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The Bike that's a Breath of Fresh Air: Bicycle with Built-in Air Purifier Spares

Cyclists from Mouthfuls of Exhaust Fumes

- A group of scientists in Thailand have designed a concept bike that purifies air and wafts it in the direction of the rider.
- The design features a filter between the bike's handlebars, and a frame that converts sunlight into energy to power a battery.
- If the bike, imagined by Lightfog Creative and Design is ever made, it could be one of the few vehicles to make the built-up environment cleaner.

Anyone who braves the traffic to cycle to work is aware how poor air quality can be. But a group of engineers in Thailand have set out to make journeys by bike more comfortable by designing a bicycle that purifies air and wafts it in the direction of the cyclist. The concept bike has a filter between its handle bars to capture pollutants and unwelcome airborne particles so that getting a mouthful of exhaust might become a thing of the past.

Bangkok-based agency Lightfog Creative and Design won a Red Dot Design Award for its concept of the APB, or air-purifier bike, which is not yet a prototype.

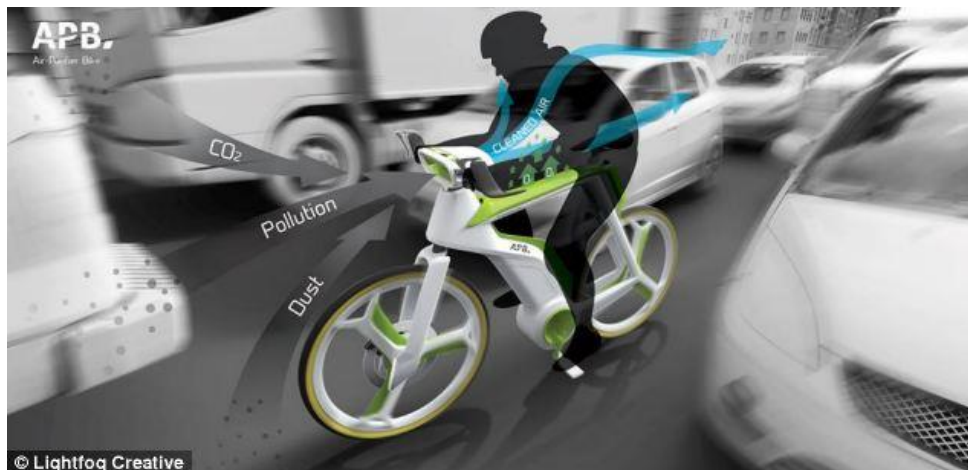
It comprises an air filter that screens dust and pollutants from the air, a photosynthesis system – which includes a water tank – that produces oxygen, an electric motor and a battery, the company said.

'While it is being ridden, air passes through the filter at the front of the bike, where it is cleaned before being released toward cyclist,' according to the engineers and designers Silawat Virakul, Torsakul Kosaikul and Suvaroj Poosrivongvanid.

The purifying system is designed to run by using pedal-power – a little like popular dynamo lights – but the air cleansing functions could continue to work using battery power when parked.

If the bike is ever made it could be one of the few vehicles to actually make the built-up environment cleaner. The bike's intriguing photosynthesis system is heavily based upon nature and the chemical process that plants use to turn carbon dioxide into organic compounds and ultimately energy, by using sunlight.

The unusual-looking green frame is designed to convert sunlight into energy that would power the bike's battery and consequently the filter system, Discovery News reported. There is no news on whether the bicycle will be prototyped or go into production.



- The bike is designed so that when it is being ridden, air passes through the filter fixed between the handlebars, where it is cleaned before being released toward cyclist.



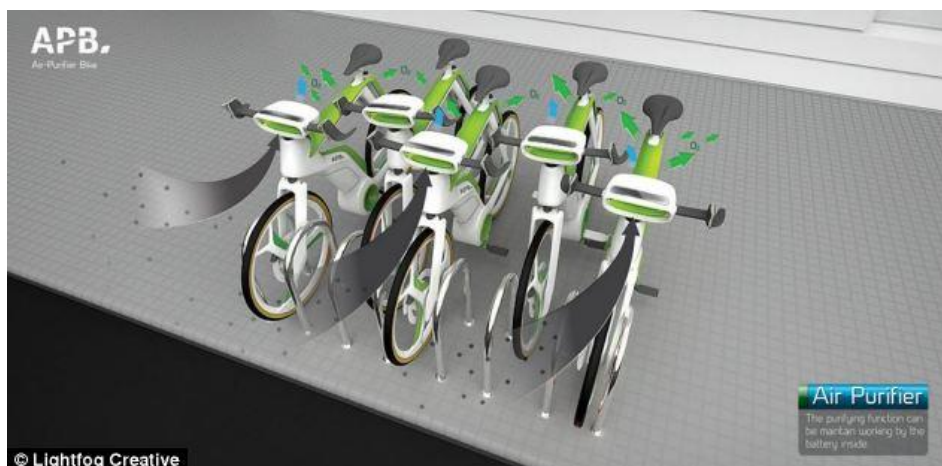
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- Cyclists riding the bike would waft out enough clean air and oxygen for themselves and others, so the vehicle would be one of the first to provide a positive environmental impact in built up areas.



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Sarah Griffiths, 13th December 2013,

<http://www.dailymail.co.uk/sciencetech/article-2523127/Bicycle-built-air-purifier-spares-cyclists-exhaust-fumes.html>