Redox Pty Ltd

FOR PUBLIC RELEASE

ANTI-DUMPING NOTICE NO 2019/83 **INVESTIGATION NO 515**

In response to the allegations QENOS have made against the imports of HDPE from Singapore, Thailand, Korea & the USA, we would like to submit the following public submission and make the following points.

1. QENOS cannot support the Australian HDPE market alone with its production volume. QENOS nameplate capacity is listed at 205KTpa (per attached QENOS fact sheet). Based on your estimates of the market size being 350KTpa there is a shortfall of around 145KTpa that QENOS cannot meet with locally produced HDPE. This is assuming that they are running at 100% utilisation of their 205KTpa capacity which we highly doubt given the documented gas shortages over the last couple of years.

2. Most modern world scale ethane crackers are built with capacities to produce over 1.5 million tonnes of ethylene. In comparison QENOS Altona plant – built in the 1960's – produces no more than 205 KTpa. These inefficiencies from the ageing plant combined with the well documented increasing gas prices we believe are the primary reasons for QENOS losing market share.

3. A successful dumping action would lead to raw material shortages and increasing raw material costs impacting end-user profitability. The market for HDPE in Australia would decline & put in jeopardy the jobs of several thousand employees that rely on competitively price HDPE materials to keep them competitive against imported finished goods.

4. As a potential customer of QENOS REDOX has sought to purchase HDPE resin from QENOS but has been rebuffed. QENOS claim - As per our conditions of sale, buyers may not resell our goods unless those goods form part of Value Added Goods. *Clause 5.7 Except as otherwise agreed, the Buyer may not resell any Goods delivered to the Buyer under these conditions, unless those Goods form part of Value Added Goods.*

5. Two news articles were released in 2017 – AFR publication 15 September 2017 (below) and The Australian 29 December 2017 (below) in which both articles outline the issues QENOS face due to soaring gas and electricity prices (in the order of 60-70% by their own admission). These massive increases in costs we believe are the key driver of QENOS inability to compete against much larger scale modern plants able to produce HDPE at much lower prices. QENOS also have made mention they cannot source enough gas to produce the ethylene required to run their plants anywhere near capacity further adding to their costs to produce.

6. It should also be noted the Australian market for HDPE Pipe resin is 120-140Ktpa with QENOS producing some 70Ktpa annually. Much of this is HDPE pipe resin is consumed in Western Australia where we believe QENOS struggle to sell QENOS resin with the high freight cost from Victoria to Western Australia. Due to this freight disadvantage QENOS is actively promoting, selling & importing HDPE pipe resin under an arrangement they have with overseas producers – LYONDELL BASELL / TASNEE (Saudia Arabia) & KPIC (Korea). In addition we understand QENOS is also promoting the same to east coast customers.

7. The below chart (obtained from a reputable global sourcing report) documents HDPE pricing (CFR South East Asia + US$40mt freight differential SEA to Australia). These prices are gathered across all South East Asia (SEA) producers and imported HDPE prices have largely followed these movements. It appears QENOS HDPE pricing has been selling well in excess of imported pricing for the last two years we believe primarily due to their escalating feedstock (gas) cost & securing sufficient supply of gas.

