
The Parliament of the Commonwealth of Australia

Australian manufacturing: today and tomorrow

**Inquiry into the state of Australia's manufactured export and
import competing base now and beyond the resources boom**

House of Representatives Standing Committee on Economics, Finance and
Public Administration

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Front cover images

Image of 'ceramic membrane tubes for oxygen generation' by Mr Mark Fergus, supplied by CSIRO, CSIRO Manufacturing and Materials Technology Division.

Images of manufacturing at Austal Ships, Western Australia and at Melba Industries, Victoria, photographed by Mr Andrew Dawson, House of Representatives Media Liaison Officer.



Chair's foreword

As we move through the first decade of the 21st century, in an increasingly globalised market, the nature of manufacturing is changing. How, what and where manufacturing is being undertaken is in flux; in some cases rapidly and quite remarkably.

The composition of manufacturing within developed countries has changed over the past twenty years, in tandem with the growth of services. In most industrialised economies the growth in the manufacturing sector has not matched that of the services sector, an evolution of industrialisation and higher living standards. But what often goes unnoticed is the continued growth in manufactured output and exports. Australia's manufactured exports presently account for around 20 per cent of its total exports—on par with services and agricultural export shares.

Contemporary industrial revolutions in developing countries, in particular China, have left an irrevocable footprint on the developed world's manufacturing trade. China's unprecedented economic growth has manifested itself in a voracious demand for resources. For a mineral rich Australia, this has led to elevated terms of trade and a surge in the value of the Australian dollar since 2003. The appreciating exchange rate consequently reduced the competitiveness of Australia's manufactured exports.

In May 2006, in this context of change, the Treasurer, the Hon Peter Costello MP, referred to the committee an inquiry into 'the state of Australia's manufactured export and import competing base, now and beyond the resources boom'. Within it, the committee was asked to focus on the challenges and opportunities for Australia's manufacturing sector arising from both the resources boom and the expansion in global trade.

The resources boom has been a price-led boom due to world-wide supply shortages. As mining capacity expands and volumes rise, prices will stabilise, but are likely to remain at high levels due to ongoing demand from China and India. The resources boom has therefore reinforced the need for Australian

manufacturers to adopt an alternative competitive strategy to that of price, whilst recognising the importance of production efficiencies. Similarly, protection measures, which were unsupported in evidence, serve only to mask uncompetitiveness.

The committee's primary recommendation is that the Australian Government develops a national manufacturing strategy in response to the sector's current and expected future transformations. In line with this, the committee recommends that manufacturing-oriented federal government programmes are reviewed to improve their relevance and accessibility and to dovetail with the national manufacturing strategy.

Only a few Australian manufacturers will be able to produce solely for the small-scale domestic market. Manufacturers must develop export survival strategies appropriate for their line of production. That may mean producing components off-shore; entering global supply chains within or outside Australia or having certain niche or high-value goods which enable profitable local production. To assist these strategies, the committee has made recommendations to improve the certainty of funding from the export market development grant scheme.

The committee also recommends that the Australian Industry Productivity Centres have a manufacturing focus and are adequately resourced to provide business diagnostics and expert advice to manufacturers across Australia. Importantly, this initiative would incorporate a one-stop-shop manufacturing advisory portal with a focus on providing information on production, process and entrepreneurial developments; forums and key global issues.

New scientific and technology-based industries are producing stand-alone high-tech products. Significantly, frontier manufacturers are also providing an avenue for traditional manufacturers to value-add by utilising new-age applications. However, the committee heard that innovative Australian manufacturers are often confronted with start-up funding difficulties. The committee therefore recommends a number of venture capital reviews to improve data and knowledge of this market in Australia. Likewise, the committee recommends that the design of the research and development tax concession scheme is examined, given that inquiry evidence raised doubts about the effectiveness of concessions in prompting additional research and development activity.

The emerging frontiers of manufacturing are demanding more scientific, electronic, design and environmental expertise. It is therefore vital that Australian students are kept abreast of emerging technologies and that industry and government communicate the opportunities the evolving sector offers. Similarly, the committee encourages post secondary vocational education providers to foster

partnerships with cutting-edge industry to give apprentices access to the latest technology in trade training. The committee also notes that Australian firms should be able to take advantage of CSIRO and university-based research and has recommended the CSIRO receive more funding to employ staff dedicated to manufacturing-based liaison.

