



Submission to:  
The Economic Development & Infrastructure Committee  
PARLIAMENT OF VICTORIA

The Technical Textiles and Nonwoven Association, and  
Composites Victoria

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# 1. Agencies

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Both the Technical Textiles and Nonwoven Association Inc. (TTNA) and Composites Victoria (CA) are independent bodies registered with the office of Fair Trading, funded by fees paid through voluntary membership. This submission provides information that is reflective of the TTNA and CA members' views and is intended to assist the parliamentary enquiry into manufacturing in Victoria.

## 1.1. Technical & Nonwoven Textile Industry Sector

Technical and nonwoven textiles and fibres are widely regarded as the most thriving and fast changing sector of the global textile industry. Innovation in new materials, processes and applications is expanding non-traditional end uses for both new and existing textile products. In contrast to popular perception of the broader TCF industries, technical textiles and fibres is a high-technology and high value-adding activity.

In short, technical and nonwoven textiles are about function rather than fashion.

Whilst they play a much more important role than is commonly acknowledged, technical and nonwoven textiles often go unnoticed as they are produced for functional properties rather than aesthetic or decorative characteristics. They are frequently used in a range of downstream applications in other manufacturing and service industries and, thus, not highly visible at the retail level.

A non-exhaustive list of end-uses includes aerospace, industrial, marine, military, safety and transport textiles and geotextiles. It also shares a number of technologies and has overlapping interests with other materials industries such as glass, plastics, films, membranes, metals, composites and paper.

## 1.2. The Composites Industry

Composites are products comprised of a combination of dissimilar constituent materials. The overall engineering performance characteristics of a finished composite far exceed those achievable from any of the individual components used in isolation. In effect, a composite is a material made from two or more dissimilar materials that, when combined, are stronger than those individual materials by themselves.

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Another term for composites is used in the past is reinforced plastics. Today, the composites industry uses a more specific term: fibre reinforced polymer (FRP) composites. A polymer is a chemical compound made of many identical components linked together like a chain. "Polymer" and "resin" are interchangeable terms.

Composites are an enabling technology, used across an extensive range of industries for a wide range of applications and contributing to growth in a diverse range of industry value chains from utilities through to boat building, manufacturing and industrial applications, aerospace, consumer products and construction products. A non-exhaustive list of the composite end-use industries is set out below:

- Aerospace
- Automotive
- Building & Construction
- Corrosion
- Marine
- Pools and spas
- Industrial (pipes, pipeliners, polymer concrete, minebolts)
- Sanitary ware (baths, basins)
- Roofing
- Tanks
- Transport (other than auto or marine)
- Wind energy
- General fabricated parts, other

New applications for composites are being found every day. The need to produce lightweight components for the automotive and aerospace industries is driving research and development; as is the need for non-corrosive products for application in highly corrosive environments. The industry is domestically orientated due to the nature of the products manufactured, which tend to be bulky, costly to transport, low volume and customised.



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## 2. The changing nature of the industry

Victoria manufacturing faces significant challenges in remaining competitive in today's global environment. The rapid advancements in low labour cost countries such as China and India has had a profound effect on the manufacturing industry. Trade liberalisation, and thus increased competition, has seen comprehensive changes to markets worldwide as

the process of globalisation has taken hold. Other factors include the global rationalisation of markets and supply chains, the need to internationalise operations, shortened product lifecycles, the rapid price fluctuations in oil-based raw materials, and the increasingly constrained environmental framework, in addition to finding manufacturing solutions to environmental sustainability.

The TTNA and CA acknowledge that the external circumstances affecting the Victorian industry are a global phenomenon. Indeed, the most influential factor in shaping Victorian manufacturing has been the process of opening Victoria to the influence of international market forces through the reduction of tariffs. The impact of lowering tariffs is a transitional force across products in all targeted tariff chapters and has resulted in considerable change to the industry, its products, their competitiveness and the way in which business is done.

Further progress by the industry, especially continued investment in innovation, skills development, the ability to satisfy environmental challenges and export growth, will help to support economic growth, resulting in a stronger and more vibrant industry to the benefit of domestic manufacturing and thus metropolitan and regional communities by sustained employment.



## 1. Industry Snap shot

Following are the results of an industry survey that was sent to a number of manufacturers.

