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President:

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The Secretary

House of Representatives Standing Committee on Industry, Science and Resources

Suite R1-116, Parliament House

CANBERRA ACT 2600

Submission to:

The Inquiry into Increasing Value-Adding to Australia's Raw Materials

I am pleased to enclose with the letter, a submission to the Inquiry into Increasing Value-Adding to Australia's Raw Materials being conducted by the House of Representatives Standing Committee on Industry, Science and resources. The submission is accompanied, in the version sent by mail, by copies of three Academy reports which deal with the use of Australia's raw materials and which comment upon value adding aspects of each area. All three reports are available in downloadable format from the Academy website.

The Academy values the opportunity to make a contribution to the work of the Inquiry as it has long had an interest in promoting profitable activities which add value to Australian raw materials. It would be interested in making further submissions of a more specific nature as the Inquiry proceeds.

Yours faithfully,

M A Besley



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The Inquiry into Increasing Value-Adding to Australia's Raw Materials

The Academy welcomes the opportunity to make an initial contribution to the Inquiry into Increasing Value-Adding to Australia's Raw Materials. There is little doubt that, for raw materials which form the basis for exports to large overseas markets, increasing the level of value added in Australia would offer greater opportunities for employment, technology development and increases in the Nation's wealth.

It is recognised, however, that there is a supply chain for these products with one end anchored close to the source of raw materials and the other anchored in the market.¹ The extent to which Australia can capture operations further down the supply chain will depend on the nature of the particular resource being considered, the effectiveness of competition for capital investment by other nations and the investment climate in Australia. The Academy believes that one significant way in which the balance can be tilted in Australia's favour is through the timely development and application of science & technology leading to innovations in the way the raw materials are processed.

The Academy wishes to contribute to this initial stage of the inquiry by placing before the committee the three enclosed Academy reports which deal with differing resources and which make reference to the extent to which value is being added in Australia and possibilities for the future. They are:

- The Competitiveness of Australian Industry, Report No 1, The Processed Food Industry, June 1994²
- The Competitiveness of Australian Industry, Report No 3, The Minerals Industry, July 1997
- Water and the Australian Economy, April 1999

The report on the Processed Food Industry examined the status of this industry at the time and the factors constraining its growth. It compared the proportion of processed food exported from Australia compared with comparable overseas countries and concluded that Australia's performance was "average" leaving considerable potential for improvement. In the time which has elapsed since the publication of that report there has been a considerable improvement in the integration of the agricultural production sectors and the food manufacturing sector. The Prime Minister's Supermarket to Asia Council, which replaced the Agri-Food Council referred to in the

¹ P Yetton, J Davis and P Swan, "Going International – Export Myths and Strategic Realities", Report to the Australian Manufacturing Council, January 1992.

² All of the three reports referred to above are available in downloadable form from the Academy website at www.atse.org.au

report, has overseen a very considerable expansion in the exports of highly processed food products. The upgrading of technology in the processed food industry has been greatly assisted by the sector advisory process put in place within CSIRO which has greatly focussed resources. The joint venture between CSIRO and the Victorian Government, "Food Science Australia", is beginning to play a significant role in the development and upgrading of technology. A major factor impacting on the processed food industry will be the efforts in the next World Trade Organisation round to reduce barriers in other countries to the importation of processed food products. Almost all food products can be imported into Australia free of tariffs whereas many of our prospective markets in Asia still maintain significant barriers to entry in the form of tariffs. Thus, while the details of the industry and its environment given in the report have changed significantly since its issue, the Academy believes that many of the conclusions regarding the potential for increased value-adding are still valid.

The report of the Minerals Industry addresses, in a case by case study, opportunities for further value-adding activities within Australia's minerals industries and lists several mineral resources where value-adding opportunities are seen to exist. It examines the importance of the various factors affecting the competitiveness of mineral winning and processing operations in Australia and makes some international comparisons where these are possible. Once again some of the conditions will have changed since the report was issued but the overall conclusions should still be valid.

The very recent report on Water and the Australian Economy provides a somewhat different perspective as the role of water is examined in a range of primary and other industries and the added value that the use of water confers. It concludes that major benefits are possible in concentrating available water use in high value-adding activities. It advocates improved trading in water entitlements as a means of upgrading the benefits to the Nation from the use of this available resource in ways which maximise the return on investment.

One factor which must be taken into account in all areas, but particularly in the minerals processing area, is the impact of Australia's commitment to the Kyoto protocol limiting total emissions of the six stipulated Greenhouse gases. Most value-adding developments in the minerals processing area involve the use of Australia's cheap and available fossil fuel reserves. They are energy-intensive, and hence in themselves would greatly increase Australia's national greenhouse gas emissions.

Assuming that full ratification of the Kyoto protocol proceeds, if Australia is to continue to increase its minerals processing capacity for products ultimately used by other nations, some way of offsetting the associated increase in emissions will have to be found. This could take the form of reductions in other areas, the development of substantial carbon sinks or by international emissions trading or the use of other flexibility mechanisms permitted under the Kyoto Protocol, Joint Implementation or Clean Development Mechanisms. The matter is particularly vital for Australia, as if the matter is not resolved satisfactorily, value-adding opportunities could be lost by Australia, to nations not signatories to the protocol. Because the developing countries might well use less-efficient processes and fuels not as efficient or greenhouse-friendly as Australia's, the net global greenhouse effect could well increase.³

³ B J O'Brien, "Australian Greenhouse Governance: The Twilight Zone" Supplement to ATSE Focus March/April 1999, No 106. (also available from the ATSE website www.atse.org.au)