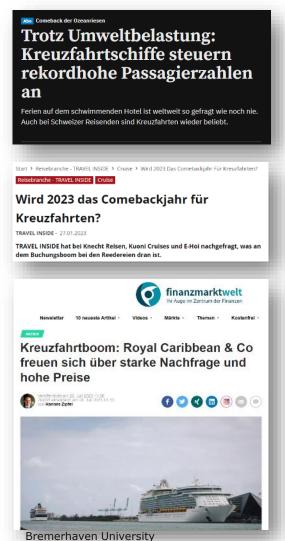
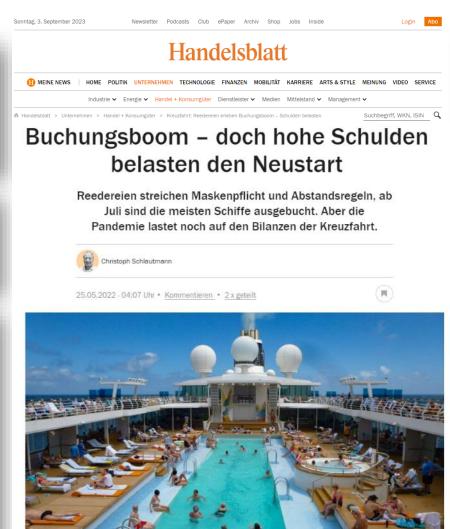
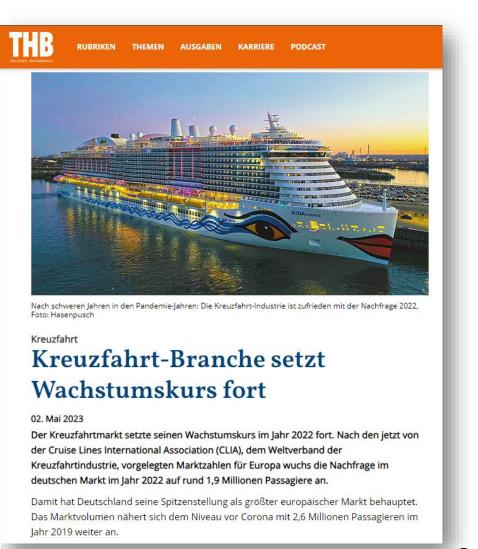


Crisis was Yesterday... Cruise 'Business as Usual'







RCL's Icon of the Seas - Polarisation trend in cruising

Floating Destination: 20 decks, 8 neighbourhoods, 10.000 pax and crew



Tonnage: 250,800 GRT

Length: 365 m

Passenger Capacity: 7600

Crew: 2350

Fuel: LNG

Sail start: 28 January 2024

28 Cabin Categories 8 Neighbourhoods/ Districts



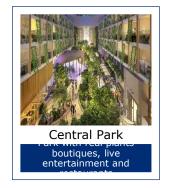


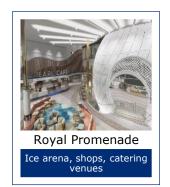












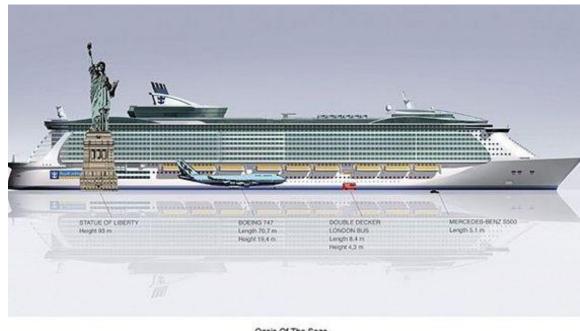


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RCL's Icon of the Seas vs. Titanic

Mega Space for Passengers, Less Crew Attention!



7	-	Oasis Of The S vs. Titanic	eas A	b.		
					-	
			<u> </u>			1

	Titanic	Icon of the Seas				
Gross Tonnage (GT)	46328	250800				
Guests	2435	7600				
GT/Guest (Space)	19	33				
Crew	892	2,350				
GT/Pax (Space)	14	25				
Guest/Crew (Service)	2,7	3,2				





https://www.pinterest.de/pin/704954147903160223/

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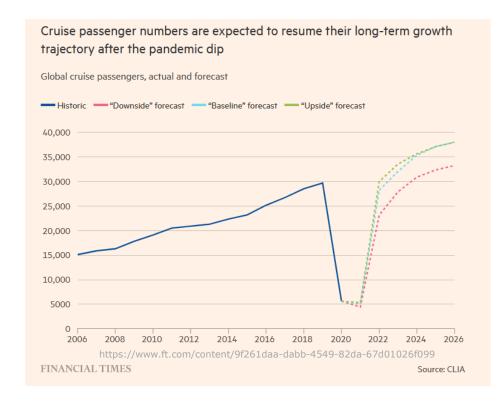
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Starting position according to Covid19

... The pandemic left the cruise sector with large debts and the challenge of getting people back on board!

"Like the tides, We will return"... This time cleaner!

We can survive anything!



