

International Marine Contractors Association

*Improving performance in the marine contracting industry*

# How to fulfill environmental sustainability expectations

Erik Bergh, HSEQS Director at DeepOcean and member of IMCA's  
Environmental Sustainability Committee

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10 November 2021





Erik Bergh

**HSEQS Director  
DeepOcean**

**IMCA  
Environmental  
Sustainability  
Committee  
Member**

## Erik Bergh

### Group HSEQS Director, DeepOcean

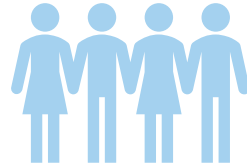
- Erik leads DeepOcean Group's HSEQS function, with two decades of experience in health & safety and environment, and quality management.
- He has previously worked as Tender Manager and HSE Manager for Subsea 7 North Sea and Canada, and HSEQ Director at Subsea 7 Norway. He has also worked in various capacities at Acergy: Corporate Quality Manger, Regional (Northern Europe & Canada) Quality Manager, Quality Team Leader/Adviser at Acergy Norway. He also worked as a Quality Advisor for the Norwegian Food Safety Authority.
- Erik holds an M.Sc. Quality Management from Nottingham Trent University and a B.A. in Psychology with a minor in Russian Language from St. Olaf College.
- Military service as a Ship Diver in the Royal Norwegian Navy.



# Our Environmental Sustainability Committee



## Environmental Sustainability



### Our aim

IMCA aims to advance environmental sustainability in the offshore marine contracting industry by supporting the membership in:

- Improving its environmental performance and
- The transition to a low-carbon and climate-resilient economy

Join us in helping the industry further improve its environmental and energy performance.

### Our activities

Our committee affords a forum for discussion, exchange of experiences and good practices, and sharing knowledge. It helps members in their efforts towards achieving environmental sustainability through supporting the membership in:

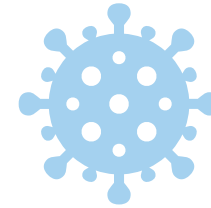
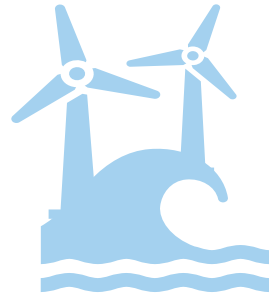
- Working with clients and contractors towards a level playing field in environmental sustainability requirements
- Minimising carbon footprints
- Reducing emissions of all kinds
- Reducing or eliminating plastic waste

Guidance documents, technical reports, and regular bulletins aid members in meeting environmental sustainability requirements and in continuing to improve their environmental, energy and climate related performance. We work in conjunction with the Marine Policy & Regulatory Affairs and Marine Renewable Energy Committees.



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# Environment as a cross-cutting issue