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2017 CY	HDPE Film	HDPE inj	HDPE Blow	AU$ to US$1.00
5-Jan	$ 1,225.00	$ 1,220.00	$ 1,215.00	$0.731
11-Jan	$ 1,215.00	$ 1,190.00	$ 1,210.00	$0.746
18-Jan	$ 1,205.00	$ 1,190.00	$ 1,200.00	$0.752
25-Jan	$ 1,205.00	$ 1,190.00	$ 1,200.00	$0.753
1-Feb	$ 1,240.00	$ 1,210.00	$ 1,200.00	$0.763
8-Feb	$ 1,245.00	$ 1,200.00	$ 1,210.00	$0.763
15-Feb	$ 1,245.00	$ 1,210.00	$ 1,220.00	$0.770
22-Feb	$ 1,240.00	$ 1,220.00	$ 1,210.00	$0.769
1-Mar	$ 1,210.00	$ 1,170.00	$ 1,170.00	$0.767
8-Mar	$ 1,210.00	$ 1,170.00	$ 1,170.00	$0.751
15-Mar	$ 1,210.00	$ 1,180.00	$ 1,180.00	$0.771
22-Mar	$ 1,220.00	$ 1,205.00	$ 1,185.00	$0.767
29-Mar	$ 1,215.00	$ 1,215.00	$ 1,180.00	$0.765
6-Apr	$ 1,200.00	$ 1,200.00	$ 1,160.00	$0.755
13-Apr	$ 1,200.00	$ 1,200.00	$ 1,180.00	$0.753
20-Apr	$ 1,190.00	$ 1,200.00	$ 1,180.00	$0.750
27-Apr	$ 1,180.00	$ 1,195.00	$ 1,170.00	$0.747
4-May	$ 1,180.00	$ 1,190.00	$ 1,160.00	$0.743
11-May	$ 1,180.00	$ 1,180.00	$ 1,160.00	$0.739
18-May	$ 1,180.00	$ 1,170.00	$ 1,160.00	$0.743
25-May	$ 1,165.00	$ 1,160.00	$ 1,150.00	$0.750
31-May	$ 1,155.00	$ 1,150.00	$ 1,150.00	$0.740
7-Jun	$ 1,150.00	$ 1,120.00	$ 1,140.00	$0.755
14-Jun	$ 1,150.00	$ 1,100.00	$ 1,120.00	$0.760
21-Jun	$ 1,135.00	$ 1,080.00	$ 1,100.00	$0.755
28-Jun	$ 1,130.00	$ 1,080.00	$ 1,100.00	$0.764
5-Jul	$ 1,130.00	$ 1,080.00	$ 1,100.00	$0.759
12-Jul	$ 1,130.00	$ 1,080.00	$ 1,100.00	$0.768
19-Jul	$ 1,140.00	$ 1,080.00	$ 1,120.00	$0.795
26-Jul	$ 1,150.00	$ 1,110.00	$ 1,130.00	$0.795
2-Aug	$ 1,170.00	$ 1,140.00	$ 1,150.00	$0.80
9-Aug	$ 1,180.00	$ 1,140.00	$ 1,150.00	$0.802
16-Aug	$ 1,180.00	$ 1,140.00	$ 1,160.00	$0.793
23-Aug	$ 1,200.00	$ 1,160.00	$ 1,170.00	$0.790
30-Aug	$ 1,230.00	$ 1,200.00	$ 1,210.00	$0.790
6-Sep	$ 1,250.00	$ 1,240.00	$ 1,260.00	$0.800
13-Sep	$ 1,260.00	$ 1,230.00	$ 1,270.00	$0.798
20-Sep	$ 1,250.00	$ 1,230.00	$ 1,270.00	$0.803
27-Sep	$ 1,225.00	$ 1,230.00	$ 1,240.00	$0.782
4-Oct	$ 1,240.00	$ 1,230.00	$ 1,240.00	$0.786

11-Oct	$ 1,240.00	$ 1,210.00	$ 1,240.00	$0.782
18-Oct	$ 1,270.00	$ 1,220.00	$ 1,260.00	$0.786
25-Oct	$ 1,285.00	$ 1,245.00	$ 1,290.00	$0.770
1-Nov	$ 1,285.00	$ 1,220.00	$ 1,280.00	$0.770
8-Nov	$ 1,310.00	$ 1,230.00	$ 1,300.00	$0.768
15-Nov	$ 1,300.00	$ 1,230.00	$ 1,290.00	$0.759
22-Nov	$ 1,320.00	$ 1,230.00	$ 1,320.00	$0.761
29-Nov	$ 1,340.00	$ 1,240.00	$ 1,340.00	$0.758
6-Dec	$ 1,340.00	$ 1,240.00	$ 1,340.00	$0.752
13-Dec	$ 1,330.00	$ 1,220.00	$ 1,340.00	$0.767
20-Dec	$ 1,300.00	$ 1,215.00	$ 1,320.00	$0.765

