INQUIRY INTO A
MORE COMPETITIVE VICTORIAN
MANUFACTURING INDUSTRY

Australian Industry Group
Submission to the Victorian Competition and Efficiency Commission
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Section 1: Introduction

The Australian Industry Group commends the Victorian Government for taking the initiative to announce an inquiry into a More Competitive Victorian Manufacturing Industry and welcomes the opportunity to provide a submission to the Victorian Competition and Efficiency Commission (VCEC) inquiry.

The Victorian manufacturing industry is an important part of Victoria’s economy and has played a leading role in the prosperity of the State. Today, amid a multi-speed economy presenting challenges at least as testing as those encountered in the past, the industry remains approximately 10 per cent of the Victorian economy and employs about 11 per cent of the Victorian workforce. Moreover, the manufacturing industry is highly integrated through its upstream and downstream linkages to other industries, as a supplier and user of goods and services. The industry plays a critical role in the innovative potential of the Victorian and national economies through substantial research and development activities and other sources of innovation.

The manufacturing industry will continue to play a vital role in the Victorian and Australian economies both during the current mining boom and beyond. It is vital that the industry continues to be renewed over the intervening period given the relatively small mining industry in Victoria. The Victorian manufacturing industry has a vital role to play in contributing to a balanced and diversified national economy.

Despite the ongoing importance of manufacturing in Victoria and nationally, the industry is facing increasing challenges. The rise of new centres of manufacturing around the globe – most notably emerging Asia and the boom in prices in mineral commodities and the associated rush to expand output and export facilities, which is resulting in unbalanced economic growth, is at the centre of current challenges. Victorian manufacturers, like those in other developed countries, are facing increased competition and lower prices in domestic and export markets. With the Australian dollar at around 40 per cent above its post-float average against the US dollar, imports are becoming even cheaper and exports from Australia are becoming
more expensive. The mining boom is also intensifying shortages in the supply of a
growing range of skilled labour. In addition to these challenges, Victorian
manufacturers, and Australian manufacturers more generally, would now have to
overcome the uncertainties posed by the recently proposed carbon pricing initiative.
Victorian manufacturing is energy intensive and the move towards a low carbon
environment will not be seamless.

These forces were emerging before the recent global financial crisis (GFC) and have
quickly re-emerged over the past year. The GFC itself saw a collapse in global trade
that hit manufactured exports particularly severely and a retreat from spending on
the part of local consumers and businesses. This caution and the resulting weak
domestic demand have persisted and have been prolonged by the swift increase in
interest rates over the past year. On top of this, recent reductions in immigration
have reduced demand growth and are exacerbating skill shortages.

This combination of forces poses formidable challenges for the industry. Challenges,
however, are not new to manufacturers who are intent on adapting, investing and
looking for new opportunities.

Three broad areas of opportunity for the industry stand out:

1. There are clear opportunities in linking closely with the provision of
   manufactured inputs and associated services for the booming mining and
   mining-related construction sectors. Victoria has a significant machinery and
   equipment, including transport equipment, manufacturing presence and has
   world-class industries providing construction and building materials.

2. Victoria is also a very significant producer of agricultural and related goods,
   which provide a source of tremendous opportunity for manufacturers in food
   processing and wood and paper products manufacturing, for example.
   Moreover, Victoria has a sizeable transport and machinery and equipment
   manufacturing base, providing some opportunity to derive gains from the
   mining boom. The metals manufacturing industry in Victoria is prominent.
3. Another broad area of opportunity relates to Victoria’s ‘know how’ – the existing human capital, technology and design capabilities that Victoria has and continues to invest in. Significant opportunities lie in design and manufacturing of niche high-tech goods and related services.

There are, therefore, fundamentally good reasons to expect that manufacturing provides a strong foundation to meet current challenges, just as it has risen to meet challenges in the past. This is not to say that the challenges are not very substantial, but it is a vote of confidence firstly in the industry itself and secondly in the ability of Victorians to find new ways to build for the future, to make investments and to encourage success.

The Australian Industry Group submission is the culmination of in-depth analysis into the broader Australian manufacturing industry. It has involved in-depth consultation with key manufacturing businesses and stakeholders and analysis of the Victorian versus national results of a comprehensive manufacturing industry survey conducted by the Australian Industry Group of approximately 420 manufacturers across Australia (including 190 Victoria based manufacturers) and across the different sectors of the industry. The national survey results will be published in the upcoming Australian Industry Group report into Australia’s manufacturing industry and covers the areas of business performance and prospects; internationalisation and global supply chains; customer and supplier bases; links to the mining industry; exposure to currency fluctuations and its management; and priorities for governments in policy settings.

Section 2 of this submission provides a brief overview of the scope and changing nature of Victorian manufacturing. In Section 3 the key drivers of growth for manufacturing in Victoria are outlined while Section 4 provides some evidence of the implications to the Victorian economy of the manufacturing sector continuing to decline relative to the growth of other sectors. In addition, Section 5 outlines the Australian Industry Group’s analysis of the specific opportunities and challenges
facing the industry. Section 6 focuses on public policy to enhance the prosperity of the Victorian manufacturing industry, including responding to the VCEC draft report recommendations and providing some additional recommendations. This includes specific recommendations regarding policy actions that should be taken by the Victorian Government to improve competitiveness, productivity, investment, jobs and export growth in the manufacturing industry. Section 7 provides concluding comments.

The Australian Industry Group believes the future of the industry in Victoria and Australia can be secured by innovation not only within the industry but through innovation in public policy towards the industry and not simply a hands-off policy approach. This submission outlines some key recommendations that the Australian Industry Group believes should be implemented by the Victorian Government to enhance the prosperity and future of the industry and of Victoria’s overall economy.
Summary of recommendations from the Australian Industry Group

- That VCEC gives consideration to the State tax reforms outlined in the Henry Tax Review and that the Victorian Government work with the Australian Government to implement the State tax reform recommendations in the Henry Tax Review.

- That the Victorian Government does more to fund research in relation to manufacturing technology and subsequently the production and commercialisation of that new technology within Victoria, including boosting the capabilities for stimulating greater collaboration between technology suppliers and technology users to ensure a greater and more direct impact of technology diffusion into the manufacturing sector.

- That the Victorian Government consider the adoption of a new grants program open to Victorian businesses across all sectors that provide competitive grants for genuine R&D activities that lead to positive economy-wide externalities.

- That the Victorian Government reviews its existing business capability development programs and implements a new suite of business programs that address the key areas necessary to achieve high performing enterprises.

- That the overall objective of the Department of Business and Innovation’s investment facilitation programs and activities be targeted to raise the productive capacity of the Victorian economy.

- That the Department of Business and Innovation adopt and publish a client-based ratings of the quality of advice and services provided by the Department, along with explicit criteria for investment facilitation.

- That the Victorian Government extend programs such as the Geelong Investment and Innovation Fund to other geographical areas Victoria’s economy where structural change is having a negative impact and/or there is a concentration of manufacturing.

- That the Victorian Government adopts the recommendations pertaining to
education, skills and management capabilities in Victorian manufacturing, as detailed in the consultancy report submitted to the Department of Business and Innovation. Support for investment in manufacturing skills and capabilities is particularly critical at this time when the industry is under the range of pressures that are eroding margins and reducing the availability of funds.

- That the Victorian Government co-funds, alongside the Australian Government, a study of management capabilities and potential program proposals that arise from the study.
- That the Victorian Government engage, through the Council of Australian Governments, a prioritisation strategy to accelerate the reforms under the National Seamless Economy initiative.
- That the Victorian Government immediately initiate a comprehensive review of the Victorian Industry Participation Policy (VIPP) program and Victoria’s approach to procurement policy, including a review of the objectives of the policy and how fair and full access to procurement opportunities by local businesses can be provided without hindering overall economy-wide benefits. Moreover, the Australian Industry Group recommends the Victorian Government lead an engagement of the Australian Government and other States and Territories to develop a national procurement policy.
- That the Victorian Government provide information to industry on the practical implications to businesses and regions from the projected economic, social and environmental impacts of climate change and of policy responses.
- That the Victorian Government offers practical assistance in the identification, assessment and implementation of innovative energy efficiency and adaptation solutions including across supply chains.
- That the Victorian Government encourage the Australian Governments to work together to develop a new national infrastructure strategy that: provides a clear strategic framework for planning to meet present needs and
support future directions; maintains and reinforces a rational and transparent process to identify the highest-value infrastructure options; directs adequate and appropriate investment towards those options; ensures timely delivery; and ensures efficient use of the resulting assets.

- That the Victorian Government considers setting up an Infrastructure Victoria agency to better coordinate the planning, prioritisation and execution of infrastructure projects throughout the State.

The Australian Industry Group’s responses to the draft recommendations made by VCEC are summarised in Table 3 of Section 6.
Section 2: The scope and changing nature of manufacturing

Introduction
The Victorian manufacturing industry has undergone significant changes in the face of challenges that at that time appeared to be insurmountable and remains a vibrant and versatile industry that has shown over its history an ability to adapt and prosper. The Victorian manufacturing industry is vastly different to what it was 30 years ago. The image of low-skilled and highly labour-intensive factories has been replaced by modern production systems featuring high innovation and technology processes and lean manufacturing requiring skilled labour. Manufacturers have increasingly extended themselves into provision of services around their core products. They are also increasingly globally focused, integrated into global supply chains and competing and investing in world markets.

Growth and share of the Victorian economy
The real output of the Victorian manufacturing industry has increased over the last two decades (Chart 1). However, the rate of increase in the industry’s output has been falling steadily over this period. Real output from the Victorian manufacturing industry has increased at an average annual rate of only 0.2 per cent over the period 2000-01 to 2009-10, a sharp drop from the 1.9 per cent average annual growth rate recorded in the preceding decade.
In addition, the share of manufacturing in Victoria’s gross state product (GSP) has declined from 16.9 per cent in 1994-95 (Chart 2) to 10.3 per cent in 2009-10. Consistent with this trend, the share of manufacturing industry in total employment in Victoria has decreased from 21.0 per cent in 1984-85 to 10.5 per cent in 2009-10 (Chart 3).
It appears that the share of manufacturing in the Victorian economy has declined more than that in the other States. Chart 4 shows Victoria’s share of Australian manufacturing output declining steadily since 1989-90, while that of New South Wales has remained broadly stable. Queensland’s and Western Australia’s shares of Australian manufacturing have risen.
This development is also reflected in the Australian Performance of Manufacturing Index® (PMI) constructed by the Australian Industry Group. Chart 5 shows the Victorian PMI trending downwards even before the onset of the global financial crisis. On the other hand, the indexes for New South Wales Queensland and Western Australia do not have the same trend.

