ANGUS PLACE COLLIERY EXTENSION PROJECT

RESPONSE TO SUBMISSION BY THE AUSTRALIA INSTITUTE

Prepared by

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1. PURPOSE OF DOCUMENT

This document addresses issues raised by The Australia Institute (TAI) in its submission to the Department of Planning and Infrastructure on the economic assessment prepared for the Angus Place Colliery Extension Project by Aigis Group (AG).

The document proceeds by initially addressing general issues raised in respect of adequacy and compliance of AG's assessment. Specific issues are then addressed individually. The document concludes with a consolidation of the key points.

2. ADEQUACY AND COMPLIANCE

At a number of junctures in its submission, TAI raises concerns in relation to the adequacy of the AG assessment, in the context of:

- Its compliance with 'state and federal guidelines' for preparation of cost benefit analyses; and
- Its failure to 'meet standards expected in the economics profession'.

Prior to addressing these issues, some general discussion of the method adopted in the economic assessment is warranted. AG and Centennial Coal (Centennial) are aware that, viewed from the strictures of current and previous economic practice surrounding consent-related economic assessments, and particularly those relating to Cost Benefit Analysis, the method employed in the submitted economic assessment is likely to be considered unorthodox.

Centennial management has determined that the company will no longer place material that might be considered commercially sensitive in the public domain, in the context of submitting consent approvals. The economic assessment is explicit in stating that Centennial will provide such material to the appropriate decision-making bodies as required for determination of the application.

Centennial has carried through a detailed program of reassessing its broader environmental impact statement processes, particularly those relating to socioeconomic impact assessment. As such, the process arrived at, while remaining cognisant of NSW Treasury and other material, is focused on more fully addressing the legislative requirements applying to assessment. In particular, as provided for in the *Environmental Planning and Assessment Regulation 2000,* assessment should be conducted *'having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development'*. In short, the focus of the economic assessment has been shifted more towards addressing, and where possible quantifying, these externalised impacts that may potentially affect the most relevant stakeholder groups.

In acknowledging that this may not meet the 'expected' orthodoxy, as is exemplified by TAI's commentary, the method adopted represents an attempt to avoid those

parts of orthodox practice that largely serve to detract from the ability of 'lay' stakeholders to comprehend the analysis presented, as it relates to project impacts likely to be of greater significance to those groups. The method also seeks to not only identify, but quantify, and thus more fully recognise, the magnitude of these externalities.

In summary, the methodological critique submitted by TAI has some validity from the perspective of orthodox economics practice. However, Centennial and AG submit that such orthodoxy has not served the provision of appropriate, comprehensible information to stakeholders well. The economic assessment aims to provide this level of information. Simultaneously, it does not inhibit the ability of the decision-maker to require further information for its consideration.

Internally, this process has been described as turning the assessment focus in 180°. That is, from an internal focus on information that is of questionable relevance to stakeholders in the area of affectation, to a clearer explanation of the nature and scale of more relevant impacts, and the commitments of Centennial to address those impacts.

2.1 Compliance with guidelines

AG acknowledges that the method adopted in preparing the economic assessment may be interpreted as not complying with orthodox cost-benefit analysis practice. AG has worked with Centennial Coal over several years on a project to develop a social and economic assessment method that focuses on providing more user-friendly information for stakeholders in the assessment process. In developing the present approach, reference has been had to the Department's *Guideline for economic effects and evaluation in EIA* (2002) and the *Guideline for the use of Cost Benefit Analysis in mining and coal seam gas proposals* (2012). The key point of TAI's critique on this point is that the method used in the economic assessment is not fully compliant with conventional cost benefit analysis. This is acknowledged by AG and Centennial. The content of this document will further explain the rationale for, and use of, an alternative method for economic assessment of mining projects.

2.2 Adequacy of information presented

The section of the TAI submission titled '*Main costs and benefits*' (pp.1-2) states that the economic assessment contains insufficient information in relation to the economics of the project for the community and decision makers. With respect to the community, Centennial Coal has received in the order of 400 submissions in relation to this project proposal. With the exception of TAI's submission, no other submission indicated that there was inadequate information included to allow individual or group members of the community to consider the socioeconomic implications of the proposal. With respect to the information available to decision makers, Centennial Coal acknowledges that there may be additional information required to allow consideration of the project. As is provided for in the 'Guideline *for economic effects and evaluation in EIA'* (NSW Department of Planning, 2002), the

economic assessment includes an explicit undertaking to provide such information on request of the Department and or other relevant assessment bodies.

