Clean Air for Schools

In Australia, more people die each year from vehicle exhaust pollution than from road crashes.

Not only do petrol and diesel engines produce greenhouse gas emissions, but they also emit pollutants such as NO2, SOX, CO and PM2.5, which have a severe impact on health.

When we breathe them in, these pollutants cause an inflammatory response that can lead to premature heart, lung and vascular disease, and all types of cancer.

Air pollution is more concentrated close to its source. Idling queues at school drop offs and pickups can have particularly high concentrations of pollutants, exposing children's developing lungs to dangerous exhaust fumes.

We want to start a conversation about the health impacts of air pollution and driving kids to school.

This school experiment comes from Norway, but we will recreate it to get data about air quality at schools in Curtin.

We hope the results will encourage families at your school to try walking or cycling to school instead – better for you and the planet.

Later this year, the Federal Government wants to introduce a national Fuel Efficiency Standard to make it easier and cheaper to buy electric vehicles. Your results will help Kate Chaney MP advocate for the best possible policy to clean our air and reduce our transport emissions.

Clean Air for Schools is a part of the Curtin Pathway to Net Zero, a project started by Kate Chaney MP. You can find out more at www.katechaney.com.au/curtin-net-zero

Clean Air for Schools

Materials you will need

- Printer
- Vaseline
- Duct tape/ Bluetac
- Laminator (optional)
- Permanent marker
- Magnifying glass

Instructions

1. Print gride sheet (keep full scale).
2. Laminate it and cut into 4.
3. Spread a thin layer of Vaseline evenly over the grid.
4. Identify 4 locations at your school to test the air quality at:
   a) Drop off parking area
   b) A busy road
   c) Playing fields/ park
   d) Quadrangle
5. Stick each grid paper at the named location using duct tape/ blue tac (ideally against a wall with some weather cover).
6. Mark the date you began the experiment.
7. Leave for 7 days.
8. Collect all four grids and mark the end date.
9. Using a magnifying glass, count the particles in 1 cm square.
10. Using the scale on the next page, rate the results.
11. Record the result in the grid box.
12. Upload your results on the Curtin Pathway to Net Zero website. We'll email you this link later.

Dust scale

Compare the air meter with the dust scale and
select the smiley (emoji) that suits:

Picture	Description	Dots pr cm^2	Air pollution level	Smiley
	The paper has many black and grey dots. Large parts of the paper have turned grey.	> 50	Very high	
	The paper has quite a few black and grey dots. There are some parts on the paper that have turned grey.	26 - 50	High	
	The paper has black and grey dots all over the surface, but there are no fields that are completely grey.	11 - 25	Medium	
	The paper has only a few black and grey dots, and there are no fields that are completely grey.	< 11	Low	

Result:

Clean Air for Schools

Date start: _____
Date end: _____
Location: Car Park

School project – please don't touch!

Curtin's Pathway to NET ZERO

Result

Clean Air for Schools

Date start: _____
Date end: _____
Location: Busy Road

School project – please don't touch!

Curtin's Pathway to NET ZERO

Result

Clean Air for Schools

Date start: _____
Date end: _____
Location: Playing field

School project – please don't touch!

Curtin's Pathway to NET ZERO
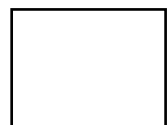
Result

Clean Air for Schools

Date start: _____
Date end: _____
Location: Quadrangle

School project – please don't touch!

Curtin's Pathway to NET ZERO

Result