2018 CY		HDPE Film	HDPE inj	HDPE Blow		AU$ to US$1.00
3-Jan		$ 1,310.00	$ 1,220.00	$ 1,320.00		$0.780
10-Jan		$ 1,340.00	$ 1,240.00	$ 1,340.00		$0.782
17-Jan		$ 1,350.00	$ 1,270.00	$ 1,360.00		$0.795
24-Jan		$ 1,380.00	$ 1,290.00	$ 1,390.00		$0.805
31-Jan		$ 1,420.00	$ 1,330.00	$ 1,410.00		$0.810
7-Feb		$ 1,420.00	$ 1,330.00	$ 1,420.00		$0.783
14-Feb		$ 1,420.00	$ 1,320.00	$ 1,420.00		$0.793
21-Feb		$ 1,420.00	$ 1,320.00	$ 1,420.00		$0.780
28-Feb		$ 1,420.00	$ 1,320.00	$ 1,440.00		$0.777
7-Mar		$ 1,405.00	$ 1,320.00	$ 1,430.00		$0.780
14-Mar		$ 1,400.00	$ 1,320.00	$ 1,405.00		$0.788
21-Mar		$ 1,380.00	$ 1,240.00	$ 1,415.00		$0.770
28-Mar		$ 1,380.00	$ 1,230.00	$ 1,400.00		$0.765
4-Apr		$ 1,370.00	$ 1,260.00	$ 1,400.00		$0.772
11-Apr		$ 1,400.00	$ 1,290.00	$ 1,415.00		$0.777
18-Apr		$ 1,390.00	$ 1,310.00	$ 1,420.00		$0.779
25-Apr		$ 1,390.00	$ 1,320.00	$ 1,425.00		$0.757
2-May		$ 1,390.00	$ 1,340.00	$ 1,430.00		$0.750
9-May		$ 1,410.00	$ 1,340.00	$ 1,440.00		$0.743
16-May		$ 1,410.00	$ 1,340.00	$ 1,440.00		$0.752
23-May		$ 1,410.00	$ 1,340.00	$ 1,440.00		$0.758
30-May		$ 1,405.00	$ 1,320.00	$ 1,430.00		$0.757
6-Jun		$ 1,400.00	$ 1,320.00	$ 1,420.00		$0.765
13-Jun		$ 1,400.00	$ 1,320.00	$ 1,400.00		$0.755
20-Jun		$ 1,395.00	$ 1,320.00	$ 1,400.00		$0.736

27-Jun		$ 1,390.00	$ 1,300.00	$ 1,390.00		$0.735
4-Jul		$ 1,390.00	$ 1,290.00	$ 1,370.00		$0.738
11-Jul		$ 1,385.00	$ 1,280.00	$ 1,370.00		$0.742
18-Jul		$ 1,385.00	$ 1,280.00	$ 1,370.00		$0.740
25-Jul		$ 1,370.00	$ 1,280.00	$ 1,370.00		$0.745
1-Aug		$ 1,360.00	$ 1,250.00	$ 1,360.00		$0.740
8-Aug		$ 1,365.00	$ 1,250.00	$ 1,360.00		$0.743
15-Aug		$ 1,355.00	$ 1,240.00	$ 1,350.00		$0.740
22-Aug		$ 1,355.00	$ 1,240.00	$ 1,350.00		$0.735
29-Aug		$ 1,355.00	$ 1,240.00	$ 1,340.00		$0.730
5-Sep		$ 1,355.00	$ 1,240.00	$ 1,340.00		$0.719
12-Sep		$ 1,330.00	$ 1,240.00	$ 1,325.00		$0.717
19-Sep		$ 1,320.00	$ 1,230.00	$ 1,325.00		$0.726
26-Sep		$ 1,325.00	$ 1,230.00	$ 1,320.00		$0.725
3-Oct		$ 1,315.00	$ 1,230.00	$ 1,325.00		$0.711
10-Oct		$ 1,325.00	$ 1,230.00	$ 1,335.00		$0.707
17-Oct		$ 1,310.00	$ 1,220.00	$ 1,310.00		$0.711
24-Oct		$ 1,310.00	$ 1,220.00	$ 1,310.00		$0.707
31-Oct		$ 1,290.00	$ 1,200.00	$ 1,300.00		$0.711
7-Nov		$ 1,280.00	$ 1,200.00	$ 1,300.00		$0.727
14-Nov		$ 1,250.00	$ 1,180.00	$ 1,280.00		$0.727
21-Nov		$ 1,200.00	$ 1,110.00	$ 1,205.00		$0.726
28-Nov		$ 1,100.00	$ 1,090.00	$ 1,140.00		$0.731
5-Dec		$ 1,130.00	$ 1,030.00	$ 1,140.00		$0.723
12-Dec		$ 1,130.00	$ 1,040.00	$ 1,140.00		$0.722
19-Dec		$ 1,130.00	$ 1,060.00	$ 1,140.00		$0.710

Australian Financial Review publication Sept 15 2017.

