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# Capacity Building: The bedrock and strategic driver of Efficiency, Sustainability and Successful Business Models

Presented by:  
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## WHAT IS SUSTAINABILITY?

Sustainability is concerned with protecting the planet, halting climate change and promoting social development, without endangering life on Earth or leaving anyone behind. This concept seeks to cover our present needs without compromising resources for future generations.





## Terminology for Environmental, Social, and Governance Sustainability

**1**

### ENVIRONMENTAL

This encompasses the reduction of GHG emissions, Fuel Efficiency, the use of Renewable Energy sources, Waste Management and the protection of marine ecosystems.

**2**

### SOCIAL

This focuses on fair labor practices, responsible supply chains, and the well-being of maritime workers.

**3**

### GOVERNANCE

This refers to transparent and ethical corporate practices, accountability, and compliance with international regulations.

**4**

### ESG INTEGRATION

By understanding these principles, professionals in the maritime sector can contribute to a more sustainable future for the industry.





## Environmental Impact Assessment

Training should cover methods for assessing the environmental footprint of shipping operations.

1

## Sustainable Shipping Practices

Including topics such as energy efficiency, waste management, and ballast water treatment, among others.

2

## Renewable Energy Technologies

Learning about the latest advancements in wind, solar, and biofuel technologies for maritime use.

3

## Green Ship Design and Operations

Emphasis should be placed on designing and operating ships that minimize environmental impact.

4

## Policy and Regulation

Understanding the evolving regulatory landscape for sustainable shipping practices.

5





## Cross-Skilling, Reskilling, Upskilling, and De-Skilling

### Cross-Skilling

Enabling professionals to acquire skills in related fields, such as Renewable Energy or Environmental Management.

### Reskilling

Providing Training to adapt to New Technologies and practices related to Sustainability.

### Upskilling

Enhancing existing skills and knowledge in areas such as Energy Efficiency or Sustainable Shipping Practices.

### De-Skilling

Addressing skills that are becoming obsolete due to the shift towards Sustainable Practices.





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IAMU

MDETI Project – Maritime Decarbonization  
Education and Training Initiative



Promoting R&D + I



Developing a “Green Curriculum” for the Maritime Sector



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## Working Group 14 Maritime Education & Training



INTERNATIONAL  
STANDARD

ISO  
24438

First edition  
2023-12

**Ships and marine technology —  
Maritime education and training —  
Maritime career guidance**

*Navires et technologie maritime — Éducation et formation maritime  
— Recommandations pour l'orientation dans les métiers de la mer*



Reference number  
ISO 24438:2023(E)

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- ✓ Emerging Technologies applied to Maritime, Ports & Logistics
- ✓ Training on Alternative Marine Fuels
- ✓ Energy Efficiency and Shipping Decarbonization
- ✓ Sustainability
- ✓ Promoting R&D + I



Training should align with International Standards  
and Best Practices for Sustainable Shipping



