Plastics and Chemicals Industries Association

Submission to the Productivity Commission Inquiry into Australia’s Anti-Dumping and Countervailing System

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# Plastics and Chemicals Industries Association

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1. Executive Summary

The Plastics and Chemicals Industries Association (PACIA) welcomes the opportunity to make a submission to the Productivity Commission Inquiry into Australia’s Anti-Dumping and Countervailing System.

The sectors are strategically important to the Australian economy and PACIA would be concerned if any policy changes were taken that could materially threaten their ongoing commercial viability.

As such, PACIA takes the following position in relation to anti-dumping and countervailing measures:

1. PACIA strongly supports Australia maintaining an effective and accessible anti-dumping regime;
   - The industry is happy to compete with "fair competition" imports,
   - The current system is consistent with WTO rules and obligations and what Australia’s trading partners have access to,
   - Industry needs confidence and certainty alongside investment decisions and competition for capital,
   - The system needs to be accessible, user friendly and cost effective for all market participants, in particular small-to-medium enterprises.

2. The structure of the current system is generally workable. In recent years there have been improvements; however, there is still some work to do. PACIA sees a range of areas where the operation of the current system can be further improved:
   - Improve resourcing and expertise of Operations unit staff,
   - Improve access and cost effectiveness for smaller enterprises,
   - Improve speed of process (needs to be balanced against thorough investigation,
   - Better access to market information.

3. PACIA believes Customs remains the best and most logical home due to its expertise and existing infrastructure. PACIA does not support it going into Treasury or the ACCC.

4. PACIA does not support a National Interest or Economy-Wide Benefits Test or other alternative approach.
2. Introduction
The Plastics and Chemicals Industries Association (PACIA) welcomes the opportunity to make a submission to the Productivity Commission Inquiry into Australia’s Anti-Dumping and Countervailing System.

PACIA is the peak national body representing the Australian chemicals and plastics sector. Turnover in these sectors is approximately $32.5 billion, industry value added $9.6 billion and wages and salaries $4.7 billion. Employment in the sectors is about 85,000 people directly. The chemicals and plastics sectors represent between 9 and 10 per cent of total Australian manufacturing activity.

This submission focuses on:
- the strategic importance of the Australian chemicals and plastics industries and the risks associated with potential loss of these sectors to the Australian economy;
- anti-dumping and countervailing measures in the context of these sectors; and
- PACIA’s position on anti-dumping and countervailing measures.

2.1. The Strategic Importance of the Chemicals and Plastics Industries
The Australian chemicals and plastics industries are strategically important to the Australian economy, as discussed at Section 2.1.

Attachment 1 shows:
- Subsectors, industries and products framework of Australian Chemicals and Plastics
- Illustrative guide to the strategic value of the Chemicals and Plastics industries.

The plastics and chemicals industries, their supply chain relationships, R&D and skilled workforce are central to Australia’s current high income economy and in particular, to attaining an environmentally sustainable future.

In 2006, the Victorian Government’s Department of Innovation, Industry and Regional Development together with PACIA and ACCORD commissioned Professor Brain and the National Institute of Economic and Industry Research to analyse the current contribution and future challenges and opportunities for the plastics and chemicals industries. It should be noted that this Report was produced before the current Emissions Trading Scheme and suite of transition measures were proposed. Nevertheless, the resulting ‘Report on the Economic and Social Contribution of the Plastics and chemical Industries to Victoria and Australia’ (The Brain Report) produced a number of Strategic Imperatives that are invaluable to the Commonwealth Government in its consideration of how to configure our transition to an environmentally sustainable, viable economy. Pertinent findings are included below. Also included here are some observations on current and future trends toward sustainable plastics and chemicals to an environmentally sustainable future.

The independent Brain Report found in Victoria alone that ‘given the scale of [existing] chemical production, the chemicals sector is one of the most important drivers of Victorian economic activity’. Indeed,

“in 2004 the chemicals sector was directly or indirectly responsible for 7.3 per cent of total Victorian economic activity, as measured by gross State product, and directly or indirectly created 124,000 Victorian employment positions.”
The level of economic activity increases to ‘9.1 per cent when account is taken of the productivity enhancing/cost saving benefits the chemicals sector generates for other sectors in the Victorian economy’.