In all, the evidence received and examined during the inquiry points to a consolidated yet vibrant and innovative manufacturing sector after the softening of the resources boom. It indicates that with adaptability and creative thinking, there are opportunities for Australian manufacturing to seize in the globalised market.

On behalf of the committee I would like to thank all those individuals and organisations who gave their time to participate in the inquiry.

The Hon Bruce Baird MP
Chair



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Membership of the committee

Chair	Hon Bruce Baird MP	
Deputy Chair	Ms Sharon Bird MP <i>(member of committee from 7/2/07 & Deputy Chair from 1/3/07)</i>	
Members	Mr Steven Ciobo MP	Mr Joel Fitzgibbon MP <i>(member of the committee to 7/2/07)</i>
	Dr Craig Emerson MP <i>(Deputy Chair to 1/3/07)</i>	
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Terms of reference

On 3 May 2006 the Treasurer, the Hon Peter Costello MP, asked the committee to inquire into and report on the state and future directions of Australia's manufactured export and import competing base, focusing on, but not limited to:

- Australia's dominance in commodities exports and the impacts of this on the economy following the resources boom;
- the state of the country's manufacturing sector (and the goods and associated services) including opportunities and challenges from the expansion in global trade (in particular by China); and
- policies for realising these opportunities.



List of abbreviations

A3P	Australian Plantation Products and Paper Industry Council
AATSE	Australian Academy of Technological Sciences & Engineering
ABS	Australian Bureau of Statistics
ACCI	Australian Chamber of Commerce and Industry
ACIS	Automotive Competitiveness and Investment Scheme
ACTU	Australian Council of Trade Unions
AEEMA	Australian Electrical and Electronic Manufacturers' Association
Ai Group	Australian Industry Group
AIPC	Australian Industry Productivity Centres
AMWU	Australian Manufacturing Workers' Union
ANSTO	Australian Nuclear Science and Technology Organisation
ANU	Australian National University
APAF	Australian Proteome Analysis Facility
APEC	Asia-Pacific Economic Cooperation
ATO	Australian Taxation Office
AUSFTA	Australia-US Free Trade Agreement
AusIMM	Australasian Institute of Mining and Metallurgy
BEP	Business Entry Point
BHP	Broken Hill Proprietary
CEO	Chief Executive Officer

CFO	Chief Financial Officer
COAG	Council of Australian Governments
COMET	Commercialising Emerging Technologies (programme)
CR	Commercial Ready (programme)
CRC	Cooperative Research Centre
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFF	Department of Agriculture, Fisheries and Forestry
DCITA	Department of Communications, Information Technology and the Arts
DEST	Department of Education, Science and Training
DEW	Department of the Environment and Water Resources
DEWR	Department of Employment and Workplace Relations
DFAT	Department of Foreign Affairs and Trade
DITR	Department of Industry, Tourism and Resources
DSL	Digital Subscriber Line
DSTO	Defence Science and Technology Organisation
EMDG	Export Market Development Grants (scheme)
ESVCLP	Early Stage Venture Capital Limited Partnership
EU	European Union
FDI	Foreign direct investment
FSF	Foreign Superannuation Fund
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GSP	Gross State Product
GVA	Gross Value Added
HECS	Higher Education Contribution Scheme
IAP	Intermediary Access Programme
IBM	International Business Machines

ICIP	Industry Cooperative Innovation Programme
ICN	Industry Capability Network
ICT	Information and communications technology
IFF	Innovation Investment Fund
IP	Intellectual property
ISO	International Organization for Standardization
KPI	Key Performance Indicator
LM	Lean Manufacturing
MAS	Manufacturing Advisory Service (UK)
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
MEP	Manufacturing Extension Partnership (US)
MIC	Management and Investment Companies (programme)
NIEIR	National Institute of Economic and Industry Research
NIH	National Institutes of Health
NMF	National Manufacturing Forum
NTB	Non-tariff barriers
OECD	Organisation for Economic Cooperation and Development
OH&S	Occupational Health and Safety
OPAL	Open Pool Australian Light-water (reactor)
P3	The Pharmaceutical Partnerships Programme
PC	Productivity Commission
PDF	Pooled Development Funds
PSF	Pre-seed Fund
QMI	Queensland Manufacturing Institute (Solutions Ltd)
R&D	Research and Development
RBA	Reserve Bank of Australia
RMIT	Royal Melbourne Institute of Technology

