

SUGAR OUTLOOK TO 2009-10

world prices to decline in real terms over the medium term

Stuart Kinsella, Richard Perry and Jammie Penm

- **The world indicator raw sugar price is forecast to fall to an average of US8.2c/lb in 2005-06.**
- **Brazil's dominance in world sugar markets will continue over the short to longer term.**
- **Reflecting assumed significant income growth, sugar consumption in China is projected to increase by around 1 million tonnes a year to 2009-10.**
- **A key question for the Australian sugar industry is its ability to change and maintain competitiveness in a volatile market with declining real world prices over the longer term.**

Production to rise, prices to fall

World sugar production is forecast to rise by 5 per cent to around 153 million tonnes in 2005-06, assuming that average seasonal conditions prevail in key producing countries. This forecast increase in production will be driven by expected higher output in Brazil, and a recovery in production in India and Thailand.

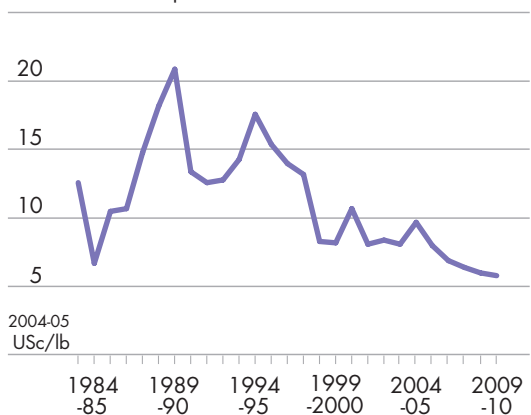
In 2004-05, sugar production in Brazil is expected to be another record. However, the effect of this on world production and prices is likely to be largely offset by production shortfalls in other major producing countries, including Thailand and India. In Thailand, drought has adversely affected the area planted to cane and crop growth, leading to a forecast decline of

4 per cent in sugar production in 2004-05. In India, drought and a woolly aphid infestation in some cane growing areas are forecast to result in a production decline of 15 per cent in the year. World sugar production is forecast to be around 145 million tonnes in 2004-05, a rise of less than 1 per cent from the previous year.

World sugar consumption is forecast to rise by 2 per cent to over 151 million tonnes in 2005-06. Partly reflecting recent significant income growth, sugar consumption, and import demand, is forecast to increase in China. Import demand is also likely to rise in the Russian Federation as a result of an expected shortfall in domestic sugar availability. Reflecting the higher forecast increase in production, world sugar stocks are expected to rise in 2005-06, placing downward pressures on world prices.

World sugar prices

New York no.11 spot



• Stuart Kinsella • +61 2 6272 4778 • skinsella@abare.gov.au

The world indicator price for raw sugar (New York no. 11 raw spot, fob Caribbean) is forecast to decline to an average of US8.2c/lb in 2005-06 from a forecast US9.7c/lb in 2004-05. Over the medium term (to 2010), world sugar prices are projected to decline in 2004-05 dollar terms, as major producing countries, especially Brazil, continue to expand production at a pace faster than increases in world sugar consumption.

Price volatility to continue

The price volatility that is typical of the sugar market is likely to continue over the short to medium term. Seasonal conditions in key producing countries have had strong impacts on production and hence world prices. Uncertainty

extent of the increase in oil prices. A sustained sharp increase in oil prices has the potential to trigger a downturn in world economic growth, significantly weakening world demand for sugar.

Other factors that could significantly influence world sugar prices include changes in government policies on sugar and biofuel in major producing and consuming countries. For Australian producers, exchange rate movements, especially against the US dollar, present an additional source of price volatility.

Developments in key markets

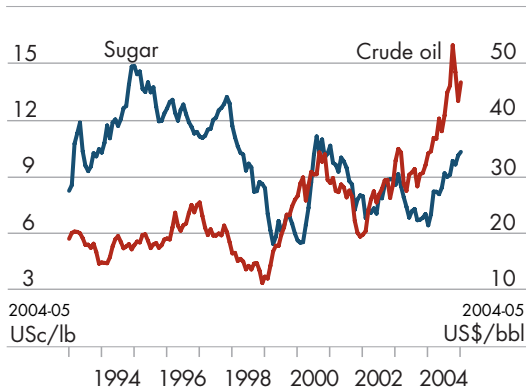
Production increases in Brazil

Sugar production growth in Brazil, the world's largest producer, is expected to be strong over the short to medium term. Over the past decade, sugar production in Brazil has increased by an average of 9 per cent a year.

Improved seasonal conditions in Brazil have increased the prospects for another record crop in 2004-05. Although adverse weather conditions experienced earlier in the season could have lowered cane sucrose levels, the effect on sugar production will be more than offset by an increase in sugar cane harvest (a forecast rise of 7 per cent on last year). Sugar production in Brazil is forecast to rise by 8 per cent to around 29 million tonnes in 2004-05.

World sugar and crude oil prices

Monthly, ended January 2005

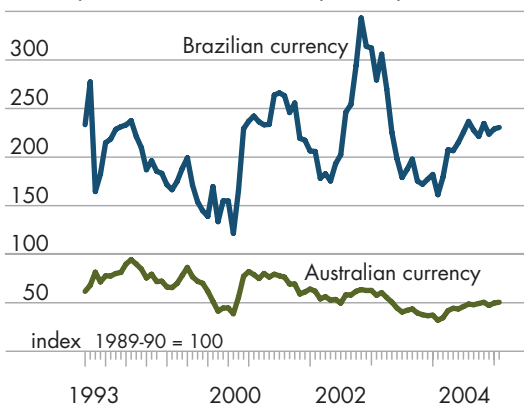


associated with seasonal conditions will continue and any severe weather events that occur in major producing countries can be expected to significantly affect world sugar prices.

