

Cruise ships

1. EXECUTIVE SUMMARY

- 1.1. Cruise ship visitor spend provides a valuable source of income to the Island, in particular to our heritage attractions.
- 1.2. Cruise ships are not thought to impact directly on the current emission reporting for the Isle of Man as they do not refuel on Island, but they do contribute to overall emissions and could impact on local air quality. However, the number of cruise ships visiting or stopping in Manx territorial seas has increased in recent years and a great understanding of what this means in terms of greenhouse gas emissions for the Isle of Man is required.
- 1.3. Cruise ships can be harmful to the environment in certain circumstances and this needs to be actively managed in accordance with international standards, considering the question of sustainability from a climate change perspective as part of any future decision making process.

2. CONTEXT

- 2.1. Our aim is to ensure that carbon emissions from visiting cruise ships are minimised. The number of cruise ships has grown steadily in recent years:

Year	Cruise Ships	Passengers	Crew	Total on-board
2016	16	5810	3207	9017
2017	23	6331	3941	10272
2018	24	9871	6141	16012
2019	49	12589	7291	19880

- 2.2. One option is to investigate onshore electricity ports during any harbour extensions to allow them to switch engines off whilst in port. Port side electrification offers a potential solution to the reduction of ship-based emissions whilst in port. Successful examples of port-side electrification can be found in California and Norway. It can be an incredibly costly solution however, and requires the buy in from the shipping operators since the solution comprises shore side and shipside modifications. – one of the most significant barriers to portside electrification has been that for a ship operator to make the case for installation of the modifications all the ports which they call into need to be bought into the conversion.

- 2.3. This solution will not succeed if only one port on a ships 'round' has the facility available. Some of the largest costs associated with portside electrification are related to the energy systems infrastructure which is required to convert the supply. Alternatively, it is conceivable that wind generated portside power may be practicable. However, it would be subject to the usual limitations related to availability of energy.
- 2.4. By Regulation 2015/757 (EU-MRV for Monitoring, Reporting and Verification), beginning in 2018, all ship owners and operators must monitor and report the verified amount of CO₂ emitted by vessels greater than 5000 Gross Tonnage (GT) on voyages to, from and between EU ports. Information such as fuel consumption, cargo loads and energy efficiency parameters will be required to be reported. (Section 1.1.3.3. (<https://cruising.org/-/media/research-updates/research/environment-research-2017.pdf>))
- 2.5. From January 2020 the United Nations shipping agency the International Maritime Organisation will ban ships from using fuels with sulphur content above 0.5%, compared with 3.5% that is currently allowed. Following this ban, if ship owners don't opt for other sources of cleaner fuel such as LNG, then they will have to fit their ships with sulphur-cleaning devices known as scrubbers (which are fitted to exhausts and remove sulphur from the exhaust gases) if they wish to continue burning high-sulphur fuel.
- 2.6. Therefore, there will need to be a review of the port's policies on scrubbers, i.e. some ports have banned open loop scrubbers which would then ban ships from entering ports.

3. SUGGESTED ACTIONS

- 3.1. To report on figures relating to cruise ships as and when required, placing them in context of carbon emissions and revenue generated.
- 3.2. To recommend that cruise ships and those businesses directly profiting from cruise ships to participate in carbon offsetting to provide balance, where possible.
- 3.3. To investigate onshore electricity ports during any harbour extensions to allow them to switch engines off whilst in port. Port side power is considered during any major planned pier works for a deep water berth.

4. BACKGROUND LINKS

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/790626/2018-provisional-emissions-statistics-report.pdf

https://co2.myclimate.org/en/cruise_calculators/new

<https://naei.beis.gov.uk/data/data-selector>

<https://www.gov.im/about-the-government/departments/environment-food-and-agriculture/environment-safety-and-health-directorate/climate-change/>

<https://www.gov.im/media/1365944/harbours-strategy-gd-2018-0011.pdf>

<https://www.gov.im/media/1360794/harbours-strategy-technical-information-gd2018-0012.pdf>

<https://cruising.org/-/media/research-updates/research/environment-research-2017.pdf>