Supply Impact*:

- 2019: Total fleet capacity = 581 K Pax
- 2020-21: Los of 8% = 532 K Pax
- 2021-22: Recovery of 6% = 566 K Pax

Demand Impact*:

- 2019: 27.5 million Pax
- 2020-21: Decrease of 74% = 7.05 million Pax
- 2021-22: Recovery of 25% = 13.9 million Pax

Revenue and Spending Impact*:

- 2019: \$27.4 B
- 2020: Decrease of 88% = \$ 3.3 B
- 2021: Recovery = \$ 6.6 B = 76% compared to 2019
- 2021 Average Pax Revenue = \$ 247 / Day = 9% less than 2019
- 2021 Average Pax Onboard Revenue = \$71 / Day = 5% less than 2019

Financial Impact (Top 3 Cruise Operators):

- 2019: Profit ≈ \$ 0,5 B / Month***
- 2020-21: 'No Sail Cash-Burn' ≈ \$1 B / Month**
- 2020-21: New Debt and Equity Capital ≈ \$12 Billion ***

Recovery Potential

Recovery Risk

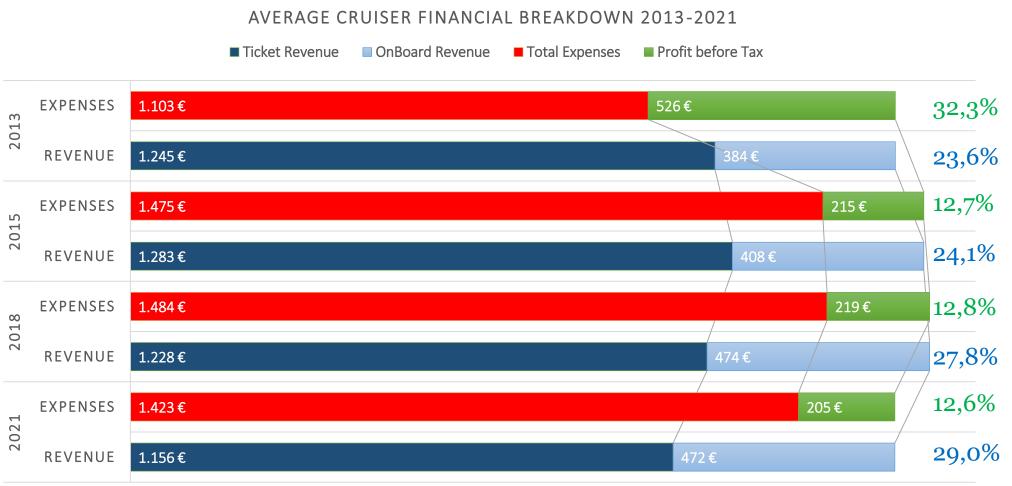
^{*} Data Sources: https://cruising.org/en-gb/news-and-research/research/2020/december/state-of-the-cruise-industry-outlook-2021, https://cruisemarketwatch.com/

^{**} https://www.cruiseindustrynews.com/cruise-news/23839-here-s-how-much-cash-the-cruise-lines-are-burning-through.html

^{***} https://www.ft.com/content/d8ff5129-6817-4a19-af02-1316f8defe52

Onboard Revenue and Captive Pricing

A Driver of Ship-Size and Competition for Port-Economies?



The Competition on Land and **Monopolies** on Board create the premises for **Captive Pricing** On Board Revenue is vital for **economic** survival and profitability

In real current prices (1 Dollar = 0.95 Euro)

Page7

'Damocles Trident' and the cruise industry

Cicero. (c. 45 BC). Tusculan Disputations, Book 5, Section 61

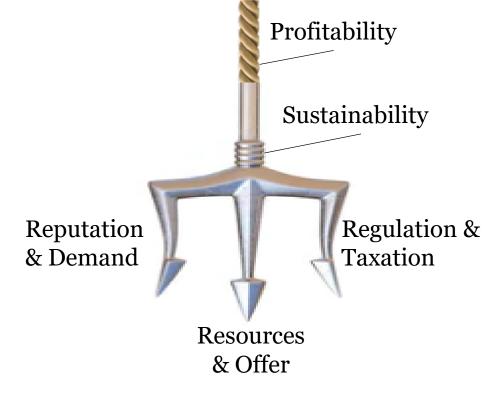
Damocles wished to experience the life of a king.

King Dionysius allowed him to change places for a day.

Damocles enjoyed the luxury, but noticed a sword above him hanging by a single hair.

He felt constant fear and realised that power comes with fears.

Damocles learned that the pursuit of power has hidden dangers.





Page8

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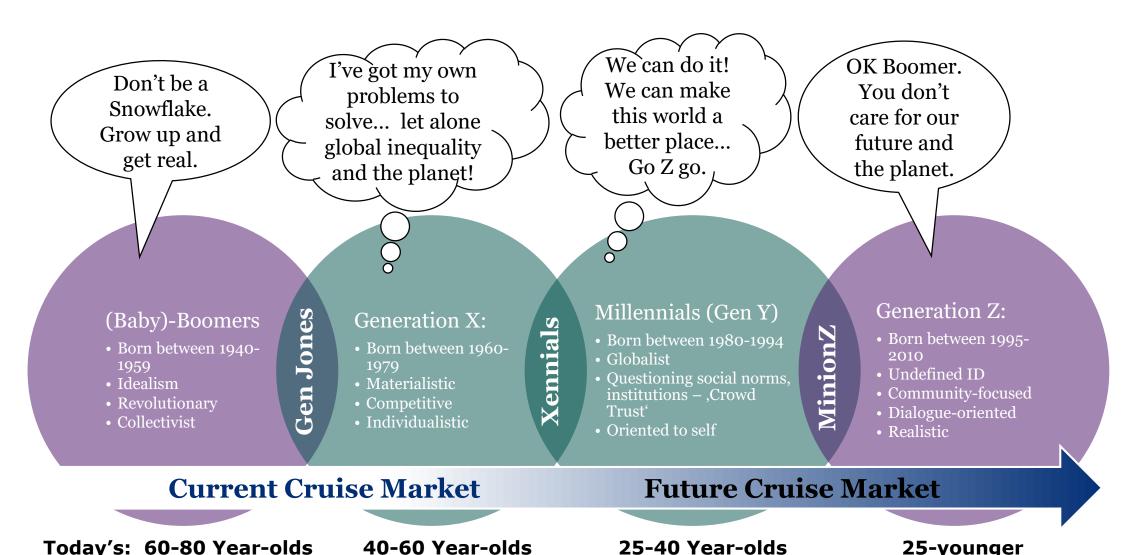
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Reputation & Demand

