

A photograph of several construction workers in orange safety vests and white hard hats working on a steep, rocky hillside. They are planting green plants in black plastic mulch. The background shows a clear sky and some trees.

SUSTAINABILITY REPORT

June 2016

CONTENTS

FROM THE CEO

FLETCHER BUILDING OVERVIEW

OUR APPROACH TO SUSTAINABILITY

OUR PEOPLE

HEALTH AND SAFETY

ENVIRONMENT

OUR COMMUNITIES



FROM THE CEO





The Fletcher Building vision of Building Better, Together resonates in the realm of sustainability.



Put simply, we have to work together with our employees, our customers and our communities if we are to achieve our sustainability aspiration and return growth to our shareholders.

WE HAVE THREE AREAS OF FOCUS FOR SUSTAINABILITY



Protecting the health, safety and wellbeing of our employees



Minimising impacts and protecting the environment



Investing in and supporting the communities in which we operate

Fletcher Building operates in over 40 different countries and a great many communities around the world. We engage with our employees, our customers and our communities with respect and a core set of values, understanding that human rights, labour practices, fair operating practices, respect for the environment, community involvement and development and consumer issues are all drivers of long-term sustainability.

At a Board and Executive level we are committed to further improving our safety performance, investing in safety, spending time to understand the issues, and implementing robust safety policies.

As an organisation we build a safety first culture and encourage all employees to take personal responsibility for their own safety as well as the safety of their colleagues, customers, contractors and visitors. Employees are encouraged to not only identify risks but also to call out unsafe acts or behaviours.

We record potentially serious injuries and measuring these metrics provides focus on minimising risks and creates opportunities for safety conversations and improvements to be undertaken at all levels of the organisation.

Fletcher Building can play a leadership role when it comes to health and safety, with this in mind we were pleased when the Chief Executive of our Construction Division, Graham Darlow, was awarded Executive of the Year at the 2016 New Zealand Safeguard Workplace Health and Safety Awards.



This award recognised Graham's unwavering commitment to safety during the immediate construction response to the Christchurch earthquakes and the subsequent rebuilding of Canterbury.

When it comes to environmental protections and minimizing our impact on the environment it is our business strategy in action that makes the difference. Our approach is to have strong business units supported by an active centre. We have a central Health, Safety and the Environment team providing direction and key performance indicators including the monitoring of our carbon emissions. This team has developed a sustainability framework which provides direction for our focus areas.

It is our 33 business units which have the greatest ability to make a difference for the environment. Within our diverse portfolio we have many inspiring examples of businesses that are reducing waste, being more energy efficient, creating new and more sustainable products and new ways of doing things.

This year, Fletcher Building businesses have been involved in all kinds of environmental initiatives. They have relocated endangered geckos, introduced lean construction methods and been nominated for environmental awards in recognition of their commitment to rehabilitate former quarry sites. I'm always impressed by the creativity of Fletcher Building people and their focus on being better every day.

Fletcher Building is committed to investing in and supporting the communities in which we operate. In New Zealand, where we are headquartered, we have a strong record of supporting youth employment programmes.

Our youth employment strategy has helped over 250 young New Zealanders into work to date. We continue to partner with the Ministry of Social Development, New Zealand Defence Force LSV, Te Puni Kōkiri, Auckland Council and First Foundation to provide training and opportunities for young people to enter the workforce.

From a global perspective, again it is our business units that make the most impact in this area. We have more than 20,000 people working in 40 countries around the world, so it is unsurprising that our community sponsorships are many and varied. Our businesses support local sport, arts, youth and health organisations in addition to educational, cultural and charity groups with the one common thread of recognising we Build Better, Together.

For the future we will continue to focus on improving our performance in the area of health, safety and the environment, in developing our people and in supporting our communities. We recently appointed Lee Finney to be our Chief Transformation Officer to continue to drive global best-practice in our manufacturing, procurement, health safety and environment and commercial practices. We look forward to reporting our progress in the coming year.

Mark Adamson

FLETCHER BUILDING OVERVIEW





Fletcher Building is an integrated manufacturer and distributor of infrastructure and building products, and a construction company.

From the smallest grain of sand to projects of great scale, we make, deliver and build to improve infrastructure, build communities and strengthen economies.

We have more than 20,000 people working in 33 business groups in 40 countries under the leadership of five divisions and an active corporate centre.