Uncertainty surrounding movements in world oil prices also has the potential to unsettle world sugar prices. On one hand, sustained higher oil prices could reduce world income growth and lead to adverse impacts on sugar consumption growth. On the other hand, higher oil prices will increase the demand for ethanol, resulting in a higher proportion of sugar cane being diverted to ethanol production (and hence less sugar production than would otherwise be the case). The net impact on world sugar prices depends on the

Sugar prices

Quarterly till December 2000, monthly January 2005



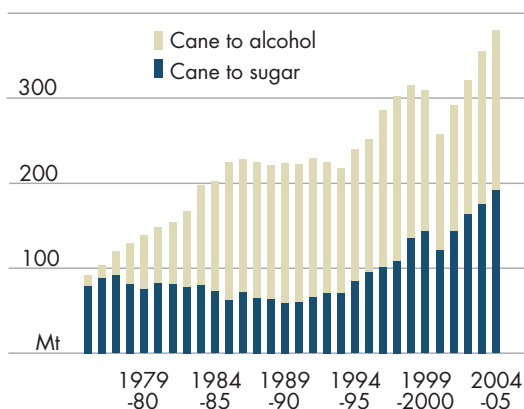
The Brazilian sugar industry has benefited from a significant depreciation of Brazil's currency, the real, since the early 1990s. While the Brazilian currency has recently appreciated against the US dollar, it has not appreciated to the same extent as many other currencies, including the Australian dollar. In Brazilian currency terms, world sugar prices have been increasing substantially. The relatively high world sugar prices experienced during 2004-05 are likely to encourage increased plantings for sugar cane in 2005-06.

Further supporting the sugar industry in Brazil is the abundance of land available for sugar cane plantings. For example, in the Centre-South (the major cane growing region of Brazil), sugar cane plantings have the potential to expand to twice their current area in the future.

Ethanol production important to Brazil

The recent increase in world oil prices is expected to provide an additional incentive for more sugar cane plantings (see the 'Energy outlook' note). Demand for ethanol derived from sugar cane stems from government policies established in the late 1970s, which aimed to promote ethanol as a reliable source of fuel. The proportion of sugar cane used for ethanol

Brazil sugar and ethanol production



production varies over time. In recent years, around 50 per cent of sugar cane has been used for ethanol production in Brazil.

While an increase in ethanol production means that more sugar cane will be diverted to ethanol production, this is not expected to significantly affect growth in sugar production in 2005-06. While the sugar cane harvest in Brazil is forecast to rise by 10 per cent, sugar production is forecast to rise by 9 per cent to around 32 million tonnes in 2005-06.

Sugar outlook

| | Unit | 2002 -03 | 2003 -04 | 2004 -05 f | 2005 -06 z | 2006 -07 z | 2007 -08 z | 2008 -09 z | 2009 -10 z |
|--------------------|--------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|
| World a | | | | | | | | | |
| Production | Mt | 148.1 | 144.4 | 145.2 | 152.9 | 157.5 | 161.3 | 165.0 | 168.4 |
| Consumption | Mt | 141.9 | 145.4 | 148.4 | 151.4 | 154.6 | 157.8 | 161.1 | 164.5 |
| Stocks b | Mt | 66.2 | 65.1 | 62.0 | 63.5 | 66.4 | 69.9 | 73.8 | 77.7 |
| Price | | | | | | | | | |
| - nominal | USc/lb | 8.0 | 7.9 | 9.7 | 8.2 | 7.2 | 6.8 | 6.5 | 6.4 |
| - real c | USc/lb | 8.4 | 8.1 | 9.7 | 8.0 | 6.9 | 6.4 | 6.0 | 5.8 |
| Australia d | | | | | | | | | |
| Sugar production e | kt | 5 461 | 4 994 | 5 155 | 5 224 | 5 280 | 5 326 | 5 371 | 5 413 |
| Sugar exports | kt | 3 975 | 3 882 | 4 034 | 4 071 | 4 107 | 4 133 | 4 158 | 4 178 |
| Value of exports | | | | | | | | | |
| - nominal | A\$m | 1 179 | 1 029 | 1 248 | 1 111 | 1 053 | 1 021 | 1 001 | 999 |
| - real g | A\$m | 1 236 | 1 054 | 1 248 | 1 086 | 1 004 | 950 | 908 | 885 |

a October-September years. b Historical estimates of closing stocks are based on individual country estimates of production, consumption, trade and stocks. Given possible under/over reporting of statistics in individual countries, changes in world closing stocks from year to year may not necessarily equal the difference in world production and world consumption. c In 2004-05 US dollars. d July-June years. e Raw tonnes actual. g In 2004-05 Australian dollars. f ABARE forecast. z ABARE projection.

Sources: Australian Bureau of Statistics; International Sugar Organisation; ABARE.

Over the medium term, Brazil's market dominance is expected to continue. Further industry expansion and rising exports from that country will put pressure on sugar prices on world markets.

Production to recover in India and Thailand

Over the past two growing seasons, sugar production in India has declined markedly mainly as a result of drought. Production is forecast to be around 13 million tonnes in 2004-05, well below the record of 21 million tonnes achieved in 2002-03.

Sugar production in India is expected to increase in 2005-06, assuming a return to average seasonal conditions. Despite this assumption of improved growing conditions, sugar production is expected to recover only partially in the coming season. Given the severity of the drought over the past two years, it is likely that plantings will not return to the predrought level immediately, as uncertainty about seasonal conditions remains. In an attempt to support sugar cane farmers, India's government has increased the statutory minimum price for sugar cane in recent years. This statutory price is a government policy under which Indian sugar cane farmers receive a minimum price for their crop from sugar mills. Despite the increase, millers' purchases of sugar cane is not likely to be adversely affected, as domestic sugar prices in India have been relatively high.

In Thailand, sugar production is also forecast to rise in 2005-06. Production in Thailand increased by an annual average rate of around 9 per cent between 2000-01 and 2003-04, before a partial reverse in 2004-05 mainly as a result of adverse seasonal conditions. Assuming average seasonal conditions prevail in the coming season, sugar production is forecast to return to the predrought level of around 7.5 million tonnes in 2005-06.

