



Energy Management

A process to minimize fuel consumption by improving operational procedures – ultimately reducing costs and demonstrating environmental leadership

Excellent environmental performance and low operational costs are the order of the day. Both issues are challenges addressed in the Energy Management service. Our projects have proven savings of up to 10 percent of fuel consumption – quantity and cost.

DRIVING FORCES PUSHING ENERGY MANAGEMENT

- High focus on environmental profile and issues
- Fuel prices at very high levels
- Stakeholders dictate the way forward
- Innovation in technology

MAIN CHALLENGES FOR OUR CLIENTS

- Resources
- Structured approach
- Implementation is difficult
- Limited experience in Benefit Tracking
- Difficult to document and share knowledge

BENEFITS

- Improved and documented environmental performance (client requirements)
- Compliance/beyond compliance profile with regards to environmental performance (ISO 14001, TMSA, MARPOL)
- Increased focus on energy consumption
- Improved fuel efficiency
- Improved communication

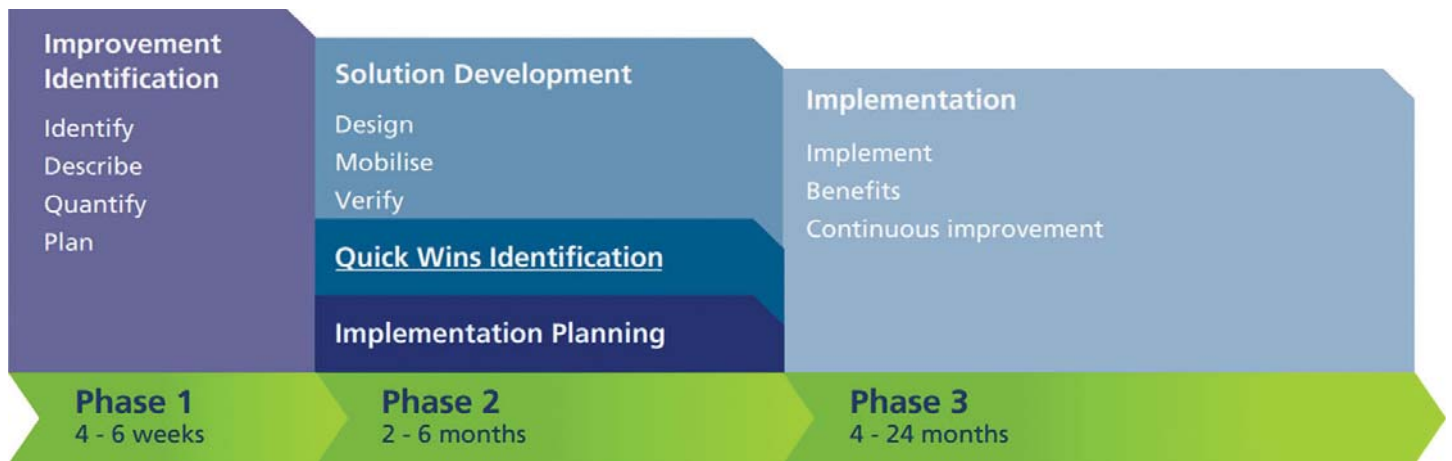


Figure: Energy Management Project Outline

DNV Maritime Solutions offer a three phased Energy Management service as shown in the figure above. The service addresses the following four main areas:

VOYAGE PERFORMANCE

- Voyage planning and execution
- Hull condition
- Propeller condition
- Autopilot and rudder
- Trim and draft
- Weather routing and ocean currents

ENERGY CONSUMERS

- Main and auxiliary engine tuning and efficiency
- Engine utilization
- Boiler usage
- Cargo operations
- Thrusters operations
- Other heavy energy consumers

TOTAL FUEL MANAGEMENT

- Pre-bunkering preparations
- Bunkering process
- Post-bunkering challenges
- Operational challenges

ORGANISATION AND STRATEGY

- Energy management strategy/policy
- Environmental profile
- Organisation – roles and responsibility
- Performance management
- Life cycle perspective

THIS IS WHAT WE DO

- Motivate and encourage people involved
- Working closely with our clients throughout the process
- Facilitate and unlock your knowledge potential
- Bring in an outside perspective on best practices
- Offer know-how, solution development and transfer of knowledge

ENERGY MANAGEMENT WORKS

- You can reduce costs whilst improving your environmental footprint
- Large savings are possible with a small investment in time and money
- Improved operation can lead to great savings – no major retrofitting is needed
- An embedded energy awareness culture will emerge
- Our approach and solutions are proven to work

DNV MARITIME SOLUTIONS

Maritime Solutions is a leading management and technology consultancy, helping out clients in the maritime industry unlock their full potential.

OUR GOAL IS TO MAKE OUR CLIENTS WINNERS

- We offer our clients advice on all aspects relevant to running a maritime business – from strategy and management related issues to technical and operational decisions and improvements
- We offer Best Practice implementation assistance

For more information please contact:

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