

A study by Opportunity Green  
September 2023



# (Un)Sustainable from ship to shore

How the cruise industry is trying to  
gaslight the public into believing that  
LNG is a climate solution.



**OPPORTUNITY  
GREEN**

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How the cruise industry is trying to gaslight the public into believing that LNG is a climate solution. A study by Opportunity Green, with the support of the ClimateWorks Foundation.

September 2023

### About Opportunity Green

Opportunity Green is an NGO working to unlock the opportunities from tackling climate change using law, economics and policy. We do this by amplifying diverse voices, forging ambitious collaborations, and using legal innovation to motivate decision makers and achieve climate justice, with particular emphasis on the aviation and shipping industries.

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### Further information

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## 01 Executive Summary

Despite liquefied natural gas (fossil LNG) being widely touted as a 'climate-beneficial' shipping fuel, its use has devastating implications for the climate. And despite what cruise companies investing heavily in the fuel might like you to believe, fossil LNG is and will remain a polluting fossil fuel.

**Fossil LNG is not a fuel solution that is consistent with the 1.5 °C temperature goal as enshrined in the Paris Agreement.**

Fossil LNG consists predominantly of methane, an extremely potent greenhouse gas (GHG), which has climate impacts over 80 times greater than CO<sub>2</sub> over a 20-year period. The lifecycle emissions of fossil LNG are particularly worrying; not only does the production of fossil LNG result in significant GHG emissions across the supply chain before it reaches the ships as a fuel but burning it on the ships themselves results in significant amounts of unburned methane being released into the atmosphere.

Increasingly, cruise companies are investing in fossil LNG as a shipping fuel and new cruise ships which are coming into commission now – and which will often remain in service for 30 or more years – are often fossil LNG-ready or reliant. Not only this, but cruise companies are systemically advertising the uptake of fossil LNG to consumers as a positive step for the climate – when it is anything but.

We believe this to be greenwashing. 'Greenwashing' is the practice of making claims about a business' products, services, processes, brands or its operations as a whole, or omitting or hiding information, to give the impression they are less harmful or more beneficial to the environment than they are.

With this report, we call out the cruise industry's marketing of fossil LNG as a climate solution and demand that cruise companies stop misleading consumers.

**In our investigation of the cruise industry's advertising of the fossil gas, we identified three main communication strategies:**

- Advertising the use of fossil LNG as reducing emissions;
- Advertising fossil LNG as environmentally friendly; and
- Advertising the use of fossil LNG as a specific initiative of reaching net zero by 2050.

This report collated the cruise industry's advertising claims on fossil LNG and analysed these 'green' claims against the rules of the advertising code and 'soft law' guidance applicable in the United Kingdom (UK).

**We identified the following broad issues with cruise companies' advertising of fossil LNG:**

- Fossil LNG's climate benefits often appear to be exaggerated and advertised in a vague and general manner.
- Significant information, such as fugitive methane emissions, is omitted.
- Comparisons of fossil LNG with conventional fuels risk not being meaningful; and
- The use of fossil LNG is at times being portrayed as part of a toolbox of measures to reach net zero which appears to be inadequately substantiated or justified.

Our analysis suggests that certain cruise companies' advertising of fossil LNG may fall foul of the relevant standards in the UK.

**Opportunity Green issues the following recommendations:**

- Cruise companies should stop advertising fossil LNG as a climate solution which risks misleading consumers as to the true sustainability of their holiday.
- Cruise companies that have misleadingly advertised the climate benefits of fossil LNG should remove such advertisements.
- Cruise companies should stop investments into climate-damaging fossil LNG as a purported climate solution.
- Cruise companies should back their net zero pledges with credible transition plans which include investments into real zero emissions solutions supported by the best available science.



Screenshot taken from Carnival's 2022 Sustainability Report on 21 September 2023.

## 02 Introduction

In 2018, international shipping was responsible for approximately 3% of global emissions. Driven by the uptake of liquefied natural gas (fossil LNG) as a shipping fuel, methane emissions in shipping increased by 150% between 2012 and 2018.<sup>1</sup>

The cruise industry is taking part in this concerning trend. Methane emissions by cruise ships in European Exclusive Economic Zones increased fivefold between 2019 and 2022 due to the greater uptake of fossil LNG by cruise companies.<sup>2</sup> Cruise Lines International Association (CLIA), the world's largest cruise industry trade association, has recently announced that 61% of new build capacity would rely on fossil LNG fuel for primary propulsion. To this end, CLIA has endorsed fossil LNG as a transitional fuel to achieve net zero carbon cruising as part of its #SailingSustainably campaign, praising fossil LNG's alleged benefits for the climate.<sup>3</sup>

While absent from its marketing, the cruise industry is well known to be associated with a range of environmental as well as human health impacts, such as air, water and land pollution affecting fragile habitats, areas and species, and posing physical and mental human health risks, both to people on board and on land. The air pollution it causes, and specifically the high levels of GHG emissions caused by the burning of fuel, are of major concern.<sup>4</sup> As a reverse example of the huge pollution impact of cruise ships, Venice, Europe's most polluted cruise port in 2019, fell to number 41 on the list after banning large cruise ships in 2021.<sup>2</sup> Indeed, taking a cruise is even more carbon intensive than flying.<sup>5</sup>

Yet cruise companies are branding themselves and their activities as sustainable, in part by pointing to the uptake of fossil LNG. We believe this to be greenwashing.<sup>6</sup>

In this report, we pull back the curtain on the use of this polluting fossil fuel and unpack cruise companies' climate claims relating to fossil LNG. We first examined the concept, problem and scale of greenwashing, with a spotlight on the cruise industry. We then provided an overview of the science behind fossil LNG when used in shipping, and cruise ships specifically, in **section 3**, before collating the fossil LNG-related marketing communications by selected cruise companies in **section 4**. Next, we outlined the regulatory landscape governing green claims in the United Kingdom (UK) in **section 5**. In **section 6** we analysed this marketing against these rules. We concluded by setting out practical recommendations in **section 7**.

In terms of methodology, the initial selection of the cruise companies for this report is based on 2021 worldwide market share, using data from Cruise Market Watch.<sup>7</sup> Of the four major group company players on the cruise market, three are using and promoting fossil LNG in at least one of their brands (**table 1**).

*61% of new build capacity will rely on fossil LNG as primary propulsion.*

## The use and marketing of fossil LNG across the cruise industry

Table 1

|  | Parent companies and cruise lines         | Investing in fossil LNG | Marketing fossil LNG as green |
|--|---|-------------------------|-------------------------------|
|   | <b>Carnival Corporation &amp; plc</b>     | Yes                     | Yes                           |
|  | Carnival Cruise Line                      | Yes                     | Yes                           |
|  | AIDA Cruises                              | Yes                     | Yes                           |
|  | Costa Cruises                             | Yes                     | Yes                           |
|  | P&O Cruises (UK)                          | Yes                     | No <sup>1</sup>               |
|  | Princess Cruises                          | Yes                     | Yes                           |
|  | Cunard                                    | No                      | N/A                           |
|  | Holland America                           | No                      | N/A                           |
|  | P&O Cruises Australia                     | No                      | N/A                           |
| Seabourn   | No  | N/A                     |                               |
|   | <b>Royal Caribbean Group<sup>2</sup></b>  | Yes                     | Yes                           |
|  | Royal Caribbean International             | Yes                     | Yes                           |
|  | Silversea Cruises                         | Yes                     | Yes                           |
| <br>NORWEGIAN CRUISE LINE HOLDINGS LTD. | <b>Norwegian Cruise Line Holdings Ltd</b> | No                      | N/A                           |
|  | Norwegian Cruise Line                     | No                      | N/A                           |
|  | Oceania Cruises                           | No                      | N/A                           |
|  | Regent Seven Seas Cruises                 | No                      | N/A                           |
|   | <b>MSC Cruises</b>                        | Yes                     | Yes                           |

<sup>1</sup> During the study period, the cruise line took down its advertisements on fossil LNG.

<sup>2</sup> Only wholly owned cruise lines were investigated.

## 2.1

### What is greenwashing?

While there is no formal legal definition of greenwashing, it may be broadly defined as follows:

*“[Greenwashing] occurs where a business makes claims about its products, services, processes, brands or its operations as a whole, or omits or hides information, to give the impression they are less harmful or more beneficial to the environment than they really are.”*

Competition Markets Authority (CMA), 2021.

Green claims are genuine, on the other hand, when they adequately describe the environmental impact of the product, service, process, brand or business, and do not hide or misrepresent crucial information.<sup>8</sup>

In recent years, greenwashing practices have been on the rise. After performing a sweep of websites in 2021, the European Commission and national consumer authorities revealed that a staggering 42% of green claims were exaggerated, false or deceptive.<sup>9</sup>

Additionally, greenwashing strategies have become more and more sophisticated.<sup>10</sup> For instance, an analysis of fossil fuel companies' posts on natural gas has revealed that communication strategies often group together natural gas and renewables, messaging which contributes to rationalising the development of natural gas and perpetuating fossil fuel reliance.<sup>11</sup>

The analysis also identified other strategies such as the representation of natural gas as helping to deliver a cleaner future and the role of natural gas in emissions reduction. As will be shown in this report, the cruise industry appears to use very similar tactics to the oil and gas industry to try to justify and promote investments in fossil LNG.<sup>11</sup>

## 2.2

### Why would greenwashing by the cruise industry be problematic?

Companies have a key role in mitigating the climate crisis; be it through their own net zero commitments, decisions to invest in new energy technologies and energy-efficient measures or engaging with consumers through marketing. To this end, the International Panel on Climate Change (IPCC) noted how a number of corporations have instead tried to hinder climate action through lobbying and media strategies. The scientific body further noted that corporate advertising strategies have sought to deflect corporate responsibility and appropriate the emotional power of climate change for the benefit of their own brand building. Considering these findings, the IPCC noted that the regulation of advertisement can help shift development pathways in a positive direction.<sup>12</sup>

Greenwashing thus enables companies to avoid scrutiny and responsibility by spreading false or misleading information. It causes consumer and investor confusion and further undermines genuine sustainability efforts. Ultimately, greenwashing helps companies to continue with business-as-usual behind a smokescreen of perceived climate action and hinders the uptake of the necessary and crucial changes to address the climate emergency.



## 2.2

### Why would greenwashing by the cruise industry be problematic? cont.

If the consumer-facing cruise industry was greenwashing the climate benefits of fossil LNG, this would be particularly concerning. This is because consumers might not know that LNG is a fossil fuel and are likely to connotate 'natural gas' positively; research has shown that different names for 'natural gas' influence its public perception.<sup>13</sup> In fact, we should be clear that this positive perception is itself an advertising coup by the oil and gas industry, who have over the years developed various messaging strategies to try to lock in a continued fossil gas downstream market by making it and its use more palatable to consumers.<sup>14</sup>

Ultimately, consumer choices have a strong influence on the investment decisions and changes that the cruise industry is, and will be, making. But those consumer choices are in turn influenced by how the industry markets its sustainability efforts (or lack thereof). Cruise Critic Data from 2021 showed that environmentally friendly cruise line policies and protocols mattered to 77% of the respondents. Additionally, over a third of the survey participants said they had become increasingly aware of cruise lines' sustainability initiatives.<sup>15</sup> Consumers are not only being exposed to these marketing messages, but they are taking them in and may well be considering them as a factor in their purchasing decisions.

