



Tasmania

PREMIER
MINISTER FOR STATE DEVELOPMENT

21 JUL 2000

3 JUL 2000

The Secretary
House of Representatives Standing Committee on
Industry, Science and Resources
Suite R1 - 116, Parliament House
CANBERRA ACT 2600

Dear Mr Prosser

**INQUIRY INTO INCREASING THE VALUE-ADDED TO AUSTRALIA RAW
MINERALS - INDUSTRY CASE STUDIES.**

I refer to your letter of 10 April 2000 seeking a submission from the Tasmanian Government on the above Inquiry.

Please find enclosed the Tasmanian Government's submission to the Inquiry. You will note that the submission focuses on Tasmania's wine and dairy industries which are already highly successful at adding value to their products. It is noted that assistance by the Commonwealth Government through removing impediments, providing support and encouraging new investment is needed to ensure that this process continues.

Thank you for the opportunity to provide a submission.

Yours sincerely

Paul Lennon MHA
Acting Premier

HOUSE OF REPRESENTATIVES

**STANDING COMMITTEE ON INDUSTRY,
SCIENCE AND RESOURCES**

**INQUIRY INTO INCREASING THE VALUE-ADDED TO
AUSTRALIAN RAW MATERIALS - INDUSTRY CASE STUDIES**

TASMANIAN GOVERNMENT SUBMISSION



Tasmania

JULY 2000

Executive Summary

The Tasmanian Government believes that investment is the generator of sustainable economic growth. The Government is also firmly committed to value-add to our raw materials before they leave the State. As part of this commitment, the Government has undertaken an Industry Development Strategy which commenced with a detailed industry audits process.

The audits identified existing industries as well as new opportunities where there is potential to expand and increase the amount of value-adding. They have also identified a number of industries where Tasmania has a natural and competitive advantage in this regard. These industries are agriculture and aquaculture, forestry, mining and tourism.

The task now is to take the next step in turning these advantages into economic development. This Inquiry provides the Tasmanian Government with the opportunity to inform the Federal Parliament on what issues and areas need to be dealt with to take this next step in value-adding

Many of the opportunities identified in this submission require significant amounts of investment, particularly in the area of infrastructure, before the value-adding potential can be realised. Energy infrastructure, in particular, is critical in attracting new industries to the State that can take advantage of our competitive advantage in raw materials. Investment in energy infrastructure will assist Tasmania to increase its value-adding especially in rural and regional Tasmania.

Introduction

Increasing value-adding is an important element in the Tasmanian Government's objectives in increasing employment; increasing the range and level of skills to diversify the economy; and to increase exports and replace imports. In recognition of the need to increase economic activity and investment in the State, the Tasmanian Government conducted a number of industry audits. The audit process identified a number of opportunities for the expansion of value-adding in the State. They identified that Tasmania has a competitive edge in the agriculture and aquaculture, forestry, mining and tourism industries.

The Tasmanian Government and representatives of industries in this State made submissions to *Of Material Value?* the first report of the Inquiry into increasing the value-added to Australian raw materials by the House of Representatives Standing Committee on Industry, Science and Resources.

In relation to the next stage of the inquiry, the Committee is reviewing specific industry areas namely, aluminium, magnesium, wine, dairy and grains. The Tasmanian industry audits highlighted opportunities for Tasmania in the mining and agricultural sectors to undertake new projects and develop existing projects further to increase the level of value-adding that currently occurs.

The dairy and wine industries in Tasmania are already highly successful at adding value to their products. It is noted that further assistance by the Commonwealth Government through removing impediments, providing support and encouraging new investment is needed to ensure that this process continues.

Due to Tasmania's climate there are no substantial grains industries in the State.