In other words, Victoria’s domestic chemicals sector is not only an important sector in its own right, it has a multiplier effect in productivity and cost saving benefits to the broader economy that would be foregone if sections of the chemicals sector moved off shore.

Care needs to be taken in devising a transition path to a sustainable future that supports the retention and growth of the plastics and chemicals industries. The Brain Report ranks the chemicals industry’s strategic value as follows:

- Equal to the motor vehicles industry
- 1.5 times the contribution of the tourism industry
- 3 times the contribution of the mining industry
- Slightly less than the contribution of the food industry.

The independent Brain Report emphatically states:

> Recognition by policy makers and external stakeholders of the chemical sector’s economic and social contribution is crucial to future industry policy. In many ways the relationships that exist between the chemical sector and broader manufacturing exemplify the importance of ensuring a critical mass. There is little doubt that without a healthy local chemical sector, Australian manufacturing would suffer significant losses in research and development contribution and innovation capabilities and enablers; two essential ingredients to future sustainability of manufacturing.

2.2. Contributions by the plastics and chemicals industries to environmentally sustainable industries in Australia and overseas

The remarkable advances in the science of plastics and chemicals, their versatility, availability, and cost-effectiveness means they are becoming substitutes for other more expensive and scarce materials. They are already an intrinsic part of our daily lives. The flexibility and strength of plastics mean they can be formed and reformed, with multiple uses and multiple lives. They can be bonded and combined with natural materials such as cloth, paper and metals and completely synthetically produced.

Plastics and chemicals were the defining marker for the 20th century and present the biggest lever for a sustainable 21st century.

As such, plastics and chemicals have a key role to play in finding sustainable solutions to many of the world’s challenges, including climate change. Some areas are outlined below.

1. **Energy shortages**: plastics and chemicals can help alleviate the looming energy crisis in these ways:
   - improving the energy efficiency of buildings i.e. insulation, lighter materials, composites in construction and fittings
   - contributing to the efficiency of renewable energy sources i.e. materials in the manufacture of wind turbines, solar panels and installation equipment, piping for geothermal systems, fuel cells and hydrogen production and storage
   - contributing to digital communications, enabling miniaturization and portability
• products at end-of-life unable to be mechanically recycled have significant residual energy and are able to be diverted from current landfills and contribute energy generation opportunities.

At a global level, in 2008, BASF published a carbon balance study. This contrasts the CO\textsubscript{2} emission-savings that are achieved with their products and procedures with the emissions from raw material extraction, production and product disposal. The results, that have been confirmed by the Öko-Institut in Freiburg (Germany) show that BASF products can save three times more greenhouse gas emissions than the entire amount caused by the production and disposal of all these products (Source: Factor 3: BASF’s climate Balance, website: www.corporate.basf.com)

2. Food production and storage: plastics and chemicals can help in these ways:
• Plastics account for only 16% of packaging by weight and protect over 50% of consumer goods (PACIA)
• Extending the shelf-life of goods and other perishables, contributing to net savings of product, materials and resources
• Green, bio-packaging for the growing, storage and transport of food and products from greenhouses to aquaculture
• Crop protection products can sustain agriculture in drought conditions and support low tilling practices
• Transport and treatment of water that is consistent quality and fit for purpose.

3. Materials shortages: plastics and chemicals can help in these ways:
• Australia has reasonable levels of plastics and chemicals recycling and this is increasing, meaning products have more than one life
• Durability and recyclability – some plastics and chemicals are inert, meaning they endure and can be recycled many times. A 2001 independent study by the RMIT Centre for Design reported an 80% saving for making a Kg of plastic packaging from recycled feedstock compared with virgin sources. (Source: Stage 2 report for Life Cycle Assessment for Paper and Packaging Waste Management Scenarios in Victoria, January 2001)
• Degradability - others biodegrade, meaning they compost or dissolve
• In some cases the next available material to plastics can consume more energy and resources to manufacture

