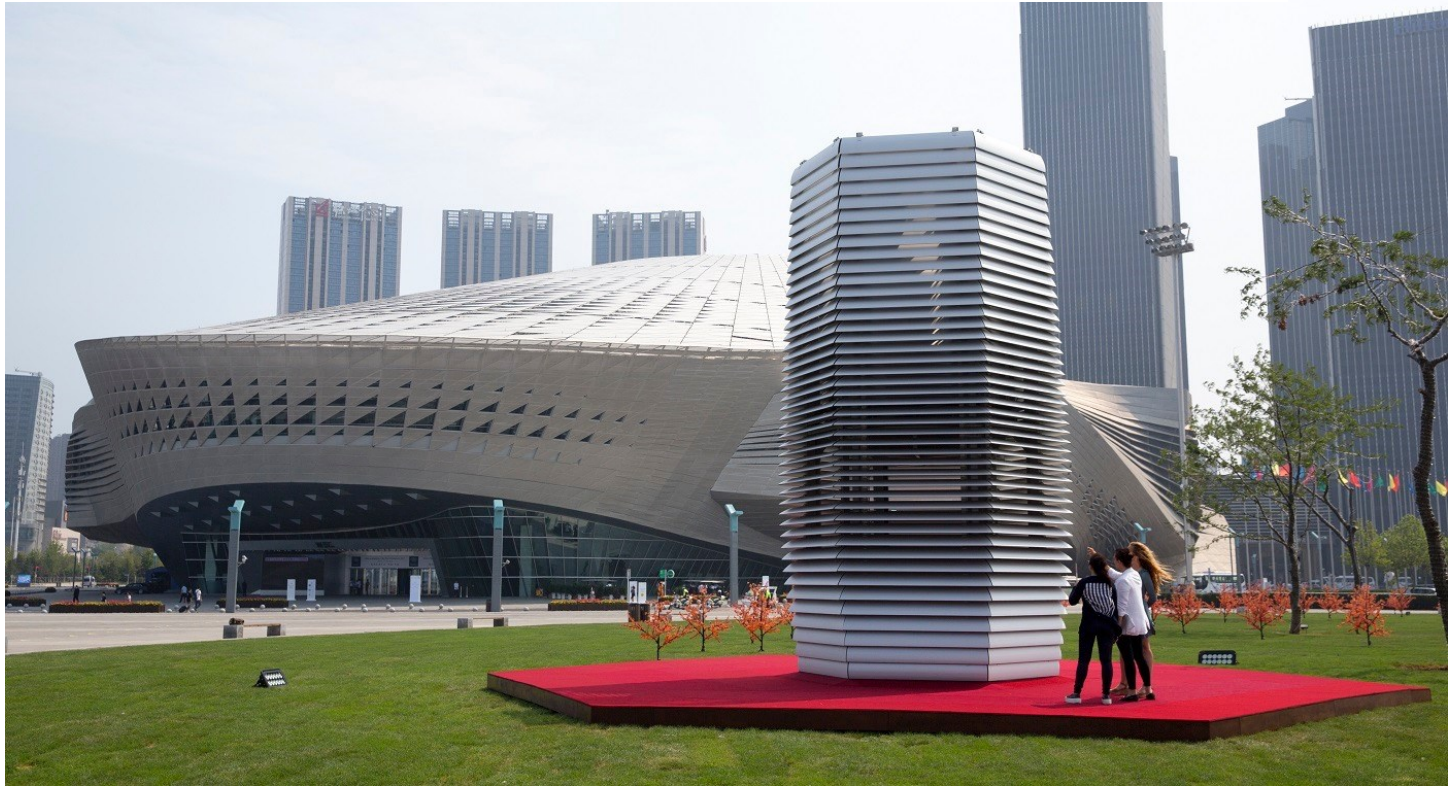


SMOG FREE PROJECT



Smog Free Tower at the World Economic Forum AMNC 17, Dalian, China

Smog Free Project is a series of urban innovations led by Dutch artist and innovator Daan Roosegaarde to reduce pollution on a city scale and to provide an inspirational experience of a clean future. The Smog Free Project aims to create an immediate impact on a local scale and activate new solutions towards smog free cities.

“The Smog Free Project, consisting of the Smog Free Tower, Smog Free Jewellery and Smog Free Bicycle concept, is a journey towards a clean future. We want to share the dream of clean air whilst making people part of the solution instead of the problem.” – Daan Roosegaarde

SMOG FREE TOWER

Daan Roosegaarde and his team of experts have created the world's largest smog vacuum cleaner. The 7-meter (23 feet) tall SMOG FREE TOWER uses patented positive ionization technology to produce smog free air in public space, allowing people to breathe and experience clean air for free. The SMOG FREE TOWER equipped with environment friendly technology cleans 30.000 m³ per hour and uses no more electricity than a water boiler (1170 watts). The workings of the SMOG FREE TOWER have been validated by the results compiled by the Eindhoven University of Technology.¹ The Smog Free Tower successfully completed its China tour and will be developed by in China by a local partner.