BUILDING PRODUCTS



Sources aggregates, manufactures and produces building materials for New Zealand and Australia. Our building product businesses include GBC Winstone, Firth, Humes, Rocla Pipelines, Winstone Wallboards, Tasman Insulation, Fletcher Insulation, Iplex (New Zealand and Australia), Sims Pacific Metals and FANALCO.

DISTRIBUTION



Has market-leading positions in New Zealand and Australia thanks to its focus on customer service. Specialising in steel, building products and plumbing supplies for the trade, the 11 businesses in this division include PlaceMakers, Tradelink, Stramit, Mico, Foreman Distribution, Easy Steel, Pacific Coil Coaters, Dimond Roofing, Fletcher Reinforcing and Tasman Sinkware.



INTERNATIONAL



Makes and distributes laminates, panels and roofing products to a global market. Our businesses include the iconic international Formica, Homapal, Laminex and Roof Tiles Group.

CONSTRUCTION



Is a respected construction and infrastructure company operating in New Zealand and the South Pacific. It has a long history of delivering significant commercial and civic buildings as well as major infrastructure projects.

HOUSING AND LAND DEVELOPMENT



Builds desirable communities in New Zealand. A Fletcher Living housing development includes a range of house types, shared green spaces and other community amenities as well as good connections to the surrounding community.

OUR APPROACH TO SUSTAINABILITY





Fletcher Building's approach to sustainability is shaped by our company values and guided by the belief that by working with all of our stakeholders – our people, customers, communities and shareholders – we can achieve more. Through strong leadership and worker engagement and participation, we are creating a sustainable future.

Fletcher Building is committed to providing strong leadership in sustainable business so that social responsibility is integrated throughout the Fletcher Building businesses. In 2015 a new board committee was formed, dedicated to safety, health, environment and sustainability governance. The committee provides governance of policy and planning, management systems, monitoring and review of safety, health, environment and sustainability performance.

Sustainability at Fletcher Building includes people, health and safety, sourcing raw materials, designing sustainable products, manufacturing sustainably, reducing CO₂ emissions, smarter energy use, distribution of products, design of buildings, construction and installation, reducing and managing waste and community engagement. Fletcher Building believes sustainability is important to the customer, delivers real value and is crucial to the life of our business.

Fletcher Building creates safe workplaces where people are encouraged to work together, help each other succeed and achieve excellence through continuous improvement and innovation. A common set of values was rolled out across our businesses during 2015 to drive employee engagement and participation. Of critical importance to sustainability, the “Play Fair” value signifies the importance of being honest and respectful in relationships with fellow employees, customers and the community.

Fletcher Building is committed to providing outstanding products and services that enhance built environments and improve quality of life, while also honouring and protecting the natural environments.

By maximising the societal, environmental and economic benefits of business activities while also managing impacts, Fletcher Building can create greater business value and further strengthen trust with stakeholders.

OUR APPROACH TO SUSTAINABILITY



Fletcher Building commits to:

- Working together to protect the environment
- Reducing the impacts associated with our manufacturing, construction and extraction operations
- Reducing the impacts associated with the distribution and use of our building materials
- Building leadership capability
- Supporting and investing in the communities in which we operate
- Managing health and safety risks across our business
- Working collaboratively with central and local government stakeholders to facilitate employment or training opportunities for disadvantaged youth
- Workplaces that strive to provide development opportunities for our people, focused on high engagement and high performance



OUR PEOPLE





The value of a company is determined by the quality of its employees. At Fletcher Building we are focused on making this company a great place to work.



This means ensuring our people go home safe every day, building leadership and capability and creating an engaged high-performing workforce across the entire business.

Our people strategy is formed around three key priorities; talent and leadership, building capability and creating a high performance workplace culture. Our learning curriculum is available in 11 languages, delivered to around 7,000 employees across the globe each year. Fletcher Building's leadership programmes focus on developing capability to support our business strategy. Building and regenerating talent is a key focus for 2017.

We have a strong focus on diversity to ensure our workplace reflects the communities in which we operate.

Becoming New Zealand's first construction company to achieve Rainbow Tick Certification was a key milestone that demonstrated our commitment to making sure Fletcher Building is an inclusive organisation for people who are lesbian, gay, bisexual, transgender, takatāpui, and intersex.

