

## CO2 emissions from fishing boats 30 per cent higher than previously reported, new study shows



Carbon dioxide emissions released by fuel-burning fishing vessels have quadrupled since 1950, according to new research from the Sea Around Us project at the University of British Columbia.

The report published in Marine Policy last week also found that 207 million tonnes of carbon dioxide were released into the atmosphere in 2016 from fishing boats, a 30-percent increase on what scientists reported was released in 2011.

In 2016, total CO2 emissions from the industrial fishing sector stood at 159 million tonnes. That is compared with 39 million tonnes in 1950.

"The fishing sector generates more greenhouse gases than previously anticipated," said Daniel Pauly, the principal investigator with the Sea Around Us research group at UBC's Institute for the Oceans and Fisheries.

"The sector is usually ignored and is not thought about when we talk about reducing emissions," he said. "It [the fishing sector] doesn't reduce its own emissions but rather increases them."

The report, co-written by Sea Around Us researchers at the University of Western Australia, hopes to influence policy makers, particularly in small-scale fisheries where fuel efficiency is very low and fishermen often leave engines running up to 10 hours at a time. The gap in emissions intensity between small-scale and industrial fisheries is only 10 per cent, despite industrial fisheries catching far more fish.

The new report says there is "a need for the international community to recognize marine fishing as a significant contributor of total CO<sub>2</sub> emissions" as well as "develop strategies and policies that consider local fleet dynamics."

Dr. Pauly says the solution lies in governments taking action. He says reducing the number of fishing vessels at sea will improve the efficiency of the industry and bring down greenhouse-gas emissions over time.

"Ideally, I would like to generate a situation where the policy makers in various countries realize that if they want to reduce emissions they have to reduce the size of their fleet," he said. "We are wasting a huge amount of energy and creating a huge amount of pollution for nothing."

Dr. Pauly said the main reason for the large difference from previous statistics is that he and his team used a different method from the Food and Agriculture Organization (FAO) to calculate the total catch of the world's fishery. Dr. Pauly's team included illegal, unregulated and unreported catches not considered in previous studies. Consequently, boat fuel used to catch 30 million tonnes of fish went unreported in 2016.

To determine the new numbers, researchers analyzed data recording the amount of carbon dioxide emitted by boats in different countries' fishing sectors, as well as the emissions intensity of those boats, which calculates the amount of CO<sub>2</sub> emitted per tonne of fish caught.

CO2 emissions in the fishing industry have intensified since the 1980s, but global fishery catches have been in decline since the mid-1990s.

Dr. Pauly explains that more boats and fishermen do not necessarily lead to more fish being caught and wastes fuel.

"You have a decreasing catch that we make more and more effort to generate," he said. "In fact, the catch is going down because we fish too much; we waste more and more fuel to catch fish we could catch with less effort."

Link: <u>https://www.theglobeandmail.com/canada/british-columbia/article-co2-</u> emissions-from-fishing-boats-30-per-cent-higher-than-previously/?platform=hootsuite