



A Step Towards Saving The Air

- Ways to reduce air pollution

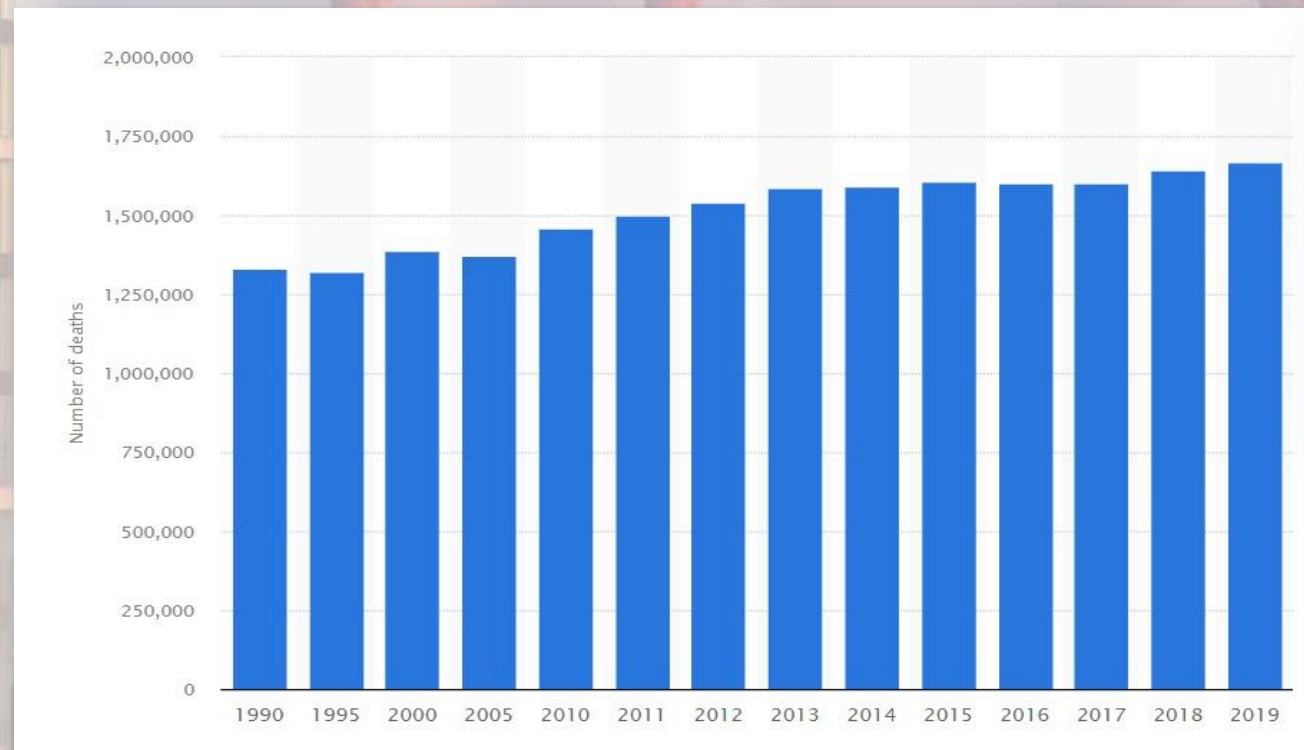
-By Gaurav Mali

Where does pollution come from?

- Air pollution originates from various sources.
- Fine particles (2.5 micrometers or smaller) are released from power plants, industrial processes, vehicle emissions, woodstoves, and wildfires.

Health Implications

- Air pollution is associated with several health issues.



- **Skin Diseases.**
- **Asthma**
- **Cardiovascular Diseases**
- **Cancer**
- **Neurological Disorders**



The average number of deaths caused by air pollution across the India was over 1.66 million in 2019, up from around 1.64 million deaths in the 2018 .