Fletcher Building is also proud of our new leadership programme for Māori employees and our continuing focus on providing leadership opportunities for women. We are one of the first organisations to support the new Tupu Toa programme that will focus on providing internship opportunities for Maori and Pasifika in tertiary study.

In 2014 we signed a principal partnership with Global Women and we are strong supporters of the organisation and its breakthrough leaders programme.



Our youth employment strategy helping young New Zealanders into work to date.

We continue to partner with Ministry of Social Development, New Zealand Defence Force LSV programme, Te Puni Kōkiri, Auckland Council and First Foundation to provide training and opportunities for young people to enter the workforce.

Fletcher Building has a proud history of helping business and engineering graduates into their first jobs and we will be building on this foundation with the launch of an enhanced graduate programme from mid-2017 onwards.

FBuSay, our annual employee engagement survey, available in 15 languages, was completed by more than 15,000 employees (86%). All senior leaders at Fletcher Building have engagement targets set annually and engagement is measured as part of their short term incentive scheme.





FB walked the diversity walk with pride.

Fletcher Building walked the walk when it came to diversity by being a sponsor of this year's Auckland Pride Festival 2016 and taking part in the Pride Parade.

As a festival sponsor, the company supported the fourth annual event which had 70 individual events including art exhibitions, sports events, workshops, visual art exhibitions, gardening events, and the annual parade. The festival ran from 5 – 21 February.

Fletcher Building Chief Executive Mark Adamson says the sponsorship celebrates Fletcher Building's recent Rainbow Tick Certification.

"Employees are really proud of our Rainbow Tick as it is based on an external audit that found we are inclusive.

We've also had feedback that it has sent a strong message to the wider community that New Zealand is changing and old stereotypes and prejudices are no longer acceptable."

In late 2015, Fletcher Building became New Zealand's first construction and building materials company to achieve Rainbow Tick certification. The certification followed a six-month audit process and demonstrates Fletcher Building is an inclusive organisation for people who are lesbian, gay, bisexual, transgender, takatāpui, and intersex.



Scenes from the 2016 Pride Parade, Auckland, New Zealand



Planting the seed of leadership within Māori.

Increasing Māori representation in people leadership roles is one part of Fletcher Building's commitment to growing a diverse workforce and creating an inclusive culture.

To aid growth in Māori leadership, Fletcher Building has partnered with Te Puni Kōkiri, Ministry of Māori development, to offer the Whakatupu programme. Whakatupu means 'to grow' or 'to plant the seed' – the programme is all about planting the seed of leadership within Māori.

The programme targets people who are in frontline roles such as operations, manufacturing, production, and retail, and those who aspire to be people leaders in the future. It provides participants with the confidence and skills to realise their potential and move into a people leadership role, and it is Fletcher's programme pipeline to Māori leaders across the company.

Kara Brown, Leadership Development Manager says she was excited when the opportunity came up to partner with Te Puni Kōkiri and harness the Whakatupu programme.

"I believe in this programme, what it is about, and what we are trying to achieve. It will I believe, help us realise our primary goal of achieving a higher business performance.

"The gap in Māori leaders is not only a focus within our company, but across many businesses in NZ. What we do could help shape what other organisations are doing in this area," she says.



The inaugural cohort of Whakatupu



Family Educational Fund makes a difference.

The Employee Educational Fund (EEF) is making a difference by providing educational opportunities for Fletcher Building employees, spouses and dependents.

Under the scheme, employees, spouses and dependents can apply for financial assistance for fees towards after school tuition, teacher aide support and tertiary studies.

Machine Operator at Dimond in Hamilton, Praneet Prakash is one grateful recipient of financial support which has allowed his wife Priya to study for a Bachelor of Nursing.

"The funding meant a lot to me and my family. It gave us great relief when fees were paid on time each semester throughout my wife's education journey," says Praneet.

Allan Deans, Sales Representative, Humes, Palmerston North, received EEF support for after-school tuition for his three children and other educational opportunities.

"EEF support has been life-changing for my large family. The children were struggling with maths, but with extra tutoring they are now successfully passing their tests.

"The fund also provided an opportunity for our oldest child to attend Outward Bound which has given her a whole new perspective on life.

"I am not aware of any other company that provides this kind of resource for their employees and families. I am very proud to work for a company like Fletcher Building," says Allan.



Employees and their families benefit from the education fund



Language no barrier to Fletcher Building career.