A recent, independent study commissioned by Plastics Europe, the pan-European Association, found that the total life-cycle energy needed to produce, use and recover plastic products in Western Europe is 3.900 Mill GJ/a and the total life-cycle GHG emissions are 172 Mt/a. Furthermore the results show that substitution of plastic products up to a maximum would need 600 - 1.400 Mill GJ/a more energy (or about 26% more energy) than needed in the total life-cycle of all plastic products today. In the same way, substitution of plastic products up to a maximum would cause 58 - 135 Mt or about 56% more GHG emissions than the total life-cycle of all plastic products today. (Source: Plastics Europe: GUA – the Contribution of Plastic Products to Resource Efficiency)
4. **Technical advancement:** plastics and chemicals can help in these ways:

- Nanotechnology opens up possibilities in composite materials for medical treatments such as heart devices and self-healing polymers, in domestic goods, telecommunications, smart clothing and paints etc.
- Sustainable cleaning and hygiene products contribute to reduced energy and water consumption, water reuse.
- A local manufacture capability is the technology and knowledge cornerstone for managing the materials and products at end-of-life.

2.3. **The trade exposure of Australian Chemicals and Plastics**

Trade in plastics and chemicals is truly global, with over 80 countries reporting an industry with a turnover of more than $US1bn. Commodity polymers are now traded on the London Metals Exchange.

As a consequence of the structure and size of the Australian market for chemicals, and freight costs from Australia, the chemicals sector in Australia is typically import replacement focused. Local producers lack the scale and economies of plants in other producer countries, but reliable, low-cost energy, comparatively lower capital costs (on depreciated plant) and production flexibilities that meet demands from local customers for low-volume, specialised products enable Australian companies to remain competitive in their own market.

Most of the growth in world chemicals productive capacity in recent years has occurred in Asia. In the past 15 years, Asia (other than Japan) has doubled its share of global chemicals production to one quarter of the total. As a consequence, Australian producers are particularly exposed to low-cost competition and the fluctuations of world markets, including extended periods of depressed prices.

The Australian chemicals and plastics industry is the world’s 21st largest producer. Five of the world’s current top 10 producers are from countries that do not have emission obligations, including the China and India. The largest growth area in the industry is in Asia and the Middle East.

Trade Data is shown at Attachment 2.
3. Anti-Dumping and Countervailing measures in the context of the Australian Chemicals and Plastics Industries

The chemicals and plastics sectors in the Asia region have experienced significant growth in over the past few decades, and this growth is expected to continue as the countries in the region expand and develop their industrial bases.

Developments in technology has seen the size of many plants in the chemicals and petrochemical areas increase - in some cases to operating capacities that are several times larger than the plants of only 10 and 20 years ago.

While this new technology offers potential for reducing costs, it creates some significant issues for the Australian industry. In many cases, the size of modern plants is larger - significantly larger - than Australia's domestic market, and capital development costs, transport and other costs make investment at this level impractical, particularly where volume throughput relied on competitive export markets.

There are, and will continue to be, product areas where Australian plastics and chemicals sectors can compete internationally, and even remain a significant and technically advanced influence in world markets. However, for the major part of these industry sectors, the outlook is that it will remain essentially an import replacement capacity focused on the domestic market, where market proximity, client service and comparatively low asset costs of aged plant offset the economies of larger modern plants.

Markets and prices for major chemicals and feedstock are volatile, with both prices and supply volumes fluctuating significantly due to economic cycles and market influences. Markets are also influenced by the large-scale and high fixed cost structures of these sectors - at times of surplus capacity, producers will seek to scale back or even idle operations, but there is inevitable price depression. As new plants are commissioned they represent a significant part of world supply, and each new plant can lead to surpluses and significant medium term price reductions.

The Australian chemicals and plastics market is comparatively small, but open and competitive. Notwithstanding the limits to their capacity to utilise latest technology and expand, and the inherent volatility of the market, these sectors believe they can continue to serve the domestic market at very low or zero rates of import duty.

Nevertheless, they are particularly susceptible to the market volatility described above. New capacity, especially in the Asia region, or a relatively modest reduction in global demand can generate surplus capacity and stock that are large in size relative to the Australian market. Local producers have no alternative but to seek to match world prices, as they too do not have the capacity to scale back production and maintain profitability.