The challenge of an ageing "cruise society": attracting new and future customers.

Hey Boomer... Have a nice Cruise!

Generational conflict and cruises as a symbol for 'Intergenerational Inequity'



'Hedonism' is losing appeal: "Tell me how you travel and I will tell you who you are"

Modern (Cruise) Tourists distance themselves from Consumerism!

- •Maxims of the Supertraveller Mindset:
- •"We want genuine brands that actually care about us and the communities that they impact."
- •"We want to come back to our ordinary worlds feeling transformed and inspired."
- •"We want the human element back in an otherwise commoditized and impersonal experience."

Robledo, M. A., & Batle, J. (2017). Transformational tourism as a hero's journey. Current Issues in Tourism, 20(16), 1736-1748. https://doi.org/10.1080/13683500.2015.1054270

- •"The full potential of tourism lies in providing experiences that transform and give meaning to the lives of the people." (p.146)
- •"Reviews of marketing material would help analyse how the industry markets its products in terms of their transformative power." (p.146)

Cave, J., & Dredge, D. (2020). Regenerative tourism needs diverse economic practices. *Tourism Geographies*, 22(3), 503–513. https://doi.org/10.1080/14616688.2020.1768434

 "Rising concerns about climate change, overtourism, declining employment and labour conditions and resource degradation have all highlighted the inadequacy of the current capitalist system in addressing the failures of mass tourism. Now, under COVID-19, there are calls for tourism to move beyond 'business as usual' and to find a pathway to regenerative tourism." (p. 504)

Bellato, L., Frantzeskaki, N., & Nygaard, C. A. (2022). Regenerative tourism: A conceptual framework leveraging theory and practice. *Tourism Geographies*, 1–21. https://doi.org/10.1080/14616688.2022.2044376

•"Regenerative tourism focuses its interventions on building the capacity of whole systems for regeneration, rather than managing social-ecological impacts whilst ultimately pursuing infinite economic growth." (p.10)

Story-Telling of a Transformational Experience

Transformational experiences give meaning to the lives of people

"New Sustainability" is more than Conservation... It is also Regeneration!

Adding socio-ecological value locally!

Page11

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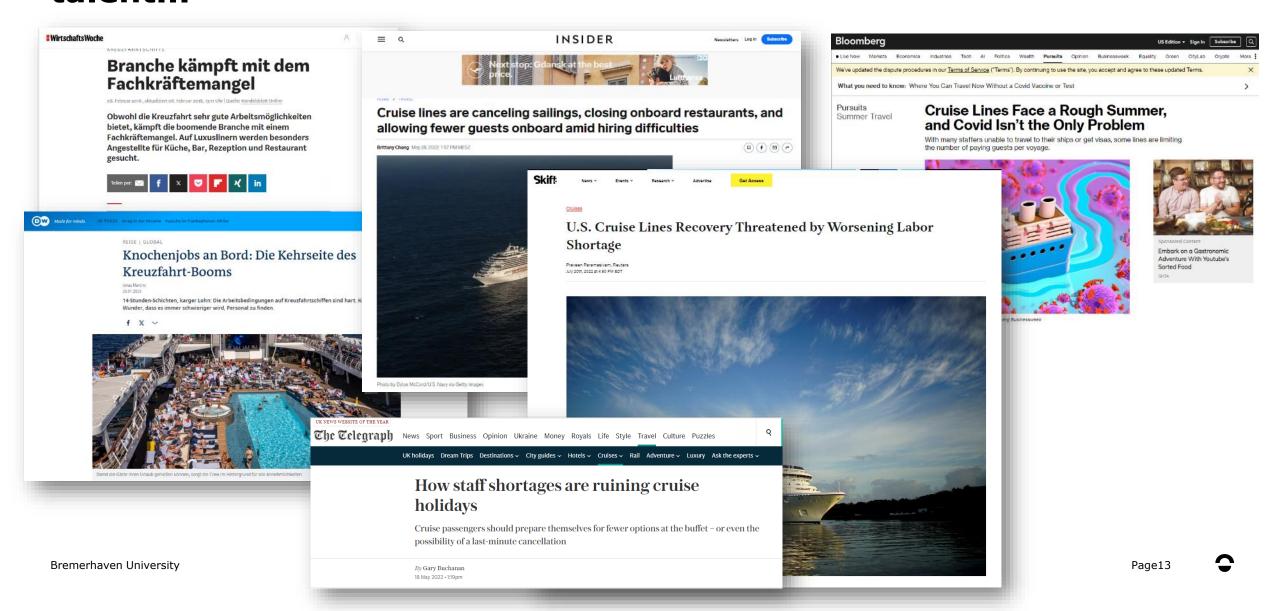
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Resources & Offer

