

# Chinese to test electrostatic smog cleaning concept in a park

October 23 2013, by Bob Yirka

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(Phys.org) —Dutch designer Daan Roosegaarde has announced at Dutch Design Week, that he's forged an agreement with Chinese officials to test a system he's designed to clear smog from a small portion of the sky. Roosegaarde, with Studio Roosgaarde, is known for coming up with innovative design ideas that are good for both people and the environment. His latest idea involves embedding copper coils in the ground and running high voltage, low amp electricity through them to create an electrostatic charge strong enough to pull down smog particles

in the air.

Roosegaarde reported that he and his team have already built a running mock-up of the system at an indoor facility. There they are using the coils in a 5 x 5 meter [smog](#) filled room to create a 1 cubic meter round hole in the center that is free of smog. He likens the technology to the [static electricity](#) that occurs when people rub a balloon on their heads. With his system, the [electrostatic charge](#) would attract soot and other particles in the air in the immediate vicinity, making the air much easier to breathe.

China, as most have heard, has been experiencing serious smog problems as coal fired electricity producing power plants release massive amounts of particles that sometimes cover cities in a haze that is both difficult to see through, and hazardous to health. The situation has at times become dire, Roosegaarde told those at the meeting, forcing officials to admit, albeit off the record, that something needs to be done in the short term, while long term plans are in the making. He disclosed that officials have granted him permission to install one of his systems in a public park in Beijing. It won't happen right away of course, Roosegaarde and his team have to test a bigger system to work out the true design, and to make sure it will work outdoors. He insists the system will be safe, even for people walking directly over the coils.

The coil system by Roosegaarde, even if it works exactly as planned won't be the solution to the extreme smog problems in China, of course, but it might offer those in the area at least a temporary respite. If successful, it's likely many such systems would be installed— Roosegaarde claims that the size of the hole in the smog is limited only by the amount of power sent through the coils.

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