



A Two-Phased Approach to Resource-Efficient Shipbuilding

Proposal Outline
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Overview – Two Phases

- High-Level Assessment (Phase 1)
 - ▶ Inputs and outputs for energy, water, and waste
 - ▶ To answer the question:
What are the broad areas for improved management of energy, water, and waste?
- Energy Audit (Phase 2)
 - ▶ Detailed investigation of inflows and end-uses
 - ▶ To answer the question:
What are the specific facilities and processes that should be targeted for energy-related improvements?
- Norfolk Ship Repair (BAE) will be used as the pilot shipyard for both Phase 1 and Phase 2



BAE SYSTEMS

Benefits

■ Resource Efficiency

- ▶ Energy, water, and waste are key metrics
- ▶ Potential to yield:
 - › Reduced utility costs
 - › Reduced water treatment costs
 - › Reduced material disposal costs

■ Green Shipyards/Green Ships

- ▶ Lower greenhouse gas emissions (GHG) and lower pollutant releases
 - › *Lower potential future liabilities*
- ▶ Compliance with Federal agency supply chain emissions reductions per E013514

