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SHIPPING IN THE POLAR CODE AREA

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Arctic Ship Traffic Data

All data from PAME's analysis is from PAME's Arctic Ship Traffic Data (ASTD) System.

PAME's Arctic Ship Traffic Data (ASTD) project has been developed in response to a growing need to collect and distribute accurate, reliable, and up-to-date information on shipping activities in the Arctic. The ASTD System was launched in February 2019.

www.astd.is.

Access to the ASTD System

Free access

- Arctic State Approved Government Agencies and Ministries
- Arctic Council Permanent Participants
- Arctic Council Working Groups and Task Forces

Fee for access

- Professional Institutions that have a demonstrated public commitment related to the protection, conservation, and sustainable use of the Arctic marine environment.
- Arctic Council Observer States
- Arctic Council Observer Organizations

Arctic Shipping Status Reports

March 2020

October 2020

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The reports use the geographic definition of the Arctic contained in the International Code for Ships Operating in Polar Waters (Polar Code) – The Polar Code area.

IMO

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INCREASE IN UNIQUE SHIPS

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Unique ships entering the Polar Code area 2013 and 2019.

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104 TOURISM VESSELS IN 2019

Cruise ships, passenger vessels and yachts

69%

OPERATED IN
1 MONTHS
OR MORE

11%

OPERATED IN
6 MONTHS
OR MORE

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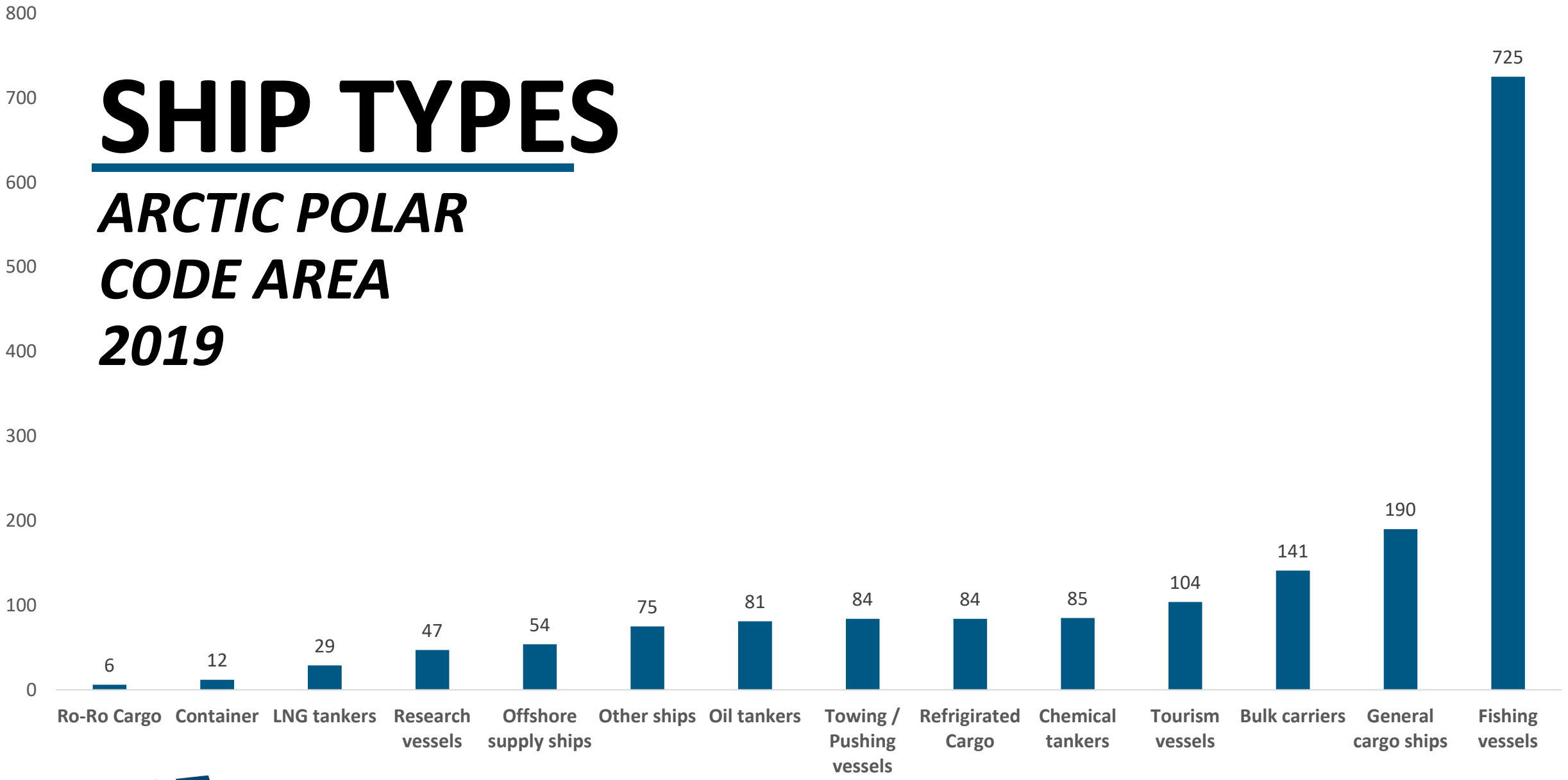
SHIP TYPES

