Roads Paved with Pig Manure Could Mean A Cleaner Future

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Pig manure could pave the road to a new sustainable asphalt, thanks to civil engineer Ellie Fini and a team at North Carolina A&T State University. Fini and her partners have filed patents on the technology and set up a company called Bio-Adhesive Alliance. Watch and share how this <u>#NSFfunded</u> formula is being engineered and tested. It may be coming to a road near you: 1.usa.gov/28XHQYd And yes, they've dealt with the "aroma" issue! <u>#scienceiscool</u> <u>#environmentalengineer</u> <u>#womeninstem</u> <u>#womenengineers</u>

Roads here aren't paved with gold, but one day they might be paved with pig manure. And that's not a bad thing.

A <u>new video</u> created by the National Science Foundation explains new research into using waste from pigs to create a more environmentally friendly alternative to the petroleum-based asphalt that is currently used in roads today.

It turns out that pig manure has oils that can be used to create a petroleum-like substance, which can be mixed with sand or gravel to make a strong asphalt substitute. Researchers are currently putting the resulting bio-asphalt through its paces, making sure that it will stand up to the daily stressors of life as a road.

If the venture succeeds, it would reduce reliance on petroleum, a non-renewable resource, and would also solve the <u>ever growing problem</u> of where to put the billions of gallons of pig waste generated in the United States every year.

In addition to being smelly, lagoons of pig waste near farms <u>have contaminated water supplies</u> during major flooding events, and are generally seen as a nuisance. Many researchers are trying to find ways to make pig waste more useful. In addition to the asphalt efforts, other researchers are working on ways to <u>reduce the amount of ammonia in waste</u> making it a less noxious fetrilizer, and extract methane from the waste, which could be used as an energy source.

Click here to watch "Pig manure paves road to sustainable asphalt - Science Nation": <u>https://youtu.be/1wHn8L37olc</u>