From France to Finland, Japan to Mexico – now people all over the world can read the Fletcher Building careers website in their native language.

The translation of the careers site into multiple languages aligns with our focus on diversity and is part of the business' commitment to making our communication channels as audience-centric as possible. It also allows us to share the Fletcher story with current and future employees, so people around the world can gain a deeper understanding of who we are, what we do and what we offer when it comes to careers.

FB Careers is now available in 11 languages: English, German, Hungarian, French, French Canadian, Finnish, Chinese (simplified), Chinese (traditional), Spanish, Thai and Japanese.

While the bulk of the flagship English site has been translated into the new suite of languages, there are parts that remain in English across the board. It's an exciting progression in the careers space for Fletcher Building and a great evolution that allows us to effectively position ourselves as an employer with opportunities on a global scale.



HEALTH AND SAFETY





Health and Safety continues to be a key priority for all our teams with the focus on having all Fletcher Building employees, contractors, customers and other visitors get home safe each day.

Strategic policy and planning, delivery, monitoring and review from the Board is provided through the Safety, Health, Environmental and Sustainability Committee, which is chaired by Fletcher Building director, Kate Spargo. Implementation of actions are managed by our executive Environment, Health and Safety (EHS) Council, which is chaired by Fletcher Building CEO, Mark Adamson.

Safety leadership is important at Fletcher Building and is sought to be integrated into all decision-making. It is recognised that in addition to the human cost of harm there is a correlation between improved health and safety and high productivity.

For the past 12 months Fletcher Building has taken a proactive approach to reporting potentially serious incidents and lead indicators. This provides the opportunity to focus on minimising risk and making continuous improvement.

Oversight of the recordable injury rates is retained by recording the 12 month rolling average Total Recordable Injury Frequency Rate per million employee and contractor hours (TRIFR). Total injuries are the sum of lost time and medical treatment injuries. In the last year, this rate was 6.68 as of 31 June 2016. This continues the flat trend of the past three years.

Despite progress in health and safety management, Fletcher Building had an unacceptable number of serious injuries in the 2016 financial year. There were 21 significant incidents reported comprised of 19 serious injuries and two fatalities. The fatalities were the result of accidents involving vehicles and working at height. For the serious injuries the hazards included material handling, powered tools and equipment handling.

Fletcher Building has cooperated with the relevant authorities when they have conducted investigations and has undertaken its own investigations into all serious incidents, with learnings being shared with all relevant employees and contractors. Where necessary improvements have been implemented with urgency.

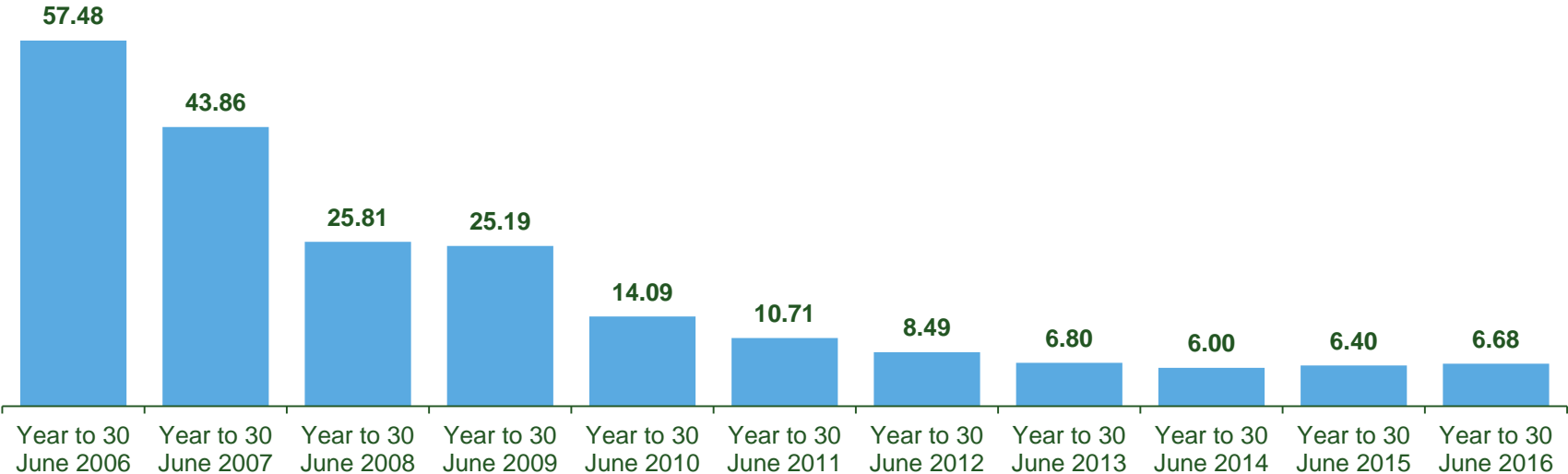
Fletcher Building continues to progress a programme of creating and distributing EHS standards to provide clarity of minimum expectations. Over the 2016 financial year guidance was distributed for processes and practices including working at height, mobile plant, vehicles (light and heavy), guarding and isolation and process safety. In conjunction with the EHS standards a risk management standard has been established to promote consistency of managing risk across the business.