Income growth to support China's consumption

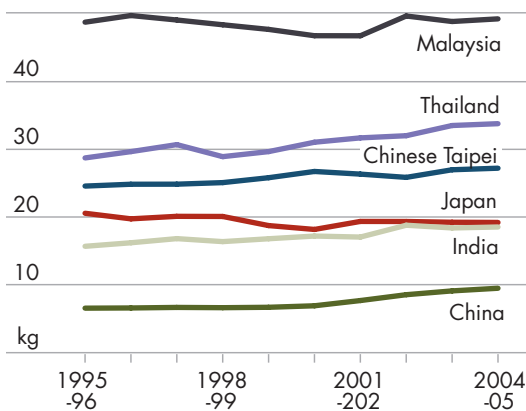
A major factor influencing demand growth for sugar is income growth. With a large population and rapid income growth, sugar consumption in China has been on an upward trend.

Between 2000-01 and 2003-04, sugar consumption in China increased by an average rate of around 9 per cent (or 0.8 million tonnes) a year. As a significant expansion of its domestic sugar industry is likely to be restricted by the availability of arable land, China is forecast to emerge as a significant net importer of sugar over the outlook period.

China's population has been increasing by around 10 million a year and is forecast to reach around 1.3 billion in 2005-06. On a per person basis, China's sugar consumption has increased by around 25 per cent since the late 1990s, but still remains relatively low compared with some of its more developed neighbors, such as Japan, Chinese Taipei, Malaysia and Thailand. Although some of the gaps in per person sugar consumption between these countries could be related to taste, preference and cultural differences, it appears that, as income growth continues, there remains significant scope for per person consumption of sugar to increase in China.

Despite significant income growth assumed over the medium term, the increase in China's per person consumption of sugar is likely to be gradual. Over the outlook period, sugar consumption in China is projected to increase by around 1 million tonnes a year. Taking into account projected increases in domestic production, sugar imports in China are projected to increase by 13 per cent a year, reaching around 3 million tonnes by 2009-10.

Sugar consumption per person in Asia



India, another key to the outlook

Import demand in India plays an important role in the outlook for world sugar prices. As discussed earlier, there has been a significant decline in domestic sugar availability (both production and stocks) in recent years.

There is considerable uncertainty about import demand in India. If production increases in 2005-06 as currently forecast, then the prospects for a large increase in import demand in the short term will be low. On the other hand, if the imbalance between domestic sugar availability and consumption widens, there will be a need for India to significantly increase its sugar imports, providing support for higher world sugar prices.

India's importance in world sugar markets has increased in recent years. Over the past few years, production shortfalls in India have helped to ease downward pressure on world prices. Depending on the progress with which the Indian sugar industry addresses structural issues and increase production, India could be an importer of sugar for the foreseeable future.

Russian sugar supply response will be important

The Russian Federation is the world's largest importer of sugar, accounting for around 10–15 per cent of world sugar imports. After a protracted economic downturn in the 1990s, the Russian Federation has experienced a sustained period of strong economic and income growth.

Higher income growth has led to a significant increase in demand for manufactured food and drink products that contain sugar, causing increased demand for sugar. The higher demand has led to an increase in domestic sugar prices and consequently a rise in import demand. The Russian Government has imposed significant tariffs on sugar imports.

After a sharp decline in the mid-1990s, sugar beet production in the Russian Federation has only partially recovered, despite government attempts to encourage additional production through tariff protection. The import demand and domestic supply response to Russia's higher domestic sugar prices will be of interest to world

sugar markets. In the short term, production is expected to exhibit only modest responsiveness to higher domestic sugar prices. Reflecting current low levels of domestic stocks, there is a strong probability that Russia's import demand will rise in order to meet increased domestic demand. Over the longer term, however, it would be reasonable to expect that the price responsiveness of domestic sugar beet production will increase.

Developments in the reform of EU sugar policy

There have been developments in the reform of sugar policy in the European Union that could have important implications for world sugar markets.

In mid-July 2004, the European Commission released a proposal for the reform of EU sugar support. Under the proposal, the European Union's guaranteed prices for sugar will be reduced by around 40 per cent; the safety net intervention system will be eliminated; and overall sugar production in the European Union will be reduced. While the response from the majority of EU members has been unfavorable, the proposal highlights the need for the European Union to restructure its sugar industry. The European Commission is expected to provide a revised draft in mid-2005.

The WTO Sugar Panel completed its report on 8 September 2004 after examining complaints by Australia, Brazil and Thailand that the European Union had violated trade rules by providing sugar export subsidies in excess of its agreed WTO limits. The parties argued that the European Union had exceeded the limit of 499 million euros (A\$838 million) on a total quantity of 1.273 million tonnes a year. Based on Australia's estimates, the European Union would have to reduce subsidised sugar exports by up to 4 million tonnes a year.

The European Union has lodged an appeal against the panel findings and the legal outcomes in this case are likely to be finalised by early May 2005. If the Panel findings are upheld, the European Union will be granted a period of time in order to implement necessary changes to its sugar regime.

Australian outlook

Despite dry conditions in Queensland throughout the first three quarters of 2004, sugar cane production in Australia is expected to increase in 2004-05. In 2003-04, CCS levels (a measure of sugar concentrate in cane) averaged 13.4 per cent in Queensland. For 2004-05, CCS in Queensland is forecast to be 13.9 per cent. Estimates for 2004-05 put the national harvest at around 37.5 million tonnes, a rise of 2 per cent from the previous season. Reflecting higher sugar content, Australia's raw sugar production is forecast to increase by 3 per cent to around 5.16 million tonnes in 2004-05.

The recent upturn in world sugar prices is expected to improve returns for cane growers in 2004-05. Although some of the increase in world prices will be offset by a higher average value of the Australian dollar, the Queensland sugar pool price is forecast to rise by 23 per cent to \$285 a tonne in 2004-05. While the pool return is forecast to increase, the final outcome remains dependent on the price and currency hedging strategies adopted by Queensland Sugar Limited.