As a new generation of holidaymakers starts to think about taking a cruise – many of whom are young families who have grown up against a backdrop of climate change and who are increasingly conscious of the necessity of climate action – 'sustainability' is an increasingly powerful marketing tool.<sup>16</sup> 'Sustainability' sells.

*Cruise Critic Data from 2021 showed that environmentally friendly cruise line policies and protocols mattered to 77% of the respondents.*

*Additionally, over a third of the survey participants said they had become increasingly aware of cruise lines' sustainability initiatives.*

## 03

### LNG: Just another dirty fossil fuel

On the face of it, fossil LNG appears to have three main benefits when compared to conventional marine fuels. However, from a climate perspective, the full lifecycle methane emissions associated with the use of fossil LNG as a shipping fuel are a disaster.

Firstly, fossil LNG is typically considered to be less expensive than conventional marine fuels,<sup>17</sup> although geopolitical instabilities have led to skyrocketing prices since the Russian invasion of Ukraine.<sup>18</sup> Secondly, the use of fossil LNG as a marine fuel decreases levels of sulphur oxide and nitrogen oxide emissions from ships, and makes it easier to comply with stricter air pollution regulations.<sup>17</sup> Thirdly, fossil LNG has a lower amount of carbon per unit of energy when compared to conventional marine fuels, which means that burning it on ships emits less carbon dioxide.<sup>17</sup>

However, there are other GHGs to consider. Fossil LNG consists primarily of methane, a GHG that is up to 83 times more potent than CO<sub>2</sub> over a 20-year period and up to 30 times more potent over a 100-year period.<sup>19</sup> The high supply chain emissions of fossil LNG, driven by methane leaking into the atmosphere throughout extraction, processing and transport ('well-to-tank' (WtT) emissions), as well as the emission of unburned methane during combustion (known as methane slip) can even lead to overall increased lifecycle GHG emissions ('well-to-wake' (WtW) emissions) compared to conventional fuels.<sup>17</sup>

Various studies examine the climate implications of using fossil LNG as a marine fuel; however, at best, the fuel's climate benefits in terms of lifecycle GHG emissions remain contentious.<sup>20</sup> In a seminal study from 2020, Dr. Elizabeth Lindstad and Agathe Riolland concluded that the use of fossil LNG in cruise ships will increase the sector's GHG emissions compared to conventional fuels. Assessed against a timeline of 20 years (GWP-20), the researchers observed that the use of fossil LNG in cruise ships increases GHG emissions by 35–53% compared to existing diesel options; assessed against a time period of 100 years the increase ranges from 2–10%.<sup>21</sup>

This stands in stark contrast to the IPCC's call to reduce global methane emissions by a third by 2030 relative to 2019 levels to comply with the 1.5 °C temperature limit.<sup>22</sup> It is also inconsistent with the Global Methane Pledge, launched in 2021, which calls for methane emissions reductions by 30% between 2020 and 2030.<sup>23</sup>

*Fossil LNG consists primarily of methane, a GHG that is up to 83 times more potent than CO<sub>2</sub> over a 20-year period and up to 30 times more potent over a 100-year period.*

## In considering fossil LNG's supposed 'climate benefits' in shipping, several factors should be taken into account.

### The shorter-term global warming potential

While GWP-100 is the widely accepted global standard to estimate the environmental impact of methane and other emissions, research has shown that using the GWP-100 metric may not be appropriate for evaluating methane's true impact on the climate crisis, which is extremely powerful in the short-term.<sup>24</sup> If we are still to have a chance at limiting global warming to 1.5 °C, as required by the Paris Agreement, we need to immediately redirect all our efforts to avoid crossing dangerous tipping points in the next few years;<sup>25</sup> the powerful short-term effect of methane directly contradicts this need.

When evaluating fossil LNG's climate impacts in shipping with a view to meeting climate goals for 2050, the World Bank accordingly noted that 'this shorter term (20-year) warming effect of methane appears as important as its long-term influence (100-year)'.<sup>20</sup> The International Maritime Organization (IMO), shipping's global regulator, has used GWP-20 as a comparator in its 4th GHG Study.<sup>1</sup> The reality is, whatever the current technical global standard, the short-term effects and impact of methane on the climate crisis matters to society. We therefore believe that the metric of GWP-20 is better suited to adequately reflect the adverse climate implications of methane.

### Lifecycle GHG emissions

What is more, fuels release emissions at different stages of their lifecycle, including production, refinement and transportation, and not only at the point of use in a ship's engine.<sup>26</sup>

In the case of fossil LNG, methane leaks and slips into the atmosphere across the full lifecycle – with drastic climate implications.<sup>17</sup> To understand the true climate impacts of using fossil LNG as a marine fuel, it is therefore essential to account for the full lifecycle emissions (WtW) and not just the 'tank-to-wake' (TtW; downstream) emissions.

### Methane slip

When using fossil LNG as a fuel in shipping, methane slip is of particular concern. For engines used in cruise ships (LPDF 4-stroke engines), the European Union estimates methane slip of 3.1%,<sup>27</sup> the IMO estimates methane slip of 3.5%.<sup>1</sup> Further, researchers have noted that methane slip on ships in operation is higher than in a test bed at the laboratory.<sup>21</sup> For example, recent research has measured methane slip of up to 8% (dependent on engine load and speed).<sup>28</sup>

At times, the cruise industry has referred to a 2021 study from Sphera to point out lifecycle GHG benefits associated with the use of fossil LNG as primary propulsion. However, that study estimates methane slip of 2.6% for the type of engines that cruise ships use.<sup>29</sup>

While research into potential mitigation technologies is under way to tackle the methane slip issue,<sup>30</sup> there are currently no proven and commercially available means to eliminate methane slip on the market. As such, we believe it is irresponsible to make ostensibly climate-motivated investments in fossil LNG on the assumption that such a solution may be available at some point in the future.

### Methane slip cont.

Any such solution has no time frame for delivery and no guaranteed effectiveness; in the meantime, the investment in and the use of fossil LNG a shipping fuel, and the inevitability of methane slip, constitutes a live and major issue and contributes to locking in fossil fuels for decades to come. The marketing of projected GHG emissions reductions based on non-existent technologies is a dangerous distraction from the urgent need to advance real solutions to reach zero emissions.

### The best available science

The IPCC itself has stressed that natural gas-based fuels are inadequate to meet the decarbonization goals for shipping.<sup>12</sup> In the same vein, the UK Climate Change Committee (CCC) has highlighted the urgency of using zero-carbon ammonia to displace fossil marine fuels, including fossil LNG.<sup>31</sup>

Ultimately, the World Bank concluded in a peer-reviewed report from 2021 that fossil LNG's role in the transition toward low- and zero-carbon shipping was likely limited and warned that 'there are significant risks that speak against LNG as a transitional fuel.'<sup>20</sup>

Some cruise companies suggest that fossil LNG infrastructure could be used with liquefied biomethane and liquefied synthetic methane. But this approach hinges on the availability of bio-LNG or liquefied biomethane; of which, truly sustainable production sources are limited. Additionally, there are competing demands for these biofuels from other sectors.<sup>20</sup> The UK CCC has thus excluded the use of biofuels and also pointed out that when used in shipping they achieve lower GHG savings compared to uses in other sectors.<sup>31</sup> Moreover, the problem of methane slip remains even with the use of biofuels.<sup>32</sup>

*"[T]here are **significant risks** that speak against LNG as a transitional fuel."* World Bank, 2021.

#### Box 1: Maersk – investing in green solutions

There are positive examples of shipping companies that refrain from using fossil LNG as a transitional fuel and are showing climate leadership. Maersk, one of the world's largest container shipping companies, has stated:

*"We prefer not to invest in transitional fuels, including liquified natural gas (LNG), and instead **leapfrog directly to fuels such as green methanol** that are available now and have significantly larger greenhouse gas reduction potential and the possibility of being climate neutral on a lifecycle basis."*<sup>33</sup>

## 04

### Company spotlight and promotional messaging

In this section we collated the various companies' fossil LNG-related advertising claims. When researching these claims, we identified three main communication strategies used by cruise companies concerning the use of fossil LNG as a shipping fuel (for our analysis see section 6).

For our company spotlight, we reviewed the companies' full websites, including their sustainability pages, which in turn often have several sub-pages. We also reviewed the companies' YouTube, Facebook and X (formerly known as Twitter) pages (since their social media pages were created, up to 31 August 2023), as social media is a key advertising platform. We primarily used the search function on each of the social media sites, using the keyword 'LNG'. We did not assess Instagram pages, as that platform does not offer a search function. Screenshots of all claims (including full quotes) are contained in a separate annex to this report. Where directly quoted, the text is replicated verbatim from the original source. Any emphasis in the text is the company's own.

Where publicly available, we also examined the cruise companies' sustainability reports to better understand the context of these claims. As will be shown below, in some cases the information contained in these reports differed from the content of the advertising claims.

Our report exclusively focuses on the use of fossil LNG as a shipping fuel and the marketing of it as a climate solution. We therefore only included advertising statements which relate to fossil LNG. Our report does not assess other sustainability efforts that companies mentioned in this report may be making, nor does it argue that the companies do not take other steps to address the climate crisis. Further information about any such measures is publicly available on the relevant company websites.

Prior to the publication of this report, we wrote to all 10 companies, enclosing a draft of an earlier version of the report with a request for comment. We received responses from Carnival Corporation & plc, on behalf of all group companies, as well as MSC Cruises. We did not receive any response from either of the Royal Caribbean Group companies.

We considered their responses to the earlier draft throughout this updated version of the report.

In summary, the issues raised by Carnival Corporation & plc broadly were:

- The use of fossil LNG in ships is one of several steps that the group is taking to achieve its 2030 climate goal.
- Fossil LNG is the lowest emission fuel that is available for the maritime industry.
- GWP-100 is the widely accepted global standard to measure the impact of methane.

The group insists that it has not engaged in greenwashing, and its statements are accurate, truthful, substantiated and aligned with its environmental strategy.

In summary, the issues raised by MSC Cruises broadly were:

- The 100-year GWP is appropriate when assessing methane impact of shipping.
- The price of fossil LNG is significantly higher than other conventional fuels.
- Fossil LNG is a transitional fuel and the cleanest fossil fuel available at scale today.
- Fossil LNG achieves CO<sub>2</sub> emissions savings of 25% compared to conventional fuels and up to a 20% reduction in GHG emissions on a CO<sub>2</sub>e basis. It also has local air quality benefits.
- Methane slip has been dramatically reduced in the last 10 years and will continue to be significantly reduced if not eliminated.
- In the meantime, MSC Cruises' engines always maintain engine loads well above 50% which is relevant to minimise the methane slip.
- MSC Cruises will continue to be involved in research projects addressing the methane slip issue.

The company insists that it has not engaged in greenwashing and is not misleading customers and that it is adhering to applicable legal and regulatory requirements.

## 4.1 Carnival Corporation & plc

### About

Carnival Corporation & plc (Carnival) is the largest global cruise company and among the largest leisure travel companies with a portfolio of nine cruise lines. Carnival's vision is to 'lead the way in innovative and sustainable cruising to deliver memorable vacations and build borderless connections'.<sup>34</sup>

A key focus of Carnival's sustainability efforts is climate action, which includes the company's commitment to reducing carbon emissions and their aspiration to achieve net carbon-neutral operations in support of the Paris Agreement global temperature limit.<sup>35</sup>

Carnival's decarbonization strategy comprises four components, namely, fleet optimization, energy efficiency, itinerary efficiency, and new technologies and alternative fuels, including fossil LNG. In fact, one of Carnival's 2030 Goals for Climate Action is to expand its fossil LNG programme.