![Chart 5](chart.png)

Source: Australian Industry Group data. Data seasonally adjusted.

**Changing nature of manufacturing**

The Australian Industry Group’s Manufacturing Industry Survey (forthcoming) indicates that nationally the petroleum and coal product; basic chemical and chemical product; and polymer product and rubber product businesses are changing the most. The petroleum and coal product businesses said that their businesses have grown significantly through ventures into new business areas and the adoption of new technology. On the other hand, businesses in the polymer product and rubber product sub-sector cite increased competition from overseas manufacturers as the catalyst for change in their businesses. They responded by making niche products, moving production lines to China and relying more on imported materials where possible. Business conditions in the basic chemical and chemical product sub-
sector appear to be better, as the changes that occurred there reflected increases in the scale of production, larger customer bases and new products.

Further insights on the performances of the various sub-sectors in the manufacturing industry can be obtained from Chart 6, which shows the movements of the Australian Industry Group’s PMI® in each of the manufacturing sub-sectors since late 2001. The global financial crisis has adversely affected the industry and while most sub-sectors have recovered many are still struggling, weighed by a highly uncertain global economic recovery, the recent strengthening of the Australian dollar, consumer cautiousness and the softening of domestic demand. Notwithstanding these factors, it is noteworthy that the performances of sub-sectors such as wood and furniture; paper, printing and publishing; and chemical, petroleum and coal products, have been on a structural decline since 2002, evident from the downward trend in the PMI for the respective sub-sectors in Chart 6.

Source: Australian Industry Group data. Data seasonally adjusted.
Conclusion

Victorian manufacturers are facing more intense competition from competitively priced alternatives produced in low unit-cost manufacturing bases in emerging economies, such as China and India. Reflecting this and other structural change factors, the share of manufacturing in the Victorian economy has declined over the last decade. Similarly, the share of manufacturing in Victorian employment has also fallen.

These trends are likely to persist as the business conditions faced by Victorian manufacturers could become more challenging as the shortage of skilled labour intensifies and as the Australian dollar maintains its elevated level, both factors largely attributed to the resources boom. These challenges highlight the need for competitiveness of the Victorian manufacturing sector to rise, an area that requires close consultation and cooperation among businesses, industry groups and the Victorian Government.
Section 3: Key drivers of growth in manufacturing

Introduction
There has been a general trend towards a declining share of manufacturing industry output and employment in the Victorian economy, a trend that is evident across many industrialised economies as part of structural changes occurring in these economies.

Productivity
A key driver of growth in the manufacturing industry is productivity. Commensurate with the decline in employment and rise in output outlined in Section 3, there has been advancement in labour productivity in the Victorian manufacturing industry (Chart 7).

Productivity in turn depends in part on capital investment, which has increased in absolute terms in the industry, as has R&D expenditure, despite both falling in terms of share of total investment and R&D in the economy. Human capital development has also played a part, as outlined below. Moreover, the industry nonetheless
continues to attract sizeable foreign direct investment and this contributes to productivity and export performance.

**Workforce skills**

Part of the growth story for Victoria’s manufacturing industry relates to the skills base of the industry. Manufacturers are facing increased demand for higher level skills as the sector continues to move from high volume, low value manufacturing to areas of comparative advantage which are principally low volume, unique and/or high quality manufacturers. Notwithstanding this shift, the Victorian manufacturing sector requires workers of all skill levels, from unskilled labourers to tradespeople and technicians to professionals, though demand is expected to continue to shift away from unskilled workers.

This trend presents challenges for the sector. Recent Department of Business and Innovation figures show that 43 per cent of manufacturing workers do not hold post-school qualifications, this represents almost 125,000 workers. Of the balance of the workforce which has completed formal education and training beyond school 27 per cent hold Certificate III and IV, 24 per cent hold Diploma or higher qualifications and 6 per cent hold Certificate I or II qualifications. The future demand for upskilling will be significant.

**Trade**

Trade is important to Victoria’s manufacturing industry. Manufacturing exports account for approximately one third of Victoria’s manufacturing gross value added, and this ratio has remained fairly stable over time (Chart 8).

Chart 8, however, also shows that Victoria’s manufacturing exports have declined significantly since 2005-06, reflecting the challenging business conditions faced by Victorian exporters, especially given the recent strengthening of the Australian dollar.
Greater linkages into global supply chains

Victorian manufacturers are increasingly immersed into global supply chains, which have brought a source of new ideas, markets and innovative capacity. Manufacturing sub-sectors tend to be vertically specialised.\(^1\) For example, the petroleum fuel manufacturing sub-sector is the most vertically specialised of the manufacturing industry, followed by the other transport equipment manufacturing. This is suggestive of manufacturing industries acquiring expertise in particular stages of production. Vertical specialisation is also particularly evident for the transport equipment manufacturing industry. This feature of the Victorian manufacturing industry is evidence of a wider trend internationally whereby there is greater integration of manufacturing industries at the global level (global supply chains).

Global business models of manufacturing, especially through multinationals require firms to design products for international markets. A global supply chain involves international cooperation in the production and delivery of a final manufactured product. This includes managing supply and demand, sourcing raw materials and

\(^1\) In the context of global supply chains, vertical specialisation is when a firm uses imported intermediate parts to create a product it then exports - that is, the firm links internationally to produce a final export product. Vertical specialisation describes a process in which a firm or industry acquires expertise in particular stages of production, rather than making a complete product from start to finish using domestic inputs.
parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, and delivery to the customer.

**Firm level strategies for growth**

The VCEC draft report places a great deal of weight on the importance of Victoria having more high performing enterprises operating in a dynamic and competitive Victorian economy.

Firm level factors and strategies are important drivers of growth for manufacturing in Victoria. The Australian Industry Group Manufacturing Industry Survey asked manufacturing businesses about their firm level strategies to grow over the next 3 years. Chart 9 provides the results for the Victorian manufacturing businesses.

![Chart 9](image)

*Source: Australian Industry Group data.*

Victorian manufacturing businesses have a clear productivity agenda over the next 3 years in order to grow. For example, improving the efficiency of production processes is nominated by Victorian manufacturers as the most likely strategy to be implemented in the next 3 years. Introducing new products and services requires innovation and this is the second most likely strategy Victorian manufacturing
businesses will employ. Improving supply chain management; introduction of new technology; raising spending on skills and development and greater spending on research and development are all part of the productivity enhancing agenda Victorian manufacturing businesses are likely to implement in the next 3 years.

Clearly the firm level strategies to be adopted by Victorian manufacturing businesses align with the VCEC recommendation that the Government pursue an industry policy focused on having more high performing enterprises operating in a dynamic and competitive Victorian economy. The firm level strategies to be adopted by Victorian manufacturers are also compatible with the Victorian Government’s broader economic objectives of a growing, innovative and open Victorian economy. These shared goals suggest there is scope for greater collaboration and facilitation of business growth by the Victorian Government – a theme that this submission will discuss further in Section 6 on policy recommendations.

**Conclusion**

This section has outlined the key drivers of growth for the Victorian manufacturing industry. There is a wide array of drivers – productivity, the degree of interlinkages with overseas markets through trade and global supply chains are key drivers. Firm level factors and strategies are also important drivers of growth for manufacturing in Victoria. The firm level strategies align with the VCEC recommendation regarding the objectives of a strategy for manufacturing and industry policy. These shared goals suggest there is scope for greater collaboration and facilitation of business growth by the Victorian Government.
Section 4: The costs of a declining manufacturing industry

Introduction
Structural change can enable resources to move to higher value uses and can provide a means to increase national and regional incomes. However, there are costs associated with structural change which may warrant some government intervention. The VCEC draft report is correct to identify the decline in Victorian manufacturing is a relative decline given the rise of services based industries and the recent boom in mining exports and activity. Victoria’s manufacturing industry continues to grow, albeit slowly compared to fast growing services industries.

The costs of decline in manufacturing
The Victorian manufacturing industry is important to the Victorian economy not only through the direct number of workers employed and the gross value added of the industry but also because of the important inter-industry linkages both as a supplier and demander of intermediate inputs from other sectors. That is, other Victorian industries depend on Victorian manufacturing to provide critical inputs to their production and/or these industries supply value inputs to Victorian manufacturing production. For Victoria, manufacturing’s share of total demand (intermediate and final demand) is around 30 per cent, illustrating that manufacturing remains considerably more important to total economic activity than suggested by value added shares.

In Victoria, the manufacturing sector’s share of gross value added (GVA) has declined over the past decade from close to 14 per cent in 2001 to approximately 10 per cent in 2010 (Chart 10).
The rate of relative decline in Victorian manufacturing over this period in terms of output and employment has been similar to that seen by manufacturing in the Australian economy more broadly. This has reflected the fact that the GVA of Victorian manufacturing has remained broadly flat over the past decade, while activity in the services and construction sectors has grown strongly. The relative decline of the Victorian manufacturing sector has partly reflected:

(i) A greater share of household income being spent on services (income elasticity of demand).

(ii) Victoria recorded the weakest growth in labour productivity among all the States over the decade to 2009-10, yet productivity in this industry has also meant that less labour input has been required.

(iii) A greater reliance on imported manufactured goods from Asia, in particular, and from other developing economies. More recently, the high level of the Australian dollar has amplified this trend.

(iv) Victorian manufacturers have increasingly outsourced service related activities to businesses in the services sector.
(v) The textile, clothing and footwear sector experienced a decline nationwide during the last decade, and Victoria had a larger share of this sector.

Given these factors are likely to persist into the future, the relative decline of the Victorian manufacturing sector is likely to continue. More specifically, activity in the industry may remain broadly flat or even decline, while growth in the service and construction sectors picks up.

While structural change in the Victorian economy is welcomed as a long-term trend, it is important to examine any costs associated with the relative decline of the manufacturing sector, not least because it can help to inform the Victorian Government of ways it can help facilitate and encourage such change.

