



**MTCC CARIBBEAN**  
Maritime Technology Cooperation Centre

# Country Report on the implementation of MARPOL Annex VI **The Bahamas**

## *Legal and institutional framework for implementing MARPOL Annex VI*

MTCC Caribbean – GMN

1st National Workshop November 21st-22nd 2017, 1st National  
Workshop,  
November 21st-22nd 2017



**GMN** | The Global  
MTCC Network  
A global network for energy-efficient shipping



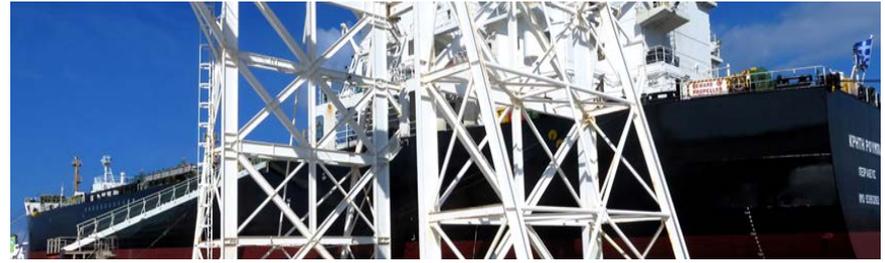
This presentation was prepared by The Bahamas Environmental Science and Technology (BEST) Commission, in cooperation with The Bahamas Maritime Authority, & The Port Department.



# THE BAHAMAS



# INTRODUCTION



- ❑ Over 90% of World wide trade is conducted by sea, and likewise over 90% of trade in the Bahamas is conducted by sea. This, along with the fact that The Bahamas is an archipelago of more than 700 islands and cays surrounded by water, means that it is critical that every effort is made to maximize the potential of the oceans and to protect the marine environment from the adverse effects of climate change.
- ❑ The Bahamas has a relatively low contribution to global GHG emissions, however, the Bahamas is extremely vulnerable to the effects of global climate change and sea level rise, as some eighty percent (80%) of the landmass is less than 5 ft (1.5 m) of mean sea level.

*'First National Communication on Climate Change Submitted to the Secretariat of the United Nations Framework Convention on Climate Change for Presentation to the Conference of Parties'*



# Purpose

- ❑ To raise awareness of the current status of The Bahamas pertaining to the implementation of MARPOL Annex VI, by highlighting current Legislation, Regulatory Institutions, Monitoring and Enforcement Capacity, Resources and Technologies in use.
  
- ❑ This presentation outlines:
  - The different institutions involved and their role with regards to implementation and enforcement of MARPOL Annex VI.
  - The actions and measures taken by regulatory institutions.
  - The status of technological development and barriers to technology uptake.



# MARPOL Annex VI Implementation

- ❑ Requires simultaneous actions by the three facets of a Country, acting and fulfilling its obligations as a:
  - Flag State
  - Coastal State
  - Port State
- ❑ This separation of a State, acting simultaneously as three entities, is enshrined in the United Nations Convention on the Law of the Sea (UNCLOS) and forms the backbone of the efficient, global and uniform implementation of IMO instruments.
- ❑ The scope of obligations, the type of measures required and the stakeholders involved vary based on the role assumed (Flag or Port State).
- ❑ In consequence, a number of institutions are involved in the process of implementation and enforcement.



# Institutions and Resources



# Bahamas Regulatory Institutions

Institutions: The Office of the Prime Minister,  
The Ministry of Transport and Local Government,  
The Ministry of Environment & Housing,  
The BEST Commission,  
The Bahamas Maritime Authority, The Port Department, The Department of Environmental Health, The Office of the Attorney General.

The Department of Environmental Health under the Ministry of Environment & Housing is the main monitoring agency of Emissions in the Country, but it is strongly supported by other institutions depending on the circumstances.

Department of Environmental Health is to resume stack emission monitoring in 2018 through the Environmental Monitoring and Risk



Assessment Division

# Institutions - BAHAMAS as a

## Flag State

### Resources

- Minister of Transport and Local Government
  
- Bahamas Maritime Authority, the agency responsible for Flag State affairs
  - A network of offices worldwide
  - Inspection and Survey Department
  - Maritime Affairs (London)
- High Commission of the Bahamas in London

## Coastal and Port State

### Resources

- Port Department
- Port State Control Officers in charge of inspections
- Environmental Monitoring and Risk Assessment Division of the Dept. of Environmental Health



# Institutions - BAHAMAS as a Flag State

## ❑ Other entities supporting Flag State functions

- ❑ Bahamas Approved Nautical Inspectors (over 200), for surveys and other inspections, all ship types
- ❑ Recognized Organisations (Classification Societies members of IACS) acting on behalf of Flag State, for statutory surveys and certificates (IAPP, EIAPP and related materials)



# RESOURCES IN THE BAHAMAS

The Department of Environmental Health is the Main Agency in the Bahamas for Monitoring of Terrestrial and Marine based emissions. Each main island in the archipelago has stationed an adequate amount of personnel.