# What are the environmental and decarbonisation expectations on our industry?



EMISSIONS  
REDUCTION



ENERGY  
EFFICIENCY



LIFE BELOW  
WATER



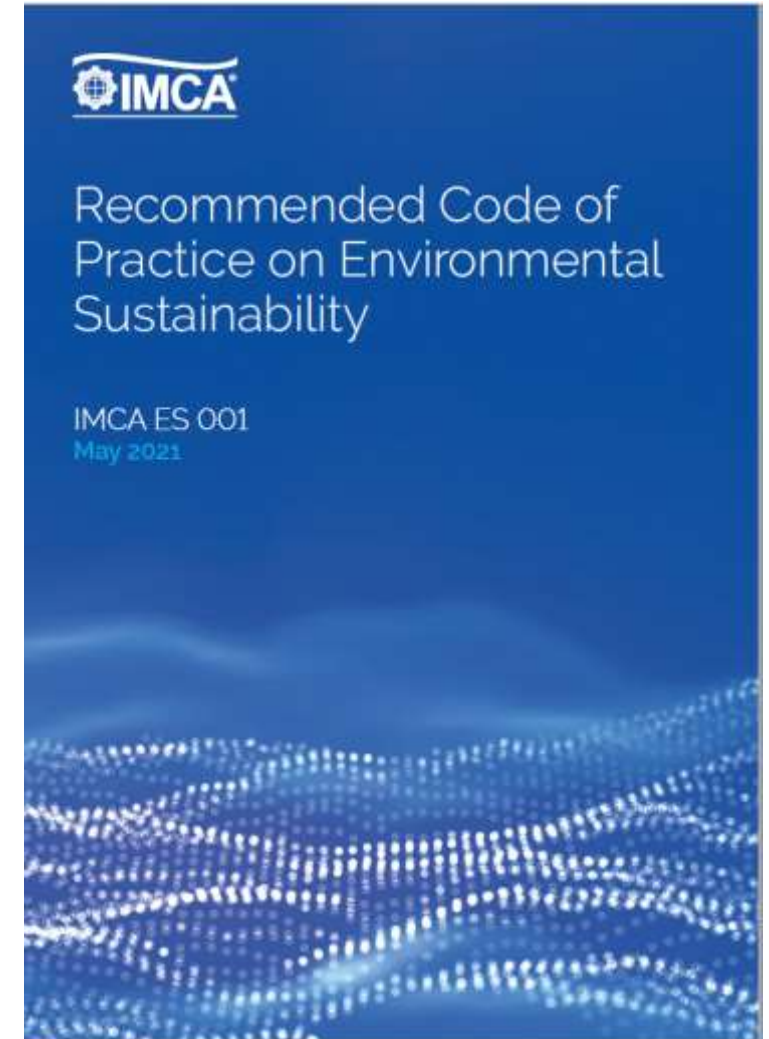
CIRCULAR  
ECONOMY



SUPPLY CHAIN  
ENGAGEMENT



REPORTING



How can we fulfil these expectations?

Biodiversity

Biodiversity



# Environmental Commitment



## Protecting our environment

Our oceans are under threat as never before and we recognise that we play a vital part in protecting the marine environments and all places where we work.

### Our commitments

Before undertaking or participating in any work, we will always assess the environmental risks and take action to ensure these risks are avoided, where this is possible, or minimised.

We will not cut corners or compromise on what is required to do this.

We all agree that it is the responsibility of every IMCA Member to understand what environmental measures are needed in their work and that this information is shared with all involved in the work.

How can you honour such a commitment?  
What might be expected of you?

**IMCA**

**Code of Conduct for IMCA Members**

2018



IMCA G 009 Rev. 1  
December 2018





# Fulfilling Expectations....



COVID-19 Login

Home » Data » Environmental Sustainability Self-Assessment

## Environmental Sustainability Self-Assessment

Welcome to the self-assessment tool based on IMCA's Recommended Code of Practice on Environmental Sustainability. This tool has been developed for IMCA members' internal use, to undertake a self-assessment according to the code.

On submission, you will be presented with your self-assessment score and, once sufficient submissions have been made by other IMCA members, a comparison with other users' outcomes.

**Confidentiality** – When you use the tool, you will be given the option to share the results with others within your company or to restrict access just to you.

- Aggregate information is used to enable you to compare of your results with the wider IMI membership, and to guide the IMCA Environmental Sustainability Committee in its work.
- Aggregate information will only be available for these purposes once sufficient submissions have been received in order to ensure your anonymity.
- Only a restricted group of IMCA secretariat personnel is able to view submission details.

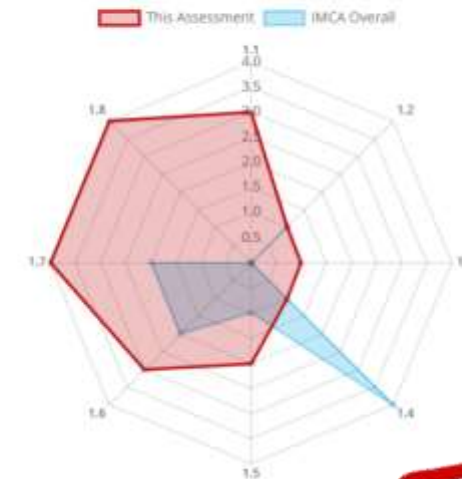
To use this tool, you must [log in below](#), or can register for a free account.



Circular Economy	Strongly Disagree	Disagree	Partly Agree	Agree	Strongly Agree
We consider the environment in new vessel design and build.	<input type="range" value="4"/>				
We understand what is meant by a circular economy approach.	<input type="range" value="1"/>				
We apply a circular economy approach to waste management.	<input type="range" value="3"/>				
We apply a circular economy approach to EOL assets.	<input type="range" value="2"/>				
We have designed for maintainability or repairability of assets.	<input type="range" value="3"/>				

### 1 - Circular Economy

ID	Statement	Response	My Score	IMCA Average
<b>1 - Circular Economy</b>			<b>59.38 %</b>	<b>31.25%</b>
1.1	We set strategy objectives and targets related to circular economy	Agree	3/4	0/4
1.2	We consider circular economy aspects in new vessel design and build	Disagree	1/4	0/4
1.3	We understand what is meant by a circular economy approach	Disagree	1/4	0/4
1.4	We apply a circular economy approach to waste management.	Disagree	1/4	0/4
1.5	We apply a circular economy approach to end-of-life assets	Partly Agree	2/4	0/4
1.6	We have designed for maintainability or repairability of assets	Agree	3/4	0/4
1.7	We consider end-of-life in projects, adopting specific strategies and actions	Strongly Agree	4/4	0/4
1.8	We inform, train and engage on workforce on the circular economy	Strongly Agree	4/4	0/4





