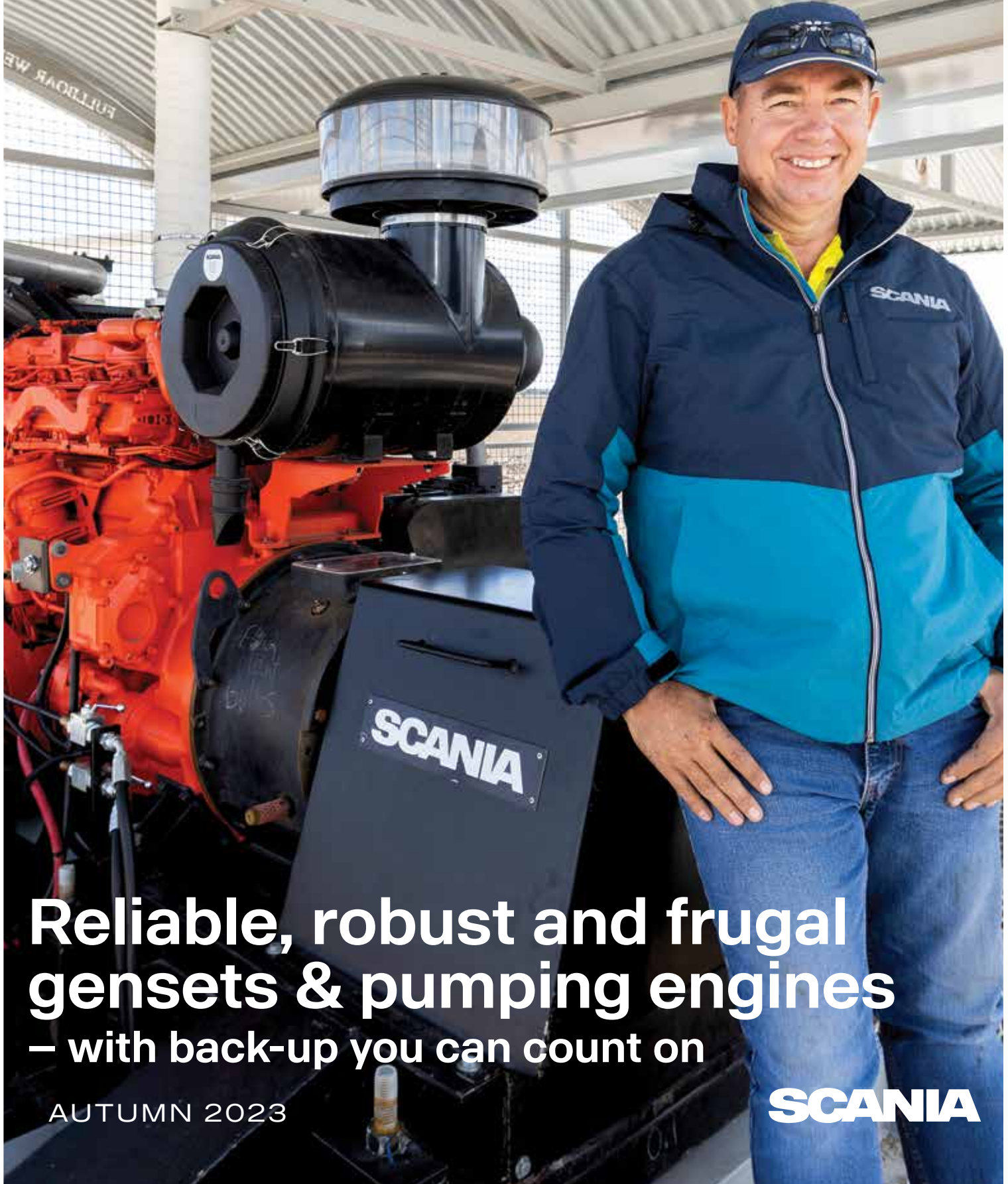




SCANIA AUSTRALIA
ENGINES

[THE NEWSLETTER FOR SCANIA-POWERED FARMERS]