The greatest impediment to the successful monitoring of GHG emissions in accordance with MARPOL Annex VI for the Bahamas is the Lack of Proper Equipment.

Due to the corrosive nature of the environment of the Bahamas, equipment deteriorates at a fast rate. Additionally Fiscal constraints makes it difficult to replace defunct equipment.

The Bahamas also has a lack of adequately trained personnel in the methods of specific equipment usage and maintenance.



# Sharing resources

- FLAG STATE
- Dialogue and cooperation with delegations from the Caribbean region represented at the IMO.
- Cosponsoring of documents and proposals submitted to IMO (ex: recent document on GHG reduction cosponsored by Belize).



# Resources

- ❑ The Commonwealth of The Bahamas is looking into liquefied Natural Gas (LNG) as an option, but is facing some challenges.
- ❑ The Bahamas is trying to reduce it's reliance on fossil fuels and as such Currently looking into alternative methods of energy such as Solar, LNG e.t.c
- ❑ A monitoring system has been mentioned but it is at its inception stage the Dept. of Environmental Health will be monitoring in early 2018 the Sulphur Content of the Air at the various Port Facilities within the Bahamas and generate a database.



# Legislation



# Legislation, regulations and standards

- ❑ The legal framework applicable to ships flying the Bahamian flag is structured as such:
  - Bahamas Merchant Shipping Act and other relevant Acts, such as Bahamas Maritime Authority Bulletins
  - Merchant Shipping Regulations
  
  - Bahamas National requirements, where requirements emanating from IMO instruments are integrated
  - BMA Information Bulletins, providing technical guidance and Flag State Administration interpretation when needed.



# MARPOL Annex VI

- ❑ By the Protocol of 1997 to the MARPOL Convention, a new Annex VI
- ❑ Annex VI of MARPOL addresses air pollution from ocean-going ships.
- ❑ Bahamas MARPOL Annex VI Accession- 2 November 2001
- ❑ Bahamas enforced MARPOL Annex VI 19 MAY 2005
  
- ❑ MARPOL Annex VI was then further modified in depth by means of MEPC Resolutions (for example, the adoption of the NOx Technical Code 2008, or recently the EEDI requirements), which did not require further ratification or accession.



# Legislation

- ❑ The Government of the Bahamas through the auspices of the Office of the Attorney General will develop local legislation to the effect of MARPOL Annex VI
- ❑ The Office of the Attorney General supports all government agencies and operates an 'open door policy' in the form of legal advice and representation.
- ❑ The Government of the Bahamas works a lot with consultants and international experts to obtain the necessary information for new legislation.



# BMA Information Bulletins

- ❑ BMA Bulletin No.75 on MARPOL 73/78 Annex VI - Regulations for the Prevention of Air Pollution from Ships
- ❑ BMA Bulletin No.123 on Hydrochlorofluorocarbon (HCFC) Refrigerants
- ❑ BMA Bulletin No.126 on MARPOL Annex VI Record book for fuel oil and ozone depleting substances



B126  
Issue Date: 18 June 2010



**The Bahamas  
Maritime Authority**

BMA INFORMATION BULLETIN No. 126

**MARPOL ANNEX VI RECORD BOOK  
FOR FUEL OIL AND OZONE DEPLETING SUBSTANCES**

Instructions & Guidance for Shipowners, Managers, Masters, Bahamas  
Recognised Organisations and Bahamas Approved Inspectors

## 1 Introduction

1.1 MARPOL Annex VI, as revised by Resolution MEPC.176(58) requires that specific actions on board be recorded in relation to Ozone Depleting Substances and Low Sulphur Fuel Oil.



# BMA Technical Alert

To disseminate information relevant to vessels under the Bahamas flag

Technical Alert No 16-12 Rev.01 on Sulphur Oxides Emission Regulations in China

Technical Alert No 16-42 Marine Fuel Sulphur Content Testing in Canada

Technical Alert No 15-09 Sulphur Emission Control Area Etc...



Technical Alert No. 16-12 Rev.01  
Issue Date 20 September 2016

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## TECHNICAL ALERT No. 16-12 Rev.01

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### Sulphur Oxides Emission Regulations in China

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#### 1. Introduction

- 1.1. The People's Republic of China's Ministry of Transport published new regulations in December 2015 advising of the creation of three new Sulphur Emission Control Areas (ECAs).



# External guidance and consultation process

- ❑ Active participation to IMO meetings
  - MEPC Working Groups on Air pollution and energy efficiency and Correspondence Group on Data Collection System: active support in achieving consensus and with drafting MEPC resolutions
    - 2016 Guidelines for the development of SEEMP (including parts on the methodology for collecting data and the collection plan)
    - 2017 Guidelines for administration verification of ship fuel oil consumption data, and
    - 2017 Guidelines for the development and management of the IMO ship fuel oil consumption database.