SAMP	Supplier Access to Major Projects
SIA	Science Industry Australia Inc.
SIP	Strategic Investment Program
SME	Small/Medium Enterprises
TAFE	Technical and Further Education
TCF	Textile, Clothing and Footwear
TCFL	Textile, Clothing, Footwear and Leather
TFIA	Council of Textile and Fashion Industries of Australia Ltd
UK	United Kingdom
US	United States
VCLP	Venture Capital Limited Partnership
VET	Vocational Education and Training



Overview

The future of Australian manufacturing: the committee's view

Based on this inquiry, the committee has formed the view that Australian manufacturing has a strong future beyond the resources boom. For the last two decades, Australian manufacturing has been making the transition from an inward-looking sector producing for a protected domestic market to an outward-looking sector competing in tough international markets. Despite large reductions in protection, the challenge from China and the high exchange rate associated with the resources boom, the Australian manufacturing sector as a whole has managed to survive and expand—albeit not at the rate of the overall economy.

In order to succeed against increasingly intense competition from China and other low-cost manufacturing countries of the region, Australian manufacturing will need to be globally oriented. Some Australian manufacturing activities and businesses will decline or close, but others will expand and new ones will emerge.

What is the optimal policy approach to the manufacturing sector?

The historic debate has been between protectionism and a hands-off, laissez faire approach. Protectionists argued for tariffs and quotas on imports of manufactured goods to insulate local manufacturing from international competition. Laissez faire advocates argued that there should be no government involvement beyond ensuring that markets are free by creating enforceable property rights and preventing anti-competitive behaviour.

During the course of the inquiry, the committee heard no compelling evidence in support of a protectionist approach. As a middle-sized, trade-exposed economy, it is not in Australia's interests to prop-up uncompetitive businesses. As far as the committee is concerned, protectionism belongs to a bygone era; protectionism as a policy approach has failed and should not be revived.

Neither does the committee support a completely *laissez faire* approach of standing back and allowing the market to adjust to life beyond the resources boom. Instead, the committee supports an approach of capacity building.

Building the capacity of the manufacturing and other sectors of the Australian economy involves removing impediments to their growth and correcting for genuine market failure. Avoiding and removing impediments can include maintaining macroeconomic stability; easing skill shortages; reducing overbearing regulation at all government levels; enabling greater access to new technology; providing export marketing assistance and encouraging entry into global supply chains.

Market failure can occur when particular activities generate positive or negative spill-overs. Activities generating positive spill-overs are those that create benefits for the wider community that cannot be fully captured by private businesses responsible for those activities. Classic examples are research and development and education and training. If left totally to the private sector, too little activity producing positive spill-overs would occur. The opposite is true of negative spill-overs, such as air and noise pollution.

A legitimate role for government exists to support activities offering positive spill-overs. This is the basis of government support for research and development, education and training.

As an island continent, Australia can benefit from manufacturing industries that have strategic importance, such as steel making and defence equipment manufacturing. However, these industries need to be efficient and competitive if they are to contribute to national wellbeing.

In summary, the committee does not support protectionism or a totally *laissez faire* approach to industry policy. Instead, it supports capacity building through removing impediments to growth and correcting for genuine market failure.



List of recommendations

3 The role of government in the manufacturing sector

National manufacturing policy

Current industry policy is sector-neutral and does not specifically provide for a manufacturing policy. A manufacturing strategy provides a sector-specific direction for manufacturing. It clearly defines the government's objectives and justifies why support programmes exist. The committee concludes that a national manufacturing policy, which also considers regional issues, would supplement the current broad industry approach.

Recommendation 1

The committee recommends that the Government develops a strategic Australian manufacturing policy, including regional strategies, to supplement existing industry policy.

Action Agenda approach

Action Agendas are the foundation of current industry policy – supplemented by general industry assistance and more targeted assistance programmes. The process appears to build cooperation and trust within industries that participate. However, only those sectors with sufficient resources or viable size can be involved. Industry collaboration through the agenda process appears to be short-lived given that unresolved issues are not always actioned after government facilitation ends.

The Action Agenda strategy has now been in place for a decade with the majority of manufacturing sectors having completed agendas: The committee therefore believes it is time to conduct a review of this 'industry-up' approach to manufacturing policy.