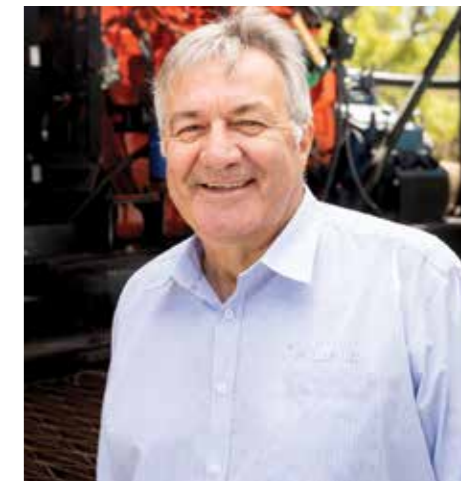


**Reliable, robust and frugal
gensets & pumping engines
– with back-up you can count on**

AUTUMN 2023

SCANIA

Scania powers Australian growers



André Arm, National Manager for Scania Power Solutions says that aside from proven robust engineering, impressive durability and the benefits of modular construction, Scania irrigation and genset engines can also run on biofuels, vastly reducing CO₂ emissions.

Jason Rendle, Scania Account Manager for Power Solutions says reliability is the number one requirement for customers: delivered by both the Scania products and their service agents.

breakdown of how an engine is running in real time or on a historical basis so operators can spot exceptions to the norm, which may presage the need for maintenance or preventative component replacement, to avoid in-service breakdowns.

“These are just some of the additional advantages Scania can provide farmers to help make their lives easier and save them money,” Jason says.

“Our engines in five, six and V8 cylinder configurations have all the power and performance farmers need in Australia to improve their yields and lower their operating costs. We have a strong reliability track record operating in some of the toughest environments on this continent and we have a large core of customers who are more than happy not only with our product, but also with our aftersales support, which is probably one of the most important areas of our entire business.

“At Scania we are all committed to uptime and ensuring availability of the engine or genset when it is needed,” Jason says.



Scania Power Solutions provides engines ranging from a 9-litre five-cylinder to a 13-litre six-cylinder and a 16.4-litre V8. In service in Australia these engines have proven to be ultra-reliable and durable, as well as easy and affordable to maintain. But it is the fuel efficiency that really sparks the passion of farming customers, noting real-world fuel consumption savings that make a mark on their balance sheets. The Scania saver ring, left, helps ensure durability.

Scania has been supporting the Australian cotton industry and farmers across the country with irrigation engines and gensets for many years.

In Goondiwindi’s cotton belt that spreads across the Darling Downs in southern Queensland, there are more than 200 Scania engines hard at work, pumping water from rivers and pushing it through irrigation channels and into water storages.

“We are delivering the lifeblood to cotton farmers,” says André Arm, Scania National Manager for Power Solutions.

“Scania Engines have built a robust reputation for reliability and dependability across this region, just as they have in many other corners of the world where water is scarce, and farmers cannot afford to waste an opportunity to store or move water in order to safeguard their growing season.

“Scania’s engines are strong, powerful and able to work all-day, every day, across extended periods, then stand idle during the off season, and then power up at the touch of a button. Of course, regular servicing around 500 hours is vital to ensure

reliability, especially when the pumping window can be very short.

“Our engines are also designed to be able to cope with low load running, as well as continuous use, and our unique saver ring technology prevents carbon build up on piston crowns,” he says.

“In addition, Scania can help operators reduce their carbon footprint by switching to biodiesel to run their engines, which can reduce CO₂ emissions by more than 80 percent. Operators may add biodiesel in any format, from B10 to B100 with no hardware or software changes needed, and no noticeable loss of performance. Using biodiesel would be most beneficial where the engines are running continuously.

“Cotton farmers, like all commodity growers, are sensitive to running costs of their agricultural machinery,” André says. “That’s another reason why Scania has been so successful. Farmers have been able to make direct comparisons on fuel consumption between our engines and their older non-Scania units, and the results are startling. In most cases we’re tens of litres better per operating hour than other engines, and those cost savings surely add

up when you are running 24/7.

“We also have been successful in converting farmers to our gensets in order to provide not only reliable electrical power, but also thanks to our efficient engines, power at a lower cost per kilowatt/hour,” he says.

Jason Rendle is Scania’s Account Manager for Power Solutions, and he says that impending telematics advances will bring even more control and information into the farmers’ hands.

“Scania has technology that will provide real-time data to the mobile device operated by farmers, so they can start or stop their engines remotely. They can see fuel consumption and many other data points on their phone, which is extremely helpful for farmers who operate vast properties with multiple engines and pumping sites, meaning they don’t necessarily need to stand over an engine to get performance data or simply to switch it on or off. This is one of the additional ways Scania can help farmers make more efficient use of their time.