As the VCEC inquiry points out, the relative decline of the manufacturing sector is likely to be associated with relocating resources currently in the industry to other areas of the economy. This will necessitate economic and social costs such as re-skilling, underutilised capital, and unemployment. Given these costs, and the current competitiveness pressures faced by Victorian manufacturers, it seems prudent to examine government policies that have been implemented to help facilitate change in the industry, such as the Industry Transition Fund, their success, and the potential for these types of programs to be applied more broadly.

In addition to structural adjustment costs, there may be further risks associated with the relative decline in Victorian manufacturing e.g. to the extent that the relative decline represents a greater reliance on imported goods, the Victorian economy will be exposed to additional risks such as fluctuations in the exchange rate and foreign production levels. In some cases, local manufacturers may be better placed to respond to the specific needs of businesses within Victoria than large foreign producers, while some businesses in some regions may not have access to viable alternatives.
Costs of adjustment may also prove quite large relative to the benefits if the factors driving the structural change turn out to be short lived. Lastly, as the enquiry touches on, a prolonged period of relative or absolute decline in Victorian manufacturing may make it difficult or impossible for the sector to flourish when economic conditions become more conducive.

Structural adjustment costs are one component of the relative decline in Victoria’s manufacturing industry. These costs include underutilised physical assets and labour (the latter resulting in social costs). While these adjustment costs are expected to vary over the business cycle, they can be substantial for regional economies.

Another factor is that structural adjustment costs can be exacerbated when there are inefficient capital and product markets. Resources do not shift seamlessly and automatically from a declining firm/sub-sector to an expanding one. For example, restructuring in the textiles, clothing and footwear industry has resulted in strong competition between local and international manufacturing businesses. This has in turn resulted in a change in the pattern of stability of garment businesses, and a large section of the industry now has a very high business failure rate. Other frictions that prevent a seamless transition include search costs, costs associated with obtaining credit and sunk investment costs.

Despite the emphasis by successive Australian and Victorian Governments on up-skilling and re-skilling the workforce, many manufacturing workers tend to lack the necessary workforce skills to be able to transition to new and emerging sectors. For example, according to ABS data, approximately 46 per cent of Australia’s working age population (7 million adults) has literacy scores below the minimum required to function fully in life and work. In terms of numeracy it is 53 per cent, or 7.9 million below the required level. Literacy levels have a direct link to productivity but also to the ability for workers to transition successfully to growing sectors.

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2 Senate Economics Committee report into Outworkers in the Garment Industry, December 1996.
There is a clear ongoing role for the Victorian Government to support and facilitate the manufacturing industry’s challenge of dealing with structural change. The VCEC draft report illustrates the case of Geelong in Victoria as a successful example of adapting to structural change (Box 4.1 of the VCEC draft report). The success is couched in terms of the Geelong region having greater employment in services and manufacturing firms switching to capital and knowledge intensive production. However it does not mention that this success was heavily dependent on government support and intervention programs. These programs included the Victorian Government’s Industry Transition Fund and the Geelong Investment and Innovation Fund (GIIF) which was established by the Australian and Victorian Governments, together with Ford following Ford’s restructure of its manufacturing operations. The Fund attempts to support new investment and job opportunities in the Geelong region. Moreover, at the national level, programs such as the Automotive Industry Structural Adjustment Program (AISAP) is providing $116.3 million to facilitate structural change through helping firms with relocation and other merger costs and also by providing labour market adjustment support.

Given the success of programs such as the GIIF in promoting a diversity of employment and great capital and knowledge intensity of manufacturing production, there is a case to extend this type of program to other geographic areas of Victoria’s economy where structural change is having a negative impact and/or there is a concentration of manufacturing businesses in sub-sectors that may be facing absolute decline.

The Victorian manufacturing industry spends the most on business research and development (R&D) among all Victorian industries. In 2008-09, amid the global recession, Victorian manufacturers spent $1.6 billion on R&D, accounting for approximately 45 per cent of Victorian R&D spending (Chart 11). Moreover, the Victorian manufacturing industry accounts for approximately 37 per cent of R&D by the manufacturing industry across Australia. As the single largest contributor to Victorian R&D expenditure, a continued decline of the manufacturing industry could
jeopardise the innovative capacity of the Victorian economy. This arises because of the direct decline in manufacturing industry expenditure on R&D and also because this gap is unlikely to be filled to the same degree by services based industries in Victoria (services industries tend to have lower propensities to spend on R&D) or mining. Mining is a relatively small part of Victoria’s economy compared to other States (while in 2008-09 mining provided 69 per cent of total business expenditure on R&D in Western Australia and 28 and 27 per cent in Queensland and South Australia, respectively, the Victorian mining industry only contributed 1.6 per cent of total Victorian business expenditure on R&D in 2008-09).

Moreover, the degree of intra-industry trade is regarded as conducive to innovation and exploitation of economies of scale.³ Manufacturing industries have a relatively high degree of intra-industry trade.⁴ While some of the resulting benefits of intra-industry trade are internalised (economies of scale for example), other benefits such as innovation provide positive externalities in much the same way as R&D activity does. Hence the relative decline of manufacturing for other industries that have a


⁴ Measures of intra-industry trade at the national level for different industries are available from the OECD STAN database. Available at: http://www.oecd-ilibrary.org
lower degree of intra-industry trade has the potential to reduce these positive externalities.

**Regional economy dimension to Victoria’s manufacturing industry**

The manufacturing industry is an important component of Victoria’s regional economies and the share of manufacturing in Victoria’s regional economies (in gross value added terms) varies from approximately 15 per cent in the Barwon region to approximately 6 per cent in the Wimmera region.\(^5\) This section outlines the relative importance of manufacturing sub-sectors to Victoria’s regional economies. Two features stand out in this analysis:

- The relative greater importance of the manufacturing industry to the local economy for many regions when compared to the Victoria wide contribution of manufacturing to Victoria’s economy. In short, many local economies and communities are relatively more dependent on the prospects of the manufacturing industry.

- The relative importance of a few manufacturing sub-sectors within these regional economies – in particular the importance of food, beverages and tobacco manufacturing (as expected given the strong inter-industry linkages with agriculture in regional areas); a concentration of machinery and equipment in a few regions (reflecting the clustering of businesses around motor vehicles and parts manufacturing); and some importance to petroleum, coal, chemical & rubber products manufacturing across Victoria’s regions.

**Barwon region**

Chart 12 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Barwon region. The manufacturing industry accounts for approximately 15 per cent of the Barwon region’s economy in gross value added.

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\(^5\) Estimates of industry size by region outlined in this section are based on Australian Industry Group estimates using ABS input-output data, employment data and other ABS and non-ABS sources.
terms. The biggest single manufacturing sub-division in this region is the machinery & equipment manufacturing sub-sector (which includes motor vehicle and parts manufacturing in and around Geelong). This manufacturing sub-division accounts for 28 per cent of the total manufacturing industry in the region. The petroleum, coal, chemical & rubber products manufacturing sub-sector is also an important component of the region’s manufacturing industry – representing approximately 26 per cent of the manufacturing industry in this region.

**Western District**

Chart 13 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Western district region of Victoria.
The manufacturing industry consists of approximately 11 per cent of the region’s economy in gross value added terms. The biggest single manufacturing sub-division in this region is the food, beverage & tobacco products manufacturing sub-sector, accounting for approximately half the manufacturing industry in this region. Metal products manufacturing is also important – accounting for 34 per cent of the manufacturing industry in this region.

**Central Highlands**

Chart 14 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Central Highlands region of Victoria.

The manufacturing industry in this region accounts for approximately 14 per cent of the regional economy and the biggest component of the industry is the food, beverages & tobacco sub-sector (accounting for nearly 40 per cent of the manufacturing industry in this region) although the Central Highlands region has a fairly even balance of other manufacturing sub-sectors.
Wimmera region

Chart 15 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Wimmera region of Victoria.

The manufacturing industry in the Wimmera region accounts for approximately 6 per cent of the regional economy so this region is less dependent on the prospects of the manufacturing industry. Nonetheless, similar to many of the other regions, the food, beverages & tobacco sub-sector is the largest of the manufacturing industry sub-sectors in this region.
Mallee region

The Mallee region of Victoria has an industry structure whereby manufacturing is broadly the same share of the local economy (10 per cent) as manufacturing’s share of Victoria’s economy as a whole. However, given the Mallee is primarily an agricultural region, the local manufacturing industry is heavily concentrated in food, products & tobacco manufacturing, with this sub-sector accounting for over 80 per cent of the manufacturing industry in the local economy (Chart 16).
Loddon Campaspe

Chart 17 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Loddon Campaspe region of Victoria. There is a fair spread of manufacturing across the region while the share of manufacturing in the local economy is essentially the same as for Victoria as a whole.
**Goulburn**

Chart 18 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Goulburn region of Victoria. The manufacturing industry accounts for approximately 13 per cent of the Goulburn economy with food, beverages and tobacco again a sizeable component of the local industry. The manufacture of metal products accounts for around 11 per cent of the local manufacturing industry.

**Chart 18**

Source: Australian Industry Group estimates based on input-output tables.

**Ovens-Murray region**

Chart 19 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Ovens-Murray region of Victoria.

Unlike many other regions, the textiles, clothing & other manufacturing sub-sector has a sizeable presence in the overall manufacturing industry in this region.
Consistent with most other regions, food, beverages & tobacco manufacturing dominates. Petroleum, coal, chemical & rubber products manufacturing is also relatively important. The overall manufacturing industry accounts for approximately 12 per cent of the Ovens-Murray regional economy.

**East Gippsland**

Chart 20 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the East Gippsland region of Victoria. The manufacturing industry accounts for approximately 12 per cent of the local economy. Petroleum, coal, chemical & rubber products manufacturing is the biggest of the sub-sectors within the manufacturing industry in this region, accounting for approximately 40 per cent of the industry. The food, beverage & tobacco products manufacturing sub-sector accounts for approximately a third of the local manufacturing industry.
Gippsland

Chart 21 shows the relative share of manufacturing sub-sectors in the manufacturing industry in the Gippsland region of Victoria. The manufacturing industry accounts for approximately 13 per cent of the local economy.
The food, beverage & tobacco products manufacturing sub-sector accounts for approximately 35 per cent of the local manufacturing industry. Petroleum, coal, chemical & rubber products manufacturing accounts for approximately a third of the local industry and metal products close to 11 per cent.

**Modeling the regional dimensions of Victoria’s manufacturing industry**

The preceding analysis of the composition and relative importance of the manufacturing industry in Victoria’s regional economies points to both the risks and opportunities for these regional economies.

