The multimillion-dollar upgrades currently being implemented at Kaituna Sawmill near Blenheim are a resounding endorsement for the sawmill’s engaged and committed team.

Kaituna Sawmill is the wood processing asset owned by Nelson Forests Ltd (NFL). NFL itself is owned by Global Forest Partners (GFP), an investment company based in the USA. The sawmill provides 65 full-time equivalent roles.

Kaituna produces some very innovative, high-quality timber products for an extremely competitive global market but, for a number of years, the sawmill has traditionally struggled to maintain a consistently year-round energy production. "We sought a significant investment from GFP to bring the sawmill up to a competitive and consistent standard within the rapidly changing global marketplace, we weren’t sure what kind of reaction we would get," says Darrell. “However, having seen what the people at the sawmill had already achieved, GFP believed in the team’s commitment to the business and its ability to deliver a measurable return on their investment.”

Since receiving the green light for the project, which is known as Project Emerald, a state-of-the-art Polytechnik 43MW biomass-fired energy centre and a Windsor continuous drying kiln (CDK) have been installed and commissioned. Phase two of the project, set down for later this year, will involve the installation of a new Weniig planer sourced from Germany, and upgrades to the green mill side of the business, such as a new horizontal saw. In total, the project scope represents a $15 million investment.

The sawmill needed to upgrade its plant, but such an upgrade comes with a hefty cost of $20,000 per person to make this happen. “The new energy centre burns wet and dry fuel and runs at a consistent temperature,” says Shane, “which gives us the ability to plan more accurately and to manage our product flow. "Products are coming out of the new kiln at a consistent dryness and as a result they’re a lot straighter. That means a huge reduction in deviation in the boards. It used to be that around 10 percent of a run wouldn’t be straight enough to go through the planer accurately, possibly 3mm in a batch, now it’s less than 0.5mm, or around 12 to 15 boards per run. In an industry where getting maximum value out of each log is crucial, improvements such as this are hugely significant.”

Work flow has also markedly improved. “With the new kiln, we can accurately predict when the product is going to come out. It takes an hour to set up a planer, but with such a consistent and predictable flow of wood, those changeovers can be planned for and set up ahead of time. Previously, we would open the kiln and it would take four to six hours for the timber to cool down so that we could plane it. Now it’s already gone through the cooling-down process when it exits the continuous drying kiln and we can run it straight through the planer.”

The new kiln has meant that a fresh approach is needed, says Shane. “I’ve been working for this company...”
for 15 years and we’ve been set in a way of doing stuff because we’ve had to. Now it’s a new beginning and we’re starting to get our head around it. It’s only taken us probably a month of trial and error.

“You have to keep the gear in to keep up with the industry or else you get swallowed up.”

DON BOON, BOILER & KILNS TEAM LEADER

“There are some really good minds working here that have nutured it out. The problem we used to focus on aren’t there anymore. It’s a real game changer. It’s enjoyable to have change like that, especially when you’re like me and you’ve been in a business for so long. It’s nice to have change. It makes it a bit more diverse so you’re not stuck in a rut. You’ve got something new to think about every day, which is good. It’s a challenge.”

Boiler and Kilns Team Leader Don Boon agrees. Standing beside the impressive and beautifully designed Polytechnic energy centre, Don almost seems astonished to find himself in such a setting after 28 years working at Kaituna. “When I first saw it, I thought ‘Heavens, an old codger like me, hell, how am I going to get my head around this?’ It’s still a learning curve, but it’s brilliant, say!” Don is acutely aware of the responsibility he and his team have to make the new technology pay its way. “Now they’ve given it to us we’ve got to make it pay. We’ve got to make it work, and we do. That’s what it’s about. I’m very proud of it. To me this is what we should have had 10 years ago. You have to keep the gear in to keep up with the industry or else you get swallowed up.”

Projects Manager for Kaituna Sawmill, Bryan Phillips, has managed the project in-house and has the relaxed smile of a man who is seeing what he has envisioned producing benefits. “Bryan has done a stunning job of planning and executing the projects,” says Darrell.

Bryan explains that the energy centre itself will result in a saving of $500,000 per annum in fuel costs because the sawmill can now produce all the steam energy it requires using wood residues from its own sawmill operation, rather than having to buy in non-renewable oil and other fuel. The continuous drying kiln also results in a 30 percent energy saving compared with the previous batch kilns.

“We had carefully researched other operations for years,” says Bryan. “We wanted a solution that reduced emissions and provided the energy output we needed. We’ve replaced a 4.7MW boiler with a 4MW boiler but it’s producing more energy. There were two tonnes of refractory bricks in the old steam boiler compared with 90 tonnes in the new boilers.”

One measure of how efficient the new boiler is can be seen in its ash production. “In two months of operation we’ve had about one and a half ash bins,” says Bryan. “Previously, there was about a wheelbarrowful every day.”

For many people, like Bryan, who have been working at Kaituna Sawmill for a number of years, the improvements they are now seeing have been long-anticipated and are deeply satisfying. “If you don’t keep up with technology you’re not going to survive in the long term,” says Bryan. “I’ve looked forward to this for a long time. Customers will notice a change.”

“This project is an investment in our people and it provides commercial viability of our business into the future,” says Darrell. “And the ongoing success of this business is directly important for the local community.”

The sawmill team won’t be resting on its laurels, however, even when the next phase of the project is complete. The search for continuous improvement is a constant at Kaituna Mill.

“Since I’ve been here we haven’t stopped,” says Darrell. “When we complete this project, we will have the satisfaction that we’ve got through the upset conditions that projects like this bring and we’ll feel great about the improvements, but we won’t be taking a big breather and feeling like it’s all over. We’ll be focusing on driving the business consistently and looking at the next improvements for the operation of the business.

“That’s the way business is, really. You’re constantly looking to improve. In any business, if you sit out your laurels and don’t put yourself out there, you just come to a stop. We need to remain very focused on our capabilities and opportunities to improve and the ideas that come from our people. Engagement, training, and people wanting to be here, they’re very important in our business, and to me.”