Qenos looks at job cuts to ease gas price shock

Ben Potter
Senior Reporter
Updated Sep 15, 2017 — 5.11pm, first published at 2.54pm

Chinese-owned ethylene maker Qenos is looking at making cuts to its 1000-strong workforce at Altona and Port Botany to help it absorb soaring gas and electricity costs.

Chief executive Stephen Bell said the company had suffered a 60-70 per cent increase in energy costs this year and seen no material improvement in either the cost or the volume of gas on offer under contract since the Turnbull government announced a new domestic gas security trigger in April.

The domestic gas trigger could see liquefied natural gas exports curtailed if the domestic market is declared short of gas and Mr Bell said if the government didn't use the power and nothing changed, people would wonder what was the point of the exercise.

The Age, News 18/04/2017, picture by Justin McManus. Opposition Leader Bill Shorten visiting Qenos in Altona who is a manufacturer of polyethylene and relies on gas to power its plant. Shorten speaking with CEO Stephen Bell on a tour of the plant.

The company has 700 direct employees and 300 contractors. It uses natural gas to heat boilers and ethane - a gas liquid fuel - as a feedstock for its ethylene "crackers". Ethylene is used to make polythene, a basic plastic building block.

"We are facing more increases and clearly we can not absorb them or pass them on to our customers," Mr Bell said. "We have to find efficiencies and our overseas competitors are not facing this problem. They can buy (ethane) at the international price.

"We are going to see people leave the business unfortunately, and that's a shame because Australia is blessed with an abundance of hydrocarbons and natural gas."

Blame Queensland LNG

Mr Bell blamed the failure of LNG exporters in Queensland to produce as much gas as they projected from coal seam gasfields, meaning gas that previously served the domestic market was sucked from Bass Strait and The Cooper Basin and Moomba fields to the LNG industry. The flow is now southwards for the first time since 2015, Energy Quest chief Graeme Bethune said.

He said he would like to see onshore gas moratoriums lifted in all states that have them in place, but said the industry expects the next significant gas province in Australia to be Origin Energy's Betaloo shale field in the Northern Territory, which is being held up by the NT Labor government's ban on fracking.

Origin has identified contingent reserves of nearly 7000 petajoules (about 7 trillion cubic feet) of gas at Betaloo, south of Darwin from a single well drilled before the moratorium, according to Energy Quest's September EnergyQuarterly.

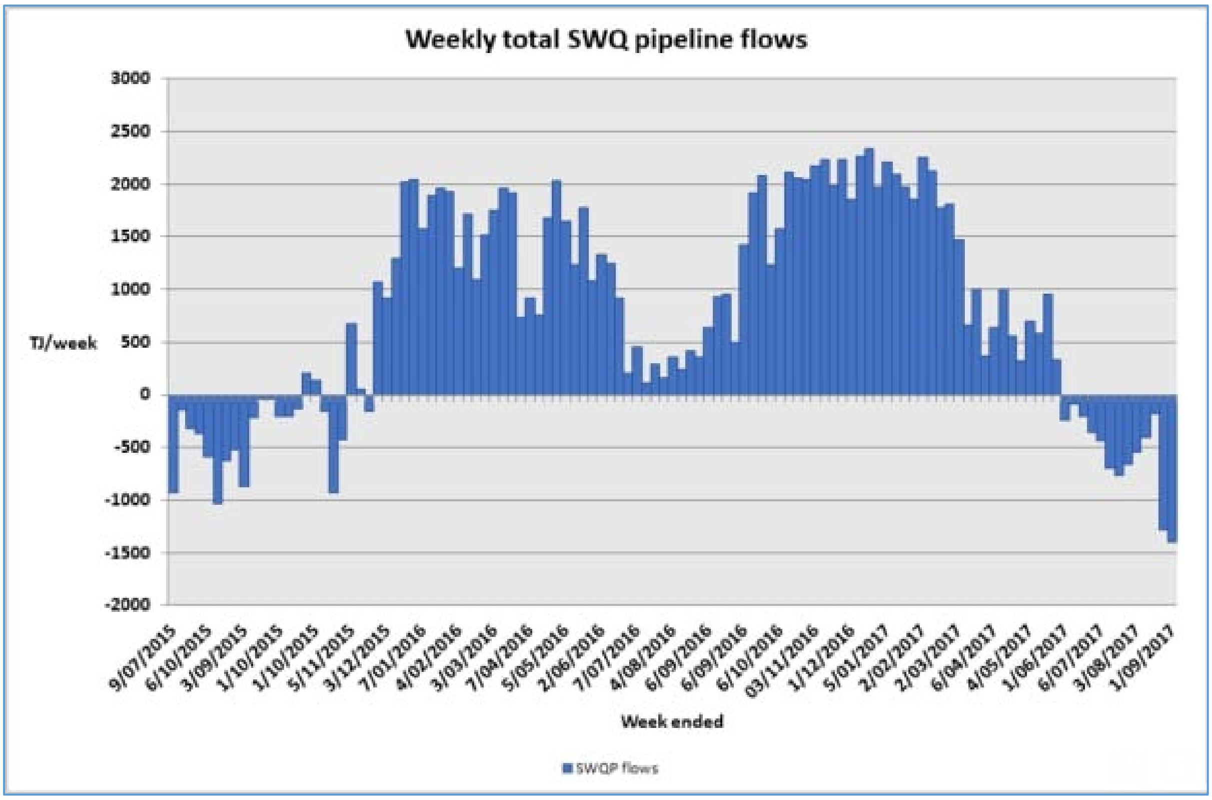
Citigroup estimates the 17,000 sqm province could contain as much as 100 trillion cubic feet, or more than Queensland's giant coal seam gas fields, but the project will be challenged by the cost of piping the gas to the east coast and production could be five to 10 years away.

