Massive cruise liners 'each spew out as much sulphurous emissions gas per day as 376 MILLION cars' it is revealed as experts call for action on the pollution they cause in port cities

- Harmony of the Seas has 16 decks, 23 swimming pools and 52 trees
- 16-cylinder Wartsila engines will burn 1,147 gallons of fuel an hour
- Pollution analysts say it will emit more sulphur than millions of cars


By Charlie Moore For Mailonline

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The billion-dollar cruise ship Harmony of the Seas has amazed the British public with its 16 decks, 23 swimming pools, 20 dining rooms and, most ludicrously, 52 trees. But not everyone is so impressed with its sheer exuberance, least of all environmental campaigners. Royal Caribbean, who own the world's largest cruise ship, has admitted that at full power each of its 16-cylinder Wartsila engines will burn 1,147 gallons of fuel an hour - about 80,000 per day - of some of the world's most harmful diesel fuel.

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Stunning aerial photos of Harmony of the Seas' arrival in Southampton reveal the scale of the 227,000-ton cruise ship. Its 16-cylinder Wartsila engines will burn 1,147 gallons of fuel an hour
A small crowd turned out to wave in the Harmony of the Seas as it sailed into Southampton last week. Pollution analysts in Brussels say that the ship burns 150 tonnes of fuel a day.

Pollution analysts in Brussels say that the ship, burning 150 tonnes of fuel a day, would emit 'more sulphur than several million cars' and 'more NO2 gas than all the traffic in a medium-sized town,' reports The Guardian.

Bill Hemmings, of the Transport and Environment group in based Brussels, told MailOnline: 'These ships burn as much fuel as whole towns, they are effectively floating cities. Even when they burn low sulphur fuel, it's 100 times worse than road diesel.

'Europe needs to get real about air pollution. Ship air pollution alone causes over 27,000 premature deaths a year.'

His group writes on its website that air pollution from shipping costs society more than €58 billion.

'If things are left as they are, by 2020 shipping will be the biggest single emitter of air pollution in Europe, even surpassing the emissions from all land-based sources together,' it says. And one estimate puts the amount of sulphur dioxide emitted by a large cruise ship at 7.5 tonnes - equivalent to 376 million cars.

According to Nabu, a German environment group, cruise companies do not live up their image of being environmentally friendly, not least because heavy fuel oil that ships run on contains far more sulphur than the diesel used in cars.
Bill Hemmings, of the Transport and Environment group in Brussels, told MailOnline: 'Europe needs to get real about air pollution. Ship air pollution alone causes over 27000 premature deaths a year.'

**Worldwide 64,000 deaths a year 27,000 in Europe**

Globally, emissions from international shipping in 2002 estimated to result in some 64,000 premature deaths, incl. 27,000 in Europe.

Tiny airborne particles (PM) cause premature death through lung and heart disease.

NOX from global shipping ~ 30% of all man-made NOX emissions

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**Cardiopulmonary mortality attributable to ship emissions worldwide**

The cost of shipping pollution is already being felt in port cities around Britain.

Campaign groups have sprung up demanding action over the increasing noise smell, and pollution from cruise ships, with many saying the environmental and aesthetic costs of the thriving industry outweigh the benefits to the local economy.
Barry Flisher, a member of the Southampton Clean Air campaign, said on its Facebook group that he ‘used to rise early for work when you could smell the sea air... the only whiffs we now get is burgers and diesel.’

MailOnline has contacted Royal Caribbean for further comment.

One campaign group said ‘If things are left as they are, by 2020 shipping will be the biggest single emitter of air pollution’

The billion-dollar cruise ship Harmony of the Seas has amazed the British public with its 16 decks, 23 swimming pools, 20 dining rooms and, most ludicrously, 52 trees
The largest cruise ship in the world measures more than four football pitches in length with a maximum capacity for 6,780 passengers. Pollution analysts in Brussels say that the ship burns 150 tonnes of fuel a day.

Harmony of the Seas encompasses 227,000 gross registered tons and is the widest cruise ship ever built, with a width of 215.5ft. Its length of 1,188ft makes it 164ft longer than the height of Paris’ Eiffel Tower, and it has a cruising speed of 22 knots (25 mph).

This weekend it will embark on a four-night, £349-a-person taster cruise from Southampton to Rotterdam, in the Netherlands, and back, followed by a three-night cruise to Cherbourg, France, and back, from £299 a person. It will then relocate to Barcelona, where it will be based this summer. On 7 June it will embark on the first of 34 seven-night sailings in the western Mediterranean, with passengers paying more than £800 each. In late October, she will set off on a 13-night cruise across the Atlantic Ocean to its winter base in Fort Lauderdale, Florida, and spend the following months sailing to islands in the Caribbean.

Miami-based Royal Caribbean currently lays claim to the world's six largest cruise ships. Harmony of the Seas is slightly larger than its two sister ships, Allure of the Seas and Oasis of the Seas, which are in a tie for the world's second-largest cruise ship.

BY THE NUMBERS: THE LARGEST CRUISE SHIP IN THE WORLD
Owner: Miami-based Royal Caribbean International
Ordered: December 2012
Builder: STX France, Saint-Nazaire
Construction time: 32 months
Cost: £800million
Decks: 18 (16 guest decks)
Gross tonnage: 227,000 gross registered tons
Length: 1,188ft
Width: 215.5ft
Cruising speed: 22 knots (25 mph)
The 25th ship in Royal Caribbean International’s fleet
Capacity at double occupancy: 5,479 passengers
Total capacity: 6,780 passengers
Crew: 2,100, representing 77 nationalities
Staterooms: 2,747
Dining venues: 20
The Ultimate Abyss slide has a 100ft, 10-storey drop
4,700,000lbs of water used in 23 pools and other attractions
A park with 10,587 plants, 48 vine plants and 52 trees
11,252 works of art on display throughout the ship