“We also have engine monitoring systems that can display on a desktop a full

Scania irrigates cotton boom

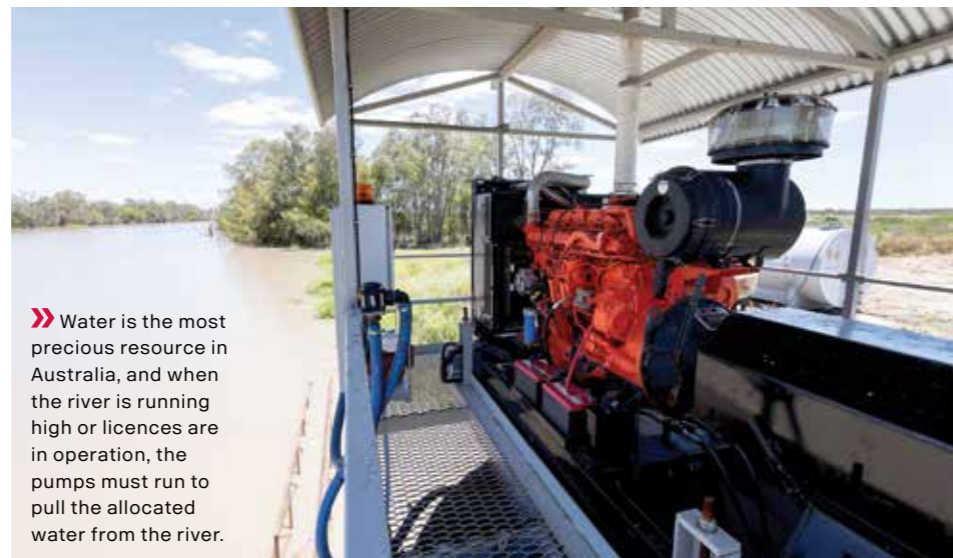


Cotton is big business in Australia, big on farms and big for exports. In fact, cotton is expected to become the third most valuable export commodity after wheat and beef in 2022/23.

In Queensland's Darling Downs, surrounding the Macintyre River, a large number of cotton farms proliferate. Also growing is the number of Scania irrigation engines and gensets installed on these farms in order to provide power and pumped water, the lifeblood of cotton growers.

Water won't get itself out of the rivers, and rainfall cannot be relied upon solely for water-sensitive crops like cotton.

Around 200 Scania engines across the region drive pumps that pull water up – sometimes up to a dozen metres above the river, into storage reservoirs or lagoons, to later be pumped out through channels to



» Water is the most precious resource in Australia, and when the river is running high or licences are in operation, the pumps must run to pull the allocated water from the river.

vast laser levelled fields where the crop is grown.

In many cases, huge centre pivots are also powered or fed water via Scania engines, pumps or gensets.

Because of the unpredictable nature of climate in recent times, rainfall must be augmented by river water, with a comprehensive licencing system in place. As such, once the water has been released upriver for the farmer to pump, the engines must be working when the water arrives downriver.

Reliability therefore is the most critical element.

Durability is also crucial, given the intermittent use of the engines. They may be working day-after-day, several days at a time or even weeks on end to pump

allocations or take advantage of a river in flood, but then they can sit idle for long periods.

So, fuss-free start-up and reliable running is paramount to operators.

Irrigation engines have long working lives and tens of thousands of hours can be achieved on Scania engines with regular servicing, at 250 or 500 hours in most cases, as well as preventative maintenance to avoid in service failure at the most inconvenient moment.



Cotton Fast Facts

- Record exports in August 2022 of \$866 million was almost double that exported in (drought-affected) 2020
- \$1.9 billion worth of cotton was exported in 2021
- \$2.046 billion worth was exported January to August 2022 – representing 562,270 tonnes, in 5.5 million bales.
- 2022/23 forecasts of up to \$7 billion in exports may be impacted by flooding in the second half of 2022 delaying planting



On-call service 24/7/365

One of the secrets to Scania's success in the agriculture sector has been the partnership with extremely effective and responsive independent authorised dealers, and none more so than Nick Rowe at Country Link Mobile Mechanical Service.