In addition, an assurance standard has been released to provide both internal and external assurance that EHS standards are being met.



Total recordable injury frequency rates.

Per million employee and contractor hours, with total injuries being the sum of lost time and medical treatment hours.





Award-winning safety in Canterbury rebuild.



Graham Darlow, Chief Executive of our Construction Division, was awarded Executive of the Year at the 2016 New Zealand Safeguard Workplace Health and Safety Awards. He shares his thoughts on the award-winning programme.

When post-earthquake rebuild work began in Canterbury there were predictions that the construction industry's poor safety record meant 1-2 workers could die each year in the region. That prospect was unacceptable.

However, with challenge comes opportunity. Three large programmes of work were established by Government and Christchurch Council and Fletcher Construction were fortunate to be involved in them all. The first was the appointment as project manager for the repair of an estimated 80,000 houses for the Earthquake Commission, the second the involvement with four other large contracting firms in rebuilding the Christchurch's infrastructure under the SCIRT banner, and the third constructing new homes and buildings under the Anchor Projects plan. We were determined to use the rebuild as an opportunity to make long overdue changes to transform construction's poor safety track record and potentially influence the industry nationally.

It was a huge challenge. Over the past five years it's required the kind of partnership and consultation with insurers, government agencies, building owners, designers, workers, unions and contractors that is now enshrined in law in the Health and Safety at Work Act.

WorkSafe took a huge step in facilitating the establishment of the Canterbury Safety Charter. A collaboration which is industry-led but involves representatives from every part of the construction industry, large and small. It was an honour for me to be elected Chair and the Charter has made a huge impact in saving lives and preventing harm by getting people engaged and making them aware of their responsibilities.

Across all programmes of work we quickly learned what it took to encourage people help them maintain standards. We didn't get everything right, but we did learn a lot and I'm very proud of what we have achieved together with the workers, contractors and everyone involved in the rebuild.

Graham Darlow



SHE day in Malaysia putting health and wellness first.

The Safety Health and Environment (SHE) Day which is held at the Roof Tile Group's (RTG) plant in Nilai, Malaysia and has been a popular annual event since 2010.

Throughout the day the plant's 120 employees create in teams comprised of a mix of departments and participate in a range of activities. Exercise sessions, talks on wellness, safety demonstrations and team building exercises are among the health and safety activities.

Production Executive Ahmad Fairul Lizam Othman looks forward to SHE Day every year.

"SHE Day is popular because it's a day for everyone to come together as one team and foster support and connectedness across the business.

"It helps to build employees' self-confidence and foster respect for each other".



Scenes for SHE Day, Nilai, Malaysia



Simple solutions ensure worker safety.

Iplex in Toowoomba, Australia has proved that a little change can have a big impact following the creations of a simple platform that operators can use to change the machinery pins and dies.

The change was initiated by Toowoomba team members after they raised concerns about their safety when standing at the base of the tooling frame. They noted that they had to be very close to the machine to reach, remove and correctly replace the pin and did not feel safe.

In response, National Processing Technician, Peter Cameron got to work and designed a light, portable aluminium platform for the operators to use. The platform takes only two operators 15 minutes to install, doesn't need any bolts and simply 'clips into position' on the extrusion head framework. It also packs up onto a pallet for easy storage.

Created for any of the site's four medium-sized manufacturing lines, the change makes the work safer, easier, and more comfortable to complete. The height of the platform allows operators to work safely at the same level as the machine and holds four people or 600kg. It also features handrail and kick plates that have been engineered to Australian Safety Standards.

