

Energy Management System Certification



Project Value

OPEX £25K fees over 3yrs, with £50K of delivery resource.

25% Office Energy Saving.

Project Scope

Energy use for the UK Corporate Group including Offshore Assets.

Includes:

- London and Aberdeen offices;
- Cygnus Alpha and Bravo assets in the Southern North Sea





Good Practice:

A 'Business Case for ISO 50001 Certification' was developed and presented to UK Leadership Team showing the scope, risk drivers, implementation programme, and high-level assessment of required work, resources and cost.

With approval, a member of Senior Management was nominated to sponsor an Energy Management Team (EMT). The EMT was established with representatives from each Operational Area of significant energy use. Energy management boundaries and scopes were defined, enabling a gap analysis to be performed on the existing management system against ISO 50001 requirements. Essential tasks were identified and consolidated into a formal action plan with responsibilities clearly defined, including needs for awareness training.

The certification body was subsequently engaged, with implementation timescales geared towards company requirements and compliance with 'The Energy Savings Opportunity Scheme (ESOS) Regulations'. All management system standards follow ISO's high-level structure, core text, terms and definitions, so with ISO 14001 (Environmental Management Systems) accredited certification already in place, many common elements simply required further development, e.g. management review.



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Applying the ISO 50001 PDCA framework:

Plan: A UK Energy Policy, approved by the CEO, was formally communicated to all Staff and Contractors by the Managing Director and the Head of HSEQ.

Following the policy, an energy review considered all energy sources, consumptions, facilities and personnel effecting energy use. Energy flow diagrams were developed to aid understanding and identify all data sources. Annualised energy usage trends were developed to promote an understanding of underlying changes. The EMT developed a definition for Significant Energy Use (SEU) based on energy consumption and/ or energy improvement opportunities. SEUs were determined, including the variables affecting their performance.

Energy objectives, targets and actions plans were set for each SEU. Robust onshore and offshore monitoring and measurement processes allowed scrutiny of progress towards targets. Specific 'energy management' requirements were integrated into existing business processes and procedures, e.g. engineering and procurement.

Do: Training, for Staff & Contractors to increase Energy Performance Awareness.

With formal training and competence systems already in place, specific awareness training was introduced for employees and contractors to inform how individuals and roles can impact overall energy use. The Cygnus Asset Team created an energy use video, which now forms part of the platform induction.

Check-Act: A quarterly EMT meeting evaluates in place elements, including ongoing monitoring and analysis of energy consumption and performance.

Internal energy audits were conducted as part of initial implementation, with further audits planned and conducted annually.

Within 6 months of completing the gap analysis, accredited certification was achieved following 7 days of third-party audit and technical approval. This enabled Neptune UK to achieve compliance with regulatory energy efficiency requirements (ESOS), along with a 25% saving in energy consumption for one onshore asset (Aberdeen office).

Success factors include:



Management

commitment

Formation of an experienced Energy Management Team



implementation

(1 person)



Previous investment in metering, data collection and reporting systems.

Overall Benefit: Implementation of ISO 50001 has improved energy management within the organisation, providing higher visibility of improvement activities, whilst reducing GHG emissions through increased energy awareness amongst our teams (staff & contractors). With an embedded Energy Management System, we are best placed to deliver upon future emission reporting and forecasting requirements.