Country Link was started by Nick's parents, Justin and Vikki Rowe, with Nick buying his father out of the business a few years ago.

Armed with a substantial collection of customers arrayed within 250 km of Goondiwindi, from Wee Waa to Condamine, and some even further afield, Nick has continued the Country Link tradition of being available to his customers 24/7.

"When our customers call out of hours, it's not to chat, it's because they have a problem, and they need it solved quickly. Time is money and there's always a degree of urgency in these calls, so we do our best to get them running again remotely or get on the road to sort out the problem.

"With Scania engines the problems have been few and far between and I am pleased that with all the electronics and longevity that is engineered into all Scania engines, it's rare to get a call-out.

"All of our customers appreciate the need for regular maintenance and the benefits of preventative maintenance as well. They want the engine to start when they press the button and stop when they turn it off. Work cycles are intensive, there are few Scania engines outside of farming that run 24/7, but with the correct service programme, there should be nothing to worry about," Nick says.

Nick's customers operate around 200 Scania engines, and his business looks after around 100 further non-Scania motors, so there's never a quiet day at the office. His team of eight run Toyota LandCruiser Utes with full mobile workshop fitouts and spares, while wife Mikaela runs the office, also wrangling four small children, including a new-born.

"Scania has become a popular choice among farmers especially cotton growers,"



Nick says. "Word of mouth is a very positive endorsement, and at Country Link we also strive to ensure we never let our customers down if they need us. It is true I have been called out on Christmas Day in the past, but this is what you must do to back up your claim to look after your customers. The crops don't know it's Christmas, and they need water," he says.

"As a representative for Scania I am delighted to see more farmers replacing their worn-out engines with Scania units, and the range of engines being selected underscores the suitability of the different configurations for our requirements in Queensland and Northern NSW.

"The genset business is also growing and I can see even more potential for these in the future. High efficiency and low fuel consumption is going to be more and more important as fuel prices continue to be volatile, but also clean running engines, emitting less CO₂ will become more important to growers who must play their part in reducing the carbon footprint of their produce," Nick says.

« Scania service agents, such as Nick Rowe from Country Link Mobile Mechanical Service, are the lifeblood of the Scania Power Solutions business.



POWERING SILOS FOR SEED AND GRAIN

Scania is powering a huge new grain silo hub near Goondiwindi, in southern Queensland.

Owned by RMI, the property will host 26 700-tonne silos when it is completed, with an additional five 300-tonne seed silos already in place.

A Scania 13-litre 6-cylinder engine will power the 550 kVA genset, which has been imported from the United Kingdom.

"There is no mains power available at this site right now. The silos will hold wheat and grains harvested in the local region," says Nick Rowe from Country Link Mobile Mechanical Service.

"The Scania genset will provide prime power initially, and will be used for backup once mains power is installed.

"We were very pleased to be able to provide the genset for this new location, which will operate extremely efficiently and provide power for the fans and blowers that will load and unload the silos. The genset is fed by a 35,000-litre fuel tank.

"Establishing the site and commissioning has been a challenging project," Nick says.



medicinal benefits of the fruit, the value of the crop will only continue to increase, along with demand as further overseas markets open up.

"The six-cylinder Scania SG550 generator set provides high performance and reliability that farmers across this region can depend upon," says Scania Power Solutions dealer Nick Rowe of Country Link, based in Goondiwindi, southern Queensland.

"With peak output of 550 kVa, the generator set has plenty of grunt to keep Bim's hydro-cooler and cool room working at peak efficiency. The generator delivers a lot of power using very little fuel, and starts on the button every time. Our regular servicing schedule ensures plenty of cooling power is just the flick of a switch away," Nick says.

"And thanks to Scania's modular engine programme, the same motors that power the cool room's genset can also power irrigation engines or water pumps, which provide the lifeblood to many growers in this region."



Powering the Queen of Plums

Since 2010, Bim Goodrich has been growing the biggest and best crop of Queen Garnet (*Prunus salicina*) plums in Australia, at his Good Rich Fruit Company farm, near Warroo, southeast of Inglewood in southern Queensland.

Five generations of Goodrich family members have worked on the farm that cultivates 75,000 trees over 60 hectares. In the peak picking season, 80 casual pickers are tasked with gathering 100 tonnes of fruit a day, hydro-cooling it and then storing it in a large, hanger-like cool-room, powered by a Scania generator.

