

BUSINESS BEAT

Manufacturers to lead

The coronavirus is shaping up as a watershed for Australian manufacturing. **Dave Cairns** looks at what is happening ... and what more needs to be done to see Geelong manufacturers help lead our economic recovery

THERE is more than a touch of irony in workers at Ford coming to the aid of Australian healthcare workers by making medical face shields.

Like their colleagues in Geelong, these staff at Ford's facilities in Broadmeadows were retained after the US carmaker ended production in Australia four years ago, dealing a body blow to our manufacturing capability.

But in recent weeks 50 or so engineering and design staff have been making 100,000 face shields to be donated to medical workers in the frontline fight against COVID-19.

Like a tooling company that is helping to make emergency ventilators and a consortium of four manufacturers collaborating with a US company to make emergency beds, Australian industry has rallied to provide vital services.

Faced with a disrupted global supply chain, Australian manufacturers have responded quickly to address shortages of medical equipment and the materials to make them.

Geelong companies, sometimes working in collaboration with the CSIRO and Deakin University, are among those who responded to the PPE shortage.

Several companies are involved with ventilator prototyping activities.

Caron Laboratories in North Geelong has made a large volume of hand sanitiser. Australian Apparel Manufacturing has morphed into a niche manufacturer of medical theatre masks and gowns.

At the CSIRO facility at Deakin University, experts have been helping a Melbourne company adapt its



A Ford worker in Broadmeadows making medical face shields.
Picture: STEFAN POSTLES

facilities to contribute to the manufacture of surgical face masks.

At Deakin University's advanced manufacturing precinct, ManuFutures tenant HeiQ Australia contributed equipment, supplies and production support to help a team from the university's Institute of Frontier Materials make more than 200,000 doses of hand sanitiser donated to the state's emergency services.

Yes, the coronavirus has exposed the fragility and self-interest of international supply chains, but the rapid and vital responses of local manufacturing has underlined the importance of Australia having its own industrial sovereign capacity.

But what will that look like going forward?

Do we want Australia to just be able to make vital medical equipment in a crisis?

Or is it the time for a major reset for manufacturing in this country?

Is it time to support innovation and to strategically strengthen domestic manufacturing capability to

allow it play a leading role in the economic recovery from COVID-19?

RESOURCE MAKERS, NOT TAKERS

MANUFACTURERS are optimistic about what will be driven by the newly created National COVID-19 Coordination Commission that is charged with minimising the impact of the virus on jobs and businesses and facilitating the fastest possible recovery.

The Geelong Manufacturing Council has contacted the commission to offer input, advocate for the region and request updates as they become available.

The GMC's chairwoman, Lyn George, said the time was right for governments to rethink policy settings to support manufacturing.

"The Austeng director said there was a real push from many quarters to realise the value of local engineering and manufacturing, and to revisit the decline of manufacturing in Australia that had followed a free market "rationalist" orthodoxy involving the export of low-value commodities and the import of high-value manufactured goods.

"We all know the ability of manufacturing to generate economic prosperity and jobs with a generous multiplier effect," Ms George said.

"There will be opportunities to lobby government for incentives to ensure manufacturing plays an integral role in kickstarting the economy post COVID-19."

The manufacturing council has also submitted a proposal to the State Government to fund projects including business support that fosters



ANDREW HAMBLING, right:
"We sold three garments in six weeks. We thought, 'Oh s---! We better do something or we are going to go under.'"

an innovation and entrepreneurship ecosystem and the potential creation of environmental and agribusines clusters.

"We will be lobbying all levels of government to provide a well thought-out policy and vision with appropriate incentives — this is not about attempting to 'pick winners' but providing the necessary framework to support innovation, research and development, funding of early stage technologies as well as collaboration between companies and universities," Ms George said.

Significantly, the need for a much better balance between what Australia makes and what it imports has been voiced by Andrew Liveris, the former chairman and chief executive of the Dow Chemical Company who has been appointed a special adviser to the Federal

Government's National COVID-19 Coordination Commission.

In a recent interview, Mr Liveris, who has established a taskforce to advise on the future of manufacturing, said the country's inability to compete in scalable industrial sectors was laid bare by 1990s trade liberalisation, globalisation and domestic deregulation.

"The most recent fatality of that was the automotive industry," he said.

By contrast, Mr Liveris said Singapore, Taiwan, South Korea and Hong Kong had worked hard on research and linked universities to foreign direct investment.

"That strategy is something Australia virtually ignored for a lot of reasons, not least being we're a rich country and can live off the annuity of our farm, hotel, quarry mindset," he told the

Australian Financial Review.

If there is a going to be a new balance in manufacturing, then it seems the country needs to better value its ability to innovate and undertake world-leading research and to commercialise those ideas.

In recent times, those abilities have been a promising feature of Geelong's reawakening manufacturing industry and the city has shown it can leverage university smarts with manufacturing know-how.

Carbon Revolution and its world-first industrial production of one-piece carbon fibre wheels came through that pipeline and a batch of other university-based start-ups are aiming to follow suit.

Imagine Intelligent Materials is another world-leading start-up with strong connection to research science and scientists. Based in North



Institute for Frontier Materials' Dr Nathan Thompson, HeiQ Australia chief executive Murray Height and Deakin IFM Associate Professor Alessandra Sutti are making hand sanitiser.

BUSINESS BEAT

FINANCE

our way out of crisis



Picture: PETER RISTEVSKI

HOW GOWNS TURNED INTO A LIFE-SAVER

DAVE CAIRNS

FOR weeks they barely had a sale at Australian Apparel Manufacturing and owner Steve Long and his partner Andrew Hambling were staring down the barrel.

