



DENALI SOVEREIGN FUND

Impact Investing Analysis



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“Our fund's goal is to optimize stability, savings, and local development by investing into companies that succeed in sustainability, surpassing industry standards, and financial impacts”



Opportunities

Carnival Corporation is at an inflection point, with looming financial and safety concerns catalyzed by the pandemic, is the company capable of manifesting changes to deliver quality cruises while promoting ethically oriented practices?



Recommendation

Carnival Corporation is not a feasible investment for the Denali Sovereign Fund.



Agenda

- 1 **Carnival's Practices**
- 2 **Industry Evaluations**
- 3 **Risk and Financial Analysis**
- 4 **Recommendations**



Carnival's Practices

A patched corporation



Carnival's mission and vision suggest a strong commitment to CSR across all 9 brands.

Mission

"Together, we deliver joyful vacation experiences and breakthrough shareholder returns by exceeding guest expectations and leveraging our industry-leading scale."¹

The company's **2019 sustainability report** highlights key ESG actions for each of the 3 pillars of its vision:

 <p>To protect the environment</p> <p>Strategy:</p> <ul style="list-style-type: none"> Investing in LNG², AAQS³, and new energy technologies to reach 2030 reduction goals Reducing single-use items and food waste 	 <p>To operate safely</p> <p>Strategy:</p> <ul style="list-style-type: none"> Continuing to ensure a diverse & inclusive workforce Creating a safe journey for guests and employees through training and safety technology 	 <p>To be compliant</p> <p>Strategy:</p> <ul style="list-style-type: none"> Introducing an ethics & compliance program in 2019 Developing a human rights policy in 2020 and a HESS⁴ event reporting system
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<p>9 Brands</p> <p>87 ships</p>	 <p>22 ships</p>	 <p>16 ships</p>	 <p>13 ships</p>	 <p>10 ships</p>	 <p>10 ships</p>	 <p>5 ships</p>	 <p>5 ships</p>	 <p>3 ships</p>	 <p>3 ships</p>
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¹This quote and slide data obtained from Carnival Corporation "2019 Sustainability Report"
²Liquefied Natural Gas. ³Advanced Air Quality Systems. ⁴Health, Environment, Safety, and Security



Carnival's environmental actions signaled a sinking ship. It has since patched its leaks but needs to do more to stay afloat in the long-term.

1 A sinking ship in 2019

\$60M
in fines

In 2017 and 2019 for oil dumping and probation violations¹



Largest-ever criminal penalty for intentional vessel pollution¹



Fantasy cruise ship received failing inspection score of 77 out of 100, the **worst in the company's history**²

2 Patching its leaks

29%
reduction

Surpassed 2020 Goal

Reduce scope 1 CO₂ emissions by 25% by 2020 compared to 2005³



Set 2030 Goal

Reduce scope 1 CO₂ emissions by 40% by 2030 compared to 2008³



Too short-term

Lack clear commitment to 70% reduction by 2050 goal, which IMO recommends³

3 Not enough for long-term impact

Overreliance on bridge technologies

- Pioneer for LNG with 3 equipped ships and plan to expand to 8 more by 2025³
- **70%** more life-cycle greenhouse gas emissions than marine gas oil⁴
- Biofuel and methanol should be prioritized, fuel cells and battery systems need faster adoption^{3,5}

Passing on the burden to customers

- Climate protection projects and carbon offsets not being actively pursued; instead, customers are made responsible³



Social

Reality

Carnival's awards suggest employee wellbeing is a priority, but they clash with the company's catastrophes at sea and response to COVID-19.

Successful on the surface¹

#5

for Best Employer for New Grads 2020

#77

Best Employer for Diversity 2020

#94

America's Largest Public Company 2018

#179

for America's Best Employers of 2021

#222

Best Employer for Women 2020

Catastrophes at sea



Costa Concordia (2012): 32 passengers killed

Lack of evacuation training & too much power in the hands of the captain²



Carnival Triumph (2013): 4 days without power

Inability to learn from failure; compliance order from fuel leak fire on Costa Allegra was ignored; no responsibility for safety³

COVID-19

1,500

infections⁴

39+

deaths⁴

#1

source of spread to Australia⁴

- "It seems as though Carnival Corporation... is still trying to sell this cruise line fantasy and ignoring the public health threat." (US Committee on Transportation & Infrastructure, May 2020)⁵

Working conditions

- 76% Great Place to Work score, but no distinction between corporate and onboard⁶
- 80+ hour weeks for less than \$1,000 / month for some crew members⁶

See appendix B and C

¹Forbes "Carnival" ²The New York Times "Oversight of Cruise Lines at Issue After Disaster" ³CNN "CNN Exclusive: Carnival knew of fire danger before cruise, documents show"

⁴Milgard School of Business "Carnival Cruise Line" ⁵CNBC "US lawmakers open probe into coronavirus infections on Carnival cruise ships" ⁶Business Insider "17 hours a day, 7 days a week: Cruise-ship workers reveal the grueling conditions they face on the job"



Carnival's environmental and social shortcomings point to an inconsistent and unreliable style of management, operating with a lack of oversight and contribution to the US economy.

Inconsistencies and lack of accountability

2019 environmental probation violations

- 2019 probation violations caused in part by complex corporate structure with 9 brands¹

COVID-19

- Carnival ignored CDC's March 8th warning to avoid cruise travel
 - CEO Arnold Donald: "A cruise ship is not a riskier environment. People perceive it that way, but the reality is it's not."²

48
hours passed between infection and announcement to passengers onboard the Diamond Princess; Carnival argued it didn't know, emails suggest otherwise³

Lack of Oversight

- 1 Cruise lines register their ships in countries with low fees, wages, and regulations, forgoing need to follow US labor laws⁴
- 2 International Maritime Organization acts a guiding organization but has no power to enforce any of its rules⁴

Lack of Contribution

- 3 Carnival pays an average tax rate of 1%⁵
- 4 Only ~5% of workers on cruise ships are American citizens⁵

¹ WLRN "Carnival Corp. Boss: 'There Were Some Gaps' In Environmental Oversight" ² Miami Herald "A cruise ship is not a riskier environment" for coronavirus, Carnival CEO tells Axios" ³The New York Times "Failures on the Diamond Princess Shadow Another Cruise Ship Outbreak" ⁴ Politico "Coronavirus on the high seas: Why the U.S. can't touch cruise lines" ⁵ OCCRP "Critics Argue That US Government Should Not Bail Out Cruise Liners"



Industry Outlook

An analysis of the Cruise Line Industry



Impact Factors of the Cruise Line Industry

ENVIRONMENTAL ¹

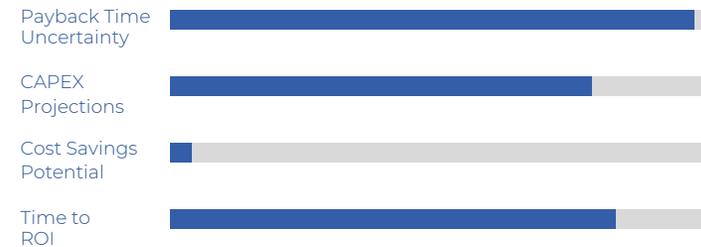
Experts agree that the environmental impact of the cruise line industry rivals the oil and gas industry.



Experts estimate that **the average cruise ship can emit as pollution as 700 trucks**. While on a cruise, individuals more than triple their carbon footprint.

TECHNOLOGICAL ²

Environmentally beneficial technologies like the ion battery system can reduce emissions by 95%. However, these factors act as a barrier to change:



ECONOMIC ³

Despite the looming effects of COVID-19 on cruise line operations, research shows that it is plausible for demand to may make a recovery. However, the same can not be said for supply.



POLITICAL ⁴

Former President Trump's party overruled the CDC no-sail order after lobbyists from the industry extensively pressured the White House. This poses several concerns about the industry.

1. The Biden Administration is **highly likely to reinstate a no-sail policy** for the foreseeable future.
2. Pressure towards policymakers to **reduce closed-door lobbying power** will heavily affect this industry.
3. With the current democratic party, the industry **must pivot to respond to future political turbulence**.

ETHICAL ⁵

Monetary deterrents to unethical acts is not effective in this industry. The lacks substance relative to other industries enables players to take advantage of the system. After being fined \$40 million, Carnival Corporation receives harsh criticism from experts:

"Carnival Corporation is not serious about the industry's frequently repeated claim that they meet all environmental regulations"

