

Candidate 1 evidence

An Investigation into the Impact and Sustainability of Cruise Liners.

Introduction

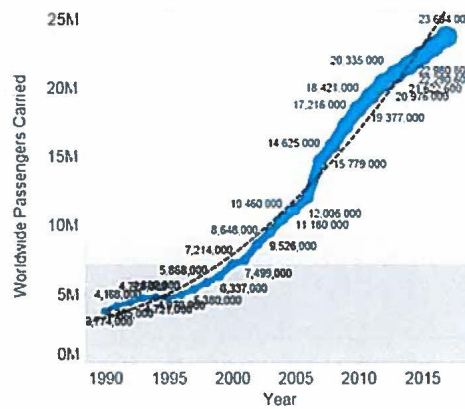


Figure 1: Number of passengers carried by Cruise Liners 1990 – 2017 (repositioncruises.com2018)

Since 1990 the number of people travelling by cruise ships on holiday has rapidly increased from 4,168,000 around 1990 to 23,694,000 in 2017 as shown by figure 1. By the time 2018 is over it is estimated that cruise liners will have carried 27.2 million passengers worldwide, the largest number ever recorded. Due to so many passengers, more ships are under development and a total of 1.3 million gross tons and over 35,000 berths are due to enter the market between April and December 2018. This expansion taking place represents an overall 7% increase in the cruising industry. Symphony of the Seas is a symbol of this expansion as the largest cruise ship it can carry maximum of 6,680 passengers, and has cost a total of \$1.35 billion (See figure 1).



Figure 2: Photograph of Symphony of the Seas (iglcruise.com 2018)

The expansion of cruise liners and introduction of newer larger ships has caused much concern over the social and environmental impact. Global warming has resulted in the Arctic sea ice melting and this is creating new opportunities of routes such as the North West Passage¹ (see figure 3).



Figure 3: The NW passage.
(<https://www.britannica.com/place/Northwest-Passage-trade-route>)

¹ NW Passage: The sea route from the Atlantic to the Pacific Ocean through the Arctic Ocean along the North coast of Canada.

This new route is allowing cruises to sail nearer the Inuit tribes such as Haida who are an ethnic group and this is affecting their lifestyle and disturbing their way of life (Britannica 2018). Benefits for the Inuit could include profit from tourists to the local area and this could improve their style of living. There are also many environmental problems such as polluting the sea and causing aquatic life to die off and this pollution reduces biodiversity of the sea (Guardian, 2015). However, some ship companies are listening to scientists and using environmental friendly fuels. An investigation into the social and environmental impact of cruise liners will help decide whether the increased number of cruises across the world can ever be sustainable.

Source 1: "Cruise holidays: Who is leading the fleet for Sustainable sea travel?" Sarah Shearman, Guardian.

This article explains how cruise liners are polluting our world environmentally and the social impacts cruises cause to local communities. These large ships give out many chemicals which are harming our environment. Sarah Shearman argues that air pollution has a significant effect on our world, despite solutions which could be put in place to sort this problem. The author states that the public who travel on these ships don't seem to care about what is going on and others don't know how much it's damaging our surroundings. She argues that there are always debates about car emissions but people seem less concerned about polluting the sea. However, Shearman states that New International Maritime Organization (IMO)² legislation coming into force in 2020 will require cruise ships to reduce their Sulphur emissions from 3.5% to 0.5%. In order to comply with the limit, cruise companies have positioned scrubber technology on their ships. This is designed by using seawater to wash the exhausts rather than water on board. Shearman argues that a more effective alternative would be to install emission abatement technology, like in road vehicles, and switch from heavy fuel oil to cleaner marine or road diesel. Liquefied natural gas, also known as LNG is another method for cruises to use. This is an engine which uses natural gas to convert chemical energy into mechanical energy. This allows companies to obey by the regulations set by the IMO. Shearman highlights that these large ships have also discovered ways to use wind power and hybrids; a system which lowers fuel consumption, reduces airborne pollution and is energy efficient. Shearman seems to think wind power is the most environmentally friendly alternative. Ships use wind power through a mechanical or electrical transmission to power the propeller. There are also other alternative energy sources such as renewables and biofuels, as well as battery-powered ships. Shearman

² IMO- a specialized agency of the United Nations, IMO is the global standard-setting authority for the safety, security and environmental performance of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.

writes that this could possibly be a better solution and some companies have started to explore these in much more detail.

Evaluation of Source 1:

Sarah Shearman is a commissioning editor for The Guardian. She is also a freelance journalist covering social issues, sustainability, business and technology. The Guardian is a trustworthy newspaper, dating from 1821, providing balanced opinion on many national and international issues. This article is credible as it includes information from international organisations such as the IMO and includes technical specifications and pollution limits to add reliability. Tracy McVeigh who also writes for The Guardian agrees with Sherman's views about cruise liners polluting the environment. She criticises ships which typically use heavy fuel oil in their engines which is polluting both air and sea and damaging our environment. McVeigh point out that P&O's cruise ship The Oceana will soon be fitted with exhaust gas cleaning systems. McVeigh argues that this is essential because cruise ships can emit as much pollutants that a million cars do every day (McVeigh, 2017). A company called EcoMarine power has recently been investigating the possibility of using wind to reduce fuel use and emissions from ships, and have stated that they will be able to use both wind and solar power as more technologies are developed (ecomarinepower, accessed 2018).

Source 2: "The Complicated Relationship between Cruise Ships and the Arctic Inuit!" Peter Kujawinski, The New Yorker.