Given the improvement in prices and returns, it is likely that some farms will increase inputs,

particularly of fertilisers, in an attempt to increase output. Assuming average seasonal conditions prevail, sugar production is forecast to increase by 1.3 per cent to 5.22 million tonnes in 2005-06.

Looking beyond 2005-06, the key question for the Australian sugar industry is its ability to change and maintain competitiveness in a volatile market with declining real world prices and the increasing dominance of Brazil. While world prices have been relatively strong over the past year or so, growers are expected to face a continuing decline in real prices over the longer term, as the major producing countries, especially Brazil, continue to expand their production.

Given this operating environment, the Australian industry will remain under considerable pressure for change. If the necessary adjustments occur, the Australian sugar industry might be able to sustain growth and profitability. While there may be risks and adjustment costs associated with various reform options, failure to make significant improvements in productivity and efficiency in the environment of increased international competition and declining real prices will lead to a decline in output.

SUGAR

INDUSTRY CHALLENGES FOR POLICY AND RESOURCE MANAGEMENT.

By David Cox – Davco Farming/Austcane
ABARE Outlook Conference – 2nd March 2005.

- The Australian sugar industry has since January 1999 been confronted with a most dramatic step change in world sugar competitiveness that is not going to reverse in the foreseeable future.
- As a result, all thinking cane farmers are now aware that if we continue to be reliant on solely the proceeds of raw sugar sales, we do not have a future. We MUST value add and cane growers MUST share in the additional revenue streams.
- Therefore, Government policy will be crucial to provide immediate, but long-term solutions to avoid the loss to the Australian economy of an industry that contributes \$3.7 billion in GDP and is responsible for 38,000 jobs.

“If the sugar industry can’t compete then the sugar cane farmers must be inefficient.”
Whether you live in a city and enjoy its comforts, a press galley journalist, a bureaucrat or a young economist that probably sounds like a logical argument.

Unfortunately, however, the reform and restructure mantra of government ‘sugar rescue packages’ perpetuates public misconceptions. Too few people realize that our international competitiveness has little to do with cane grower efficiency. Most of the efficiency gains available to cane growers have been taken up over the past five years of low sugar prices and most farmers have rationalized production techniques to the point where I believe there is only limited productivity gains yet to be captured at the farmer level.

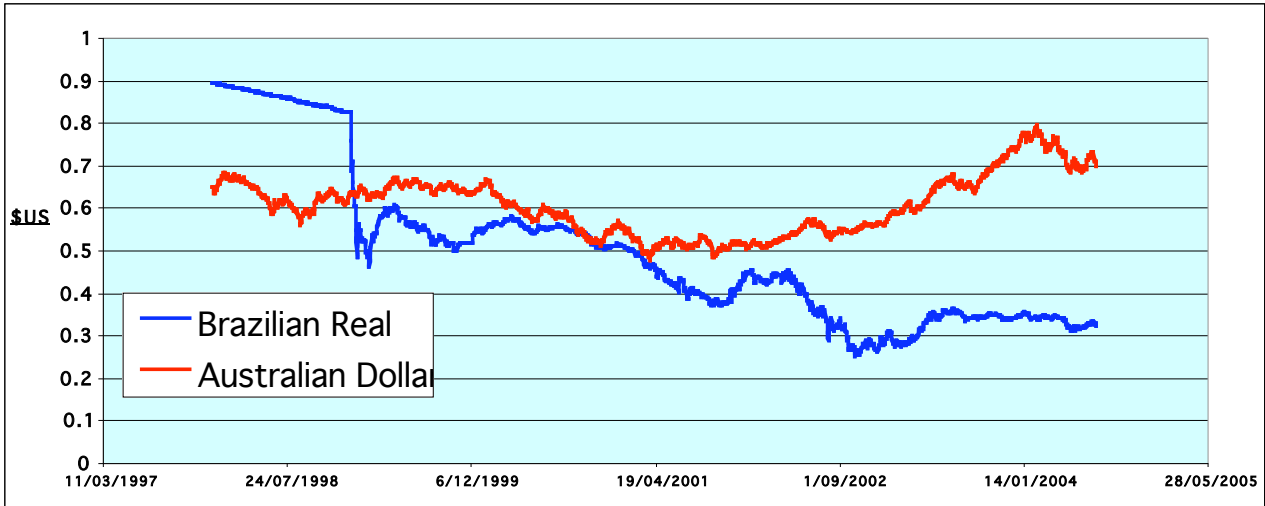
Today I want to do three things:

- 1) Clarify the cause of the sugar industry’s problem,
- 2) Explain why the simplistic farm inefficiency argument is logical in theory but wrong in practice;
- 3) And I especially want to focus on the positive policy opportunities for both Federal and State governments and the positive opportunities for sugar cane farmers and the industry in general.

