

# Innovation & Collaboration Drive Hutt Valley's Manufacturing Success



Catherine Lye CEO, Advanced Manufacturing Aotearoa

There is no silver bullet to solve New Zealand's economic challenges, but gold nuggets are scattered everywhere. By diligently panning for these golden opportunities—in areas such as technology investment, workforce development, and innovation—we can accumulate the wealth of ideas and resources needed to build a resilient and prosperous economy. Through collective effort and strategic thinking, New Zealand can turn its potential into sustained growth and success.

### Unleashing Potential: The Manufacturing and Engineering Hub of Hutt Valley

Across the Hutt Valley, New Zealand, manufacturing and engineering form the backbone of the local economy, driving innovation, creating high paid jobs and contributing significantly to the region's GDP (\$1.5b). For 80 years the Hutt Valley Chamber of Commerce has been at the forefront of highlighting and supporting these industries, recognizing the importance of not only the present achievements but also the future potential that lies within this vibrant community.

Despite the common narrative of productivity challenges in Aotearoa, the Hutt Valley stands out with its advanced technology and exceptional science and research capabilities. One of the most remarkable aspects of the Hutt Valley is its dense concentration of researchers and scientists—400% more than anywhere else in New Zealand. This wealth of intellectual capital and the close connection to the power of the education sector has the potential to fuel the region's manufacturing prowess, leading to cutting-edge process innovations and world-class products.

The Chamber of Commerce's frequent interactions with local businesses reveal a region brimming with creativity and practical solutions, driven by both experienced professionals and ambitious newcomers.

"We have a convergence of education, research, innovation manufacturing and collaboration that establishes the region as the centre for high value manufacturing, technology and science for Aotearoa" says Patrick McKibbin, Chief executive of the Hutt Valley Chamber of Commerce.

A recent visit by the Chamber to **OpenStar Technologies** underscored this point vividly. Led by Ratu Mataira, OpenStar Technologies is making rapid strides in fusion energy research. The team, born out of the Paihau-Robinson Research Institute, who specialise in electro magnetics and are developing electric airplane engines with Airbus and Air New Zealand, is on track to develop a fusion reactor by 2029, with a prototype expected by the end of this year. This breakthrough promises to revolutionize energy production, offering a clean, safe alternative to fossil fuels and enhancing power reliability for industries. The project epitomizes the Hutt Valley's capacity for world-changing innovation, stemming from its rich scientific and engineering expertise.

In addition to high-tech advancements, the region boasts a strong food and beverage manufacturing sector. A recent gathering of the Hutt Valley Food and Beverage Manufacturers featured insights from James Ardern of **Whittaker's**, New Zealand's most trusted brand and a renowned chocolate manufacturer based in Porirua. Whittaker's commitment to quality permeates every aspect of their operation, from sourcing cocoa beans in Ghana to their meticulous manufacturing processes. This dedication has cemented their reputation for producing "World Class Chocolate from Porirua," and their success story continues to inspire other local businesses.



Moreover, the Hutt Valley's manufacturing community plays a crucial role in addressing global challenges. The **Fraser Engineering Group**, for example, recently completed an urgent order for fire trucks destined for South Australia, just in time for a predicted heatwave with temperatures soaring to 50 degrees Celsius. The dedication and ingenuity of Martin Simpson and his team at Fraser Engineering highlight the region's ability to respond to international needs with high-quality, reliable solutions.

**Metco Engineering Ltd.** exemplifies the synergy of 'tradition' - from humble beginnings in 1970 and 'innovation' - to a cutting-edge facility today. Under the guidance of Paul Jessup and Brent Greer, Metco's journey from a two-man operation to a company with over 65 employees and 400 customers is a testament to the power of continuous improvement and strategic investment. Their recent investments in advanced technology, including a new Trumpf Tru TubeLaser 7000, a 5-axis mill and a high-capacity storage tower, enable them to produce complex components 24 hours 7 days a week with unparalleled precision. This technological edge, combined with a strong commitment to local collaboration, securely positions Metco as a leader in the industry.

Another standout in the region is **Myriad Engineering Ltd.**, now under the leadership of Jayden Jessup. Building on the solid foundation laid by Mark and Fiona Wilson, Jayden's ambition and experience promise to drive the company to new heights. This blend of seasoned expertise and youthful vigour is a recurring theme across the Hutt Valley's manufacturing industry, ensuring a strong future for the sector.