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MODEL  
COURSE  
7.13

BASIC TRAINING FOR MASTERS,  
OFFICERS, RATINGS AND  
OTHER PERSONNEL ON SHIPS  
SUBJECT TO THE IGF CODE

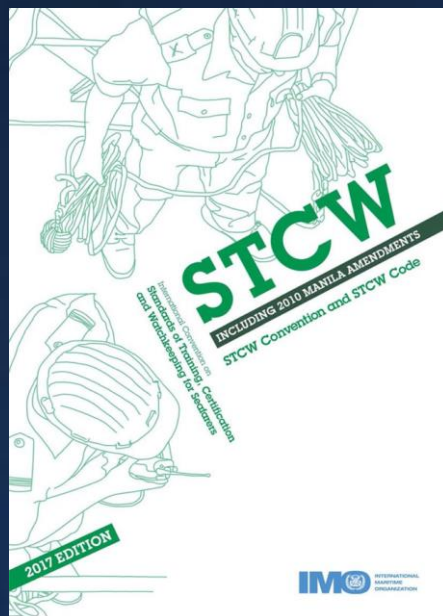
2019 EDITION



MODEL  
COURSE  
7.14

ADVANCED TRAINING FOR MASTERS,  
OFFICERS, RATINGS AND  
OTHER PERSONNEL ON SHIPS  
SUBJECT TO THE IGF CODE

2019 EDITION

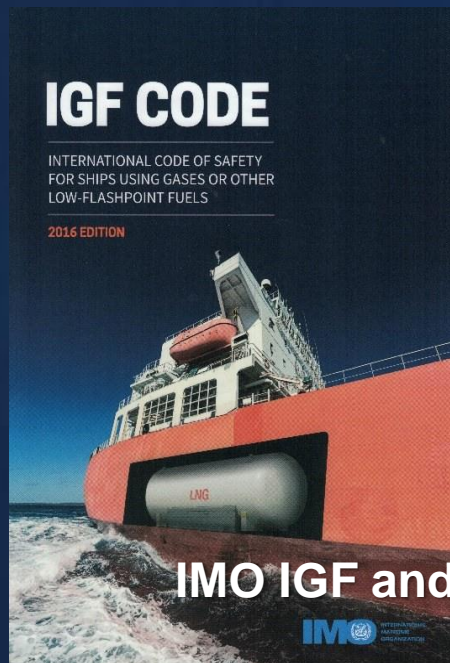


IMO Model Courses 7.13 and 7.14

**IGF CODE**

INTERNATIONAL CODE OF SAFETY  
FOR SHIPS USING GASES OR OTHER  
LOW-FLASHPOINT FUELS

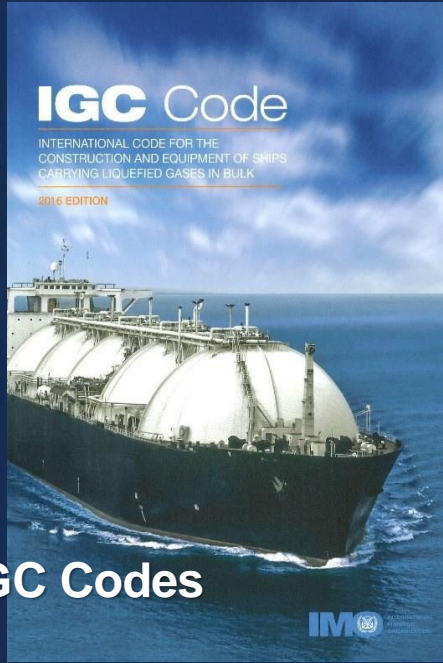
2016 EDITION



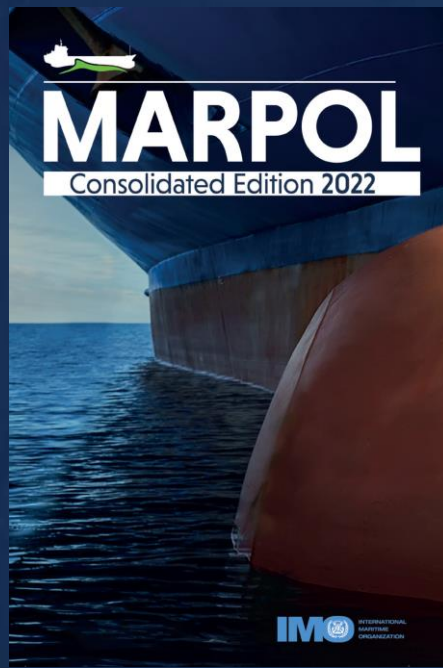
**IGC Code**

INTERNATIONAL CODE FOR THE  
CONSTRUCTION AND EQUIPMENT OF SHIPS  
CARRYING LIQUEFIED GASES IN BULK

2016 EDITION



IMO IGF and IGC Codes



## Training and Capacity Building

To ensure Safe, Efficient and Sustainable Shipboard Operations, through Awareness and Competence Building

- ✓ Facilitating the Energy Transition in the Maritime Industry
- ✓ Involving all Relevant Stakeholders – Strategic Alliances and Collaborations

