5

Employment issues

Introduction

- 5.1 The closure of the Kurnell and Clyde refineries will inevitability lead to the displacement of some workers. This chapter reviews the broad employment environment for employees in the refining and energy sector, the impacts of proposed refinery closures and the transition arrangements in place for displaced workers.
- 5.2 A significant feature of the recent and anticipated closures of Australian refineries is that they are relatively orderly, with a long lead in. This is important not only to allow the market time to readjust supply chains, but also to provide displaced workers with time to seek and secure new job opportunities.

Background

5.3 Employment in the domestic energy sector is adjusting to support the changing needs of industry. According to the Australian Government's *Energy White Paper 2012* (EWP), the energy industry directly provides more than 100 000 jobs and indirectly supports many more.¹ It is forecast that jobs in the sector will grow by 3.9 per cent annually, for the next five years. Employment in oil extraction is forecast to grow at 7.3 per cent.²

¹ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 12.

² Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 206.

- 5.4 In general the energy sector's workforce is more highly skilled than other industries.³ This characterisation holds for petroleum refining and fuel manufacturing industry, according to the Department of Resources, Energy and Tourism (RET) 'a large proportion of workers in the sector are employed in higher skilled occupational groups'.⁴ The most common individual occupation is Chemical, Gas, Petroleum and Power Generation Plant Operators.
- Table 5.1Main employing occupations in the Petroleum Refining and Petroleum Fuel
Manufacturing sector, 2011

Occupation	Number employed	Employment share of occupation (%)
Chemical, Gas, Petroleum and Power Generation Plant Operators	1100	20.0
Metal Fitters and Machinists	310	5.5
Production Managers	180	3.2
Industrial, Mechanical and Production Engineers	130	2.3
Other Building and Engineering Technicians	120	2.1
Electricians	110	1.9
Mining Engineers	100	1.7
Structural Steel Construction Workers	100	1.7
Chemists, and Food and Wine Scientists	90	1.7
Engineering Professionals (not further defined)	90	1.6

Source RET, Submission 18, Table 5, p. 19.

- 5.5 The employment prospects in the oil refinery industry diverge from the wider energy sector's story of strong growth and buoyant employment. At present RET has indicated that 5 500 people are directly employed in the sector.⁵ Only 240 workers have joined the sector since 2006 and with the closure of the Kurnell refinery by mid-2014 this moderate growth in jobs will decline.⁶
- 5.6 In his submission, Mr Velins posited that a range of factors have contributed to reduced employment in refineries since the 1960s:

Reduction in employment started once protective tariffs were removed in the early 1960s. The next waves of change came in the

- 5 RET, Submission 18, p. 18.
- 6 RET, Submission 18, p. 28.

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³ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 208.

⁴ Department of Resources, Energy and Tourism (RET), Submission 18, p. 28.

late 1960s when mandatory processing of Gippsland crude oil commenced, as most refiners then lost the upstream margin from their own fields overseas which had propped up their downstream (refining, distribution and marketing) operations. Changed maintenance processes and the move to centralised control rooms, automated analytical instruments and the use of process control computers in [the] early 1990s resulted in further reductions in staff.⁷

5.7 The inquiry has highlighted that the general narrative of the refinery sector does not necessarily reflect what is happening in practice. It is clear that employment prospects vary from employer to employer, and from refinery to refinery. During the hearing Mobil Oil stressed that the sector was viable and that refining would continue:

A lot of the discussion over the course of today has seemed to me to be working on the view that there is no future for the refining industry in Australia. I do not agree with that, fundamentally. I think there is a business for refining in Australia. It is important to the economy. These are high-tech, high-skilled jobs that are very important for the long-term viability and vibrancy of the Australian economy. It is important from an education perspective. It is important from an infrastructure perspective.⁸

5.8 As the sector adapts it is crucial that both government and industry work to ensure that the skills utilised in the oil refining sector are preserved and that displaced workers have viable employment options.

