

Greening the Fleet: Emission Reductions for Ships



The Port of
LONG BEACH
The Green Port

Technology Symposium
June 10, 2015

Ocean Going Vessel (OGV) Challenges

- Largest Port Source
- Largest Port Source Generator of DPM, NOx and SOx
- Second Largest Port Source Generator of GHGs
- Air Pollution and GHG Reduction Strategies are Expensive
- Difficult to regulate due to International deployment
- Shippers make business decisions to deploy particular ships

OGV Air Pollution Reduction Technology Solutions

- Alternative Marine Power/Cold Ironing
- Alternative At-Berth Emission Reduction Technologies
- LNG Powered OGVs
- Sea Water Scrubbers



Air Agency Support

- Agency OGV Regulations are effective

Examples:

1. Shore Power Regulation
2. Fuel Switching Regulation



Operational Strategies



New Ships



Bigger ships