To this end, Carnival has eleven fossil LNG-powered cruise ships that are expected to join the fleet through 2025, including eight ships already in operation as of December 2022.<sup>35</sup>

Carnival, however, also states that due to the high price of fossil LNG in certain markets, at times it uses conventional marine fuels to power its fossil LNG-capable ships. Carnival further acknowledges that the types of engines that it uses are subject to 'small amounts of methane slip'.<sup>35</sup>

In the search for solutions for the methane slip issue, Carnival is collaborating with other stakeholders. Carnival is also piloting the use of biofuel to ultimately replace fossil fuels.<sup>35</sup>

**CARNIVAL CORPORATION & PLC**  
Sustainability

**WE ARE FOCUSED ON DECARBONIZATION**

**We aspire to achieve NET CARBON NEUTRAL Ship Operations by 2050**

**FLEET optimization**  
Delivering larger, more-efficient ships as part of our ongoing newbuild program, replacing some of the existing ships in our fleet.

**ENERGY efficiency**  
Improving the existing fleet's energy efficiency through investment in projects such as service power packages and air lubrication systems and expanding shore power capabilities.

**ITINERARY efficiency**  
Designing more energy-efficient itineraries and focusing on operational execution and investing in port and destination projects in strategic locations to support these efforts.

**NEW TECHNOLOGIES and ALTERNATIVE fuels**  
Investing in a first-of-its-kind lithium-ion battery storage system, testing fuel cells powered by hydrogen derived from methanol and exploring carbon capture and storage. We are also supporting the adaptation of alternative fuels including LNG and other bio and synthetic hydrogen-derived fuels.

AIDA Carnival Costa CUNARD Holland America Line P&O ARABIA P&O CRUISES PRINCESS CRUISES SEABOURN

Screenshot taken from Carnival's 'We Are Focused on Decarbonization' sub-page on 21 September 2023.

## 4.1

### Carnival Corporation & plc cont.

#### About cont.

In terms of emissions reporting, Carnival explains in its sustainability report that it reports emissions, including methane slip, as part of the company's total carbon emissions (reported as CO<sub>2</sub>e) exclusively based on GWP-100 and measured solely on a TtW basis.<sup>35</sup>

#### 'Sustainable from Ship to Shore'

Carnival advertises its environment-related sustainability efforts throughout sub-pages of its sustainability website. This includes sub-pages on its focus areas,<sup>36</sup> its 2030 goals and 2050 aspirations,<sup>37</sup> and its focus on decarbonization.<sup>38</sup> Its decarbonization sub-page invites consumers to read about alternative fuels which is another sub-page.<sup>39</sup>


The sub-page on alternative fuels is mostly dedicated to advertising the introduction of new fossil LNG-powered ships as part of its efforts to reduce its carbon footprint and in support of its climate goals.

A video titled 'LNG Powers The Fun' is prominently featured at the top of the page which advertises fossil LNG broadly as follows:

- The introduction of fossil LNG-powered ships as being part of their 'eco-friendly green cruising initiative';
- Fossil LNG as being more environmentally friendly than other fuels;
- Fossil LNG as being among the cleanest fuels in the world, by significantly reducing emissions with cleaner exhaust;
- Fossil LNG as contributing to reducing emissions and exceeding their 'goals';
- Fossil LNG as reducing their environmental footprint as part of their company-wide commitment to preserving and protecting water, air and land resources.

### We support the adaptation of alternative fuels,

including liquefied natural gas (LNG) and other bio and synthetic hydrogen-derived fuels. We are proud to have led the cruise industry's use of LNG as an alternative fuel source, with eight LNG powered cruise ships currently in our fleet. As we strive to achieve our 2030 goals and 2050 decarbonization aspirations, the availability and effective adoption of alternative fuels, which have a lower CO<sub>2</sub> profile, could impact our organization. That's why our most recent efforts include successfully piloting the use of biofuels, partnering with one of the world's leading methanol producers and introducing new LNG ships to our fleet.



**Biofuels**

During 2022, we piloted the use of biofuel as a replacement for fossil fuel on two of our ships....

**Other Fuels**

Through our key partnerships and Classification Societies, we are also assessing methanol, bio-LNG....

**LNG**

As part of our plan for carbon footprint reduction, we have 11 LNG powered cruise ships that are...  
→

Screenshot taken from Carnival's 'Alternative Fuels' sub-page on 21 September 2023.



### 4.1.1 Carnival Cruise Line

#### About

Carnival Cruise Line, also dubbed ‘America’s Cruise Line’, is part of the Carnival family.

The cruise line shares a common vision with its parent company which is described on its website as ‘the global leader in the cruise industry, leading the way in innovative and sustainable cruising to deliver memorable vacations and build borderless connections’.<sup>40</sup>

Carnival Cruise Line has three fossil LNG-powered cruise ships, either already in operation or to be introduced. To find out more about sustainability efforts, the cruise line links to its parent company’s documents and reports (see **section 4.1**).

#### ‘LNG powers the fun’

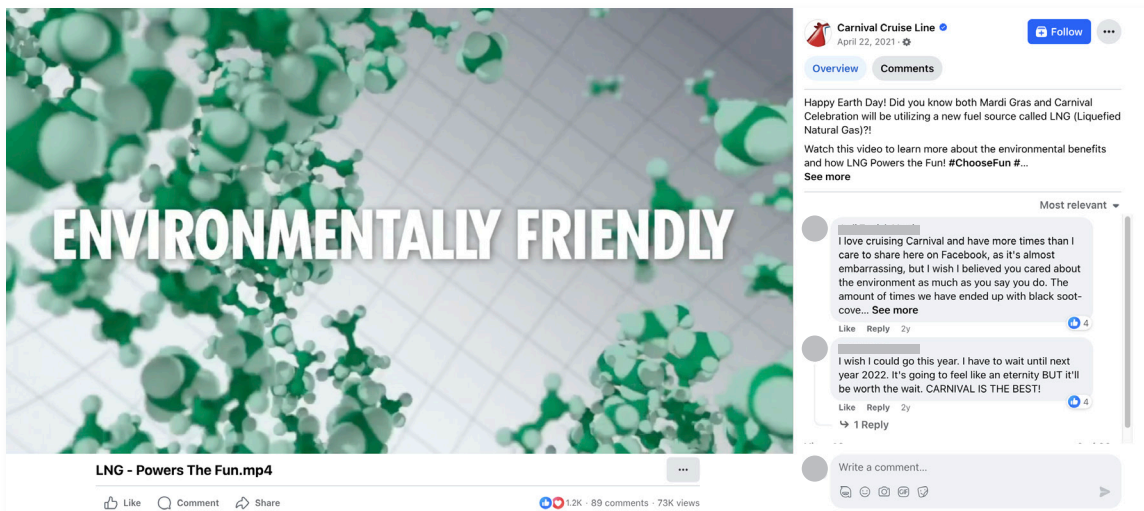
Carnival Cruise Line advertises the ‘environmental features’ of its fossil LNG-powered ships. For instance, the ship *Carnival Jubilee* is advertised as ‘next-level fun, powered by LNG’, with the onboard activities being advertised as ‘powered by clean-burning LNG fuel’.<sup>41</sup>

Similarly, the ship *Carnival Celebration* is advertised as ‘great fun together, all powered by LNG’. After listing the ship’s various features, the ship description says: ‘Perhaps best of all, all the fun you’ll have on Carnival Celebration is powered by clean LNG!’<sup>42</sup>

The sub-page on the ship *Mardi Gras* features the video ‘LNG Powers the Fun’ (see **section 4.1**).<sup>43</sup> A holiday on the ship is advertised as follows:

‘All the vacation fun you’re looking forward to on Mardi Gras will be powered by Liquefied Natural Gas (LNG), one of the cleanest fuels in the world. Watch this video to learn more about how Carnival is leading the way in eco-friendly cruising with the first LNG-powered cruise ship in North America!’

Carnival Cruise Line posted the same video in its Facebook page in 2021, wishing consumers a ‘Happy Earth Day’.<sup>44</sup>



Screenshot taken from Carnival Cruise Line’s Facebook page on 21 September 2023.

## 4.1.2 AIDA Cruises

### About\*

AIDA Cruises is described as the market leader in the German-speaking cruise market. The cruise line, which is part of the Carnival family, states that environmental protection is one of its top priorities.<sup>45</sup>

Together with the Carnival family, AIDA Cruises set the goal to reduce carbon intensity by 20% by 2030 compared to 2019 levels and aspires to reach climate neutral ship operations by 2050.<sup>46</sup>

In its 'Green Cruising Strategy', AIDA Cruises describes a variety of steps it is taking in furtherance of its climate goals and aspirations. Next to investing in shore power, fuel cells and batteries, the cruise line lists fossil LNG as a specific initiative.<sup>46</sup>

AIDA Cruises describes the fuel as a 'bridge into the future' and attributes the fuel an important role in the maritime energy transition. To this end, it has two fossil LNG-capable cruise ships.<sup>46</sup>

The latest sustainability report (for the financial years 2020/2021) makes no mention of methane emissions.

### 'Green Cruising'

On AIDA Cruises' sub-page on its fleet, the two ships *AIDAcosma* and *AIDAnova* are prominently advertised as their most modern cruise ships which can be completely powered by 'low-emission' fossil LNG.<sup>47</sup>

Additionally, fossil LNG is advertised throughout AIDA Cruises' several sustainability sub-pages. The main sustainability page, titled 'Our Course: Green Cruising' states AIDA Cruises' clear commitment to the United Nations and European Union climate goals and reaffirms the long-term goal of the climate neutral cruise. Further, under the header 'Mission: Zero Emission', AIDA Cruises advertises *AIDAnova* and *AIDAcosma* as its two cruise ships which can be operated with low-emission fossil LNG.<sup>48</sup>

A separate sustainability sub-page titled 'Bridge to the Future: liquefied gas LNG' encourages consumers to learn more about the fossil gas.<sup>49</sup> Several statements on fossil LNG are made:

- Liquefied natural gas is low and/or lower emission;
- Even though LNG is of fossil origin, it has an important role in the maritime energy transition;
- By using fossil LNG as a shipping fuel, local emissions of particulate matter and sulphur oxides are almost completely avoided and emissions of nitrogen oxides and carbon dioxide are significantly reduced;
- The use of fossil LNG is only an intermediate step for AIDA, as the contribution of the fossil gas to GHG emissions reduction is limited.

The sub-page lacks any mention of methane emissions linked to the use of fossil LNG in cruise ships.

\* All statements have been translated from German into English by a native speaker.

#### 4.1.2

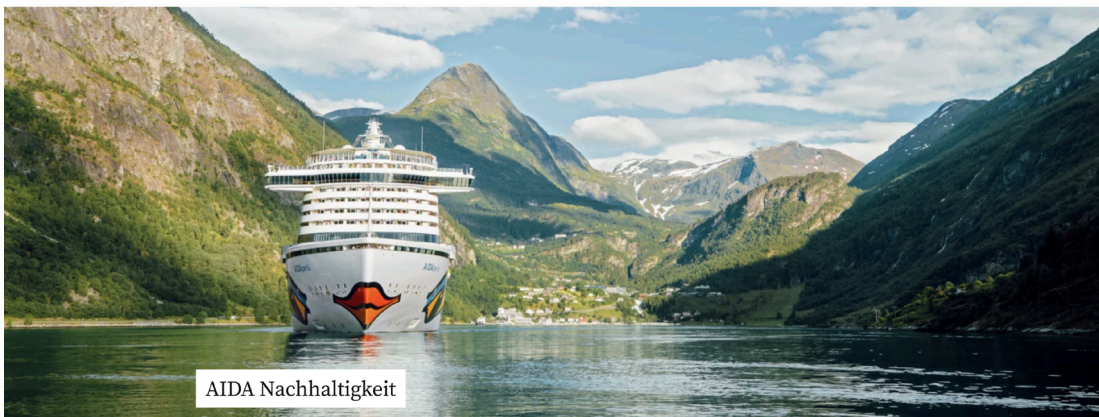
#### AIDA Cruises cont.