Discussion

Employment conditions

5.9 The Construction, Forestry, Mining and Energy Union (CFMEU) told the committee that the average age of workers was early to mid-50s and the average length of service for workers was 20 years.⁹ According to

⁷ Mr Eriks Velins, Submission 1, p. 4.

⁸ Mr Andrew Warrell, Mobil Oil, Committee Hansard, Canberra, 30 November 2012, p. 31.

⁹ Ms Lorraine Usher, Construction, Forestry, Mining and Energy Union (CFMEU), *Committee Hansard*, Canberra, 30 November 2012, p. 33. Also see RET, *Submission 18*, p. 22.

Shell, refinery workers earn between \$130 000 and \$150 000 per annum for a 35-hour week and a nine-day fortnight.¹⁰

- 5.10 The evidence indicates that workers in the sector are highly skilled, relative to other industries.¹¹ BP claimed that the market for skilled employees was 'highly buoyant' and that the resources boom had driven wage inflation.¹²
- 5.11 For BP, labour is now the second largest cost associated with refineries, following crude feedstock. It stated

The Australian personnel cost index (that is, the cost of labour per barrel produced) is some four times more expensive in Australia than in the region. This is not just a challenge in comparison to Asian economies. On a global scale, skilled worker costs in US and European competitors are now substantially lower on a USD equivalent basis through a combination of exchange rate movements and the very high domestic wage inflation over recent years, which have not been compensated for in productivity improvements. This is compounded by comparatively generous non- cash benefits of domestic labour and its impact on productivity.¹³

- 5.12 Shell stated that labour costs had increased three-fold over the last ten years.¹⁴ The CFMEU countered this claim, and argued that increases were a function of the strong Australian dollar.¹⁵
- 5.13 Caltex acknowledged that wages did affect the company's profitability, but stressed that wages did not factor into its decision to close the Kurnell refinery:

... in the case of Kurnell, where we have made the decision to close, had the AWU offered to halve their wage rates — they did not; but had they — it probably would not have changed the outcome. Quite frankly, the numbers were so compelling against it that it was not about those sorts of issues. Whether it was tax or other imposts, they were not at the margin. The structure of the refinery, the fact that it is energy inefficient, the fact that it was set up to make regular grade gasoline and is constrained to a

- 12 BP, Submission 13, p. 12.
- 13 BP, Submission 13, p. 7.
- 14 Mr Andrew Smith, Shell, Committee Hansard, Canberra, 30 November 2012, p. 37.
- 15 Mr Peter Colley, CFMEU, Committee Hansard, Canberra, 30 November 2012, p. 38.

¹⁰ Mr Andrew Smith, Shell, Committee Hansard, Canberra, 30 November 2012, p. 43.

¹¹ RET, Submission 18, p.18.

particular type of crude just meant that its fate was set by the hardware. However, when the operation starts to become marginal then these things do start to become more and more important.¹⁶

Employment in the sector and the impact of closures

- 5.14 The employment figures for the petroleum refining and fuel manufacturing industry, and the impact of closures, varied between sources. According to RET approximately 5 500 people were employed in 2011 in the refinery industry.¹⁷ The Australian Institute of Petroleum (AIP) has estimated that the industry directly and indirectly provides between 3 500 and 4 000 jobs.¹⁸ The Australian Manufacturing Workers' Union (AMWU) estimated that there are 4 700 permanent and contract staff directly employed by sector.¹⁹
- 5.15 Industry and the unions provided the committee with refinery specific employment figures. For example, BP submitted that they directly employ 828 workers at the Kwinana and Bulwer Island refineries.²⁰ Another 500 contract workers provide labour such as specialist engineering and maintenance services. Periodically, the labour force increases by an additional 500 workers during shutdown activities.²¹
- 5.16 It has been estimated that the closures of the Clyde and Kurnell refineries will directly result in the loss of 490²² and 700²³ permanent jobs respectively. These figures however do not include contract workers or the indirect job losses to associated businesses and services.
- 5.17 According to Shell, its decision to close the Clyde refinery and convert it to an import terminal would lead to the loss of 200 jobs, from a total of 310.²⁴ It is anticipated that 180 people will be made redundant (of which 60 are expected to retire); 20 employees resigned; and more than 100 employees have been redeployed within Shell (13 employees at the upstream Prelude

¹⁶ Mr Gary Smith, Caltex, Committee Hansard, Canberra, 30 November 2012, pp. 39-40.