### **Building a Collaborative Ecosystem: Hutt Valley's Collective Success**

The Hutt Valley's collaborative spirit extends beyond individual successes. Businesses in the region actively seek local suppliers and partnerships, fostering a supportive ecosystem that benefits the entire community. This was evident at a special event recently where the Hutt Valley Chamber of Commerce supported Metco Engineering with a visit by Rt Hon Christopher Luxon and Hon Chris Bishop to cut the ribbon on their latest significant investment in new technology – Trumpf TruLaser Tube 7000. Companies like **Pertronic Industries Limited** – fire detection & alarm systems, **Racetech Manufacturing Ltd** – race seats, **MAS Zengrange** – defence and space manufacturing, **Voideck**– temporary platform safety system, **Baytex** – large tents & marquees, **Omeo** – handsfree personal mobility device, **Fine-Tuned** – golf putters and the amazing **Weta Workshop**, **Ecoreef** – saving our coastlines block by block, **Barclay Engineering** – owner Brendan Jessup has turned this business around into a thriving supplier and manufacturer of innovative plumbing and gas products designed to last for decades, and others showcased how they integrate **Metco Engineering** prowess into their own innovative products. Such collaborations enhance the overall productivity and competitiveness of the region's manufacturing sector.

"It was fantastic to bring so many of the Hutt Valley's leading manufacturers together at the Metco Engineering facility in the Hutt Valley. It was a real celebration of what they do together to show the Prime Minister why the Hutt Valley has so much to offer New Zealand as we build out of the current economic situation" said Patrick.







<The latest investment by Metco Engineering - the Trumpf Tru Tube Laser 7000>



# Inspiring Future Generations: Showcasing Opportunities in Hutt Valley's Manufacturing Sector

The Chamber of Commerce's efforts to highlight these stories aim to inspire the next generation of workers and entrepreneurs. Many young people, or rangatahi, are unaware of the exciting opportunities available in their own backyard. By showcasing the achievements and potential of local businesses, the Chamber hopes to bridge this knowledge gap, encouraging more young people to pursue careers in manufacturing and engineering.

"Everyone has got this attitude that everything is made in China, well guess what? It ain't. It's far from it. And we need to change people's mindsets with that. "If you look around you, around New Zealand, you'll see what's actually made here. You'll be surprised." Paul Jessup, Director & CEO, Metco Engineering.

As the Hutt Valley continues to grow and evolve, the Chamber remains committed to supporting and celebrating its manufacturing community. From the advanced research at OpenStar Technologies to the quality-driven success of the many food and beverage manufacturers and the innovative solutions from Metco Engineering, the region stands as a beacon of productivity and progress.

The Chamber's work ensures that these stories are told, inspiring both current and future generations to contribute to the vibrancy & diversity of the Hutt Valley's manufacturing sector.

Building on the story telling is a proposed initiative to raise the profile and strengthen the pipeline of talent into manufacturing through the establishment of the Hutt Valley / Porirua Manufacturing Academy. This potentially will be a collaboration between the education sector and industry, with industry playing a key role in education investment for the younger generations looking at careers in manufacturing.



<PM Christopher Luxon chatting with a young lad about his favourite subject at school and what he wants to do when he leaves school>



## Metco Engineering's Journey of Growth and Innovation - From Humble Beginnings to High-Tech Leadership

In 1968, Brian Francis and his family moved from England to Upper Hutt, New Zealand, leading to the founding of Metco Engineering in 1970 with Bill Hansen. Starting with modest equipment, they branded themselves as "Sheetmetal Manufacturing and Production Engineers." Bill's departure led to a partnership with Nigel Messenger, and together they grew the company's turnover significantly. Metco specialized in producing essential car parts with a focus on quality and precision. Over three decades, Brian and Nigel diversified their operations, and in 2001, they decided to pass leadership to new owners. In April 2002, Paul Jessup and Brent Greer took over Metco, bringing a fresh perspective and a focus on technology. After extensive experience in other engineering companies, they sought to utilise the best practices they'd learned and invested in cutting-edge equipment to compete in the sheet metal market.

Paul and Brent, both qualified toolmakers, quickly modernized Metco. Their background in automated machinery led to the acquisition of a CNC turret punch, marking the beginning of Metco's significant investment in advanced machinery. This shift enabled Metco to secure a contract with Assa Abloy in 2008, necessitating further expansion and new equipment.

