



U.S. DEPARTMENT OF TRANSPORTATION – MARITIME ADMINISTRATION

# ***MARITIME ADMINISTRATION***

## ***Office Of Environment***

West Coast Collaborative  
September 5, 2014

Michael Carter  
[michael.carter@dot.gov](mailto:michael.carter@dot.gov)

# OFFICE OF ENVIRONMENT

## ❖ Two primary missions

### ➤ **MARAD Environmental Compliance**

- ✓ Agency Green Programs/Sustainability
- ✓ Ship and facility operational compliance
- ✓ National Environmental Policy Act (NEPA)

### ➤ **Maritime industry stakeholder assistance**

- ✓ Vessel owners and operators
- ✓ Port, shipyards
- ✓ Federal, state environmental regulatory and resource agencies
- ✓ Public

**MARAD does not regulate environment**

# Sustainable Goods Movement at DOT

- **National Freight Policy Effort**
  - \* **Multimodal considerations/planning**
  - \* **Climate Adaptation and Climate Change**
    - **Gulf Coast Infrastructure Study**
    - **Adaptation considerations in port and terminal infrastructure (grants/assistance)**
- **MARAD National Maritime Strategy**
  - \* **2 Symposiums**
  - \* **Target Date December 2014/January**

# MARAD Programs Related to Sustainable Fright Movement

- America's Marine Highway Program
- Port and Intermodal Infrastructure
- Office of Environment
  - \* TEAMS – total energy and emissions analysis of maritime systems (well to hull study - Offshoot of GREET – adds Maritime Component)
  - \* GIFT/WebGift
  - \* Corridor Congestion Case Studies (infrastructure congestion points)

# META Initiative

## ❖ Maritime Environment and Technology Assistance (META) Initiative

- Stimulate technology advances for improved sustainability
- Address critical marine transportation environmental issues
  - ❖ Non-indigenous aquatic species (ballast water management technologies, underwater hull husbandry)
  - ❖ **Port and vessel air emissions and energy**
  - ❖ **Energy efficiency and conservation**
- **Collaborative** effort among Federal agencies, academia, industry and public stakeholders
  - \$3-4M per year since 2010 – leveraged over \$17M from Federal partners and more from the private sector.

# META Initiative

➤ **Objectives - Stimulate technology advances for improved sustainability; seek solutions; demonstrate and inform**

✓ **Maritime Use of Alternative Energy and Technology**

- Natural gas
- Advanced Renewable “drop-in” biofuel
- Hybrid propulsion
- Fuel cell

➤ **Goals:**

- ✓ Technology validation and demonstration
- ✓ Reduction of polluting emission from ships and in and around ports

# THANK YOU

Contact

[michael.carter@dot.gov](mailto:michael.carter@dot.gov)

202-366-9431