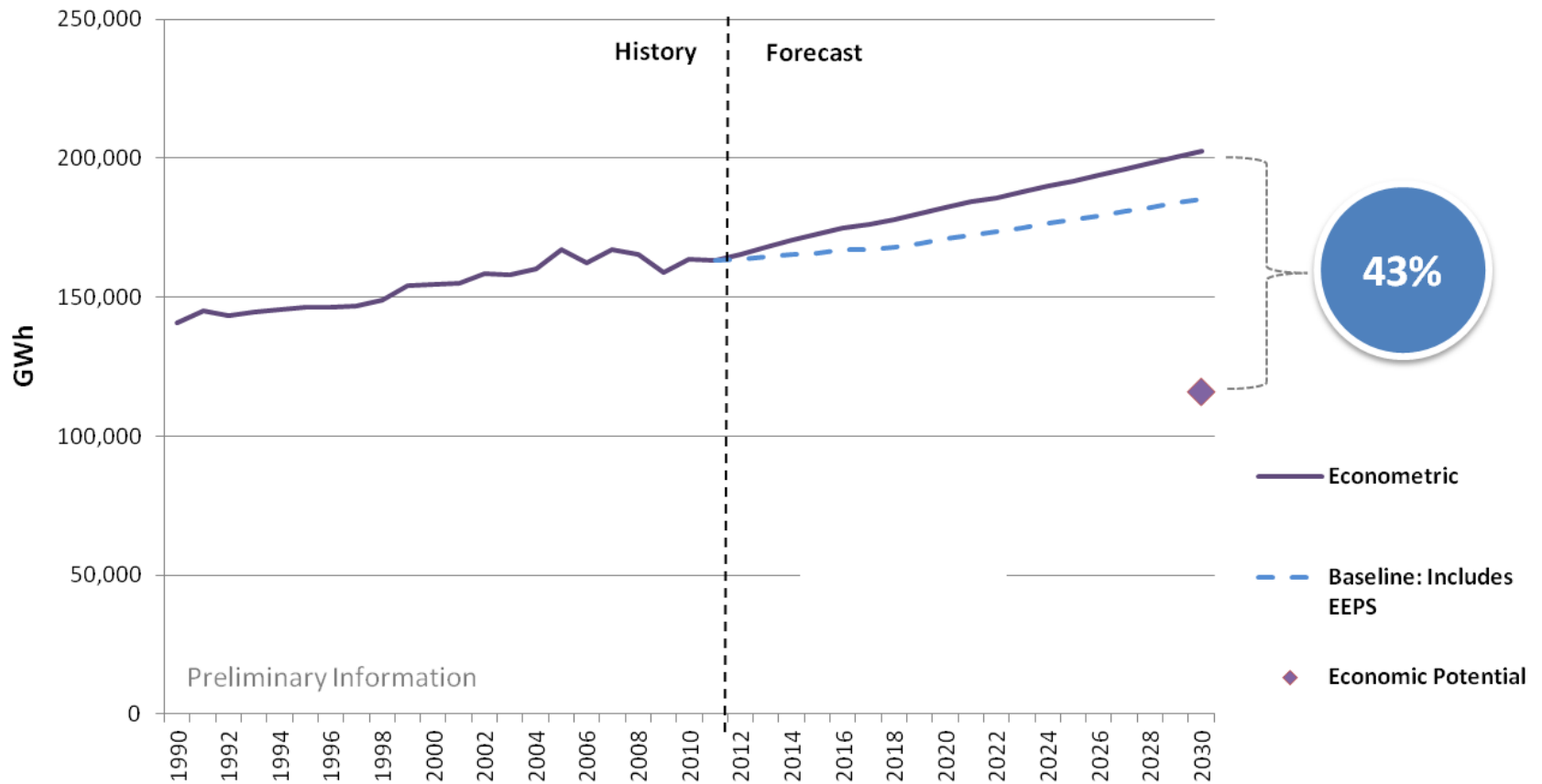
# Efficiency: Key Findings

- Significant efficiency potential exists across all sectors and fuel types
- Electric efficiency shows the greatest potential to reduce primary energy use
- Across all fuel types, the commercial sector holds the largest efficiency potential