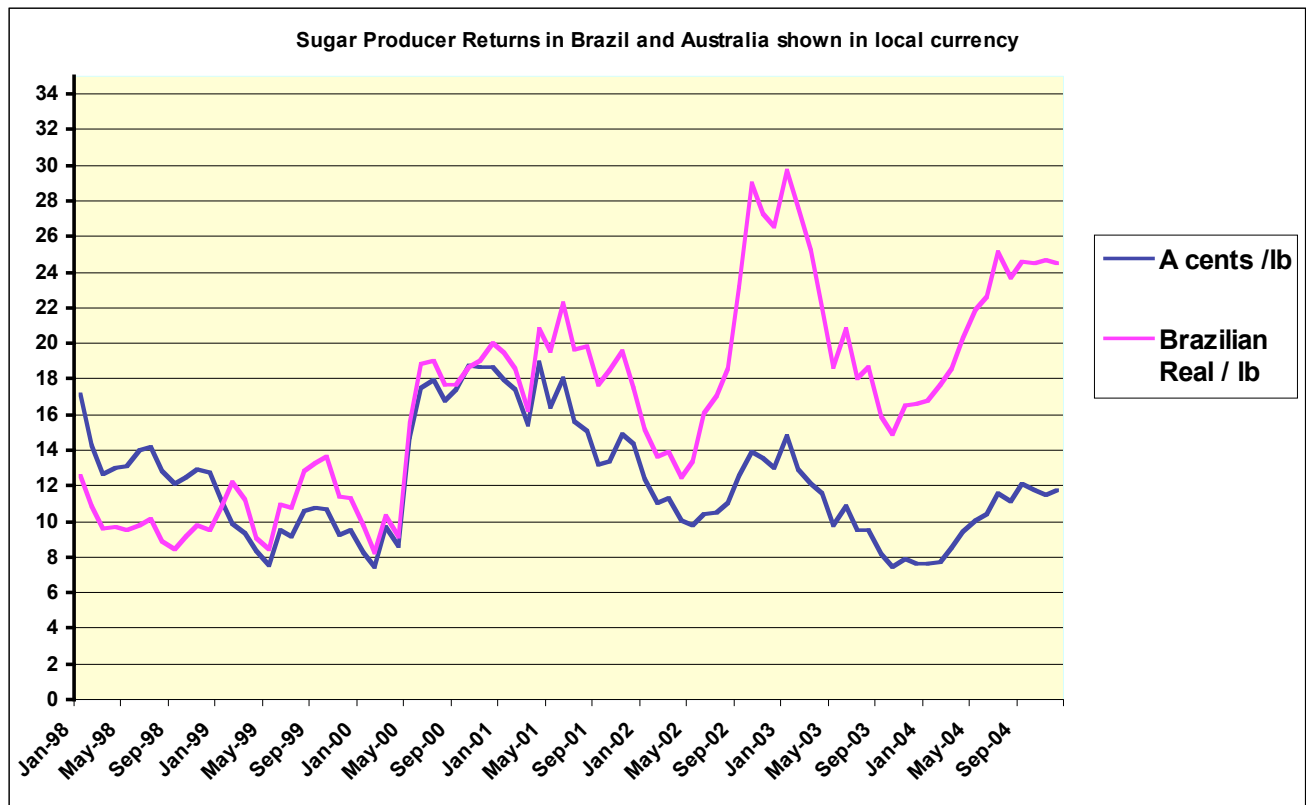
For most of the last century the Australian sugar industry has had a reputation around the world of being at the forefront of technology and leaders in productivity. We hosted tour after tour of international sugarcane growers wanting to learn how we were doing it so well.

This changed in January 1999 when the Brazil government floated their currency (Real). Following the currency float the REAL plummeted from US84c to US47c over the initial few weeks, and continued down to a low of US25c in 2002. The Real has now clawed back and has fluctuated between US30-35c over the last couple of years. This single event has resulted in a step change in the value of only the free traded raw sugar crystal on the world market, which is less than 30% of world production.

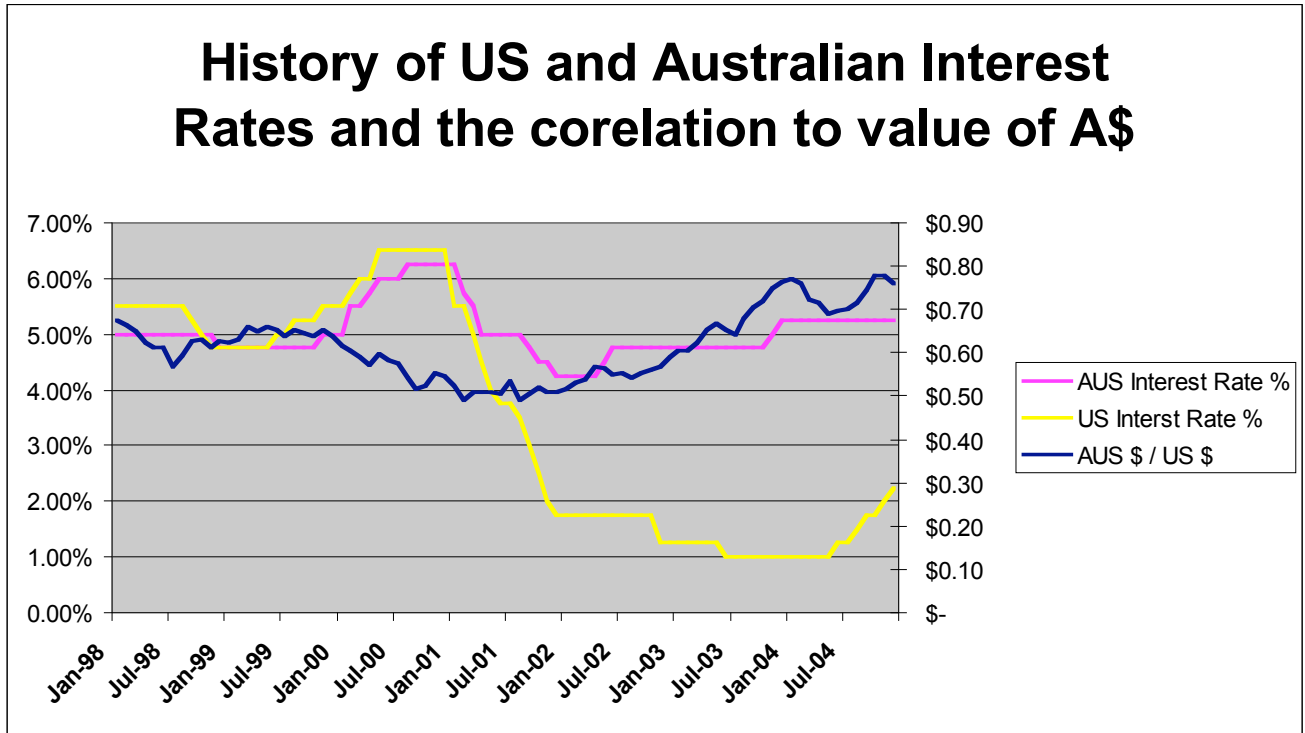
The following graph shows the fluctuations between the Brazilian REAL and the \$A Dollar



This Graph shows the resultant Brazilian and Australian sugar producer income in our own currencies



The following graph shows the impact the differential between Australian interest rates and US interest rates have upon our income.