¹⁷ RET, Submission 18, p. 18.

¹⁸ Australian Institute of Petroleum (AIP), *Downstream Petroleum* 2011, p. 9.

¹⁹ Australian Manufacturing Workers' Union (AMWU), *Submission* 7, p. 4.

²⁰ BP, Submission 13, p. 10.

²¹ BP, Submission 13, p. 10.

²² CFMEU, Submission 9, Attachment 2: Strategic Economics and SGS Economics and Planning, The Future of Clyde Refinery – A report to CFMEU Mining & Energy and AMWU, July 2011, p. 54

²³ Caltex, Submission 12, p. [13]; AWU, Submission 4, p. 17.

²⁴ Shell, Submission 20, p. 12.

project and 90 employees in the terminal conversion or the operational terminal).²⁵

- 5.18 The CFMEU provided the committee with a report on the effects of closing the Clyde refinery.²⁶ The report stated that the closure would result in the direct loss of 490 jobs and the indirect loss of 1 700 jobs in NSW.²⁷ In its submission the CFMEU stated that the refinery directly employs 350 workers and around 220 contractors.²⁸ The CFMEU evidence contends the total job losses across Australia will be around 2 200.²⁹ It is anticipated that indirectly jobs will be lost in the plastics and petrochemical industry.
- 5.19 Caltex announced that the Kurnell refinery will close in mid-2014. Caltex has estimated that 430 Caltex employees and 300 contractors will be directly affected.³⁰ The effects of the closure are compounded for the town of Kurnell as its total population is only 2 200.³¹ The AWU posits that '[t]he sheer quantum of jobs being lost in this instance will ensure that further jobs are lost not merely in the supply chain but in community business'.³² The AWU has stated:

It is likely that the removal of such a large volume of jobs, income and resulting consumption from such a small community will have a deleterious effect on local businesses and further increase job losses and closures in the supply chain and in other sectors that rely on income from refinery workers.³³

5.20 Redeployment within the companies was an option for some employees. During the hearing Caltex stated:

> Since the announcement, we have lost about 20 employees from Kurnell, but 13 of those employees have actually moved to our sister refinery in Brisbane. So within the industry there is some transferring of skills, and we are proactively promoting that. But, in terms of other activities, we are doing a lot of the same things that Shell are doing, as Andrew Smith talked about. We are having employment fairs. We had Chevron visit just recently, seeking

- 27 CFMEU, *Submission 9*, p. [54]; Mr Peter Colley, CFMEU, *Committee Hansard*, Canberra, 30 November 2012, p. 36.
- 28 CFMEU, Submission 9, p. 2.
- 29 CFMEU, Submission 9, p. 2.
- 30 Caltex, Submission 12, p. [14].
- 31 Australian Workers' Union (AWU), Submission 4, p. 17.
- 32 AWU, Submission 4, p. 18.
- 33 AWU, Submission 4, p. 17.

²⁵ Shell, Submission 20, p. 12.