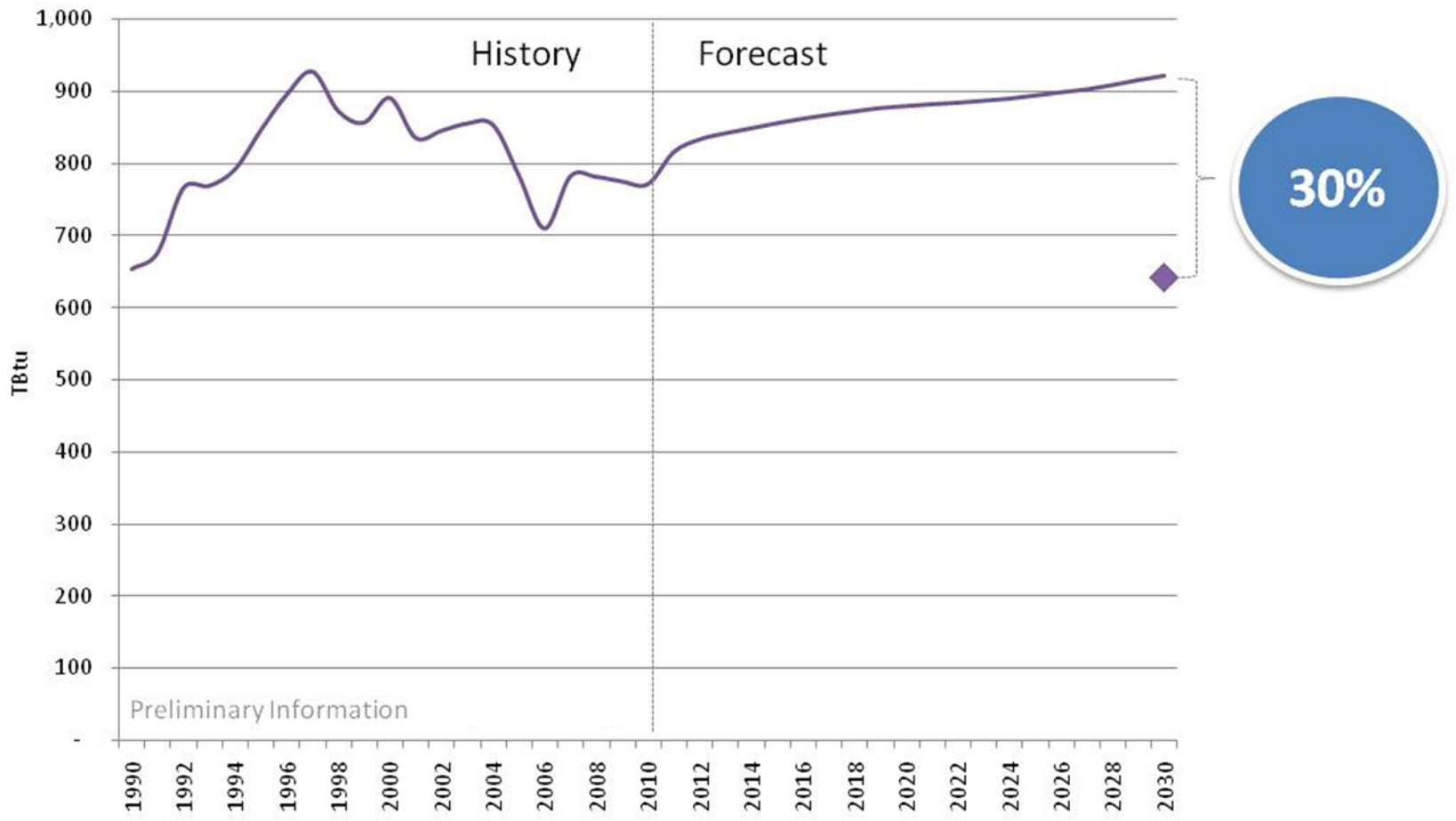
# Efficiency Overview: Economic Potential