"We start picking the fruit on Australia Day and the harvest lasts about three weeks," Bim says. "When it is picked, the fruit is about 30-degrees and the hydro cool chills it to about 10 to 15-degrees, and then we store it in the cool room before it is collected the following day.

"The cool room and hydrocooler need 100 kW each of power and the Scania generator has been fantastic. It has not missed a beat in 6000 hours of operation, performing entirely to expectation. Servicing is taken care of by Nick Rowe at Country Link Mobile Mechanical Service."

With a high value crop, and short picking season and 100 tonnes a day to be stored,

there's no margin for failure of the Scania engine – the cost of lost power for one day would be significant for the farm.

"We are the biggest grower of Queen Garnet plums in Australia. The fruit has recognised health benefits and as well as being eaten as fresh fruit, it is also processed and used in a number of health food supplements," Bim says.

"We are exporting to China and looking at wider Asian and global markets," says Rowan Berecny, who has managed the farm with Bim for the past 11 years.

"The flavour, the quality, the high nutritional value and the fact that we don't use insecticides, fungicides or chemical fertilisers enhances the appeal of this fruit. The Queen Garnet was bred locally in Stanthorpe, and some are grown in Victoria, but it is a controlled variety, has up to seven times more antioxidants than other plums, and is known to lower blood pressure."

With ongoing research into the wider





SUSTAINED SUCCESS

Simon Doolin's Cleveland farm, North Star, located just inside the NSW border, south of Goondiwindi, is a successful enterprise, recognised as the **2020 Growth Awards National Winner in the Sustainability category.**

Drawing water from the Great Artesian Basin, Simon Doolin irrigates his sizeable 6000 hectare holding, growing wheat, cotton, sorghum, corn and barley, and uses two Scania six-cylinder engines.

"We have had the one engine around eight years and it has run for close to 26,000 hours. We rely on it year-round," Simon says. "My father and brother also run Scania engines on their farms."

The motor produces 350 hp, the output required due to the significant depth from which the water must be pumped to the surface. In line with Simon's focus on efficiency, the motor also powers a generator which drives his Zimmatic centre pivot, that irrigates circles up to 100 hectares in size.

"The Scania engine has been a success for us," Simon says. "It just works. We have pushed service intervals to 400-450 hours, and oil consumption is almost zero. When we are irrigating, we'll run the motors continuously. Reliability is number one. We can't afford to be without the motor when we need to irrigate," Simon says.

"Over the journey we haven't had any problems with the motor, or the ancillaries like the starter or alternator. Reliability has been very good, and Nick Rowe and his team from Country Link have been very responsive if we have had any small issues or questions.

"The servicing schedule and maintenance work has ensured the reliability and optimum performance we have enjoyed. There have been no vibration issues with

the motor, the radiators keep the operating temperatures spot on, and we're looking at adding telemetry to be able to monitor the motor's performance from the app on the phone, which is handy when you are running a big farm. The Scania tech allows us to remotely start the motor, but the bore pump still needs to be physically started.

"Once the motor and bore are running though, we can adjust the revs and use the telemetry to monitor engine temperature and fuel use via the app, which does provide benefits," he says. "We also have alarms and exception reporting through the app.

"There is a lot of automation and remote control through phone apps coming to the agricultural industry," Simon says. "We can measure a lot more remotely, such as water pressure and flow rates, which is very

important if you aim to operate a farm as efficiently as possible.

"Mixed farming is now more cost sensitive: labour shortages mean we must rely on technology a lot more, so we can't afford to have things letting us down. Reliability is paramount," he says.

"Nick is so good with service. I know if I have a problem with a motor even if it is on Christmas Day, Nick will be here to help me fix it, and he has been. That's what I need. I need that back up service. It doesn't matter what gear you have. All machinery will break down at some stage, but you just need someone to fix it. If the problems can be overcome quickly, they don't become a big problem. If the cotton or crops go without water then you have a big problem," Simon says.



A FULL HOUSE

Jason Sinclair manages a property running the full range of Scania's engines.



Jason Sinclair manages the 4000-acre Lakeland Downs cotton farm at Condamine and has worked on the property for 20 years.

The farm is home to the full gamut of Scania irrigation engines, with examples of the five-cylinder, six-cylinder and V8 engines all pumping water either from the Condamine River into the nearby lagoon, or from the 1000-megalitre lagoon to water storages or irrigation channels.