Early in the year things had been looking good at the 27-year-old North Geelong business which had started focusing on making quality school uniforms, mostly for schools on their side of town.

But then came the coronavirus.

"We sold three garments in six weeks," Mr Hambling said. "We thought, 'Oh s---! We'd better do something, or we are going to go under.'"

Fast-forward about six weeks and the business has added staff as it tackles an order book that's growing by the day.

But they're not making school uniforms. Australian Apparel Manufacturing has turned its industrial sewing skills to making medical gowns and masks.

They are completing about 120 pieces a day, but Mr Hambling said staff were busily working through orders for about 5000 garments, including one for 500 for a Perth client.

"We just keep getting orders coming in each day, or more inquiries," he said. Australian Apparel

Manufacturing has added two machinists, for a total of five, and employed another person who lays and cuts the fabric.

"We would probably put on more machinists if we could find them," he said. "But they are on industrial machines, not domestic machines, and they need to be good and fast."

Mr Hambling said the business would definitely have been forced to close if it had not received the PPE contracts.

The change in fortune is credited to a Belmont GP who asked if they would make the clinic's medical gowns, with demand quickly growing from there as the GP put the word out.

When Geelong schools reopen, Australian Apparel Manufacturing will return to making uniforms, but it is hoping to keep its new clients, too.

Mr Hambling said unlike cheap disposable imports, Australian Apparel Manufacturing's medical gowns were made to repel moisture and could be washed and re-used.

"I don't want the virus to keep going, but I hope people down the track stick with us and keep buying garments that are Australian made that are good quality," he said.

making an advanced product. Ms Conley would also like to see the Federal Government support the development of more industry clusters, something it had yet to do.

"The theory of clusters is that you get an acceleration of capability within a cluster that you don't get outside of it," she said.

"It's a proven successful action that we need to continue to build in Australia in different technologies."

IT NEEDS MORE THAN WORDS

IF the coronavirus is going to herald a new era in Australian manufacturing, it will need to be backed by strong policy settings.

And in the case of government procurement programs, such as in defence, requirements for local content need to be enforceable.

The Geelong Manufacturing Council's chief executive, David Peart, said manufacturing was well placed to lead economic recovery if meaningful incentives and enforceable changes were put in place and that encouraging local innovation would be an important factor in supporting growth.

"Policies such as favouring local content with meaningful and enforceable actions and encouraging local innovation will go a long way to building a base for future growth," Mr Peart said.

He said there needed to be change of mindset that stopped focusing purely on cost, to appropriately valuing local innovation capability, supply chain relationships, quality and responsiveness.

"Local content provisions must be clear and enforceable," Mr Peart said. "Too often, we have seen sourcing activities with the promises of high local content be undermined by revelations of product arriving from offshore."

"This not only damages local capability building it also serves to reinforce the lack of credible and enforceable local content provisions."

He said policy settings that favoured local suppliers and governments as a buyer of Australian made would be very helpful and were the sort of policy mechanisms used in many other developed nations.

Mr Peart said the recent PPE supply chain issues illustrated the potential of Geelong's regional industry.

"We acknowledge that more needs to be done and are actively seeking our further opportunities to ensure that manufacturing remains robust, sustainable and innovative and able to lead our region's economic recovery," he said.



Advanced Fibre Cluster chief executive Jennifer Conley.

Picture: ALISON WYND

Geelong, it is harnessing the sensing power of graphene, which it can make in commercial quantities, and marrying it with advanced signal processing to make pioneering applications.

The company recently received a \$271,000 grant to explore and develop applications for military body armour.

Imagine chief executive and executive chairman Chris Gilbey said working with Australian universities and its world leaders in materials science research was crucial for his company.

"Having access to those people, that's what gives us an edge," Mr Gilbey said.

"At Imagine, we leverage the best scientific and

engineering thinking and work to deliver manufacturable, scalable sensing solutions."

He said as Australia appeared to be at the forefront of coping with COVID-19, the country had an opportunity to expedite its economic recovery "if we avail ourselves of it".

"I think it is Australia's time if we are prepared to grasp the nettle and get on with it," Mr Gilbey said.

FILLING GAPS IN THE CHAIN

AUSTRALIA has already embarked on a long-term mission to retool its defence industries and increase the production of Australian-made military equipment and services.

The programs are aimed at giving our defence forces sovereign capability — that is, the ability to build and sustain

our own defence, including the sophisticated industry needed to guarantee military independence, if necessary, in times of conflict.

The massive procurement programs involved in defence projects are giving Australian industry an opportunity to retool, and perhaps create export opportunities for advanced manufacturing while they are at it.

The Advanced Fibre Cluster Geelong involves a group of innovative companies and organisations aimed at accelerating the growth of the advanced fibre and composites industries.

Chief executive Jennifer Conley said the COVID-19 pandemic was proving a pivotal time for Australian manufacturing as governments were more intent on developing sovereign capability — and the crisis was speeding up that change.

"We are really at a big turning point for industry because we have this opportunity, that has been there for some time, but suddenly we have to position ourselves to have more local, sovereign capability," Ms Conley said.

"In the case of advanced fibre industries and composite development, there are some gaps in our supply chains that government is interested now in helping to support."

And for defence-focused innovation programs, the government is interested in developing the supply chains down the line.

As an example, Ms Conley said Australia did not have the capacity to produce carbon fibre at industrial levels, which would be the start of the supply chain, with that material then needing to be turned into a weave or a fabric before it could be used in