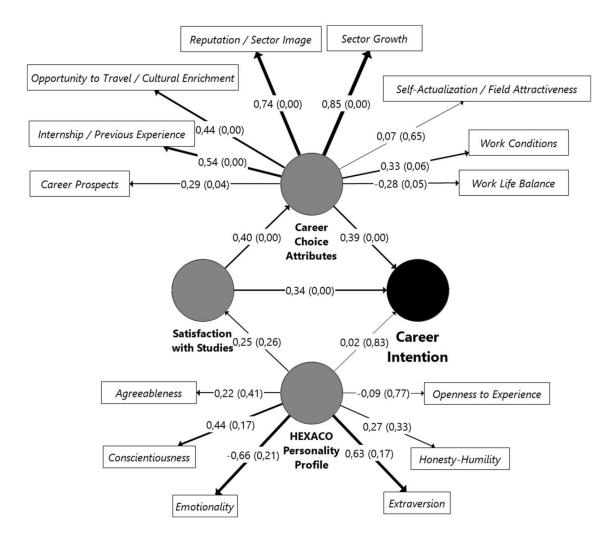
Skills shortage and 'emancipated' destinations!

Staff shortages and COVID19 as triggers in the competition for talent...



Career Choice Attributes and Career Intention:

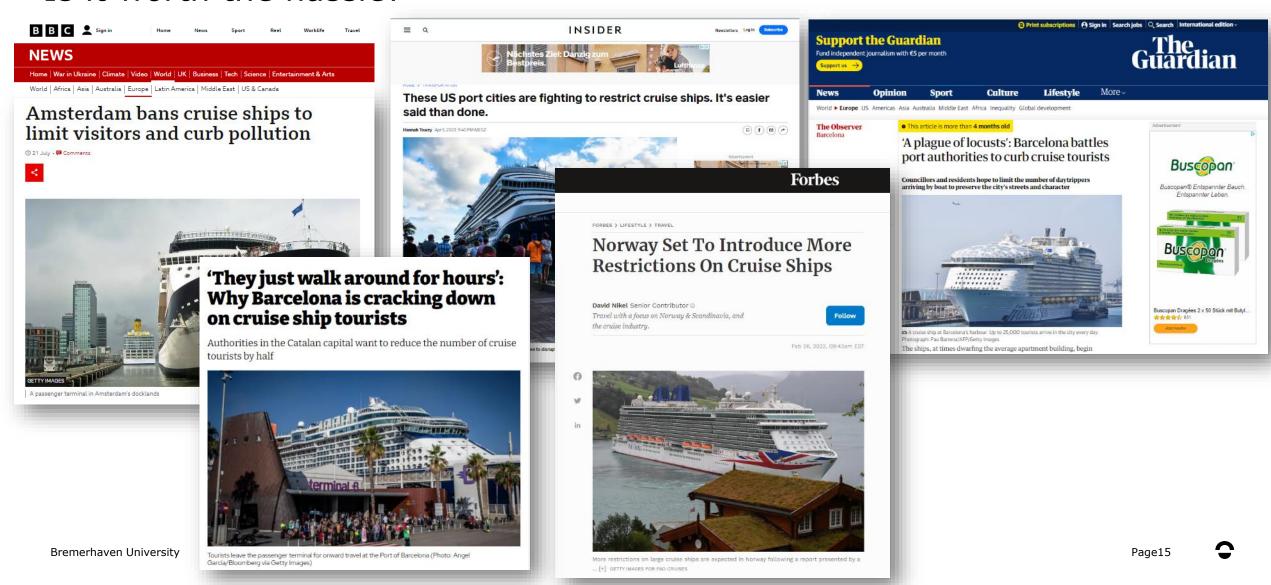
"Being paid to travel the world and getting stripes along the way" Story is insufficient!



"Coming to the rest, non-personality-related factors, our findings do not support the career expectation stereotypes of the younger hospitality-student generation. Rather than focusing their decision on short term **employment-focused aspects** such as: 'work conditions', 'work-life balance' and 'career-prospects', they place particular emphasis on longer-term and somewhat idealistic considerations. 'reputation / sector image', 'sector growth' and 'opportunity to travel / cultural enrichment' emerged as the most important aspects predicting an intention to pursue a career in cruise tourism. This has considerable implications for the cruise sector, as the sector's current recruitment narrative may prove insufficient to compensate for the negative publicity regarding sustainability and corporate social responsibility: 'Being paid to travel the world and getting stripes along the way' may not be enough to attract - not mentioning retain - young talents in the near future." (p.2038-2039)

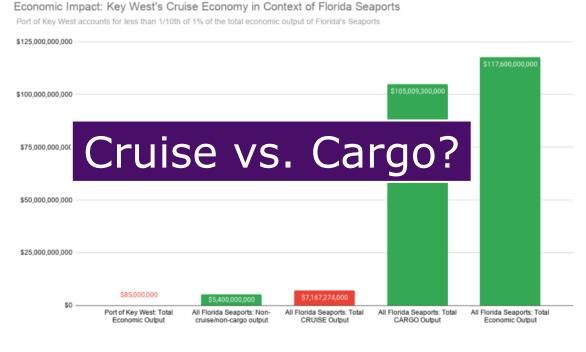
More and more destinations and their residents are questioning the actual value-added contribution of cruise tourism:

Is it worth the hassle?



