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## CO2 output from shipping twice as much as airlines

- Maritime emissions not covered by Kyoto accord
- Studies suggest 75% rise in 15 years as trade grows

John Vidal, environment editor The Guardian, Saturday 3 March 2007

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carried by sea and world trade is increasing all the time. Photograph: Macduff Everton/Corbis

Carbon dioxide emissions from shipping are double those of aviation and increasing at an alarming rate which will have a serious impact on global warming, according to research by the industry and European academics.

Separate studies suggest that maritime carbon dioxide emissions are not only higher than previously thought, but could rise by as much as 75% in the next 15 to 20 years if world trade continues to grow and no action is taken. The figures from the oil giant BP, which owns 50 tankers, and researchers at the Institute for Physics and Atmosphere in Wessling, Germany reveal that annual emissions from shipping range between 600 and 800m tonnes of carbon dioxide, or up to 5% of the global total. This is nearly double Britain's total emissions and more than all African countries combined.

Carbon dioxide emissions from ships do not come under the Kyoto agreement or any proposed European legislation and few studies have been made of them, even though they are set to increase.

Aviation carbon dioxide emissions, estimated to be about 2% of the global total, have been at the forefront of the climate change debate because of the sharp increase in cheap flights, whereas shipping emissions have risen nearly as fast in the past 20 years but have been ignored by governments and environmental groups. Shipping is responsible for transporting 90% of world trade which has doubled in 25 years.

Donald Gregory, director of environment at BP Marine, said this week that BP estimates that the global fleet of 70,000 ships uses approximately 200m tonnes of fuel a year and this is expected to grow to 350m tonnes a year by 2020. "We estimate carbon dioxide emissions from shipping to be 4% of the global total. Ships are getting bigger and every shipyard in the world has a full order book. There are about 20,000 new ships on order" he said.

The estimate supports other academic studies which, until now, have been dismissed as "extreme", because the industry fears that emissions regulations will be forced on it if it is not seen to be addressing the issue. "The International Maritime Organisation [IMO] needs to come up with an emissions strategy, or it will be down to us," said Mr Gregory. "Aviation is in the firing line now but shipping needs to take responsibility. There will be increasing pressure to do something." Dr Veronika Eyring, a researcher at the Institute of Physics and Atmosphere, calculates that the global fleet used 280m tonnes of fuel in 2001 and that could reach 400m tonnes by 2020.

"People are becoming more aware of the shipping emissions problem, but there is still uncertainty as to the exact amount of fuel being used," she said.

An IMO study of greenhouse gas emissions has estimated that emissions from the global fleet would increase dramatically in the next 20 years as globalisation leads to increased demand for bigger, faster ships. Without action the IMO predicts that by 2020, emissions from ships would increase up to 72%.

Yesterday the independent Tyndall Centre for Climate Change, which has launched a two-year study into shipping emissions, said the problem needed to be addressed urgently. "The proportion of [greenhouse gas] emissions from international shipping continues to receive scant regard within government. Shipping has been missed off the climate change agenda, said researcher Alice Bowes.

Britain downplays the problem, saying that ships in UK waters emit less than 2m tonnes of carbon dioxide a year. But no record is kept of the fuel used and most ships take on fuel outside Britain.

Although the industry maintains that ships are more efficient at transferring freight than air, it admits improvements can be made.

Yesterday Caroline Lucas, a Green MEP, said: "[Shipping] has got away with doing nothing and maintained a clean image which it does not deserve."

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