By 2009, Metco had grown substantially, extending its premises and adding new technology, including a state-of-the-art laser machine. The CNC machining division was growing rapidly, prompting its relocation to a dedicated building in 2011. This expansion allowed Metco to accommodate more CNC lathes and mills, meeting increasing demand.

In 2016, Metco reached a milestone with the opening of a 5000sqm facility in Seaview, consolidating their operations and showcasing their commitment to cutting-edge technology. The introduction of a high-capacity storage tower in 2018 further enhanced their capabilities, enabling 24-hour operation of twin laser cutting machines. Further investment in a 5-axi mill enables Metco to produce highly complex 2D/3D components that would be almost impossible to manufacture with less advanced machinery.

Metco Engineering is a forward-thinking company committed to maintaining technology gains. Continuous investment in advanced machinery positions Metco as a one-stop-shop which really makes life easier for Customers with integrated production covering design, laser cutting, folding, fabricating, painting, assembly, and even delivery. New Zealand boasts numerous innovative companies that excel globally despite their modest size. Many of these firms operate under the radar at home but are recognized as product leaders on the international stage. Metco collaborates as a co-maker to enabling innovation and driving progress.

As has been the mainstay in the growth of Metco in the last 50 years, Paul and Brent will continue to invest in cutting edge technologies with a focus on automation to ensure they keep up with the demands of their Customers and Industry for continuous improvements in cost, delivery and quality.

As Metco continues to invest in the latest technology, Brent and Paul are also investing in their people, upskilling their team to meet the evolving demands of their industry "Our team are the backbone of everything that happens at Metco. This investment also affords us the chance to keep upskilling on the very latest production methods" says Paul Jessup.

Investing in cutting-edge talent and tools must go hand in hand to fully harness the potential of both. Talented professionals can only maximise their capabilities when equipped with the latest technologies, while advanced tools require skilled operators to realise their full value.



This synergy enables innovation, as knowledgeable individuals leverage state-of-the-art equipment to push the boundaries of what is possible. Moreover, it ensures operational efficiency, as both elements work together to streamline processes and improve output quality. Ultimately, this integrated investment approach is vital for maintaining a competitive edge, driving growth, and achieving sustained success in any industry. For New Zealand to remain competitive, we must go beyond being just a labour force, as manual labour is inexpensive and abundant worldwide. We need to be innovators and problem solvers —"thinkers and doers."

Leveraging their various divisions, including engineering, CNC, design, and art, Metco Engineering allows provision for Customers to set up their own desk and be part of the Metco R&D team. This allows skilled workers, equipped with the latest technologies to engage with Customers to understand their unique needs and challenges, and partner as "co-makers" to innovate or re-design products by finding cost-competitive solutions without compromising quality or functionality.

"This collaborative approach seed's innovation, enabling the co-creation of solutions that are not only technologically advanced but also tailored to market demands" says Paul.



<Left to right: Paul Jessup, Marcus 'User Experience & Training Lead' OMEO, PM Christopher Luxon>





<PM Christopher Luxon with Andrew Lingman - General Manager, Baytex>

Always looking for better, Paul and Brent are providing the team with the latitude to explore emerging technologies like AI to streamline processes and help make better-informed decisions. As the internal AI Champion, Jack Smith's passion for AI seems to be driving some real progress within the business. As Cost Estimation/Programming Manager, reducing estimation time from a few hours to just a few minutes on CNC jobs where precision and efficiency are crucial is a remarkable improvement and can significantly enhance productivity and accuracy.

The Metco team enthusiastically expressed how much they love making awesome stuff, the environment being created for skilled workers to excel, and the advanced technology they get to use, technology that is advancing so fast.



Metco's proactive and forward-thinking approach, will definitely be a key driver for growth and success. Constantly seeking out new opportunities and exploring adjacent applications shows a willingness to adapt and innovate, which are essential qualities in today's dynamic business environment. With this mindset, they're likely to stay ahead of the curve and capitalize on emerging trends and markets.

"We are proud to be a part of the trend of increasing manufacturing in the country, and we want to continue supporting this growth, particularly in the area of future workforce development. The possibility of the Hutt Valley / Porirua Manufacturing Academy will be a game-changer for the sector" said Paul Jessup.

The Metco story is a story the New Zealand economy is all the better for. When businesses grow, our economy grows, and that's what our country needs.