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COURSE BROCHURE

Sustainable Maintenance and Energy-Efficient Asset Care Training Course

31 October – 4 November 2027
Cairo

jupiterprime.uk

info@jupiterprime.uk

Registered in the United Kingdom and Saudi Arabia

Sustainable Maintenance and Energy-Efficient Asset Care Training Course

Ref: 1163_43756 **Date:** 31 October – 4 November 2027 **Location:** Cairo **Fees:** 4000 GBP

Sustainable Maintenance and Energy-Efficient Asset Care is a 1-week training course for maintenance, facilities and sustainability managers who build a maintenance sustainability scorecard for one site. Corporate carbon targets now reach the plant floor, where leaking compressed air, fouled heat exchangers and scrapped spares quietly waste energy and materials. Jupiter Prime Training delivers this course on sustainable maintenance and energy-efficient asset care.

Why Sustainable Maintenance and Energy-Efficient Asset Care Matters Now

Three groups now press maintenance leaders on sustainability. Boards and investors expect measurable emission cuts and look for quick wins inside existing plant rather than new capital. Sustainability teams need reliable energy, waste and refrigerant figures that only maintenance records can supply. Finance teams want life extension and refurbishment weighed honestly against replacement. Sites that treat maintenance as an energy and materials lever cut utility bills and landfill while keeping reliability; sites that do not miss easy savings and report weak data. The course draws on the asset management principles of ISO 55001 and the maintenance terminology of EN 13306.

Who Gains Most from Sustainable Maintenance and Energy-Efficient Asset Care

- Managers who own maintenance budgets for rotating equipment, utilities and HVAC
- Facilities leads who run buildings, chillers, lighting and water systems
- Sustainability officers who report site energy, waste and emissions
- Stores and materials leads who decide whether spares are repaired, reused or scrapped
- Reliability specialists who link equipment condition to energy draw

A site leadership group pairing maintenance and sustainability members gains most when several of them attend together.

Sustainable Maintenance and Energy-Efficient Asset Care Capabilities

Participants practise finding the energy and materials losses hidden in routine maintenance and turning them into tracked improvements.

- Assess energy losses from compressed air, steam traps, fouling and misalignment — utility cost owners
- Calculate the payback of efficiency-focused maintenance tasks — budget holders
- Weigh life extension, refurbishment and replacement on whole-life impact — capital committees
- Design spare parts reuse, repair and remanufacture routes — stores and procurement
- Build maintenance sustainability KPIs with clear data sources — sustainability reporting
- Communicate savings and emission cuts to site leadership — executive sponsors

Key Sustainable Maintenance and Energy-Efficient Asset Care Terms

- Energy Baseline — the measured energy use of an asset or system under normal load, used to judge later savings.
- Specific Energy Consumption — the energy used per unit of output, such as kilowatt-hours per tonne produced.
- Life Extension — planned work that keeps an asset safely in service beyond its original design life.
- Remanufacture — restoring a used component to as-new specification so it can return to stock.
- Circular Spares — a stores approach that repairs, reuses and recovers parts before buying new.
- Refrigerant Leak Rate — the share of a cooling system's charge lost over a period, a direct emission source.

Sustainable Maintenance and Energy-Efficient Asset Care Day by Day

Day 1: Maintenance as a Sustainability Lever

- Direct and Indirect Emission Sources in Plant — Maintenance Influence
- Site Energy Mapping and Significant Energy Users — Priority Assets
- Energy Baseline Setting From Meter and Log Data — Savings Proof
- Waste Streams From Maintenance Activity — Oils, Filters and Scrap
- Stakeholder Map for Sustainable Asset Care — Finance, HSE and Operations

Day 2: Energy-Efficient Maintenance Practice

- Compressed Air Leak Surveys and Repair Tagging — Wasted Power Recovery
- Steam Trap Testing and Insulation Repair — Heat Loss Reduction
- Heat Exchanger and Chiller Fouling Control — Approach Temperature Recovery
- Motor, Belt and Alignment Care — Drive Train Efficiency
- Lighting, HVAC and Building Controls Upkeep — Facilities Energy Savings

Day 3: Life Extension and Refurbishment Choices

- Remaining Life Estimation From Condition Data — Extend or Retire
- Refurbishment Versus Replacement Comparison — Embodied Carbon and Cost
- Rerating and Upgrade Options at Overhaul — Efficiency Gains
- Lubricant Condition Monitoring and Drain Extension — Oil Waste Cut
- Refrigerant Leak Detection and Recovery — Direct Emission Control

Day 4: Circular Spares and Sustainability KPIs

- Repairable Spares Classification and Rotable Pools — Purchase Avoidance
- Remanufacture and Vendor Take-Back Agreements — Material Recovery
- Obsolete Stock Disposal Hierarchy — Reuse, Recycle, Landfill
- Maintenance Sustainability KPI Set — Energy, Waste and Emission Measures
- Data Sources From CMMS and Utility Meters — Reporting Quality

Day 5: Practising the Maintenance Sustainability Scorecard

- Case Study from a Commercial Office Campus — Chiller and Lighting Savings
- Case Study from a Cement Plant — Compressed Air and Kiln Drive Losses
- Improvement Opportunity Ranking by Payback — Quick Wins First
- Savings Verification Against the Baseline — Credible Results
- Maintenance Sustainability Scorecard Assembly — Peer Challenge and Handover

Applying Sustainable Maintenance and Energy-Efficient Asset Care After the Course

- Run a compressed air leak survey on one site system and tag every leak for repair.
- Classify the top fifty stores items by repairability and set up a rotable pool for the first group.

Sustainable Maintenance and Energy-Efficient Asset Care Questions FAQ

What is sustainable maintenance and energy-efficient asset care, and why does it matter now?

It is maintenance practice that cuts energy use, waste and emissions while keeping assets reliable. It matters now because carbon targets require savings from existing plant, not only new investment.

Which roles gain most from sustainable maintenance and energy-efficient asset care?

Maintenance, facilities and sustainability managers gain most, along with stores leads. You benefit when your decisions shape how equipment uses energy or how parts are bought and discarded.

How does a sustainable maintenance and energy-efficient asset care course differ from an energy management course?

It works through the maintenance function rather than through metering systems or tariffs. An energy management course designs an organisation-wide energy policy; here you change tasks, spares and overhaul choices.

What do you bring back from sustainable maintenance and energy-efficient asset care?

You bring back a scorecard for one site. It lists energy baselines, ranked improvement tasks, circular spares targets and the measures that will prove savings.

Sustainable Maintenance and Energy-Efficient Asset Care: The Way Forward

The maintenance sustainability scorecard first informs which energy and waste fixes enter next month's work schedule. Maintenance managers use it to plan tasks, sustainability officers to report results and finance teams to track savings. After its first use, revisit the baselines, because production changes and seasonal loads can mask or exaggerate real gains.