



THE DANGERS OF CONSTRUCTION EMISSIONS

WHAT IS AIR POLLUTION?

GLOBALLY, THE CONSTRUCTION INDUSTRY PRODUCES

23%

OF THE WORLD'S TOTAL
CO² EMISSIONS ACROSS IT'S
ENTIRE SUPPLY CHAIN.



OVER

5%

OF THESE ARE RELATED DIRECTLY
TO ACTIVITIES ON **CONSTRUCTION SITES**



MAIN POLLUTANTS



CO (CARBON MONOXIDE)

WORKERS CAN BE EXPOSED TO CARBON MONOXIDE WHEN USING PETROL POWERED EQUIPMENT IN ENCLOSED SPACES. IT IS POISONOUS TO RED BLOOD CELLS WHEN INHALED.



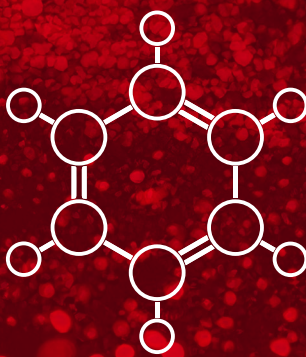
NO2 (NITROGEN DIOXIDE)

NO2 CAN CAUSE INFLAMMATION OF THE AIRWAYS AND INCREASE SUSCEPTIBILITY TO RESPIRATORY INFECTIONS AND TO ALLERGENS.



OZONE

MOST GROUND-LEVEL OZONE IS A SECONDARY POLLUTANT FORMED BY THE ACTION OF SUNLIGHT ON VOLATILE ORGANIC COMPOUNDS IN THE PRESENCE OF NITROGEN DIOXIDE.



HYDROCARBONS

BENZENE CAUSES HARMFUL EFFECTS ON BONE MARROW AND A DECREASE IN RED BLOOD CELLS. IT CAN ALSO CAUSE EXCESSIVE BLEEDING AND AFFECTS THE IMMUNE SYSTEM.



SULPHUR DIOXIDE

SULPHUR DIOXIDE IS A COLOURLESS, NON-FLAMMABLE GAS WITH A PENETRATING ODOUR THAT IRRITATES THE EYES AND AIR PASSAGES.



PARTICULATES

SOME ESTIMATES HAVE SUGGESTED THAT PARTICULATES ARE RESPONSIBLE FOR UP TO 10,000 PREMATURE DEATHS IN THE UK EACH YEAR.



CONSTRUCTION EMISSIONS



A DNV GL REPORT COMMISSIONED BY OSLO'S CLIMATE AGENCY, ESTIMATES THAT THE TOTAL ANNUAL GREENHOUSE GAS EMISSIONS FROM CONSTRUCTION SITES IN C40 CITIES, IS ESTIMATED TO BE IN THE RANGE OF **120 TO 240 MILLION TONNES OF CO₂e.**



WHAT'S A C40 CITY?

THE NETWORK OF **40** OF THE WORLD'S MEGACITIES COMMITTED TO ADDRESSING CLIMATE CHANGE



AIR POLLUTION IS ONE OF THE MAJOR ENVIRONMENTAL DETERMINANTS OF HEALTH AND THE NUMBERS OF CONSTRUCTION WORKERS HARMED BY AIR POLLUTION ARE LARGE.

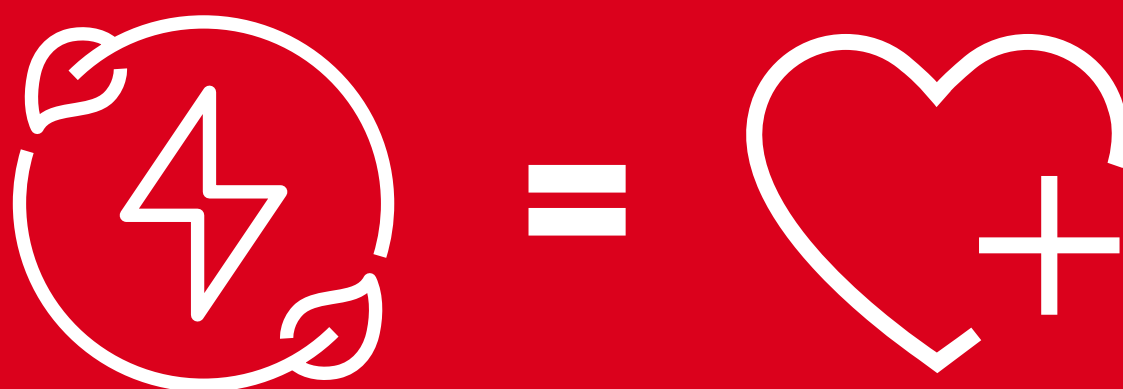


MEASURES TO REDUCE

THE POLLUTANTS PRIMARILY RESPONSIBLE FOR **DAMAGE TO HEALTH** OFTEN SHARE COMMON SOURCES WITH THE TOXIC POLLUTANTS THAT **DAMAGE THE CLIMATE.**



MEASURES TO REDUCE EMISSIONS OF GREENHOUSE GASES THROUGH **ENERGY EFFICIENCY**, AND MOST OF THE OPTIONS FOR SWITCHING FROM FOSSIL FUELS, ALSO **REDUCE LOCAL AIR POLLUTION WITH IMMEDIATE BENEFITS TO HEALTH.**



REDUCTION IMPACT

OVER THE FOLLOWING **18 YEARS** A $1 \mu\text{g}/\text{m}^3$ REDUCTION IN FINE PARTICULATE AIR POLLUTION IN ENGLAND COULD PREVENT AROUND:



9,300

STROKES

50,900

CASES OF CORONARY HEART DISEASE



16,500

CASES OF ASTHMA

4,200

LUNG CANCERS



INNOVATIVE SOLUTIONS

**FUTURE DRIVERS FOR CORDLESS LIGHT EQUIPMENT,
FOR A CLEANER AND SAFER ZERO EMISSIONS JOBSITE.**



**READ THE FULL WHITE PAPER
AVAILABLE IN LINK ABOVE**