Comparative economic impact of cruising...

Cargo shipping and other forms of tourism more beneficial?



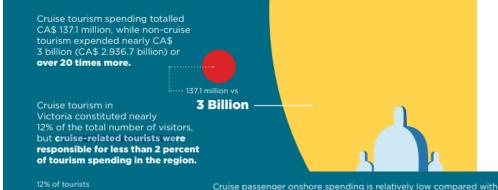
REPORT: New analysis exposes cruise tourism benefits as overinflated myth

WEDNESDAY APRIL 06, 2022

2% of spending

Economic benefits of non-cruise tourism dwarf cruise tourism

Cruise- vs. Land-Tourism?



overnight tourism. In Victoria, cruise passengers are estimated to have spent CA\$ 87.36 per visit, while stayover visitors spend seven times more (CA\$ 710) per visit and 2.7 times (CA\$ 237) more per day. In addition, non-cruise "day trippers" are estimated to have spent 1.6 times more (CA\$ 137.46.) per person than the average cruise passenger.

Non-cruise tourism in Greater Victoria is responsible for generating nearly **20 times more in government taxes** than cruise tourism.

The Port of Key West accounts for less than 1/10th of 1% of the total economic output of Florida's Seaports. https://www.safercleanerships.com/news/economic-impacts-florida-seaports-and-cruise-ships-at-the-port-key-west



Caribbean Tourists Arriving by Plane Worth More to Local

Economy Than Cruise Guests Find average per visit and per day spend for cruise and air arrivals in three tourism economies;

Narch 10th, 2016 at 115 PM EDT
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Brememaven omversity

Country	Cruise Arrivals	Air Arrivals	Cruise Spend Per Person	Air Spend Per Person
U.S. Virgin Islands	1,900,000	800,000	\$138-\$158 per day	\$200-\$250 per day w/o lodging
Puerto Rico	1,356,822	8,600,413	155.62 per day	\$298.15 per day w/ lodging
Bermuda	355,880	224,329	\$153 per visit	\$1249 per visit w/ lodging

Non-cruise tourism created nearly **31 times more jobs** (37,411 vs. 1210)
than cruise operations In Greater Victoria.

https://www.stand.earth/latest/ocean-protection-shipping/canadian-shipping/report-new-analysis-exposes-cruise-tourism

Page16



The Question of Regulation...

Regional Restrictions vs. Globalisation

Home » Activities » Bonaire's One Cruise Ship Policy

Bonaire's One Cruise Ship Policy

by Tanya Deen for the Bonaire Insider | Feb 11, 2023 | Activities, Local News, Tourism Announcements



Bonaire gets closer to enacting the "One Ship Policy."

In a recent press conference, an update was given on the "one ship policy" aimed at a better Bonaire experience for cruise tourists as well as residents of Bonaire. By handling a maximum of one large cruise ship per day, several improvements are being made for Bonaire. For the cruise tourists, the service and experience of the island visit will improve by spreading out the number of visitors. Bonaire can also better serve the increased number of cargo ships, partly due to the strong growth in the number of inhabitants, and entrepreneurs can offer more service to visitors. This will also relieve pressure on Bonaire's infrastructure.

The "one ship policy" already came into effect last year, resulting from the Tourism Recovery Plan, but Bonaire is still seeing two cruise ships at a time due to older contracts that cannot be broken. As of mid-April, there will mostly be one cruise ship in port. However, smaller ships with less than 700 passengers will be allowed as a second ship. The revision of the criteria and requirements for port bookings was also discussed. Incentives for motivating cruise lines to visit during the low season is also being considered.

Port ≠ Land Experience

Cruise News + Royal Caribbean News

Royal Caribbean to Increase Capacity at its Private Island

Royal Caribbean will increase capacity at PerfectDay at CocoCay to 13,000 passengers by adding Hideaway Beach, CEO Jason Liberty revealed.

By Robert McGillivray Affiliate Disclaimer Modified Date: Feb 8, 2023



Photo Copyright: Melissa Mayntz / Cruise Hive

Royal Caribbean Group has big plans for Perfect Day at CocoCay, its private island in the Bahamas. During the recent Q4 earnings call on February 7, CEO Jason Liberty and Royal Caribbean Internation President Michael Bayley revealed plans to increase the island's capacity to 13,000 visitors daily.

Perfect Day at Cococay has quickly become one of the most popular destinations for cruise travelers. With the launch of *lcon of the Seas* coming and with the addition of the new Hideaway Beach, an adult-only neighborhood set to launch in the fourth quarter of 2023, the island is sure to become even more popular.

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The economic impact of cruising on ports varies...

A Meta analysis of the economic impact of cruises on destinations

Meta-Analysis of 30 Studies:

Quantitative data extracted and coded from:

- 17 Scientific Journal Papers
- 4 Conference Papers / Working Papers
- 9 Industry Reports (e.g. CLIA, BREA)

LS-Regression Model of 8 Observed variables:

INDEPENDENT VARIABLES:

- Cruise line expenditures
- Number of cruise line calls
- Cruise passenger length of stay
- Cruise passenger expenditures
- Number of cruise passengers
- Crew expenditures
- Number of crew members

DEPENDENT VARIABLE:

Direct economic impacts on port communities

10% Increase on pax expenditure at port = 8% Increase in Direct Economic Benefits

Compared to US and EU ports: The direct economic impact of cruising on ports was 37% lower for the Caribbean and 26% lower for the emerging market ports.

