

Research that matters.

Coal in the Southern Highlands economy

Briefing note March 2015

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The Australia Institute

Research that matters.

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Introduction

Mining has a long history in the Southern Highlands, but plays a small role in its economy today. Oil shale extraction and iron works also existed in the nineteenth century, but have long since closed.1 Berrima Colliery has historical roots dating back to 1867, but was mothballed in 2013 following a court case which found the mine was polluting local waterways and that its expansion should not proceed.2 Today the industry is based on several active quarries producing sand and building materials as well as one active coal project and one prospective coal project.

The active coal project is Tahmoor Coal, an underground longwall mine which began in 1975. It is currently owned by Swiss-based multinational Glencore. It mines coking coal and thermal coal, producing around two million tonnes of saleable coal in 2013. Tahmoor is proposing to expand in the future.³ Tahmoor employs around 500 people.⁴

The proposed coal project is Hume Coal, owned by Korean energy company, Posco. It is currently exploring in the Southern Highlands region around Sutton Forest, with the intention of developing an underground mine. 5

Hume Coal's project is opposed by parts of the Southern Highlands community, particularly the Southern Highlands Coal Action Group (SHCAG). The group is concerned that further coal development will negatively affect water resources in the region and its wider economy, concerns echoed by local member and Minister for Planning, Pru Goward:

Water quality may be impacted, local tourism businesses may suffer, and property values may fall. The community could lose more than it could ever gain from big mining.6

A study commissioned by SHCAG suggests that the inflow of groundwater into the mine would be 13 billion litres (13 gigalitres, GL) per year 20 years after commencement of the mine. To put this in context, irrigation water allocations in the district is 16.3 GL. The study estimates that this inflow would lead to drawdown of the watertable by around 120 meters and would be felt over an area of up to 200 square kilometres.⁷

The Australia Institute prepared this briefing note at the request of SHCAG in preparation for a community rally in Bowral on 7 March 2015.

The Southern Highlands economy

Like most of the NSW and Australian economies, the economy of the Southern Highlands is dominated by service industries. Health care and social assistance is the largest employer, followed by retail trade, manufacturing, education and construction, as shown in Figure 1 below:

¹ http://www.joadjatown.com.au/about.html http://www.fitzroyironworks.com.au/

http://www.illawarracoal.com/berrima.htm

http://www.miningaustralia.com.au/news/boral-puts-berrima-colliery-into-care-and-maintena

www.tahmoorcoal.com.au/EN/Publications/Annual%20Environmental%20Management%20Reports/2 0140328%20Tahmoor%202013%20Annual%20Review%20with%20appendices%20(Reduced%20Fil e%20Size).pdf

⁽NSW Trade & Investment 2013)

http://www.humecoal.com.au/

⁶ http://www.highlandsproperty.com.au/southern-highlands-undermined/

http://www.shoocockatoo.com/media-info

Health Care and Social Assistance 2,297 Retail Trade 2,249 Manufacturing **Education and Training** 1,791 Construction 1,654 Accommodation and Food Services 1,583 Professional, Scientific and Technical Services 1.229 Transport, Postal and Warehousing 868 **Public Administration and Safety** 819 Other Services 709 Administrative and Support Services 650 Wholesale Trade 645 Agriculture, Forestry and Fishing 643 Financial and Insurance Services 434 Rental, Hiring and Real Estate Services 404 **Arts and Recreation Services** 278 Inadequately described 250 Information Media and Telecommunications 243 186 Electricity, Gas, Water and Waste Services 183 500 1,000 1,500 2,000 2,500

Figure 1: Employment in the Southern Highlands

Source: ABS census 2011, accessed through Tablebuilder Basic

Figure 1 shows that the Southern Highlands employment is centred on services, along with strong manufacturing and construction sectors. Tourism is not separately defined in census data as it draws on several sectors, such as retail, accommodation and food services and transport. But t he strength of these sectors in Figure 1 reflects the strong tourism industry in the Southern Highlands, which is not surprising given the picturesque nature of the area and its proximity to Sydney.