The safety of employees who change the pins and dies on manufacturing lines is of utmost importance to the Iplex business unit.



ENVIRONMENT





Fletcher Building is focused on reducing our energy use and carbon emissions in major energy using businesses.

We have an eight-year target, running from 2012 to 2020, to reduce our overall group carbon emissions intensity by 10%. Some plants have made significant gains, up to 13% emission reduction, while others have suffered from the inefficiency of stop-start operations due to subdued market demand. As a result of this mix our composite intensity index has marginally increased to 100.6 from 100. Production volumes have increased significantly over this period which has meant that our overall CO² emissions have also increased.

Key achievements

Our High Pressure Laminating plants throughout the world have achieved better than 10% reduction in emissions intensity since 2012, as has our medium density floorboard (MDF) facility in Gympie Australia, and the two particle board plants in Dardanup Australia and Taupo New Zealand.

Group performance

Our energy and CO² inventory for the 2015 financial year identifies total CO² emissions of 1,322,447 tonnes – a reduction of 19,683 tonnes on the 2014 financial year (1.5%). This includes the CO² emitted during the generation of electricity used by Fletcher Building.

Emissions from our New Zealand operations amounted to 760,970 tonnes, a reduction of 1% on 2014 figures. In our Australian operations emissions were down 2.8% at 378,371 tonnes. Our international operations' emissions reduced by 0.7% to a total of 183,106 tonnes for the year.

The performance of our nine most emissions-intensive products is illustrated on the next page.

Fletcher Building continues to participate in CDP, the Carbon Disclosure Project, requiring us to report how we manage the risks and opportunities of climate change and provide a complete inventory of our annual energy use and CO² emissions. The Fletcher Building CDP 2014 Disclosure score was 93 out of 100, admitting us to the CDP 2015 NZX 50 Climate Disclosure Leadership Index.



Emission reduction target – 10% reduction 2012 to 2020.

INDEXED PRODUCT GROUP	% OF FB EMISSIONS	EMISSIONS (T) 2012	EMISSIONS (T) 2014	INDEX 2014 (2012 = 100)	EMISSIONS (T) 2015	INDEX 2015 (2012 = 100)
Cement	47%	483,968	603,978	101.7	609,006	102.3
High Pressure Laminate (HPL)	11%	157,250	142,470	83.9	142,586	86.6
Medium Density Fibreboard (MDF)	6%	77,927	75,827	92.0	75,174	88.9
Glass fibre insulation	6%	67,293	70,765	92.9	81,851	90.5
Plastic Pipes	5%	80,854	70,674	111.9	67,820	130
Plasterboard	3%	26,311	32,826	99.4	34,400	99.6
Steel (EAF only)	3%	42,849	46,279	96.9	33,894	89.3
Particleboard	2%	29,198	31,889	86.3	32,051	90.1
Concrete Products (not Firth)	1%	22,429	18,874	98.6	18,267	97.7
Fletcher Building Composite Index	84%			99.2 Target 90		100.6

(T) = Tons



Smarter energy use in Australasia.

Being smart about how we use energy is a key initiative in our sustainability programme designed to deliver environmental along with economic benefits for stakeholders and customers.

To identify energy-saving initiatives across our New Zealand operations Fletcher Building is working with the New Zealand Government's Energy Efficiency and Conservation Authority (EECA). Energy audits and have been conducted across our businesses and energy saving initiatives implemented.

A subsidiary of Laminex Australia, CTCI Ltd has installed a 95kw solar array installation on the roof top of its manufacturing unit in Bathurst and is one of our success stories.

With more than 300 panels soaking up New South Wales sunshine, in 2015 the business provided 17% of the electricity used at the site and reduced the associated CO² emissions by 26 tonnes.

Fletcher Building continues to investigate and implement new ways to ensure the business is smarter with managing energy consumption and energy sourcing.



The solar panels at CTCI in Bathurst, Australia



Laminex bricks get environmental ticks.

Laminex New Zealand has taken a loss and made it into a profit by turning wood waste at their Taupo site into energy bricks – an innovation that has been given the thumbs up by industry experts for saving the planet thousands of tonnes of landfill waste and greenhouse gas emissions each year.

Laminex (NZ) was awarded a 'Commended' in two categories at the recent Energy Efficiency Conservation Authority (EECA) Awards – the Trustpower Renewable Energy Award and the University of Waikato Innovation Award.