10% Increase on the time spent at port = 2.4% Increase in Direct Economic Benefits

Cruise calls and average expenditure per passenger

Visitor numbers

The general degree of economic development → Economic Impact of Cruise Tourism

Length of stay

→ The cruise

company

matters



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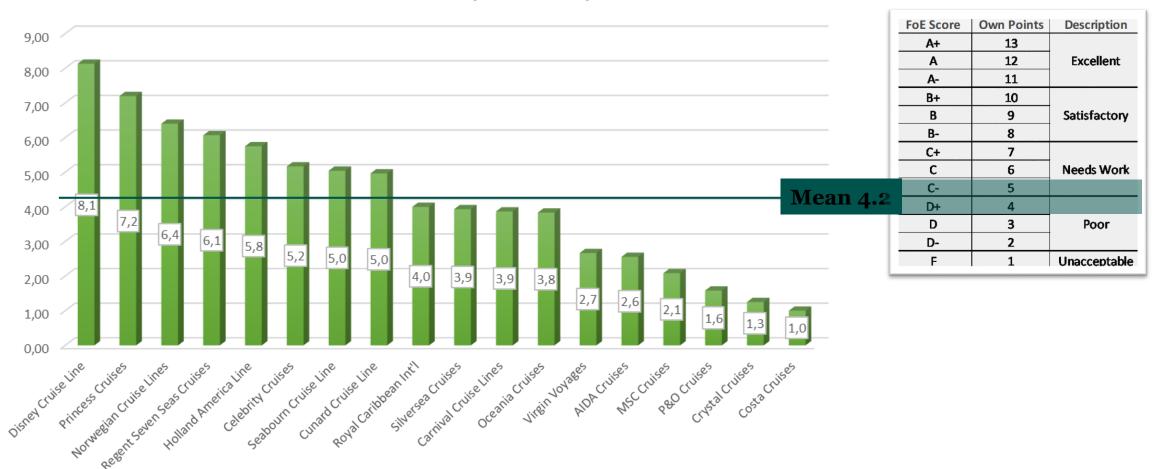
Regulation & Taxation

... When sustainability becomes concrete and hurts the wallet!

The Critics...

Environmental Sustainability - FoE Scorecard 2009-2021 (Average)

FoE Cruise Line Score (2009-2021)



Evaluation of FoE-criteria according to Ship Class:

Large Ships score with Technology, the small ones Compliance

		reatment tal Ships)	Water Quality Compliance (% of Total Ships)				Air Pollution Reduction (% of Total Ships)					
Ship Class	Grade F (1)	Grade C (6)	Grade F (1)	D	Grade C (6)	В	Grade A (12)	Grade F (1)	Grade C (6)	В	Grade A (12)	Ship Class % of Total
Mega (>5000 Pax)	6%	94%	95%	2%	2%	0%	0%	51%	19%	26%	4%	26%
Large (3000-5000 Pax)	38%	63%	77%	16%	1%	0%	6%	56%	20%	22%	2%	47%
Mainstream (1000-3000 Pax)	25%	75%	58%	29%	4%	0%	8%	58%	10%	33%	0%	19%
Small (<1000 Pax)	29%	71%	25%	0%	0%	25%	50%	88%	0%	12%	0%	8%
Total	26%	74%	78 %	2 %	2%	1%	6%	58%	16%	24%	2%	100%

Sewage Treatment: Whether a cruise line has installed the most advanced sewage and graywater treatment systems available instead of dumping minimally treated sewage directly into the water.

Water Quality Compliance: To what degree cruise ships violated 2010-2019 water pollution standards designed to better protect the Alaskan coast. Ships were also failed for scrubber use since they generate toxic water pollution.

Air Pollution Reduction: Whether a cruise line has retrofitted its ships to "plug in" to available shoreside electrical grids instead of running polluting engines when docked. Or uses the lowest sulfur fuel worldwide or both.

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'Damocles blade' of regulation!

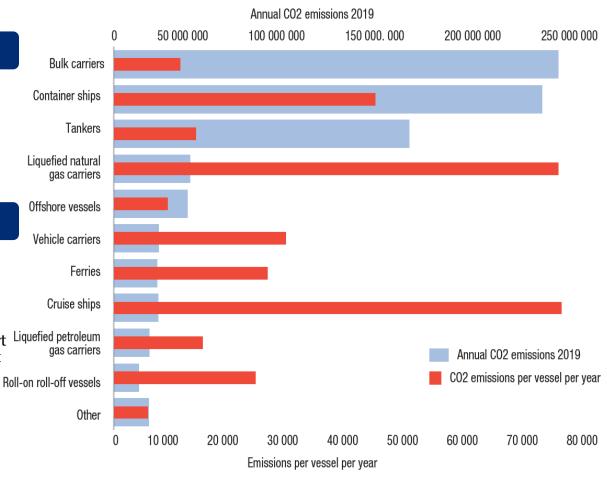
Cruise ships have the largest \overline{CO}_2 foot' but a relatively small \overline{CO}_2 footprint'.