- Dr. Ross A. Klein PhD

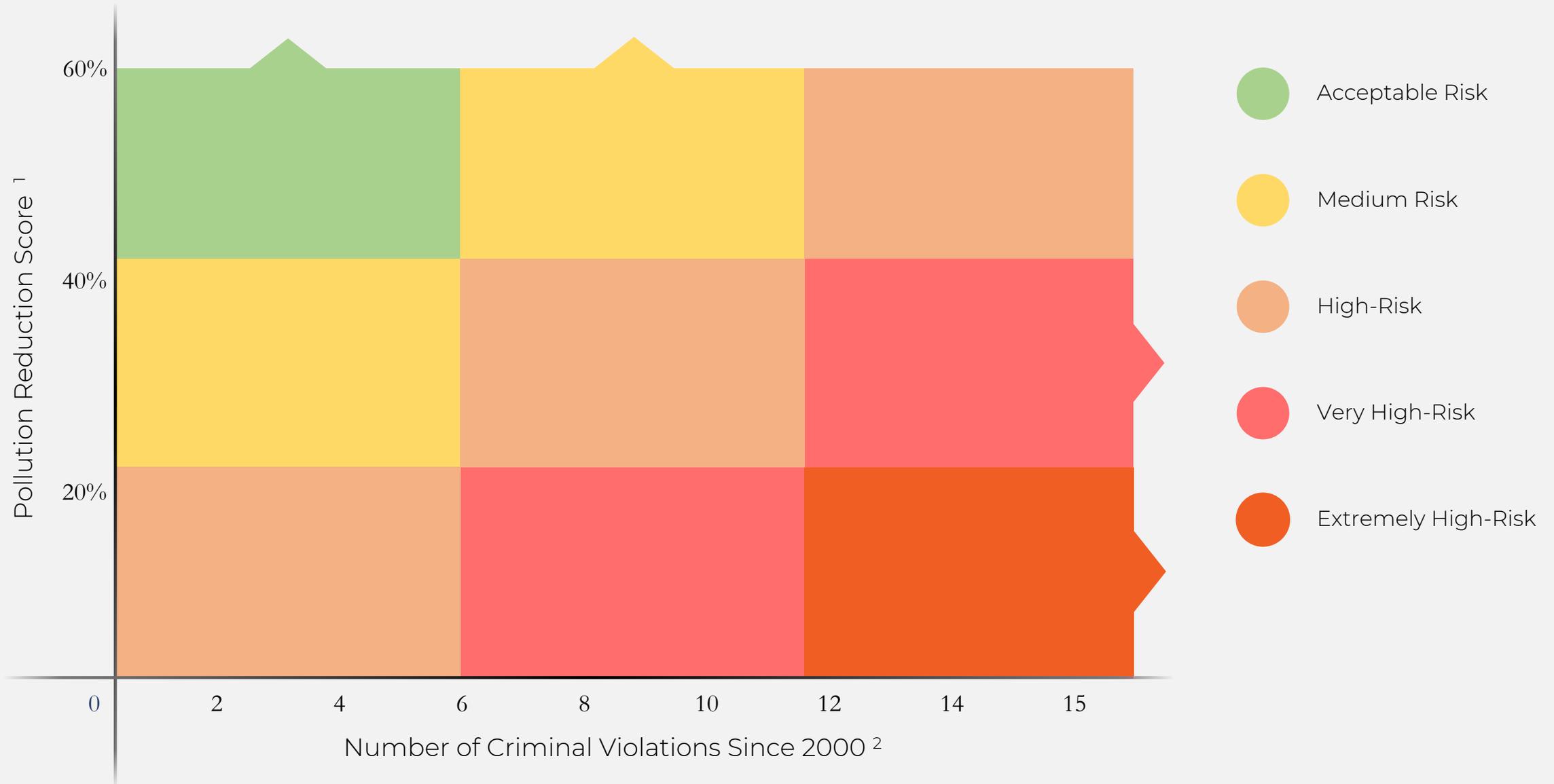
LEGAL ⁶

Several legal factors point towards a highly unfavorable industry for investment. Thorough consideration of the following factors is necessary to conduct a true cost-benefit analysis.

1. Certain maritime laws create favorable loopholes for companies, but **unfavorable results for society**.
2. **Location of incorporation** plays a large role in unethical corporate operational flexibility.
3. Legal contracts and agreements can subject customers and employees to **highly unfair treatment**.

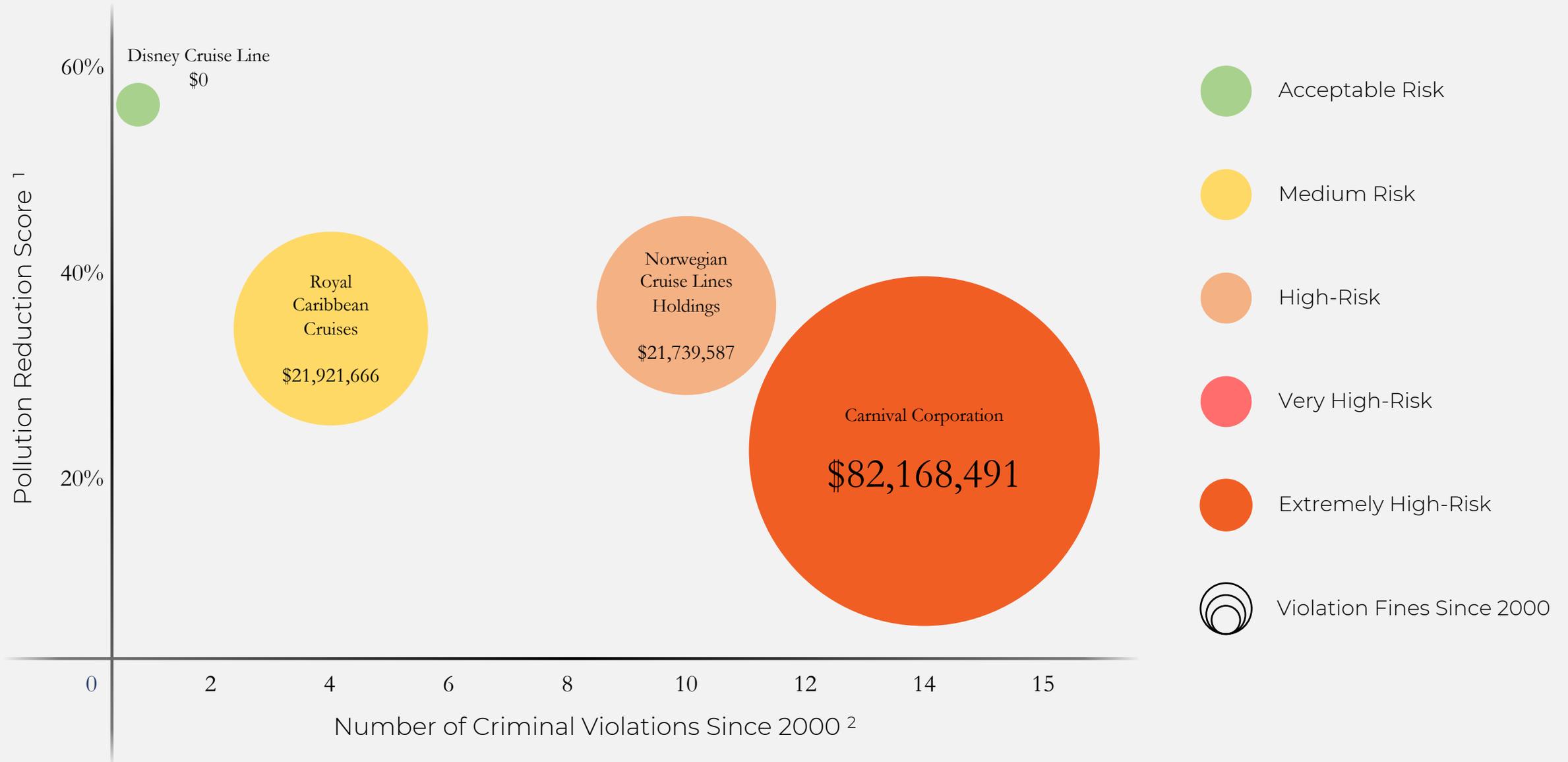


Risk of Future Environmental Violations





Risk of Future Environmental Violations



See appendix E
¹ Weighted score of company air & water pollution based on an analysis of every operational cruise ship
² Count of criminal violations imposed onto a company from 2000 – 2021



Carnival Corporation's Outlook

STRENGTHS

Current Market Leader

Historical Financial Strength

Strong Brand Recognition

OPPORTUNITIES

Natural Inflection Point

Investments in Technologies

Health & Safety

Environmental Investments

WEAKNESSES

Lack of Corporate Mission

Weak Corporate Guidance

Unaccepting of Change

Inflexible Business Model

Unfavorable Legal Standing

Criminal Violation History

Weak CSR Initiatives

Lack of CSR Goals

THREATS

COVID-19 No-Sail Policies

Criminal Violation Fines

Competitive CSR Response

Regulatory and Policy Shifts

Revisions of Maritime Law

Curtain of Secrecy has Lifted

Major Approval Decline

Laggard in Reform



Risk and Financial Analysis

A company with an uncertain
future



Carnival's Current Financial Position

Stock Price as of February 18th, 2021:

\$22.89

Key Performance Indicators

1	Current Ratio	0.23
2	Debt Ratio	0.44
3	ROA	-19.09

"CCL Stock is a Sinking Ship"

-47%
Feb 2020 - 2021

"Wave of pessimism from analysts on The Street stems from the poor outlook on when cruise lines will be able to resume operations."¹

"Leveraging to Stay Afloat"

\$14.9
In billions

"Debt levels are "ballooning" across the sector, and assuming banks are going to want to be paid interest on that debt, the entire business model of the cruise industry is looking increasingly "unsustainable."²

"Downgraded to Junk..."

BB-
Standards and Poor's

"Carnival's exposure to increased travel restrictions has left it vulnerable to shifts in market sentiment in these unprecedented operating conditions, and the company remains vulnerable to the continued uncertainty around the potential recovery from the outbreak."³

Carnival's Financial Risks



1

Growth Concerns

Pre-Health Crisis:

Revenues were increasing by **10.3%** from 2018-2019

However...

Net cruise costs grew at **double** the pace of revenue raising profitability concerns¹

Current Outlook:

"In terms of revenue, CCL saw a **73% decline in 2020...**"²

"Even with no sailing costs, Carnival still has to **pay for maintenance and dry dock expenses each month.**"²

Profitability issues coupled with uncertain demand forecasts indicates growth problems

2

Debt Concerns

Pre-Health Crisis:

Debt was still an issue for Carnival...

Income Statement shows total debt increased from:

\$9 Billion to \$11 Billion from 2017 to 2019³

Repayment was slow at only **\$1.5B** a year³

Current Outlook:

"The company is overleveraged...its 1-year long-term debt change is at a staggering **112.7%**."⁴

Carnival isn't borrowing cheap either... the company issued \$4B in bonds at **13%**

Looming debt concerns doesn't bode well for long term sustainability

3

Liquidity Concerns

Pre-Health Crisis:

Carnival hadn't really dealt with many liquidity issues due to strong bond ratings

In fact, Moody's said in 2019 that:

"Carnival's liquidity is adequate. " due to its "revolving credit facility"⁵

Current Outlook:

"Liquidity Crisis is on the Way..."