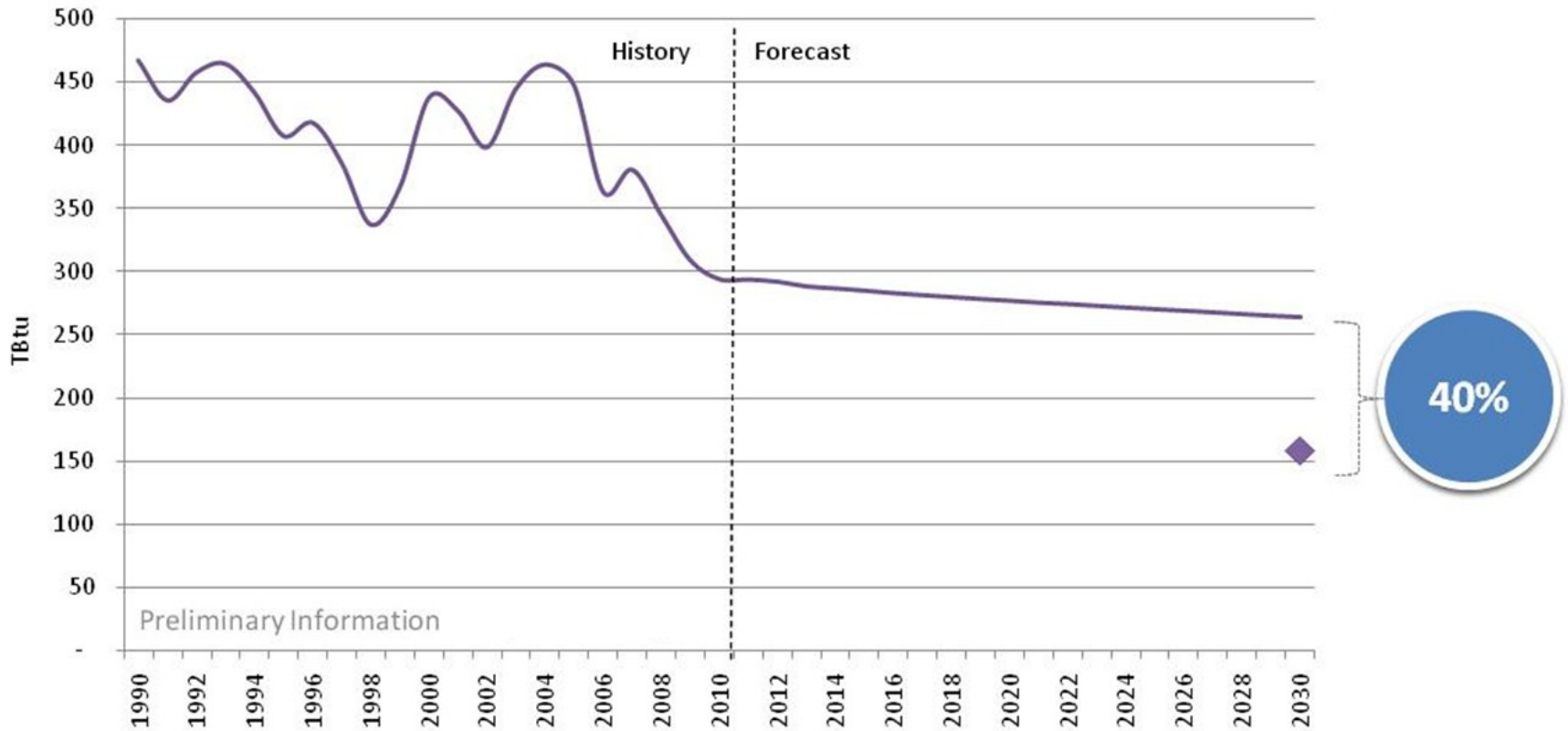
# Electric Economic Efficiency Potential