- **WORLD “RESIDUAL” MARKET.**

Approximately 70 % of the worlds sugar production is sold and consumed in the country of its origin, at a price set by government to give an acceptable profit margin above their local producer costs. As this domestic producer price has absolutely no link or relativity to the world “residual” market price, the majority of the world’s sugarcane producers are virtually unaffected by Brazils devaluation as they have limited exposure to this “residual market”. Of course this does not apply to Australian producers as 100% of our sugar is either exported or priced domestically at the “residual market value”. This price is often wrongly labeled the “free world market price”. The key point though is that our competitive difficulties in the residual sugar market have little to do with farmer efficiency and everything to do with protectionism, and exchange rate shifts beyond our control. As this currency imbalance is unlikely to change sufficiently for the better in the foreseeable future: most analysts would suggest never, *we must look for better solutions both on farm and off farm.*

- **BRAZIL’S FARMING ADVANTAGES.**

In June 2004, I participated in a Queensland Government Sugar delegation to Brazil to assess their growing and milling sectors. At this point, I would like to acknowledge the hospitality of all the Brazilian sugar industry people we met on tour. I would like to thank them for the generous allocation of their time as well as the valuable information about their industry that they were prepared to so freely share with us. It was very much appreciated and we continue to enjoy ongoing communications.

We are also most thankful for the participants of the Brazil Ethanol Road Show along the Queensland coast from Brisbane to Cairns in August 2004. This raised awareness of the Brazilian ethanol experience and will assist in our efforts to have ethanol accepted as a viable clean green renewable fuel alternative, which **DOES NOT DAMAGE MOTOR VEHICLES.**

I was very impressed with all aspects of the Brazilian industry. They are doing an excellent job of making the best use of all the resources available to them. Brazil currently has 5.5 million hectares of land under sugarcane and it is quoted by their Department of Agriculture that a further 90 million hectares are available for expansion, and that does not encroach on the 350 million hectares of Amazon forests, which are to be left pristine. There is very limited irrigation as the rainfall is sufficient and much more reliable than Australia’s dryland production regions. Field worker labour

rates are 1/10th of the Australian pay scale, while mill workers are about 1/6th. Unfortunately none of the above can be transferred across the Pacific to improve the competitiveness of our industry.

- **BRAZIL'S MILLING ADVANTAGES –**

This is the area of stark contrast with the Australian industry. More than 80% of Brazils current milling capacity has been constructed over the last 30 years and have one feature in common – they all produce ethanol. This joint production concept allows the Brazilians to produce HIGHER quality raw sugar at a LOWER price than our traditional Australian mills. There are two very significant additional benefits when ethanol production is included in the milling process –

- 1) Longer season lengths are achievable due to the ability of the ethanol process to capture the energy value of reducing sugars, which are present in the sugarcane earlier and later than the current traditional harvest season. This results in much better utilization of the capital in milling infrastructure.
- 2) The dual product process (sugar and ethanol) consumes much less energy than the “all to crystal sugar” approach adopted here in Australia, therefore leaving a surplus of up to 70 % of the bagasse to be available for cogeneration of “green, renewable” electricity for sale to the national grid. The “all to crystal sugar” approach adopted by our mills in Australia can never match it with the Brazilian milling operations if we continue along our current path.

- **WHAT CAN WE TRANSLATE ACROSS THE PACIFIC?**

I am thoroughly convinced that for our industry to have a prosperous, sustainable future, we must emulate the Brazilian sugarcane-processing model with at least three products being produced,

(1) High quality raw sugar crystal

(2) Ethanol

(3) Cogeneration of “green” electricity.

We **must** capture the Brazilian mill process efficiency. We must also share the benefits of a more efficient industry between Growers and Millers. Brazil has achieved this through vertical integration of infrastructure ownership. This will be difficult to achieve and you can be assured there will be two fiercely opposing views on how to achieve it.

- **OUR PATH FORWARD-**

There are two key areas with potential for improvement:

- (1) Restructuring and further cost efficiency measures
- (2) Transition to an ENERGY crop via diversification to transport biofuels and green electricity.

The first point above is important, the second is absolutely essential for long-term industry viability.

RESTRUCTURING AND EFFICIENCY GAINS - do opportunities remain?

Possible areas for restructure to increase efficiency are:

- **FARM SCALE -**

I think the phrase “the horse has bolted” applies here to the possibility of significant gains in this area. While there are some who will benefit from increased scale they will be very site specific. It should also be pointed out that increasing size does not automatically lower costs. Farm block layout is of paramount importance in achieving lower costs. Now that each farming region has been developed with necessary infrastructure in place, in the majority of cases the net benefit of relocating infrastructure to achieve better farm layouts will be marginal. Dry land farms will offer more potential than irrigated farms.

Most of the major growing costs are on a per hectare basis (i.e., fertilize, herbicide, irrigation) leaving only two big ticket items affected by scale, (1) machinery capital and (2) labour. Because most of the machinery on the industry’s small farms has been purchased and paid for in better economic times, the capital is sunk and with low annual utilization and good maintenance, will last for many years to come at a minimal cost.

I am firmly of the view that all things considered, the best social and economic outcome for Australia is to not only allow the small cane farmers to remain in the industry but to encourage them to do so. I make this recommendation on one clear condition that a small farmer whose farm size cannot justify his total labour allocation must obtain off-farm employment to supplement his farm income.

- **INCREASED YIELD –**

This is an ongoing challenge for farmers year after year after year. There are currently no obvious “big” gains on the horizon. New higher producing varieties generally hold the greatest potential and these will be taken up as they prove themselves. There has been widespread misunderstanding in the media and among other observers of our industry, between goal setting targets of productivity improvement programs and actual “real world” achievable gains. This misunderstanding has caused a considerable problem for the industry’s public perception.

