



The t-shirt consumes carbon, instead of producing it | Photo source [Vollebak](#)

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BLACK ALGAE T-SHIRT CUTS EMISSIONS

FASHION & BEAUTY

Vollebak's new t-shirt will maintain its colour and hold the carbon for up to 100 years

Spotted: London-based tech clothing startup Vollebak has launched a t-shirt made from eucalyptus trees and black algae. The t-shirt feels and looks just like a conventionally dyed t-shirt without any of the unsustainable practises present in traditional black dyes.

Last year, the brand launched a t-shirt made out of wood pulp and algae, which could be composted and would break down within three months. Now, Vollebak has moved a step forward by creating a t-shirt that consumes carbon, as opposed to producing it. Black algae usually grow in ponds and feed off sunlight and carbon dioxide.

Carbon black is the pigment mostly used to dye our clothing black and it is highly dangerous for the environment. The practice usually involves stripping large plots of tar sand land from all pre-existing vegetation and animal life, to then extract the carbon black from the petroleum stored under the ground.

For the fabric, wood pulp from eucalyptus, beech and spruce trees are chipped and harvested from sustainably managed forests only, the brand says. It is then spun into yarn to create a wearable fabric that is dyed with black algae ink.

“The wood is turned into [the] fabric using an environmentally responsible and closed-loop production process. In practice, this means that over 99 per cent of the water and solvent used to turn pulp into fibre is recycled and reused,” [the brand says](#).

Due to its composition, the Black Algae t-shirt can biodegrade in about 12 weeks. Once the fabric decomposes, the black algae ink will remain. What's more, unlike other organic materials that release

carbon dioxide when they decompose, the ink continues to lock in the carbon dioxide it absorbs for up to 100 years.

Written By: Katrina Lane

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Takeaway:

Environmental scientist Professor Johan Rockström has pointed out that the world is coming closer to the tipping point of each of the natural systems that allow the planet to function. These include the atmosphere, biosphere and water resources. To keep it below 1.5 degrees, he said that we need a fossil fuel-free economy in the next 30 years, which means offsetting the carbon with collaboration across industries – including retail.