MANUFACTURING MATTERS

An industry-led initiative to partner with government



Introduction

New Zealand manufacturing is facing unprecedented challenges and wants to partner with government to secure a vibrant and fit-for-the-future local industry.

Manufacturing fuels the New Zealand economy, accounting for 10 percent of jobs, more than half of New Zealand's exports and a third of R&D expenditure. It underpins the success of other key sectors and is a significant employer in many regions.

It also drives environmental and technological improvements across the economy.

But a successful manufacturing sector is not just about its economic contribution. New Zealand needs a resilient, thriving local manufacturing sector to meet domestic demands, particularly for local construction and infrastructure, while delivering improvements in wellbeing.

While the sector has rebounded in the last five years after a post-GFC decline, the unprecedented pressures of climate change, the fourth industrial revolution, skills shortages and trade issues challenge its future. Without industry change and investment and conducive policy settings, New Zealand manufacturing will decline.

New Zealand is lagging behind its peers in addressing these issues. Governments across the world have engaged with their manufacturing sectors to develop strategies that support them to adapt and transform.

Manufacturing Matters* is an industry-led initiative signalling to government that the industry wants to engage in developing such a strategy.

Manufacturing fuels the economy:



more than 50% of New Zealand's exports



makes up 10% of the economy



\$29.0 billion GDP



31% of total business R&D expenditure



242,000 jobs - earnings 9% higher than average



10% of jobs in New Zealand

But manufacturing is bigger than that, it:



is essential to the success of other key New Zealand sectors



provides for a diverse workforce (employs more Maori and Pacific people than other industries)



purchases significant shares of the value of output of primary, wholesale, transport and warehousing industries



opens export markets, trade and investment connections for New Zealand businesses



is a key employer in several regions



generates large flow-on impacts across the economy

CHALLENGES

INDUSTRY 4.0

New technologies like the internet of things, 3D printing, sensors, robotics, artificial intelligence, augmented reality are revolutionising manufacturing. Industry adoption is limited by lack of understanding of value, limited expectations, cost and data security concerns.

CLIMATE CHANGE

There are growing consumer and regulatory pressures to reduce emissions, waste, and manage environmental impacts.

The Zero Carbon Act gives industry a clear timetable to invest in cleaner energy alternatives, but reducing emissions in some cases will depend on radical changes in technology.

TRADE

Trade protectionism is growing in offshore markets, especially through the use of non-tariff measures.

This is increasing the cost of accessing markets and the ability of local manufacturers to compete with imports.

Substandard imports can result in significant costs for repairing and replacing non-conforming building products.

SKILLS/CAPABILITY SQUEEZE

There is increasing competition for scarce talent and the industry is struggling to secure vital technical and soft skills.

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OPPORTUNITIES

INNOVATION

Harness Industry 4.0 technologies to:

- reduce waste
- improve working conditions and attract workers
- respond to increasing demands for customised and personalised solutions
- further integrate into global value networks.

ENVIRONMENTAL

Gain market advantage by responding to demand for processes, products and packaging that reduce environmental impacts.

Add value through 'low-emissions circular economy' activities using few materials, reducing energy use, keeping resources in use as long as possible, and eliminating or reusing waste.

SERVITISATION

More opportunities to expand into high-value service areas such as installation and set up services, maintenance and repair services, logistics services, performance monitoring services, and consulting, design and engineering services.

CONSTRUCTION PIPELINE

Partner with the construction sector to meet the growing demand for prefabricated structures.

What's needed for successful industry transformation



Better **ANALYSIS** of production, product and market intelligence •.



Building **COLLABORATIVE** manufacturing relationships across value chains



Agile and continuous **INNOVATION** supported by management upskilling and peer-to-peer learning Manufacturers will need to transform. Ultimately they will drive the required investment and innovation



Investing in PEOPLE, including a range of workforce practices to support diversity and new ways of working



Participating in GLOBAL VALUE NETWORKS



Using **GOVERNMENT PROCUREMENT** to solve environmental and technological challenges whilst supporting domestic manufacturing opportunities



Committing to addressing non-tariff measures in **TRADE** negotiations, strong enforcement of standards and conformance, improving the responsiveness of trade remedies processes



Developing **ENVIRONMENTAL ROADMAPS** with industries to identify how they will transition to meet emission targets and the role of different policy levers in supporting the transition (e.g., ETS, R&D support, skills support), and identifying options for minimising carbon leakage Government is a partner, supporting manufacturers to adapt through integrated policies



Supporting **INNOVATION** through iincentivising investment in Industry 4.0 technologies and the development of cleaner processes and products

INVESTMENT POLICY targeted at attracting high quality foreign investment, which brings necessary capability, networks and innovation to advance domestic manufacturing, and that supports growth in risk/development capital

*Manufacturing Matters is a collaboration between Wood Processors and Manufacturers Association, the Manufacturers Network, Metals New Zealand, Plastics NZ, The Maintenance Engineering Society of New Zealand.

The Manufacturing Matters report, prepared on commission by Martin Jenkins, is a robust, comprehensive policy document which details the value of manufacturing to the New Zealand economy and society, current and future challenges and opportunities, and how other nations have supported and fostered manufacturing. It calls on the Government to partner with the industry to secure New Zealand's manufacturing future.

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Investing in **PEOPLE** by ensuring early access to vocational education and pathways, catering for the realities of unstructured skills development and the growing importance of soft skills, and recognising the significant amount of learning that occurs in the workplace