Peter Kujawinski explains the relationship cruise liner companies have with the Inuit tribes. Kujawinski states that the Inuit feel that cruise ships are disrupting the wildlife as they travel through their native land. The tribes are demanding cruise ships to be restricted, however they believe no one is taking what they say into consideration. Kujawinski states that by protecting the Nunavut's environment, it would maintain the Inuit lifestyle and allow them to carry on their traditional culture. Kujawinski states there has been an organization set up which has created restrictions for marine traffic around important habitats. However, the problem is, according to Kujawinski, that much of the area has disputed waters. The article reports that Canadians claim that the North West Passageway is its own waters but the USA say it's an international water. There is much debate who owns the water area at the Nunavut islands. All this controversy means that the Inuit's claims are not being heard.

Evaluation of source 2:

Peter Kujawinski published the article in The New Yorker, on May 11th 2017. The New Yorker delivers essays on conflicts between environmental, social and economic impacts of world issues and this is relevant to help us understand the sustainability of cruise liners. The author highlights the views of the Inuit and argues that they have not got a strong voice. However,

Ashifa Kassam from The Guardian disagrees with Kujawinski and states that introducing this new passageway is a huge advantage to the Inuit as their income increases massively and he believes it improves their style of living. He argues that the passengers of the ships are learning about the Inuit culture including drum dancers, throat singers and the creations of local artisans. Visitors have also brought in more than \$100,000 to the communities since these routes opened (Kassam, 2016, the Guardian). An article by Carolyn Beeler highlighted the possibility of social impact on the Inuit when The Crystal Serenity docked at a small community called Cambridge Bay in 2017. She stated that the passengers on the ship doubled the population of the small village for a day. Beeler quoted a resident who worried about the ocean traffic in her small community and the possible impact on seal and other wildlife. However Beeler also mentioned that the ocean liner avoided environmentally sensitive areas and brought 'thousands of dollars' into the village as local crafts were sold (pri.org, 2017).

Summary 3 "Cruise industry "failing" environment and public health, report claims" By Gavin Haines, travel writer, the Telegraph

Gavin Haines reports on the impacts cruise ships have on the environment. He states that Naturschutzbund Deutschland (NABU) is a German non-governmental organization dedicated to conservation at home and abroad, including the protection of rivers, forests and individual species of animals. Haines explains that NABU awards points for environmentally friendly factors and 44 out of the 55 European vessels assessed by NABU scored zero points. Three of these ships were operated by Royal Caribbean International who operate liners such as Symphony of the Seas (Figure 2). Haines highlights that many vessels are assessed on which type of fuel they run on and whether or not they are fitted with catalysts and particulate filters. Cruise ships which follow the rule of using cleaner fuels on the Arctic waters were awarded points. Haines cites Daniel Rieger, from NABU, who states that "there are at least a few companies that are starting to take action voluntarily". However Royal Caribbean have announced a new class of ship which will be powered by natural gas and they hope to have this up and running between 2022-2024 and claim that they do meet or exceed all environmental laws and regulations. Haines comments how NABU are advising anyone who would like to travel by cruise to look into more detail about the cruise for example the fuel it runs on and see if it's more environmentally friendly. If everyone did this and didn't sail with the damaging ships then Haines argues that eventually all ships will be running on natural gasses and less damage will be done to the environment.

Evaluation of Source 3

Source 3 was published by Gavin Haines a Travel writer for the Telegraph in 2016. The Telegraph is a national British daily broadsheet newspaper distributed across the United Kingdom and internationally. The reliability is high as the Telegraph is well respected across the

world. Will Coldwell from The Guardian agrees with Haines statement as he headlines that air on board cruise ships 'is twice as bad as at Piccadilly Circus' meaning that it is very polluted. Coldwell points out that passengers on cruise liners are not only encouraging companies to pollute the environment but by travelling on these liners they are exposing themselves to very harmful levels of pollution. These particles are so small they can enter the bloodstream via the lungs and no one thinks about this before boarding cruise liners (Coldwell, Guardian, 2017). The issue of ships polluting the seas was also highlighted by Andrew McMaster who quoted EU based non-profit Transport and Environment, which stated that pollution from the shipping industry causes about 50,000 premature deaths a year and costs over €58 billion per year (globalcitizen.org, 2018).

Conclusion

All three sources deal with the impact of cruise liners. Source one highlights that cruise liners have a massive environmental impact and cause air and water pollution to our seas harming aquatic life. Source three agrees and details methods used to monitor that impact through NABU. Source one and three also agree that the public is either unaware or unwilling to address these impacts as they go on holiday in a cruise liner. The social and economic impact of cruise liners is dealt with in source two with reference to the Inuit communities in the NW passage. Source two argues on behalf of the Inuit tribes and debates how cruise liners are interrupting their traditional way of life. On the other side of the argument it does highlight that cruise ships bring in money to the Inuit local economy and could boost their lifestyle. The sustainability of cruise liners is addressed in source one by Shearman who argues for more sustainable forms of power such as LNG, wind power and solar energy. Beeler argues that ocean liners were acting responsibly by avoiding sensitive areas near Cambridge Bay and Haines stated that some companies were beginning to act more responsibly. New technology to create more sustainable types of fuel, more consultation with the Inuit population and more understanding and action by holiday-makers and tourists may all help the industry become more sustainable. If cruise liners continue to be a very popular way for people to enjoy their vacations it is important that they are as sustainable as possible so that any negative impact is kept at a minimum.

Word Count: 1920

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