TAI's discussion on the need for this information in allowing the financial strength of the project is a valid comment. The undertaking to provide this material addresses this matter. It should also be noted that in relation to the Angus Place Colliery, the mine has operated continuously since 1979. Figure 1 demonstrates volatility in thermal coal prices over a 30-year period. As noted, this volatility has not affected continuation of mining at Angus Place Colliery. Centennial Coal submits that this would amply establish the viability of continued operation of the mine.

Figure 1: Australian thermal coal price, USD/metric ton, June 1984 – June 2014

Source: http://www.indexmundi.com/commodities/?commodity=coal-australian&months=360

Centennial Coal's extensive community consultation programs have not produced any material questioning the operational viability of Angus Place or other Centennial Coal mines operating in the area. This would appear to be supported by the lack of responses received that relate to the information presented to the community in the economic assessment. It is relevant to point out that among the submissions received, approximately 91% of local submissions were supportive of the proposal. For the surrounding region[1] and NSW, support was 22% and 6% respectively. This of course means that objections were approximately 9%, 78% and 94% respectively. This suggests that the community that most closely observes the impacts of, and which better understands the positive and negative aspects of the mine's operations, appears to have a different view to the very small proportion of the State's population who reside beyond the area, but have provided comment on the application. A more detailed analysis of these data is included in Appendix 1.

[1] Blue Mountains, Bathurst, Mudgee and Orange

In order to illustrate its point, TAI cites part of a determination by the Planning Assessment Commission in relation to the Stratford Coal Project. The intent of the excerpt is to illustrate how claims in respect of employment impacts in the economic assessment for the project have not been realised to date due to reductions in the workforce relating to economic conditions. There is no doubt that such an outcome is also possible at the Angus Place Colliery or any other mine in the state. However, this perspective is limited in that it relates to a particular point in time. If a longer-term view of the project was taken, it would be reasonable to acknowledge that at a point warranted by economic conditions, production and employment would be likely to return to higher levels. If a mine is inoperative for a period of time, it follows that negative impacts also largely cease during that period. That is, the timing of benefits and costs may change, but there would be a strong likelihood that the approved resource would still be extracted at some point. Furthermore, in terms of royalty and tax income for state and federal governments, this may be considered as a positive outcome, given that higher prices in a more favourable market environment would yield higher returns to government.

3. SPECIFIC ISSUES

NOTE: Prior to discussing specific issues, it is necessary to point an apparent error in Table 1 of the TAI submission (p. 5). Table 1 is the key summary of benefits which compares AG's estimates with those proposed by TAI. The error appears to be related to editing, however it must to be acknowledged in order to properly address TAI's conclusions, and to avoid confusion during the assessment process. The error is:

- In the 'comments' column (column 3), it appears that the comments included against column 1 items from 'state taxes' (row 3) down, are incorrect. This appears to be substantiated by the benefit calculations in column 4. It appears that there should be no comment against 'state taxes' and that the current comment in that row, and those subsequent, should be shifted down one row each. The comment against 'Project impact controls and mitigation' should be disregarded, as it relates to 'Wages' (row 1).

Commentary in TAI's Table 1 has been considered on the basis of the corrections suggested above.

3.1 Labour, wages and opportunity cost

The TAI submission includes some valid theoretical commentary on employment impacts. However, there is some contextual material included in the economic assessment that suggests that TAI's argument for reducing the value or contribution of employee incomes to the regional and state economies to zero cannot reasonably be sustained. In the regional context, TAI's analysis disregards Lithgow City Council's recognition of the contribution of mining incomes to the region. This is discussed in the economic assessment (pp. 26 – 28). On the strength of this material alone, TAI's argument should be considered as unsustainable.

TAI states that due to the current low unemployment rate (stated at 5.8 per cent for NSW), it is inappropriate to assume that employees cannot find alternative employment. TAI assumes that mining employees' skills are directly transferrable to 'other mining, construction and engineering projects' (p.3). In terms of equating this opportunity cost to zero in the context of the Lithgow LGA regional economy, this assumption must necessarily be based on an accompanying assumption that such other projects would either be situated within, or in relatively close proximity to the Lithgow region, or relate to workers commuting to other areas where such jobs are available. The need to consider this is demonstrated by internal employee survey output cited in the economic assessment (p. 29) noting that 81 per cent of the mine's employees reside in the Lithgow LGA. This supports an assumption, further supported by survey output, that these workers have residential and community ties to the region and as a consequence, being required to leave the area to obtain alternative employment may not be the purely economic-driven decision that may be implied from TAI's approach.