# Natural Gas Economic Efficiency Potential



# Petroleum Products Economic Efficiency Potential

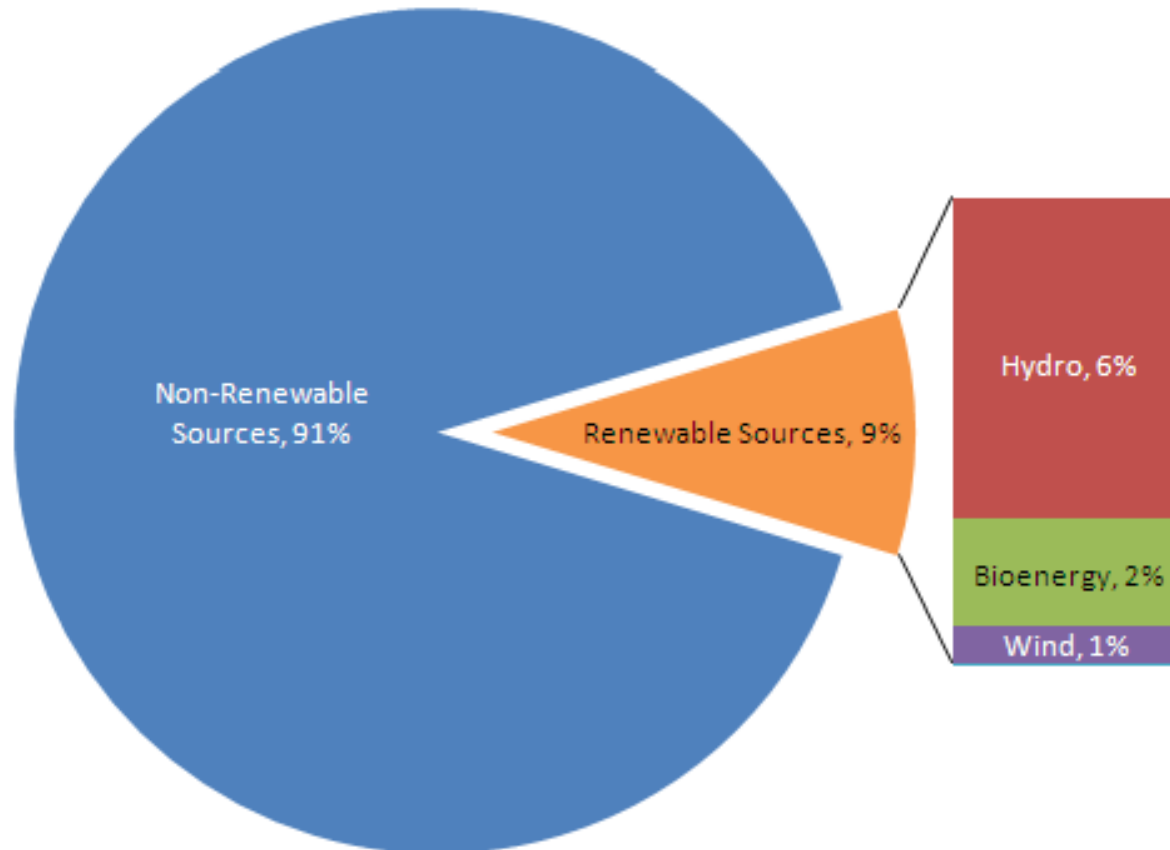


# Renewable Energy: Key Findings

- Substantial potential exists for increases in hydropower, bioenergy, wind power, and solar energy
- Wind and solar provide the greatest potential for growth



