

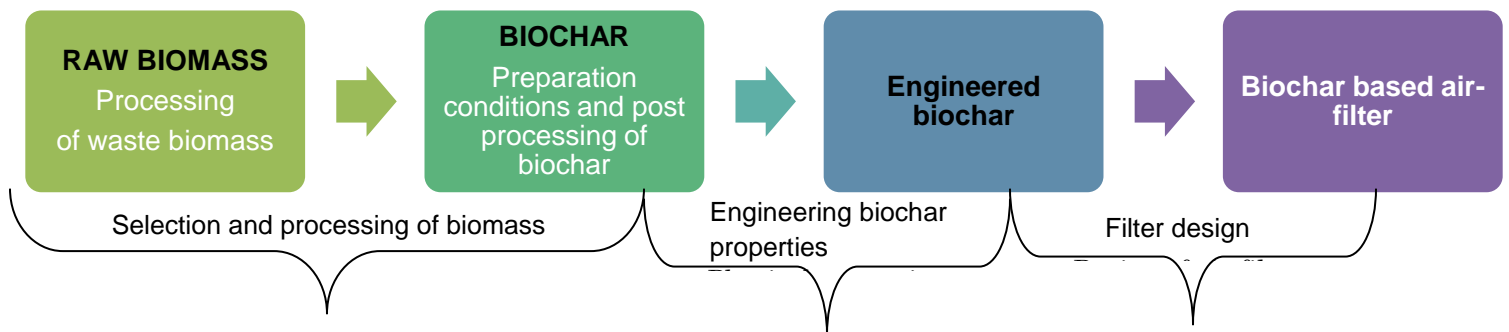
## ENGINEERED BIOCHAR AIR-FILTER EASILY INSTALLABLE, EASILY MAINTENABLE, BETTER AIR QUALITY

### General description

Our innovation involves valorization of biochar, prepared from waste biomass, as material for air-filter to improve indoor air quality. Our laboratory trials under varied conditions show that the biochar-based air-filter capture particulate matters, other contaminant gases, and improve indoor air quality.

### Unique features

Our processing methods and customizable designs offer superior filtration efficiency of particulate matters compared to conventional filters of similar grade.



Particulate matters (PMs) can affect our respiratory systems and lead to health hazards such as aggravated asthma, irritation of airways and even heart attacks. Customized biochar fins can help remove PM1.0, PM2.5 and PM10 from air. This is especially important during haze seasons.



Biochar fins can be arranged and fitted into air duct



Biochar fins are made under special conditions for optimum performance.

Designs are customizable according to specifications and site conditions.

### CONTACT US:

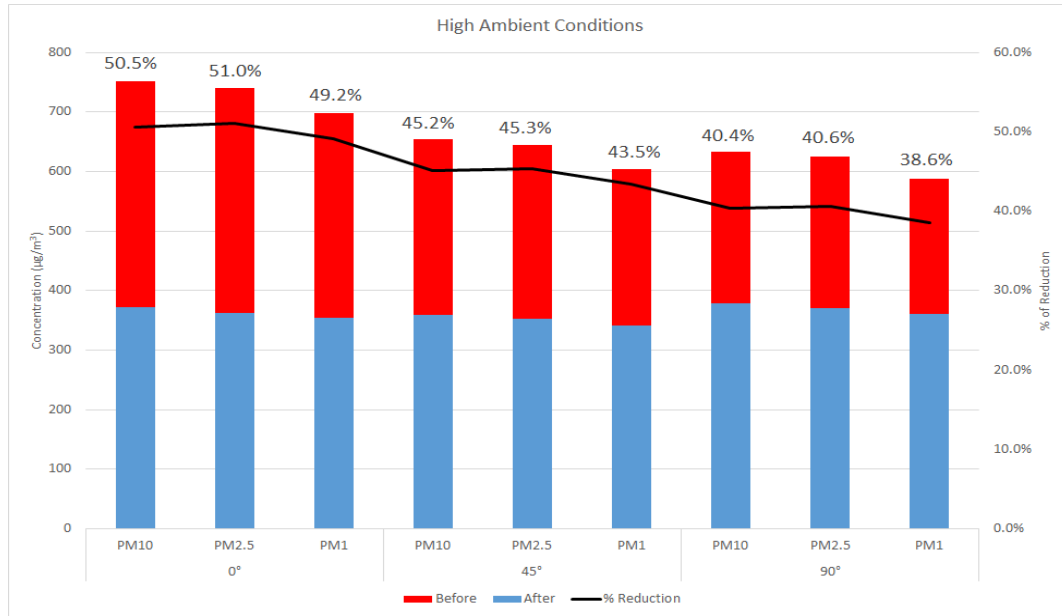
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***Disclaimer:** Data obtained under simulated conditions in the laboratory.*



Laboratory tests showed biochar fins adjusted at different angles can remove 39%-51% of PM1.0, PM2.5 and PM10, under high pollution conditions.

### **Advantages over existing air filters**

- Pressure drop across biochar fins is lower than that across normal air filters. This may lead to more energy-saving.
- Life span of at least 6 months.
- Fins can be made from recycled wood, thus making it a more sustainable option.

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