Effects on Environment

1. Global Warming:

- Emission of gases like CO_2 , CH_4 , as well as pollutants from industries and vehicles, leads to heat trapping
- This trapped heat results in rising temperatures and contributes to climate change.



2. Acid Rain:

- Emissions of sulfur dioxide and nitrogen oxides from industries, vehicles, and power plants, reacts with moisture in the air.
- This chemical reaction forms acid rain, which can harm crops, trees, and buildings.



3. Biodiversity:

- Air pollution negatively impacts biodiversity by harming plants and animals that rely on clean air, water, and soil for their survival.

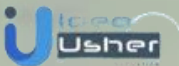


Simple Ways That We Can Use To Help Reduce Pollution:

- **Ridesharing or Carpooling** 🚌🚲:

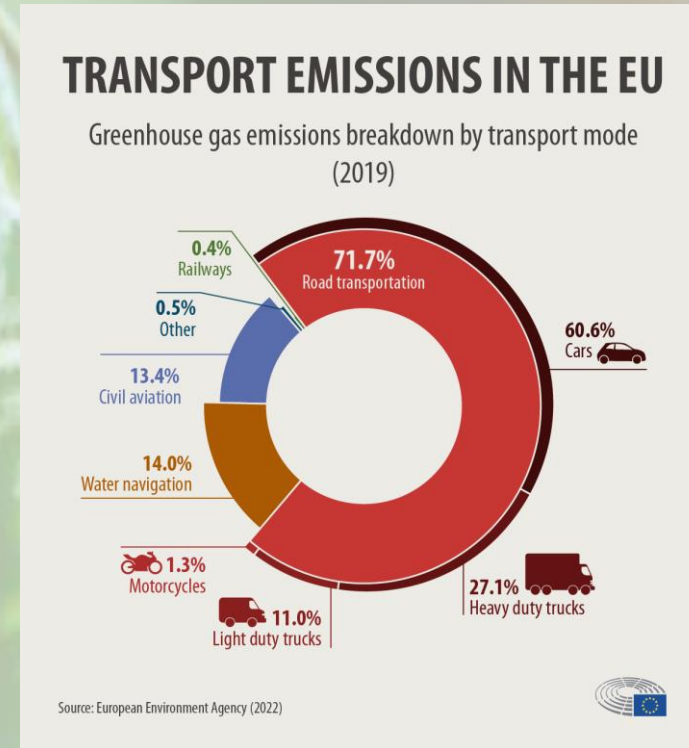
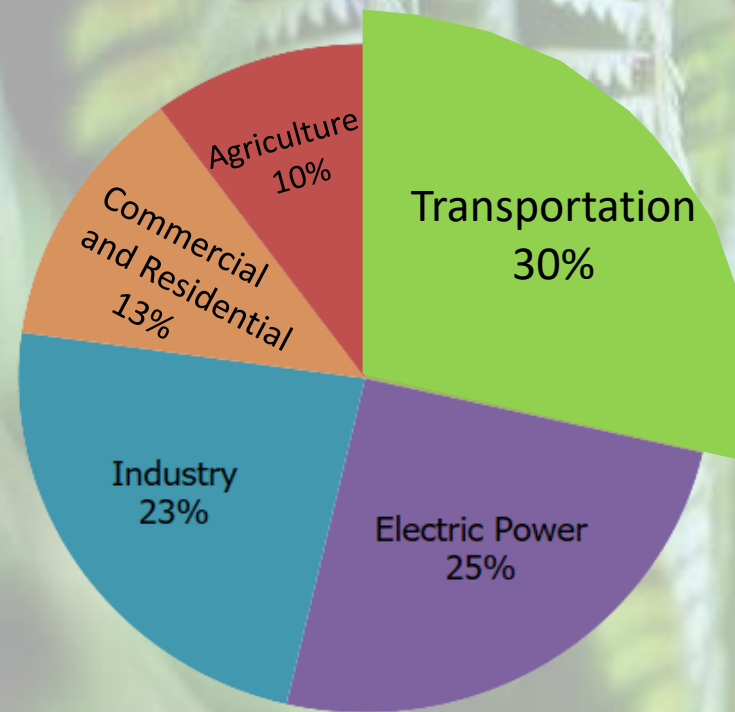
1. Involves sharing a vehicle with multiple passengers traveling to the same destination.
2. Reduces vehicle emissions by decreasing the number of cars on the road.
3. Promotes fuel-efficient, eco-friendly transportation.
4. Eases traffic congestion, leading to lower fuel consumption.
5. Conserves resources and reduces environmental impact.
6. Indirectly leading to less emission of harmful gases and promoting more cleaner air.



