

Talking Points

by Martin Derrick

Cool, man!

The Lotus Eco Elise displayed at the British Motor Show featured body panels and spoiler containing hemp.

According to Lotus, it's a great material because it's exceptionally strong (which is why it was used for rope for centuries). It can also be produced locally, reducing carbon miles of the manufacturing process, is a natural resource that requires low energy and absorbs CO₂ while growing as a plant through natural photosynthesis.

In the Eco Elise, hemp is used with a polyester resin to form a hybrid composite, but it's hoped that a fully recyclable composite resin will be viable in the short-term.

And just for good measure, the carpets are made from sisal, another natural and renewable crop.

Said Lotus CEO Mike Kimberley: "The Eco Elise is a great example of the advanced

and affordable green technologies Lotus is developing. We are keen to ensure that Lotus as a company and its products offer an ethical, green option that appeals to our customers."

However, Lotus and the rest of the motor industry could go one step further in the use of natural, renewable raw materials – actually growing the materials needed to build a car.

This is the focus of research that's been going on for some years at Fiat with its spider's web concept. The company's scientists are looking to copy the insect's web, with its combination of strength and lightness.

Fiat is also working on what it describes as "intelligent molecules" which naturally align themselves in such a way as to produce very light and very strong materials.

The future, as Fiat sees it, is that materials for tomorrow's cars will come not from mining but from agriculture. Quite literally, they will be grown.

The only question is how these eco-vehicles will eventually be recycled. Biodegradable they may be, but in the wrong hands isn't there a danger that all that hemp in Lotus's Eco Elise might end up being smoked?