

THE RIGHT TO BREATHE

PROBLEM

London is one of the most polluted places in the UK. Diesel commercial vehicles contribute heavily to dangerous gases and particulates that are very harmful to people. In 2008, The Greater London Authority estimated that 4300 premature deaths in London were due to long-term exposure to small particles.

PROCESS

My design solution is supported by months of research as part of my case study, including an online survey aimed to uncover the impacts of air pollution on people. I found that 100% of respondents from London were worried about air pollution. I determined that the most significant source of particulate pollution in London is road traffic. Light Commercial Vehicles are some of the dirtiest vehicles on the road – it is time for change.

PROPOSAL

My design proposal offers a completely new type of vehicle. With a modern electric powertrain and active particulate-collecting technology, my design eliminates tailpipe emissions completely and reduces non-exhaust emissions by over 90%. If even a small percentage of London's ¼-million vans were of this design, people could breathe easier.