The predominance of the food, beverages and tobacco manufacturing sub-sector in many of these regional economies is an example of where great benefits can be achieved for the local economy if this sector grows strongly and particularly expands its export performance (see section 5 for a discussion of export opportunities). However, at the same time it points to the risk of having a narrow manufacturing base whereby any downturn in this sub-sector will have much more significant ramifications for the local economy. The same applies to machinery & equipment manufacturing and petroleum, coal, chemical & rubber products manufacturing for regions such as Barwon and Gippsland, respectively.

To illustrate the potential impact of a further decline in the manufacturing industry on a regional basis, the Australian Industry Group has conducted general equilibrium modeling of the economy-wide impact of two hypothetical scenarios. Appendix A provides a summary of the modeling techniques.

*Scenario 1: A cumulative 10 per cent fall in the sales volume for Australian food manufacturing exports over 10 years*

Under this scenario let us assume that there is a cumulative 10 per cent fall in the sales volumes for food manufacturing exports from Australia over 10 years (that is

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6 The estimates in this section have been derived using a general equilibrium model adopted from the Monash Multi-Regional Forecasting (MMRF) model. The MMRF model is available for download at http://www.monash.edu.au/policy/mmrft.htm along with the model’s documentation.
between now and 2021, food manufactures export demand falls by 10 per cent). The reason for this fall in export sales volumes in this hypothetical scenario could be any (combination) number of factors - examples may include drought reducing production and exports; reduced export competitiveness from lower productivity and the stronger Australian dollar; an outbreak of disease affecting the production and export of food manufactured goods.

What is the impact of this scenario from an economy-wide perspective on the Victorian regions outlined above? Chart 21 presents the estimated long-run impact on household consumption (a broad measure of the welfare impacts) and regional gross domestic product of Victorian regions. The chart shows the percentage deviation of household consumption and regional gross domestic product for each region from what would otherwise be the case in the absence of cumulative 10 per cent fall in the demand for food manufacturing exports from Australia over 10 years. For example regional gross domestic product is estimated to be about a quarter of a percent lower than what it would otherwise have been in the Western District by 2021. While this may not seem a significant impact it must be recognised that this is the impact of just one relatively small negative external shock and that the loss of a quarter of a percentage point in output can have quite significant impacts on local communities.

Chart 22 shows that the Victorian regional economies most affected under this scenario are the Mallee and Goulburn regions. We saw earlier that part of the reason why this is the case relates to the high dependency of these regions on food, beverage & tobacco products manufacturing. The Western District is also significantly affected in relative terms.
Scenario 2: A cumulative reduction of 10 per cent in the level of total factor productivity of the manufacturing industry over 10 years

Under this scenario let us assume that there is a cumulative 10 per cent fall in the level of total factor productivity of the Victorian manufacturing industry over 10 years (that is between now and 2021, the level of total factor productivity falls by 10 per cent). The reason for this fall in productivity could be due to a (combination) of factors – reduced R&D expenditure and innovation; bottlenecks associated with congestion; reduced workplace productivity due to a lack of improvement in work practices.

What is the impact of this scenario from an economy-wide perspective on the Victorian regions outlined above? Chart 23 outlines the long-run impact of the scenario of deterioration in the level of total factor productivity and shows the importance of productivity to the long-term prosperity of the industry. Under this negative scenario regional gross domestic product would decrease by between 4.1 per cent (Wimmera region) to 12.6 per cent (Barwon region). The Barwon region is relatively more negatively impacted because a decline in total factor productivity of
this magnitude would result in its motor vehicle manufacturing sub-sector becoming uncompetitive and its exports falling substantially. Real household consumption in each region would also be negatively affected.

**Chart 23**

Impact on each regional economy of a fall in total factor productivity in Victorian manufacturing

<table>
<thead>
<tr>
<th>Region</th>
<th>Real household consumption</th>
<th>Regional gross domestic product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melbourne</td>
<td>-14.00</td>
<td>-12.00</td>
</tr>
<tr>
<td>Barwon region</td>
<td>-12.00</td>
<td>-10.00</td>
</tr>
<tr>
<td>Western District</td>
<td>-10.00</td>
<td>-8.00</td>
</tr>
<tr>
<td>Central Highlands</td>
<td>-6.00</td>
<td>-4.00</td>
</tr>
<tr>
<td>Wimmera region</td>
<td>-2.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Mallee region</td>
<td>-10.00</td>
<td>-8.00</td>
</tr>
<tr>
<td>Lockyer Campaspe</td>
<td>-6.00</td>
<td>-4.00</td>
</tr>
<tr>
<td>Goulburn</td>
<td>-2.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Ovens-Murray</td>
<td>-12.00</td>
<td>-10.00</td>
</tr>
<tr>
<td>East Gippsland</td>
<td>-10.00</td>
<td>-8.00</td>
</tr>
<tr>
<td>Gippsland</td>
<td>-6.00</td>
<td>-4.00</td>
</tr>
</tbody>
</table>

Source: Australian Industry Group economic modeling estimates.

**Conclusion**

The analysis in this section, including the hypothetical general equilibrium modeling scenarios, has demonstrated the importance of the manufacturing industry to regional economies in Victoria and the potentially negative impact of a further decline in the performance and size of the manufacturing industry. The next section analyses the specific challenges and opportunities facing the Victorian manufacturing industry.
Section 5: Specific opportunities and challenges facing the industry

Introduction
The Victorian manufacturing industry faces a unique set of challenges and opportunities. On the one hand, the mining boom and associated high exchange rate are reducing the international competitiveness of the industry and providing competition for resources domestically. On the other hand, the emerging growth of Asia that is fuelling the mining boom can provide longer-term growth opportunities if Victorian manufacturers can increasingly tap into these markets with niche and high value added goods.

Challenges

Strong Australian dollar
The Australian dollar has strengthened significantly over recent months. This upward trend in the Australian dollar is likely to persist in the period ahead, reflecting rising interest rates in Australia, strong demand for Australian resources exports, and low interest rates in other developed economies, such as the US, UK, Japan and the Euro area.

The strength of the Australian dollar presents significant downside risks to Victorian manufacturing exports, and reinforces the urgent need for manufacturers to improve their cost competitiveness. The strong Australian dollar lowers the export earnings of Victorian manufacturers in the export sector, while manufacturers in the import competing sector face increased competition from abroad. The inverse relationship between the level of the US to Australian dollar exchange rate and earnings from manufacturing exports can be demonstrated from the data (Chart 24).

According to the Australian Industry Group 2011 Manufacturing Industry Survey, 73 per cent of Victorian manufacturers cited the strength of the Australian dollar as an
important influence on competitiveness over the past three years, and 80 per cent of Victorian manufacturers considered the Australian dollar as an important constraint on competitiveness over the next three years.

Chart 24

Victorian manufacturers are active in currency risk management in order to protect their operations from the negative impact of exchange rate fluctuations. The Manufacturing Industry Survey found that Victorian manufacturers used forward exchange contracts (38 per cent) as their main hedging instrument. This was followed by 24 per cent of manufacturers nominating natural hedges (e.g. mitigating currency risk through offshore investments and imported inputs) and 21 per cent nominating the use of foreign currency options or swaps.

For Victorian manufacturers that did not actively hedge, the survey sought to ascertain the underlying factors influencing their decision making. A relatively high proportion of manufacturers agreed with the proposition that hedging arrangements are too costly (39 per cent) with a similar high proportion agreeing that their decision had been influenced by not knowing enough about hedging (35 per cent). A lower, although still sizeable proportion of manufacturers indicated that their decision reflected agreement with the proposition that fluctuations in the exchange
rate even out across their business operations (29 per cent) and that fluctuations in the exchange rate cancel out over time (29 per cent).

**Heightened uncertainty in global supply chain management**

Economic development in Asia is widely expected to continue for decades, as these economies catch-up with the developed world. This lifts global energy consumption and fuel prices. Meanwhile, the high demand for natural resources, such as coal and iron ore, by these countries to fuel industrialisation raises global commodity prices.

Whilst economic growth in China and India is anticipated to remain robust, there remains considerable uncertainty about their respective growth trajectories, reflecting the gradual development of policy frameworks and evolving political conditions in these countries. Against this backdrop, it is plausible that fuel and commodity prices could remain elevated for an extended period, and could also become considerably more volatile.

These developments would complicate the management of global supply chains by Victorian manufacturers. For example, a business may suddenly need to change its well-established supplier and manufacturing networks to remain cost effective, if fuel prices, and hence shipping costs, jumped unexpectedly to record highs.

Victorian manufacturers need to actively monitor the major long term trends that determine macroeconomic conditions, so as to better anticipate and manage the risks posed by changes in important determinants of supply chain viability, including wage conditions in various possible production bases, fuel cost and currency values. In addition, Victorian manufacturers may need to establish multiple supply chains to boost the resiliency of the overall supply chain network.
Increased import competition from emerging Asian economies

Many Asian economies have developed rapidly over the last decade, supported by robust growth in China and India. This has led to the emergence of Asian manufacturers that have increasingly penetrated markets in the developed economies with very competitively priced substitutes.

The Australian Industry Group 2011 Manufacturing Industry Survey shows that the percentage of Victorian manufacturers who cite competition from products dumped from abroad as an important constraint on competitiveness in the next three years is 54 per cent, up from 46 per cent in the last three years. It may or may not be the case that some Asian exporters adopt unfair trade practices, such as intellectual-property violations, dumping and securing unfair subsidies. Notwithstanding this, Victorian manufacturers and their employees have to confront that cheap Asian imports will dominate the Australian market for an extended period of time (Chart 25).

Chart 25

ASEAN imports in Australia

Source: ABS data.

Against this backdrop, the challenge for Victorian manufacturers is to overcome the intense competition from cheap Asian imports. A key concern is whether the manufacturing base in Australia will be completely eroded as a result of the
competition from Asia’s manufacturers. The Australian Industry Group 2011 Manufacturing Industry Survey shows that 79 per cent of Victorian manufacturers cite new import competition as an important constraint on competitiveness over the next three years, up from 74 per cent over the last three years.

Opportunities

Asia as an opportunity as well as a threat

It is widely anticipated that global economic growth over the next few decades will increasingly be propelled by emerging economies, especially those in Asia. Industrialisation and increasing consumer wealth in the expanding economies in this region could mean higher demand for Australian manufactured goods, hence providing more export opportunities for Australian manufacturers.