ARCTIC POLAR CODE AREA 2019



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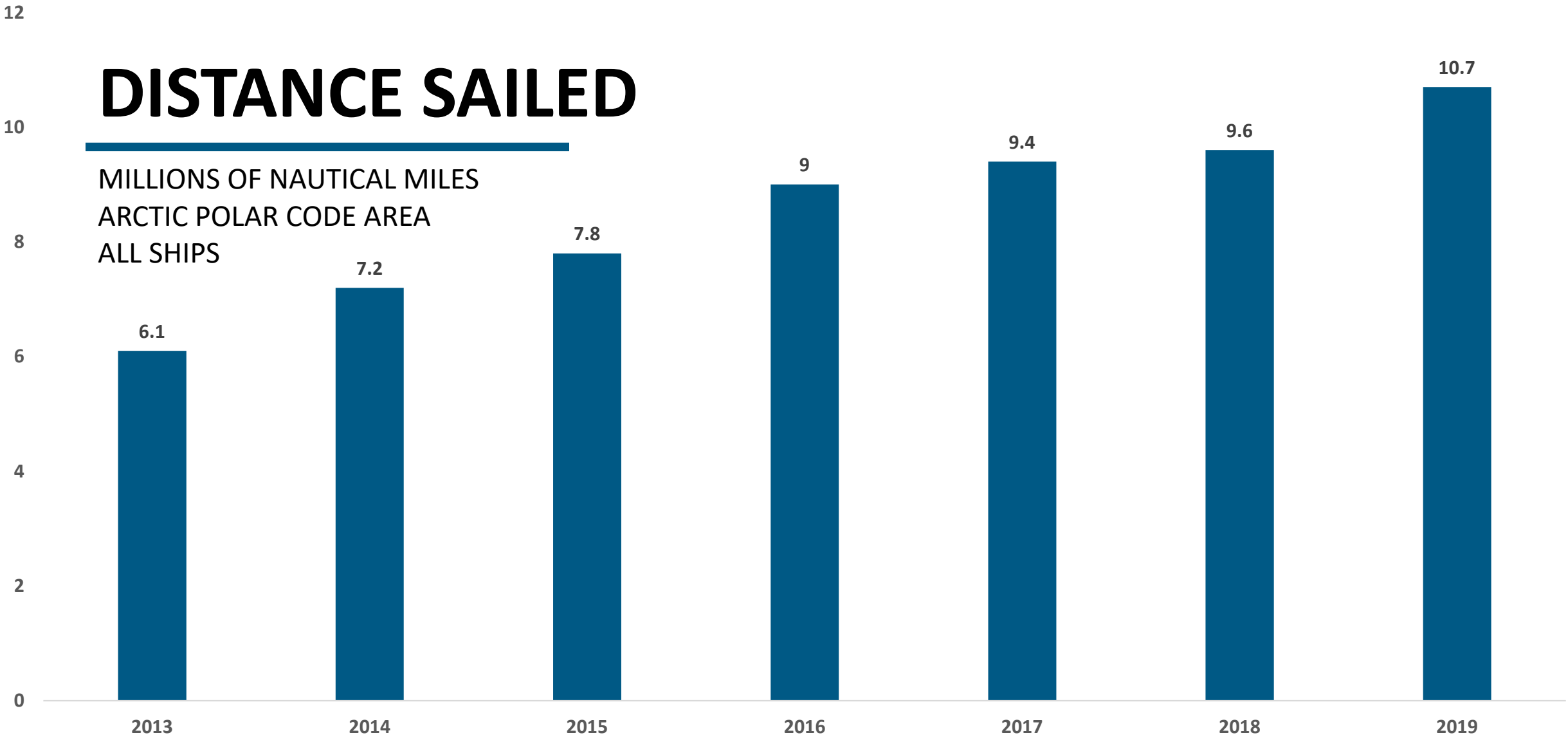
DISTANCE SAILED