#### 'Green Cruising' cont.

This sub-page also features a video titled 'LNG Propulsion', also available on YouTube.<sup>50</sup> The video includes the claim that LNG is the cleanest fossil fuel in the world.

AIDA Cruises has also been promoting fossil LNG on its Facebook account. For example, on 8 May 2023, AIDA Cruises made a Facebook post where it promoted the fuel as follows:

- '#AIDAnova could be refuelled with low-emission liquefied natural gas for the first time in #Kiel on Saturday. [ship emoji; wave emoji] The @ Seehafen Kiel GmbH & Co. KG is the first German port to make it possible to supply cruise ships with #LNG. You can marvel at our kissing beauty in Kiel every Saturday until October. [kiss emoji] Can you visit her this season?'



AIDA Nachhaltigkeit

#### Unser Kurs: Green Cruising

Die Liebe zum Meer ist tief in unserer DNA verankert und unser Antrieb in eine nachhaltige Zukunft. Bereits seit vielen Jahren arbeiten wir am Schutz der marinen Ökosysteme, einem sparsamen Umgang mit Ressourcen und an neuen, emissionsneutralen Antriebstechnologien – denn wir bekennen uns klar zu den Klimazielen der UN und der Europäischen Union. Dieser Kurs macht uns zum Vorreiter in der Kreuzfahrtbranche. Wir arbeiten mit unserer ganzen Innovationskraft an unserem langfristigen Ziel: der klimaneutralen Kreuzfahrt.

Screenshot taken from AIDA Cruises' sustainability sub-page on 21 September 2023.

### 4.1.3 Costa Cruises

#### About

The Italian cruise company Costa Cruises is a 'world leader in the industry'. The cruise line, part of the Carnival family, is headquartered in Italy and operates at a global level. According to the cruise line, sustainability is an integral part of its culture.<sup>51</sup>

One of Costa Cruises' key priorities is climate neutrality. In a letter addressed to stakeholders, the company's president, Mario Zanetti, states:<sup>52</sup>

'The delivery in December of *Costa Toscana*, our new flagship and second Costa LNG-powered ship, is a magnificent example of the ability of Costa's innovation ecosystem to generate progress, pioneering LNG within the cruise sector as we aspire to be carbon neutral by 2050.'

Costa Cruises has two fossil LNG-powered ships, which it describes as promoting 'sustainability and innovation' in its 2021 Sustainability Report. The report further states:<sup>52</sup>

'Designed to be a real travelling "smart city", where sustainable solutions and circular economy concepts are applied to reduce environmental impact.'

The report makes no mention of methane emissions.

#### 'The Good Power of Travel'

Consumers interested in finding out what responsible cruising with Costa Cruises might look like, can click on 'Costa Experience' and 'Sustainability':<sup>53</sup>

- 'Choosing a Costa cruise means experiencing a **holiday that respects the environment** and local communities that you'll meet every day in the destinations we explore.'
- 'What does it mean to be a **responsible explorer**? It means discovering new destinations in harmony with our surroundings, really getting to know the communities that live there, helping us to build a more equitable future for coming generations.'

For Costa Cruises, protecting the sea is a priority. One of their initiatives to achieve that, is fossil LNG-fuelled ships which the cruise line advertises as follows:<sup>53</sup>

- 'For *Costa Smeralda* and *Costa Toscana* we have chosen the **most innovative propulsion system in the cruise industry**.'
- 'Liquefied natural gas (or LNG) is in fact the most advanced technology currently available, to guarantee the best environmental performance, reducing emissions.'

Consumers are also invited to learn more about Costa's fleet. *Costa Toscana*'s many features, including fossil LNG, are promoted as follows:

- 'And that's not all – *Costa Toscana* **keeps the environment in mind**, and has new LNG propulsion engines for increasingly **sustainable travelling**.'

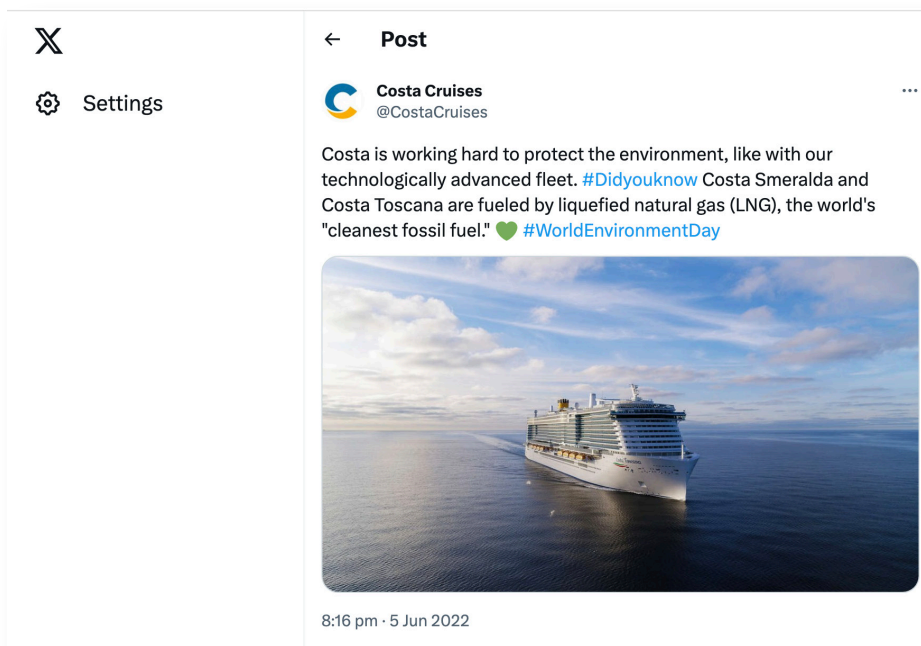
### 4.1.3

#### Costa Cruises cont.

##### 'The Good Power of Travel' cont.

In the past few years, Costa Cruises also promoted fossil LNG's supposed climate benefits in a range of posts on its Facebook and X accounts (see annex). Examples include:

- 'Costa celebrates #EarthDay everyday with sustainability initiatives from differentiated waste collection & less plastic to technologically advanced LNG fueled ships. [...]' (Post on 22 April 2022)<sup>54</sup>
- '[...] Costa is already practicing sustainable travel thanks to the newest addition to our fleet, Costa Smeralda. This innovative ship uses Liquefied Natural Gas (LNG) to reduce gas emissions and help protect the planet.' (Post on 15 October 2020)<sup>55</sup>
- '[...] The ship is the first in our fleet to be powered by LNG, the cleanest fossil fuel in the world, serving as a testament to our respect for the environment & sea. [...]' (Post on 10 December 2019)<sup>56</sup>
- '[...] Meeting the desires of a booming #cruise market, while also working to protect our environment! To address this challenge, our newest ship, Costa Smeralda will use Liquefied Natural Gas (LNG) to reduce gas emissions and help protect the planet.' (Post on 18 July 2019)<sup>57</sup>
- 'Here at Costa, helping protect the environment and the sea is one of our priorities. And we do it with solutions that are as innovative as they are practical: Costa Smeralda, the ship we're building, will be powered by liquid natural gas (LNG), the greenest fuel in the world. Happy World's Ocean Day.' (Facebook post on 8 June 2018)



Screenshot taken from Costa Cruises' X account on 21 September 2023.

#### 4.1.4

### P&O Cruises

#### About

P&O Cruises (UK), dubbed ‘Britain’s favourite cruise line’, is a British cruise line and part of the Carnival family. To date, P&O Cruises has two fossil LNG-powered cruise ships. To learn more about the cruise line’s sustainability commitments, P&O Cruises refers to its parent company’s documents.

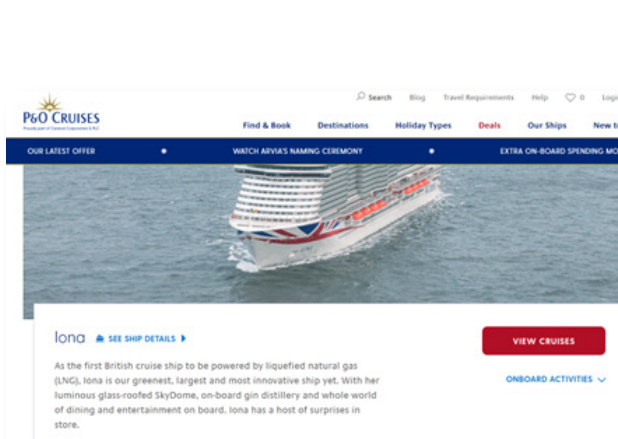
Earlier this year, a report by environmental NGO Transport & Environment found that P&O Cruises’ LNG-powered ship *Iona* emitted as much methane as 10,500 cows over a year.<sup>2</sup>

During the course of our investigation into potential greenwashing of fossil LNG by the cruise industry, Opportunity Green reached out to the cruise line with a draft of an earlier version of this report. While the cruise line disagreed with the findings of the draft report, we noted that P&O Cruises in the meantime took down their advertisements.\*

It is important to note that there is room for further improvements, as P&O Cruises’ ships still run on fossil LNG. We therefore hope that taking down the advertisements is just one of many steps that P&O Cruises will take to address its climate impacts.

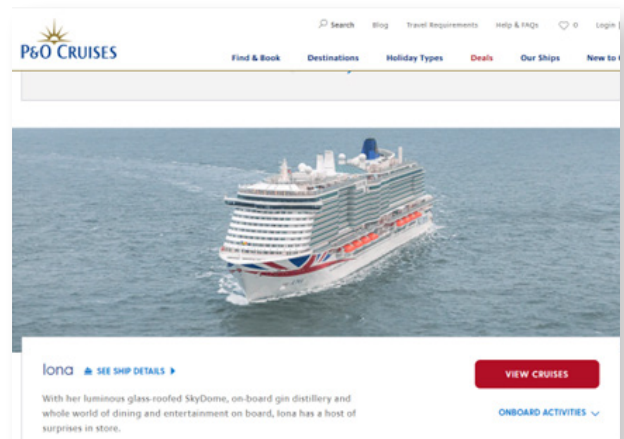
*“We welcome this promising development which shows that **responsible advertising** is feasible.”*

#### Before



Screenshot taken from P&O Cruises’ ‘Ships’ sub-page on its website on 23 March 2023.

#### After



Screenshot taken from P&O Cruises’ ‘Ships’ sub-page on its website on 26 August 2023.

\* Carnival Corporation & plc responded on behalf of P&O Cruises.

### 4.1.5 Princess Cruises

#### About

Princess Cruises is one of the world’s leading international cruise lines. It has two fossil LNG-capable ships.