Recommendation 2

The committee recommends that the Government reviews the on-going need for an Industry Action Agenda approach.

Australian Industry Productivity Centres

The committee acknowledges that the new Australian Industry Productivity Centres (AIPC) initiative, modelled on the UK Manufacturing Advisory Service (MAS), will provide manufacturers with the necessary tools to build better business capability and global strategy. However, the committee is concerned that the multi-sector focus of the nascent AIPC may lead to resource dissipation and ultimately make it less relevant to the manufacturing sector. The UK MAS was customised for the needs of an evolving manufacturing sector—and this fit-for-purpose approach seems to be the key to its success. The AIPC should also forge links with the existing state-based manufacturing advisory agencies. This will ensure the national strategy takes account of regional issues.

Recommendation 3

The committee recommends that the Australian Industry Productivity Centres initiative be finetuned to ensure that:

- akin to the UK Manufacturing Advisory Service it maintains a manufacturing focus so as not to dissipate resources;
- it is well promoted and easily accessible;
- Australian regions are sufficiently resourced and that there is one centre in every large manufacturing region;
- there is appropriate liaison with state-based manufacturing advisory agencies.

Jurisdictional regulatory over-lap

Overlapping regulations at the local, state and federal government levels continue to create unnecessary compliance burdens for manufacturing businesses. Where possible, compliance reporting requirements and timing of information returns for jurisdictions should be identical. The committee heard the most evidence about lack of coordination between federal and state/territory occupational and health and safety standards and how this created an unnecessary impost on manufacturing businesses.

Recommendation 4

The committee recommends that through the Council of Australian Governments (COAG), the States, Territories and the Commonwealth harmonise standards particularly in regard to occupational health and safety issues such that compliance and regulatory burdens for manufacturers are reduced, without compromising safety standards.

4 Manufacturing strategies — mixing the old with the new

Benchmarking to world's best practice

The committee supports 'benchmarking' and the use of diagnostic audits and various management tools to improve business weaknesses identified through it. Firms analysing their deficiencies is a positive step towards productivity and efficiency gains. The committee therefore endorses the diagnostic analysis that the Australian Industry Productivity Centres are proposing to offer and hopes that small to medium enterprises will be exposed to well-founded manufacturing-based methodologies suitable for their business type.

Recommendation 5

The committee regards benchmarking as a vital activity of the nascent Australian Industry Productivity Centres and recommends that the Government ensure the Centres are adequately resourced to provide this service to a wide range of companies across Australia.

Export Market Development Grants scheme

The main government support for exporting is the Export Market Development Grants (EMDG) scheme.

A problem with the EMDG scheme is that even applicants with strong applications are not sure how much they will be reimbursed when they are deciding on promotion spending, which limits the incentive the scheme provides to undertake additional marketing. The suggestion to allow a smoothing arrangement whereby unspent scheme monies could be carried over into future years would reduce this uncertainty. Increasing the budgeted amount for the scheme would reduce the uncertainty further, by increasing the probability that eligible applicants would receive their reimbursement even in years with high demand.

Recommendation 6

The committee recommends that the Government increase the amount budgeted for the Export Market Development Grants programme each year and, in line with a recent Austrade review, allow the carry forward of any unspent budgeted funding to be used in future programme years of high applicant demand.

5 Developing and funding emerging manufacturing

Australian synchrotron

Nanotechnology offers great scope for both improving traditional manufacturing processes and developing new manufacturing industries. The Australian Synchrotron is an important facility for nanotechnology (and has broader uses). It will bring national benefits. It is noted that, around the world, synchrotrons are substantially funded by governments, partly due to their high cost and use in basic research. It is important that the Australian synchrotron be placed on a sound financial footing.

Recommendation 7

The committee recommends that the Australian Government commits to annual direct funding of the Australian Synchrotron given its importance to manufacturing innovation through cutting-edge research.

Venture capital

The committee notes claims that innovative manufacturing is being held back by an underdeveloped venture capital market in Australia, meaning that viable projects are not being funded. However, on the information currently publicly available, it is hard to assess this. More information is therefore required.

Recommendation 8

The committee recommends that the Australian Bureau of Statistics, in conjunction with the Australian Taxation Office and the Department of Industry, Tourism and Resources, improve the available data on venture capital, including by distinguishing better between venture capital and other forms of private equity, and compiling performance data.