 Usher



Air Pollution By Different Mediums:



- 20-30% of particulate matter (PM) 2.5 at the breathing level of air quality
- 75% of carbon monoxide emissions
- 60–70% of the total urban air pollution
- 14% of the global greenhouse gas emissions

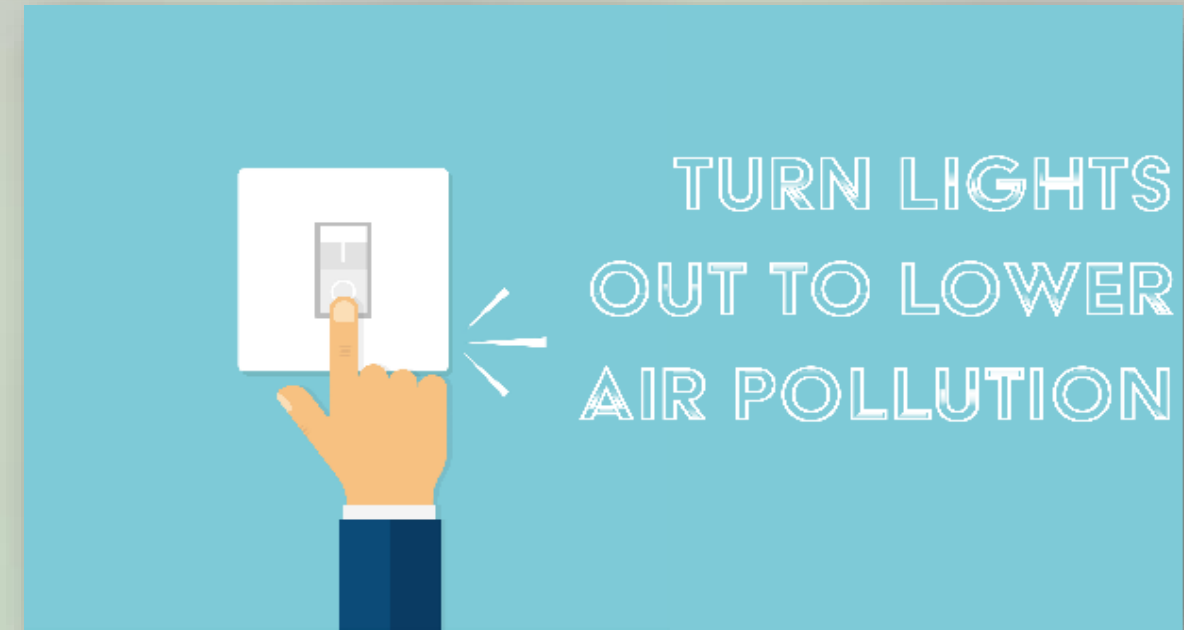
How Much Pollution Can Ridesharing Reduce:

- Reducing greenhouse gas (GHG) emissions by 4% to 5%
- Reducing CO2 emissions by 22% to 28%
- Reducing global emissions by up to 11%
- Reducing emissions by 9.6 to 11.07 gigatons of carbon dioxide
- Reducing the carbon footprint of an average household by up to 2,000 pounds (1 ton) of CO2 annually