By contrast, the 1.7 TCF reportedly located in Lakes Oil's locked down fields in Gippsland and Santos's Narrabri field in northwestern NSW are closer to large users and Opposition Leader Bill Shorten has urged the Victorian and NSW governments to lift their bans and let the gas flow.

Victoria could be gamechanger

"It would really be a game changer if Victoria removed the ban," said Garbis Simonian, director of Weston Energy in NSW, which sources gas for a number of small industrial users.

"There is a lot of gas in the ground there, a lot of tight sand gas that is ready to go and could be brought to market relatively quickly. It's proven, it's available and it's very close to market - that's where we need the gas."



Gas has begun to flow south from Queensland for the first time since 2015 **EnergyQuest**

Mr Simonian also said that more action was also needed from the NSW government to back the development of Santos's Narrabri coal seam gas venture, which would bring on a big enough volume of gas that should moderate east coast domestic prices.

He said some short-term purchase contracts were being signed in the $8-$10 a gigajoule range by some buyers, but many others were holding off hoping the federal government would trigger the Domestic Gas Security Mechanism for 2018.

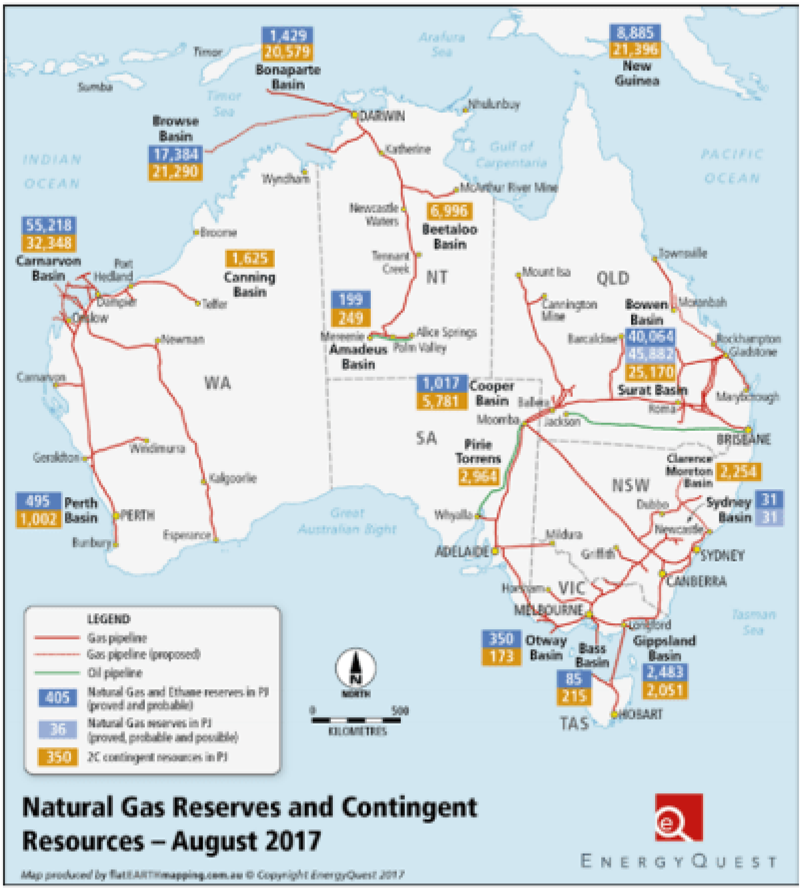
Mick McCormack, chief executive of dominant gas pipeline owner APA Group, said he was concerned that a federal government move to trigger the Domestic Gas Security Mechanism for 2018 would take the pressure of state governments such as Victoria's to lift the ban on onshore exploration.