For example, research conducted by Willem Buiter and Ebrahim Rahbari indicates that nine of the eleven countries they identify as global growth generators are in emerging Asia while the remaining two are from Africa.\(^7\) Furthermore, China will overtake the US to become the largest economy in the world by 2020, and will itself be overtaken by India by 2050. In addition, by 2050 Asia will provide 51.0 per cent of global GDP but Western Europe and North America will produce less than a fifth of global output.

Victorian manufacturers could take full advantage of the projected rapid growth in emerging Asian economies and increase exports to these countries. Victorian manufacturers could benefit from this trend by modifying their existing products, or by manufacturing new products to better cater to the needs of the emerging middle class consumers in Asia, whose spending power is forecast to increase significantly. Food exports are an area where Victoria appears to have some competitive advantage as well as a sound reputation for high quality and food manufacturing exports could be a significant growth area for Victoria.

To achieve greater market share into Asia, Victoria’s manufacturers can be supported by the Victorian Government through appropriate export and trade strategies. This is because market failures are evident – for example information asymmetries exist regarding the type of opportunities available in different markets and the regulatory processes and rules that businesses may not necessarily be aware of in doing business in Asia. This is precisely why governments sponsor and host trade missions as well as provide programs to work with businesses to expand into overseas markets.

**Sophisticated manufacturing based on skills**

Another broad area of opportunity relates to Victoria’s ‘know how’ – the human capital, technology and design capabilities that Victoria has and continues to invest in. Significant opportunities lie in niche manufacturing of high-tech goods and related services. Victorian based companies are having some success in the manufacture of, for example, medical and scientific equipment and medicaments. The Victorian Government has a role in contributing further to the transformation of manufacturing into a high skilled and sophisticated export oriented industry.

**Supplier to the mining and related sectors**

There are potential opportunities in linking the provision of manufactured inputs and associated services for the booming mining and mining-related construction sectors. Victoria is a significant transport equipment and machinery and equipment manufacturer and has world-class industries providing construction and building materials. Nonetheless the opportunities posed by the recent mining boom are not automatic and there are costs. The Victorian results from the 2011 Manufacturing Industry Survey indicate that the resources boom is having an ambiguous impact on the profitability of the Victorian manufacturing industry, presenting opportunities for higher sales and challenges in the form of increased business costs (Chart 26).
It appears that manufacturers in the Victorian fabricated metal product and machinery and equipment sub-sectors are the key beneficiaries of increased sales to the mining and mining-related businesses. Approximately 34.1 per cent of the manufacturers in the fabricated metal product sub-sector note that sales to mining and mining-related businesses have risen in the resources boom, while only 4.9 per cent of manufacturers indicating otherwise. Meanwhile, 41.3 per cent of manufacturers in the machinery and equipment sub-sector indicate that sales to mining and mining-related businesses have risen during the resources boom, while only 10.3 per cent of manufacturers indicating the opposite.

Although businesses in the fabricated metal product and machinery and equipment sub-sectors are expected to benefit from increased sales during a resources boom, they have also encountered more significant difficulties in recruiting and retaining employees during the boom. For instance, 44.2 per cent of manufacturers in the fabricated metal product sub-sector encountered more difficulty accessing skilled labour.
Conclusion

The outlook for the Victorian manufacturing industry remains challenging, especially given the rise of low cost competitors from emerging economies. That said it is also important to note that the rise of Asia and other emerging economies also presents enormous opportunities for Australian manufacturers, provided they act strategically, and with appropriate government facilitation and support, to improve their cost competitiveness and venture into overseas markets.
Section 6: Policy recommendations

Introduction

In order for the Victorian manufacturing industry to grasp the opportunities and meet the challenges outlined in the previous section there needs to be support and facilitation by the Victorian Government. Victorian manufacturers have already done much to become highly competitive and strongly performing enterprises but there is a clear and ongoing role for the Victorian Government.

VCEC was asked by the Victorian Government to inquire into strategies to promote a more competitive Victorian manufacturing industry. VCEC has chosen to interpret this mandate to recommend that an appropriate objective for Victorian Government policy on industry, including manufacturing, should be confined to improve the wellbeing of Victorians by having more high performing enterprises in a dynamic economic environment. While the Australian Industry Group does not have any argument with the objective of improving the wellbeing of Victorians by having more high performing enterprises, it is important that VCEC focuses this inquiry on recommendations that provide for a prosperous and sustainable manufacturing industry in Victoria.

State taxation

Businesses in Victoria are inhibited by a State tax structure that is inefficient and does not promote international competitiveness. The case for State tax reform is made clearly in Australia’s Future Tax System Review (‘the Henry Tax Review’).

The Australian Industry Group recommends, as a matter of urgency, that VCEC gives consideration to the State tax reforms outlined in the Henry Tax Review and that the Victorian Government work with the Australian Government to implement the State tax reform recommendations in the Henry Tax Review. These will ensure that Victoria has an efficient and fair tax system that promotes economic growth and high performing enterprises operating in an internationally competitive Victoria.
Victoria’s recent lagging productivity performance and longer term challenges associated with ageing of the population mean that the longer Victoria postpones genuine and comprehensive tax reform, the more difficult the task of promoting long-term economic growth across all sectors for the wellbeing of all Victorians.

The State based tax reforms proposed in the Henry Tax Review are not easily implementable in the short-term and are likely to require broader reforms to fiscal federalism and revenue sharing allocations between the States through the Commonwealth Grants Commission. Nonetheless, the Australian Industry Group recommends that the Victorian Government engage the Australian Government and other States to initiate an agreed timetable through the Council of Australian Governments (COAG) to implement the Henry Tax Review recommendations with respect to reform and removal of State based inefficient taxes.

Victorian manufacturers lend support to the importance of State tax reform. The Australian Industry Group Manufacturing Survey asked respondents to rank the five areas of government policy of most potential benefit to their own manufacturing business (potentially providing some insight to firm level strategy priorities).

**Chart 27**

**Policy priorities for Victorian manufacturers**

- Increased government support for commercialisation
- Increase flexibility in the regulation of workplace relations
- Direct subsidies to encourage production
- Increased incentives for R&D expenditure
- Reform of state taxes

Source: Australian Industry Group data.
Chart 27 presents the top 5 priorities for Victorian manufacturing businesses in areas where the State Government has some area of direct influence. The highest ranked priority is State tax reform with a ranking of 3.3 out of a possible maximum of 5.

**Technology**

The continuous adoption and application of technology as well as the ability of businesses to adapt and implement new technology is crucial to the productivity and growth prospects of the Victorian manufacturing industry, particularly in attempting to manufacture and commercialise more high-value products and services.

Victorian Government has a strong track record of establishing key initiatives, premier facilities and centres of excellence in joint ventures with academia and industry alike in the past. Consequently, Victoria is often perceived, nationally and internationally, as leading the development of technology capabilities that relate to advanced manufacturing, nanotechnology, automotive and biotechnology & pharmaceutical research.

There is, however, anecdotal evidence that there is substantial disconnect between the creation of technology capabilities to that of their diffusion and adoption within key sectors of Victorian industry in a way that delivers a direct impact to manufacturing.

The Victorian Government could do more to fund research in relation to manufacturing technology and subsequently the production and commercialisation of that new technology within Victoria. This objective could also include boosting the capabilities for stimulating greater collaboration between technology suppliers and technology users to ensure a greater and more direct impact of technology diffusion into the manufacturing sector.

This can be achieved, in particular, by establishing a mechanism to increase the linkages between small-to-medium-enterprises and large-corporate or multinational organisations which are mostly neglected in current programs. Furthermore, the
linkages between academia and industry – often seen as a perennial problem – require substantial efforts and attention. Most often than not, efforts are made to fund the academic side of this engagement equation with little or no benefits to industry.

Such a program should produce, from an industry perspective, a comprehensive statement on: sector needs, priorities and innovation capabilities; technology options and relevant applications; the benefits potentially available; known barriers to take-up and effective use; experience with and evaluation of attempts to unlock those benefits; and a statement of the relevant elements and gaps in existing Government policies and agendas, in manufacturing.

**Innovation and R&D expenditure**

Innovation is critical for the Victorian economy and its businesses. An important aspect of the innovation process is research and development. Manufacturing businesses value the importance of research and development as part of their business growth strategies to become high performing enterprises that are internationally competitive. For example, according to the Australian Industry Group Manufacturing Industry Survey, the top four firm level strategies for growth are related to innovation; capital investment; improving business structures and great integration into global markets (Table 2). Each of these strategies will involve some form of research & development, whether in terms of designing new products or revising internal business practices to become more productive.

Approximately 7 per cent of manufacturing sector respondents to the Australian Industry Group Manufacturing Industry Survey across Australia rated increased incentives for business expenditure on R&D expenditure as a policy providing the highest benefit to their own business.
Table 2: Top manufacturing business growth strategies over the next 3 years

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Improve efficiency of production processes; introduce new products and services; improve supply chain management; introduction of new technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital investment</td>
<td>Raise spending on skills development; greater (physical) capital investment; greater spend on R&amp;D</td>
</tr>
<tr>
<td>Business structure</td>
<td>Outsource production to other domestic businesses; concentrate on fewer products and services; alliances/mergers &amp; acquisitions; vertical integration; establish new distribution channels</td>
</tr>
<tr>
<td>Globalisation</td>
<td>Increased sourcing of labour from overseas; outsource production to businesses offshore; develop export markets</td>
</tr>
</tbody>
</table>

Source: Australian Industry Group data.

There is a clear role for governments to provide incentives for business expenditure on R&D given the positive externalities from this activity in terms of innovation and productivity across the economy. While most of the policy levers employed to promote business expenditure on R&D rest with the Australian Government, there is some role for State Governments to promote business expenditure on R&D. The Australian Industry Group recommends the Victorian Government consider the adoption of a new grants program open to Victorian businesses across all sectors that provide competitive grants for genuine R&D activities that lead to positive economy-wide externalities. The former STI Infrastructure Grant Program provides one governance model that could be considered in the context of developing an R&D program.

Business capability development programs

Section 3 of this submission indicates that Victorian manufacturing businesses have a clear productivity agenda over the next 3 years in order to grow.