Of Material Value - Observations

The first report of the Inquiry reviews the performance of those industries that add value to Australian raw materials and outlines the broad conceptual means through which governments could potentially enhance the prospects of these industries. The Tasmanian Government concurs with the factors identified in the report as necessary for supporting raw materials processing, particularly: the need to maintain a sound macroeconomic environment; the economic imperative that drives the need for ongoing microeconomic reform aimed at lowering business input costs; the importance of efficient and appropriate regulatory arrangements; and the potential benefits that can be achieved through a further reduction of all barriers to free and open trade.

However, The Tasmanian Government notes that the process by which these industries were chosen is not explained in the Committee's report. Whilst each of these industries contributes to varying degrees to the performance of the Tasmanian economy, there are many other industries that are equally worthy of consideration in relation to the prospects of achieving additional value-adding of Australian raw materials. A more detailed explanation behind the choosing of such industries may be beneficial next time in providing more targeted information.

General Issues

The external factors which influence the attractiveness of value-adding to raw materials locally include price, demand, and competitive advantages in competing states and countries (including transport costs, access to imports, wage prices and skill levels) and the level of support provided to industry by other government (including discounted resources, explicit subsidies and incentives). These factors are predominantly beyond the ability of Australian governments to influence. Factors impacting on value of raw materials that are within the capacity of Australian governments to influence are outlined below.

Infrastructure

Energy, transport (air, sea, road and rail) and communications are key elements of many proposals for expansion of existing activities and diversification into new areas. Most projects which value-add to raw materials are highly sensitive to the availability and cost of these elements.

Energy:

Tasmania's hydro-electricity generation network is operating at its long-term sustainable level. Options being investigated to increase the availability of energy in Tasmania include natural gas, a link to the National Electricity Grid, and renewable energy sources.

Transport:

Shipping: The Tasmanian Freight Equalisation Scheme (TFES) assists in alleviating the comparative interstate freight cost disadvantage incurred by Tasmanian business in transporting eligible non-bulk goods to and from Tasmania by sea. The objective of the scheme is to provide Tasmanian industries with improved opportunities to compete in mainland markets. The TFES has a northbound and a southbound component. The northbound component of the scheme applies to goods produced in

Tasmania for use or sale on the mainland. The southbound component applies to equipment and non-consumer raw materials of Australian origin used as inputs into the mining, manufacturing, agricultural, forestry and fishing industries in Tasmania. The TFES does not provide assistance for the movement of goods between Tasmania and other countries, even if the goods pass through the Australian mainland. The southbound component of the TFES is only paid on equipment or raw materials that are made, constructed or substantially altered in Australia.

On 8 September 1998, the Prime Minister announced that the Howard Government accepted the recommendations of the June 1998 report by the TFES Review Authority in full and that this would deliver an additional \$15 million per year to the scheme. The new arrangements commenced on 1 July 1999. As at 30 April 2000, a total of 4205 TFES claims have been registered, representing a total outlay of \$47.48 million in the 1999-00 financial year. The 2000-01 Commonwealth Budget makes provision for estimated expenditure of \$60.6 million for the TFES in 2000-01, a projected increase of 7%.

Tasmanian businesses report that although the TFES provides a very important compensation for the costs arising from Bass Strait, it falls short of full compensation. Some goods are not covered by the TFES, including bulk cargoes and inputs to production that are imported from overseas. The maintenance, in real terms, of the funding provided to the scheme is vital to the prospects of many Tasmanian industries engaged in the value-adding of raw materials.

Rail: Tasmania's rail system is efficient within the constraint of an ageing rail network, however, any new lines need to be considered on a case by case basis. New rail lines can improve overall freight transport efficiency and new competition can also influence increased productivity in road transport.

Air: Air freight capabilities is also a critical factor influencing the capacity of Tasmania to compete in overseas markets for in particular perishable food products. Issues include the availability and scheduling of services aligned to industry freight needs, and cost / mode of freight handling to eliminate double-handling.

Double-handling is of particular concern to the dairy industry. In addition to the extra time involved in re-loading, the temperature of produce must be maintained. Double-handling increases the likelihood of the cool chain being broken and the product inside being compromised.