Presence in the market, access to low-cost energy and feedstock sources, improved productivity of existing plant and the capacity to survive the slumps of a volatile market are, however, all crucial to survival.
3.1. Anti-Dumping and Countervailing Duties

PACIA has consistently argued that Australia should maintain and preserve the rights of Australian industry in relation to safeguards, particularly, the capacity to take anti-dumping and/or countervailing action in accordance with the existing rights under World Trade Organisation Agreements.

As the international context for the chemicals and plastics sectors, outlined above, indicates ‘Intermittent Dumping’ is a major concern. PACIA is concerned that this term could be construed as an occasional event, something that might occur from time to time. However, as the global and regional trading context outlined above shows, dumping resulting from over supply or troughs in economic cycles can last for extended periods often years.

For the past few decades, intermittent dumping as described has been a major influence on the chemicals and plastics sectors. It has been the basis of most of the dumping measures these sectors have sought. Global supply capacity and price fluctuations will continue to have a major impact on profitability and activity in the chemicals and plastics sectors generally, and it is important that anti-dumping remedies provide a timely and effective remedy where injury occurs. The existence of remedies provided for by the World Trade Organisation, and their increasingly widespread use, has an important impact in maintaining a degree of price and market stability.
4. PACIA Position on Anti-Dumping and Countervailing Measures

PACIA strongly supports Australia maintaining an effective and accessible anti-dumping regime

Measures to support free and fair trade are not peculiar to Australia, but rather part of a broader global effort to support competitive markets. As noted in the Productivity Commission’s Issues Paper:

“Australia’s Anti-Dumping system is based on internationally agreed rules and procedures under the auspices of the World Trade Organisation (WTO). Nearly all other developed, and many developing countries have anti-dumping regimes. Hence, the objectives and broad concepts underpinning Australia’s system gave widespread endorsement.” (p6)

It would therefore be quite peculiar if Australia did not maintain a similar, consistent approach to that agreed under the WTO with the likelihood being that Australia would in fact become a greater target for dumping. The current system is consistent with WTO rules and obligations and what Australia’s trading partners have access to.

The Australian chemicals and plastics industry is happy to compete with “fair competition” imports, but the industry needs confidence and certainty alongside investment decisions and competition for capital. The need for an effective anti-dumping system is especially important in an environment where Australia continues to open up its markets through the reduction of tariffs through its bilateral and plurilateral negotiations and agreements.

The Australian chemicals and plastics industries remain the largest users of the anti-dumping provisions. This is unsurprising given the size of trade in these sectors, but also the sheer diversity in product. Although there has been a decline in anti-dumping cases in recent years, this should not be viewed as the system losing relevance or importance. Rather, it is more reflective of some deficiencies in the system (such as the cost of undertaking a case), along with both contraction and consolidation in local Australian manufacturing.

As discussed in section 2, the chemicals and plastics industries are of vital strategic importance to the Australian economy given its links to almost every sector in the economy. Maintaining the supply chain in Australia is critical to Australia’s ongoing economic prosperity. A break in the chain, or indeed shortfalls in timely supply from Australian manufacturers, has consequences for other sectors. PACIA would be highly concerned if the current safeguards were removed potentially threatening the ongoing viability of local manufacture. Experience has shown that where short term views are taken in this area, the longer term result has been higher prices. While PACIA does not argue against the benefit of lower prices, these prices must be relatively stable long term prices achieved through competitive markets, not through short term or intermittent dumping activity.

As such, PACIA considers that it is vital for its members to be able to access a robust efficient and effective system to address dumped goods into the Australian economy that is consistent with the agreed provision under the WTO.
The structure of the current system is generally workable, but PACIA sees a range of areas where the operation of the current system can be further improved

Although PACIA’s members strongly support maintaining an effective anti-dumping system, there is a wide diversity of views among the membership about how the system could be improved. Clearly, there are a number of technical changes to the system that could be made, ranging from the application process through to the review/continuation process.

However, there is little doubt that all participants agree that the system needs to be accessible, user friendly and cost effective for all market participants and in particular small customers. The current costs associated with pursuing a case have meant that smaller players are unlikely to have initiated action. The necessity to engage consultants at significant cost, along with the lengthy time from initiation to conclusion has acted as a disincentive.

