



AIR POLLUTION AND MOBILITY: WHAT THE SCHOOL COMMUNITY CAN DO

Air Pollution has become a critical issue for all of us as it affects our health directly. As per WHO (World Health Organisation), globally, an estimated 4.2 million premature deaths are linked to ambient or outside air pollution. Ailments like heart disease, stroke, chronic obstructive pulmonary disease, lung cancer, and acute respiratory infections have been linked to air pollution.

In India, the Central Pollution Control Board (CPCB) has listed some 122 cities which do not meet the National Ambient Air Quality Standards (NAAQS). Under the National Clean Air Programme (NCAP), efforts are being made to reduce the key air pollutants—PM 10 and PM 2.5—by the year 2024, in a timed manner, with the support of respective state pollution control boards. The 122 cities will be given special attention to reducing the levels of air pollution there.

Green Schools Programme (GSP), through its audit and the school network, has been keeping air pollution and ways to reduce it at the centre. Besides working on actions at the school level, it is equally crucial to spread awareness among the masses, especially students, to make the right choice. The following pointers on the various aspects of air pollution will help the school community facilitate relevant actions with their students and make them more environmentally conscious.

Instill Awareness of Air Quality in and around the School

- Awareness about the prevalent air pollution concentrations and the state of air quality can be spread through a permanent display board indicating the air quality of the day (<http://cpcb.nic.in/>).
- Students can also develop a protocol based on the prevalent AQI (Air Quality Index) to minimize outdoor exposure. For instance, avoiding unnecessary outdoor activities on 'Very Poor', 'Severe' and 'Emergency' days.
- To know the air quality in real time, the following CPCB link can also be accessed: https://app.cpcbcr.com/AQI_India/
- Organize assemblies, seminars and health check-up camps from time to time where expert speakers can be invited to talk to the students and faculty about air pollution and its health impacts.



Sources of Air Pollution

- Different sources of air pollution can be discussed in the classroom. Most of the tiniest particles and gases come from combustion sources like vehicles, cooking fumes, industry, power plants and waste burning.
- Practices of garbage burning near the school can be monitored. Awareness campaigns can be organised in nearby areas to spread knowledge about the harmful effects of burning waste.
- If waste being burnt is witnessed, students can report/take pictures and send to the concerned authorities. The school can enable mechanisms to report these instances.

Indoor Air Pollution

Indoor air quality is generally ignored while discussing air pollution, but in many studies, indoor air has been found to be more polluted than outdoor air.

Doing the following can go a long way in maintaining the indoor air quality:

- Maintaining proper ventilation inside the room
- Use of cleaner cooking fuels
- Reducing the use of paints and chemicals that release VOCs (volatile organic compounds) or keeping them tightly covered if not in use
- School projects that involve making air purifiers and sensors using waste or readily-available material. For instance, an air purifier made from waste car air filter mould, electric fan and filter paper can help students monitor air quality within the campus and take action.

Commute to School

- Schools can undertake promotional events for children from time to time, whereby cycling and walking can be promoted as fun and healthy activities. There should also be focus on sustaining these mobility practices
- Schools can regulate third-party service providers like cabs, rickshaws and auto-rickshaws, that ferry children to school. These should be registered and students should be encouraged to opt for only registered vendors. This will enable schools to have a say in students' safety and will also help them control the levels of pollution. Moreover, the service providers can be held accountable for any gaps.
- Information on the effect of commuting practices on the environment should be given to students. They can be made to undertake exercises to calculate their carbon footprint based on their mode of travel. This can help them become aware of what they can do



every day to help the environment as early practices that get inculcated stick around for a lifetime.

- Rationalize the routes of school buses for maximum utilization. Ensure regular maintenance and compliance with PUC and fitness certification requirements of all school-owned vehicles.
- Introduce a parking policy where parking for personal vehicles are priced.
- Introduce an incentive for faculty and staff for using school buses or public transport.

Minimising Health Impacts of Air Pollution:

While the problem of air pollution and the consequent health impacts get intensified during winters, these are never completely absent during other seasons. It is a persistent problem that calls for consistent precautionary measures. Here are some such measures that schools can follow:

- Encourage students to ensure compliance with the rules on construction activities, waste generation and disposal and parking at the housing society level. Schools can enable mechanisms to report these instances.
- Cycling can be promoted through the provision of bicycle stands/parking.
- 'Green barriers' can be created within and around the campus by rigorous plantation of specific native trees, shrubs and bushes along the entry points/parking areas and boundaries. Doing so will minimize the dispersion of dust and pollutants from roads.
- Proper disposal of waste including plastics and biomass waste (dead leaves, branches etc.) must be ensured to do away with emissions from burning of waste.
- Cleaner fuels—LPG and electricity—should be used for all energy requirements within the school including cooking.
- There should be minimum use of Diesel Generator sets within the school premises. Temporary connections can be used for occasional requirements such as annual functions. Supplement electricity supply with cleaner alternatives such as solar energy.
- Compliance with dust control norms for construction sites within the school premises or vicinity of the school should be ensured with the help of students.
- Sweeping of outdoor areas should be done during the non-peak hours (at least 2 hours before the school starts or late evenings) to minimize re-circulation of dust.
- Schools can also take the lead in educating students on the potential health risks related to the sources of pollution along with the precautions that can be taken. Medical experts should be consulted for such sessions.



WHAT CAN WE, AS INDIVIDUALS, DO?

The way we travel every day can make a whole lot of difference.

- Avoid using personal vehicles to commute to school—take the school bus/public transport, or walk/cycle to school.
- Awareness and action begin at home. Encourage your family members to use clean fuels, follow traffic rules and use public transport as far as possible.
- Raise your voice if you see anyone burning waste or driving a visibly polluting vehicle. If you are a teacher, lead from the front. It is important that teachers be the torch bearers for such practices, as students look up to them for guidance and learn. For instance, teachers cycling to school can have a huge positive impact.
- Calculate your carbon footprint based on your travel choice. This will help you become aware of what you can do every day to help the environment.
- Support the school and its management if it decides to undertake actions and measures to combat air pollution.