Marginal

Louis Vega, head of Dow Chemical in Australian and New Zealand, said the federal government's efforts to date had had only a marginal impact on pricing and it was still cheaper for the Japanese to buy Australian gas than for Australian firms.

"Significant price movements will only occur when more gas is brought to the market and a truly competitive market evolves. This means ending the moratorium and reinstating onshore gas exploration. Once onshore is brought back, we can begin to reverse a dire situation and begin an effectively transition to a truly low-carbon economy for Australia," Mr Vega said.

Figure 21 Natural gas reserves and contingent resources, Australia, PNG and Timor Leste



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Gas Reserves and Contingent Resources **EnergyQuarterly Sept. 2017**

29 December 2017

https://www.theaustralian.com.au/business/companies/qenos-layoffs-start-as-energy-costs-hit/news-story/468a5d8c01f354465d442e637ecadcd4 1/2

THE AUSTRALIAN

Qenos lay-offs start as energy costs hit

Manufacturing company Qenos is being forced to lay off 15 per cent of its 700-strong workforce as it battles to cope with higher energy prices, chief executive Stephen Bell said yesterday. Mr Bell said Qenos, which has polyethylene plants in Altona in Melbourne and Port Botany in Sydney, had been battling hard to boost productivity following increases of up to $60 million a year in its gas and electricity expenses, but was now being forced to lay off staff.

“We have taken a lot of action working on every aspect of the business to improve our competitiveness, but it can only partially mitigate the impact,” he said. “We are having to take out 15 per cent of our workforce at the moment.

“We have already started with a number of people over the last few weeks and it will continue into the New Year. We are doing it with great reluctance but we have a business to run. We have to take action to keep the business viable.”

Mr Bell said the manufacturing industry in Australia was “facing the very real prospect of further job losses” because of the impact of higher energy prices. “I just don’t see how large industrial companies can continue (with) the sorts of cost increases we have sustained without having to take action.

“There is a very real prospect that some businesses might not be able to remain viable. With the prices we are seeing now for gas and electricity, some are just not sustainable. “The rise in energy prices is a big issue for us, and for all large users of energy.”

Mr Bell said electricity prices at the company’s plant in Sydney had more than doubled since last year. He said he was also worried about the effect of rising energy prices on his company’s customers. “We are a very domestically focused business. “We add value to local resources,” he said. “I worry about our customers. They are consumers of energy and the dramatic escalation of energy costs is putting them under enormous pressure. “It is a real issue for the whole value chain.”

Mr Bell said Australia had gone from having some of the cheapest energy in the world to being a country with the most expensive. Gas prices in the US had come down dramatically in recent years while prices in Australia had more than doubled, he said. “In Australia we were paying $4 a gigajoule a few years ago for gas but in recent times the costs are between $10 and $15 a gigajoule,” he said. “For most large industrial users, this is not competitive.” He said the big fall in energy prices in the US had encouraged more manufacturing to move back to America while manufacturing in Australia was under pressure. “We are competing against the world.

“We are going to see more industries go offshore.” He said this would have long-term effects on Australia’s economy. “Manufacturing is a sector which employs an enormous number of people,” he said.

GLENDA KORPORAAL, CHINA CORRESPONDENT

Glenda Korporaal has been covering business and finance in Australia and around the world for more than thirty years. She has worked in Sydney, Canberra, Washington, New York, London, Hong Kong and Singapore an... Read more

QENOS PROFILE

Australia's manufacturer and supplier of polyethylene

Locations:	Altona, Victoria and Botany, New South Wales
Employment:	Approximately 800 employees.
Manufactured Product Range:	The full range of polyethylenes (HDPE, LDPE,LLDPE)
Annual Capacity:	
Olefins/Olefines	Approximately 500,000 tonnes ethylene capacity
Polyethylene	About 200,000 tonnes HDPE, 90,000 tonnes LDPE and 120,000 tonnes of LLDPE

Shareholders:

China National Chemical Corporation (ChemChina) is the sole shareholder of Qenos Pty Ltd. ChemChina is a large government owned enterprise and is one of the leading speciality chemical and petrochemical companies in China with its headquarters in Beijing.