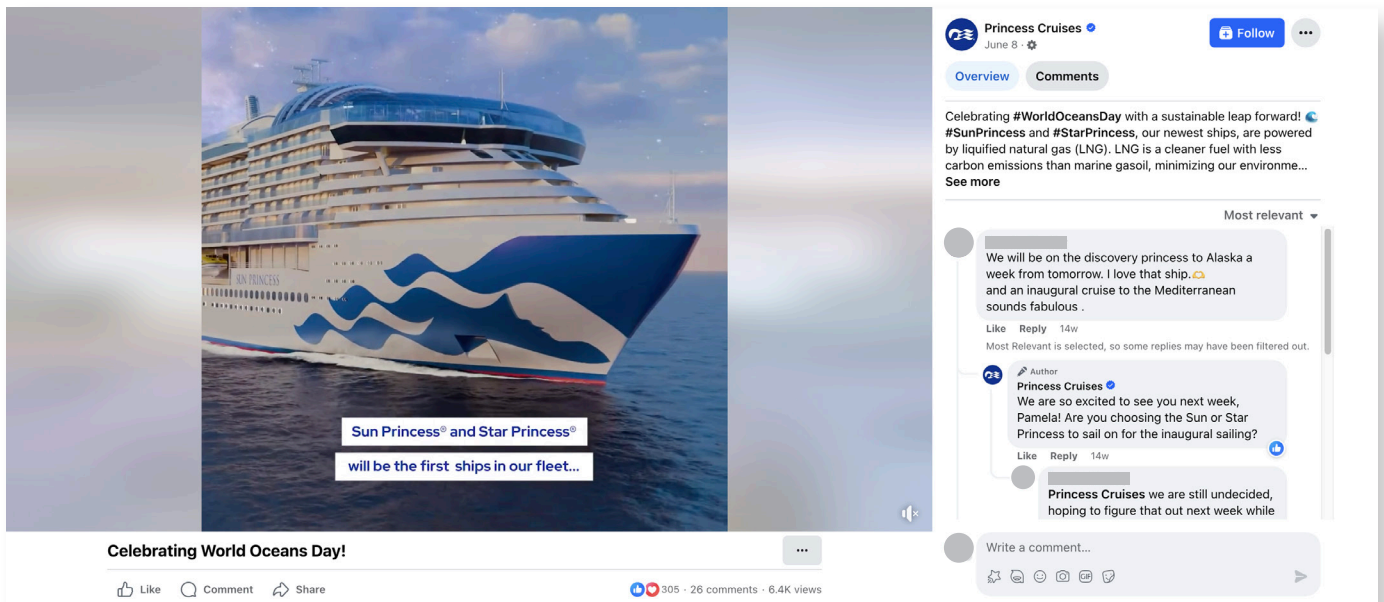
We were not able to find up-to-date information on this specific cruise line’s sustainability efforts as its last report dates from 2019.

#### A sustainable leap forward

For World Oceans Day 2023, Princess Cruises distributed a video which advertised fossil LNG’s climate benefits on its Facebook<sup>58</sup> and X<sup>59</sup> accounts.

The posts contained several statements, included in the header of the post and/or in the video itself:

- ‘LNG is a cleaner fuel with less carbon emissions than marine gasoil, minimizing our environmental footprint.’
- ‘It’s part of our commitment toward a brighter future, honoring the integrity of the oceans we sail, places we visit, and lives we touch.’
- ‘We will continue working toward our carbon reduction sustainability goals through innovative decarbonization projects and technological upgrades to save energy and reduce fuel consumption.’
- ‘Welcome to the next generation of sustainable cruising.’



Screenshot taken from Princess Cruises’ Facebook account on 21 September 2023.

## 4.2 Royal Caribbean Group

### About

Royal Caribbean Group is one of the world's leading cruise companies. The group wholly owns and operates several global cruise brands. It also owns a joint venture by 50% that operates TUI Cruises and Hapag-Lloyd Cruises.<sup>60</sup>

One of the company's operating strategies, as stated in its Annual Report 2022, is to 'protect the environment in which [the group's] vessels and organization operate, with a focus on decarbonization'. Amongst other things, this includes the group's 'Destination Net Zero' strategy.<sup>60</sup>

The strategy comprises three goals:

- By 2025, reduce carbon intensity by double digits from 2019 baseline;
- By 2035, deliver a net zero cruise ship by 2035; and
- By 2050, achieve net zero emissions.

The carbon reduction roadmap to realise these goals focuses on four main areas:

- Advancements in energy and fuel efficiency;
- The development of low-carbon fuels and sustainable technologies;
- The pursuit of alternative energy sources; and
- Supplier engagement to shift to low-carbon processes.

The latest sustainability report states that progress is being made on the group's plan to deliver new ships powered by a range of sustainable power sources such as dual-fuel (fossil) LNG engines, hydrogen-based fuel cells and battery technologies. The Sustainability Report 2022 states that fossil LNG, 'the cleanest burning fossil fuel currently available', is 'leading the way on [the group's] transition to alternative fuels'.<sup>61</sup>

A look at Royal Caribbean Group's absolute emissions, however, reveals that compared to 2019 levels, scope 1 and 2 GHG emissions increased in 2022.<sup>61</sup>



## 4.2

### Royal Caribbean Group cont.

#### 'Seastainable'

Royal Caribbean Group publishes its sustainability reports and sustainability factsheets on its sustainability sub-page. Interested consumers are invited to learn more about the group's strategies, initiatives and approach to ESG across the business.<sup>62</sup>

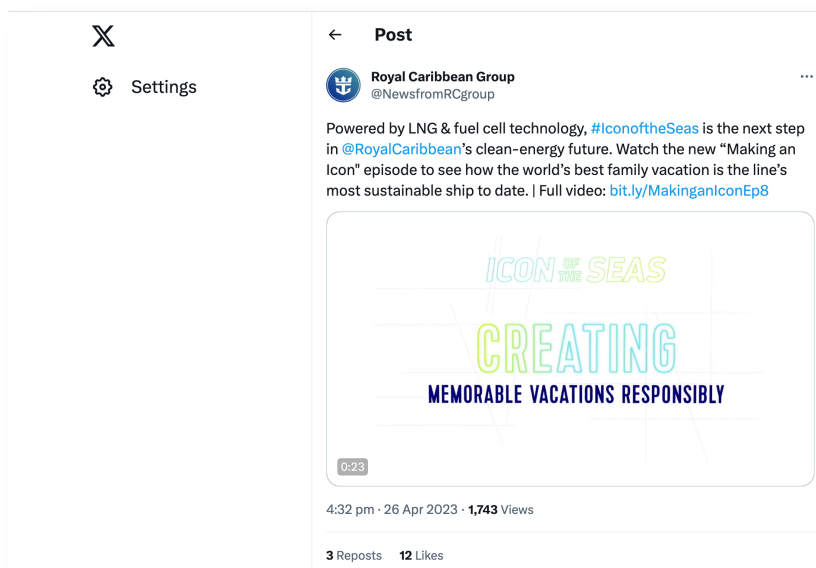
The factsheet on energy use and air emissions replicates information of the sustainability report 2022.<sup>63</sup> Royal Caribbean Group's immediate strategy is to transition new ship builds to fossil LNG, which the factsheet describes as the 'cleanest-burning fossil fuel currently available'. The longer-term plan is to partner with other stakeholders to develop alternative and accessible fuels and technologies.

On 26 April 2023, Royal Caribbean Group posted a video on its X account.<sup>64</sup> The header of the post describes the group's new ship *Icon of the Seas*, powered by fossil LNG and fuel cell technology, as the next step in a 'clean-energy future'.

Consumers are invited to watch the video to learn how the 'world's best family vacation is the line's most sustainable ship to date'.

The video contains several statements (both audio and visual):

- 'ICON OF THE SEAS CREATING MEMORABLE VACATIONS RESPONSIBLY' [appears on the screen]
- 'It is in our mission and our purpose to continue to build the ships to be more sustainable.'
- 'The mantra has always been "How do we become better?"'
- 'It will be able to adapt with the times.'
- 'Being able to ensure that we're delivering vacations in the most responsible way possible' [destination net zero' appears on the screen].



Screenshot taken from Royal Caribbean Group's X account on 21 September 2023.

#### 4.2.1

### Royal Caribbean International

#### About

Royal Caribbean International is the world's largest cruise brand.<sup>60</sup>

While Royal Caribbean International is currently not using fossil LNG-powered ships for its cruises, the cruise line has four fossil LNG-capable cruise ships on order, including ship *Icon of the Seas* and the ship *Utopia of the Seas*.<sup>61</sup>

For sustainability reports and further documents, the cruise line links to the Royal Caribbean Group's sustainability website.

#### A clean-energy future

Royal Caribbean International does not have a dedicated sustainability sub-page. The cruise line also does not advertise the environmental features of its new fossil LNG ships that are on order, *Icon of the Seas* and *Utopia of the Seas*. However, it promotes the ships' environmental features on its Facebook and X channels.

For instance, it posted the above-mentioned video on the ship *Icon of the Seas* on its Facebook account on 27 May 2023.

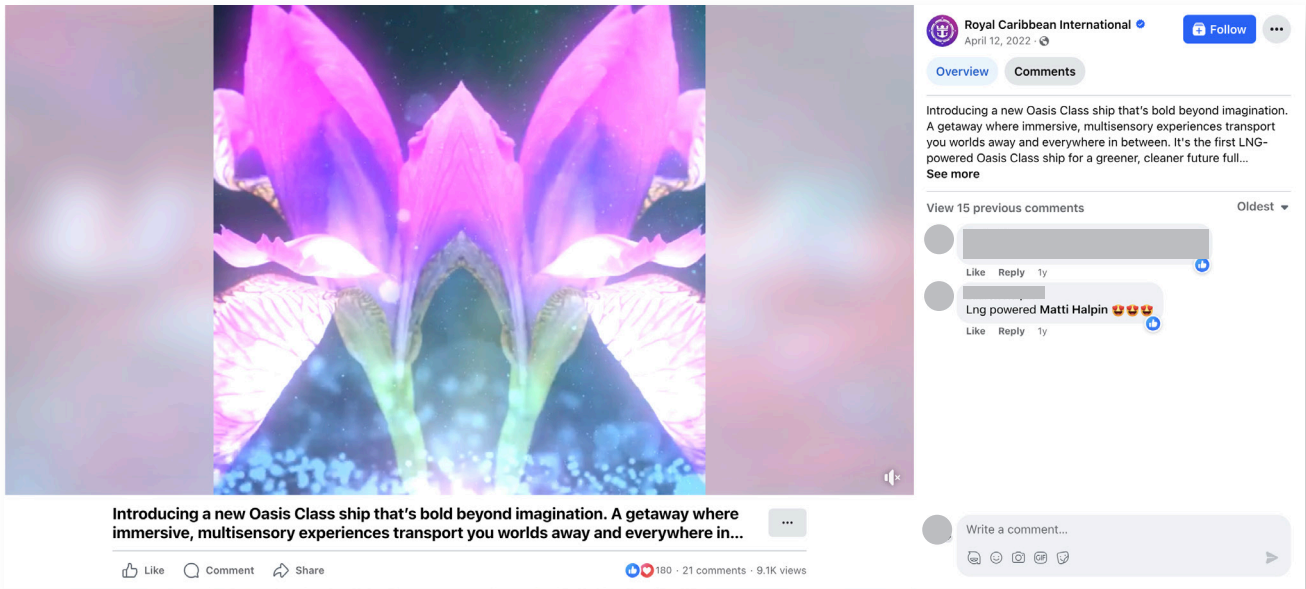
The description of the video says: *'When it comes to clean energy, #IconoftheSeas is setting the standard. [heart-shaped eyes emoji] Watch "Making an Icon: Creating Memorable Vacations Responsibly" to learn how our first ship powered by LNG and fuel cell technology marks the next step in Royal Caribbean's journey to create a clean-energy future. Tap the link to see the full episode.'*

On 12 April 2022, the cruise line posted a video on its LNG-capable ship *Utopia of the Seas*. The video itself contains colourful video images of blooming plants and fluttering butterflies. The header of the post reads as follows:

*'Introducing a new Oasis Class ship that's bold beyond imagination. A getaway where immersive, multisensory experiences transport you worlds away and everywhere in between. It's the first LNG-powered Oasis Class ship for a greener, cleaner future full of adventure. Prepare to see all your favorites meet bold new firsts!*

*#UtopiaoftheSeas arrives in Spring 2024 — details to come as visions become reality.'*

### 4.2.1 Royal Caribbean International cont.



Screenshot taken from Royal Caribbean International's Facebook account on 21 September 2023.