**1. In order for us to foresee the manufacturing industry of the future, please indicate what your company plans to do over the next few years:**

Answer Options	Response Percent	Response Count
Introduce new capital equipment	35.3%	12
Invest in new processing equipment	38.2%	13
<b>Invest in more research, development &amp; innovation</b>	<b>55.9%</b>	<b>19</b>
Rationalise operations	20.6%	7
Merge with other firms	14.7%	5
Start/expand exports	32.4%	11
Reduce staffing	23.5%	8
Increase staffing	23.5%	8
Improve labour flexibility	38.2%	13

Increase local production	17.6%	6
Import more products	23.5%	8
Better supply chain control	32.4%	11
<b><u>Continue to produce in Australia</u></b>	<b><u>61.8%</u></b>	<b><u>21</u></b>
Shift production offshore	14.7%	5
Shift all production offshore	0.0%	0
Adopt lean manufacturing principles	32.4%	11
Unsure of the future at this stage	5.9%	2
Other (please specify)		3

**2. In order to ascertain trends associated with the given size of a company, please indicate your company's approximate turnover (\$AUD) by selecting a band below:**

Answer Options	Response Percent	Response Count
Under \$1,000,000	26.5%	9
\$1,000,000 to \$5,000,000	14.7%	5
\$5,000,000 to \$10,000,000	17.6%	6
\$10,000,000 to \$15,000,000	14.7%	5
\$15,000,000 to \$20,000,000	5.9%	2
Over \$20,000,000	20.6%	7
Any comments:		2
<b><i>answered question</i></b>		<b>34</b>

**3. What percentage of your product range is produced in Victoria?**

Answer Options	Response Percent	Response Count
0 to 20%	9.1%	3
20 to 40%	6.1%	2
40 to 60%	12.1%	4
60 to 80%	6.1%	2
80 to 100%	66.7%	22
Any comments:		2
<b><i>answered question</i></b>		<b>33</b>

**4. What percentage of your product range is exported overseas?**

Answer Options	Response Percent	Response Count
0 to 20%	75.8%	25
20 to 40%	12.1%	4
40 to 60%	6.1%	2
60 to 80%	3.0%	1
80 to 100%	3.0%	1
Any comments:		3
<b><i>answered question</i></b>		<b>33</b>

Comments

1. We have established a stand along export team to grow export sales
2. We used to export a lot more but have now set up manufacturing for local markets overseas
3. We place 10 to 15 contractors in China and Indonesia annually

**5. Please indicate the factors that influence the decision of where your company chooses to manufacture: either in Australia or offshore.**

Answer Options	Not important	Somewhat important	Very important	Deal breaker	N/A	Response Count
Cost of labour	2	11	17	0	2	32
Availability of skilled personnel	1	11	19	0	2	33
Protection of intellectual property rights	3	8	19	1	2	33
Quality standards	2	1	23	4	2	32
Probity matters	5	6	16	2	3	32
Incentives provided by government	6	5	18	2	2	33
The impact of the global financial crisis	7	8	15	1	2	33
Ease of raw material supply	4	10	12	2	3	31

**Comments**

1. Go to where larger markets are as well as maintaining local markets
2. Legal framework, the various market demands on specific products, shipping routes, infrastructure (eg reliable power) etc
3. Market size has shrunk as manufacturing off shores
4. Incentives - not targeted correctly
5. High value capital equipment already here

**6. How has the global downturn affected your business?**

Answer Options	Response Percent	Response Count
We've lost a significant amount of business	30.3%	10
We've lost some business, but we're holding our own	39.4%	13
Business is good despite the GFC	24.2%	8
Business is looking up in the near future	6.1%	2
Other (please specify)		1

Comments

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1. It has been the toughest yr we have ever experienced, but have made adjustments to address issues as required

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**7. What end user industry group is your product sold into?**

<b>Answer Options</b>	<b>Response Percent</b>
Aerospace	16.7%
Automotive	<b>70.0%</b>
Building & construction	46.7%
Energy	6.7%
Industrial	36.7%
Marine	23.3%
Mining	30.0%
Pool, spas and sanitary ware	16.7%
Transport (other than automotive)	33.3%
Telecommunication	0.0%
Paper Industry	20.0%
Electrical Industry	6.7%
Cleaning & Maintenance	10.0%
Sports and Leisure Industry	20.0%
Machine Industry	10.0%
Defence	20.0%

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