SMOG FREE JEWELLERY

Creating a tangible souvenir, Roosegaarde created SMOG FREE RINGS and SMOG FREE CUFFLINKS made from the compressed smog particles collected from the Smog Free Tower. By sharing SMOG FREE JEWELLERY you donate 1000 m³ of clean air to the city.

The SMOG FREE RING is made of smog collected from the SMOG FREE TOWER. Not only is the Smog Free Ring part

¹ "The Smog Free Tower works with the proven ENS technology of positive ionization to remove large fractions of particulate matter from the air in its immediate surroundings. Both the technology and the Smog Free Tower itself have been successfully evaluated with both field measurements and numerical simulations with Computational Fluid Dynamics. The results confirm that the tower captures and removes up to 70% of the ingested PM10 and up to 50% of the ingested PM2.5. For a tower in an open field in calm weather, this provides PM10 reductions up to 45% and PM2.5 reductions up to 25% in a circle with diameter of more than 20 m around the tower. When the tower is applied in semi-enclosed or enclosed courtyards, the beneficial effects can be much larger." (Prof. dr. Bert Blocken Eindhoven University of Technology, the Netherlands and KU Leuven, Belgium).

of the prestigious art collection of Stedelijk Museum Amsterdam, it is also used as a wedding ring by couples all over the world.

SMOG FREE BICYCLE

In 2017, Roosegaarde presents a new addition to SMOG FREE PROJECT: the SMOG FREE BICYCLE under an exclusive partnership with ofo, the leading Chinese bike sharing programme and TEZIGN a Shanghai based design platform to develop the Smog Free Bicycle in China. The project will be developed in the coming months and further details will be released about its development in the near future.

The concept draws its inspiration from the recent Smog Free workshop at M Woods in Beijing which featured artist Matt Hope and Prof. Yang from Tsinghua University and led to new creative output. The innovative bicycle, first presented at TED, inhales polluted air, cleans it, and releases clean air around the cyclist. The bicycles will work in similar ways as the Smog Free Tower and provide a healthy and energy friendly solution for urbanites, combatting both traffic congestion and pollution issues in the city. It is intended to become a medium for smog free cities, generating clean air by pedalling, creating impact on the larger urban scale.

Daan Roosegaarde: "Beijing used to be an iconic bicycle city. Together with Chinese and Dutch expertise we will

bring back the bicycle as a cultural icon of China and as the next step towards smog free cities.”

PARTNERS

SMOG FREE PROJECT was made possible with the kind support of the China Central Government, Embassy of the Kingdom of the Netherlands in China, Film Method Works, City of Rotterdam, Stichting Doen and Port of Rotterdam. Official measurements validated by professor dr. Bert Blocken of Eindhoven University of Technology. The SMOG FREEPROJECT is developed by Daan Roosegaarde in collaboration with the engineers and designers of Studio Roosegaarde, ENS technology and advisor Ursem (till 2013).

Selected Awards

Grand Award for Sustainability, Design For Asia, HK.

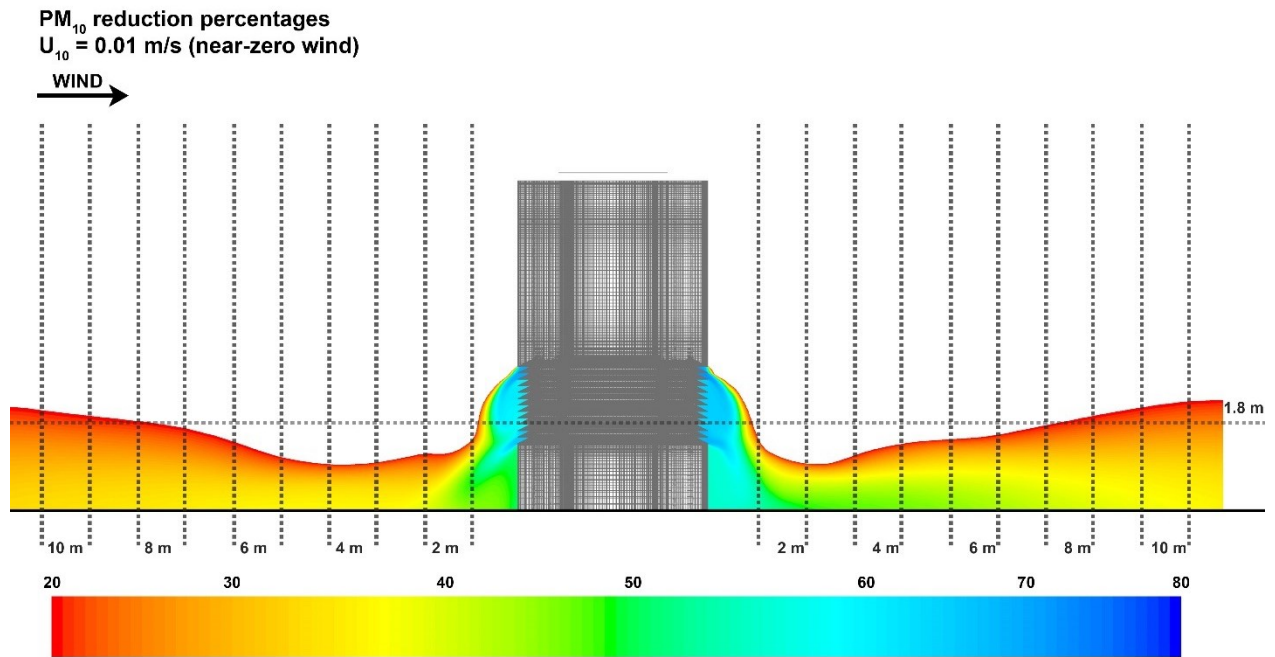
Gold Award, Design For Asia, HK.