## 4.2.2 Silversea Cruises

### About

Silversea Cruises is an ultra-luxury and expedition cruise line.<sup>60</sup>

Silversea Cruises is awaiting the delivery of two fossil LNG-capable ships, namely *Silver Nova* and *Silver Ray*.<sup>67</sup>

For sustainability reports and further documents, the cruise line links to the Royal Caribbean Group's sustainability website.

### 'A Nova way to travel'

Inviting consumers to learn more about the company, Silversea Cruises advertises its sustainability efforts in the 'About Us' section of its website. The cruise line states that the delivery of its two Nova-class ships will push boundaries in sustainable cruise travel, with pioneering technology that will reduce the ships' carbon footprints. Next to using fuel cell system and battery technology, the ships will use fossil LNG as a main fuel.<sup>67</sup>

On the sub-page dedicated to *Silver Nova* which portrays 'a Nova way of luxury travel', the new ship is introduced. Amongst other features, its environmental features are highlighted:<sup>68</sup>

*'What's more, Silver Nova will be our most environmentally friendly, and thanks to her groundbreaking technological solutions she will propel Silversea into a new era of sustainable cruising. It's the Nova way to travel.'*

Another statement includes:

*'Our latest flagship will lead our fleet into sustainable cruising, respecting the fragile ecosystems of the remote and remarkable destinations we visit.'*

Two videos are featured on the ship's sub-page. The first one titled 'Introducing Silver Nova' contains the following audio statement:

*'Welcome aboard Silver Nova, the beginning of a new era in ultra-luxury cruise travel. A vessel that creates a new benchmark across all categories. She's also the most sustainable ultra-luxurious cruise ship at sea.'*

#### 4.2.2

#### Silversea Cruises cont.

#### 'A Nova way to travel' cont.

Another video, titled 'Silver Nova – A New Travel Attitude', contains the following statements:

- 'This is more than exploring places' [shot of pristine looking islands and dark blue sea];
- 'This is a NEW way of respecting them' [shot of a diver and a turtle in crystal clear water].

Under the header 'Sustainability Credential' the following claim is advertised:

*'With Silver Nova, we're introducing a new way of looking at sailing, at the environment, at the ocean itself. Thanks to her state-of-the art technologies, Silver Nova is one of the most sustainable cruise ships ever built: a true reflection of our deep commitment to the oceans, the environment and the communities we find at each of our splendid destinations.'*



#### Sustainability Credentials

With *Silver Nova*, we're introducing a new way of looking at sailing, at the environment, at the ocean itself. Thanks to her state-of-the art technologies, *Silver Nova* is one of the most sustainable cruise ships ever built: a true reflection of our deep commitment to the oceans, the environment and the communities we find at each of our splendid destinations.

Screenshot taken from Silversea Cruises' 'Silver Nova' sub-page on 21 September 2023.

## 4.3 MSC Cruises

### About

MSC Cruises is the world's fastest growing major cruise company.<sup>69</sup>

MSC Cruises has three fossil LNG powered ships either awaiting delivery or already in operation:

- *MSC World Europa* (2022; the world's largest fossil LNG-powered cruise ship);
- *MSC Euribia* (2023); and
- *MSC World America* (2025).

The 2022 Sustainability Report contains a sustainability action plan with six key workstreams, one of them being transitioning to net zero emissions. Key goals for this workstream include a:

- 40% reduction in carbon emissions intensity by 2030 with a 2008 baseline; and
- Net zero emissions by 2050.

Key actions for 2022 are listed such as realizing a 33.5% reduction in carbon emissions intensity compared to 2008 levels and introducing the fleet's first fossil LNG ship. In fact, the report's 'Planet' section describes the launch of the first fossil LNG powered ship as 'a significant milestone on this important journey'.<sup>69</sup>

MSC Cruises notes that achieving net zero will require a combination of different technologies and fuels.

The cruise company also explicitly acknowledges that to achieve net zero a complete transition away from fossil fuels is needed.

The company's current approach to climate action is investing in fossil LNG, in fact, the company has invested €3 billion in its three fossil LNG-powered cruise ships. The 2022 Sustainability Report claims that fossil LNG emits up to 20% less GHG (on a CO<sub>2</sub>e basis) than marine gas oil, including methane slip, which the company hopes to address with new technologies.<sup>69</sup>

The mid-term approach is to blend bio-LNG into fossil LNG from 2023 onwards, as the company expects wide availability to improve. The cruise line also points out its trialling of fuel cell technology on board *MSC World Europa*.

In the longer-term, MSC Cruises expects hydrogen-derived synthetic fuels to play a major role in the decarbonization of shipping, including its own operations.

MSC Cruises also explicitly acknowledges the problem of methane slip and points out its collaboration in the GREEN RAY project.

### What do the numbers suggest?

While MSC Cruises' carbon intensity has decreased, absolute GHG emissions have increased.

### 4.3

#### MSC Cruises cont.

##### 'The Future of Cruising'

MSC Cruises advertises a range of fossil LNG-related green claims across various sub-pages on its website. On the homepage,<sup>70</sup> the cruise company asks: 'Can cruising be more environmentally responsible?'

The cruise company states that it is putting environmental responsibility at the heart of everything it does, and names the introduction of 'the cleanest marine fuel available' on its latest ships as an example. A video titled 'Discover the Future of Cruising' is also displayed.<sup>71</sup>

Consumers are invited to discover more. On a separate sub-page titled 'Welcome to the future of cruising', the company advertises a range of environmental initiatives it is taking, one of them being emissions reduction (CO<sub>2</sub>e):

*'Our new ships are powered by Liquefied Natural Gas (LNG), the cleanest marine fuel available at scale today, reducing CO<sub>2</sub>e emissions by up to 20% and virtually eliminating sulphur oxides and fine particles, while reducing nitrogen oxides by up to 85%.'*

Consumers can scroll down and learn more about fossil LNG, a fuel that MSC Cruises suggests can power change.

'Cruising is changing for good. Our new ships are powered by **LNG (Liquefied Natural Gas)**: a cleaner alternative to traditional marine fuels. In fact, it's the cleanest fuel available at the required scale. Not only does it release fewer harmful emissions, it is also more efficient – and is one more step on our journey to a more environmentally responsible future. Thanks to LNG power we are able to reduce **CO<sub>2</sub>e emissions by up to 20%** and virtually eliminate sulphur oxides and fine particles, while reducing nitrogen oxides by up to 85%.'

At the very bottom of the sub-page, a net zero roadmap is featured which outlines milestones up to 2050. The roadmap includes the introduction of fossil LNG-powered ships, trialling biofuels and the plan to introduce blended biofuels and bio-LNG, and lastly the aim to use green liquid hydrogen to power fuel cells onboard.

On the sub-page 'Planet', MSC Cruises repeats some of its advertising claims.<sup>73</sup> Under the section 'leading the energy transition' MSC Cruises states that new technology and low carbon fuels are fundamental to its carbon reduction strategy. It names the introduction of fossil LNG-powered *MSC Euribia* as an example and repeats the supposed climate benefits of the fuel. It also advertises the introduction of the next fossil LNG-powered ship, which will be *MSC World America*.

### 4.3 MSC Cruises cont.

#### 'The Future of Cruising' cont.

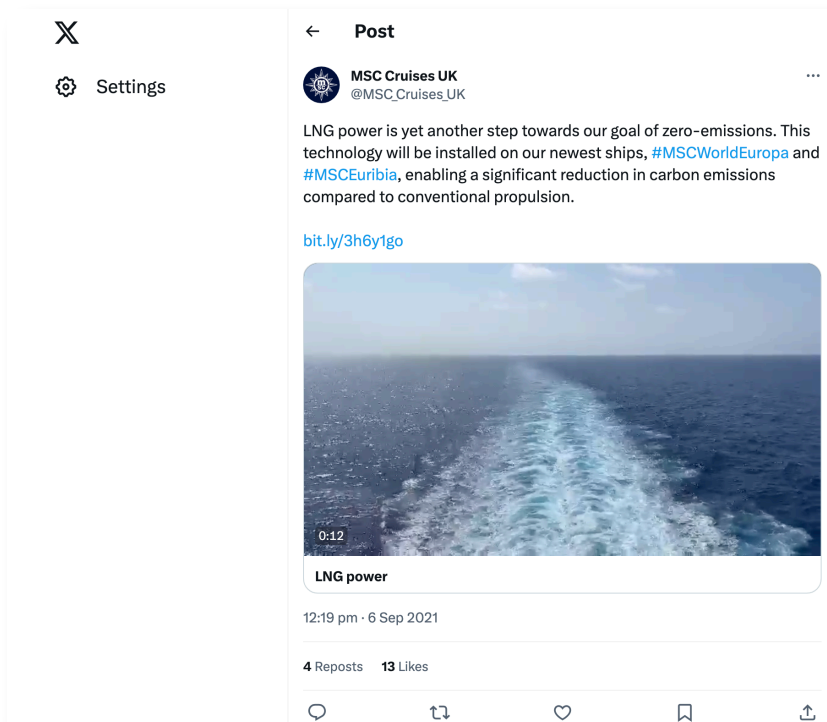
MSC Cruises makes similar advertising claims on its ship-specific sub-pages on the LNG-powered *MSC Euribia*,<sup>74</sup> *MSC World Europa*,<sup>75</sup> and *MSC World America*.<sup>76</sup>

For instance, *MSC World Europa*, the fleet's first LNG-powered cruise ship, is advertised as follows:

'A more sustainable cruise MSC World Europa was made with the future in mind. We wanted to set a new standard for the cruise industry. As our first LNG-propelled new cruise ship, MSC World Europa is a huge step forward in that mission. This next-generation power hugely reduces emissions and marks a milestone on our journey to net zero emissions operations. [...]

MSC Cruises also advertises the introduction of its fossil LNG-powered cruise ships on its Facebook and X accounts.<sup>75</sup> For example:

- 'Is there a fuel that can power change? LNG is a cleaner alternative to traditional marine fuel. Discover how it's making a difference on #MSCWorldEuropa and #MSCEuribia #TheFutureOfCruising [...]. (Post on 9 February 2023)<sup>77</sup>
- 'LNG power is yet another step towards our goal of zero-emissions. This technology will be installed on our newest ships, #MSCWorldEuropa and #MSCEuribia, enabling a significant reduction in carbon emissions compared to conventional propulsion. [...]'<sup>78</sup> (Post on 6 September 2021).



Screenshot taken from MSC Cruises' X account on 21 September 2023.



## 05 UK requirements for 'green claims'

This section provides an overview of the legal and self-regulatory frameworks including non-binding guidance documents governing green advertising claims in the UK and gives examples of potentially relevant rulings.