"With **\$22 billion in debt** and only **\$10 billion in liquidity** at the end of May, out of which \$6 billion in cash reserves, Carnival will **run out of money in less than a year and a half** at the current burn rate."⁶

Carnival especially is banking on a recovery soon with no real backup plan



Financial Implications of CSR



“**CSR** provides insurance-like protection to **preserve firm value** and lowers volatility from the outbreak of the pandemic, a **high debt level** with great financial distress risk can further highlight the insurance role of CSR. Alternatively, **CSR protects overleveraged firms from being bankrupt.**”¹



“Firms may not be able to prevent recessions from happening, however, they can **limit the negative impact of recessions** on their performance by engaging in CSR activities (**or refrain from cutting back**). (These activities) result in more favorable consumer perceptions of the brand, **engaging in CSR aligns both social and managerial interests, owing to the economic gains from CSR investments.**”²



“In the short term, shocks to [CSR] factors can affect **cash flows** and the ability to **pay interest to debt holders**. In the long term, they can harm corporate culture and impact operating models, which can lead to the erosion of revenue generation and, ultimately, **profitability.**”³

¹ Accounting and Finance: Rethinking capital structure decision and corporate social responsibility in response to COVID-19

² European Journal: Doing good when times are bad: the impact of CSR on brands during recessions

³ Massachusetts Financial Services: Sustainable Investing



Risk Assessment

Risk Factor	Scale	Likelihood
Demand Rebound		UNCERTAIN
Inability to Pay Off Debt		LIKELY
Credit Rating Troubles		LIKELY
Fees and Fines/ Legal Troubles		LIKELY
Health and Safety Troubles		LIKELY
Continued CSR Investment		UNCERTAIN



Recommendations

Improvements to Carnival Corporation's CSR Strategy



Research and Development into Creating Minimal Impact on the Plant

Carnival Corp has **violated several crimes against the environment** ranging from illegally dumping oil, wastewater, and plastic into the water. Most prevalently **polluting the air** with Sulphur Oxide and smog more than federal & state regulations.



Research: New technological innovations into different spaces including Battery, Biofuel, Solar, Wind, Electric, and alternative fuels

Development: Eliminating harmful chemicals (SO_x, NO_x, and CO₂) that could ironing places onto the environment



Potential Costs: \$200-\$400 million over the next 10 years in cruise line industry

Probability of Success: High due to return on investment illustrated in the fuel, oil, and gas industry in stocks, profitability, and overall performance

1



Employees: Hires in R&D Sector, Layoffs in Service Sectors

Customers: Increase in Ticket Prices

Local Population: Cleaner Environment, Improved Air Quality



Refocusing Efforts to Include Quality Employee Care and Safety at Work

Carnival Corp have been **overworking** and **under** paying their employees for years along with putting employee's **health at risk** which has been shed to light due to the COVID-19 pandemic after **leaving thousands of workers stuck at sea with no explanation** with hopes to continue their voyage in the summer of 2020. Due to Maritime Laws and Regulations, Carnival Corp have been able to find loopholes to **avoid legal action**.¹

Carnival's Vision Statement

2

"We operate with...openness and transparency at all times. And we intend to be an exemplary corporate citizen leaving the people and the places we touch even better."

Sustainable Development Goal:

Good - Health and Well-Being

Employee Bylaws

3

- Use platform and social capital to **regulate itself for employee**.
- Offers **accountability and transparent** to employees
- Partner with local unions
- Increase median annual earnings to **industry average of \$18,706**
- Create more conventional schedules that can **not exceed 65-hour work weeks**

Impact on Stakeholder's

Employee: Improved Autonomy, Wages, Working Conditions and Increased Employee Expectations

Customers: Better experience with cruise line, Increased Customer Satisfaction



Going Beyond Law Requirements by Making Long-Term, Environmentally Conscious Investments

Carnival Corp's 2019 Sustainability Report addresses and states what has been achieved and **short-term goals** the company has in **social, environmental, and governance**.¹

LONG TERM COMMITMENTS

2025: 90% of employees are included and feel safe

2030: 100% of fleet equipped with Advanced Air Quality Systems

2035: Improve water use efficient for onboard operations by 30%

2040: Reduce CO₂e and CO₂ by 60% from all operations

2045: 85% of ships powered 100% environmentally friendly energy sources

2050: Net Zero Emissions

IMPACT ON STAKEHOLDERS

Carnival: Forces rapid ambitious company growth

Employee: New Training, Alterations in Actions

Customers: Increase in Ticket Price, Decrease in Entertainment Expansion

Local Population: Positive Impact on Climate Change



Thank you!



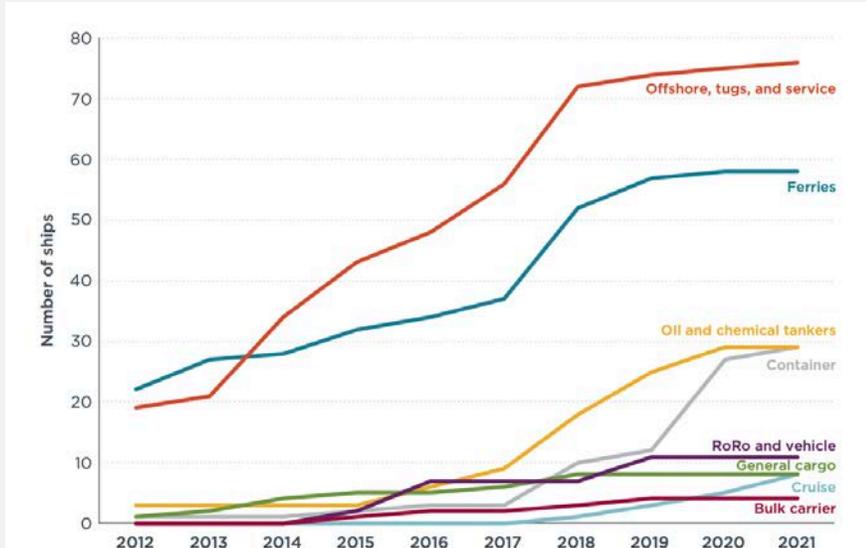
Appendix

Our analysis and research



Appendix A: Adverse effects of LNG

Adoption of LNG across cruise ships

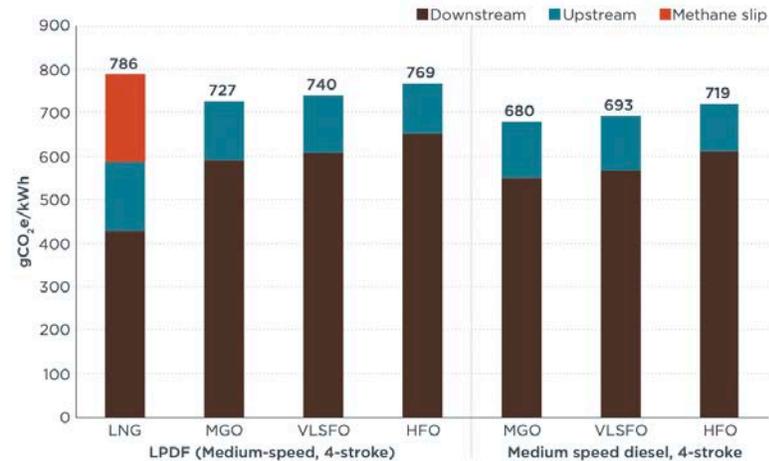


Life-cycle Greenhouse gas emissions for cruise ships, 20 year global warming potential

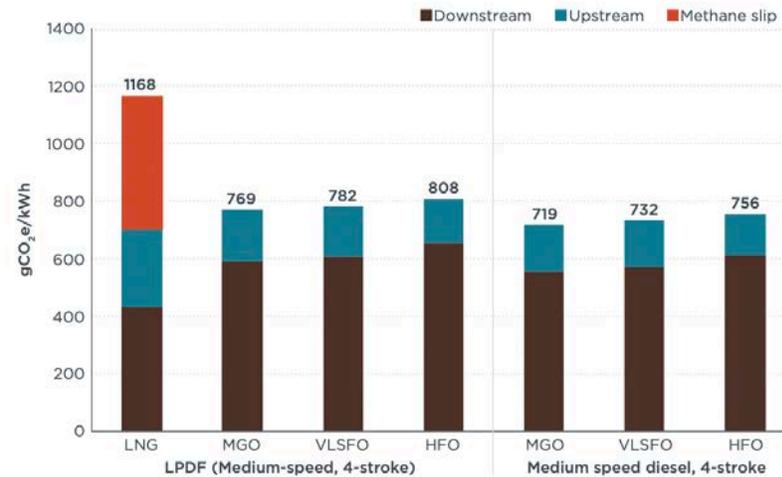
Table 2: Well-to-hull emissions for LNG and a selection of conventional marine fuels, in grams (g)/megajoule (MJ)

	HFO	VLSFO	MGO	LNG
CH ₄	0.1	0.1	0.1	0.3
N ₂ O	0.0	0.0	0.0	0.0
CO ₂	10.7	12.9	13.5	11.0
CO ₂ e (100-year)	14.3	16.8	17.4	21.5
CO ₂ e (20-year)	19.2	22.0	22.7	35.6

Source: GREET (2018)
Note: GWP values from IPCC AR5 (IPCC, 2013)



Life-cycle Greenhouse gas emissions for cruise ships, 100 year global warming potential



Life-cycle Greenhouse gas emissions for cruise ships, 20 year global warming potential

Appendix B: Poor reaction to the pandemic



Letter from US Committee on Transportation and Infrastructure, May 2020

“According to the CDC, half of the cruise lines that had norovirus outbreaks in 2019 were Carnival Corporation owned ships.”

“In fact, it seems as though Carnival Corporation and its portfolio of nine cruise lines, which represents 109 cruise ships, is still trying to sell this cruise line fantasy and ignoring the public health threat posed by coronavirus to potential future passengers and crew.”