Communication: Effective communication technology is imperative for any industry. It is vitally important that the industry be able to communicate with their markets, as well as amongst themselves. The Internet has assisted Tasmanian businesses to communicate with their clients and customers overseas more easily.

Industry Sectors

This section describes the five industry sectors that are part of the industry case study and the opportunities for the expansion of value-adding in Tasmania.

1. Wine

Wine Production in Tasmania:

The wine industry is a significant and expanding industry for Tasmania.

Tasmania stands apart from the majority of the Australian wine industry in being famous for lighter styles of complex red wines, crisp fresh whites and finely structured sparkling wines. Characters of freshness and elegance could be said to define the Tasmanian style. These characters set our industry apart from the seductive big reds, which lead the current Australian wine export success.

Our wine industry is at a critical stage of its development. This stage is the building of national and international competitiveness. The next few years will see our industry define its place in Brand Australia and in world markets. The styles of wine will establish as icons of Tasmania. These wines need to be based on best practice and innovation in viticulture, winemaking and marketing.

The Tasmanian industry is set to double in all aspects of size including planted area in the next five years. A key challenge will be in the marketing of wines from these new areas. Tasmania competes in the wine market with other components of Brand Australia and as a component of Brand Australia.

The Vineyards Association of Tasmania is a professionally organised industry association. The association has a development focus, with subcommittees dealing with technical challenges, training developments and marketing opportunities.

It is estimated that the current value of wine produced in Tasmania is around \$25 million. The majority of this wine is sold on the Australian market, with only 15 per cent of sales in overseas markets. The potential expansion to around \$60 million by 2005 will largely be sold on overseas markets, with only a slight increase in sales in the Australian market. The economic impact per hectare of the wine industry, over \$100 000 wine value per hectare, is a driving competitive advantage for the industry in a State with a scarce soil resource. In water scarce valleys of Tasmania the wine industry will be a dominating competitor in the longer term. As the next 500 hectares of vineyard is planted, 1 000 new jobs will be generated.

In 1997-98 there were 112 vineyards and 87 licensed wine producers. The area planted was 522 hectares, with a bearing area of 445 hectares. The area of new plantings in 1997 was 60 hectares. The total yield for 1998-99 was 3,113 tonnes, which is a 20 fold increase since 1985-86, and over 40 per cent greater than the previous largest yield in 1994-95.

The major growing regions are in the North East, the Tamar Valley and the Coal Valley. The major varieties grown in Tasmania are Pinot Noir, Chardonnay, Riesling, and Cabernet Sauvignon. Other varieties include Sauvignon Blanc, Pinot Gris, Merlot, Gewürztraminer, Cabernet Franc, Semillon, Muller Thurgau, Pinot Meunier, Gamay, Petit Verdot, and Shiraz.

Winegrape production and estimated value:

Year	Yield (tonnes)	Wine*(cases)	Value**(\$million)
1994	1,116	73,656	7.4
1995	2,154	142,164	14.2
1996	1,874	123,684	12.4
1997	1,448	95,568	9.6
1998	3,113	205,458	20.5

* Based on 66 cases per tonne

** Based on \$100 per case

Issues Surrounding Value Adding to the Tasmanian Wine Industry:

At present, Wholesale Sales Tax (WST) on wine is set at 41%. This is made up of a 26% Federal tax and a 15% surcharge, which is collected by the Commonwealth and returned to the States. The State provides a 15% subsidy to vineyards for cellar door and mail orders.

From 1 July 2000 wine will be subject to the GST and an additional 29 % Wine Equalisation Tax (WET). The Federal Government also announced that it would provide a 14% rebate (up to \$300,000 of sales) on top of the 15% State tax rebate on the WET in relation to cellar door and mail order sales of wine.

Tasmanian wines will be disadvantaged by the 10% GST as the rate of tax per litre will be significantly greater for premium products.