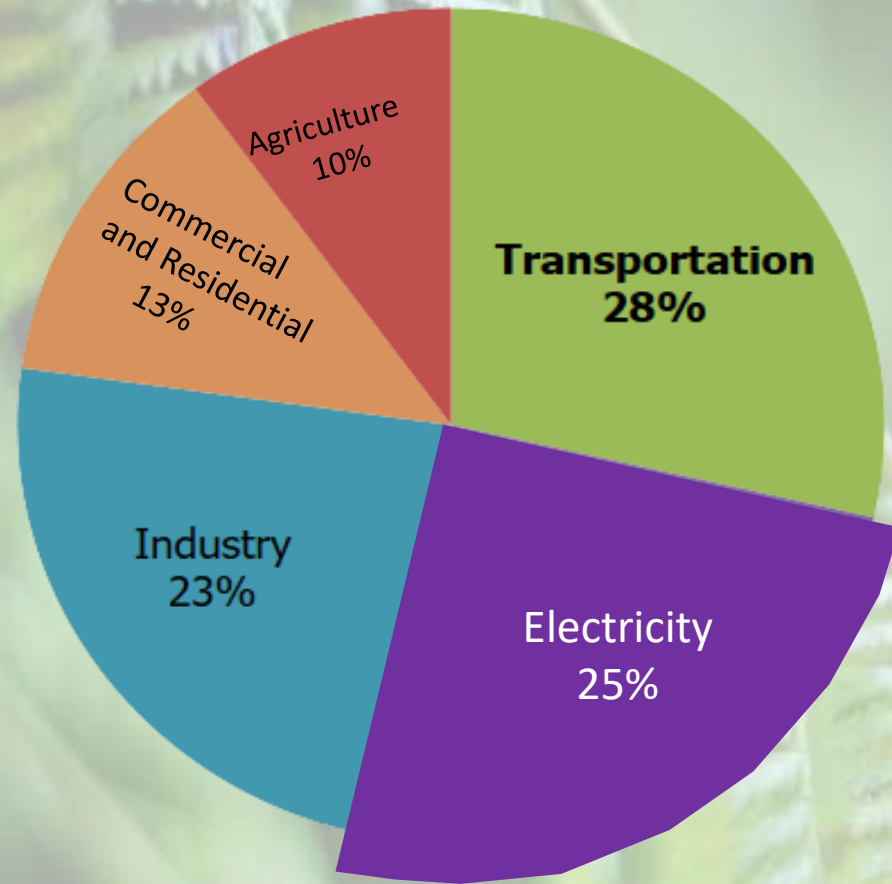
• **Switching Of Lights, fans And Different Appliances When Not In Use:**

Conserving electricity is crucial as it reduces the need for fossil fuel power generation, a major source of air pollution.

- **Reduced Energy Demand:** Turning off lights and appliances cuts electricity use, reducing outdoor air pollution.
- **Mitigated Outdoor Pollution:** Lower electricity demand means fewer power plant emissions, leading to less air pollution.
- **Indoor Air Quality:** Reduced energy use helps maintain better indoor air quality.
- **Efficiency Promotion:** Energy-saving habits promote energy-efficient appliances, further reducing emissions.
- **Health Benefits:** Lower air pollution improves air quality and lowers health risks, especially for respiratory and heart issues.



Air Pollution Because Of Electricity:



- 40% of all energy-related emissions.
- For every kilowatt-hour of electricity 60 and 150 grams of CO₂.
- A wind turbine between 3 and 22 grams, and a hydropower plant 4 grams.