May 1, 2020

Mr. Arnold W. Donald
President and Chief Executive Officer (CEO)
Carnival Corporation & PLC
3655 N.W. 87th Avenue
Miami, Florida 33178-2428

Mr. Donald:

Long before the COVID-19 pandemic began to race around the world, affecting local communities, churches, cities, homes, hospitals, and cruise ships sailing at sea, the cruise industry had a problem managing, containing, and responding to public health outbreaks. During a Royal Caribbean cruise on the *Oasis of the Seas* ship in January 2019, which departed from Port Canaveral, Florida, 592 passengers and crew fell ill with the norovirus, described by the Centers for Disease Control and Prevention (CDC) as an “ultra-contagious gastrointestinal illness.”¹ The CDC said this was “more than the total number of passengers who fell ill from the norovirus on every cruise that set sail in 2018,” *Kaiser Health News* reported.² The CDC identified the *Oasis of the Seas* incident as one of ten norovirus outbreaks on cruise ships last year.³ According to the CDC, half of the cruise lines that had norovirus outbreaks in 2019 were Carnival Corporation owned ships.⁴

Norovirus and other communicable diseases are not new public health threats to the cruise line industry. In 2010, the World Health Organization (WHO) identified norovirus and influenza outbreaks as “the major public health challenges for the cruise industry.”⁵ This assessment was made an entire decade before COVID-19 emerged on the world’s stage.

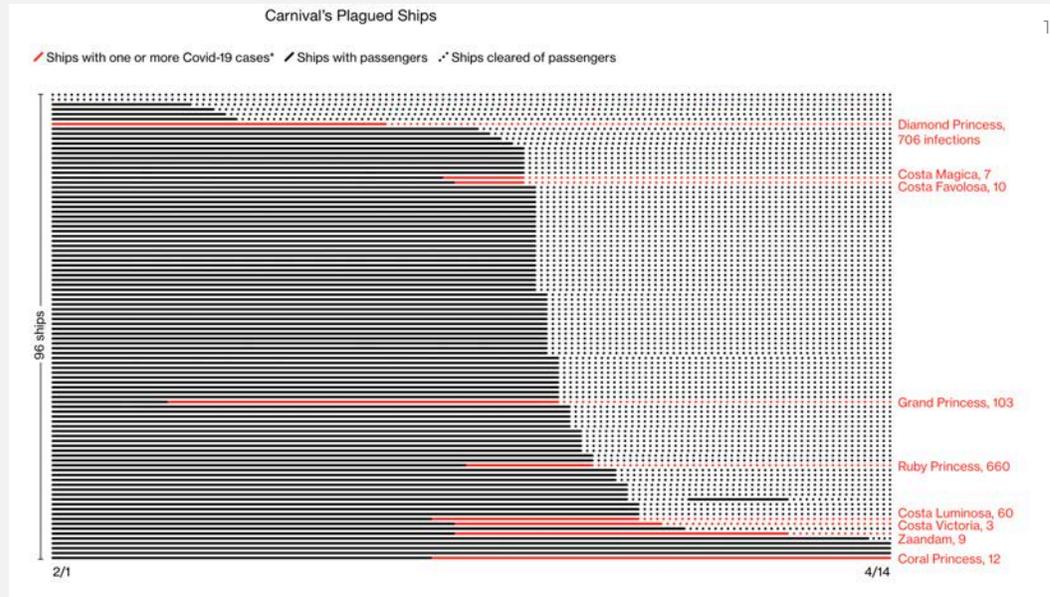
¹ “Investigation Update on the Oasis of the Seas,” Vessel Sanitation Program, Centers for Disease Control and Prevention (CDC), accessed here: https://www.cdc.gov/nceh/vsp/surv/outbreak/2019/Oasis_of_the_Seas_1-6.html. Cruise Line: Royal Caribbean International, Cruise Ship: *Oasis of the Seas*, Voyage Dates: January 6–13, 2019.

² Bruce Horowitz, “How Cruise Ship Passengers Should Prepare For Sickness Or Injury At Sea,” *Kaiser Health News*, September 20, 2019, accessed here: <https://khn.org/news/how-cruise-ship-passengers-should-prepare-for-sickness-or-injury-at-sea/>.

³ “CDC Cruise Ship Outbreak Summary,” Shipdetective.com, accessed here: http://www.shipdetective.com/ships/cdc/outbreak_summary_cruise_ships.htm.

⁴ Five of the ten 2019 norovirus outbreaks occurred on three Carnival Corporation owned cruise lines, including three outbreaks on AIDA Cruises (*AIDA Adina* and *AIDA Alma*), one outbreak on Carnival Cruise Lines (*Conquest*) and one outbreak on Princess Cruises (*Island Princess*). See: “CDC Cruise Ship Outbreak Summary,” Shipdetective.com, accessed here: http://www.shipdetective.com/ships/cdc/outbreak_summary_cruise_ships.htm.

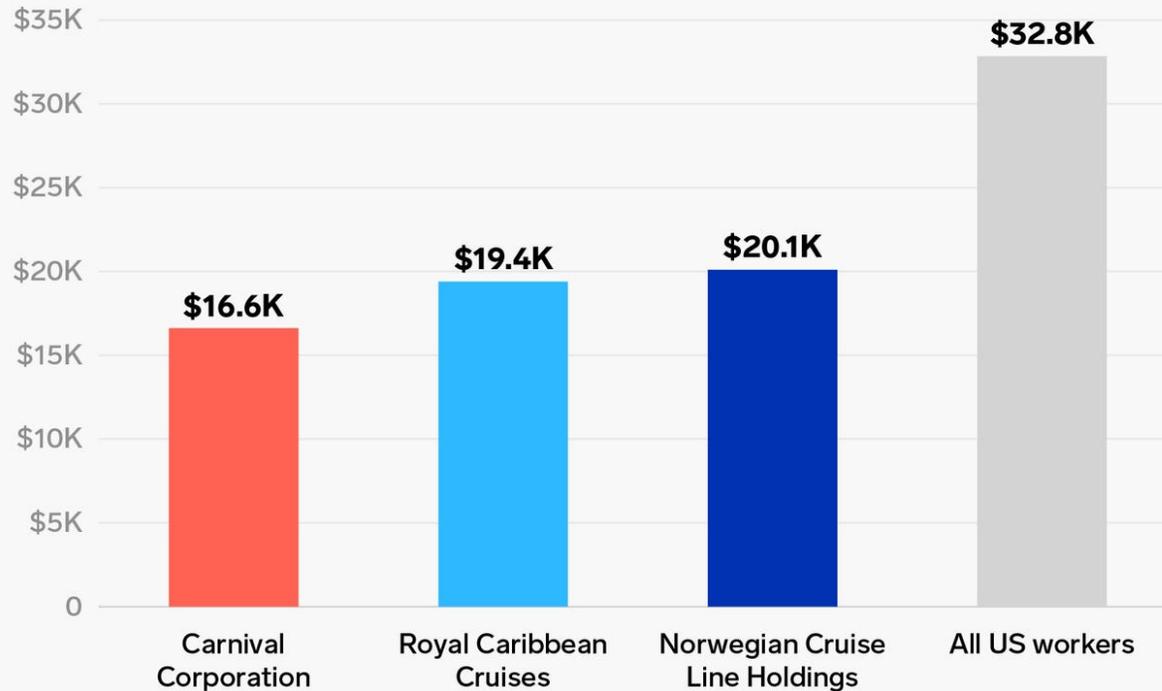
⁵ Ross Dowling and Clare Weeden, “Cruise Ship Tourism,” (2nd Edition), 2017, accessed here: <https://books.google.com/books?hl=en&lr=&id=ePMSDgAAQBAJ&oi=fnd&pg=PA220&dq=cruise+ship+health+s>.





Appendix C: Working conditions at sea

Cruise company median annual earnings, 2018



Sources: Carnival Corporation; Royal Caribbean Cruises; Norwegian Cruise Line Holdings; Social Security Administration

BUSINESS INSIDER

Divide between corporate and onboard employees

“Carnival Corp. CEO Donald said in a February interview with Business Insider that he didn't believe crew members were treated with less respect than staff members and officers, saying the **working conditions on Carnival ships are "excellent."** If crew members were subject to worse treatment, their displeasure would become clear to passengers, he said. When asked if some crew members might feel pressure to pretend they are happy because they cannot afford to lose their job, Donald said that would be impossible to sustain for the length of a contract.”

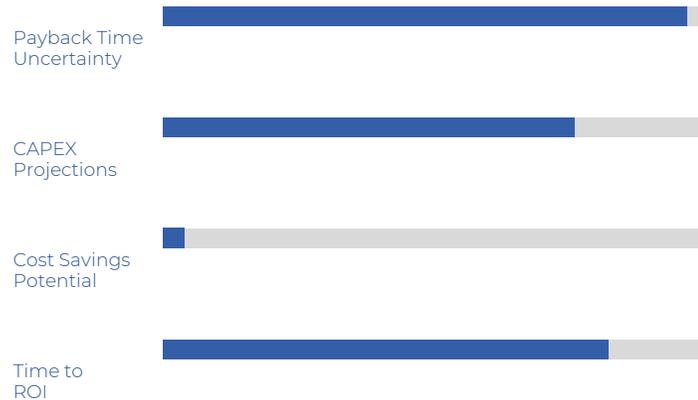
“The hostess who is from Colombia said she worked **seven days per week while making around \$1,000 per month.** She said her job **required her to always appear happy to guests, which she sometimes found exhausting.** Last Christmas, she became homesick, retreated to a pantry, and started crying. Her boss found her and asked why she wasn't smiling.”



Appendix D: Technological Factors

TECHNOLOGICAL

Environmentally beneficial technologies like the ion battery system can reduce emissions by 95%. However, these factors act as a barrier to change.



This appendix slide will help define and explain the origins and research behind each of these four factors.

Research and analysis was derived from [the European Maritime Safety Agency's "Study on Electrical Energy Storage For Ships"](#)

PAYBACK TIME UNCERTAINTY

The EMSA research study defines payback time uncertainly as the uncertainly and variability around the number of years until the investment reaches a break-even point.

For cruise ships specifically, their research shows that the payback time (in years), is "Highly Variable". In contrast, other payback times for ships including ferries, supply vessels, fishing vessels, and shuttle tankers, are around 4 years, on average.

CAPEX PROJECTIONS

The investment costs for the battery system is extremely high, relative to other costs that the company may be considering.

Outside research points towards relativity in cost as a key driver of the barriers to change. Relative to the average cruise company costs, a battery system upgrade will cost more than other upgrades for any one ship, thus leading to a reduction is pursuit.