Jason's story is one of admiration for the Scania engines, particularly the big V8 16-litre unit that stands on a tall tower at the edge of the river.

"I just love the Scania V8," he says. "This motor is very robust. It has run for 3501 hours over eight years, consuming exactly 170,334 litres of fuel, which equates to an average of 48-litres per hour. That's impressively low for a motor running a 26-inch China pump that sits 11 metres below

the engine in the tank, driven via two drop belts. Previously the engines we had on this job would use up to 65-litres of fuel per hour.

"Our gearing means the pump runs at 740 rpm, and we stop the motor and climb down to inspect the pump and the belts every day," Jason says. "Using two belts for the drop keeps better tension and enhances the belts' working lives.

"We have a six-cylinder motor pumping 100-megalitres a day, using only 25 litres per hour, because it is not lifting the water so high. The fuel savings over our other non-Scania brand engines are significant," he says.

"Since we installed these Scania motors we have not looked back," Jason says. "The modularity of the engines helps, as the three different motor configurations largely use the same spare parts, and they all use the same grade and quality of oil, which also provides a simplification for on-going maintenance. There's not going to be a mix-up putting the 'wrong' oil in one engine or the other.

"We run the V8 engine for around 350 hours per year, some months the engine is running continuously, day and night when pumping out of the river. When we get our allocation, we need the pump ready to go, so the motor must start on the button.

"We have 4000-megalitres of storage, and our storages are full now because the river has been running very high, so we have been pumping.

"We have some redundancy, with another Scania engine able to pump out of the river, which was handy when the V8 engine's pump centre bearing went, and we had to run the second motor while we fixed the pump. When the water's coming you can't sit and watch it go by," Jason says.

"The five- and six-cylinder engines are used for irrigation. We're irrigating 1200 of the 4000 hectares, we have some dry land grazing and some dry land cotton. The price of cotton is high now so it's worth planting. I like to rotate the cotton fields yearly so we're usually 50/50 on growing and resting.

"I have worked here for 20 years and currently there are just three of us looking after the property. I've seen fires and flood, I've seen the river bone dry, but in 2022 it hasn't stopped running since February. We had a big flood that came right up to the engines at the side of the river, so we had to move them.

"With the first six-cylinder installation we have built a frame to hold the motor that we can easily move to a higher locating pad nearby if the river floods again, as well as fixing a snorkel to the inlet to ensure the engine doesn't ingest any water.

"We have had such a good run with the



Scania engines, they are very reliable and long lasting and very efficient. I'm waiting for our other non-Scania engines to reach the end of their lives so I can replace them with new Scania's. They'll be far less trouble. With some of the other engines we have had their technicians out here all the time, but with Scania, Nick Rowe just comes to do the servicing.

"We change the oil every 250 hours, as a preventative measure and every 1000 hours Nick comes out to give the motor a check over and do the valves. We would change the injectors and turbo at 30,000 hours," Jason says. "The combination of the robust engines and Nick Rowe's servicing means that we don't need to worry about our pumping performance."



EVERY CENT COUNTS



Nangram Farm, Wallumba near Condamine is owned by the McDonald family of Cloncurry and is managed by Randal Coggan.

The feedlot and farm are well-established, and the farm is also home to a large number of coal seam gas outlets, operated by an energy company.

“I’ve been here a while,” Randal says. “The beauty of countryside is one factor and the McDonald family give me the scope to get on with the job.”

“With both the feedlot and the farm it is a very intensive operation for me and my staff

of 10. It keeps us hopping,” he says, “We’re here to work, not play.”

The farm comprises 2000 acres under irrigation growing forage and cash crops for sale and the feedlot.

The feedlot has the capacity for up to 13,000 head, which would typically spend 100 days on site before shipping out to the abattoir.

“We have our own water storage on site,” Randal says. “Initially I didn’t know much about Scania irrigation engines but a friend on the other side of Condamine, Jason Sinclair, got me on to them.”

“We now have two 400 hp Scania six-

cylinder motors to pump water out of the river and to drive the 10 centre pivots we have on the farm. There’s 5500-megalitres in water storage here, pulled out of the river on two licences.

