IMPACT OF EMISSIONS OF MARINE DIESEL ENGINES TO

AIR POLLUTION ON THE STRAIT OF GIBRALTAR

ABSTRACT

The subject of this paper is the impact which marine diesel engines have on air pollution.

The combustion of fossil fuels for marine diesel engines produces emission of various greenhouse gases; including carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), carbon monoxide (CO), oxides of nitrogen (NOx), non-methane volatile organic compounds (NMVOCs), and sulphur dioxide (SO2).

Gas emission calculation is shown on the example of the STRAIT OF GIBRALTAR with nine methods for calculating harmful emissions of the marine diesel engines.

The main objective of this paper is to do an comparative analysis of the different methodologies for calculatnig the energy consumption and emissions base don an emission invertory made by the authors of this paper