²⁶ See CFMEU, Submission 9.

interest in LNG roles that they are involved with. We are supporting retraining of all our employees, and every employee has an opportunity to get funding from the company to assist in retraining activities as well.³⁴

Downstream impacts

- 5.21 The unions and industry are cognisant that the impact of closures extends beyond the refineries to associated service providers, local businesses and downstream industries.³⁵
- 5.22 The AMU provided an example of the downstream impacts of the Kurnell refinery closure:

A tangible example of the net impact of the Caltex closure is the recent shutdown of the local lubrication refinery. This closure lead to the loss of 100 direct jobs and also lead to the closure of a downstream supplier and the loss of a further 60 jobs. The sheer quantum of jobs being lost in this instance will ensure that further jobs are lost not merely in the supply chain but in community businesses. ³⁶

- 5.23 Caltex has provided the committee with a list of businesses, both upstream and downstream, which will be affected by the closure. These include:
 - the possible closure of LyondellBasell and HCE;
 - loss of work for various contractors; and
 - loss of income for some 470 small businesses which supply the refinery, at a quarterly spend of approximately \$50 million.³⁷
- 5.24 LyondellBasell submitted to the committee that it employs 175 people and is the only Australian manufacturer of polypropylene. In its submission LyondellBasell did not discuss the closure of the Clyde refinery and its impact. However, it did state that it sourced 95 per cent of its key raw materials from Australian refineries and that it purchased and shared utilities and services onsite with Shell at both the Clyde and Geelong refineries.³⁸ During the hearing, the CFMEU stated:

³⁴ Mr Gary Smith, Caltex, Committee Hansard, Canberra, 30 November 2012, p. 43.

³⁵ For example AMWU, Submission 4, p. 4; CFMEU, Submission 9, p. 2;

³⁶ AWU, Submission 4, p. 18.

³⁷ Caltex, Submission 12, p. [14].

³⁸ LyondellBasell, Submission 19, p. 1.

... aside from the direct job losses in oil refining, there are other flow-on impacts to firms like LyondellBasell in terms of highskilled, complex manufacturing jobs, high-wage, high-skill jobs, so there is likely to be a permanent loss of that manufacturing capacity and those manufacturing skills as a result of large parts of the plastics and petrochemicals industry shutting down.³⁹

5.25 In relation to the possible effects of refinery closures on businesses like LyondellBasell, RET commented:

Oil refinery closures in Australia are therefore likely to have flow on effects on downstream manufacturing activity through reduced availability of feedstock for the chemicals and plastics industry. While many of the final products could be imported, and some inputs could be replaced with imports, there are likely to be adjustment pressures on the chemicals industry.⁴⁰

Skills retention

5.26 The unions and industry recognise the importance of refineries as places to employ and train high skilled workers.⁴¹ During the hearing Mobil Oil stated:

One thing we feel people need to consider is not only the supply and demand implications but ultimately the jobs that are involved. These are high-tech, high-skill jobs. If we provide the right environment for these types of jobs, then we provide a draw in our universities and the infrastructure of the manufacturing industry as somewhere to develop engineers, scientists, high-skilled fitters and tradespeople and things. If you do not have that there, you will not have something that is resilient to the commodity cycle. People seem to forget that commodities do go through cycles over time. So we need a place where those high-skilled workers can reside. If we do not have that, as we go through the commodity cycle all those skills atrophy.⁴²

³⁹ Mr Peter Colley, CFMEU, Committee Hansard, Canberra, 30 November 2012, p. 36.

⁴⁰ RET, Submission 18, p. 22.

⁴¹ Mr Peter Colley, CFMEU, *Committee Hansard*, Canberra, 30 November 2012, p. 36; Mr Andrew Warrell, Mobil Oil, *Committee Hansard*, Canberra, 30 November 2012, p. 4.

⁴² Mr Andrew Warrell, Mobil Oil, Committee Hansard, Canberra, 30 November 2012, p. 4.

