Solution to Pollution

Anti Smog Tower

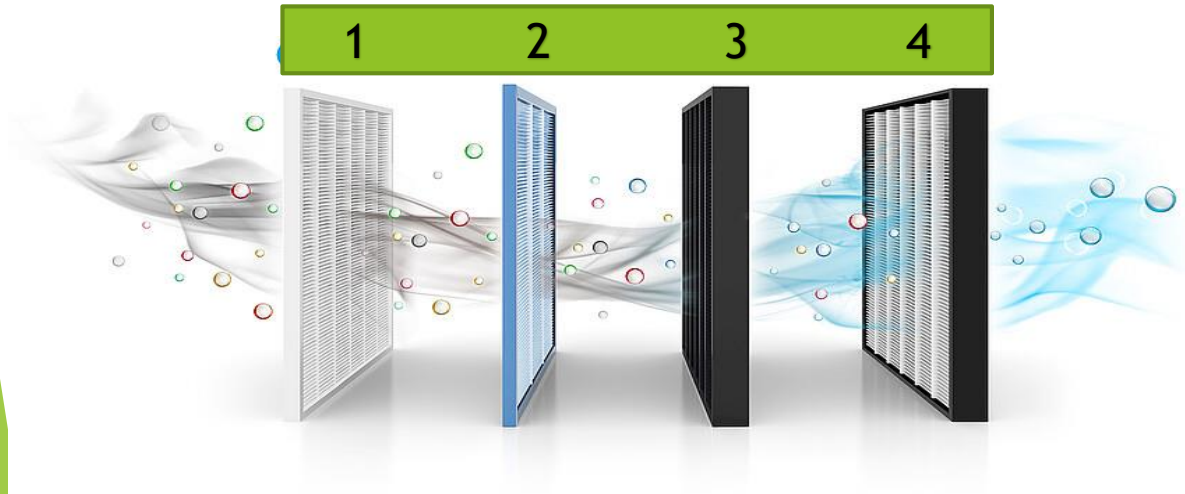
For better lives of our children and elders and every specie who breathes in our environment

WHAT MACHINE IS CAPABLE OF ?

It binds more than 80 % of particulate matter and No2 from air

Unit is capable of bringing down the PM 2.5 and P, 10 level from 200 to 50 within 60 minutes

The essence of this technology is the newly developed combination of filters
which contains a highly Effective filter layer for dust particles
and activated carbon layers that absorbs no2



Four stage air purification

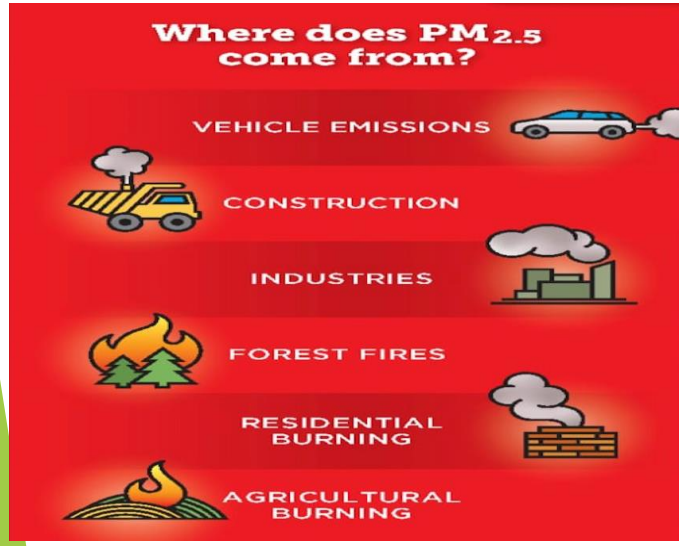
PM 2.5 & PM 10 ?

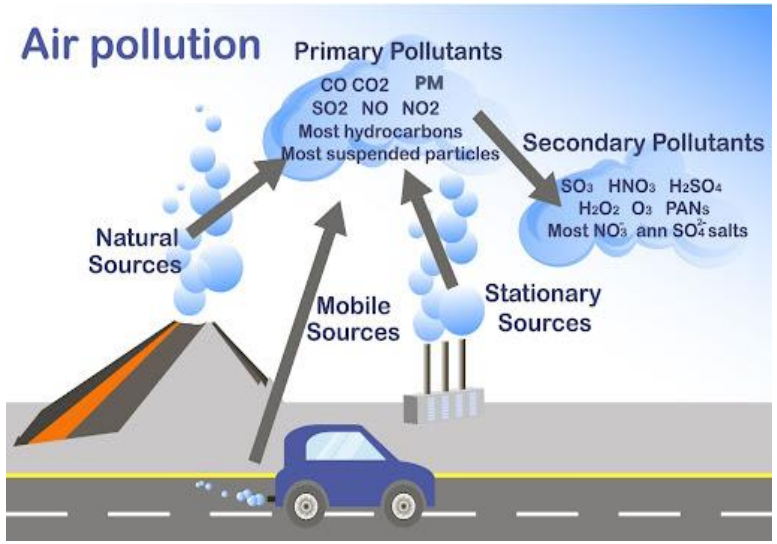
Does anyone knows from where it actually comes in our daily livelihood?