Greater resources also need to be provided to Customs to ensure the appropriate expertise is available. This expertise could be brought in on a case by case basis, but it is vital that those dealing with the case need to have greater sectoral/industry specific knowledge, preferably with expertise in business and markets. PACIA is also of the view that Australia’s extensive international network, in particular our diplomatic posts, could have a greater role in assisting affected companies.

A critical ingredient to effective competition is undoubtedly access to clear, consistent and transparent information. This has been evidenced in numerous markets, be they energy or global commodity markets. Unfortunately, it has become all too easy for the Australian Bureau of Statistics (ABS) to suppress vital market information on confidentiality grounds. The suppression of this data restricts the capacity of participants to not only understand the volumes or prices in markets and to make informed investment decisions, but to pursue action where there is suspicion that injurious behaviour is occurring.

PACIA believes customs remains the best and most logical home for anti-dumping

PACIA does not support administration and operation of the anti-dumping system going into either Treasury or the ACCC. Although as noted above greater resources could be provided to Customs, we remain firmly of the view that the experience and existing infrastructure within Customs makes it the most appropriate agency in this area.

PACIA does not support a National Interest or Economy-Wide Benefits Test or other alternative approach

The Association has significant concerns with the proposal to include a test for economy wide impacts. The system is already costly and time consuming and such a test would merely add more complexity and uncertainty to the system.

PACICA was concerned to read in the Issues Paper that the “effects and ensuing impacts on the various stakeholders are similar to those that result from tariffs and other measures which raise the price of imports”. This is simply not the case. Dumping provisions are not about price protection, or indeed about artificially inflating prices. Rather, they are about correcting injurious (often short term beneficial) behaviour and where imports are unfairly priced, industry is entitled to remedy.

As noted above, a long term view, along with the broader economy benefits provided by a sector, needs to be considered when assessing the costs and benefits of the anti-dumping system. PACIA is concerned that such a test would simply result in an examination of the
lowest possible product cost at any given time without taking into consideration the benefits of reliable supply throughout the supply chain.

Similarly, a national interest test must introduce a degree of subjectivity as such things are not immediately measurable or tangible. Experience has shown that while lower prices may deliver a short term benefit, markets and prices are inherently cyclical and over the longer term prices have ultimately been higher. There are a number of clear questions that must be addressed if such a test were to be introduced:

- How is “interest” defined?
- Is the community’s interest only in short term prices?
- How is reliability, coupled with on-specification of supply, to be factored over the longer term?
- How could this be objectively measured?
- Who adjudicates over the process?
- Would the test be open to political interference?

PACIA would need to be convinced that these questions could be answered before such a test could be contemplated. We would also need to be convinced that its inclusion to the process could be done in a timely manner as further delays simply add to the potential injury.

PACIA also has believes that a proposal to addressing dumping through competition policy is fundamentally flawed. While in broad terms both dumping policy and competition policy are compatible, the focus of each is different. The former is about industry activity and practice within global market whereas the latter is focused on domestic competition where the consumer benefit is central. As such, PACIA would see the two approaches sitting side by side.
## 5. Attachment 1: Australian Chemicals and Plastics Industries