Recommendation 9

The committee recommends that an inter-departmental working party, headed by the Department of the Prime Minister and Cabinet, report publicly on the issue of whether there are market failures hindering the development of the venture capital industry. The report of, and submissions received by, the Venture Capital Industry Review, should be made available to this working party and be allowed to be cited in their report.

If, in the light of this further study, it is concluded that the venture capital market is unduly limited in Australia, it would be worth examining the available tax concessions. These appear to ‘reward’ successful investors and ‘punish’ the unsuccessful, which may be reinforcing rather than offsetting any tendency towards investors being unduly risk averse.

Recommendation 10

The committee recommends that the Department of Industry, Tourism and Resources and the Treasury prepare a paper outlining the implications, including cost, of allowing participants in the Venture Capital Limited Partnership and Early Stage Venture Capital Limited Partnership schemes to deduct losses in these schemes against other income.

Regardless of whether substantial changes are deemed necessary to the venture capital tax concessions, the existing schemes are unduly complicated and lack criteria for judging their success.

Recommendation 11

The committee recommends that the venture capital tax concession schemes – such as the Venture Capital Limited Partnership scheme and the Early Stage Venture Capital Limited Partnership scheme – be merged and simplified, and clear objectives set.

Another possible impediment to new companies accessing venture capital is a lack of knowledge about how and where to obtain it. The nascent Australian Industry Productivity Centres could play a role here.

Recommendation 12

The committee recommends that the Australian Industry Productivity Centres ensure they have adequate information about venture capital funds to assist new manufacturers in accessing this source of funding.

6 Manufacturing careers and training

Image of manufacturing employment

Difficulties in attracting new employees to fill skills shortages in manufacturing are exacerbated by the sector's poor public image. Whilst the committee recognises that some old-style manufacturing industries remain, there may be insufficient community awareness of the many manufacturers offering attractive and increasingly interesting working environments.

Recommendation 13

The committee recommends that the manufacturing industry, with the support of the Australian Government, develop a coordinated communications strategy for promoting the career opportunities in manufacturing, especially in innovative, knowledge based manufacture.

Science and technology education

Good quality science education is critical for the future growth and development of Australia's innovation and manufacturing sectors. It is of great concern, therefore, that science education is experiencing a decline in Australia – in terms of secondary and tertiary student uptake, quality of teaching and relevance of curricula.

The committee notes the importance of practical and interesting (not just 'core') primary and secondary curricula that engage students, equip them with up-to-date science and mathematics skills, and encourage the pursuit of science and innovation related careers. However, such curricula must be backed by adequate resources and appropriate teacher training.

Recommendation 14

The committee recommends that the Ministerial Council on Education, Employment, Training and Youth Affairs consider the necessary resources provision and teacher training needs to introduce updated primary and secondary school science curricula with a focus on practical and up-to-date information about emerging technologies.

Industry–TAFE technology and skills exchange

The committee notes the importance of three-way training partnerships between individuals/schools, educators and industry. The success stories it heard in evidence involved TAFE brokering training partnerships with industry—to harness up-to-date equipment and to gain an understanding of skills that trainees require for the workplace. In addition, group training organisations should be mindful of exposing apprentices to technologically advanced equipment by ensuring a good spread of host employers are involved in the scheme.

Recommendation 15

The committee recommends that post secondary vocational education providers continue to seek out opportunities to form training partnerships with companies that own costly state-of-the-art equipment—to give apprentices access to the latest technology and maintain the skills of TAFE trainers.

7 Business engagement with researchers

CSIRO

While the committee commends CSIRO for the steps it has taken to improve its liaison with business, more needs to be done to ensure Australian firms are able to take full advantage of CSIRO's research.

Recommendation 16

The committee recommends that CSIRO receive additional funding to employ more staff dedicated to liaising with individual (especially small and medium-sized) businesses, business organisations and the new Australian Industry Productivity Centres. The liaison officers should inform potential partners of relevant work within CSIRO and seek information on possible future CSIRO work that could lead to developing new products and processes useful to Australian manufacturers.

Universities

While the primary focus of university research should remain independent basic research to push out the frontiers of knowledge, there is scope for better cooperation between universities and industry. In some cases this might lead to university researchers doing more applied work with more obvious commercial applications. In some cases they might learn from the experience of TAFEs in working with industry. However, universities should not be placed under funding pressure so that they feel a need to undertake commercial research to fund basic research and teaching.