EU Emissions Trading System (ETS)*:

- In January 2024, the EU Emissions Trading Scheme (EU ETS) will be extended to cover CO2 emissions from all large ships (of 5000 gross tonnage and above) calling at EU ports, regardless of which flag they fly. The scheme covers:
- 50% of emissions from journeys starting or ending outside the EU
- 100% of emissions occurring between two EU ports and when ships are in EU ports.
- The EU ETS covers emissions of CO2 (carbon dioxide), CH4 (methane) and N2O (nitrous oxide), but the latter two only from 2026.

IMO's EEXI and CII Reporting:**

- From 2023, shipping companies will have to submit two sets of data to the IMO each year:
- Energy Efficiency eXisting Ship Index (EEXI): This is the energy efficiency of a ship (CO2 emissions per tonne and nautical mile) compared to a baseline based on ship design (installed engine power, transport capacity and ship speed).
- Carbon intensity indicator (CII): This measures the efficiency of a ship's transport of goods or passengers (i.e. a ship's CO2 emissions per unit of nominal transport effort the product of a ship's capacity and the total distance travelled in nautical miles).
- From 2024, the IMO will give ships CII ratings (A-E, where A is best / least carbon intensive). The level of performance will be recorded in a "compliance statement" which will be included in the ship's Ship Energy Efficiency Management Plan (SEEMP).
- Rating E -> plan with corrective measures to achieve a C or better
- Rating D -> 2 more years time and plan with corrective measures
- Rating C, B or A -> Efforts to achieve consistent A



Source: UNCTAD calculations, based on data provided by Marine Benchmark. https://unctad.org/news/covid-19-cuts-global-maritime-trade-transforms-industry

* https://eur-lex.europa.eu/eli/reg/2023/957

** https://www.imo.org/en/MediaCentre/PressBriefings/pages/CII-and-EEXI-entry-into-force.aspx

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CONCLUSION: What impact do these developments have on the future and prospects of the cruise industry?

Larger cruise ship newbuildings and reduction of operating life (esp. older ships)

- Technologically up to date and more energy-efficient
- More control over and opportunities to generate on-board revenue
- Digital services and a lower crew-to-passenger ratio

Declining port calls and increasing home ports outside the EU

- Shipping companies shift their routes (to non-EU territories) and include their own private islands in their itineraries
- The total number of ports visited is likely to decrease and focus on the main ports of departure and main points of attraction

Consolidation and 'glocalisation' of the market

- Cruises become more expensive and deliver less value for money
- Increased polarisation of markets/segments (class instead of mass), at least in Europe (i.e. return to the 'traditional' model.

Reputation & Demand

Regulation & Taxation

Profitability

Sustainability

Resources & Offer



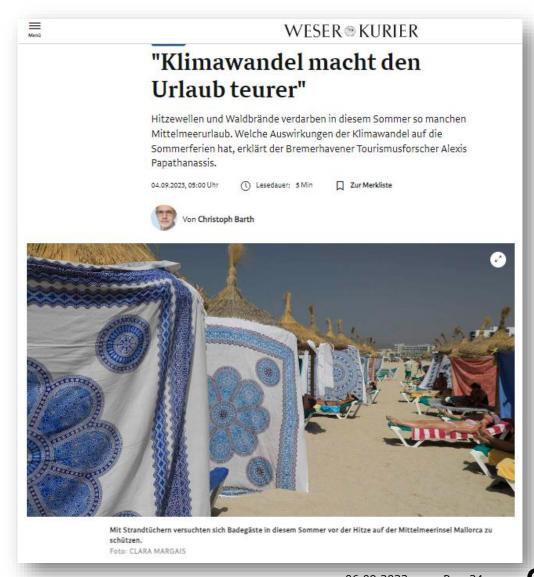
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Reasons for optimism...