### 5.1. Subsectors, industries and products framework of Australian Chemicals

<table>
<thead>
<tr>
<th>Sub-sectors</th>
<th>Industries</th>
<th>Principle products</th>
<th>Production and product characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic chemical sub-sector</td>
<td>Fertilizer manufacturing</td>
<td>Ammonia (fertilizer), ammonium nitrate, ammonium phosphate, superphosphate, urea, fertilizers (fishmeal, potash, etc.)</td>
<td>• Capital intensive – relatively large scale enterprises.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acetylene gas, carbon dioxide, carbon monoxide, hydrogen, nitrogen, oxygen.</td>
<td>• High volume – importance of economies of scale for competitiveness.</td>
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<tr>
<td></td>
<td>Synthetic resin</td>
<td>Plastic raw materials, polyethylene, polypropylene, polystyrene, polyvinyl chloride, synthetic rubber, etc.</td>
<td>• Low degree of product differentiation – many products, commodities.</td>
</tr>
<tr>
<td></td>
<td>Organic industrial chemicals</td>
<td>Organic acids, dye base, phenol, pigment, styrene, urea (high grade), vinyl chloride.</td>
<td>• High barriers to entry.</td>
</tr>
<tr>
<td></td>
<td>Inorganic industrial chemical manufacturing</td>
<td>Chlorine, fluoride, acids (nitric, hydrochloric, phosphoric, sulphuric), sodium (bicarbonate, carbonate, hydroxide), zinc oxide.</td>
<td></td>
</tr>
<tr>
<td>Knowledge products sub-sector</td>
<td>Medicinal and pharmaceutical products</td>
<td>Antibacterial products, antibiotic products, medical gas, ointments, toxins, vaccines, vitamins.</td>
<td>• Very high degree of differentiation between products.</td>
</tr>
<tr>
<td></td>
<td>Cosmetics and toiletry products</td>
<td>Face, hand or skin lotions or creams, deodorants, hair shampoos and conditioners, nail polish, sunscreen, perfume, lipstick.</td>
<td>• Products focused on delivering specific outcomes for humans, animals, plants, etc.</td>
</tr>
<tr>
<td></td>
<td>Soap and other detergents</td>
<td>Detergents, soaps, disinfectants, laundry bleach, toothpaste, washing powders or liquids.</td>
<td>• Sustained innovation necessary for continued competitiveness.</td>
</tr>
<tr>
<td></td>
<td>Pesticide manufacturing</td>
<td>Dip, fly spray, fungicide, insecticides, insect repellants, animal poisons, weed killer.</td>
<td>• High levels of R&amp;D and marketing expenditures.</td>
</tr>
<tr>
<td>Specialty products sub-sector</td>
<td>Explosives</td>
<td>Dynamite, blasting powder, fuses.</td>
<td>• High degree of product differentiation.</td>
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<td></td>
<td>Paints</td>
<td>Paint, putty, stains, primers, fillers.</td>
<td>• Flexible manufacturing techniques can be employed for economic, relatively low production runs.</td>
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<td></td>
<td>Rubber product manufacturing</td>
<td>Boots, erasers, gloves, hoses, mattresses, sheething, sponges, washers, water bottles.</td>
<td>• Medium levels of R&amp;D and marketing expenditures.</td>
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<tr>
<td></td>
<td>Rubber tyres</td>
<td>Motor vehicle tyres, tubes, retreads.</td>
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<tr>
<td></td>
<td>Plastic blow moulded products</td>
<td>Bottles.</td>
<td></td>
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<tr>
<td></td>
<td>Plastic extruded products</td>
<td>Hoses, pipes.</td>
<td></td>
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<tr>
<td></td>
<td>Plastic bags and film manufacture</td>
<td>Bags, food wrapping, film, garbage bags.</td>
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<tr>
<td></td>
<td>Plastic product, rigid fibre reinforced products</td>
<td>Automotive components, rigid plastic sheets, swimming pools, water tanks.</td>
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<td>Plastic foam products</td>
<td>Fast food containers, foam padding.</td>
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<td>Plastic injection moulded products</td>
<td>Buckets, garbage bins, plastic kitchenware, floor coverings.</td>
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<td></td>
<td>Ink products</td>
<td>Writing, drawing or printing ink.</td>
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<td></td>
<td>Other chemical products</td>
<td>Antifreeze, adhesives, glues, dry cleaning components, removers (rust, stain, fat), surface cleaners.</td>
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</tbody>
</table>

Source: Brain Report, 2006
5.2. *Strategic Value of the Chemicals and Plastics Industry*

**Figure 1: The chemicals sector produces products used by all sectors of the economy**

Source: Brain Report, 2006
6. Attachment 2: Chemicals and Plastics Trade Data

6.1. Balance of Trade in Chemicals and Plastics

![Graph showing balance of trade in chemicals and plastics from 1990-1991 to 2005-2006. The graph indicates a decrease in the millions of dollars, with the trade balance going from -$12,000 in 1990-1991 to -$12,000 in 2005-2006.]