The firm level strategies to be adopted by Victorian manufacturing businesses closely align with the VCEC recommendation that the Government pursue an industry policy focused on having more high performing enterprises operating in a dynamic and competitive Victorian economy. These shared goals suggest there is scope for greater collaboration and facilitation of business growth by the Victorian
Government. Victorian Government business and investment facilitation programs have an important role in achieving these shared objectives.

The VCEC draft report outlines around 30 Victorian Government programs that can be accessed by Victorian manufacturing businesses. The report suggests that there is not an overarching strategy that links these programs; that the objectives of the programs are not necessarily clear; and that transparency and administration can be improved by having a rigorous review and evaluation process implemented as well as better engagement with business. These recommendations are outlined in detail as draft recommendations 7.1 to 7.8.

The Australian Industry Group supports the direction of draft recommendations 7.1 to 7.8. What matters most is the efficacy of the business facilitation programs and how well they are administered to meet their objectives – not the number of programs. There is a clear rationale for having a suite of Victoria Government programs that facilitate business growth and investment for manufacturing businesses as well as businesses in other sectors. The rationale is:

- **Market failures:** for example, asymmetric information may mean that businesses do not have knowledge (and the costs of acquiring the knowledge is prohibitive) regarding strategies and opportunities for growth domestically and overseas. As another example, imperfect credit markets can lead to market failure when small businesses may not be able to access adequate capital to invest and grow. Thirdly, as previously discussed, positive externalities in business activities such as R&D suggest that markets alone will under provide these important activities.

- **Economy-wide goals:** for example, government business facilitation programs can help businesses achieve growth and in turn create net benefits to the community by these businesses becoming high performing enterprises. As another example, business facilitation programs can assist businesses and
workers transition out of declining industries and into more stable growing industries.

- **Regional development goals**: business facilitation programs can assist businesses in regional economies grow and even possibly diversify. As Section 4 outlined, the manufacturing industry plays a relatively important role in many Victorian regional economies and this industry concentration is a benefit when these sub-sectors are doing well but can also be a risk when there is cyclical or structural decline.

Accordingly, the Australian Industry Group recommends the Victorian Government review its existing business capability development programs and implements a new suite of business programs that address the key areas necessary to achieve high performing enterprises:

- Capacity for innovation (including research and development - see sub-section above).
- Commercialisation.
- Business strategy planning and business re-engineering.
- Exporting (see section 5 on the potential opportunities for Victorian businesses).
- Education, training and workforce skills (see sub-section below).

The Australian Industry Group supports Victorian Government programs to be better scrutinised with respect to their efficacy and net benefits to the Victorian community. This ensures that programs are of ongoing value to businesses across sectors of the economy and the broader community but also provides for programs to be adjusted to changing priorities.

The Australian Industry Group has a demonstrated record in working with Federal and State Governments in the delivery of business facilitation programs and VCEC should consider the important role industry associations play in ensuring the delivery and success of these type of programs ‘on the ground’. The Australian Industry
Group welcomes the opportunity to assist the Victorian Government in the design and delivery of a suite of business facilitation programs that enhance the competitiveness and innovative capacity of the Victorian economy.

**Investment facilitation and assistance**

There are clear market failure reasons for having an ongoing program of investment facilitation. For example, there are information asymmetries for businesses regarding understanding and complying with Victoria’s regulatory framework and there are positive productivity externalities associated with facilitation services helping make Victoria more competitive by reducing red tape associated with establishing or expanding a business in Victoria.

The Australian Industry Group supports an ongoing program of investment facilitation through the Department of Business and Innovation (DBI). It is nonetheless critical that this program provide the right type of services that maximizes potential investment into Victoria. The Australian Industry Group believes these services should focus on:

- Assisting businesses navigate the requisite legislative and regulatory requirements.
- Assisting with site identification and associated infrastructure needs, including planning approvals processes.
- Assisting with business development programs, including training.

The Australian Industry Group also recommends:

- The overall objective of DBI’s investment facilitation programs and activities should ultimately be to raise the productive capacity of the Victorian economy.
- Adoption of client-based ratings of the quality of advice and services provided by DBI are useful and should be published along with explicit criteria for investment facilitation which gives potential business investors some clarity and certainty regarding the circumstances under which DBI’s
Programs to facilitate structural adjustment

Given the success of programs such as the Geelong Investment and Innovation Fund to facilitate structural adjustment, the Australian Industry Group recommends the Victorian Government extends this type of program to other geographic areas of Victoria’s economy where structural change is having a negative impact and/or there is a concentration of manufacturing businesses in sections of the industry that may be facing absolute decline.

Education, training and workforce skills

Management talent and workforce skills are important contributors to sustained innovation and competitiveness in the Victorian manufacturing industry and on this basis it is important to enhance the level of education, skills and management capabilities in Victorian manufacturing. Achieving this calls for concerted efforts, through initiatives at the firm and industry level, and policy drivers at the government level.

The Australian Industry Group, together with the University of Technology Sydney has recently completed the Management and Workforce Skills and Talent project, one of the nine research reports commissioned by DBI to support VCEC’s Inquiry into a More Competitive Manufacturing Industry. In this report the Australian Industry Group made a series of recommendations to the Victorian Government relevant to workforce skills including:

- Manufacturing Management and Workforce Skills Advisory Service: The need for the provision of independent skilling advisory services to provide manufacturing companies with practical advice on:
  - Developing management capabilities and practices;
  - Workforce development plans;
  - Benchmarking tools;
  - Recruitment and selection and retention strategies;
- Skills utilisation;
- Upskilling;
- Workforce literacy and numeracy and
  - Dealing with Registered Training Organisations.

- Skilling for new technologies: The allocation of funding to support specialist technology training where this training is not available through existing formal training arrangements.
- Meeting the need for niche trades training: The introduction of a process to identify manufacturing critical trades where future training is uncertain and to fund the development of innovative, industry-led solutions to assure delivery.
- Improving the quality of skilling: Making a renewed commitment to supporting training quality improvements through new national partnership arrangements with the Commonwealth Government, through incentives to Registered Training Organisations and through improved information provision.
- Attracting young people into the trades: Evaluating manufacturing careers programs and, subject to evaluation outcomes, expanding practical initiatives which expose young people to contemporary manufacturing workplaces.
- Literacy and numeracy: Providing more flexible funding support for companies and their employees to address literacy and numeracy shortfalls, within the context of a Victorian literacy and numeracy workforce plan. This initiative would need to be supported by the increased availability of specialist trainers and improvements in the level of literacy and numeracy instruction for existing and new trainers and the provision of funding for the development of suitable training resources.
- Leadership and management skill development program: Formulating a practical leadership and management skill development program that focuses on fostering management capabilities through learning mechanisms such as scenario planning, action learning sets, mentoring, face-to-face
coaching and shadowing and exchange programs.

Full details on all of the recommendations and the underpinning research are included in the consultancy report to DBI.

**Management skills training**

Management skills are increasingly recognised as a critical factor in the success and growth of a business, including its productivity performance.\(^8\) As a starting point, the Australian Industry Group sees virtue in the Victorian Government cooperating with the Australian Government to funding a national study of management capabilities which recognises the dramatic changes in the capability requirements of managers since the Karpin Taskforce’s report of 1995. This study should focus on innovation, globalisation and sustainability and also take into account the considerable work undertaken by a large range of key stakeholders in the intervening period. The Victorian and other State Governments could assist by co-funding the study and potential program proposals that arise from the study.

**Business regulation**

A regulatory environment conducive to investment and economic activity is a fundamental prerequisite to broader economic growth and international competitiveness. Australian Industry Group survey data estimates that nationally the compliance cost of business regulation for the manufacturing industry exceeds $680 million per year.\(^9\) The estimate is a broad measure calculated on the basis of the time cost of staff alone, and excluding purchases of equipment, professional fees, overheads and other on costs that would significantly add to the cost of compliance. On average, the Australian Industry Group estimates each manufacturer spends 102 hours per month on managing compliance – the equivalent of 1.79 hours (1 hour 47 minutes) per employee.

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The compliance burden on regional businesses identified in the survey is almost 15 per cent higher than for their metropolitan counterparts. The additional compliance burden among regional manufacturers mainly reflects a greater proportion of employee resources directed towards managing federally imposed taxes such as the GST and company tax, state imposed payroll tax, and implementing measures associated with environmental management. As well, the survey results also reflect the disproportionate impact of all types of regulation on smaller businesses. The Australian Industry Group is currently conducting a survey to update, extend and broaden its earlier study. Results from this study are planned to be published in late August 2011.

Accelerating the Council of Australian Governments (COAG) National Seamless Economy initiative is especially crucial given the ongoing burden of regulatory red tape. The current COAG reform process is slow and lacks a prioritisation strategy. The Australian Industry Group recommends that the Victorian Government engage through the COAG to develop a prioritisation strategy to accelerate the reforms under the National Seamless Economy initiative.

Moreover, the Australian Industry Group believes that the key areas of priority for Victorian regulation reform, over and above the COAG process, include:

- Reforms to the planning system to make it more efficient and transparent.
- Ensuring efficient product approval processes are in place which does not stifle commercialisation and adoption of new products and processes.
- Reforms to the Victorian Vocational Education and Training system to reduce the regulatory burden associated with businesses accessing the system for workforce training purposes.
- Implementing the reforms associated with improving the administration of regulation outlined by VCEC in the draft report *Strengthening Foundations for the Next Decade: An Inquiry into Victoria’s regulatory framework*.

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10 The Australian Financial Review of 12 May 2011 quotes Paul McClintock, chairman of the COAG Reform Council, as indicating the COAG reform process is far too slow.
• Reviewing whether the Reducing the Regulatory Burden initiative has in fact delivered the estimated benefits – anecdotal evidence from Australian Industry Group members suggest there has been little discernible net impact—somewhat at odds with the claimed benefits espoused by the Victorian Department of Treasury and Finance.

Procurement policies

States and Territories have in place various industry participation and procurement policies. These differ in scope and objectives across Australia and do not necessarily result in consistency of application, reduction in administrative burden for businesses operating in multi jurisdictions or promotion of ‘economies of scale and scope’ in procurement activities.

It has been suggested that public procurement can act as an instrument of innovation policy by, for example, governments raising the demand for high technology or innovative products and services which in turn can spur local industry to meet these standards.11 Public procurement is also especially effective for smaller businesses in regions under economic stress as well as in distributive and technological services.12 VCEC has already been given a number of oral submissions which have shown the value of supporting local companies through procurement and which have given those companies the impetus to develop into larger businesses, often with an export focus that are highly productive and internationally competitive. The proposal of using public procurement to spur innovation among local businesses is worth investigating by VCEC and the Victorian Government. However, it should be noted that the proposal risks placing additional hurdles for local businesses.