Figure 1 shows that mining is one of the smallest employers of Southern Highlands residents, with only 186 residents employed in mining in 2011. This is likely to have declined since the census with the closure of Berrima Colliery and downturn in the coalmining industry generally – ABS labour force data suggests the coal industry nationally has reduced employment by around 20,000 over the last two years. The NSW Minerals Council estimated in 2014 that mining employs only 82 residents in Wingecarribee shire, which accounts for much of the Southern Highlands area. These results suggest that the bulk of the Tahmoor mine's workforce commute to work from outside the Southern Highlands.

All in all, coal mining amounts to less than one per cent of jobs in the Southern Highlands.

ABS 2014, Catalogue 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, Table 06.
Employed persons by Industry Subdivision and Sex
(Lawrence Consulting 2014)



Agriculture and mining

Although also a relatively small employer, agriculture employs around six times more people in the Southern Highlands than mining and is important to the region's environment and social fabric. Agriculture is likely to be negatively affected by mining development in the region, due to the impact on groundwater resources and demand for other services and inputs.

The impacts of mining on agricultural employment can be seen at a state level. States with relatively larger mining sectors, such as Queensland and Western Australia, have seen agricultural employment decline by around 30 per cent through the mining boom. Victoria has a negligible mining sector and has seen agricultural employment increase through the same period, as shown in Figure 2 below:

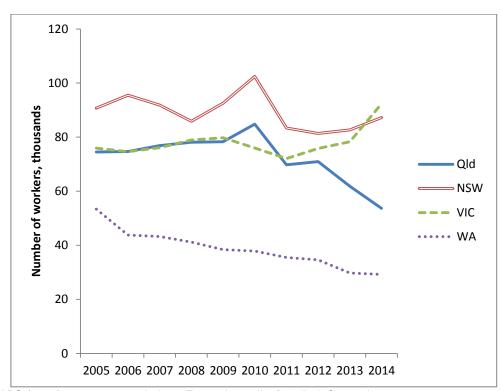


Figure 2: Employment in agriculture 2005-2014, selected states

Source: ABS (2014) 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly

Figure 2 shows that agricultural employment in NSW has fluctuated through the mining boom. With both a strong agricultural industry and a large mining sector in parts of the state, this seems consistent with the results seen in other states.

Many factors affect these results, but it is likely that mining's competition for rural labour, services and other inputs, combined with impact on water resources has been a strong influence. A study by the Reserve Bank of Australia lends support to this theory, suggesting the mining boom could be responsible for a reduction in agricultural employment by 30 per cent nationally.¹⁰

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¹⁰ (Downes et al. 2014)

Manufacturing and mining

The Southern Highlands also has a strong manufacturing sector, the third largest employer as shown in Figure 1 above. While the mining industry often claims to support local manufacturing by buying its products, it can also have the effect of crowding out manufacturing through competition for specialised labour and services. For example, economic assessment commissioned by Waratah Coal in Queensland estimated that their mine would reduce manufacturing employment in Queensland by over 2,000 jobs. 11 At a state level, huge increases in mining investment have not significantly affected manufacturing employment, as shown in Figure 3 below:

10000 250.0 Queensland mining investment - \$AUD millior 9000 Queensland manufacturing employment 200.0 8000 7000 150.0 6000 thousands 5000 Manufacturing 100.0 4000 employment 3000 Mining investment 50.0 2000 1000 0.0 0 May-1989 an-1996 Sep-2012 May-2014 Sep-1992 May-1994 Sep-1997 May-1999 lan-2001 Sep-2002 an-2006 Sep-2007 an-2011 lan-1991 May-2004 May-2009

Figure 3: Queensland manufacturing employment and mining investment

Sources: ABS 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly and ABS 5625.0 Private New Capital Expenditure and Expected Expenditure, Australia

Figure 3 shows that despite a huge increase in mining investment, many times historical levels, manufacturing employment has not experienced any stimulus. If anything it has trended down more steeply since the boom in mining investment began, suggesting that the negative impacts of the mining boom on the manufacturing sector outweigh the increase in demand for mining machinery, etc. Again this result is supported by the Reserve Bank of Australia's estimate that the mining boom has led to a 20 per cent reduction in manufacturing output. Decision makers and the manufacturing industry in the Southern Highlands should be aware of these findings.