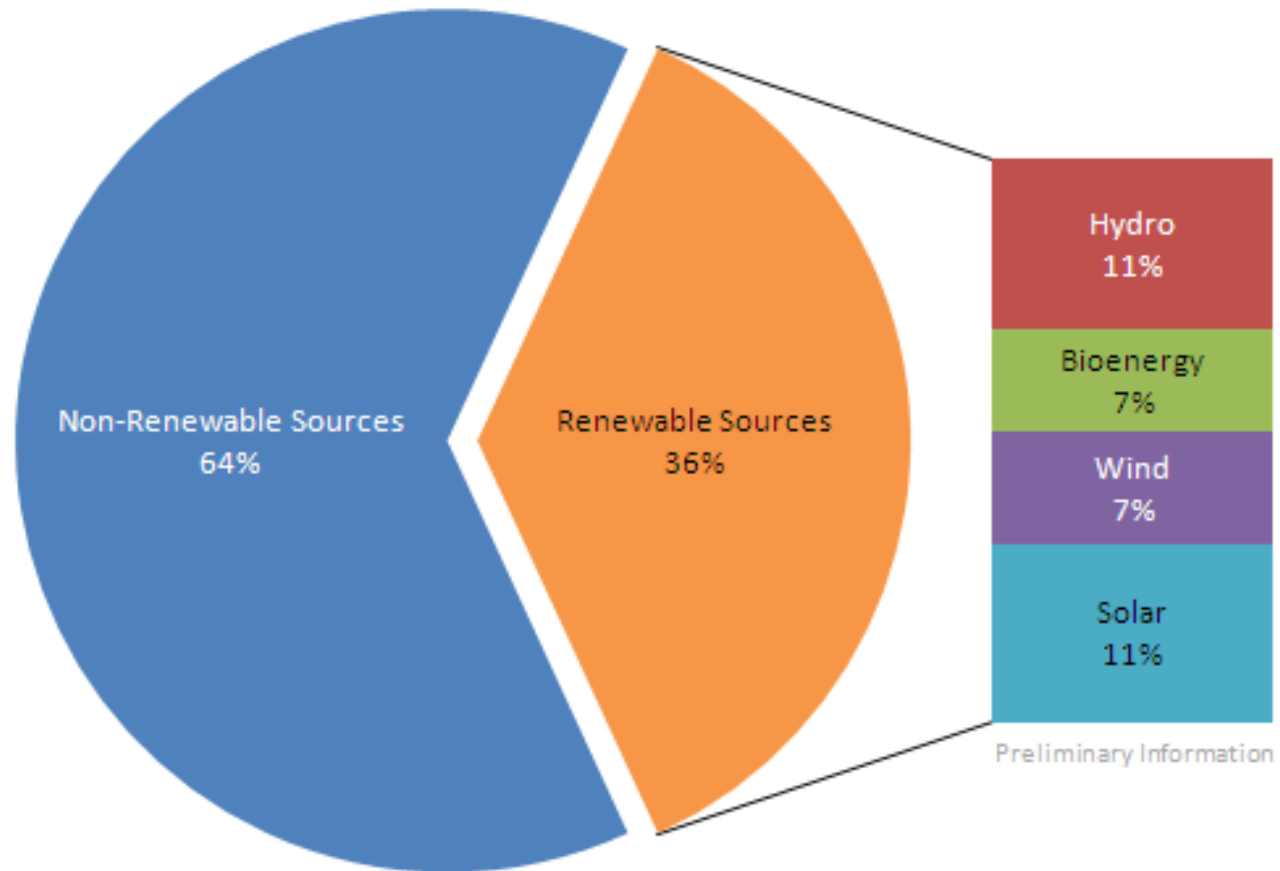
# In-State Renewable Energy Production in 2010



\* Solar energy production was less than 1% of total primary energy.

\*\* Ethanol used by the transportation sector is not included, and currently accounts for 1% of total energy use.

# Renewable Energy Technical Potential in 2030



Preliminary Information