

Global Maritime Trends and Game Changers

- A recent National Intelligence Council Report identified trends and developments during the next 15-20 years
- The report provided an in depth analysis of megatrends and game changers
- Energy management was one of these game changers



Is Energy Management a Port Issue?

- Is this a real issue or another case of “solutions seeking problems”?



What is Port Energy Management?

- What it isn't
 - Its not about trucks
 - Its not about LNG as vessel fuel
- It is about port infrastructure and taking a systematic look at managing energy use to enhance
 - Environmental compliance
 - Cost effectiveness/ competitiveness
 - Resiliency



Energy Management for Environmental Compliance

- Energy management is a means to reduce energy use and apply technologies reduce emissions, reduce greenhouse gasses and reduce the carbon footprint of the port



Energy Management for Cost Effectiveness / Competitiveness

- Ports spend hundreds of millions of dollars per year on energy
- These costs will continue to increase for existing operations
- Adding programs such as cold ironing, and automation will exponentially increase costs
- If energy management can reduce these costs by 25% it will amount to a significant savings.



Energy Management for Resiliency

- Commercial ports are not resilient operations
- Energy technology is capable of enhancing this resiliency
- The DOD has already started to enhance the resiliency of their facilities through the SPIDERS (Smart Power Infrastructure Demonstration for Energy Reliability and Security) Program



Is Energy Management Applicable to all Ports

- Some aspects are applicable to all ports. There are a number of programs that are low hanging fruit that make economic sense to ports and particularly port terminals.
- For others it may or may not work out depending on the value placed on reducing emissions, or carbon footprint, or what value is placed on resiliency



Why Now?

- Energy management is a way to discriminate your port in an increasingly competitive atmosphere.
- It is a way that a port can add value by helping reduce costs and enhance resiliency, while meeting environmental goals



How Do You Find Out What Types of Things You Can Do?

- Conduct an assessment
- Assessments are inexpensive and the cost return can be significant
- The resulting framework can serve as a decision support tool to assess specific energy efficiency and local energy generation options
- This framework could also serve as a foundation for comprehensive energy management planning