Industry reaction to the new tax arrangements has been mixed, whilst they are pleased to have obtained the rebates they are concerned that: additional paperwork will be a burden; vineyards that rely heavily on wholesale sales, such as those not located on recognised wine routes, will not receive benefit from the rebate; the industry is also concerned that the WET rebates have not been incorporated into Federal legislation, and therefore do not provide investors in the industry with an assurance that rebates will continue in the future; and Tasmanian wine producers have relied heavily on cellar door and mail order sales, and therefore the issue of the cap is considered significant for their future investment plans. The cap on WET rebates for cellar door and mail order sales acts as a disincentives for growth of the smaller operators.

Investment incentives have not existed at a Federal level in Australia unless there were, or are exceptional circumstances. In any event these have been mainly confined to non-monetary incentives. Financial incentives have been occasionally used on projects of "major economic significance". Projects attracting this support have been for scales of investment beyond the dairy or wine sectors.

The use of incentives remains predominantly the province of State Governments, which has favoured the larger financially prosperous States. Federal Government assistance to investment projects in the dairy and wine industries has been almost non-existent.

Also given the amount of raw material capable of being supplied in Tasmania from the wine sectors the establishments of large scale start up investment projects is unlikely. In many of these industry sectors significant investment requires substantial supplies of raw material. It is difficult to attract further players into Tasmania as the size of production stabilises at the capacity of the processing sector. Currently Tasmania has an under-supply to the industries' capacity and the introduction of

another large processor would result in the development of further under-capacity for a period of time, during which all players suffer.

The attraction of finance, particularly access to venture funding is difficult in the primary sector. Most initiatives are viewed as higher risk due to the vagaries of the agricultural sector. Given the difficulty of attracting this type of finance the Tasmanian Government has supported the introduction of an appropriate equity fund into the State to assist in meeting this need.

As a competitive rural industry, the wine industry suffers from lack of investment in generic research and development, and in regional marketing due to the diffusion of the benefits of these investments. This situation is worsened by the cash flow demands of the unprecedented industry growth.

The Tasmanian wine industry is poised to take a step into a new phase of development. This phase is the building of national and international competitiveness. This should be measured against these parameters: physical quality; cost competitiveness in production and marketing; brand strength; and sales and distribution strength.

The wine industry is integrated with the Tasmanian economy and is a leading component of the Tasmanian tourism experience. Winery visitation has grown from 40 000 in 1992 (10 per cent of visitors) to 70 000 in 1997 (14 per cent of visitors).

The development of the wine tourism product will complement these developments. Government has a partnership role in the development of this competitiveness. This will be particularly important in assisting industry meet the challenges of this next stage of growth.

Tasmanian wine does not fit the "Brand Australia" profile, due to the unique cool-climate style of wine that Tasmania is able to produce. The ability to win a significant position in the wine market for branded regional Tasmanian wine as distinct from "Brand Australia" wine is critical to success. Critical mass and continuity of supply are also issues for the smaller vineyards.

The 1992 Australia/European Community wine agreement allows for the Australian wine export boom.

The requirement for separate licences for every region of the United States and Canada created difficulties. The Canadian Government controls the purchasing, warehousing and retailing of wine. Therefore costs are increased making the product less competitive.

The different label requirements for each country are a costly impediment to the export of Tasmanian wines.

The levels of both sophistication and capital required for vineyard and winery developments are very high. The resultant high overheads generate a strong requirement for economies of scale in order to maintain competitiveness. During 1998 the largest entity in the State's wine industry (Pipers Brook) took over another major company (Heemskerk/Rochecombe). The expanded company now produces well over a third of the State's grapes, and processes an even higher proportion of its vintage.

It has been noted by the industry that there is a need to maintain and improve skill levels of growers especially in relevant viticultural techniques. The industry has a heavy reliance on casual and seasonal labour and is looking, through the Food Industry Training Board, at methods of improving skills and uptake in the area.

2. Dairy

Dairying in Tasmania:

Over the last decade, Tasmanian dairy production has increased by nearly 80 per cent and dairying has become Tasmania's largest agricultural industry. Dairy product manufacturing is also of major significance to the manufacturing sector of the State and it is an important export industry.