MILLIONS OF NAUTICAL MILES
ARCTIC POLAR CODE AREA
ALL SHIPS



75% INCREASE FROM 2013-2019

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FUEL USED


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HEAVY FUEL OIL (HFO) USE BY SHIPS IN THE ARCTIC 2019
ARCTIC SHIPPING STATUS REPORT (ASSR) #2
20 OCTOBER 2020

HFO DEFINITION

MARPOL Annex 1 reg 43, paragraph 1.2:

"oils, other than crude oils, having a density at 15°C higher than 900 kg/m3 or a kinematic viscosity at 50°C higher than 180 mm2/s."

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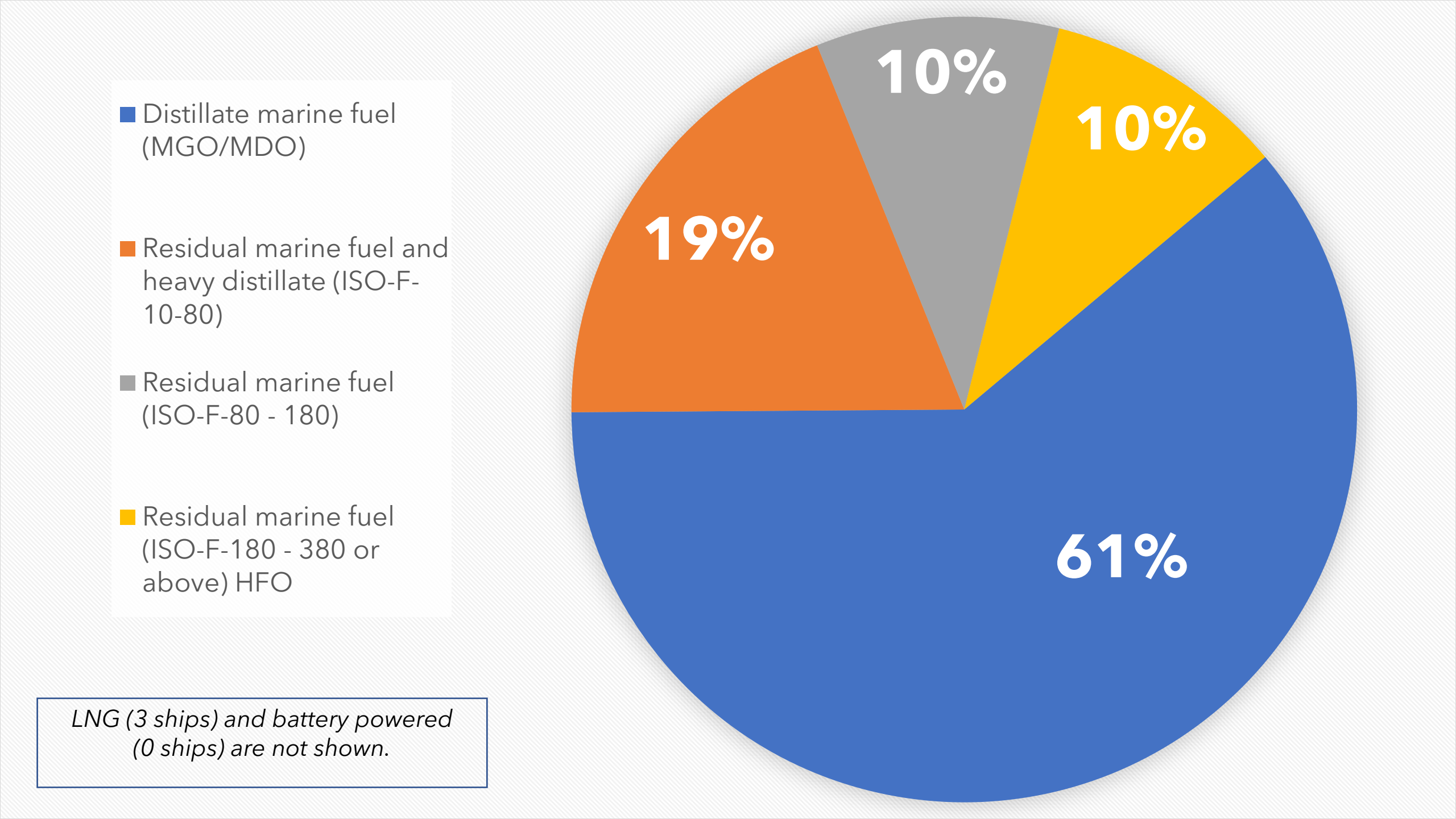

LNG (3 ships) and battery powered (0 ships) are not shown.