COST SAVINGS POTENTIAL

After implementation, research shows that cruise ships will likely only save 5% on fuel costs, with the implementation of the battery system. The visual used in our presentation represents 5% of 100%.

Certain measure can be taken to maximize savings. The best method outlined in the study showed that relying on 100% of electric power for long durations would help increase savings.

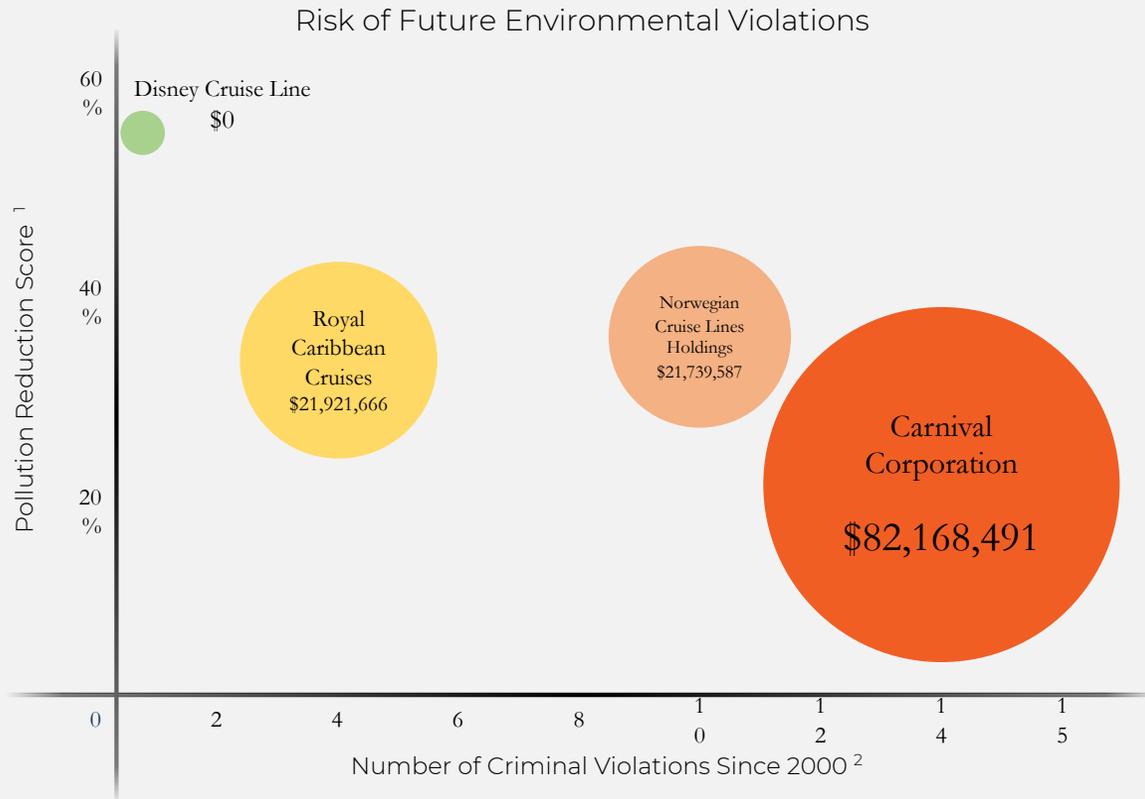
TIME TO ROI

The study outlines that cruise ships need to wait several years beyond what other vessels need, to see a potential return on investment, due to the high expenditures of energy for the commercial entertainment ship.

Unlike other vessels, the difference is portrayed in terms of energy consumption and fuel usage, which appears to be much higher for cruise ships compared to other vessels.



Appendix E: Environmental Risk Analysis



In our analysis, we determined that two key factors in determining future environmental violations by a company are their current efforts in reducing pollution, and their historical performance in abiding by legal regulation.

These factors together help paint a picture of potential future offenses. Although not an “end-all-be-all” analysis, this type of comparative analysis is useful in easily visualizing how a company’s performance differs from their competitors.

The Pollution Reduction Score is a value derived from two key performance indicators: air pollution reduction and water pollution reduction.

The weighted score is measured based on the number of ships each company owns, and whether they are outfitted with the most environmentally friendly battery storage system (air) and waste treatment system (water).

Company	Waste Treatment	Air Pollution	Pollution Weight	Number of Violations	Violations Since 2000
Carnival Corporation	3.714285	2.142857	0.244047	14	\$ 82,168,491
Royal Caribbean Int	7	1.5	0.354166	4	\$ 21,921,666.00
Norwegian Cruise Line Hld	7.333333	1.333333	0.3611111	10	\$ 21,739,587.00

¹ Based loosely on Friend of the Earth's Cruise Ship Report Card

² Good Jobs First's Violation Tracker



Appendix F: A Positive Light

STRENGTHS

- Current Market Leader
- Historical Financial Strength
- Strong Brand Recognition

ANALYSIS OF STRENGTHS

Based on research conducted by the team, and through interpretation and analysis of the case materials, we determined these three strengths were at the forefront of Carnival Corporation's business.

As the current market leader in this industry, they hold significant power over setting the standards and molding the industry to their desires.

Their historical financial strength allows them to leverage their capital in pursuit of opportunities, mentioned on the right.

Finally, their brand is known world-wide, allowing for a smooth transition to other opportunities, where they see fit. The environmentally friendly initiatives we proposed will be a good start to begin repurposing their brand.

ANALYSIS OF OPPORTUNITIES

Given the current COVID-19 pandemic, the curtains have lifted from this industry. Since the COVID-19 outbreak on Carnival's cruise ships, a keen eye has been peeling back the layers of this industry, putting pressure on the industry to change.

We believe investments into areas of technology, health & safety, and environmental initiatives, will help revitalize the brand and paint a picture for good.

Each of these opportunities have varying lengths of time. Investments into technology is a long-term goal, whereas health & safety improvements are a short-term goal.

Environmental investments will also be perceived by a case-by-case basis.

OPPORTUNITIES

- Natural Inflection Point
- Investments in Technologies
- Health & Safety
- Environmental Investments



Appendix G: A Grim Future



WEAKNESSES

- Lack of Corporate Mission
- Weak Corporate Guidance
- Unaccepting of Change
- Inflexible Business Model
- Unfavorable Legal Standing
- Criminal Violation History
- Weak CSR Initiatives
- Lack of CSR Goals

ANALYSIS OF WEAKNESSES

Our presentation touches upon the mishaps of Carnival Corporation throughout the past several years. We outline these weaknesses here.

It is no surprise that factors such as a weak corporate mission and lack of guidance helped result in the several catastrophes on-board and off-board Carnival cruise ships.

These weaknesses all point towards the fact that the tides are shifting, and previous historical strengths cannot outweigh the weaknesses that the company exhibits. A lack of CSR commitment and heavy criminal violation history also stains the company from a public perspective. Brand deterioration is plausible and likely looming.

The pandemic allowed for a natural inflection point, but our team's research points towards the fact that Carnival will fail to change with the times.

ANALYSIS OF THREATS

On-going COVID-19 issues, including the prior no-sail policy, questions even the short-term recovery that Carnival was hoping for. With the new Biden administration, tensions are likely to be placed again, without the support of heavy lobbying.

Competition plays a large role in determining the financial and cultural health of Carnival. We saw that Disney is using this tide to change their operations. It is highly uncertain whether Carnival will be able to sustain their previous competitive advantage with the onset of competitors who are willing to pivot their operations.

With maritime laws being the least strict in present day, it is impossible for loopholes to get bigger. Instead, the only probable trend is for regulation to tighten, given the current geo-political landscape.