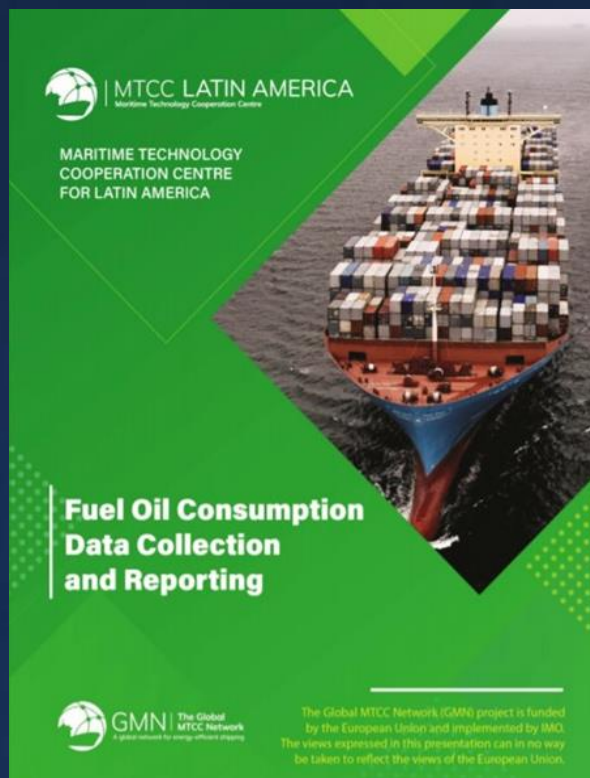
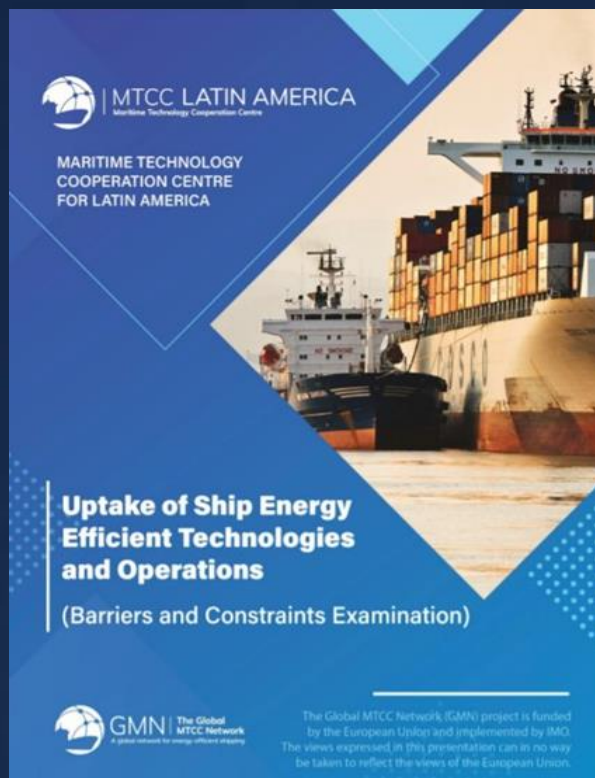




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## MTCC Latin America Projects Developed and Published

<https://mtcclatinamerica.com/pilot-projects-2.html>



INTERNATIONAL  
MARITIME  
ORGANIZATION



European  
Union





## Integrating Sustainability into Strategic Growth Targets

1

### SUSTAINABILITY GOALS

Maritime, Port and Logistics Sectors should set clear and measurable Sustainability Goals

2

### INVESTMENT STRATEGIES

Investing in Green Technologies and Sustainable Practices should be prioritized

3

### INNOVATION AND RESEARCH

Encouraging R&D + I of New Sustainable Technologies is essential

4

### COLLABORATION AND PARTNERSHIPS

Working with Stakeholders across the industry to drive collective progress towards Sustainability (NGOs, Research Centers, Environmental, Academia)

5

### STAKEHOLDER ENGAGEMENT

Regularly engaging with Stakeholders to ensure Leadership, Transparency and Accountability





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# The Future of Maritime Education and Training

*The industry must embrace a Holistic Approach to Sustainability to cope with present and future Challenges and Opportunities*



## CERTIFICATIONS

Providing Training leading to Industry-recognized Certifications in Sustainable Shipping Practices



## INTERNATIONAL STANDARDS

Working with Regulatory Bodies, Policy Makers and Standardization Bodies



## KNOWLEDGE SHARING

Promoting Sustainability through Professional Training, Collaboration, Experience & Knowledge Sharing



## CONTINUOUS LEARNING

Encouraging ongoing Professional Development and upskilling in Sustainability-related areas



Embracing Sustainability and Technology to shape the future of the Maritime, Port and Logistics Sectors



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The Maritime, Port and Logistics Sectors are undergoing a significant transformation, embracing **Sustainability** and driving the **Energy and Digital Transition** through MET





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# Thank You

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