- **HARVESTER CONSOLIDATION –**

Statistics indicate there is considerable scope for rationalization. While there will be many situations where harvester rationalization will lower costs, the raw statistics are grossly misleading because they do not differentiate between harvesters. There are a whole range of harvesters out there from new \$400,000 machines cutting greater than 80,000 tonnes to the thirty year old machine that was paid off 25 years ago, cutting lower tonnages but providing valuable additional on-farm employment for the small farmer. The best economic outcome is for these farmers to continue to operate in these smaller groups until the end of the economic life of the harvester.

24 hour harvesting has been suggested as a possible lower cost solution due to the obvious better utilization of capital. There will be some growers in some areas of the state, which may benefit from this practice. Farms with lighter dry land crops and good field layout may well capture a benefit. In the Burdekin region, when I list all the advantages and disadvantages; with current technology and operating in the Australian cost structure, my conclusion is the result is negative.

24 hour harvesting may find favour if our exchange rate equaled Brazils, our cost of capital exceeded 12% and Brazils Workplace Health and Safety regulations applied here. Until that happens, most will find that our current single shift harvesting will predominate. We are currently encouraging millers to offer incentive payments to harvesting groups if there is a benefit to the miller of this practice.

The sugarcane growing industry is no different to every other business in Australia today. All the participants are endeavouring to improve their efficiency to increase profits and after five years of low prices we all know how hard it is to keep squeezing additional profitability from our businesses.

- **DELIVERY OF GOVERNMENT SERVICES –**

This is an area which has been completely overlooked in the ‘reform and restructure’ crusade but it is probably the only one, which offers immediate significant potential in lowering farm costs of production. That is especially the case in irrigated areas like the Burdekin where government monopolies with expensive centralized government bureaucracies grossly increase our water costs.

Local management of our irrigation reticulation systems can produce water price reductions lowering our total production costs by between 7-12%. This area of cost reduction must be pursued.

- **MILLING TECHNOLOGY –**

Australia's sugar industry has developed over the last 70 years under a highly regulated framework. As a consequence we have an industry focused on producing raw sugar crystal for overseas refineries.

Brazil on the other hand has a modern milling industry, which has developed with new integrated technology focused on **full utilization of the sugar cane plant**, producing a higher quality sugar crystal more attractive to refiners, and by allocating poorer sugar starches to the production of ethanol, with excess fibre going to the production of electricity. The Brazilian industry has developed within a government policy environment for the past 30 years, which has guaranteed the domestic ethanol market.

Australian millers are beginning to invest in these technologies and product diversification with new ethanol plants and emerging co-generation infrastructure. However current investment is piecemeal and current negotiations between millers and growers indicate that the cane farmer will not share in the benefit of the increased mill profitability.

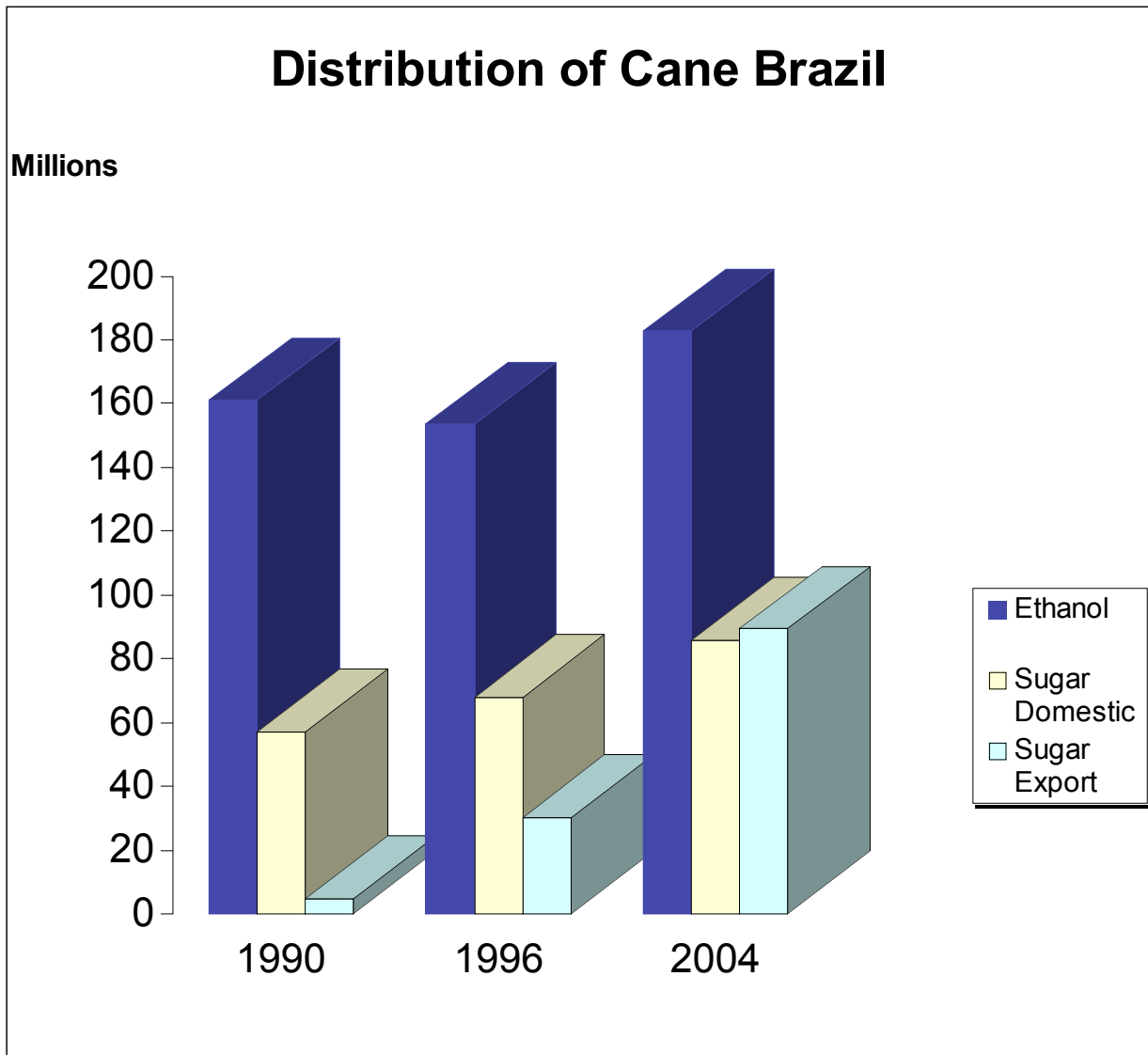
To increase the capital investment required to match Brazils technology, the Australian Government will, like the Brazilian Government, need to move policy settings forward to secure future Australian domestic markets for ethanol and excess electricity.

