

V O L V O

“CWA Real drive test method for collecting vehicle interior air quality data”

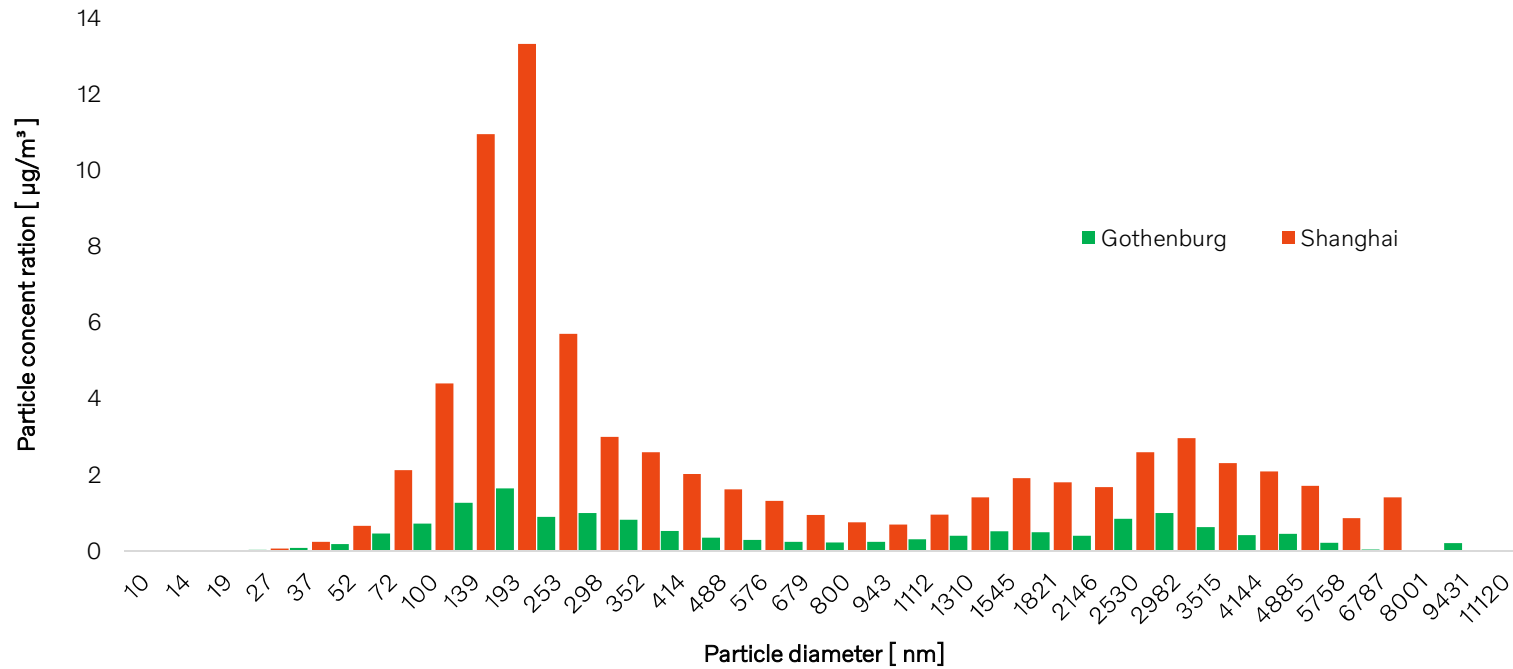
Input given by:

Anders Löfvendahl, Technical expert-Cabin air quality

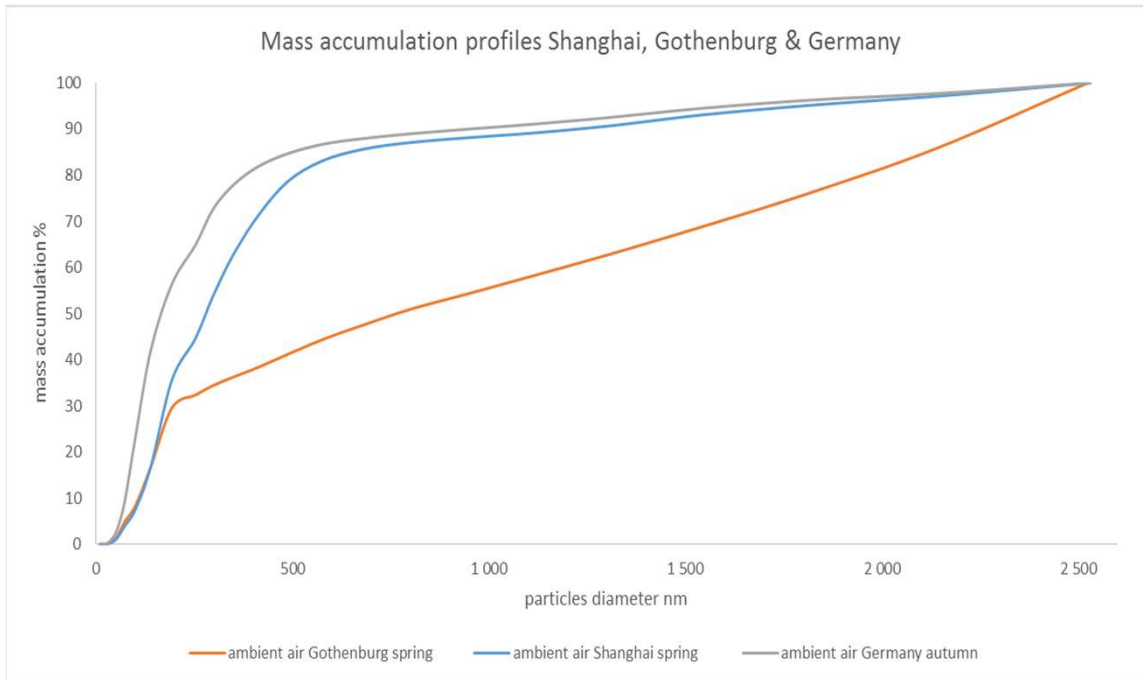
Aleksandra Sebastian, Air quality analysis engineer

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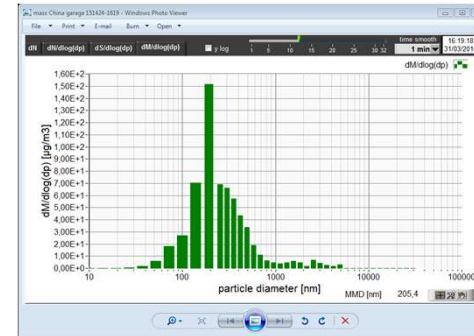
Comparison of typical particle mass profiles for Gothenburg and Shanghai spring 2015



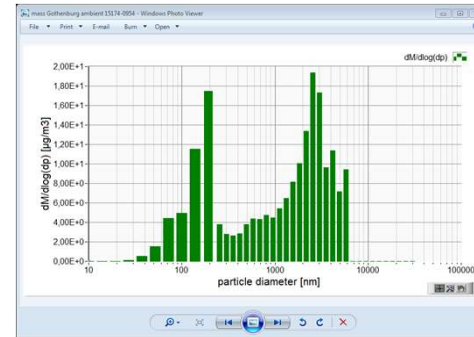
Mass accumulation and mass distribution profiles



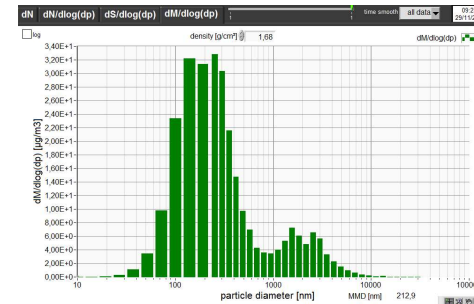
Size distribution can vary day to day and from place to place resulting in different PM 2.5 efficiency.