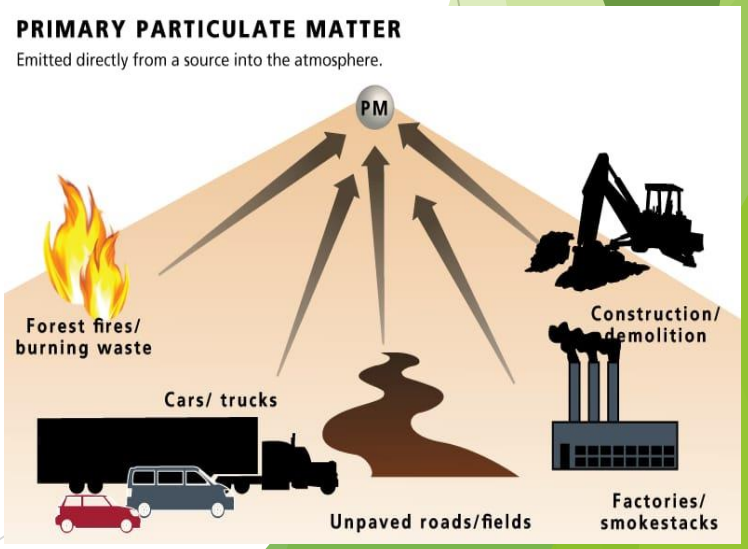
- Airborne particulate matter (PM) is not a single pollutant, but rather is a mixture of many chemical .
- Sulphur di oxide – Carbon mono oxide – Nitrogen di oxide – Lead – Ozone –

  Ammonia – Benzene - Arsenic – Nickel

  These are the common pollutants present in our environment







How does it differ from each other ?

What are the diseases and health problems that occurs when we breathe in air full of pollution ?

Headache and anxiety (So2)

Impact on central nervous system (pm)

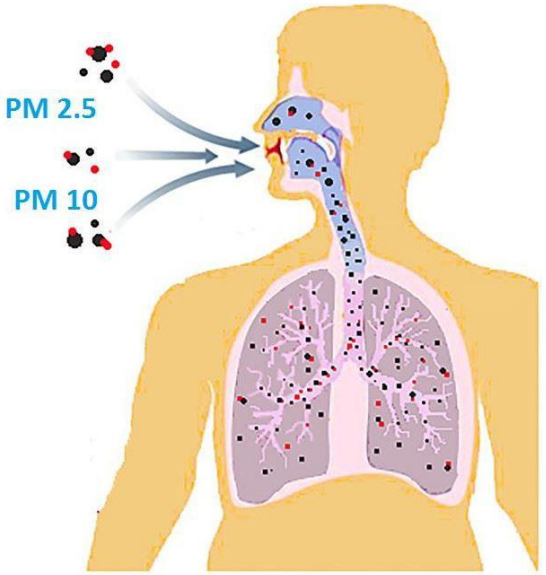
Asthma And reduced lungs (No2)

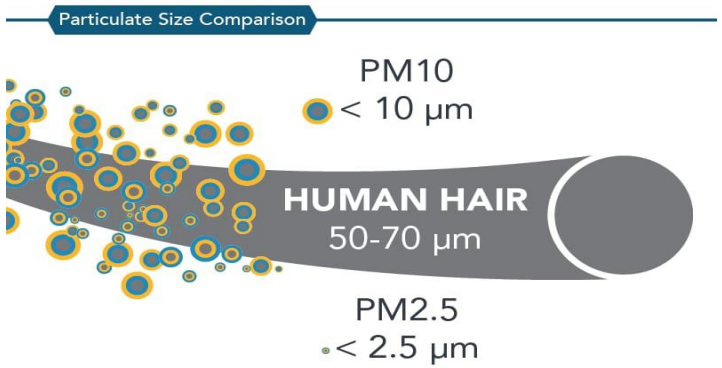
Lung cancer (pm , Bap)

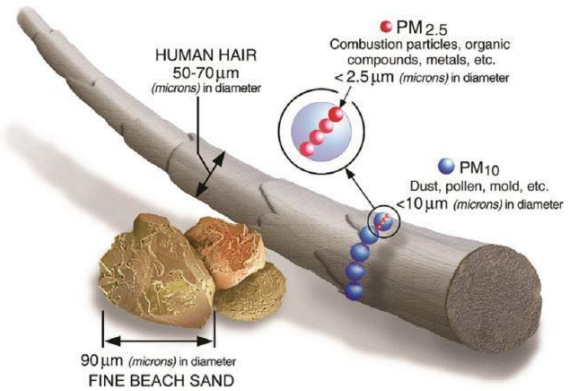
Cardiovascular diseases (Pm ,03 ,So2)