THE 165 SHIPS USING HFO IN THE ARCTIC IN 2019

FUEL CONSUMPTION

FROM 2016 TO 2019

FUEL CONSUMPTION GREW BY

82%

WITH A SIMILAR NUMBER OF SHIPS

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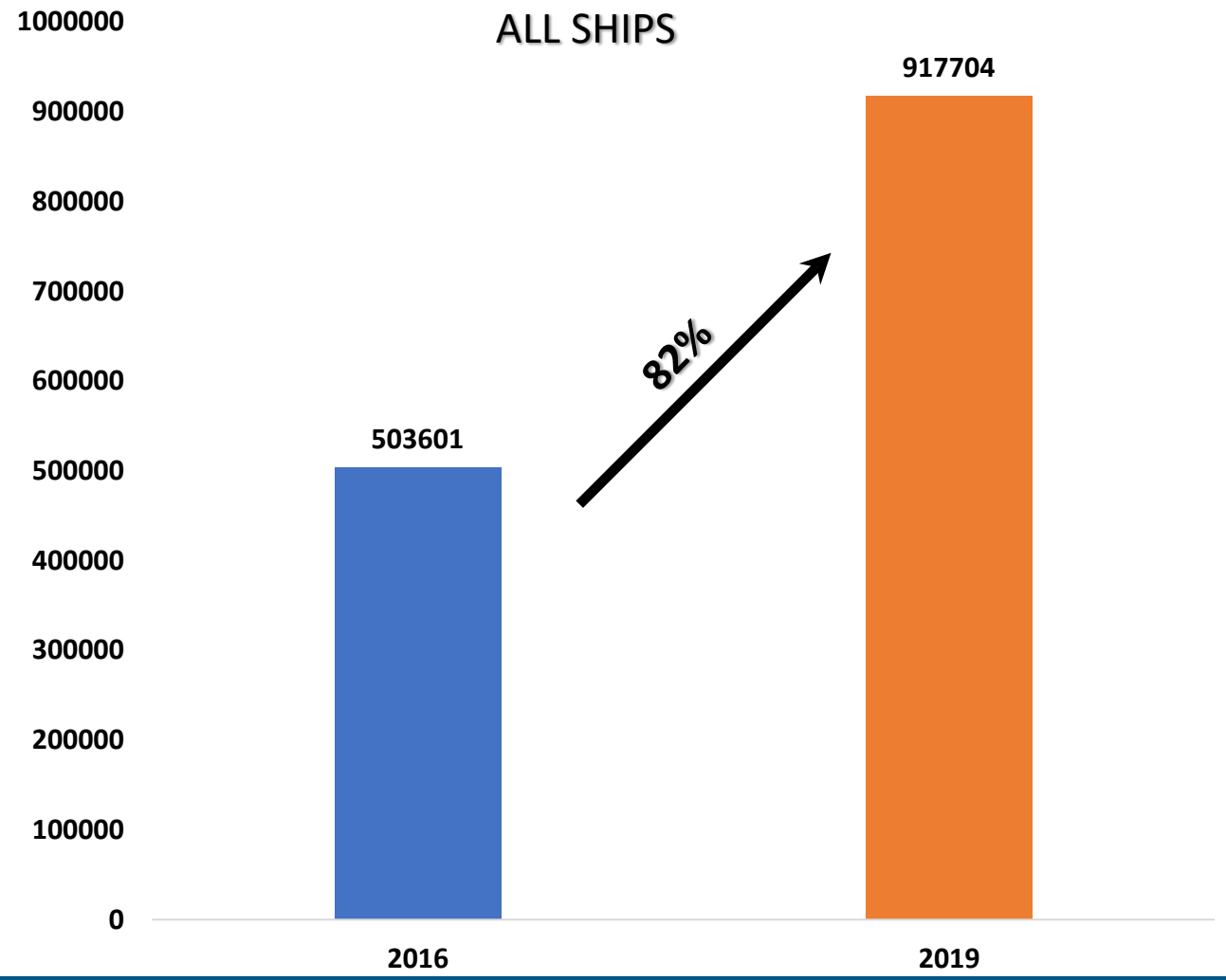
FUEL CONSUMPTION