The State's 745 registered dairy farms produced 543 million litres of milk, with a farm gate value of approximately \$130 million in 1997-98. Approximately 10 per cent of the State's production is consumed as whole milk within Tasmania, the remainder being further processed. The total value of manufactured dairy products exceeded \$300 million in 1997-98, with approximately one third exported to overseas destinations and two thirds consumed in Australia. Approximately 2 000 people (one fifth of the State's rural workforce) are employed directly in dairy farm production, with a further 1 600 persons employed in manufacturing and distribution.

Tasmanian milk production constitutes only a small proportion of the total Australian dairy industry, producing about 6 per cent of the total Australian milk production of 9,440 million litres in 1997-98.

The dairy industry is important to the social and economic structure of rural communities in Tasmania. The main dairying areas are in the North of the State, with 64 per cent of herds in the North West and King Island, 19 per cent in the central North, 14 per cent in the North East and 3 per cent in the South. Approximately 850 people are employed in dairy processing, with most processing plants being located in the main dairying regions.

Tasmanian milk production has increased faster than production in other States over the last ten years. Tasmanian production has increased at 6 per cent per annum compared to 5 per cent for Victoria, and even less in other states.

The 1995 Dairy Industry Select Committee concluded that Tasmania had the capacity in the long term to increase production to 950 million litres, that is, a 75 per cent increase on 1997-98 production, through a combination of increased farm productivity and new farms.

Pasture irrigation has contributed to past milk production increases. Potential exists for further irrigation development through both on-farm and community water storage projects. By increasing milk production in Summer and Autumn, irrigation extends the peak production period. This assists processors to maximise economies of scale and continuity of supply of more perishable products.

Two of the three large Tasmanian dairy manufacturers already have spare capacity or they have announced plans to expand capacity. United Milk Tasmania Ltd, which processes about 60 per cent of the Tasmanian milk production, opened a new factory at Quoiba in 1998. The company forecasts significant growth, 7-10 per cent per

annum, in their milk intake. Intake is expected to increase from 320 million litres in 1997-98 to 400-450 million litres in 2001-02 to utilise the expanded capacity. In late 1998, Lactos announced plans to spend \$20 million over the next three years to enable their milk intake from existing suppliers to increase from 85 million litres to 105 million litres.

Production of milk products:

	1997	1998	1999
Cows milk (Million litres)	529	543	603
Butter (tonnes)	10,869	8,745	11,548
Skim & Buttermilk Powder (t)	13,690	11,465	16,240
Wholemilk powder (t)	1,950	2,791	3,534
Cheese (t)	25,589	27,004	30,158

More than 80 per cent of Tasmania's milk production is sold outside the State and approximately 50 per cent of this is destined for export markets. Little expansion is expected in the Australian market, although there are important shifts between products. Thus any expansion in milk production will be exported overseas as manufactured product.

Global demand for dairy products continues to grow due to population growth generally and increased income in developing countries, which causes food expenditure patterns to move away from traditional foodstuffs.

The economies of Asia and the Middle East have experienced the greatest growth in demand for dairy products in recent years. Despite a weaker economic outlook for these economies over the next few years, they provide potential for further growth in the longer term. The forecast from the Australian Bureau of Agricultural and Resource Economics is that Australia's dairy exports will rise from an estimated \$1.9 billion in 1997-98 to around \$2.8 billion in 2002-03 (in 1997-98 dollars).

Cheese offers the greatest potential in terms of demand growth. Asia has been a major growth area for the cheese trade over the past decade, with the volume of cheese exports to this market doubling between 1990 and 1996. The Australian Bureau of Agricultural and Resource Economics forecasts that the growth in cheese demand may not be fully met by expanding supply. This would encourage higher world cheese prices. Demand for skim milk powder is expected to increase over the medium term, primarily from low income countries of Africa and Latin America, but prices are forecast to remain stable. The export demand for butter is forecast to increase steadily and prices are forecast to remain stable.