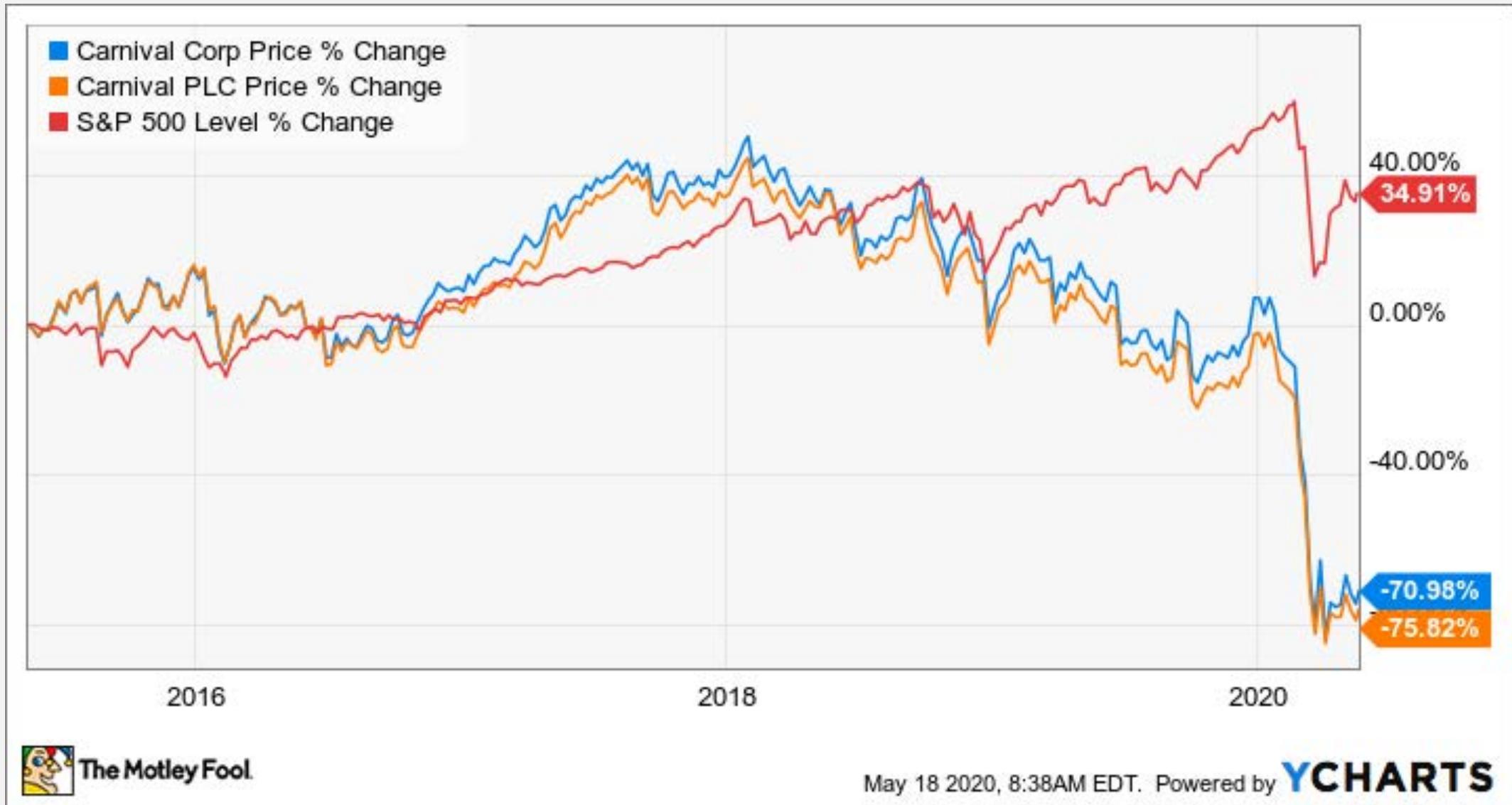


THREATS

- COVID-19 No-Sail Policies
- Criminal Violation Fines
- Competitive CSR Response
- Regulatory and Policy Shifts
- Revisions of Maritime Law
- Curtain of Secrecy has Lifted
- Major Approval Decline
- Laggard in Reform



Appendix H1: Stock Performance¹

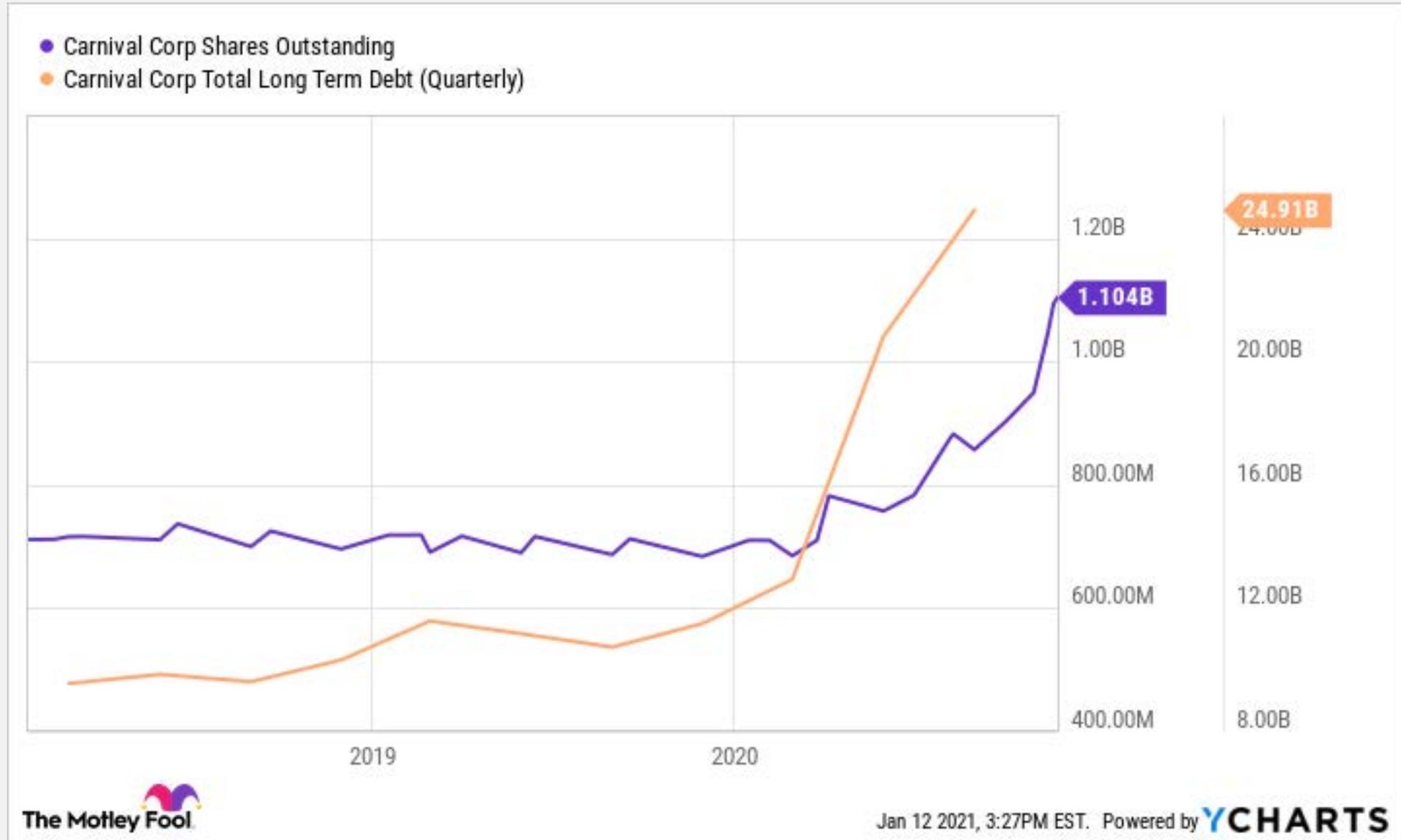


May 18 2020, 8:38AM EDT. Powered by **YCHARTS**

¹ The Motley Fool: Should You Buy Carnival Cruises Before It Goes Back Up?



Appendix H2: Debt Increase²



Jan 12 2021, 3:27PM EST. Powered by YCHARTS



Appendix H3: Credit Rating

Credit Rating Scales by Agency, Long-Term

Moody's	S&P	Fitch	
Aaa	AAA	AAA	Prime
Aa1	AA+	AA+	High grade
Aa2	AA	AA	
Aa3	AA-	AA-	
A1	A+	A+	Upper medium grade
A2	A	A	
A3	A-	A-	
Baa1	BBB+	BBB+	Lower medium grade
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	
Ba1	BB+	BB+	Non-investment grade speculative
Ba2	BB	BB	
Ba3	BB-	BB-	
B1	B+	B+	Highly speculative
B2	B	B	
B3	B-	B-	
Caa1	CCC+	CCC	Substantial risk
Caa2	CCC		Extremely speculative
Caa3	CCC-		Default imminent with little prospect for recovery
Ca	CC	CC	
	C	C	
C	D	D	In default
/			
/			

"Junk"



S&P downgrades cruise operator Carnival to BB-

"S&P Global Ratings on June 23 downgraded Carnival Corp. & PLC's issuer credit rating to BB- from BBB- to reflect its expectation that the cruise company's credit measures will remain "very weak" through at least 2021.

The rating agency also downgraded the cruise ship operator's issue-level rating on its secured notes to BB+ from BBB- and its issue-level rating on the company's unsecured debt to BB-from BBB-. The company remains on CreditWatch with negative implications.

Ratings said Carnival's adjusted leverage could exceed 10x in 2021 due to the pause in sailings. The company booked an adjusted loss of \$2.38 billion for the second quarter of 2020, and Ratings expects full-year EBITDA to be 50%-60% below 2019 levels.

Carnival may generate sufficient EBITDA to reduce its adjusted leverage below 6x in 2022 if demand begins to recover and net yields improve closer to 2019 levels, Ratings said."

- S&P Global Market Intelligence¹

¹ S&P Global Market Intelligence: S&P downgrades cruise operator Carnival to BB-

Appendix I: Risk Assessment Support



Demand Outlook

Positive Spin:

"According to Cruise Lines International Association (CLIA), the leading trade organization for the industry. It found that **73% of cruisers say they are "likely to cruise" in the next few years, and 50% say they will cruise within the year.**"¹

"Our data shows that cruisers are eager to cruise again and are willing to follow stringent public health measures in order to return to sailing," Golin-Blaugrund said, noting **90% of cruisers polled said they would wear a mask.**"¹

Negative Spin:

"While cruising fanatics are eager to return, the expansion of the industry in recent years has depended on attracting new cruisers. A 2016 study by Allianz Global Network showed that **two-thirds of Americans have never even been on a cruise.**"²

"Linda Allen-Spear, a travel specialist and founder of Cruises by Linda, says **it's not looking good. "We have no new cruisers,"** Allen-Spear told me earlier this fall. "[Zero] new bookings. **Practically no calls. Only existing clients.**" Ben Cordwell, an analyst specializing in travel at GlobalData, adds that it's important to remember that "bookings" for next year aren't entirely new, either, with many representing voucher rebookings from canceled 2020 sailings."²

Fees and Fines/Legal Troubles

Positive Spin:

"In an effort to change its culture, **Carnival Corp.'s recently hired a chief ethics and compliance officer, Pete Anderson, who created an the action plan to address the issues** outlined in the culture survey referenced by the court monitor. **Implementing that plan will take 18 to 24 months, he said.** In December, Anderson's team presented to the court **all of the things it has done so far to address pollution**, including expanding the team charged with investigating violations from four to eight, the budget for the company's compliance office from \$27 million to \$47 million, and the compliance staff in Miami from 29 employees to 55."³

Negative Spin:

"U.S. District Judge Patricia Seitz said she is **frustrated** that the company **has not presented goals to measure improvements in the number of violations per quarter**, adding that each of the violations cited by the court-appointed monitor **could be grounds for the court to revoke the company's probation and even re-sentence the company.** She asked the executives to stop qualifying the data about environmental violations by saying that the amount of pollution is a fraction of its overall operation."³

"The key to reducing environmental violations, said Seitz, is to **change the company's culture.** A survey conducted by an outside expert hired by the court and delivered to the company in August found a **pervasive lack of trust between workers, supervisors and managers**, resulting in a perception that the **company blames employees who make mistakes instead of determining the root cause of a violation.**"³

Safety/Health Troubles

Positive Spin:

"A Vancouver-based company, **TraceSafe**, is working with cruise lines to **develop onboard contact tracing systems that could help the industry return to operations.** "Our technology is very adaptable," Lloyd said. "When changes to the **CDC guidelines** come out, that can be quite catastrophic. With our framework, we're **quite flexible and can quickly and agilely adapt and meet those requirements.** We're fine with **whatever the CDC decides, as our product will adapt and make sure it works flawlessly.**"⁴

Negative Spin:

"Although cruising has many obvious pleasures, potential health hazards are also a risk with cruise ship travel. **Crew members and fellow travelers often come from countries where these diseases are more common than in the United States and where vaccination is not routine.** Respiratory diseases are also common on cruise ships."⁵

"**Small luxury operators have tried strict testing requirements and capacity limits, but onboard outbreaks persist... The recent outbreaks suggest that it will be nearly impossible to prevent the spread of infections in the short term without extreme measures that would drastically increase costs and reduce the entertainment value of a cruise.**"

"The more the industry learns about the virus, the clearer it becomes that an **arsenal of expensive precautions** are needed. Many of the smaller ships that sailed through the summer and fall imposed a series of new protocols such as requiring preboarding Covid tests, daily temperature checks and sharply reduced passenger loads."