Notable Design for Social Impact Award, Core 77, US.

Platinum Award, A'Design Award, IT.

Excellent Product Design, German Design Award, DE.

Most Visionary Project in Europe, Vivaio Award, IT.



Reduction in PM10 Concentration (in percentage) by the SFT in near-zero wind conditions, up to distance of 10 m from the tower (Eindhoven University of Technology)



Smog Free Tower, Tianjin, China (Image credit: Studio Roosegarde)

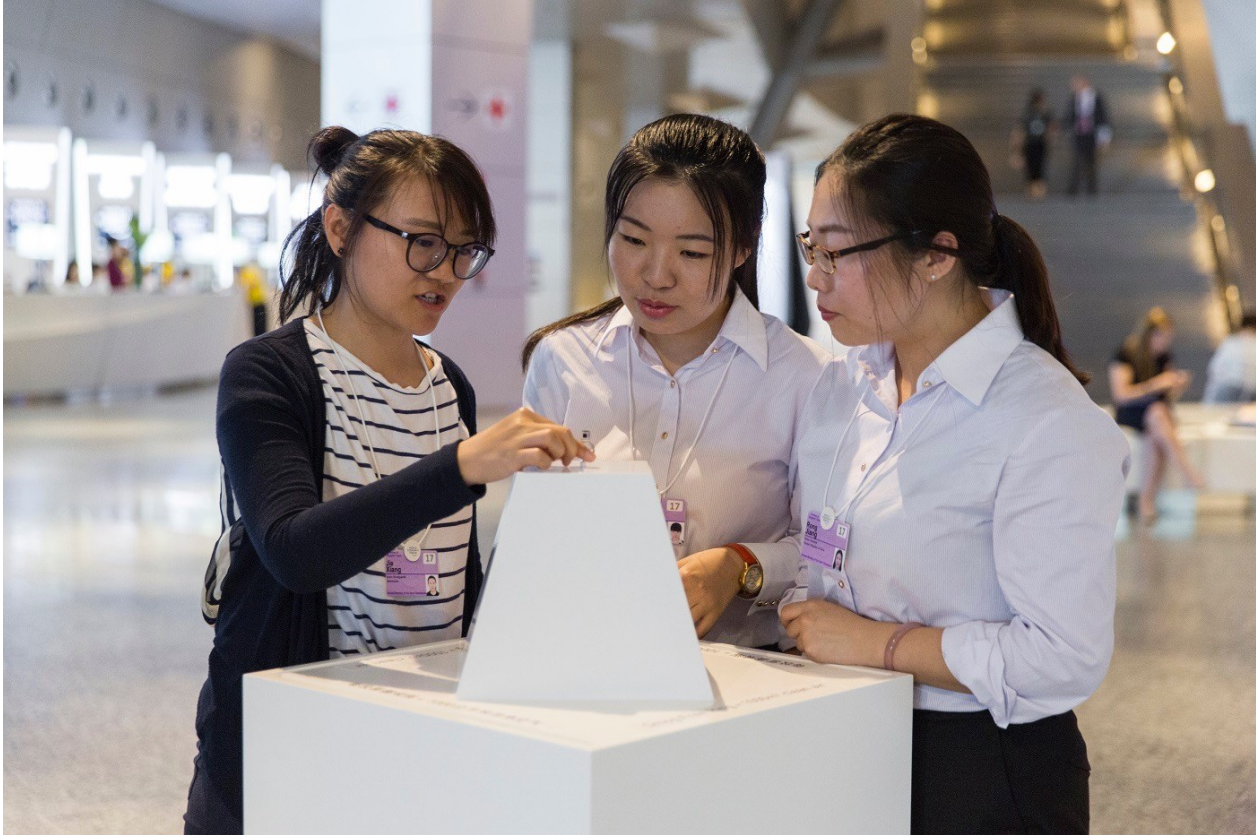


Smog Free Tower, the World Economic Forum Dalian, China (Image credit: Studio Roosegaarde)





Smog Free Project Pop-Up Exhibition, the World Economic Forum Dalian, China (Image credit: Studio Roosegarde)





Smog Free Ring (Image credit: Studio Roosegaarde)





Artist impressions of Smog Free Bicycle (Image credit: Studio Roosegaarde)