The dairy sector also adds to Tasmania's image as a producer of quality food products. Dairy processors' factory based retail outlets and farm based cheese producers provide experiences for tourists and aid in the marketing of Tasmania as a tourist destination.

General Issues Surrounding the Value-Adding to Dairying:

As of 1 July 2000 regulation with regard to the pricing of fresh milk will cease. Compensation totalling \$80,000,000 will be allocated to farmers based on the market milk and the manufacturing milk the dairy farmers sold in the year to 30 June 1999. Further funding (Dairy Regional Assistance Program) will be available and is to be used to encourage investment to reduce impact on regional communities.

Opportunities:

There is an opportunity for additional overseas exports of manufactured dairy products. The overseas export demand for cheese, milk powders and butter is increasing, but these are broad product categories. Individual firms have identified tailor made products that are differentiated from the high volume low value products of competitors. The opportunity exists to expand on this marketing strategy.

Ultra heat treated milk now accounts for 5 per cent of total Australian packaged milk sales and its share of total sales is steadily increasing. In some countries ultra heat treated milk accounts for in excess of 50 per cent of total milk sales. Markets in South-East Asia offer great potential provided it is possible to secure a share of their forecast growth in demand to 1 billion litres of ultra heat treated product.

There is an opportunity in supplying fresh dairy foods. Yoghurts, desserts and fromage frais are growth categories throughout the world. Within Australia this \$400 million retail sector is growing at over 7 per cent a year but virtually none of these products are produced in Tasmania.

There is an expanding export market for cheese, milk powder and butter. There is also scope within the domestic market for the introduction of differentiated products, particularly cheeses. Tasmanian companies have an established market presence in both the domestic and export markets.

Ultra heat treated milk products are experiencing strong growth in both the domestic and export markets. The market for new products is developing rapidly as consumer support grows. There appears to be limited opportunity for Tasmanian companies to compete in the bulk commodity sections of the market (full cream milk) due to higher production costs and smaller volume runs.

The fresh dairy food market is highly competitive. The introduction of new products requires a high level of manufacturing and promotional expertise. Whilst the State has not been a significant player in this field, the quality and supply of the raw product opens up opportunities for either joint venture activity or further development of existing capabilities.

There are a number of engineering workshops in the State specialising in the manufacture of stainless steel equipment. This sector supports the dairy industry, but with further research and development and product development, Tasmanian industry could secure a larger share of the market.

Potential does exist for niche dairy based products, which can capitalise on the State's quality image and capture a premium in the market through product differentiation.

Access to Efficient and Competitively Priced Inputs and Infrastructure:

The Tasmanian dairy industry is fortunate in that it is based on pasture grazing throughout the year whereas in many other dairying countries animals must be housed for part of the year with a concomitant increase in costs. The Tasmanian and Victorian dairy industries are similar in that most cows calve in Spring thereby minimising production costs by matching pasture growth with feed requirements. As a result milk production is highly seasonal and over 90 % of the production is used for manufacturing. The dairy sectors interstate are geared to production of consistent

quantities of milk throughout the year for consumption as whole milk which increases the cost of its production.

Australian dairy farm average cash costs are clearly competitive. Australia's average costs of 31 cents per litre are second only to New Zealand's 29 cents per litre. In comparison with the other Australian States, Tasmania and Victoria have the lowest average costs of production of 23 cents per litre.

Whilst the average cost of milk production in Tasmania is equal to the lowest in Australia, there is a wide range of costs between individual dairy farmers. Most of the variability is due to differences in stocking rate, feed production and utilisation, farm size and the inputs used in production. Over time, productivity can be increased and production costs lowered by the continued provision of information and training for dairy farmers.

The average milk price received by Tasmanian dairy farmers over the last few years has been less than the price paid by comparable Victorian manufacturing milk companies. The price discrepancy exists because of the higher cost of some inputs for Tasmanian dairy processors compared to Victorian processors.

