

Group Number _____ Staff Use Only: Written Score _____ (50 max.)

Current Issues Written Sample Test
2024 New Jersey Envirothon

1. By which year does the 2019 Energy Master Plan Pathway to 2050 propose the almost complete electrification of the transportation sector in New Jersey?

- a) 2030
- b) 2040
- c) 2050
- d) 2060

Answer: c) 2050

Explanation: The 2019 Energy Master Plan Pathway to 2050 aims for almost complete electrification of the transportation sector in New Jersey by the year 2050.

2. What areas will New Jersey focus on to reduce wasted energy, as mentioned in the strategy?

- a) Increasing building size
- b) Appliance inefficiency
- c) Expanding energy benchmarking
- d) Reducing education campaigns

Answer: b) Appliance inefficiency

Explanation: The 2019 Energy Master Plan Pathway to 2050 outlines a focus on reducing wasted energy through improvements in building thermal envelopes, appliance efficiency, energy benchmarking, equipment controls, and strategic energy management.

3. What is the recommended approach for utilities to encourage non-wires solutions for handling increased electrification?
- a) Increasing electricity rates
 - b) Implementing strict regulations
 - c) Proposing and adopting tariffs and other platforms
 - d) Relying solely on government funding

Answer: c) Proposing and adopting tariffs and other platforms

Explanation: The 2019 Energy Master Plan Pathway to 2050 suggests that utilities should propose and adopt tariffs and other platforms that encourage non-wires solutions using private sector investment.

4. What is the proposed purpose of a New Jersey Green Bank, as mentioned in the strategy?
- a) To regulate energy prices
 - b) To fund research and development
 - c) To lower the cost of capital for renewables and energy efficiency projects
 - d) To discourage private sector investment

Answer: c) To lower the cost of capital for renewables and energy efficiency projects

Explanation: The 2019 Energy Master Plan Pathway to 2050 suggests exploring the establishment of a New Jersey Green Bank to leverage public dollars, grow private sector investment, and lower the cost of capital for renewables and energy efficiency projects.

5. What is the significance of electrifying transportation and buildings in achieving emissions-reduction goals?
- a) It has no impact on emissions reduction
 - b) It reduces overall energy consumption
 - c) It increases reliance on natural gas
 - d) It contributes to air pollution

Answer: b) It reduces overall energy consumption

Explanation: Electrifying transportation and buildings leads to more efficient energy consumption, reducing overall energy usage.

6. What is the primary focus of the Integrated Energy Plan's methodology?

- a) Political considerations
- b) Economic analysis
- c) Scientific basis for energy strategies
- d) Social implications of energy policies

Answer: c) Scientific basis for energy strategies

Explanation: The Integrated Energy Plan methodology emphasizes a policy-informed analysis approach, rigorous New Jersey-specific data gathering, and scenario-based analysis to assess the scientific basis for energy strategies.

7. How does electrified transportation contribute to New Jersey's 80x50 carbon emissions reduction target?

- a) It increases overall energy consumption.
- b) It hampers flexibility in meeting targets.
- c) It provides net emission and air pollution benefits.
- d) It has no impact on the reduction target.

Answer: c) It provides net emission and air pollution benefits.

Explanation 4:

The passage explains that electrified transportation produces fewer greenhouse gas emissions and air pollutants, contributing to the reduction target.

8. How does the Transit Village Initiative contribute to reducing traffic congestion and improving air quality?

- a) By increasing reliance on personal vehicles
- b) By decreasing transit ridership
- c) By adding residential housing options within walking distance of transit facilities
- d) By limiting state-funded programs supporting transit-oriented development

Answer: c) By adding residential housing options within walking distance of transit facilities

Explanation: The Transit Village Initiative seeks to reduce traffic congestion and improve air quality by increasing transit ridership through the addition of residential housing options within walking distance of transit facilities.

9. According to the Integrated Energy Plan findings, what percentage of New Jersey's electricity can be provided by zero-carbon renewables in 2050?

- a) 57%
- b) 78%
- c) 100%
- d) 35%

Answer: b) 78%

Explanation : The Integrated Energy Plan findings state that zero-carbon renewables can provide 78% of New Jersey's electricity in 2050.

10. Why does the Energy Master Plan recommend an early focus on new construction and the conversion of electric baseboard heating and oil- and propane-fueled buildings?

- a. To maximize profits for construction companies
- b. To reduce reliance on natural gas for building heat
- c. To eliminate the need for retrofitting and rehabilitation
- d. To support the use of fossil fuels in aging heating systems

Answer: c. To eliminate the need for retrofitting and rehabilitation

Explanation: New construction and the conversion of certain heating systems are prioritized to avoid retrofitting and to use more efficient technologies.