

# SmogStop POLLUTION BARRIER SYSTEM

A barrier that reduces vehicle emissions  
without sacrificing noise mitigation.

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SmogStop reduces traffic emissions in downwind neighbourhoods by 58% compared to a conventional noise barrier.

# An Innovative Noise Barrier that Removes Air Pollutants.

IMPROVES AIR QUALITY BY REMOVING NOX AND VOCs.

## AIR QUALITY & URBANIZATION

As cities continue to grow, so does the need to connect them. Every day, vehicles that our economy depends upon, emit dangerous pollutants into our air. Among these dangerous air pollutants are nitrogen oxides (NOX) and volatile organic compounds (VOCs). These chemicals directly contribute to smog advisories, acid rain and have been linked to serious health risks ranging from asthma to stroke and cancer.

## AN INNOVATIVE SOLUTION

The **SmogStop** Pollution Barrier is a modern day solution designed to simultaneously tackle noise and air pollution along major highways and transit corridors.

A tried and tested noise barrier system, is integrated with patented SmogStop technology, maintaining its noise mitigation properties while releasing cleaner air into the environment.

Individuals living in close proximity to major highways and roadways are more likely to suffer from adverse health effects caused by dangerous air pollutants.

50%  
NOX Removed



Globally, outdoor air pollution causes more than 3.7 million premature deaths each year.

## FEATURES & BENEFITS



### Reduce regional smog

SmogStop has developed a proprietary coating that breaks down the NOX and VOCs that produce smog. Powered by sunlight, it transforms these pollutants into harmless gases and water.



### Lower the amount of NOX in high traffic cities

SmogStop barriers have the capability to reduce air pollutants by 54%, providing cleaner air back into the atmosphere.



### Reduce potential health risks

Reduce harmful chemicals in the air, decreases the amount of health risks linked to air pollution.



### A barrier that lets natural light shine through

SmogStop Pollution Barrier uses a durable, transparent acrylic material that helps mitigate traffic noise without sacrificing sunlight.





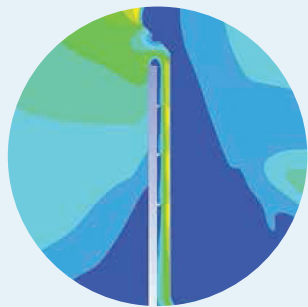
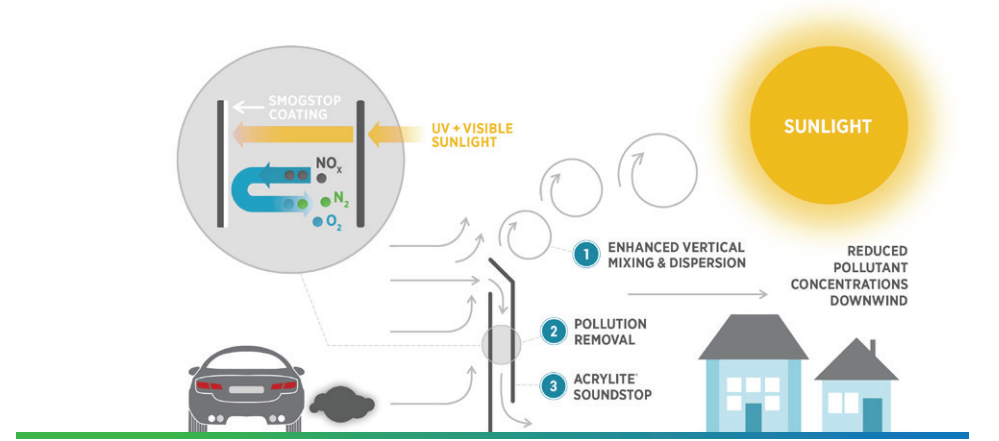
# POWERED BY WIND AND SUN

**An aerodynamic design that directs traffic emissions into a channel, while sunlight breaks them down.**

EKHO's SmogStop Pollution Barrier is a double-walled design that directs traffic emissions into a specially designed channel. The channel generates vortices and enhances vertical mixing of emissions with clean air.

Through a process of decomposition by light, the patented SmogStop coating works with sunlight to breakdown NOx and VOCs to transform pollutants into harmless gases and water.

The photocatalytic process coupled reduce NOx levels in surrounding communities.



CFD computer simulation of wind tunnel testing



SmogStop noise barrier can remove 16 tonnes of NOx per kilometre each year

**EKHO Infrastructure Solutions is the exclusive partner for SmogStop.**

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## Wind tunnel and photocatalytic tests conducted at Canadian universities.

Advanced computer models and wind tunnel testing conducted by Canadian universities proved that SmogStop can reduce traffic emissions in downwind neighbourhoods by 58% compared to a conventional noise barrier.







**SmogStop**  
BARRIER

# SmogStop POLLUTION BARRIER SYSTEM

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