The Australian Industry Group acknowledges the prominence of value for money considerations in procurement processes in order to benefit the economy as a

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whole. However, the Australian Industry Group argues that value for money needs to be explicitly spelt out in government procurement processes and include concepts such as lifetime costs and availability of servicing and support.

Consideration must be given to the value given to businesses by certainty of government purchasing support and how that means companies can be encouraged to expand. Recognition of the capital expenditure which results from local sales and the ability of companies to undertake R&D as a result should not be ignored.

Similarly local procurement can have a direct impact on export sales. Companies seeking exports orders are often asked about their local buyers, including government. Selling to overseas governments where the local Australian Government has not been a purchaser is not an easy task. As an example, Gippsland Aeronautics, the only plane manufacturer in Australia, is continually asked why there are no Victorian Government sales.

Victorian Government departments must also be given a mandate to consider the total benefits of local procurement. Too often there is reluctance by the Departments to buy locally because the specifications exclude local manufacturers or because the practice has been to buy overseas, or that it is simply easier to do so. This is not good enough.

Victorian Government departments could be encouraged to refer to Australian standards in tender contracts, not those from overseas. In the event of discrepancies between international and Australian standards, potential importers could be made to comply with Australian standards, rather than Victorian businesses being made to comply with international standards. However, it is important that the Victorian Government ensures Victorian businesses are not disadvantaged by compliance to Australian standards when engaging in international markets.

Government Departments must also justify their purchasing decisions to Parliament and look at all costs. These could include overall government costs, not simply the
initial procurement cost. For example having infrastructure sitting idle because parts cannot be obtained quickly from overseas suppliers is inefficient and the potential for such scenarios should be a part of the decision. Too often such matters are given scant respect.

A failure to take into account the holistic benefits of local procurement would not serve the community or the Victorian Government well and would not be a recognition of the manner in which the Government needs to support local industry. Value for money can take many guises, including those which are intangible, and these must be given equal standing in determining policy.

VCEC recommends that the Victorian Government remove local jobs and local content as evaluation criteria in government procurement and the Victorian Industry Participation Policy (VIPP) is reinstated as a ‘tiebreaker’ in the event of two bids being identical. This is a policy which has already been proven a failure. It reinstates the past. The Australian Industry Group is concerned that the VIPP would not adequately take into account other criteria, such as the adoption of a holistic view of value for money and an assessment of whole of life benefits accorded by successful bidders, if VIPP was used as a tiebreaker. The successful use of the VIPP as a tiebreaker relies on the existence of robust processes, which anecdotal evidence suggests appears to be absent. That policy manifestly failed to take account of the issues mentioned above and was finally recognised by the previous Victorian Government as a policy which offered nothing to support local businesses. Quite simply, local engagement should remain important selection criteria in at least the pre-tender phase and VIPP as only a ‘tiebreaker’ should be consigned to the past.

The Australian Industry Group recommends that a comprehensive review of the VIPP and Victoria’s approach to procurement policy be initiated immediately, including a review of the objectives of the policy and how fair and full access to procurement opportunities by local businesses can be provided without hindering overall economy-wide benefits.
Moreover, the Australian Industry Group recommends the Victorian Government lead an engagement of the Australian Government and other States and Territories to develop a national procurement policy that:

- Fosters demand for high technology products and services (in turn hopefully sourced locally). Research suggests that public procurement can act as an instrument of innovation policy. Moreover research suggests that public procurement is especially effective for smaller businesses in regions under economic stress.

- Avoids the beggar thy neighbour State and Territories based procurement policies currently in place.

- In co-operation with the States and Territories, implements an investment threshold for Major Projects (Resources & Infrastructure) above which it would be a condition of approval that project proponents commit to participate in a rigorous reporting regime around the use of local suppliers and content.

- Involves a rigorous reporting regime including the establishment of a Local Industry Sustainability Index (LISI) to accurately reflect the levels of local procurement achieved and to help inform future policy-making.

The Australian Industry Group also recommends that the Victorian Government lead a nationwide approach to engage the key stakeholders in the formulation of government procurement policies.

**Business energy costs**

Australian Industry Group research into energy prices and energy efficiency measures taken by businesses identifies that businesses continue to be impacted by significantly rising energy input costs. Disturbingly, however, some 73 per cent of Australian businesses surveyed have either made no energy efficiency improvements or experienced reductions in energy efficiency over the last 5 years, with a further 12 per cent reporting improvements of 5 per cent or less. Moreover, over half of all
companies surveyed (57 per cent) expect their energy efficiency will be unchanged over the next 2 years.

While rising energy prices will increase the commercial necessity for businesses to adopt existing energy efficiency technologies, a range of barriers will continue to inhibit take-up, including gaps in information, skills and access to capital for efficiency improvements.

The Australian Industry Group recommends the Victorian Government develop an initiative to:

- Provide information to industry on the practical implications to businesses and regions from the projected economic, social and environmental impacts of climate change and of policy responses.
- Practical assistance in the identification, assessment and implementation of innovative energy efficiency and adaptation solutions including across supply chains.

**Infrastructure**

While infrastructure is outside the scope of this the terms of reference for this inquiry, the Australian Industry Group believes that the success of the manufacturing industry and the Victorian economy as a whole is dependent on the provision of high-quality infrastructure.

The Australian Industry Group recommends Governments work together to develop a new national infrastructure strategy that: provides a clear strategic framework for planning to meet present needs and support future directions; maintains and reinforces a rational and transparent process to identify the highest-value infrastructure options; directs adequate and appropriate investment towards those options; ensures timely delivery; and ensures efficient use of the resulting assets. This framework should include:

- The Victorian Government could consider setting up an Infrastructure
Victoria agency to better coordinate the planning, prioritisation and execution of infrastructure projects throughout the State.

- Bedding down the expanded role for Infrastructure Australia, announced in the 2011-12 Federal Budget, in the assessment and prioritisation of nationally strategically important infrastructure projects, including providing advice to governments on the appropriateness of funding options for different projects.

- Further development of structured public-private partnership policies that can lower the risks faced by private investors while reducing upfront costs to the public. Privatisation of existing public assets can unlock substantial sums for reinvestment in new infrastructure; with appropriate structures and risk-sharing, this can leverage further private investment, including by superannuation funds.

- Transport infrastructure reform to help address congestion: for example, better provision of real-time information by governments about transport options and network conditions; investment in new and smarter transport infrastructure to keep up with population pressures; and pricing reform to improve utilisation and efficiency in the use of transport infrastructure.

Responses to draft recommendations made by VCEC

Table 3 outlines the draft recommendations made by VCEC and the Australian Industry Group response to these recommendations.
Table 3: Australian Industry Group responses to VCEC recommendations