ARCTIC POLAR CODE AREA 2016 & 2019

NUMBERS IN CUBIC METERS

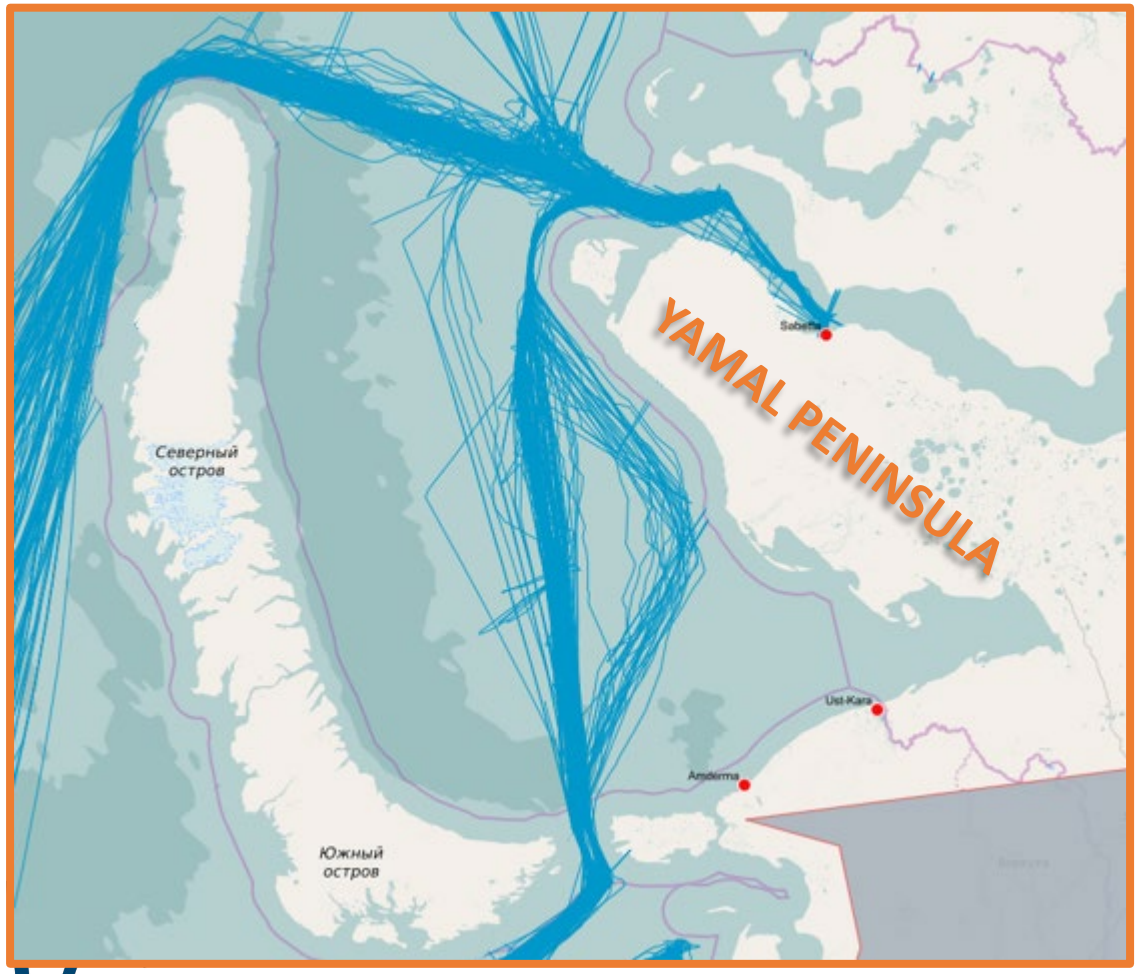


LNG TANKER TRAFFIC IN THE ARCTIC

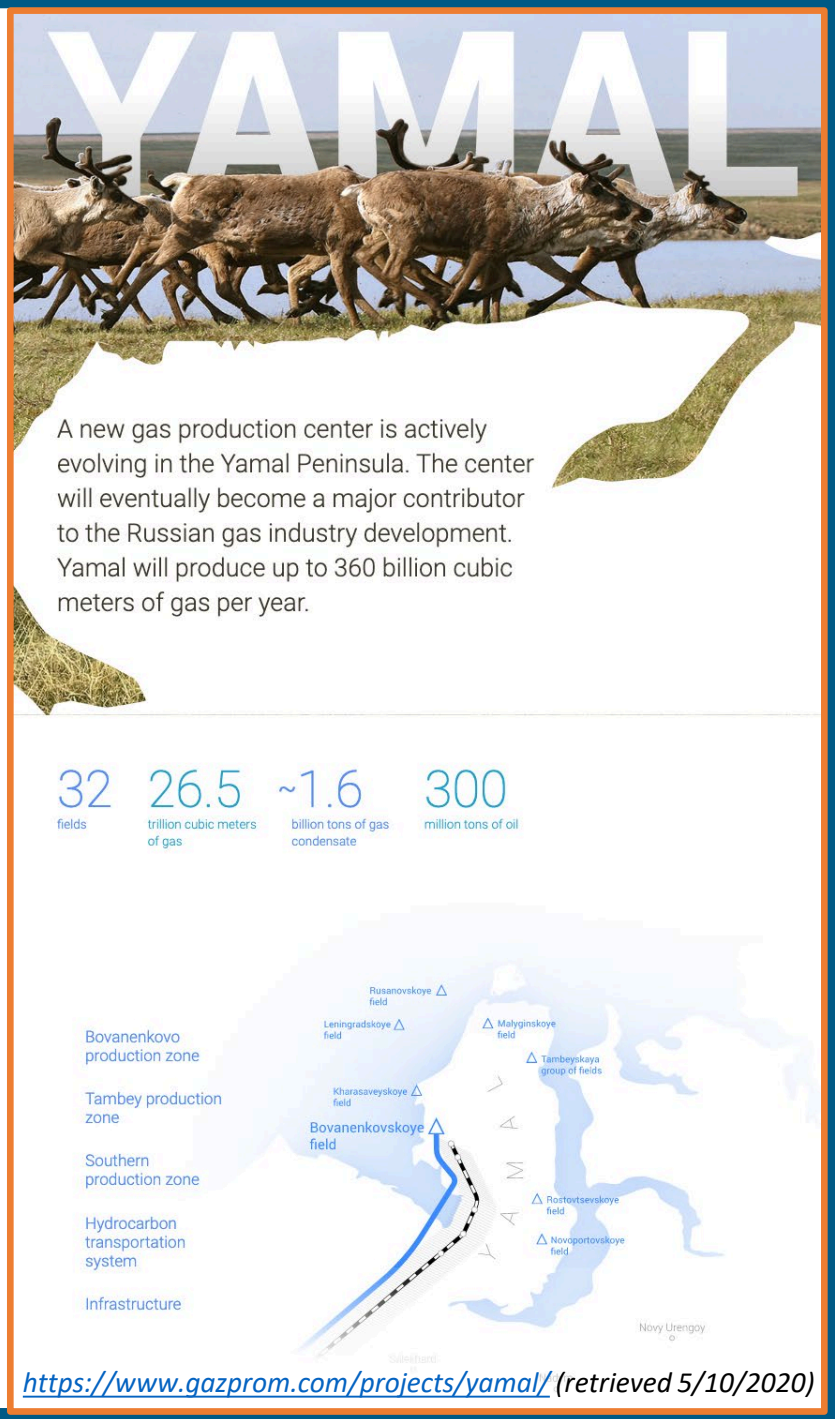
POLAR CODE AREA

THE REASON IS THE YAMAL MEGAPROJECT

Yamal will produce up to 360 billion cubic meters of gas per year.



www.astd.is



https://www.gazprom.com/projects/yamal/ (retrieved 5/10/2020)

LNG TANKERS IN 2019 SAILING TO THE YAMAL PENINSULA

NEXT STEPS

NEW ERA OF *SHIP FUELS*

STEP 1

2020

SULPHUR CAP

From 1 January 2020, the limit for sulphur in fuel oil used on board ships operating outside designated emission control areas is reduced to 0.50% m/m (mass by mass). This will significantly reduce the amount of sulphur oxides emanating from ships and should have major health and environmental benefits for the world, particularly for populations living close to ports and coasts.

STEP 2

2029

HFO BAN

The IMO's PPR 7 proposed a draft regulation which would phase out the use as fuel oil and carriage for use as fuel oil of HFO by ships in Arctic waters starting in 2024. According to the draft regulation, which has not yet been adopted, States would have the ability to temporarily waive the requirement for individual ships until 1 January 2029, provided they report the particulars to IMO.

STEP 3

2050

50% REDUCTION OF GHG

IMO has adopted an initial strategy on the reduction of greenhouse gas (GHG) emissions from ships, setting out a vision to reduce GHG emissions from international shipping and phase them out as soon as possible, and no later than 2050.

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ADDRESSING THE KNOWLEDGE GAP

1. Fuel used in the Arctic in 2020 (and beyond)
2. Behavior of low sulphur fuels in cold Arctic waters
    - which are designed to comply with the IMO's 2020 fuel sulphur limit

Joint PAME-EPPR project addressing both gaps

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EPPR EMERGENCY PREVENTION, PREPAREDNESS AND RESPONSE

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THANK YOU

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