Shanghai



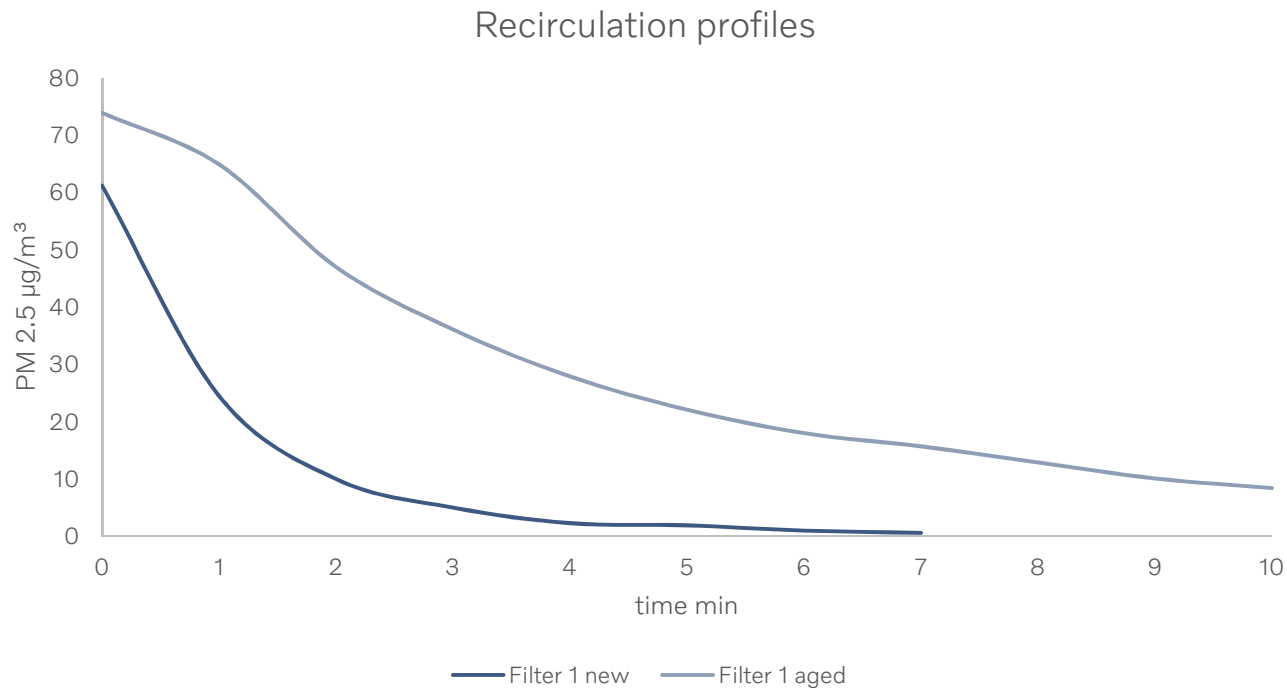
Gothenburg



Germany
Autobahn

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Clothing has no or very minor effect on PM 2.5 levels New or aged filter has a major impact on PM 2.5 efficiency

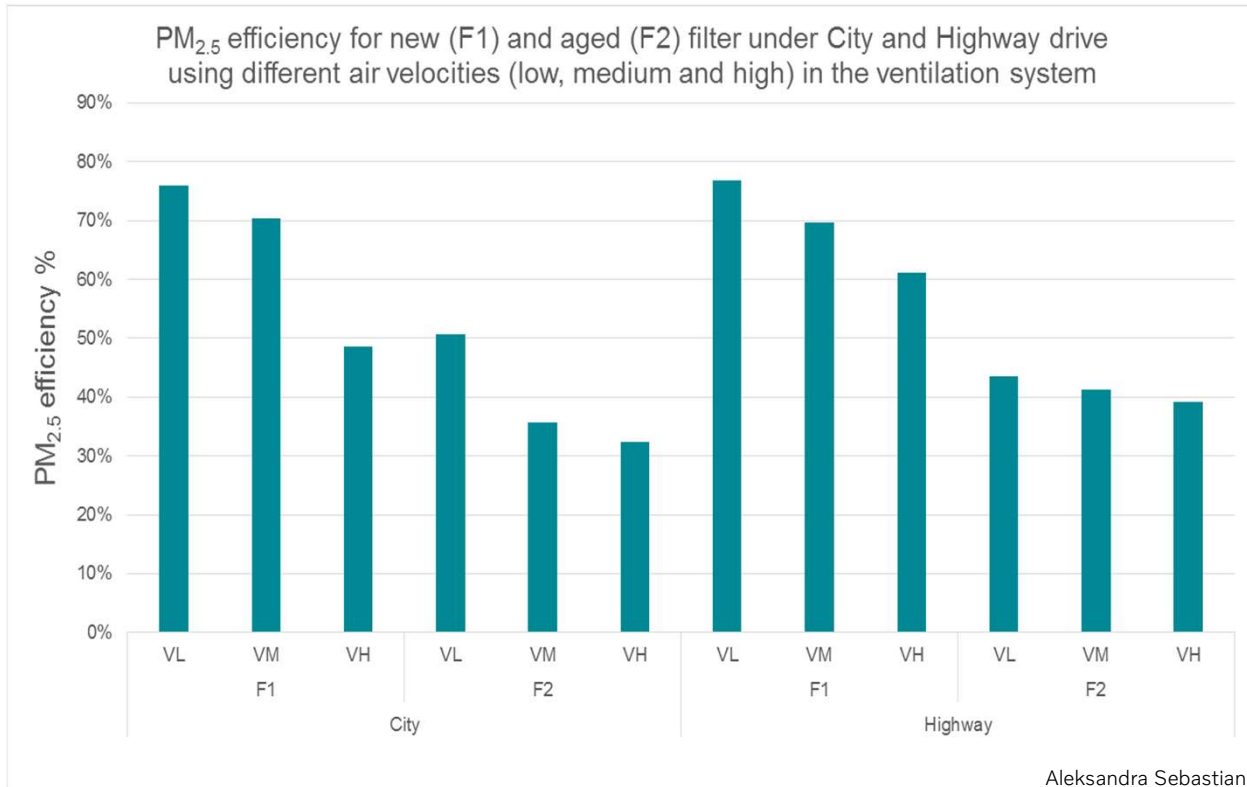


Aleksandra Sebastian 91532

Tests with 4 persons in the car, full recirculation. Values for new filter goes down to 0=> Low particle emissions from the passengers