It may only take one new vertically integrated Brazilian style sugar-ethanol-cogeneration mill to generate a step change in efficiency right across the Australian industry and provide transparent infrastructure and production cost benchmarks which will restore the proper balance of negotiating power between miller and growers. We can match Brazilian sugar milling efficiency here, but only with the right policy settings. Greater competition and transparency of investment and production costs in the milling sector, together with positive renewable energy policy settings, would allow growers to take some advantage of our currency to invest in the most modern Brazilian milling infrastructure.

This is precisely what we intend to do in the Burdekin with the new Austcane group.

Why Renewable Energy is the only Real Answer:

The only long-term answer for any competing sugar cane industry is **diverse revenues** -- especially from renewable energy. Thirty years of Brazilian government policy encouraging domestic and now exported ethanol, a large domestic sugar market, and cogeneration underpins Brazil's dominance of the world residual sugar market.



DIVISION OF BRAZILIAN SUGAR CROP BETWEEN ETHANOL, DOMESTIC SUGAR, AND EXPORTED SUGAR

Thailand, our other closest competitor, is already moving heavily into ethanol to diversify revenues, as are other low cost sugar exporters. The potential for Australia to diversify its cane revenues is enormous, but the window of opportunity limited. Biofuels and cogeneration are by far the largest and most viable based on existing technology and both offer major economic, environmental and social benefits.

Renewable transport fuel potential is a huge untapped opportunity to diversify revenues in the Australian sugar industry. As oil price projections of \$20-25 a barrel start to look more fanciful by the day, that opportunity is looking ever more attractive on cost. Sugar could provide the lion's share of a renewable transport fuel market in Australia of over 1 billion litres annually. This has the potential to generate up to \$1.2 billion in extra revenue.

Because we could also be using excess currently wasted fibre (Bagasse) as the energy source to produce ethanol from sugar juice and add electricity to the grid, we would also maximise the greenhouse contribution.

All in all, these opportunities in renewable energy could raise the sugar industry's value by a significant amount and in doing so secure the regional economies, which rely on this industry.

The Opportunity for Policy Leadership:

While they obscure the industry's ongoing plight, the current lift in sugar price and the 2004 Sugar Industry Reform Package were both good news. All growers welcomed the desperately needed short-term assistance provided by the federal government and while diversification funding was modest it was very welcome.

Because there is so little room to raise farm efficiency, and because mill efficiency gains are restricted by the policy settings, those implementing the government's package are struggling to reconcile the 'reform and restructure' rhetoric of the 2004 package with reality on the ground.

What is now abundantly clear is that the *renewable energy policy settings – as opposed to funding programs -- are the most crucial area for government leadership* in any future sugar industry deliberations.

These are difficult policy challenges:

The oil majors understandably want to delay the uptake of biofuels – 'sure ethanol's safe and becoming more cost competitive as oil price projections rise, but why help a competitor into your market?'

Coal companies understandably want to defend their own domestic market share – so 'why help renewable electricity?'

Sugar millers will quietly exploit their regional monopolies in crystal sugar production – with renewable energy policy settings the way they are, why would you do anything else?

I can understand all of these positions and it helps to explain why some of the policy levers are left alone.

An increased Mandatory Renewable Energy Target would unlock the potential of sugar to generate electricity on a significant scale. A similar program for biofuels would do the same for sugar based ethanol and fix the anomaly between the treatment of renewable electricity and renewable transport fuels.

But why would government make these changes when those who would produce and sell the biofuels and electricity have their feet on the brakes? Government can't ignore this, but they have an opportunity to look to the broader national interest. Also at the current and projected rates of mining our enormous coal reserves for burning around the world, I believe it would considerably enhance our "international perception" if we were to display a genuine substantial commitment to offsetting these resultant CO₂ emissions with further clean, green renewable energy production. Our sugarcane growing industry is perfectly positioned to assist.

The reality is that pressure, domestically and internationally, to reduce greenhouse emissions from industry, transport and electrical energy sectors will only increase. The sugar industry can and must move into the renewable energy business if it is to survive and continue to contribute to the nations wealth.

In Closing:

My appeal today is for policymaking vision. The Prime Minister has acknowledged that sugar's predicament is not the industry's fault.

With no major breakthrough in trade liberalization the Australian sugar industry will continue to stagnate in the 'residual' sugar market. The only alternative is to diversify cane revenues with the right policy settings on renewable energy. In the overall scheme of things this would have a beneficial impact on other players in the energy sector.

This presents a golden opportunity for policy leadership and vision.

They have a chance not to resort to taxpayer funds but to policy measures, which are net positive for Australia and secure the social, economic and environmental contribution, which we know our sugar industry can make.

To Summarise:

- ETHANOL is not a single product issue,
- It is a TOTAL ECONOMIC, SOCIAL and ENVIRONMENTAL CONCEPT
- The Benefits include:
 1. Renewable fuel
 2. Reduction in CO2 emissions
 3. Improved air quality in our cities
 4. Improved public health
 5. Better quality sugar
 6. Lower cost sugar
 7. Improved balance of payments
 8. Improved fuel supply security
 9. Stabilization of Qld. coastal communities
 10. Regional employment

I look forward to working with government to see that Australia seizes this opportunity.