“The first of the engines has 600 hours and the second is newer, with just 200 hours. When they are running it is around the clock, every day. They’re running unless they need to be serviced. We service them at 250 hours and Nick has been really good at assisting us whenever we have any questions. Servicing has been done right and on time, which is imperative for our business, because when we have to pump the

water, the engines need to run,” Randal says.

“We did have a gearbox temperature sensor play up and Nick walked us through how to fix it and get the motor running. Water is money. We can’t afford to not run the motors. But they have been very good so far,” Randal says.

“They seem to be very efficient as well, even when pumping water up out of the river. The Scania performance powering the pumps drawing water up out of the river is the same as the other engines pushing water along the channels. Efficiency is very important to us,” Randal says. “Every cent counts. It all adds up. It’s a numbers game, and energy costs are scrutinised closely.”

Focusing on maintaining reliability even led to the engines getting their own bespoke covers sourced by Nick Rowe.

“The covers will keep the birds off and prevent nesting on the radiators,” Nick says.

Award-winning grower relies on Scania Power



RMI-owned Carrington Cotton Farms' Caribuckly site near Goondiwindi plants around 2000 hectares of cotton, drawing water out of the Macintyre River, feeding the 127-hectare on farm water storage.

"We have just installed a new 6-cylinder Scania engine after five years with one working without issue, and saving significant fuel use compared with the engine it replaced," says Farm Manager Danny O'Brien, who has been at the farm for a year, following a stint at a similar farm in Wee Waa.

"The engines run pumps for around 1500 hours per year, and we service at 250 hours. We never have any trouble with them," he says.



Australia is one of the world's largest suppliers of raw cotton to the global market. With around 5% of global production, we rank fourth in the world, producing around 680,000 tonnes of raw cotton fibre worth close to \$2 billion.

With so much production, and a somewhat volatile commodity price, running cotton farms in Australia as efficiently as possible is key to success. And managing water efficiently plays a

significant role in this success.

RMI's Carrington Cotton Group has an excellent track record for efficient production and farming methods and has 16 Scania engines working to provide water to the fields, drawing it from the Macintyre River and pumping it to storages and then out to fields.

Farm Manager Thomas Popp has been awarded for his successes in recent times, including Macintyre Valley Cotton Growers Awards' Farm of the Year in 2019 and Irrigated Crop of the Year for his yield of

14.72 bales per hectare.

Thomas manages three farms with around 5000 hectares under irrigation, which requires not only powerful pumps but also plenty of irrigation pipework.

Keeping the pipes in top condition requires regular maintenance, and occasionally replacement of rusted pipes. The Carrington Farm has just installed new Scania engines to run the pumps, to push the water through newly replaced pipework.

"We have three farms here covering 2700 hectares of cotton with a yield between

13-14.5 bales per hectare on average over the farms," Thomas says. "Some fields can even go to 16 bales per hectare. Carrington has won 'Farm of the Year' twice, and we're usually a strong performer in yields. We have won the yield prize three times, thanks to good farming and good efficiency," he says.

Scania-powered pumps have been instrumental in ensuring a high degree of reliability in the provision of water to fields running up to 1000 syphons, and there are four Scania pumps pulling up to

100-megalitres per day, each, from the river to keep the onsite water storages full. With the flooding rainfall in the spring of 2022 in Goondiwindi, all the water storages on the farms have been filled.

"Altogether our farms have 16 Scania engines, the oldest being around 7 or 8 years old," Thomas says. "The Scania engines have been really good. The six-cylinder engines deliver plenty of power for our needs. We run them about 1000 hours a year down at the river pumping water. We've not had any dramas with them, and they are very

efficient to run.

"Our new Scania's use around 10 litres per hour less fuel than the American engines we have replaced, and that's part of the motivation to continue buying Scania. That level of fuel saving really adds up if you're running engines as long as we do. Plus, we have had good back up service from Nick Rowe at Country Link," Thomas says.

"Nick is very responsive. He'll answer the phone any time I ring him, even at 4 or 5am. I call, he answers, and we get the issue resolved. Back-up service is pretty good."

EMPOWER YOUR BUSINESS



Through engines, adjacent components, software, and related services – all based on more than a century of experience – Scania makes your operation excel and prepares you for any type of challenge. No matter if you want to increase uptime, improve your operating economy or face tougher environmental requirements, we have the solution for you.

From design to installation and support, our job is to help you run a reliable and efficient business. Today and tomorrow.



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