¹ USA Today: 'Pent-up demand': With bookings strong for late 2021, many cruisers are ready to sail

² Conde Nast Traveler: How Can Cruise Lines Attract New Cruisers in 2021?

³ The Miami Herald: Federal judge frustrated over Carnival's continued pollution while on probation

⁴ Travel Pulse: Tech Company Developing Contact-Tracing Wearable Devices for Cruise Ships



Appendix J1 – Industry Call for \$5B R&D

BY THE MARITIME EXECUTIVE 11-23-2020 09:03:59

Among the decisions at last week's International Maritime Organization's Marine Environment Protection Committee (MEPC 75) was an agreement to give further consideration to the proposal of the major shipping organizations to launch a research and development initiative funded by the industry and administered by the IMO. The members reviewed the proposal and "agreed to give it further consideration."

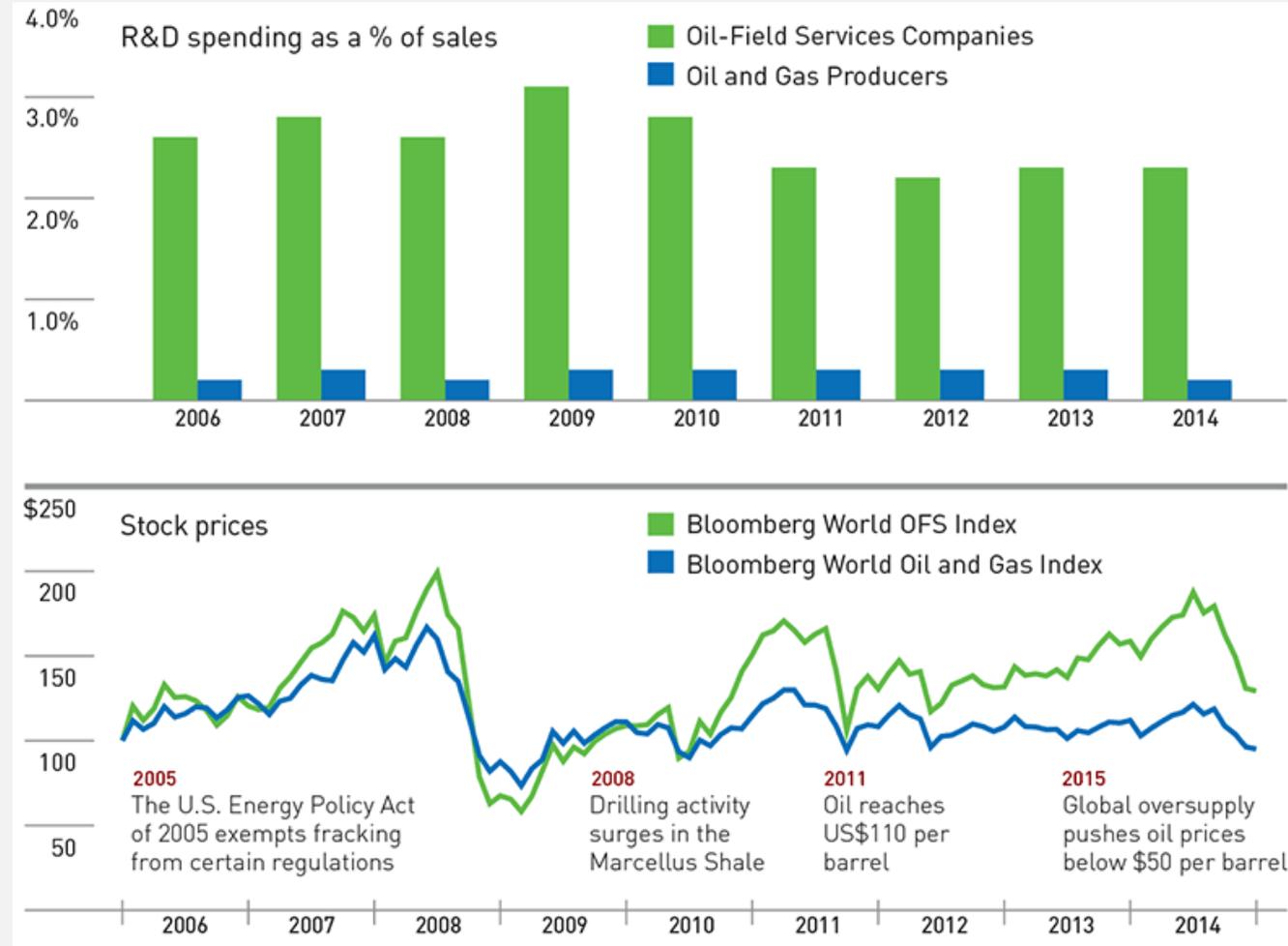
Coordinated to the launch of the MPC 75 sessions discussing the efforts to lower carbon emissions, eight of the leading shipping organizations called on the IMO to back a proposed \$5 billion R&D program to accelerate the decarbonization of the maritime industry. The proposal builds on the previous \$2 per tonne charge on bunker fuel sales that the International Chamber of Shipping and others have been advocating for as a means to focus the industry's efforts.

The organizations, which collectively represent all sectors of shipping from cargo to passengers and over 90 percent of the world's merchant fleet, said their effort was focused on R&D, but critics said the efforts did not go far enough and accused the organizations of trying to dominate the discussion which could have adverse consequences on their cost of operations.

"...Organizations proposed the formation of a new International Maritime Research and Development Board (IMRB)... **IMRB is a crucial vehicle for driving the progress needed to build a zero-carbon shipping industry...** the organization said it was the best opportunity to **coordinate and accelerate the R&D needed to meet the IMO's 2050 emissions targets.**"