5.27 Similarly, the CFMEU discussed the impact the closures would have on the capacity of tertiary institutions to provide practical training:

A particular point that was raised with us by people in the University of Sydney and UNSW was that they basically place people undertaking tertiary education—engineering and petrochemicals people—in those refineries. Those training opportunities are no longer going to be there. So, for major universities in Sydney, it is going to be a problem getting the onsite training positions for their students. So we are talking about the loss of tertiary skills, graduate skills, as well.⁴³

5.28 The AIP makes the point that the refinery industry is technologically advanced and as such employs and brings to Australia highly skilled staff:

International expertise flows readily into the Australian refinery workforce. There are also many 'spill-over' effects into other industries through the transfer of technical skills and expertise to other businesses.⁴⁴

Alternative employment opportunities

5.29 The committee heard that the skills of displaced workers were in high demand in other areas of the resources sectors, particularly LNG. Industry and government indicated that they were committed to assisting displaced workers find alternative employment. In the EWP, the Australian Government indicated that there will be 'strong demand' for workers in the energy resources sector generally and it is aiming to facilitate workforce mobility to fulfil demand.⁴⁵ Shell told the committee:

Most of the skills that are in the refinery area are in demand internationally, ranging from somebody who is a panel operator, who typically would have at least 10 years experience, to the engineers and management. These are all skills that are in strong demand internationally. We have a number of the workforce, ranging from operators to instrument supervisors to electrical supervisors to various engineering disciplines, working internationally and in Shell projects offshore.⁴⁶

⁴³ Mr Peter Colley, CFMEU, Committee Hansard, Canberra, 30 November 2012, p. 36.

⁴⁴ AIP, Downstream Petroleum 2011, p. 9.

⁴⁵ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 208.

⁴⁶ Mr Andrew Smith, Shell, Committee Hansard, Canberra, 30 November 2012, p. 41.

5.30 In its submission, Shell has cautioned that it has experienced difficulty redeploying employees, despite the workers having the relative training and skills required for their new positions:

The small number of employees who opted to try for roles in our upstream business supports the view that Australian workers on the whole are not readily mobile – despite many of these workers having the right skills and training to easily transfer to the upstream business.⁴⁷

- 5.31 Shell concluded that there are jobs available in upstream LNG projects, however, employees will need to be mobile.⁴⁸
- 5.32 In his submission, Mr Velins suggested that the growth in LNG plants would provide employment opportunities for refinery workers.⁴⁹ Caltex submitted that:

While refinery closures inevitably reduce employment in the sector, the avoidance of losses in refining frees up capital for more productive use within the economy, boosting employment overall; in addition, Australia has a shortage of skilled labour broadly of the type released by refinery closures, so it is expected labour will be redeployed overall into more productive uses.⁵⁰

5.33 The AWU told the committee that they had received anecdotal reports that Kurnell employees who were actively looking for new jobs were experiencing difficulties:

You are talking about these highly skilled operators. They have been through the rigorous process of applying for jobs, even in a FIFO capacity into Western Australia and those rural areas, and only a small handful of guys have been able to secure work in those growth industries, which is concerning. It points to whether or not there is capacity for displaced highly skilled manufacturing workers to find a path into these growth sectors of the economy. There appears to be a disconnect there, and that is something of high concern, given the already huge impact of losing a job and the probability of finding employment thereafter.⁵¹

48 Shell, Submission 20, p. 14.

⁴⁷ Shell, Submission 20, p. 13.

⁴⁹ Mr Eriks Velins, Submission 1, pp. 5-6.

⁵⁰ Caltex, Submission 12, p. [13].

⁵¹ Mr Misha Zelinsky, AWU, Committee Hansard, Canberra, 30 November 2012, p. 37.