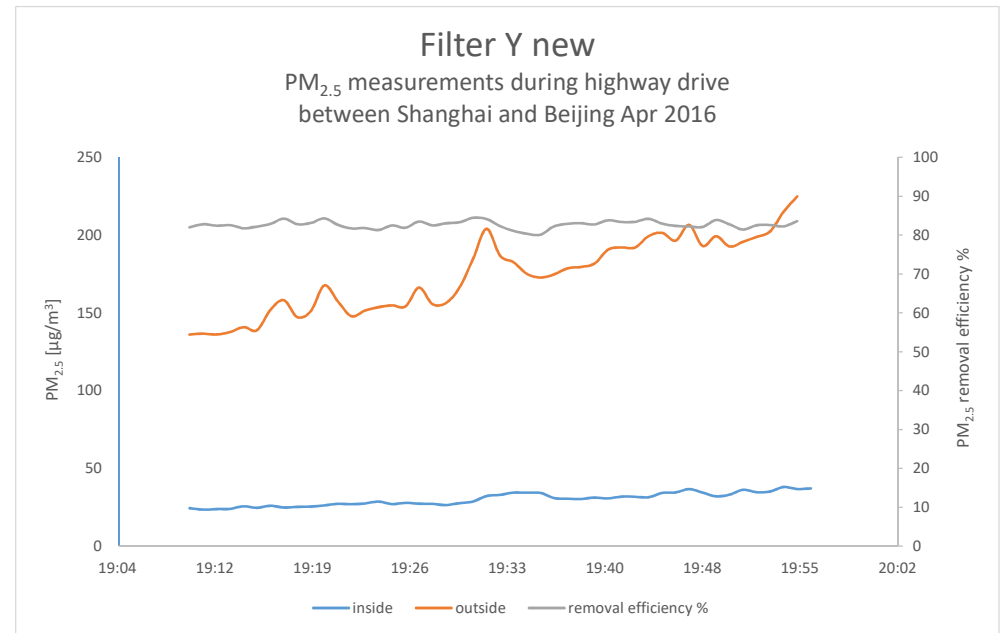
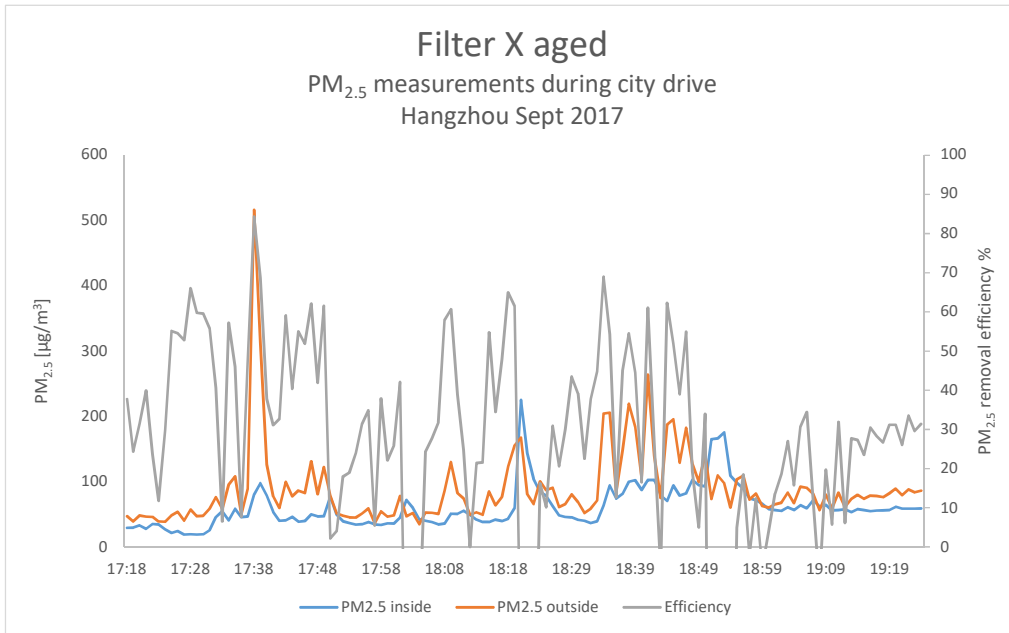
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HVAC Airflow vs. PM 2.5 efficiency



Airflow impacts the PM 2.5 efficiency a lot and must be controlled for consistent results .

Why ambient PM 2.5 concentration needs to be consistent



Idle or highway driving is needed to have stable conditions and get consistent results.