<table>
<thead>
<tr>
<th>Draft recommendation by VCEC:</th>
<th>Australian Industry Group response:</th>
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<tr>
<td><strong>Draft recommendation 6.1</strong></td>
<td>The Australian Industry Group agrees in principle that contributing to the wellbeing of Victoria by having more high performing enterprises operating in a dynamic and competitive Victorian economy is a worthwhile overarching objective.</td>
</tr>
<tr>
<td>That the focus of a forward looking strategy for manufacturing is: ‘to contribute to the wellbeing of Victoria by having more high performing enterprises operating in a dynamic and competitive Victorian economy’. That policies to give effect to this strategy focus in the following five areas:</td>
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<td>• increasing the capacity for innovation</td>
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<td>• improving the quality, availability and flexibility of skills</td>
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<td>• ensuring regulation is justified and efficient</td>
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<td>• promotion and facilitation</td>
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<td>• procurement.</td>
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<p>| <strong>Draft recommendation 7.1</strong>  | The Australian Industry Group agrees in principle and is ready to engage with the Department of Business and Innovation and the Victorian Government on developing such a strategy. The recommendations by the Australian Industry Group outlined in this submission should form an integral part of the strategy. |
| That the Department of Business and Innovation develop a strategy that outlines the overall objectives for manufacturing policy and the role of programs in contributing to that strategy. This strategy could:  |
| • specify an overall objective of manufacturing policy, such as increasing the wellbeing of the Victorian community  |
| • focus on the drivers of growth of manufacturing businesses, such as access to adequate skills and capacity to innovate  |
| • identify whether there are policy problems in relation to any of these drivers  |
| • establish a set of programs to address these problems but without overlaps or inconsistencies.  |</p>
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<th>Draft recommendation by VCEC:</th>
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| **Draft recommendation 7.2**  
That the Department of Business and Innovation consolidate its existing manufacturing programs into a smaller number, retaining only those that are consistent with the strategy proposed under draft recommendation 7.1. | Consolidation per se should not be an end goal but only a means to a more effective suite of programs that can be accessed by businesses in manufacturing and other sectors. |
| **Draft recommendation 7.3**  
That the Department of Business and Innovation publish its Initiative Design Framework and the plans prepared for new initiatives that are accepted, using this framework. | Supported.                                                                                     |
| **Draft recommendation 7.4**  
That all funding proposals for manufacturing programs be based on a business case identifying options from which the proposed option was chosen and why it was chosen. | Funding proposals by Victorian Government departments should already be supported by business cases and come under the scrutiny of the Expenditure Review Committee of Cabinet. |
| **Draft recommendation 7.5**  
That the Department of Business and Innovation arrange for an independent external assessment of the effectiveness and efficiency of its approach to monitoring and evaluation. This assessment should be published. | Supported.                                                                                     |
| **Draft recommendation 7.6**  
That the Victorian Government establish the requirement that all programs must sunset, and can only be continued after an evaluation of their relevance, effectiveness and efficiency, against their intended purposes and the overarching strategy for manufacturing. This evaluation should have regard to evidence from stakeholders, including | Supported subject to the evaluation criteria including additional productivity, business facilitation and growth. |
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<th><strong>Draft recommendation by VCEC:</strong></th>
<th><strong>Australian Industry Group response:</strong></th>
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<td>participants and industry associations.</td>
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| **Draft recommendation 7.7**  
That the Department of Business and Innovation increase public reporting of the allocation of grants, the progress of programs towards achieving their key performance indicators, and the results of evaluations of programs. | Supported, the Government’s announced Grants Victoria initiative will also assist businesses understand and access grants programs. |
| **Draft recommendation 7.8**  
That the Department of Business and Innovation accelerate its efforts to engage directly with businesses, to identify areas where government can be most effective in encouraging economic growth. | Supported, the Australian Industry Group has a demonstrated record of working openly with Governments to enhance the prospects for economic growth. |
| **Draft recommendation 8.1**  
That:  
• the Investment Facilitation Team replace its current performance indicators with client-based ratings of the quality of its advice, timeliness with which it was provided, and cost savings to the project resulting from the facilitation services  
• these cost savings be benchmarked with the costs of the facilitation services, to give an indication of the rate of return on the services. | Supported. |
| **Draft recommendation 8.2**  
That the Victorian Government support the continuation of the Interstate Investment Co-operation Agreement when it expires later in 2011, aiming to tighten the constraints on inter-state competition for footloose firms and ultimately seeking the cessation of investment assistance. | Supported in-principle but ultimately if State Governments demonstrate, on a cost-benefit basis, that an investment is worth attracting then it should do so. |
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<th>Draft recommendation by VCEC:</th>
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<tr>
<td><strong>Draft recommendation 8.3</strong> That if investment assistance continues, its objective be changed to attracting investment that generates technological or innovation spillovers that lead to productivity improvements in Victorian-based businesses that would not otherwise have occurred.</td>
<td>Supported, the Australian Industry Group adds that the objective of investment assistance be expanded to ensure that the investments attracted include more positive spillovers, such as the development of intra- and inter-industry linkages, as well as the enhancement of management capability across businesses.</td>
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<tr>
<td><strong>Draft recommendation 8.4</strong> That larger proposals for investment assistance should be evaluated by using the Department of Treasury and Finance’s computable general equilibrium model, so that decisions are informed by an understanding of the impact on existing businesses and the Victorian economy overall.</td>
<td>Supported in-principle.</td>
</tr>
<tr>
<td><strong>Draft recommendation 8.5</strong> That the Department of Business and Innovation develop proposals for publishing information about the outcomes from individual projects that have received assistance.</td>
<td>Supported in-principle subject to commercial in confidence considerations.</td>
</tr>
<tr>
<td><strong>Draft recommendation 9.1</strong> To the extent that innovation programs are not assessed against the principles in this report in the Victorian Government’s review of financial assistance programs, that the Government evaluate current innovation programs available to the manufacturing industry, including an assessment against the framework of principles for innovation initiatives. The outcomes of the evaluation should be</td>
<td>The Australian Industry Group supports the review of all programs with the objective of introducing a suite of business programs that are highly effective and promote economic growth. However, the Australian Industry Group emphasises that the review should be conducted by experts</td>
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<td>Draft recommendation by VCEC:</td>
<td>Australian Industry Group response:</td>
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<td>Draft recommendation 10.1</td>
<td>Supported.</td>
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<td><strong>Draft recommendation 10.1</strong></td>
<td><strong>Draft recommendation 11.1</strong></td>
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<td>That the Department of Business and Innovation undertake and publish an evaluation of the effectiveness of the Careers in Manufacturing program considering:</td>
<td>That the Department of Business and Innovation, in undertaking its direct engagement with businesses, gather data on regulatory burdens affecting the manufacturing sector — focusing on understanding the nature and causes of any unnecessary regulatory burdens — and encourage business organisations to survey their members and publish the results.</td>
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<td>• whether it strengthens the provision of balanced information to young people considering career options</td>
<td>Supported.</td>
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<td>• whether it affects decisions by students about courses of work undertaken and skills developed</td>
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<td>• appropriate level of government funding versus industry funding desirability to continue, or change the mix of activities in the program</td>
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<td>• whether the program could be improved by drawing on the experience of other initiatives where business has successfully engaged with young people about potential careers.</td>
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<td>Draft recommendation 11.2</td>
<td>Supported.</td>
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<td>That VicRoads, in consultation with the Municipal Association of Victoria,</td>
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<td>Draft recommendation by VCEC:</td>
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<td><em>examine and report to the State Government by September 2012 on the feasibility of establishing a ‘one-stop-shop’ for road transport permits.</em></td>
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<td><strong>Draft recommendation 12.1</strong>&lt;br&gt;That the Victorian Government remove local jobs and local content as evaluation criteria in government procurement, and replace the current arrangements by reinstating the Victorian Industry Participation Policy (VIPP) as a ‘tiebreaker’ between equivalently rated tenders, on the following basis:</td>
<td>Not supported. The Australian Industry Group recommends that a comprehensive review of the VIPP and Victoria’s approach to procurement policy be initiated immediately, including a review of the objectives of the policy and how fair and full access to procurement opportunities by local businesses can be provided without hindering overall economy-wide benefits. The review needs to consider a broader definition of value for money. Moreover, the Australian Industry Group recommends the Victorian Government work with other Australian Governments to develop a national procurement policy.</td>
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<td>• only impacts on local skills and innovation would be considered in the tiebreaker</td>
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<td>• these impacts would be rigorously measured, with the application of specialist expertise</td>
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<td>• the Government and its agencies would be alert to the possibility that the tiebreaker rule could distort bidding behaviour. The tiebreaker rule would be evaluated after one year of operation the reasons for tiebreaker decisions would be published, and the VIPP commitments relating to skills and innovation would be followed-up, to ensure that the promised additions to skills and innovation are in fact delivered</td>
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<td>• penalties would apply for non-performance of VIPP commitments relating to skills and innovation where these were used as a tiebreaker in a tender decision.</td>
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<td><strong>Draft recommendation 12.2</strong>&lt;br&gt;That the Victorian Government reform its</td>
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<td>The Australian Industry Group</td>
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<td>Draft recommendation by VCEC:</td>
<td>Australian Industry Group response:</td>
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<td><strong>procurement policies to ensure:</strong></td>
<td>recommends that a comprehensive review of the VIPP and Victoria’s approach to procurement policy be initiated immediately, including a review of the objectives of the policy and how fair and full access to procurement opportunities by local businesses can be provided without hindering overall economy-wide benefits. The review needs to consider a broader definition of value for money. Moreover, the Australian Industry Group recommends the Victorian Government work with other Australian Governments to develop a national procurement policy.</td>
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<tr>
<td>• the scale and structure of procurement projects are not an unwarranted barrier to the involvement of local SMEs (without undermining the potential benefits from greater certainty and economies of scale)</td>
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<td>• tendering agencies encourage innovation in procurement, and adopt approaches (such as outcome-based specifications) that do not constrain the ability of firms to offer innovative solutions that represent better value for money</td>
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<td>• project requirements, prequalification requirements, tendering rules and contractual conditions are not overly risk-averse, prescriptive, onerous or inconsistent</td>
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<td>• procuring agencies give adequate weight to whole-of-life costs and overseas supply risks in the evaluation of tenders.</td>
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**Draft recommendation 12.3**
To remove unnecessary compliance costs, that the Victorian Government limit the compulsory requirement to prepare a VIPP plan to tenders where competition between local and foreign suppliers is important. In other cases, preparation of a VIPP plan would not be compulsory.

Supported in-principle.

**Draft recommendation 12.4**
That, in light of the findings and recommendations of this inquiry, the Victorian Government and the Industry Capability Network Victoria:
• improve the measurement and performance reporting of the

Supported.
Draft recommendation by VCEC:  

| Victorian Industry Participation Policy. This would include measurement of the compliance costs associated with the VIPP  
| organise training for public sector staff involved in procurement, encompassing the goals and principles of the reformed VIPP. |

Australian Industry Group response:  

| Supported in-principle subject to adequate training for businesses. The recent Auditor General report on the allocation of electronic gaming machine licences highlights the inadequate provision of information and training to businesses participating in the e-auction. |

**Draft recommendation 12.5**  
That the Victorian Government pilot the e-auction approach for an appropriate set of procurement activities, and evaluate the impact on transactions costs, value for money and opportunities for regional suppliers and SMEs.

**Conclusion**

This section has outlined the Australian Industry Group’s policy recommendations for a vibrant and competitive Victorian manufacturing industry and economy more generally. The strategy involves a productivity enhancing agenda that encapsulates policy tools available to the Victorian Government. Action is required now to move the manufacturing industry to a high growth path and enhance the long-term prospects of the Victorian economy.
Section 7: Conclusion

The Victorian manufacturing industry has played a key role in the industrialisation, growth and prosperity of Victoria and continues to do so despite the current challenges associated with longer term structural change, unbalanced growth across the Australian economy and the appreciating exchange rate driven by a historically high terms of trade.

This submission has highlighted the scope and nature of the Victorian manufacturing industry, including its importance to the fabric of the Victorian economy through inter-industry supply linkages. The submission highlights the challenges associated with the high exchange rate and international competition from lower cost economies. It also outlines the opportunities that are present in terms of Victoria’s proximity to the world’s fastest growing region and the potential gains to manufacturing high technology products requiring skills and innovation. This is the future of manufacturing and the Victorian Government does and can play a further role in making this a present day reality to the benefit of Victoria’s economy and long-term prosperity. Taking action on the Australian Industry Group recommendations outlined in this submission is the first step towards that goal.
General equilibrium modeling

The general equilibrium estimates in this submission have been derived using a general equilibrium model adopted from the Monash Multi-Regional Forecasting (MMRF). The model parameters used in this submission are:

- Comparative static simulations with results representing long-run deviations from a business as usual baseline.
- The Australian economy is represented by 18 ‘regions’ – 11 Victorian sub-state regions and the other States and Territories.
- Each region is modelled as an economy in its own right, with region-specific prices, region-specific consumers, region-specific industries, and so on.
- There are four types of representative agents in the model: industries, households, governments and foreigners.
- The sectors in each region can produce a variety of products, and each creates a single type of capital. Capital is sector and region specific.
- In each region, there is a single household and a regional government. There is also a Federal government. Finally, there are foreigners, whose behaviour is summarised by demand curves for regional international exports and supply curves for regional international imports.
- A comparative-static model ‘closure’ is used where exogenous variables include observable variables such as tax rates or unobservable variables such as technology and preference variables. In addition, exogenous variables those that are naturally exogenous in a static model, such as investment by industry and one of the capital stock or rate of return for each industry. In this case a long-run closure is used, implying that capital stocks are endogenous for each industry while the rate of return for each industry is exogenous. Moreover, in this closure wages are endogenous while employment is exogenous.
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