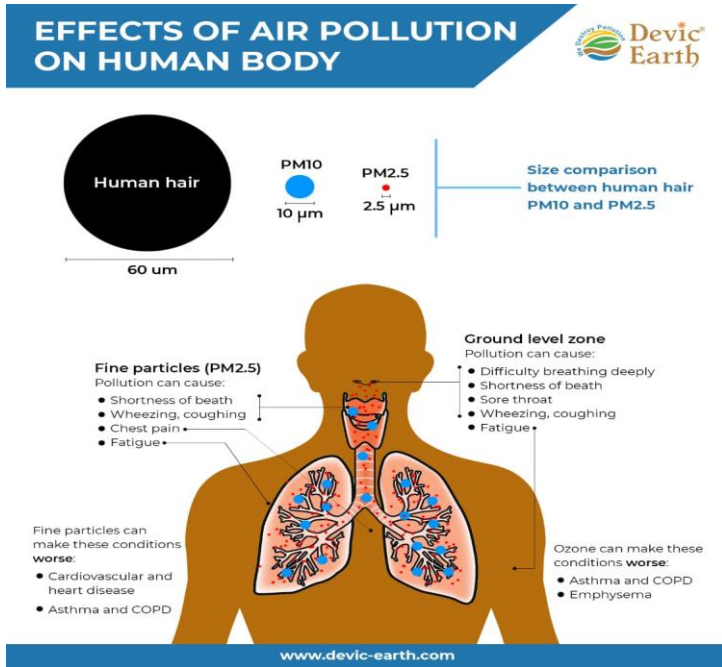
Impact on reproductive system (Pm)

Problems to liver , spleen and blood (No2)









AQI STANDARDS GLOBALLY

Air Quality Index (AQI) Values	Levels of Health Concern	Colors
When the AQI is in this range:	*..air quality conditions are:*	*...as symbolized by this color:*
0 to 50	Good	Green
51 to 100	Moderate	Yellow
101 to 150	Unhealthy for Sensitive Groups	Orange
151 to 200	Unhealthy	Red
201 to 300	Very Unhealthy	Purple
301 to 500	Hazardous	Maroon

AQI Category (Range)	PM_{10} 24-hr	$PM_{2.5}$ 24-hr	NO_2 24-hr	O_3 8-hr	CO 8-hr (mg/m^3)	SO_2 24-hr	NH_3 24-hr	Pb 24-hr
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.5 –1.0
Moderately polluted (101-200)	101-250	61-90	81-180	101-168	2.1- 10	81-380	401-800	1.1-2.0
Poor (201-300)	251-350	91-120	181-280	169-208	10-17	381-800	801-1200	2.1-3.0
Very poor (301-400)	351-430	121-250	281-400	209-748*	17-34	801-1600	1200-1800	3.1-3.5
Severe (401-500)	430 +	250+	400+	748+*	34+	1600+	1800+	3.5+

AQI Standards INDIA

Air Quality Standards in India

Pollutants	Unit	WHO / US EPA	CARB	Indian Std	Typical city
PM_{10}	$\mu g / m^3$	50	50	100	282 ± 97
Oxides of nitrogen	- do -	100		80	63 ± 22
Sulphur Dioxide	- do -	80	105	80	25 ± 10
Carbon monoxide	- do -	2,000		2000	5450 ± 2947
Ozone	- do -	235	180	NA	30 ± 15
Unburnt HC	- do -	-		160	NA

- In Indian context CO pollution, Particulate (PM_{10}, $PM_{2.5}$ & $PM_{0.1}$) and NOx (in select cities) are areas of concern. Internationally concerns are raised about ground level Ozone, Benzene & other air toxins such as 1,3 butadiene, aldehydes, alkenes, etc.

Each nation devices & adopts a balanced approach for BAQ.

What change do we offer ?

Parameter	GOVERNMENT OF INDIA	SLE	DELHI CURRENT	WHO / US EPA
PM 10	100 - 250	121	315	50
PM2.5	60 - 120	86	189	35-60
NO2 nitrogen dioxide	0 - 40	36	68	100
03 ozone	0 - 50	25	48	23.5
Co carbon mono oxide	0 - 2.0	0.48	9	2.0
So2 sulphur dioxide	0 - 40	14	20	80
NH3 ammonia	0 - 200	13.2	40	0-100
Pb. lead	0 - 1.0	NIL	4	0 - 1.0