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¹¹ (AEC group 2010)

¹² (Downes et al. 2014)

Indirect jobs claims by Hume Coal

As discussed above, empirical data on how mining affects other industries suggests that some industries important to the Southern Highlands, especially agriculture and manufacturing, can be negatively affected. Other research by The Australia Institute has shown that mining creates almost no jobs in other parts of the economy. 13

Despite this, Hume Coal claim:

1200 jobs are estimated to be created if a mine was given approval in the future. These include direct and flow-on jobs. 14

No source is provided for this estimate, which contradicts the experience of other areas of NSW and Queensland. If there has been any actual calculation behind this claim, it is likely to be based on "multiplier" models, which have been dismissed by the ABS as "biased" and by the Productivity Commission as being regularly "abused". 15

The fact is that coal is a small employer, which has a minimal effect on employment in the wider economy, but can negatively affect important regional employers.

Royalties and council payments

95 per cent of all NSW royalties come from coal and most royalties from the Southern Highlands are likely to be paid by Tahmoor Coal.

Tahmoor produced 2,029,001 tonnes of coal in 2013. Most of this was metallurgical coal. Assuming this sold for the average Australian hard metallurgical coal price in 2013 of \$162 per tonne and the standard underground royalty rate of 7.2 per cent, royalties paid would have been around \$24 million. This is an overestimate as it does not incorporate royalty deductions and assumes all coal is metallurgical coal. \$24 million represents just 1.8 per cent of NSW government royalties. All royalteis account for only two per cent of the state's \$60 billion budget, slightly more than traffic fines and licences. Royalties from the Southern Highlands are likely to represent around 0.04 per cent of the State budget. 16

According to the NSW Minerals Council, 17 no mines in the Southern Highlands or Illawarra regions make payments to local governments under voluntary planning agreements. All mines in the Illawarra and Southern Highlands pay a total of \$1,001,845 in rates payments, but this will be mostly in the Illawarra where there are seven operating mines as opposed to just Tahmoor in Wingecarribee Shire. While details are difficult to work out from the Minerals Council's report, it is likely that coal mining pays less than one per cent of the Wingecarribee Shire's \$50 million annual rates revenue.1

16 (NSW Government 2013; Lawrence Consulting 2014; NSW DII 2008)

17 (Lawrence Consulting 2014)

¹³ (Campbell 2014b; Campbell 2014a)

http://www.humecoal.com.au/index.cfm/news/newsletters-bulletins-2014/community-newsletterfebruary-2014/

⁽Gretton 2013: ABS 2011)

http://wsc.nsw.gov.au/uploads/2508/wingecarribee-shire-council-financial-ststements-2013-14.pdf

Conclusion

Mining plays a small role in the economy of the Southern Highlands. The major employing industries are service industries, manufacturing and construction. While tourism is not separately counted in most statistical publications, the strong employment numbers in retail, accommodation, food and transport industry categories suggest it plays a strong role. Agriculture is a relatively small employer, but still employs around six times more Southern Highlands residents than mining. Agriculture and manufacturing can be negatively affected by mining development through competition for water, skilled labour, services and other inputs.

Mining in the Southern Highlands makes modest contributions to state government royalties, of perhaps \$24 million or 0.04 per cent of state revenue. Mines pay perhaps one per cent of shire rates.

By any measure, coal mining's current and potential contribution to the Southern Highlands economy is minor. Decision makers should carefully assess these contributions against the potential impacts and risks that coal mining can have on the environment, communities and other industries.

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