

Energy Efficiency & Management

Course Knowledge Assessment & Practice Quiz

Question 1: According to international figures and research from the Carbon Trust, approximately what percentage of acquired energy do UK organizations typically waste due to structural and management inefficiencies?

A) 5-10%

B) 10-15%

C) 20-30% [ANSWER]

D) 40-50%

E) Over 60%

Question 2: What is the structurally correct order of capital deployment mandated by the Net Zero Investment Hierarchy before integrated supply additions are sized?

A) Green (Renewables), then Clean (Optimizations), then Lean (Demand Mitigation)

B) Clean (Optimizations), then Green (Renewables), then Lean (Demand Mitigation)

C) Green (Renewables), then Lean (Demand Mitigation), then Clean (Optimizations)

D) Lean (Demand Mitigation), then Clean (System Efficiency), then Green (Renewables) [ANSWER]

E) Lean (Demand Mitigation), then Green (Renewables), then Clean (System Efficiency)

Question 3: The 6th IPCC Synthesis Report (2023) stated with high confidence that human activities, principally through greenhouse gas emissions, have unequivocally caused global warming, pushing global surface temperatures to what level above 1850–1900 baselines during the 2011–2020 interval?

A) 0.5°C

B) 0.8°C

C) 1.1°C [ANSWER]

D) 1.5°C

E) 2.0°C

Question 4: Why does the document identify energy policy as the single most effective vehicle for overall climate change remediation?

A) Energy sectors are easier to regulate than private technology companies.

B) Approximately 65% of all global greenhouse gas emissions (and up to 80% in industrialized nations) originate from energy and fossil fuel sectors. [ANSWER]

C) Carbon taxation is the only tool capable of guaranteeing fixed environmental output standards.

D) Energy infrastructure transitions completely eliminate the need for consumer behavioral modifications.

E) Onsite micro-generation hardware has a completely zero-cost capital asset curve.

Question 5: According to global solar market indicators cited in the material, what radical capital asset cost deflation was observed for installed roof-mounted solar PV systems between 2006 and 2014?

A) System prices dropped from over €10,000/kWp to under €5,000/kWp.

B) System prices dropped from over €5,100/kWp to under €1,640/kWp. [ANSWER]

C) System prices stabilized firmly at a baseline of €3,000/kWp due to carbon trading floors.

D) System prices decreased linearly by exactly €100 every single quarter.

E) System prices dropped from over €1,496/kWp to a completely subsidized net-zero asset cost of €0/kWp.