How Much Pollution Can Saving Electricity Reduce:

- Reducing CO₂ Emissions: 11%
- Reducing Annual Energy-Related Emissions: 12%
- Reducing Pollution: 2.5%
- Reducing SO₂ Emissions: 95%
- Reducing PM 2.5 Emissions: 80%
- Reducing CO₂ Emissions: 2.5 million tons/year

- **Reusing and recycling products:**

- **Emission Reduction:** Reusing and recycling reduce the need for new manufacturing, cutting emissions tied to air pollution.
- **Landfill Impact:** Less waste in landfills means fewer emissions, including methane and toxins, reducing air pollution.
- **Energy Efficiency:** Recycling and reusing consume less energy than making new products, lowering air pollution from energy production.
- **Resource Protection:** These practices preserve natural resources, lessening air pollution linked to resource extraction.
- **Sustainability:** Reusing and recycling support a sustainable, circular economy, reducing reliance on resource-intensive manufacturing and thus curbing air pollution.

**REDUCE
REUSE
RECYCLE**



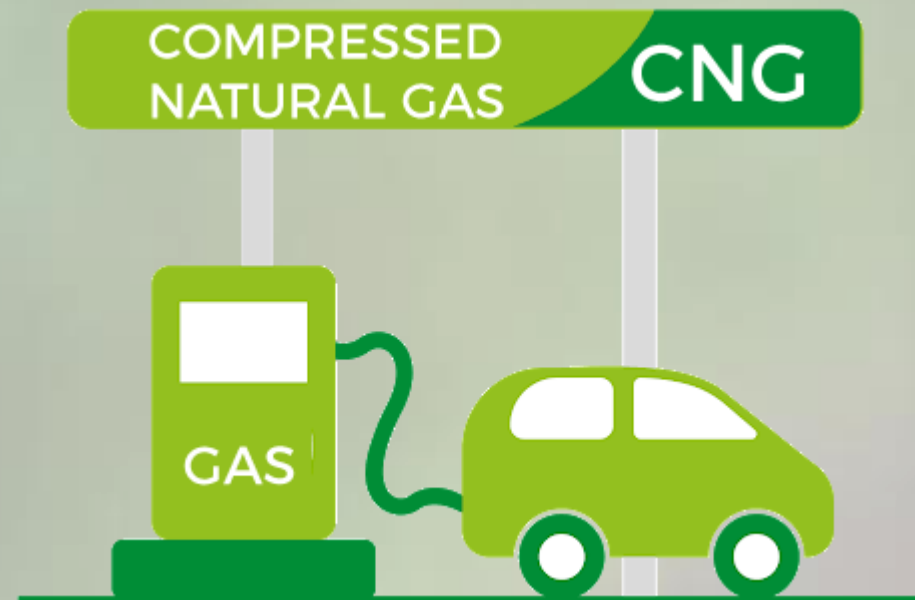
How Much Pollution Can This Stop:

- Paper Recycling: 73% air pollution reduction
- Steel Recycling: 86% air pollution reduction
- Plastic Recycling: 30% carbon emissions reduction
- Aluminium Recycling: 95% energy savings

Using Fuel Efficient Vehicles (CNG, Electric):