For the purposes of this report, we focused on rules protecting consumers from misleading products and services-related green claims to analyse the claims advertising fossil LNG as a 'climate-beneficial' cruise ship fuel.

## UK rules for 'green claims'

Table 2

|                                  |   |
|----------------------------------|---|
| <b>Legal basis</b>               | <p>The main legal basis against which green claims are measured is the Consumer Protection from Unfair Trading Regulations 2008 (the CPRs), the most relevant regulations which are:</p> <ul style="list-style-type: none"> <li>• Misleading actions (Regulation 5)</li> <li>• Misleading omissions (Regulation 6)</li> </ul>   |
| <b>Guidance</b>                  | <p>The UK's non-binding guidance for the CPRs is the Green Claims Code (2021) by the Competition and Markets Authority (CMA).<sup>8</sup></p>   |
| <b>Principles</b>                | <p>Based on the Green Claims Code, to comply with the CPRs green claims must:</p> <ul style="list-style-type: none"> <li>• Be truthful and accurate;</li> <li>• Be clear and unambiguous;</li> <li>• Not omit or hide important information relevant;</li> <li>• Compare goods or services in a fair and meaningful way;</li> <li>• Consider the full lifecycle of the product or service; and</li> <li>• Be substantiated.</li> </ul>  |
| <b>Judicial cases</b>            | <p>No judicial climate-specific greenwashing cases to date.</p>   |
| <b>Self-regulatory framework</b> | <p>The UK Code of Non-broadcast Advertising and Direct &amp; Promotional Marketing (CAP Code) is the non-judicial self-regulatory code against which green claims are measured.</p> <p>The general rules on misleading advertising are contained in section 3.</p> <p>The environment-specific rules are contained in section 11:</p> <ul style="list-style-type: none"> <li>• Clear basis of environmental claims (rule 11.1)</li> <li>• Clear meaning of advertising terms (rule 11.2)</li> <li>• High substantiation requirements for absolute claims (rule 11.3)</li> <li>• Claims must be based on full lifecycle or demarcate limits (rule 11.4)</li> </ul> |
| <b>Guidance</b>                  | <p>The relevant non-binding guidance for the CAP Code is the CAP guidance on environmental advertising claims (updated June 2023).<sup>80</sup></p> <p>The principles of the CMA's Green Claims Code are intended to be consistent with the requirements of the CAP Code.</p>   |
| <b>Non-judicial cases</b>        | <p>Yes. There is a number of non-judicial climate-related greenwashing cases.</p>   |
| <b>Key bodies</b>                | <p>CMA; Advertising Standards Authority (ASA).</p>  |

## Box 2: How the ASA is cracking down on greenwashing

The ASA has had a wealth of opportunities to apply the rules of the CAP Code in the climate space and across sectors such as energy,<sup>81</sup> buildings and heating,<sup>82</sup> finance<sup>83</sup> and transport.<sup>84</sup>

Examples include:

- **A case concerning an advertisement which claimed that gas had about half the emissions of coal.<sup>85</sup>**
  - The ASA concluded that the number of emissions depended on upstream emissions and other factors.
  - Even though the claim only displayed an estimate ('about'), the ASA considered that the claim did not adequately clarify that the emissions reductions could only be achieved in certain circumstances.
  - The ASA found the advertising to be misleading and unsubstantiated.
- **A case involving an advertisement which claimed that an airline's green initiatives were protecting the world.<sup>86</sup>**
  - The ASA took note of the airline's aspiration to become carbon neutral by 2050 as well as its interim 2030 target to cut carbon emissions in half. However, the ASA found the advertising claims not to be qualified with this information.
  - The ASA considered that consumers would likely understand the claim in a sense that the airline was already taking significant steps to address its environmental impact.
  - As there are currently no environmental initiatives or commercially viable technologies in the aviation industry which would substantiate such absolute green claims, the ASA found these claims to be misleading.
- **A case on an ad containing a claim on the development of biofuels and synthetic fuels to achieve net zero emissions by a global energy company.<sup>87</sup>**
  - The ASA upheld the complaint and noted that the basis of the environmental claim had not been clear.
  - Further the ad had misleadingly omitted material information relating to the plan and timeframe of the company's net zero goal and the role that the development of biofuels would play in such a plan.

## 06 Analysis

In our analysis of green claims on the use of fossil LNG in cruise ships, we identified three main communication strategies used across the cruise industry, which appear to be similar to the communication strategies that fossil fuel companies employ (see section 3).

This section unpicks and analyses these different categories of advertising statements and shows how such claims may be misleading consumers. As a benchmark we use the UK regulatory framework on green advertising claims. While these rules may not be applicable to all companies, we note that rules in a number of other jurisdictions are similar.

### 6.1 Emissions reduction claims

When considering the emissions reduction advertising claims relating to fossil LNG made by cruise companies, we observed that advertisements broadly fell into two categories: general claims relating to emissions reductions, and more specific claims.

### Vague and general claims

These emissions reduction claims used general and vague phrasing such as 'emissions' or 'gas emissions', often without specifying:

- **The type of emissions being reduced;**
  - While the reductions in sulphur oxide and nitrogen oxide are beneficial in respect of local air pollution levels, the critical problem with fossil LNG is the significant fugitive supply chain and combustion methane slip emissions.
- **The emissions savings;**
  - At times, no indication of the emissions reductions is given, or general and vague phrasing such as 'significant' is used.
- **The limits of such claims.**
  - Most of the claims do not indicate whether emissions reduction claims encompass the whole lifecycle (WtW) or just focus on TtW emissions.

## 6.1 Emissions reduction claims cont

### More specific claims

Some emissions reduction claims used phrasing such as ‘carbon emissions’ or ‘CO<sub>2</sub>e emissions’ and may have also indicated the types of emissions and/or the emissions savings. However, often the following information was missing:

- **The limits of these claims;**
  - Even some of the more specific claims at times do not indicate whether the advertised emissions savings are based on WtW or TtW analysis.
- **The underpinning methodology;**
  - Where GHG emissions savings were advertised in ‘CO<sub>2</sub>e’ the underpinning methodology was missing which could provide further contextualisation for consumers.
- The climate impacts of methane assessed against a 20-year period are much higher than when assessed against a 100-year period. We believe that it is crucial for consumers’ understanding of any alleged climate benefits of fossil LNG that methane’s short-term climate impacts are at least included alongside the long-term.
- **Fugitive methane emissions.**
  - In some cases, the problem of fugitive methane emissions was acknowledged in the sustainability reports of the cruise companies. Additionally, ongoing work to tackle this problem was outlined.
  - However, of all the ads examined, not a single advertisement mentioned the problem of fugitive methane emissions.

**Box 3: Relevant rules and guidance**

In addition to the general provisions on misleading advertising in section 3 of the CAP Code, the following environment-specific rules of the CAP Code as well as the following excerpts of the CAP Guidance are particularly relevant:

**Rule 11.1.** The basis of environmental claims must be clear. Unqualified claims could mislead if they omit significant information.

**What does the CAP Guidance say?**

Environmental claims are likely to mislead if the basis of the claim is not clear. Some information will be necessary for consumers to understand the basis of the claim, and unqualified claims could mislead if they omit this significant information.

**Rule 11.3.** Absolute claims must be supported by a high level of substantiation.

Comparative claims such as “greener” or “friendlier” can be justified, for example, if the advertised product provides a total environmental benefit over that of the marketer’s previous product or competitor products and the basis of the comparison is clear.

**What does the CAP Guidance say?**

Before submitting marketing communications for publication, marketers must ensure that they hold robust documentary evidence to prove all claims, whether direct or implied, that are capable of objective substantiation.

**Rule 11.4.** Marketers must base environmental claims on the full life cycle of the advertised product, unless the marketing communication states otherwise, and must make clear the limits of the life cycle. If a general claim cannot be justified, a more limited claim about specific aspects of a product might be justifiable. Marketers must ensure claims that are based on only part of the advertised product’s life cycle do not mislead consumers about the product’s total environmental impact.

**What does the CAP Guidance say?**

General claims about the environmental credentials of products or services are likely to be interpreted as claims about the product’s entire lifecycle, from manufacture to disposal. If marketers/broadcasters cannot justify general claims, the limits of the lifecycle must be made clear. More limited claims about a specific aspect of a product or service may be acceptable. Where a claim relates only to part of a product or service’s lifestyle, this should be made clear. Ads must not mislead consumers about the product’s total environmental impact.

**Box 3: Relevant rules and guidance cont.**

Additionally, the following principles and excerpts of the guidance of the Green Claims Code are particularly relevant:

**Principle a. Claims must be truthful and accurate.**

**What does the Green Claims Code guidance say?**

Claims must not mislead consumers by giving them an inaccurate impression, even if those claims are factually correct.

While claims that are more specific may be less likely to mislead, that will not always mean they are acceptable. For example, a specific claim relating to part of a product that only draws attention to a particular sustainability benefit could still mislead consumers even if it is true, if there are also significant negative impacts from that product.

**Principle b. Claims must be clear and unambiguous.**

**What does the Green Claims Code guidance say?**

Claims that relate only to a specific part of a product, service, process, brand or business risk falling foul of Principle b unless they make that clear. Principle (a) is also likely to be relevant. Without explanation, such claims risk confusing consumers and preventing them making informed choices.

**Principle c. Claims must not omit or hide important information.**

**What does the Green Claims Code guidance say?**

Claims should not just focus on the positive environmental aspects of a product, service, process, brand or business, where other aspects have a negative impact and consumers could be misled. This is especially so if the benefits claimed only relate to a relatively minor aspect of a product or service or part of a brand's or a business's products and activities. Cherry-picking information like this is likely to make consumers think a product, service, process, brand or business as a whole is greener than it really is.

**Principle d. Comparisons must be fair and meaningful.**

**What does the Green Claims Code guidance say?**

It is important that consumers are not misled by the way comparative claims are made. This is linked to the principle that claims must be truthful and accurate. Comparisons should be based on clear, up-to-date and objective information. They should not benefit one product or brand to the detriment of another if the comparison is inaccurate or false.

**Principle e. In making the claim you must consider the full life cycle of the product or service.**

**What does the Green Claims Code guidance say?**

Claims may be based on a specific part of an advertised product's life cycle, or part of a business's activities. It should be clear which aspect they refer to. They should not mislead consumers about the total environmental impact. A claim could itself be true, but misleading, if it suggests a product is greener than it is by ignoring some other aspect of its life cycle.

**Principle f. Claims must be substantiated.**

**What does the Green Claims Code guidance say?**

Most environmental claims are likely to be objective or factual claims that can be tested against scientific or other evidence. Given the requirement that claims must be truthful and accurate, businesses should have evidence to support them.

## 6.2 Environmentally friendly claims

When analysing marketing practices around the use of fossil LNG as a fuel in cruise ships, we noted that the cruise industry used a range of environmentally friendly terms to describe LNG – a polluting fossil fuel. Such claims include:

- Green; greener; the greenest fuel in the world
- Clean; cleaner; the world’s cleanest fossil fuel; the world’s cleanest-burning fossil fuel; the cleanest-burning fossil fuel currently available
- Eco-friendly, keeps the environment in mind, cares for the environment, minimizes the environmental footprint
- Sustainable, increasingly sustainable, more sustainable

At times, phrasing such as ‘[helping] to protect the planet’ or ‘helping to protect the environment and the sea’ was used, or events such as Earth Day, World Oceans Day or World Environment Day were used as an opportunity to advertise the fossil gas.