Recommendation 17

The committee urges universities to consider appointing more 'industry liaison officers' to facilitate contacts between universities and local industry (including via the new Australian Industry Productivity Centres). They could look for opportunities to share equipment and arrange short-term secondments in both directions.

8 Innovation and research and development

Research and development

The committee accepts that fundamental research which benefits the broader economy, rather than just the company undertaking it, may be undersupplied in the free market so there is a case for government support. This can be provided through a competitive grants scheme along the lines of Commercial Ready. The scheme should focus on R&D with wide benefits that would not be undertaken otherwise. It need not be limited to smaller enterprises, although they may often better fit these criteria. Consideration should be given to making contingent loans as well as grants, as this will replenish the available funds and so allow more encouragement for R&D. The scheme should be simple for firms to access, with straightforward compliance requirements.

Recommendation 18

The committee recommends that successful Commercialising Emerging Technologies (COMET) and Commercial Ready grant applicants are linked up with the CSIRO to foster better industry applied research at the small to medium manufacturing level.

Research and development tax concessions

There are doubts about the extent to which the existing R&D tax concessions are effectively inducing additional R&D, especially given the reduction in the company tax rate. The concessions may not be the optimal form of incentive. Replacing the concessions with increased grants would allow for a more targeted approach, although grants may have disadvantages, such as administrative costs and risks of favouritism.

The committee recognises that there may be benefits to Australia from conducting R&D here, even if the intellectual property rights are held offshore. R&D and design activities, rather than production, will increasingly form the basis for Australia's involvement in global manufacturing. The committee commends the recent decision to allow companies holding intellectual property offshore access to the 175 per cent premium concession and believes the same argument is applicable to the standard 125 per cent scheme.

Recommendation 19

The committee recommends that the design of the R&D tax concession scheme be examined in the light of the recent report by the Productivity Commission and the evidence assembled in this inquiry. The examination should include the eligibility rules, in particular the extent to which foreign-owned companies conducting R&D in Australia are able to benefit from the concession.

If such an examination leads to the R&D tax concession being reduced then the funds saved should be used for increased grants where a convincing case can be made for them.

9 Government assistance to manufacturing

Improving assistance programmes

Many grant programmes relevant to the manufacturing sector are of a similar nature and could be streamlined. Business confidence in support programmes is lost when eligibility criteria and processes are changed frequently.

Assistance programmes should be presented within an overarching manufacturing strategy. This would make it easier for manufacturers to determine what industry programmes best fit their circumstance. This approach provides manufacturing sector relevance to general industry programmes; thus limiting the growth in programmes.

The Committee accepts that merit-based grants require a high degree of transparency and accountability – but should not unduly interfere in the operation of businesses. Grant programmes which require laborious ex-post evaluations should instead introduce a staged funding approach which would align with business milestones.

Recommendation 20

The committee recommends that the Department of Industry, Tourism and Resources review assistance programmes with a view to:

- rationalisation, simplification and programme stability;
- dovetailing programmes into a manufacturing sector strategic approach; and
- conducting grant programmes in consecutive stages where evaluation of outcomes is more readily apparent.

A stand-alone manufacturing portal

It is not easy for manufacturers to access manufacturing specific policy information. The Committee therefore recognised a need for a manufacturing webpage on the Department of Industry, Tourism and Resources web site with a link to a stand-alone, user-friendly manufacturing portal.

The portal would support the manufacturing-based Australian Industry Productivity Centres network, offering a comprehensive resource for manufacturers, beyond programme information. Clear home page links to Austrade, Invest Australia, Industry Capability Network, Business Entry Point and the Export Hub should be on this site. The UK's Manufacturing Advisory

Service portal and the US's Manufacturing Extension Partnership portal both have good features that could be used as models for site development.

Recommendation 21

The committee recommends that a dedicated manufacturing advisory portal be developed as the internet face of the manufacturing-based Australian Industry Productivity Centres, linking to a manufacturing webpage on the Department of Industry, Tourism and Resources website. Features of this would include:

- streamlining of other information portals so there is a one-stop-shop for the manufacturing sector;
- prominent home page links to the industry agencies and the generic 'business entry point' and 'export hub';
- an on-line venture capital information service; and
- a focus on sector specific issues beyond assistance programme advice including information on production, process and entrepreneurial developments; forums and key global issues.