5.34 In relation to the closure of the Clyde refinery, it was reported that:

It is likely that some of the staff directly affected by the closure could find employment elsewhere. However, this transition period is likely to create short-term hardships for these workers and their families whilst they invest time and resources to re-skill and/or up-skill to remain in the workforce.⁵²

5.35 In its submission RET identified the relative opportunities of workers depending on their job description, in general it was concluded that:

Workers displaced by refinery closures will have varying job prospects, depending on their skills and abilities, and depending on their willingness to seek work in other sectors, occupations or locations. Some workers with highly specialised skills may need to undergo retraining in order to take advantage of available job opportunities.⁵³

- 5.36 RET advised the committee of the measures the Australian Government would undertake to assist redundant employees, these included:
 - a 'Jobs Market' for employees of the Kurnell refinery, which would bring together job seekers with employers and training organisations;
 - the new 'Resources Sector Jobs Board' which is a website advertising job vacancies;
 - general employment programs -- such as employment support with a 'Job Services Australia provider' for help with resume preparation, job applications, interview skills and career advice; the 'Experience+Career Advice service' for redundant workers over 45 year; financial advice from Centrelink;
 - general skills development programs in particular the 'Australian Government Skills Connect initiative' and the 'Building Australia's Future Workforce package'.⁵⁴
- 5.37 Caltex told the committee that it is 'committed to supporting its people with the highest level of care, attention and respect'.⁵⁵ To this end Caltex will be providing displaced workers with a range of services, including

⁵² CFMEU, Submission 9, Attachment 2: Strategic Economics and SGS Economics and Planning, The Future of Clyde Refinery – A report to CFMEU Mining & Energy and AMWU, July 2011, p. 54.

⁵³ RET, Submission 18, p. 29.

⁵⁴ RET, Submission 18, p. 20.

⁵⁵ Caltex, Submission 12, p. [13].

redundancy benefits, vocational training allowances and outplacement services, which include resume writing and interview skills training.⁵⁶

5.38 Shell has also submitted that it is committed to assist displaced staff:

As part of the conversion project Shell has invested a considerable amount of time and effort to equip our staff for life outside Shell. Apart from the almost 20 different programmes and seminars held for our employees post the announcement, we have run a series of Career Expos where local and National employers could engage with our employees on future job opportunities. The employment opportunities presented at these Expos resulted in employees feeling more confident that they could secure employment (even in Sydney) post the conversion of Clyde - including nine direct offers of employment from employers attending these Expos. In addition Shell worked with the local TAFE College on having more than 160 employees receive recognition of prior learning and thereby receive various trade certificates and qualifications.⁵⁷

Conclusion

- 5.39 The energy sector is a major employer providing work directly and indirectly for over 100 000 Australians. It is forecast that jobs in the sector will grow by 3.9 per cent annually, for the next five years. Employment in oil extraction is forecast to grow at 7.3 per cent. Employment in the oil refining sector diverges from the wider energy sector. At present, 5 500 people are directly employed in the sector with growth declining because of reducing refining capacity.
- 5.40 In general the energy sector's workforce is more highly skilled than other industries. This characterisation holds for petroleum refining and the fuel manufacturing industry. A large proportion of workers in the sector are employed in higher skilled occupational groups. It can take up to fifteen years for employees to become fully skilled in certain fields. So as refining capacity reduces there can be significant loss of skill, which cannot be easily replaced. This potential skill loss is something that the oil companies should monitor.

⁵⁶ Caltex, Submission 12, p. [13].

⁵⁷ Shell, Submission 20, p. 13.

- 5.41 Evidence presented showed that the people employed in the oil refinery industry are highly skilled, productive and, as is indicated by the average length of service, loyal.
- 5.42 Five refineries are remaining open and the committee did not receive any indication that they would be closing in the short-term. Indeed, Mobil Oil and Caltex indicated that refining was an important core business for them. The cooperative approach that Mobil and its employees are taking at the Altona refinery is commendable.
- 5.43 Where closures are inevitable, the committee holds the view that reducing undue stress and assisting workers to adjust to changing employment circumstances should be a priority for both industry and government. The committee believes this can only occur when there is a level of certainty for workers and targeted support. To date, structural changes have occurred in a relatively orderly manner, with long lead times between closures being announced and workforce having to adjust. Efforts to redeploy and reskill displaced workers must remain a priority.

Julie Owens MP Chair 30 January 2013