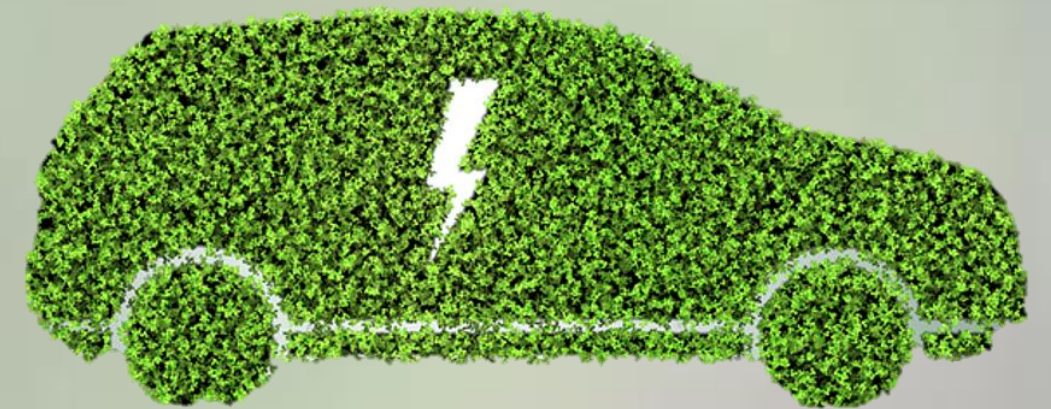
- **CNG'S Vehicles:**

- Lower Emissions: CNG vehicles produce fewer harmful pollutants like CO, NOx, and PM, reducing air pollution.
- Reduced Greenhouse Gases: CNG emits fewer CO2 emissions compared to gasoline or diesel, contributing to climate change mitigation.
- Fuel Efficiency: CNG vehicles are more fuel-efficient, saving energy and reducing the consumption of fossil fuels.
- Improved Local Air Quality: Lower emissions lead to cleaner air, especially in urban areas.
- Incentives: Government incentives encourage CNG vehicle adoption.



Using Fuel Efficient Vehicles (CNG, Electric):

- **Electric (EV) Vehicles:**
- Zero Tailpipe Emissions: EVs produce no direct emissions, reducing harmful pollutants like CO, NOx, and PM.
- Greenhouse Gas Reduction: EVs decrease greenhouse gas emissions, especially when charged with renewable energy sources.
- Energy Efficiency: EVs are highly energy-efficient, reducing energy waste and air pollution.
- Noise Reduction: Quieter operation of EVs decreases noise pollution.
- Reduced Fossil Fuel Dependence: EVs promote cleaner transportation by reducing reliance on fossil fuels.



An aerial photograph of a rocky coastline. The ocean is a deep blue-grey, with white foam from the waves crashing against the shore. The rocks are various shades of brown and tan, some large and smooth, others smaller and more jagged. The overall scene is dynamic and natural.

Water

“A NECESSITY NOT A LUXURY”

-Aditya Ganjare

Facts and Figures

- Approximately 163 Million Indians don't have access to clean drinking water.
- 21% of the communicable diseases are linked to unsafe drinking water.
- Every day 500 children die because of diarrhea in India.
- Kolkata wastes 50% of the water that it receives.
- Bangalore, which is the third most populous city in the country, comes a close second at 49%.
- Water wastage figures in New Delhi, Chennai and Mumbai stand at 26%, 20%, and 18% respectively



Ways of Water Conservation

Never throw/drain leftover water in a glass or bottle. This can be used for watering a plant or to fill water bowls kept for birds. Always keep a vessel, near the basin, and pour the leftover water from bottles or glasses, collect all the water at the end of the day and use it to water plants etc.



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Don't water your lawn every day, twice a week is enough. Also, to reduce loss from evaporation, the best time to water the lawn is early morning



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Ways of Water Conservation

Soak pots and pans instead of letting the water run while you scrape them clean.



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Dishwashers typically use less water than washing dishes by hand. Now, Energy Star dishwashers save even more water and energy. Run washing machines and dishwashers on fully loaded modes, so that we can clean/wash maximum articles in fewer cycles



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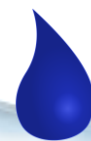


Ways of Water Conservation

Drop tissues/paper towels/rags in the trash instead of flushing them and save water every time.



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Apart from turning off taps when not in use, another way of saving water is to do a regular maintenance check and fix/replace old leaking taps, pipes, and toilets. By doing this, you can save up to 75 liters of water each day which is huge and combined with all your efforts of conservation of water at home.



75 /

Ways of Water Conservation

While you wait for hot water, collect the running water and use it to water plants.



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Turn off the water while you brush your teeth and save up to 12 litres a minute. That's up to 600 litres a week for a family of four.



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Educate Others!

Knowledge shared = Knowledge²

We must encourage and educate others to conserve water so that we do not lose this invaluable resource

The young generation if educated properly can find out more ways to conserve water and build a safer future!





THANK YOU