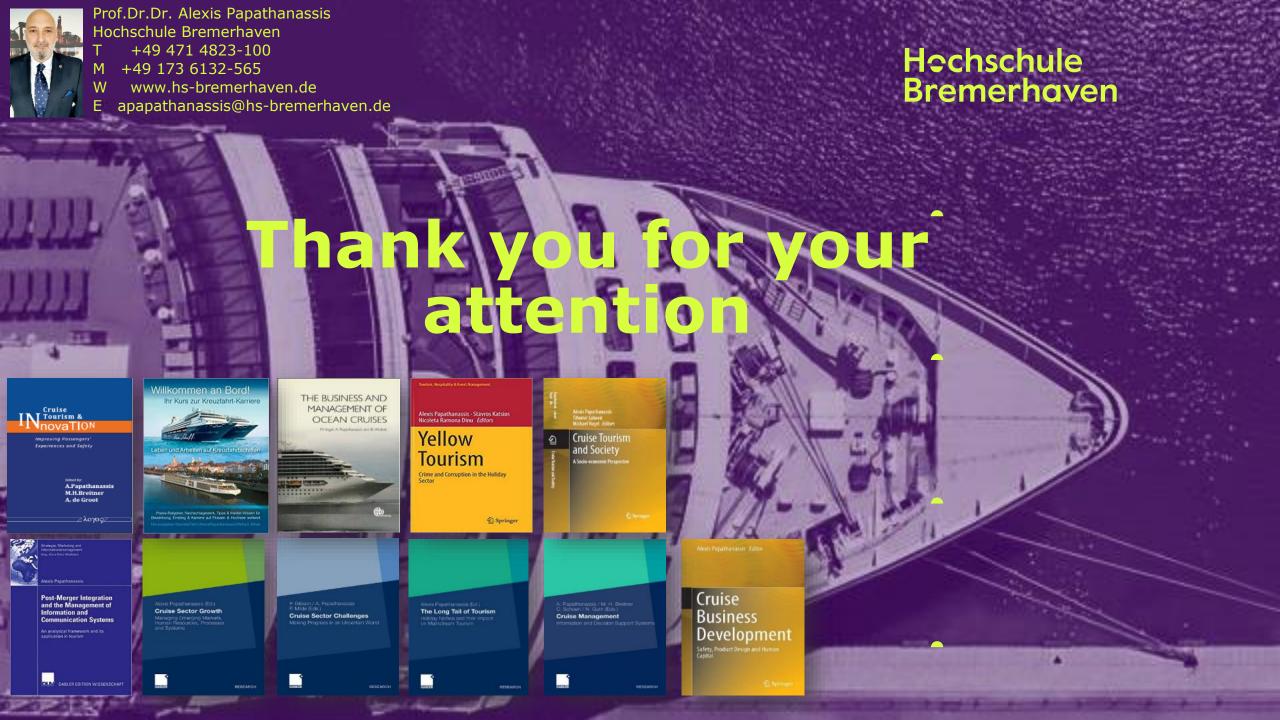
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When it comes to transport, the seas are not always the first port of call. But with TRANSPORT advances in technology it looks likely that they will continue to play a vital role. Their ability to transport huge cargo and thousands of passengers in just one trip makes them **Future ship** an attractive option. The industry is moving to use cleaner oil-based fuels and shapes alternative energy - such as solar, wind power and fuel cells (electrochemical cells that convert the chemical energy from fuel into electricity) - is another innovation of these future ships. **Zero Emission Activity Eoseas Concept Cruise Ship** "World Class" Cruise Ship **Cruise Vessel** Capacity: 3,311 passengers Capacity: 5,400 passengers Capacity: 540 passengers Crew: 1.089 Features: 2,700 staterooms; all Length: 160 metres Length: 305 metres season sailing capability: Features: four dual-fuel LNG (liquid Power source: fuel cells, solar LNG-fueled natural gas) diesel electric and winds energy Features: Swat (Small generators; innovative sail concept Waterplane Area Twin) hull; four for added wind energy propulsion fully automatic wing sails **Super Eco Ship 2030** Length: 353 metres Power source: fuel cells using LNG as hydrogen Features: symmetrical aerofoil-shaped hull source designed to harness wind propulsion in Features: additional energy tandem with LNG; fuel savings of 60 per cent from solar and wind power: and reduced carbon emissions by 80 per cent friction-resistant materials compared with conventional shipping SOURCE FUTURISM @INEWSGRAPHICS

but at the end of the day...



06.09.2023 Page24



Future Concept-Models *From Flying Cruise Ships to Nuclear Cruises...*







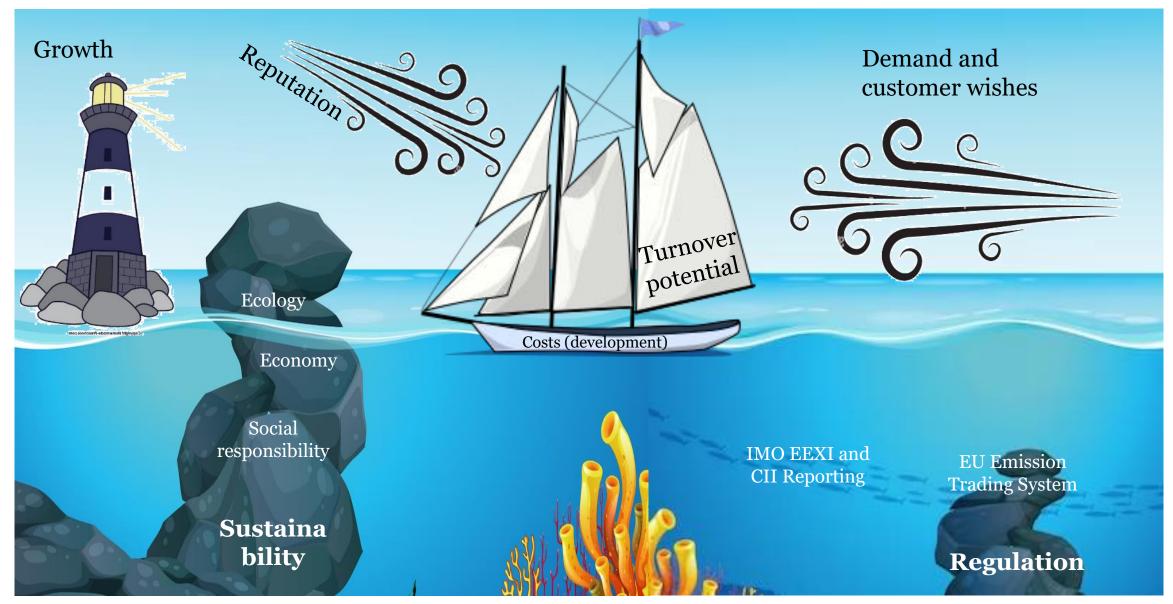




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Where is the cruise industry 'sailing'?



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