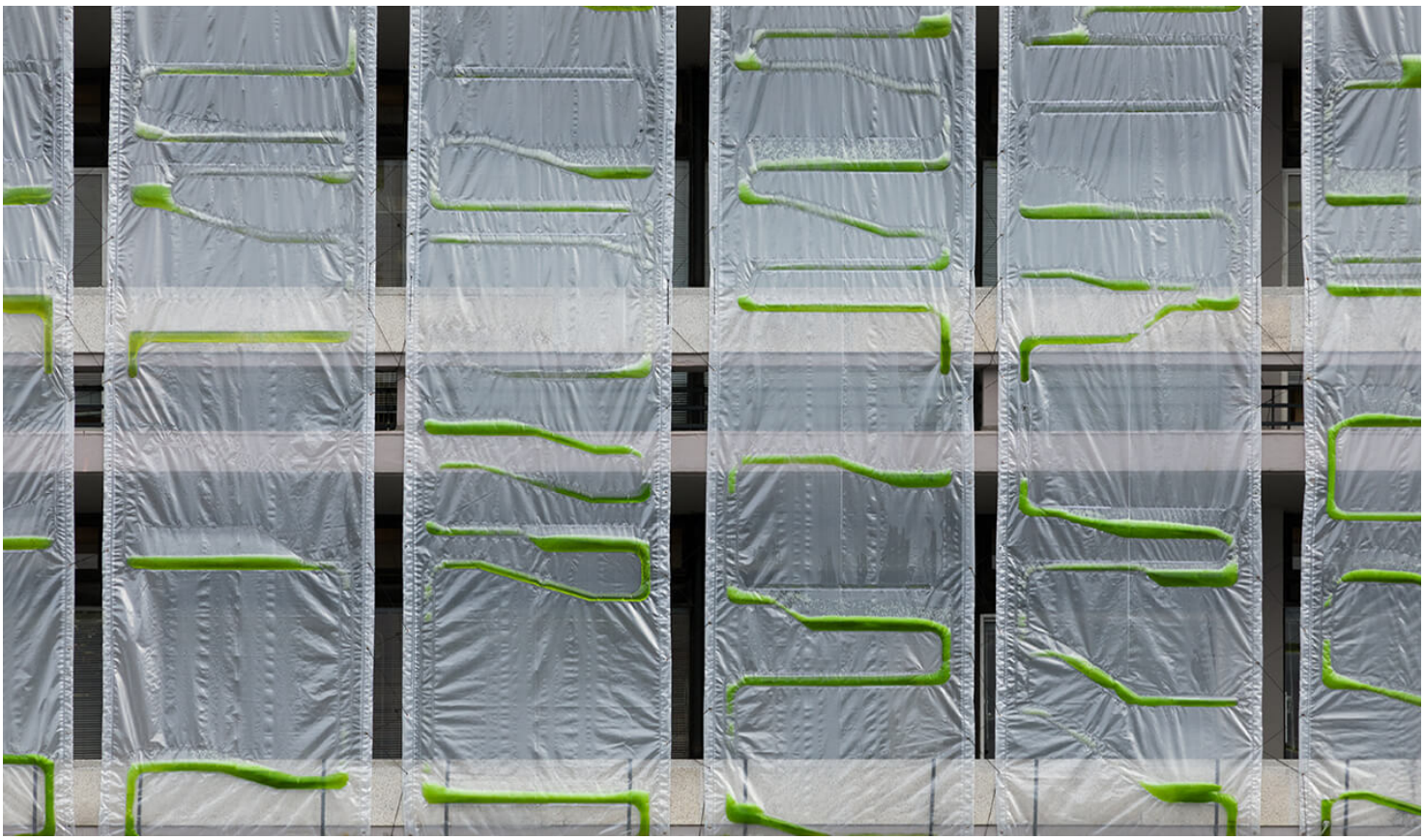

Algae curtain

CURTAIN MADE OF ALGAE MAKES BUILDING MORE SUSTAINABLE

SUSTAINABILITY

Urban areas could benefit hugely from this algae curtain that can help reduce carbon emissions

Spotted: From concrete tiles that reuse rainwater to low-cost technology for eco-friendly houses, there are many means through which we can behave more responsibly. Now a unique idea from a UK startup could help reduce air pollution in urban areas.

EcoLogicStudio has found a way to harness photosynthesis in algae. The algae can remove air pollution through a so-called 'urban curtain', designed to rest over the outside of buildings. This urban curtain, or Photo.Synth.Etica, is a photobioreactor. It acts as an incubator for the algae, allowing it to carry out the naturally carbon-sequestering process of photosynthesis.

The Photo.Synth.Etica prototype is made of 16 modules of bioplastic. Each is two metres wide and seven metres long. These serpentine tubes embedded into the panels optimise the carbon sequestration process. In concentrating the process of photosynthesis in one area, this can therefore drastically reduce air pollution and the effects of carbon in high-density populated areas. The micro-algae feeds on daylight and air, capturing carbon dioxide molecules and storing them within the curtain, while producing oxygen and releasing it back into the surrounding air. The curtain is highly efficient, carrying out the process to the same extent as twenty trees would in the space of a day. The startup hopes to see the curtain integrate into new and existing buildings. It could also double as a sunshade in the future.

1st January 2019

Website: www.ecologicstudio.com
Contact: www.ecologicstudio.com/contact

Takeaway:

Urban areas are the biggest contributors to carbon emissions, yet also the most densely populated. The high volume of people means that introducing innovations and technology to alleviate the strain can be difficult without disrupting everyday lives. Such innovations as this curtain are therefore prime examples for how solutions can be integrated seamlessly. How could your business introduce such low-impact technology to make a big difference on your carbon footprint?