Both acknowledgements are for the Laminex 'briquette machine' installed at its Taupo site which compresses sander dust (from making particle board) into briquettes which are a renewable energy source.

Previously, the site was producing enough sander dust to fill 72 wheelie bins a day – that's about a 1,000 tonnes a year, and Laminex New Zealand was footing the bill for transport and disposal at a cost of \$220,000 each year.

Now, more than \$200,000 is saved each year as a result of the briquette machine and since 2014, the only non-renewable energy used on site is the limited amount of fuel used to run the company's fleet.

Around a thousand tonnes of briquettes can generate more than 6,000 megawatt-hours of energy as the biomass has a high calorific value. The site itself doesn't use the briquettes so the surplus is picked up by other companies and used to fuel their industries.

The process has gained national and international attention and Laminex New Zealand is fielding calls from as far away as Cyprus, Greece with queries on how they might replicate this New Zealand initiative.

The annual EECA awards celebrate businesses, organisations, and individuals who have demonstrated excellence and innovation in energy efficiency or renewable energy. The judges said the Laminex initiative was “a practical and innovative switch that makes the company an exemplar in sustainability”.

This year, more than 100 entries were received from which the judges selected finalists for ten categories. As well as large and small companies and businesses, the list of finalists includes local councils, community and charitable trusts, high schools, sports clubs and university students. They come from all around New Zealand, with one even from Antarctica.



Rhesa Goldsbury, Taupo Manufacturing Plant Manager; Rebbecca Page, Sustainability Advisor, Laminex New Zealand; Neil Phillips, National Operations Manager, Laminex New Zealand; Gary Walker, Account Director North, Energy Efficiency Conservation Authority.



Iplex Australia's environmental first.

Iplex Australia has become the world's first plastic pipe manufacturer to publish a suite of documents about the environmental impact of a range of their products. Helping our customers to meet their environmental targets is integral to Fletcher Building's environmental strategy.

The company published a suite of verified and registered Australasian Environmental Product Declarations (EPD®). These demonstrate that Iplex is a responsible manufacturer and cares about its customers and the effect their products and processes have on the environment.

The declarations help Iplex's customers – the builders and developers wanting to construct environmentally responsible buildings and infrastructure. The information provides them with the evidence they require to claim credit points under the Green Building Council of Australia and the Infrastructure Sustainability Council of Australia's rating systems for their projects.

"We recognised the growing market demand for validated environmental credentials for our products," says Iplex Australia General Manager Nicole Sumich.

"I felt it was important to demonstrate leadership in this area and commit the resources – the team have done a wonderful job in meeting these needs."

An investment in power efficient machinery, rainwater harvesting, choosing strategic factory locations and route planning are just some of the initiatives Iplex has undertaken to reduce environmental impacts. It has also sourced polymer and additives from certified Best Environmental Practice suppliers to achieve the results reflected in the declarations.





M2PP Expressway's environmental legacy.

Building an 18km, four-lane expressway in an archaeologically and ecologically sensitive area is no small feat – one made even tougher with the addition of a demanding environmental goal.

Located on Wellington's Kapiti Coast, the challenge was to construct the \$630m Mackays to Peka Peka (M2PP) expressway with minimal disruption and leave the natural environment in better shape than when it was started. Some of the project hurdles included 25 separate waterways and seven contaminated sites.

The project's legacy will be over nine hectares of wetland habitat and 140 hectares of new planting, including 1.4 million locally eco-sourced plants. For every acre of wetland used for the expressway, five acres will be constructed to replace the lost wetland. To date over 701,000 plants have been planted on the project with more to plant in the next growing season.

Trees that required felling as part of the clearance works for the expressway were also recycled – chipped and converted into 6,000 cubic metres of mulch to protect the extensive planting. Another recycling initiative involved the reuse of surplus peat which was mixed with sand to create a high quality growing medium for plants, minimising the need to import topsoil.

Fauna as well as flora required special care with one important task being the relocation of native fish to the Waimeha Stream just west of the expressway's Te Moana interchange.



Planting on the M2PP Expressway



Rocla innovation reduces oil consumption by 80%.

In an industry first, Rocla Emu Plains in NSW, Australia have developed a new oil release system for their pipe manufacturing machines which will reduce mould oil consumption by 80%.