# Key themes – priority action areas!



EMISSIONS  
REDUCTION



ENERGY  
EFFICIENCY



LIFE BELOW  
WATER



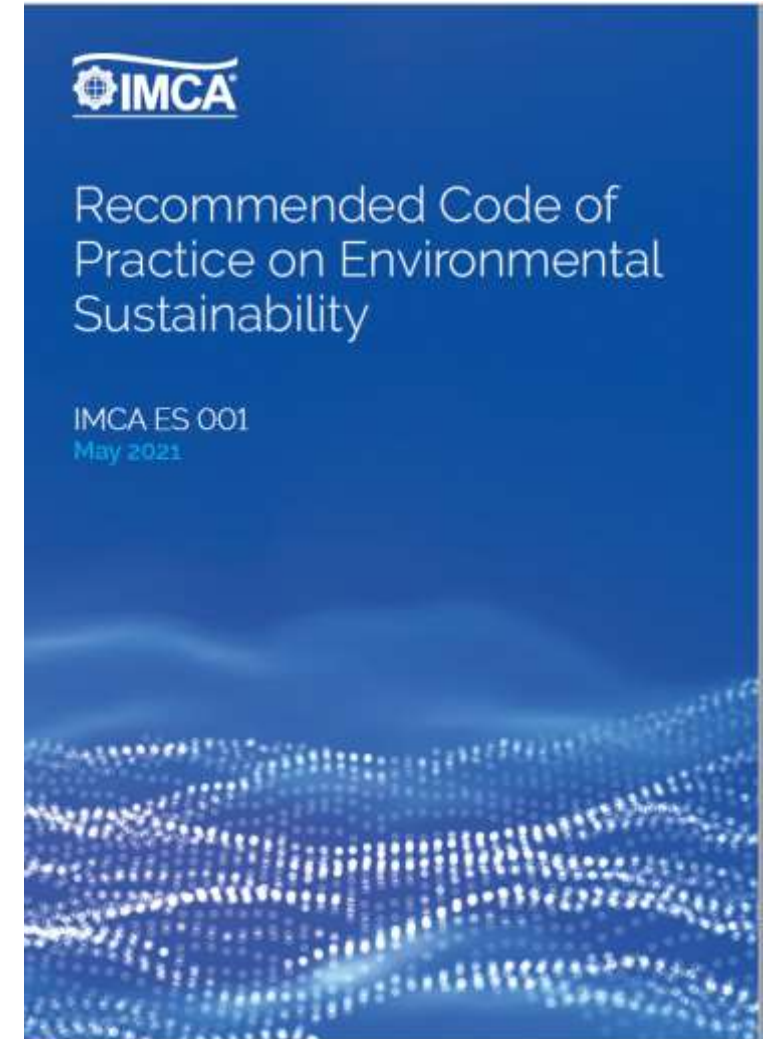
CIRCULAR  
ECONOMY



SUPPLY CHAIN  
ENGAGEMENT



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# Emissions reduction

## Contextual Definitions:

- **Greenhouse gases:** Gases that absorb infrared radiation, trap heat in the atmosphere, and contribute to climate change. Greenhouse gases are often measured in carbon dioxide equivalents based on the global warming potential of each gas.
- **Carbon Footprint:** The total amount of greenhouse gas emissions produced to support the company's activities.

### Direct Emissions

#### Scope 1

GHG emissions from sources that are owned or controlled by the company (e.g., fuel the company purchases or onsite power generation).



### Indirect Emissions

#### Scope 2

GHG emissions from the generation of purchased electricity, gas, steam etc. consumed by the company.



#### Scope 3

GHG emissions that are a consequence of company activities, such as company travel and from supply chain.