### In combination with emissions reduction claims

At times such phrasing was used in combination with emissions reduction claims, which is concerning for the reasons outlined in **section 6.1**.

### Stand-alone claims

Such phrasing is even more concerning when used as a stand-alone phrase. This is because the use of such general and vague terms risks causing consumers to believe that fossil LNG has an overall positive impact on the climate. While these claims may be true in a limited way, for example regarding positive impacts on air pollution through the reduction of sulphur dioxide and nitrogen oxide emissions, and reduced CO<sub>2</sub> emissions through combustion, these limits are not made clear. Additionally, little or no information is provided relating to the fugitive methane emissions throughout the fossil LNG supply chain and through methane slip on board cruise ships.

As such, these advertisements risk abusing consumers’ lack of knowledge regarding the true climate impacts of fossil LNG and, without contextualisation, may misrepresent the impacts of fossil LNG on the climate.



**Box 4: Relevant rules and guidance**

In addition to the general provisions on misleading advertising in section 3 of the CAP Code, the following environment-specific rules of the CAP Code as well as the following excerpts of the CAP Guidance are particularly relevant:

**Rule 11.1.** The basis of environmental claims must be clear. Unqualified claims could mislead if they omit significant information.

**What does the CAP Guidance say?**

Environmental claims are likely to mislead if the basis of the claim is not clear. Some information will be necessary for consumers to understand the basis of the claim, and unqualified claims could mislead if they omit this significant information.

**Rule 11.3.** Absolute claims must be supported by a high level of substantiation.

Comparative claims such as “greener” or “friendlier” can be justified, for example, if the advertised product provides a total environmental benefit over that of the marketer’s previous product or competitor products and the basis of the comparison is clear.

**What does the CAP Guidance say?**

Absolute environmental claims (such as “sustainable” or “environmentally friendly”) must be supported by a high level of substantiation. Relative claims like “greener” or “friendlier” will require verifiable evidence that proves an environmental benefit over comparable products. Marketers should set out the relevant information in the ad or signpost how the information used to make that comparison can be checked by the target audience.

**Rule 11.4.** Marketers must base environmental claims on the full life cycle of the advertised product, unless the marketing communication states otherwise, and must make clear the limits of the life cycle. If a general claim cannot be justified, a more limited claim about specific aspects of a product might be justifiable. Marketers must ensure claims that are based on only part of the advertised product’s life cycle do not mislead consumers about the product’s total environmental impact.

**What does the CAP Guidance say?**

General claims about the environmental credentials of products or services are likely to be interpreted as claims about the product’s entire lifecycle, from manufacture to disposal. If marketers/broadcasters cannot justify general claims, the limits of the lifecycle must be made clear. More limited claims about a specific aspect of a product or service may be acceptable. Where a claim relates only to part of a product or service’s lifecycle, this should be made clear. Ads must not mislead consumers about the product’s total environmental impact.

Additionally, the following principles and excerpts of the guidance of the Green Claims Code are particularly relevant:

**Principle a. Claims must be truthful and accurate.**

**What does the Green Claims Code guidance say?**

Broader, more general or absolute claims are much more likely to be inaccurate and to mislead. Terms like “green”, “sustainable” or “eco-friendly”, especially if used without explanation, are likely to be seen as suggesting that a product, service, process, brand or business as a whole has a positive environmental impact, or at least no adverse impact. Unless a business can prove that, it risks falling short of its legal obligations.

**Box 4: Relevant rules and guidance cont.**

**Principle b. Claims must be clear and unambiguous.**

**What does the Green Claims Code guidance say?**

Vague and/or general statements of environmental benefit are more likely to be misleading. At best, they can have a number of meanings that can confuse consumers and make it difficult for them to make informed decisions. At worst, they can give the impression a product, service, process, brand or business is better for the environment than is really the case. They can also be difficult to substantiate.

General or all-encompassing sustainability claims such as “environmentally friendly”, “eco”, or “sustainable” don’t provide any real indication of what is meant. If anything, they are likely to create an overall impression that a product has a positive, or no, environmental impact.

**Principle d. Comparisons must be fair and meaningful.**

**What does the Green Claims Code guidance say?**

Comparisons should enable consumers to make informed choices about competing products and businesses or between different versions of the same product. They should not say or imply, through the use of language or imagery, that one product (or one version of a product) is, for example, “greener” or “environmentally friendlier” or “more energy efficient” than another, if it is not.

**Principle e. In making the claim you must consider the full life cycle of the product or service.**

**What does the Green Claims Code guidance say?**

Claims may be based on a specific part of an advertised product’s life cycle, or part of a business’s activities. It should be clear which aspect they refer to. They should not mislead consumers about the total environmental impact. A claim could itself be true, but misleading, if it suggests a product is greener than it is by ignoring some other aspect of its life cycle.

**Principle f. Claims must be substantiated.**

**What does the Green Claims Code guidance say?**

Most environmental claims are likely to be objective or factual claims that can be tested against scientific or other evidence. Given the requirement that claims must be truthful and accurate, businesses should have evidence to support them.

Most environmental claims are likely to be about things that can be measured against the evidence. They are likely to be objective or factual claims, or based on underlying facts, that are capable of substantiation. That is likely to apply even to claims that products, for example, are the “cleanest”, “safest” or “best” for the environment. Those are matters which can be tested against a range of measures for which evidence can be gathered.

Broader and more ambitious claims may be more difficult to substantiate, particularly where they are also ambiguous. For example, a claim a product is “environmentally friendly” may refer to a number of environmental aspects, such as its impacts on the air, soil and water, its packaging, its components and production processes, its use and/or its disposal. It is likely to suggest the product has a positive overall effect on the environment (or no negative one). A high level of strong evidence is likely to be required to substantiate such a claim.

### 6.3 Net zero claims

During our sweep of websites and social media accounts we further noted that some of the cruise companies promoted the expansion of a fossil LNG programme alongside their net zero goals or net zero aspirations in a manner that might suggest to consumers that it serves as a specific initiative to facilitate the transition to net zero.

The specific content of such advertising varied, with some being explicit, for example by stating that fossil LNG power was a step towards a company's net zero goal.

Other advertising made this suggestion more implicitly. For example, the introduction of fossil LNG ships might be advertised in proximity to climate goals (including net zero goals or aspirations) and climate action.

Another example is attributing fossil LNG an important role in the maritime energy transition.

We observed a range of forward-looking advertising claims around the 'future', such as:

- The expansion of a fossil LNG programme signposting a commitment toward a brighter future;
- Fossil LNG contributing to a greener or cleaner future;
- Fossil LNG being another step towards a more environmentally responsible future.

Some advertisements we identified as being very vague and general without any apparent qualification, others provided some information on the supposed 'transitional' role of fossil LNG.

However, as outlined in section 3, there are serious concerns with investing in fossil LNG as a 'bridge' fuel, as this means locking in fossil gas for decades to come.

## Box 5: Relevant rules and guidance

In addition to the general provisions on misleading advertising in section 3 of the CAP Code, the following environment-specific rules of the CAP Code as well as the following excerpts of the CAP Guidance are particularly relevant:

**Rule 11.1. The basis of environmental claims must be clear. Unqualified claims could mislead if they omit significant information.**

### What does the CAP Guidance say?

Where businesses are responsible for a significant amount of harmful emissions or other environmental harm, ads which reference specific environmentally beneficial initiatives are more likely to mislead if they do not include balancing information about the business's significant ongoing contribution to emissions or other environmental harm.

Ads which refer to a business's lower-carbon activities without including information about its overall harmful environmental impact may provide a misleading impression of the proportion of the business's overall activities that are lower in carbon.

Claims that go beyond aspirational claims and suggest that a business is already taking steps to reduce emissions and have a positive environmental impact are likely to mislead if the ad omits material information about the balance of current activities, current emissions and the pathway to reducing these.

Ads which focus on specific initiatives as a way of achieving net zero should clearly contextualise those claims with information about the role that the initiative would play in that net zero plan, and how and when net zero emissions will be achieved. Without this information, these claims are likely to be interpreted to mean that those activities formed a significant element of the business's current activities and that the business is making meaningful progress towards achieving net zero emissions.

Additionally, the following principles and excerpts of the guidance of the Green Claims Code are particularly relevant:

**Principle a. Claims must be truthful and accurate.**

### What does the CAP Guidance say?

While claims that are more specific may be less likely to mislead, that will not always mean they are acceptable. For example, a specific claim relating to part of a product that only draws attention to a particular sustainability benefit could still mislead consumers even if it is true, if there are also significant negative impacts from that product.

Similarly, businesses should not focus claims on a minor part of what they do, if their main or core business produces significant negative effects.

**Principle b. Claims must be clear and unambiguous.**

### What does the CAP Guidance say?

Businesses are increasingly recognising the importance of improving the environmental effects of their products, services and practices. However, claims about future goals should only be used for marketing purposes if the business has a clear and verifiable strategy to deliver them. Wider environmental goals of the business should also be clearly distinguished from product-specific claims.

## 07 Conclusion and recommendations

**Our report has illustrated how the cruise industry appears to be systemically advertising fossil LNG as a climate solution despite the disastrous climate implications that the use of fossil LNG as a shipping fuel entails.**

Fossil LNG consists mainly of methane – a GHG which is 80 times more potent than CO<sub>2</sub> over a 20-year period. Research has shown that the use of fossil LNG in cruise ships has significant GHG lifecycle emissions and can even lead to an increase in GHG emissions when compared to conventional fuels. Of particular concern are methane slips, where significant amounts of unburned methane are emitted into the atmosphere throughout the supply chain.

Despite climate scientists ringing alarm bells about the climate impact of fossil LNG, cruise companies are increasingly investing in fossil LNG as a shipping fuel. What is more, we are concerned that several of the largest industry players are marketing these investments as climate action in advertising that, broadly, risks misleading consumers as to the true climate impact of taking a cruise.

**We have identified three key communication strategies that appear to be widely used across the cruise industry when advertising the use of fossil LNG:**

- Advertising the use of fossil LNG as reducing emissions;
- Advertising fossil LNG as environmentally friendly; and
- Advertising the use of fossil LNG as a specific initiative of reaching net zero by 2050.

Our report presented these claims against the legal and self-regulatory advertising frameworks of the UK in relation to environmental claims.

**We identified the following broad issues with cruise companies' advertising of fossil LNG:**

- Fossil LNG's climate benefits often appear to be exaggerated and advertised in a vague and general manner.
- Significant information, such as fugitive methane emissions, is omitted.
- Comparisons of fossil LNG with conventional fuels risk not being meaningful; and
- The use of fossil LNG is at times being portrayed as part of a toolbox of measures to reach net zero which appears to be inadequately substantiated or justified.

Not only are legal and regulatory frameworks, as well as soft-law guidance, delivering clear direction in respect of the requirements for fair advertising of green claims, but regulators are increasingly cracking down on misleading and unsubstantiated green advertising. Our analysis suggests that cruise companies that use and advertise fossil LNG may not be meeting the UK advertising regulatory standards. Companies must be alive to the legal and reputational risk of such practices.

**We therefore have the following recommendations:**

- Cruise companies should stop advertising fossil LNG as a climate solution which risks misleading consumers as to the true sustainability of their holiday.
- Cruise companies that have misleadingly advertised the climate benefits of fossil LNG should remove such advertisements.
- Cruise companies should stop investments into climate-damaging fossil LNG as a purported climate solution.
- Cruise companies should back their net zero pledges with credible transition plans which include investments into real zero emissions solutions supported by the best available science.

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