

## At a Glance

### What is it?

- The Maritime Energy Working Group is one of five working groups within Task Force Energy that supports the development of a Department of the Navy (DoN) Energy Strategy.

### What will it accomplish?

- The Maritime Energy Working Group will:
  - Lay the ground work for energy-related initiatives, technical expertise, and opportunities.
  - Provide inputs from the maritime community to the emerging DoN Energy Strategy.
  - Share ideas and practices that can help the other five working groups supporting Task Force Energy.

### How will it work?

- The Maritime Energy Working Group has representation from across the maritime environment and is actively collaborating with the other services, government agencies, industry, and academia to develop a Maritime Energy Roadmap that will:
  - Facilitate energy efficiency initiatives within the acquisition process, lowering total ownership costs and enabling the Navy to build an affordable future fleet.
  - Increase current fleet readiness by incorporating available technologies and incentivized energy conservation initiatives to reduce our ships' dependency on fossil fuels and their impact on the environment.
  - Leverage our innovative workforce to meet current operational requirements and to anticipate future technical challenges for a shipbuilding program that supports the maritime missions of tomorrow.
  - Increase mission effectiveness and fleet readiness by advancing existing shipboard technologies.

### Points of Contact:

T. Martin - [thomas.martin@navy.mil](mailto:thomas.martin@navy.mil)

The Maritime Energy Working Group's charter is to lay the groundwork to meet the objectives of the emerging DoN Energy Strategy. Additionally, the group provides the technical expertise, opportunities and leadership necessary to expand understanding and promote the necessary culture changes.



The Maritime Energy working group is responsible for the implementation of the Navy's energy goals within the Naval Maritime community. Through representation on the Task Force Energy Executive Steering committee and Navy Energy Coordination Office, the working group contributes to issues as they relate to the DoN energy strategy as a whole – and shares ideas and best practices that might positively impact the other energy working groups.

Current energy initiatives within the maritime community:

- incentivized Energy Conservation Program (i-ENCON) – engenders a culture of energy conservation through education, best practices, and incentives.
  - On pace for record year in 2009
- Fleet Readiness Research and Development Program (FRR&DP) – continuously seeks out energy saving initiatives, validates savings through shipboard demonstrations, and delivers ready to install technologies approved through Top Management Attention team for fleet installation.
  - Five technologies are under evaluation on seven ships
- Hybrid Electric Drive for DDG-51 – improves efficiency by using fewer gas turbines and loading gas turbines to optimal conditions.
  - Land based testing in 2010; followed by at-sea demo
- High Efficiency Chiller – the next Navy standard chiller reduces energy consumption by 30%, reduces GHG emissions by >50%.
  - Forward fit and back fit applications
- Smart Voyage Planning – utilizes ship performance characteristics and real time environmental information to optimize ship route selection.

. . . and many more programs & technologies.

#### Challenges and opportunities include:

- *Achieving Energy Security is a long-term objective, requiring near-term emphasis on energy demand in strategic planning and acquisition.*
- *Identify and fast track potentially game-changing technologies to enhance the use of existing technologies for the fleet.*
- *Increasing efficiencies amidst expanding capabilities & requirements.*