Qenos Plants:

An Overview of the Botany Sites:

The Qenos Botany site covers 37 hectares (91 acres) and is located approximately 17 km south of the Sydney central business district. The area is adjacent to Botany Bay and its shipping terminal. Chemical companies first commenced operations at Botany in 1942 and since that time the area has developed into a major chemical and plastics manufacturing location. The Qenos plants include Olefines, Alkatuff, Alkathene and Site Utilities. Site Utilities provides steam and power to all Qenos Botany plants and also the neighbouring Orica Chlorine and Huntsman Surfactants plants.

Olefines Botany
The Olefines plant was built in 1983 and originally operated on a naphtha and liquid petroleum gas (LPG) feedstock producing both ethylene and propylene. In 1996 the operation was converted and began to process ethane feedstock and the plant now produces approximately 250,000 tonnes of ethylene per year for the two downstream polyethylene plants–Alkatuff and Alkathene and other domestic and export customers.

Alkatuff Botany
The Alkatuff plant is the newest polyethylene plant and was commissioned in 1992. It produces over 120,000 tonnes of polyethylene per annum. The process requires only low pressure for production. The product is a stronger polymer called linear low-density polyethylene. LLDPE is light and has high strength properties. The polyethylene is used in many applications including stretch wrapping, food packaging and rotational moulded products including water tanks. Alkatuff also produces HD injection grades.

Alkathene Botany
The Alkathene plant uses a high-pressure polymerisation process and produces 90,000 tonnes of low-density polyethylene per year. LDPE is moisture proof, flexible, transparent, heat sealable, hygienic and recyclable. LDPE is used for plastic bags, film, moulded plastic products and linings for milk cartons.

An Overview of the Altona Sites:

The Altona Chemical Complex began production in the early 1960s and is the largest production centre for petrochemicals and plastics in Australia today. The Qenos Altona site covers 91 hectares (225 acres) and is located approximately 15 km west of the Melbourne central business district.

Olefins Altona

Olefins produces ethylene for its downstream plastic plants. It also supplies other manufacturers that use these basic raw materials. It has an ethylene capacity of over 180,000 tonnes per year.

Plastics Altona

The Plastics site manufactures High Density Polyethylene (HDPE). Low pressure polymerisation is the industrial process used to transform ethylene into polyethylene.
Many items that are used in the home, such as milk bottles, micro irrigation pipes, moulded plastics and telecom conduit are made from resin produced at Qenos Plastics.

Resins Altona

Production began at the site in 1967 as Hoechst Australia. Qenos Resins produces high density polyethylene (HDPE). The current capacity of this plant is 90,000 tonnes per annum and provides the raw material for plastic products in a wide range of domestic and consumer goods.

Our products:

Summary of Qenos Products/End Uses

Plant	Main Products	Some End Uses
Qenos Olefins	Ethylene	Basic raw materials for production of plastics
Qenos **Plastics**	High Density Polyethylene	Plastic materials used for automotive parts, bottles, water and gas pipes, wire and cable insulants, miscellaneous moulded articles, plastic components for motor vehicles
Qenos **Resins**	High Density Polyethylene	Pipes, bottles, packaging, electrical appliances and an extensive range of domestic and consumer goods
Botany **Olefines** **Alkathene** **Alkatuff**	Ethylene Polyethylene	Plastic film, moulded plastic products, water tanks, linings of drink cartons, toys, garden equipment, bread wrapping and electrical cable insulation and industrial packaging

Qenos Imported Product Range

Qenos acts as local agent for a wide range of imported polymers manufactured by ExxonMobil Chemical, Dexco Polymers, Kumho and BASF. These products include: EPDM; butyl and nitrile rubber; metallocene PE; EVA; EMA; EAA/ionomer; PP; BOPP; polyester resins; bitumen modifiers; tackifying resins; polymer modifiers; styrenic thermoplastic rubbers, thermoplastic elastomers, styrene butadiene rubbers and PIB.