Rocla's Emu Plains site manufactures concrete pipes, box culverts and other products that use 'mould oil' in their manufacturing process. The oil prevents concrete 'sticking', allowing for the fast re-use of steel moulds. Reducing oil usage has made the process safer, increased product quality and will lessen the need for drilling that can disturb land and marine ecosystems.

Traditionally, the oil is sprayed in the machine using pressurised air (a pneumatic system). Previously, when the oil was sprayed, it formed uneven sized droplets of oil, meaning some of the droplets are too big or small to be effective in the process. This caused a large amount of over spray and wasted oil, not to mention oil mist, which has a potential health and safety issue.

In an effort to reduce this impact, Mechanical Engineer Jim Dixon, from Rocla's Process Engineering Team, led the design of an 'electrostatic' system and pioneered its trial on Emu Plain's R250 pipe machine over a period of six months.

The electrostatic system works by electrically charging the oil particles and attracting them to the required mould surfaces, meaning the machine uses less oil because a thinner and more even coat of oil can be used.

Employees have reported that the reduction in mould oil has resulted in a safer, less slippery environment that's easier to clean. "This innovation reduces the health and environmental effects of oil mist overspray, making the operation of our machines more pleasant, safer and kinder on the environment," says Grant Wyber, Rocla Pipes and Products Process Engineering Manager, "there are definite oil usage cost savings and pipe quality saving resulting from this project."

The overall success of this solution has prompted the innovation to be rolled out to all Rocla pipe sites, with some 13 machines in total that will be changed, starting with the Gailes and Campbellfield Victoria sites.





Waikato Expressway's wetland wonderlands.

Building permanent stormwater devices early on in the Rangiriri/Huntly section of the Waikato Expressway project is generating environmental and economic benefits.

Two wetlands at Rangiriri and Te Kauwhata and a treatment swale at Te Onetea were constructed at the start of the Expressway. The installation of these erosion and sediment controls which prevent sediment laden water being discharged uncontrolled off-site during construction, replace the past practice of installing temporary and often large devices, such as, sediment retention ponds which have to be removed at the completion of the project.

Utilisation of the Rangiriri wetland as a water source has also reduced the volume of water needed to be taken from the Waikato River allowing more water availability for recreational and downstream users of the river. The Rangiriri wetland will also provide an attractive native habitat while treating stormwater runoff from the expressway.

The biggest roading project ever undertaken in the Waikato region of New Zealand, the Expressway is also being constructed by Fletchers in an alliance with the Transport Agency, Beca, Higgins and Coffey (FBHC). The 21-km Hamilton section is the final of the Waikato Expressway, a Road of National Significance (RoNS) and the design for the section includes five interchanges, 18 bridges, 4 million cubic metres of earthworks and extensive local road connections.

The Waikato Expressway is scheduled to be completed in 2020 when both the Hamilton and Huntly sections are finished.



Wetland management learnings from the Waikato Expressway has been used for the M2PP Expressway

OUR COMMUNITIES





Fletcher Building is committed to supporting the communities in which we operated and the people who call these communities home.



Paige Satchell is a rising star at Three Kings United and was recently selected for the Football Ferns.

Our 33 business units are active in their communities and implement many sponsorships and corporate giving programmes. As a group we support sporting, community, cultural, educational, environmental and health organisations and initiatives. We strive to play a leadership role where we can and play an active part in many business and industry organisations.

In the sporting world Stramit Building Products has been a proud supporter of Surf Life Saving NSW for a decade. Stramit supports the work done by surf life savers all over Australia in addition to the annual country championships which see 1,200 surf life savers compete in the competition which is a highlight on the annual surfing sports calendar. For the past two years, Fletcher Living in New Zealand has supported grass roots hockey and soccer at both high school and representative level.

Our community support involves a range of initiatives including PlaceMakers sponsorship of The Prostate Cancer Foundation of New Zealand for seven years which has seen over \$1.5 million for research and public education programmes. Another initiative in the area of men's health is the Fair Dinkum Shed sponsorship of the Australian Men's Shed Association which provides supportive spaces for men to talk and be part of a community. In Canada, Formica North America continues to partner with Les Ateliers from Saint-Jean-sur-Richelieu to help people with physical or mental disabilities to join the workforce.

OUR COMMUNITIES



Some of the sporting, community, cultural, educational, environmental and health organisations and initiatives we support.



THANK YOU