Soils ain’t soils

Scania’s first commercially delivered Euro 6 prime mover has gone into service with pioneering entrepreneur and green organics specialist Peats Soil, which aims to fuel its fleet with home-produced bio-diesel.
The first Scania Euro 6 specification prime mover has entered service in Australia.

Peats Soil in South Australia has taken to the advanced low emission technology with alacrity, as it pushes ahead with its organic, eco-friendly strategy, which includes the construction of a bio-fuel manufacturing plant.

“As a company, we are committed to building our green profile,” says Peter Wadewitz, Managing Director of Peats Soil.

“We are not talking, we’re practicing, we have committed large amounts of funds to our biofuel project and we’re planning to commercialise it, producing up to 1.3 million litres of biofuel a year. We are aiming to replace up to half our fleet’s annual fuel consumption of diesel with biofuel, and so we are looking at trucks that can run on 100% biodiesel,” he says.

The company has vehicles traversing Adelaide and South Australia collecting grease-trap fat from food producers. Peats Soil has been working with Adelaide University in a government-assisted study to produce biofuel. The partnership includes cash and in-kind contributions from private industry to help develop a commercially viable ethanol production plant. Peter says he expects to be producing biofuel by October 2014, having successfully perfected the manufacturing process in the laboratory.

“Of course making something work in the lab and then transferring this to a commercially viable plant is the key challenge. We have been working for 2 years on this plan, to convert the fat waste into biofuel.

“Once we have the commercial plant up and running we have to decide if we commercialise it more widely or sell the Intellectual Property.

“The lab-produced biofuel has been manufactured to the equivalent of the European standard. We have been experimenting with 10-20% bio mix and as much as 40% mixes. We asked Scania what percentage biofuel their trucks would run on and were surprised and happy when they said they had engines that would run on 100% biofuel with Euro 6 emission compliance.

“When we took delivery of the silver R 490 Euro 6 truck that Scania in Adelaide had on hand, our driver, Dave Willis said that in 25 years he had not driven a truck this good.

“He said the Euro 6 truck felt like a V8 even though it’s a 13-litre six. He says driving the R 490 was a revelation. He is really enjoying it.”

The Euro 6 R 490 prime mover covers 5000 km per week, on a 3-times daily loop between 3 locations, picking up raw green organics and delivering the Peats Soil production facility, picking up processed product and delivering it to the city or stockpiles.

The new truck, like the 12 other Scanias in the fleet, is rarely stationary.

“We are getting very good fuel from the Scanias,” Peter confirms, “probably around a 7.5% improvement on the American vehicles we have had on the fleet in the past, and sometimes as much as 20%. The reliability has been good, and Scania looks after all the vehicles on a maintenance contract. The contract gives me fleet running costs predictability and peace-of-mind,” he says.

“From the drivers’ perspectives, they all say they love the comfort in the cab and the safety of the Scania product. The new truck comes with Lane Departure Warning and Adaptive Cruise Control, which work very well. We like the fact that the technology assists the drivers but doesn’t take over from them.”

The Peats Soil R 490 was imported by Scania Australia to be one of the stars of the 2013 Brisbane Truck Show and has been travelling the country showing off its advanced Euro 6 technology.

The second-generation Euro 6 engine is even more fuel-efficient than Scania’s industry leading Euro 6 first generation engines launched almost 3 years ago.

The Euro 6 emission standard calls for a fine balance between the combustion and after-treatment processes. Scania is using its vast experience of both EGR and SCR to implement an optimal technical solution for each output level, as well as for individual applications.

Driver Dave Willis loves the new exceptionally smooth 6-cylinder Euro 6 R 490 prime mover he’s been driving for the past few weeks with another driver, John Symonds. They have covered 20,000 km in a very short period of time.

Having previously been behind the wheel of a Scania V8 powered prime mover he has found the shift to the 13-litre 6-pot a surprising revelation.

“The truck is hard to fault. I love the torque, especially down low, it just pulls really well,” he says. “I am a fan of this smooth in-line engine.

“The torque just hangs on up hills so we don’t need to change gear. The engine just digs in. It really lives up to its claims of hugging torque, and at 1100 rpm you can really feel it delivering. This engine does its best work down low, it is exceptional performance for a 13-litre 490 hp engine,” Dave says.

“I will confess to having been a Scania-sceptic before I drove one,” he admits. “I drove an old (bonneted) Scania some years ago and I was impressed by the reliability and comfort, and then Peter bought an R 500 V8.

“But this new truck has really impressed me.

“We are doing about 300 km per night and around 700 km during the day. The truck works about 23 hours each day, Monday to Friday. I drive the night shift and John drives the day shift. We’re usually on a similar route, which takes us through the Adelaide Hills in pocket B-double formation, carting green waste out of the city and organic compounds back in.

“It’s very quiet in the cab even when the engine is working hard. The retarder works well especially on steep descents.

“I think it is very good for Peats Soil to have this green truck. You do see lots of old trucks emitting a lot of soot, but it is good we’re not contributing to that pollution,” he says.