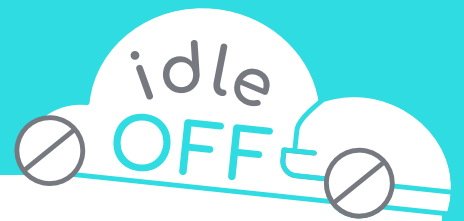


Name: _____



1. WHAT ARE TRANSPORT EMISSIONS?

Transport emissions are the pollutants created when fuel - petrol or diesel - goes through the process of combustion inside a car, truck, bus or motorbike engine. When a vehicle with an internal combustion engine (ICE) is turned on, combustion

produces water vapour (H_2O), carbon dioxide gas (CO_2) and sulfur dioxide (SO_2). Because combustion is not perfect, other harmful gases are produced, including carbon monoxide (CO), hydrocarbons and nitrogen oxides (NO and NO_2).



Every time an ICE vehicle is running, it releases particulate matter - tiny airborne particles. The smallest ones get into our lungs and blood stream.

After coal-fired power stations, transport emissions are the second highest human-

made source of pollution in Australia. The cars we drive everyday contribute to about HALF of Australia's transport emissions.

And these cars are around us - at our homes, schools, shops, playgrounds, parks and workplaces - every minute of every day.

IN AUSTRALIA, TRANSPORT EMISSIONS HAVE INCREASED NEARLY 60% SINCE 1990

WHY SHOULD WE BE CONCERNED ABOUT TRANSPORT EMISSIONS?

Because they're dangerous to human health... particularly children. In 2017, Melbourne University's Energy Institute estimated 1715 deaths were attributable to transport emissions each year in Australia. In New Zealand, the Ministry of Transport estimates that 399 people die prematurely due to exposure to emissions from vehicles.

disease), asthma, lung cancer and infections such as pneumonia. Because the tiny particles get into the blood stream, there are impacts to the rest of the body which include heart disease and diabetes. Some studies have also shown air pollution can affect the brain, leading to strokes, Alzheimer's and Parkinson's Disease in the elderly, and reducing intelligence in children, causing some students to perform poorly in certain subjects.

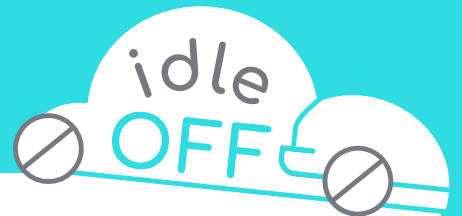


4.2 MILLION
PEOPLE WORLDWIDE
DIE FROM CAUSES DIRECTLY
LINKED TO OUTDOOR AIR POLLUTION

Outdoor air pollution also contributes to an estimated 4880 premature deaths each year in Australia. Causes of death due to transport emissions include lung diseases like COPD (chronic obstructive pulmonary

Did you know!

Air pollution is in the top 10 risk factors for disease and premature death in Australia, ranking higher than passive smoking.



FIND OUT MORE ABOUT TRANSPORT EMISSIONS

As part of your IDLE OFF project, what else can you learn about transport emissions?

Some questions you might like to consider...or ask your own!

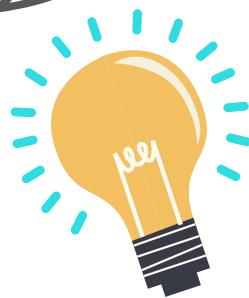
Which countries have the worst air pollution and the highest impact on human health due to transport emissions?

How much air pollution is caused by cars versus trucks, buses and motorbikes?

Why do schools have policies such as hats and sunscreen to protect from sun damage over summer and yet may not have policies that protect children from vehicle emissions?

What progress has been made to curb transport emissions?

Why is there a lot of awareness about car accidents in Australia, but not about the health impacts of transport emissions?



BEFORE YOU MOVE ON..

What pollutants are made by transport emissions?

What impacts do these pollutants have on human health?

How do they affect your fellow students, particularly those with asthma?