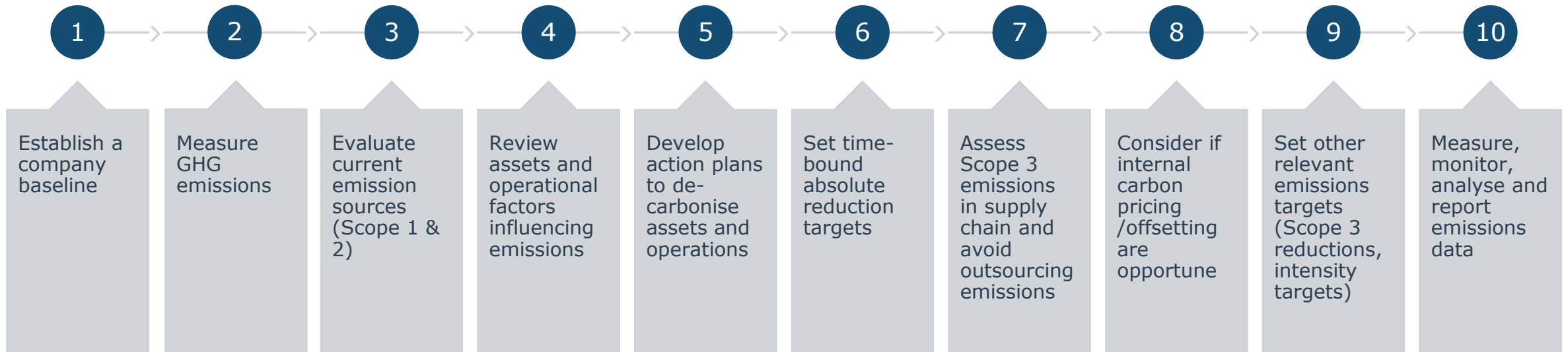
## Drivers for Emission Reduction



# 10 Possible Steps for a De-Carbonisation Roadmap

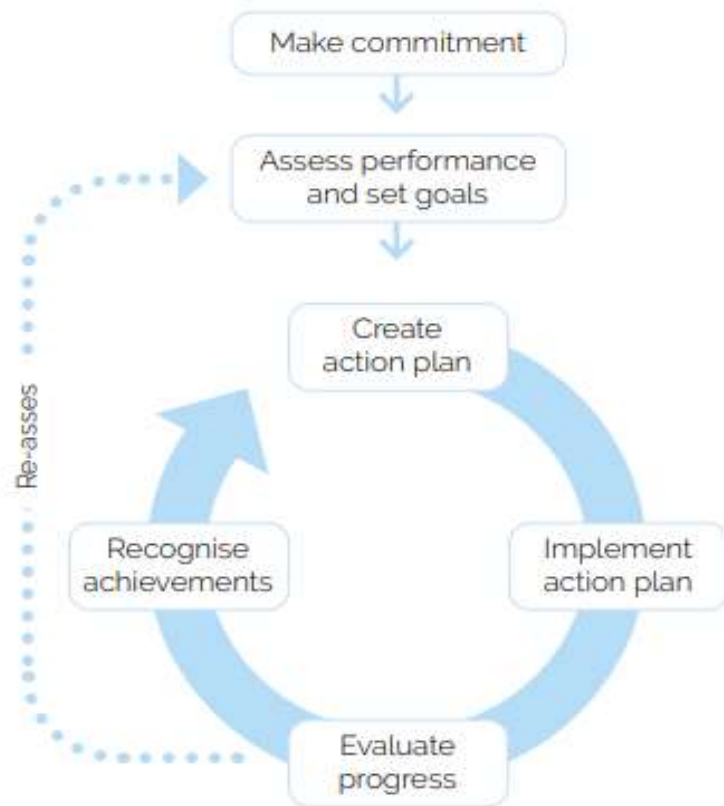
As good practice, Members should develop GHG emissions reduction targets and strategies aligned with the Paris Agreement. SMART target should be set for emissions reduction, consistent with the IMO GHG Strategy.

Good practice calls for achieving net zero emissions by 2050 and expressing a commitment to developing Science-based Targets by 2025.



# Energy efficiency and management

**Figure 9 - Framework for setting up an energy management programme**



(Source: ENERGY STAR - U.S. Environmental Protection Agency Program. Guidelines for Energy Management).

## Operational Measures

- Energy Management as topic in worksite daily status meetings and performance reports;
- Prioritise regular preventive asset maintenance (e.g. Propeller/hull cleaning to remove marine growth);
- Achieve fuel reduction by selecting the most suitable vessel for the activity and prioritise optimised voyage planning over transit speed (Eco vs max speed).

## Technical Measures (technical measures and new technologies)

- **Use digitalisation** w/ enhanced use of sensors and software programs to:
  - monitor and manage energy use throughout the worksite;
  - digitally control engine fuel injection and speed;
  - leverage latest satellite positioning software to achieve most optimal course.
- **Focus on existing and emerging technologies**
  - Hybrid power systems
  - Alternative energy sources (e.g. fuel cells)
  - Increased use of shore power



**Biological diversity** “means the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.”

**Ecosystem** “means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.”

## Sector environmental impacts

- CO<sub>2</sub> emissions
- Invasive species
- Waste & hazardous waste
- Damage & disturbance of the site
- Underwater noise impacts on biodiversity
- Injury/damage or mortality to life underwater

# The three remaining Themes of the Code



EMISSIONS  
REDUCTION



ENERGY  
EFFICIENCY



LIFE BELOW  
WATER



CIRCULAR  
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# Conclusion



# Question and Answer Session





Improving performance in the  
marine contracting industry