Milk collection costs were one of the larger cost disadvantages. This was the result of Tasmanian milk tankers having to travel more kilometres per tanker load of milk than their Victorian counterparts. A cooperative strategy between Tasmanian manufacturers could result in a rationalisation of tanker routes and a reduction in costs.

The 1995 Dairy Industry Select Committee of Inquiry into dairying found that the largest dairy manufacturer in Tasmania had the following cost disadvantages.

The United Milk Tasmania Ltd/Bonlac merger means a large Australian dairy manufacturer now has a presence in Tasmania. This change in management provides the opportunity for other Tasmanian manufacturers to collaborate with Bonlac to supply milk components to Bonlac. This will enable Bonlac to increase economies of scale in the production of some products and the associated companies may use Bonlac's marketing contacts to sell existing products.

There is an opportunity for import replacement of dairy inputs. There are significant imports into Tasmania of plant and production inputs for both farmers and dairy manufacturers, for example, stainless steel vessels, specialty papers, cultures and rennet. Identification and compilation of these imports could provide the impetus for their production in Tasmania.

Investment:

As mentioned for the wine industry, investment incentives have not existed at a Federal level in Australia unless there were, or are exceptional circumstances.

While the recent expansion by United Milk Tasmania, now Bonlac, was granted Major Projects Facilitation status, the granting of dairy and wine projects such status in Tasmania would be uncommon due to the relatively small scale of projects. It is also unclear what benefits the granting of Major Projects Facilitation confers on projects not requiring inter-jurisdictional coordination.

Industry surveys of dairy farmers have shown that over the last two years Tasmanian dairy farmers have had low returns on capital and negative farm business profits after allowing for payment of family labour. One outcome of the low profitability is that farmers find it difficult to pay wages which attract and retain farm employees. As a result, industry does not have a large pool of skilled and experienced labour with equity to take on share farming positions and eventual farm ownership.

3. Aluminium and Magnesium

Aluminium in Tasmania:

The aluminium industry is well established in Tasmania. The aluminium smelter at Bell Bay, acquired by Comalco in 1960, value adds to alumina and produces aluminium for national and overseas markets.

There are three main stages in the production of aluminium metal. They are the mining of bauxite ore, refining the ore to alumina and the smelting of alumina to make primary aluminium metal. Of these stages, the Bell Bay smelter is only concerned with the smelting process of which alumina, carbon and electricity are the main ingredients.

The three main process areas at the Bell Bay smelter are manufacture of carbon products, conversion of alumina to metal and metal alloying and casting.

Eckart Aluminium Pty Ltd produces aluminium paste and powder at its Bell Bay plant. It uses molten aluminium from the Comalco's smelter for producing these products.

Total aluminium production at Bell Bay in 1999 was 151,000 tonnes, an increase of 6.5% over the previous year production. The Bell Bay aluminium smelter directly employs around 630 people, with typically a further 150 full-time contractors undertaking work around the site at any one time. In addition, it creates employment for some 1,600 Tasmanians who depend directly on the economic impact of the smelter.

A great amount of energy is consumed during the smelting process - from 14-16,000 kilowatt hours of electrical energy is needed to produce one tonne of aluminium from about two tonnes of alumina. The availability of low cost electricity is therefore essential for competitive production of aluminium.

The Tasmanian government is actively pursuing the proposed Basslink and undersea gas pipeline projects that should make available additional energy needed for future industrial development in Tasmania.

Transport cost, associated with the production and delivery of a product in the market, plays a significant role in maintaining the product's competitiveness. Major markets for value-added aluminium products are in the mainland Australia and overseas. Bell Bay has a local deep seaport and excellent infrastructures. However, Coastal Express, the shipping company that previously transported goods for Comalco has ceased its operation at Bell Bay.

Currently, the goods from Bell Bay must be transported to and from Devonport for the mainland Australia and overseas destinations. This increases the cost of transporting

the goods such as the imported petroleum coke for making anodes and the delivered aluminium products in the market.