# External guidance and consultation process

- ☐ Active participation to IMO meetings:
  - MEPC Working Groups and Intersessional Groups on the Reduction of GHG emissions from ships: direct contribution to the discussion with the proposal of a “Vision” for IMO’s Strategy on GHG reduction.



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INTERSESSIONAL MEETING OF THE  
WORKING GROUP ON REDUCTION OF  
GHG EMISSIONS FROM SHIPS  
2nd session  
Agenda item 3

ISWG-GHG 2/3/1  
22 September 2017  
ENGLISH ONLY

## DEVELOPMENT OF DRAFT TEXT FOR INCLUSION IN THE INITIAL IMO GHG STRATEGY

Text proposed for a vision

Submitted by the Bahamas, Belize, ICS, BIMCO and INTERTANKO

### SUMMARY

*Executive summary:* This document contains a draft text for a vision to be included in the initial IMO Strategy on reduction of GHG emissions from ships

*Strategic direction:* 7.3

## Discussion

3 The co-sponsors propose hereunder a draft text for the vision, to be included under the second heading of the initial IMO strategy structure:

"The IMO is committed to the decarbonization of international shipping in the second half of the century."



# Monitoring and Enforcement

- ❑ As a Flag state for Bahamian vessels
  - Enforcement Through Inspections
  - Port State Control inspections
  - As a Port state for vessels calling in Bahamian ports
  - Major Ports in the Bahamas
    - Freeport Container Port - Transshipment Port
    - Arawak Port Development - Nassau Container Port Terminal
  
- ❑ Class Inspections



# External guidance and consultation process

- ❑ Relationships with industry and others stakeholders: constantly liaising with
  - Other States active at IMO, such as Japan, Germany, Panama, etc...
  - States specifically active in the context of GHG reduction and Climate change, such as Pacific Islands States or EU delegations (EC Directorate for Climate Change)
  - Industry NGO's: International Chamber of Shipping (ICS), Intertanko, Intercargo, BIMCO, Interferry, IACS
  - Recognised Organisations acting on Bahamas' behalf



# Data Collection mechanism

- ❑ As an answer to new MEPC resolutions on IMO Ship Fuel Oil consumption database, the BMA Inspection and Survey Department has just developed a new BMA Bulletin “Fuel Consumption Data collection and reporting” .
  
- ❑ It covers some key elements, already covered by MEPC resolutions (MEPC.278(70) (Regulation 22A); MEPC.282(70) (SEEMP Guidelines); MEPC.292(71) Guidelines for Administration verification of data):
  - Use of a standardized data reporting format
  - Verification activities to be delegated to accredited RO's



# Data Collection mechanism

- ❑ The Bulletin provides Bahamas Flag State preferences, choices or requirements on the following elements, amongst other:
  - Which methods are accepted for the collection of data onboard ships (Bunker Delivery Notes; fuel meters readings...)
  
- ❑ Following tasks are delegated to accredited Recognized Organisations:
  - Approval of amended SEEMP
  - Data collection and analysis
  - Verification of data reported (issuance of a Statement of compliance)
  - Submission of data to IMO database



# Current initiatives on GHG emissions

- ❑ The Bahamas delegation at IMO provided valuable contribution to the long-term debate on GHG reduction from international shipping and positively influenced the principles adopted for the establishment of IMO's Strategy on this matter.

- As noted in UNCTAD Review of Maritime Transport 2017 (p.90 and 97)

... (IMO, 2017c). Delegations expressed concern with regard to the need for proper references in the road map to consideration of the special needs of small island developing States and the least developed countries, in accordance with the Small Island Developing States Accelerated Modalities of Action Pathway, to ensure both progress and inclusiveness, and the need for a high level of ambition with regard to the strategy was highlighted.<sup>7</sup>



7. Cook Islands, supported by Palau, Papua New Guinea, Solomon Islands, Tuvalu and Vanuatu, as well as interventions by Bahamas and Norway.

- In MEPC 71 report (para. 7.28, p.49)



# Barriers and mitigation strategies

- ❑ Geographical make up of the Bahamas - Port Facilities for vessel >400grt are on different islands (Bimini, Inagua, Abaco, Freeport, New Providence (Arawak Port Development Clifton Pier, and Prince George Wharf)
- ❑ Distance from the Most northern island to the southern island is approximately 510 miles
- ❑ Energy efficiency technology uptake
- ❑ Lack of centralized reporting system and proper data analysis/use.



# Partnerships



# Opportunities for partnership

- ❑ Between MTCC Caribbean and Government entities within The Bahamas
- ❑ Link established between MTCC, Freeport harbour, APD Container Port and the BMA for data collection.
- ❑ Increased Communication between CARICOM Members on Climate Change issues and GHG reduction for shipping
- ❑ **Recognized Organisations** (Classification Societies members of IACS) acting on behalf of Flag State, for statutory surveys and certificates (IAPP, EIAPP and related materials)

