

Session 7	Emerging innovative technologies for the bioeconomy
Pitch Title	First fermented-based asphalt with binder from mycelium
Company	Visibuilt
Speaker	Max van 't Hof
Keywords	Agricultural side streams
feedstock	
Keywords	Mycelium
technology	
Keywords	Asphalt, binder, pavement materials
End-Product	

## **Abstract:**

## Problem

The traditional recipe for asphalt has remained largely unchanged over the past 100 years, with a central component being the fossil fuel bitumen. Bitumen acts as a binder in asphalt but requires high temperatures of up to 250 °C and is a polluting and energy-intensive resource. The asphalt industry currently lacks good alternatives as it strives to meet the global climate neutrality goals.

## Solution

The Danish start-up Visibuilt is developing a new bitumen alternative for the asphalt industry using nature's own binder, mycelium. Visibuilt's binder, visiBIT, aims to offer the asphalt industry a solution with a lower climate footprint and enable production of road surfaces at room temperatures.

## **Potential**

This unique solution not only promises significant market potential, with a global bitumen market valued at around 100B EUR, but also aims to eliminate the industry's dependency on fossil fuels and improve working conditions. Asphalt bound with visiBIT instead of bitumen could potentially reduce energy consumption and decrease CO2 emissions in production by over 80%. Overall, visiBIT aims to give the asphalt industry the opportunity to take a significant step towards reducing emissions and energy consumption, aiding the global efforts to combat climate change.