Magnesium in Tasmania:

Magnesium is the lightest of the structural metals. It is used as a structural metal in an alloyed form and most magnesium alloys have a slightly higher density. Magnesium is a reactive metal and is usually found in nature in the form of an oxide, carbonate or silicate, often in combination with calcium.

The world production of magnesium is small compared to the other structural metals such as steel and aluminium. About half of this is used directly in aluminium alloys to harden and strengthen them. For example, the body of an aluminium can contains approximately 1.5% and the can lid about 4.5% magnesium.

Other significant uses of magnesium are for cast metal components from either sand or die-casting, the desulphurisation of steel, inoculation of cast iron and chemical reagents.

Demand for magnesium is forecasted to increase significantly through its growing applications in the automotive industry. Continued pressure on the automotive industry to become more energy efficient and to discharge less atmospheric pollutants is the driving force behind the increased projected demand for magnesium. Magnesium aluminium alloys, thanks to their light weight and superior mechanical qualities, are able to replace many components made of steel or aluminium for the automotive and other industries. High-pressure die casting of magnesium-aluminium alloy for automotive components is projected to grow at the rate of 15% per annum. This will push the western world total magnesium market growth to a level of 541,000 tonnes per year by 2007 from 333,000 tonnes in 1998.

Three separate magnesite deposits with high percentage of elemental magnesium have been identified in Tasmania, namely, Main Creek magnesite and Savage River mine magnesite.

Savage Resources Limited (which is a wholly owned subsidiary of Pasminco Limited) holds mining leases over magnesite resources in the Main Creek area. There is a significant deposit of magnesite associated with the magnetite ore body at the Savage River iron ore mine. A large portion of magnesite is within the pit limit for mining of the iron ore reserve.

General Issues Surrounding the Value-Adding to Aluminium and Magnesium:

Energy in the forms of electricity and natural gas is a critically important factor in establishing new industries in this State. Competitively priced hydro electricity was a major attraction for establishing energy intensive industries in the past. Now, the Tasmanian electricity supply capacity has nearly reached its limit and for any significant future industrial project, additional energy supply capacity is needed.

The second most important factor influencing the establishment of these industries in the State is infrastructure such as road and rail links and water supply.

It is noted that there is little demand for aluminium and magnesium locally. A favourable trading arrangement with overseas countries will encourage value-adding

in the State. For this to occur Australia must have access to international markets. This can be achieved through production at an internationally competitive price but also maintaining an open and accessible international market.

Research and Development (R&D) are backbones of innovation and technological advances. The magnesium production technologies being targeted for application by the magnesium project proponents need further improvement to suit the Australian environmental conditions. Local R&D facilities can make a significant contribution to making overseas technologies suitable for local conditions. R&D are certainly essential elements in making the local value adding industries internationally competitive.

4. Grains

Tasmania is always looking to expand and diversify its economic base. However, due to the low level of grains production in Tasmania the Government has no comment to make in regard to this industry sector.

Concluding Comments

There are a wide range of opportunities for the further value-adding of Tasmanian resources. The Tasmanian Government recognises the need to further value add to existing production and as part of diversification into new areas.

However, particular attention should be paid, not only to the issue of the location of value-adding industries and projects in regional Australia, but also to the significant part they play in the continued economic advancement in those areas. Tasmania is no different in this sense. It has been acknowledged that, as a regional area, there is a strong need for such value adding industry to be attracted to the State. Attracting this sort of industry faces significant hurdles. This Inquiry presents a possible opportunity to advise the Commonwealth Parliament of Tasmania's constraints.

The need for Commonwealth Government cooperation and support is vital if we are to obtain the industry required for value-adding to become a reality. Energy infrastructure is the main area at present that needs this cooperation. Its development is expected to be the stimulus that attracts prospective industry to the State and is therefore a crucial component in developing a competitive advantage from the raw materials at our disposal.