Source: Australian Bureau of Statistics
6.2. Imports and Exports by Region

**Australian Imports by Region 2005-06**

- **Other**: $3,344,485,740 (23%)
- **EU**: $3,215,018,641 (22%)
- **APEC**: $3,139,444,655 (55%)

Source: Australian Bureau of Statistics

**Australian Exports by Region**

- **Other**: $789,578,204 (21%)
- **EU**: $352,802,203 (10%)
- **APEC**: $2,592,218,314 (69%)

Source: Australian Bureau of Statistics
6.3. **Top 20 Sources of Imports and Export Destinations**

**Top 20 Sources of Imports 2005-06**

<table>
<thead>
<tr>
<th>Value (FOB) $m</th>
<th>United States of America</th>
<th>China</th>
<th>Japan</th>
<th>Germany</th>
<th>New Zealand</th>
<th>Korea, Republic of</th>
<th>Malaysia</th>
<th>France</th>
<th>Taiwan</th>
<th>Thailand</th>
<th>Singapore</th>
<th>Italy</th>
<th>Netherlands</th>
<th>Belgium</th>
<th>Other</th>
<th>Indonesia</th>
<th>Korea, Republic of</th>
<th>Japan</th>
<th>China</th>
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**Top 20 Export Destinations 2005/06**

<table>
<thead>
<tr>
<th>Value (FOB) $m</th>
<th>New Zealand</th>
<th>United States of America</th>
<th>China</th>
<th>Japan</th>
<th>Korea, Republic of</th>
<th>Hong Kong (SAR of China)</th>
<th>India</th>
<th>Thailand</th>
<th>Finland</th>
<th>Singapore</th>
<th>United Kingdom</th>
<th>Malaysia</th>
<th>Papua New Guinea</th>
<th>Taiwan</th>
<th>Viet Nam</th>
<th>Philippines</th>
<th>South Africa</th>
<th>Namibia</th>
<th>Pakistan</th>
<th>Other</th>
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<td>$1,300</td>
<td>$1,400</td>
<td>$1,500</td>
<td>$1,600</td>
<td>$1,700</td>
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</table>

Source: Australian Bureau of Statistics
### 6.4. Global Trade: 2005 Shipments/Turnover

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Shipments/Turnover (US $billion)</th>
<th>% World Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Australia</td>
<td>21.943</td>
<td>0.86</td>
</tr>
<tr>
<td>1</td>
<td>United States</td>
<td>557.984</td>
<td>21.79</td>
</tr>
<tr>
<td>2</td>
<td>Japan</td>
<td>269.612</td>
<td>10.53</td>
</tr>
<tr>
<td>3</td>
<td>China</td>
<td>222.68</td>
<td>8.70</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
<td>190.278</td>
<td>7.43</td>
</tr>
<tr>
<td>5</td>
<td>France</td>
<td>120.213</td>
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<tr>
<td>6</td>
<td>Korea</td>
<td>97.746</td>
<td>3.82</td>
</tr>
<tr>
<td>7</td>
<td>United Kingdom</td>
<td>96.808</td>
<td>3.78</td>
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<tr>
<td>8</td>
<td>Italy</td>
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<tr>
<td>9</td>
<td>Brazil</td>
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<tr>
<td>10</td>
<td>India</td>
<td>68.43</td>
<td>2.67</td>
</tr>
<tr>
<td>11</td>
<td>Spain</td>
<td>53.802</td>
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</tr>
<tr>
<td>12</td>
<td>Netherlands</td>
<td>49.8</td>
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<tr>
<td>13</td>
<td>Switzerland</td>
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<td>15</td>
<td>Taiwan</td>
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<td>Puerto Rico</td>
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<tr>
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<tr>
<td>18</td>
<td>Russia</td>
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<tr>
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<td>Canada</td>
<td>40.868</td>
<td>1.60</td>
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<tr>
<td>20</td>
<td>Mexico</td>
<td>29.896</td>
<td>1.17</td>
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<tr>
<td></td>
<td><strong>Total Top 20</strong></td>
<td><strong>2235.944</strong></td>
<td><strong>87.32</strong></td>
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<td></td>
<td><strong>Other</strong></td>
<td><strong>324.817</strong></td>
<td><strong>12.68</strong></td>
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<tr>
<td></td>
<td><strong>World Total</strong></td>
<td><strong>2560.761</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: American Chemistry Council