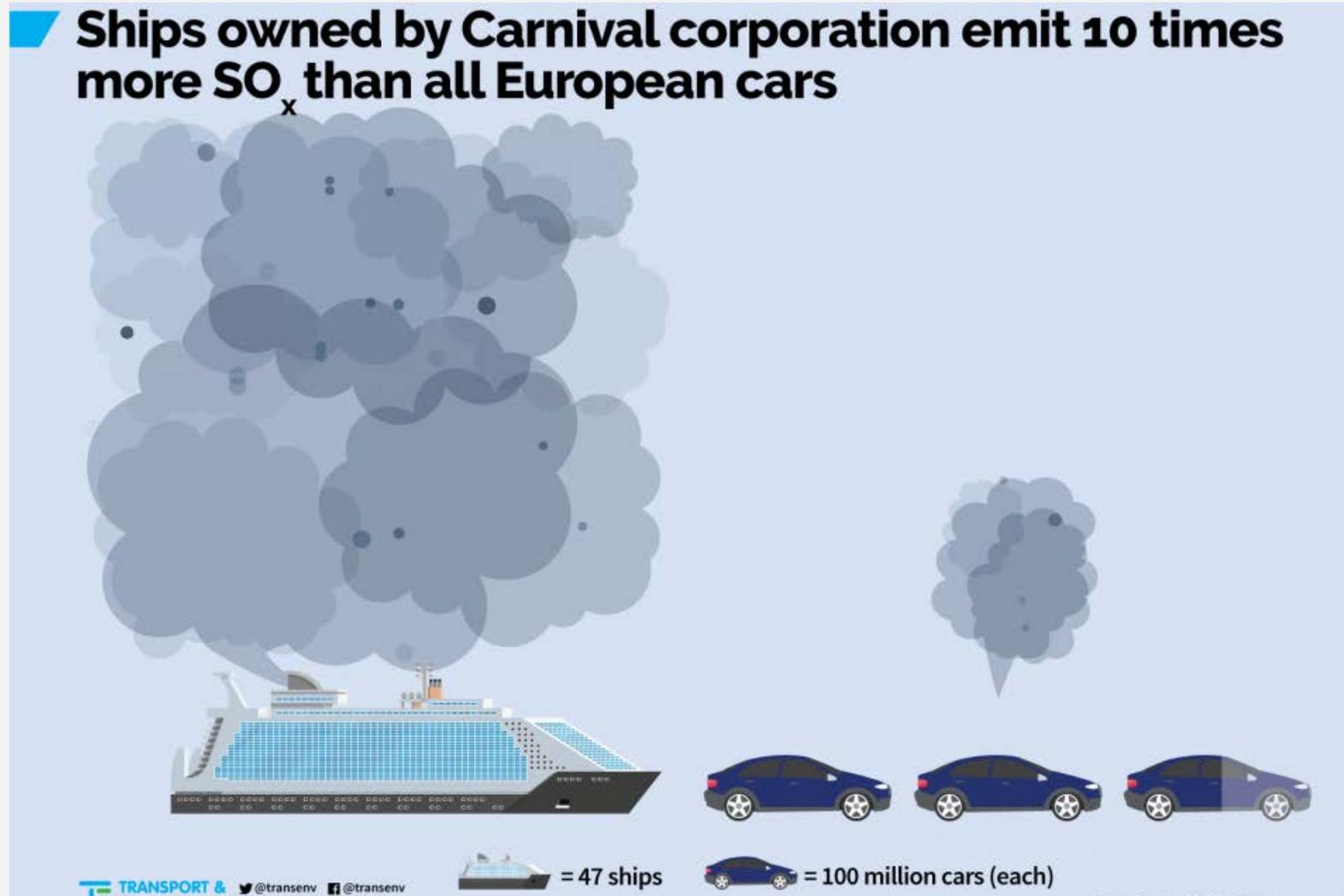


Appendix J2 - R&D Investment Pays Off in Oil and Gas





Appendix K - Carnival's ship SO_x emissions





Appendix L – Big plans for fun but not the environment

MARDI GRAS: FUN-FUELED VACATION INNOVATION



GET A SNEAK PEEK BEHIND THE FUN

INSPIRED BY

**BIG PLANS FOR
BUILDING FUN**

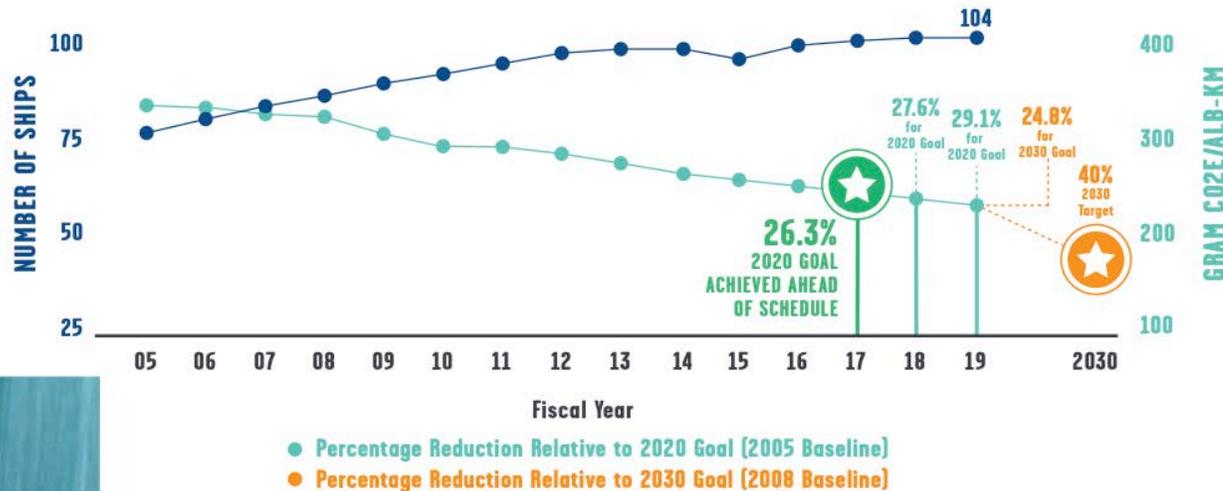
Appendix M – Sustainability Development Goals



CARBON FOOTPRINT



- Made more progress on our 2020 goal and achieved a 29.1% reduction relative to our 2005 baseline.
- Committed to a new goal to reduce the intensity of CO₂e (carbon dioxide equivalent) emissions from our operations by 40% by 2030 relative to our 2008 baseline, measured in grams of CO₂e per ALB-km. In 2019, we achieved a 24.8% reduction.
- Delivered the second cruise ship in the world to be powered by liquefied natural gas (LNG) both at sea and in port.
- First cruise company to join The Getting to Zero Coalition for decarbonization.
- Invested in fuel-cell technology.
- Invested in battery technology.
- Received Greenest Shipowner of the Year Neptune Award.
- Received Germany's Blue Angel award for AIDAnova's environmentally-friendly ship design.



GUEST AND CREWMEMBER HEALTH, SAFETY & SECURITY



- Continued to implement a series of initiatives to prevent guest and crew injuries.
- Continued to enhance our health and safety procedures.
- Completed the implementation of active assailant program.
- Carnival Corporation & plc - CSMART Academy received the SAFTEY4SEA training award for the 2nd consecutive year.

COLD IRONING CAPACITY



- 47 ships equipped with the ability to utilize cold ironing/shore power technology.
- We connected to 12 cruise ports equipped with cold ironing technology globally.

ADVANCED AIR QUALITY SYSTEMS



- 77% of fleet equipped with Advanced Air Quality Systems.
- 236 engines equipped with Advanced Air Quality Systems.
- Developed a [public website](#) dedicated to Advanced Air Quality Systems updates.

AWWTS TECHNOLOGY



- Reached our goal by achieving a 10.3 percentage points in our Advanced Waste Water Treatment System (AWWTS) coverage of fleetwide capacity relative to our 2014 baseline.

WATER EFFICIENCY



- Surpassed our goal by achieving an 8.7% reduction relative to our 2010 baseline.
- Further improved our water efficiency by supplying 82% of our water needs from the ocean and purchasing only 18% at designated ports.

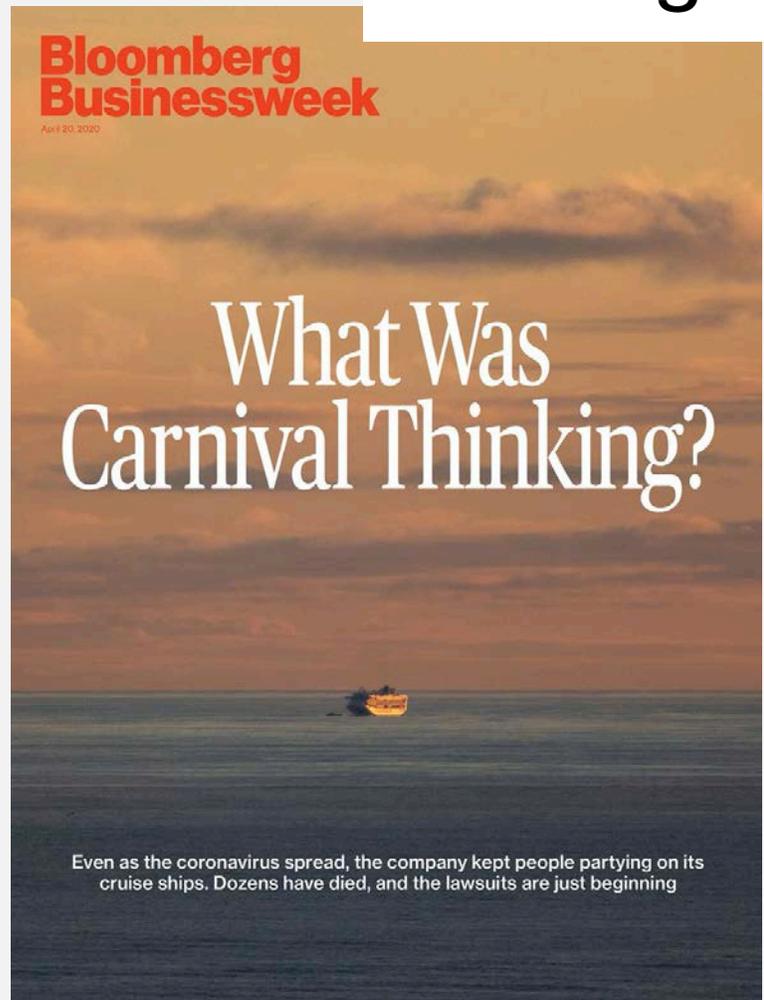


Appendix N – Employee's experience to COVID response

“Nothing’s perfect, OK?”



▲ Containers of food are delivered to the guests being kept isolated in their cabins. (“I wouldn’t have fed it to my worst enemies,” says Dever.) COURTESY KAREN DEVER



Even as the coronavirus spread, the company kept people partying on its cruise ships. Dozens have died, and the lawsuits are just beginning



▲ “Finally found out we could have room service from the bar, compliments of the *Princess*,” says Karen Dever. COURTESY KAREN DEVER



Appendix O – Leading responsibility

Ethics & Compliance

At Carnival Corporation & plc we recognize our responsibility to provide industry leadership and to conduct our business as a responsible global citizen. Our Corporate leadership is manifested in our Code of Business Conduct and Ethics, which requires that every employee and member of the Boards of Directors use sound judgment, maintain high ethical standards and demonstrate honesty in all business dealings. As a responsible global citizen, we are committed to achieving and maintaining the highest standards of professional and ethical conduct.

Every Carnival Corporation & plc employee is responsible for adhering to business practices that are in accordance with the letter and spirit of the law, and with ethical principles that reflect the highest standards of Corporate and individual behavior. Integrity of performance is a Carnival Corporation & plc standard wherever we do business.

We inform Carnival Corporation & plc employees of our Code of Business Conduct and Ethics when they are hired. In addition, all shoreside employees at the Director level and above, or the local equivalent, complete and sign a Business Ethics Disclosure Form at least once annually, indicating that they have read, understood and agreed to comply with our Code of Business Conduct and Ethics.

To reinforce the Company's commitment to ethical business behavior, Carnival Corporation & plc introduced mandatory ethics training during 2011. All employees must complete the computer-based Code of Business Conduct and Ethics training biennially, while additional ethics training is assigned based on employee position and responsibilities. Certain employees in sensitive roles receive ethics training annually. The Boards of Directors and senior management also receive this training. Training completion rates are monitored and transmitted to the Corporate Compliance Officer annually.

Health, Environment, Safety Security & Sustainability

The Boards of Directors of Carnival Corporation & Carnival plc have established a Board-level Health, Environmental, Safety & Security ("HESS") Committee to assist the Board in fulfilling their responsibility to supervise and monitor HESS policies, programs, initiatives at sea and onshore, and compliance with HESS legal and regulatory requirements.

In addition, Carnival has established a hotline telephone number and website to permit reporting of environmental concerns. The hotline can be contacted at:

- 1-888-290-5105 (toll-free in North America)
- +1-305-406-5863 (from all other locations)
- www.carnivalcompliance.com