Taking regional context and current economic circumstances into consideration, there are several further limitations to TAI's assumptions:

- In addition to being 'highly skilled' as noted by TAI, a considerable proportion of the Angus Place workforce possess skills that are highly specialised, and may in fact be either unsuitable for deployment in the alternative employment suggested by TAI, or result in underemployment.
- In terms of this specialisation, the production workforce at Angus Place, as underground miners, possess perhaps greater levels of skill specialisation than might mining production employees more generally. These employees currently represent 85 per cent of all employment at the mine. The NSW Minerals Council identified underground mining employees as comprising 43.8% of total coal mining jobs in the State in 2012. As it cannot be assumed that these specific skills are directly transferrable to open cut mining, further opportunities within NSW are likely to be confined to less than 50% of any mining jobs available.
- The prevailing low unemployment rate cited by TAI would suggest that opportunities for comparable alternative employment would in fact likely be scarce. This is particularly likely to be the case in the mining sector. The Productivity Commission (1998, p.67) provided one measure of the relative constraints on finding alternative employment within the black coal mining industry, finding that voluntary labour turnover rates were less than half the average for all industries.
- The extent to which some proportion of employees might find alternative employment cannot be estimated with any level of certainty, as such outcomes involve individual decisions, the timing of cessation of mining, economic conditions (such as employment levels as discussed above), and a large variety of other factors. What can be firmly established is that should the mine be unable to continue operations, all employment at the mine

would cease, with the resultant impacts on employee's households and the regional and extended economies. A review of submissions made in support of the project highlights that a major concern of mine closure is the potential for population decline in the region, resulting in a broad adverse impact across the social (participation, social networking and general social capital) and financial economy (i.e. loss of / decline in spending). This is demonstrated by data provided in Appendix 1 that indicates that Angus Place Colliery spent $12 million with Lithgow LGA-based contractors, and almost another $1 million with contractors based in the region. The loss of this work would clearly have significant negative impacts in such a relatively small local and regional economy. It is not clear that this is recognised in TAI's submission, which discusses the extension of mining in the context of a new project (*'if the project did not go ahead'*) and cites federal guidelines that in part state that *'it can be expected that many of the jobs* [relating to the project] *will be filled by individuals who are currently employed but who are attracted either by the pay or by other attributes of the new positions'* (p.3). The positions referred to in the economic assessment are existing positions. These would be sustained, not created, as a consequence of approval. Were the approval not granted, the positions would be lost, with the associated economic and social impacts. The potential extent of these impacts is illustrated in the attached Appendix 1.

The limitations identified above are intended to address TAI's contention that there is no direct or extended economic benefit associated with Angus Place employees' incomes. As previously stated however, a case can be made out for acknowledging that only a proportion of the benefit of these incomes is expended in the local economy. Material relating to internal research conducted among Angus Place employees is reported in the economic assessment (p. 29). This includes a finding that on average, employees spend 33.5 per cent of their incomes with local businesses. Application of this proportion to the total wages benefit objected to by TAI, would result in an adjusted wage and salary assumption of approximately **$158 million,** with the estimated economic benefits of the project decreasing to **$455 million** and **net benefit to $384 million**. Given the commentary above in relation to the more specialised production personnel at Angus Place, if the proportion of these employees (85 per cent) was applied to the estimates above, the estimates would be **$135 million** (wage and salary estimate), **$432 million** (estimated economic benefits) and **$361 million (net benefit)**. It is submitted that these estimates would be conservative, as it would no longer provide for benefit associated with economic activity by these households in other parts of NSW.

3.2 Royalties and taxes

The method applied by TAI for assessing royalties net of deductions appears to be incorrect. On page 4, TAI states, in part 'At $60 per tonne, royalties **before deductions** *[emphasis added]* are $4.32 per tonne'. Therefore TAI estimates royalties and then subtracts relevant deductions. Discussion with Centennial Coal

management indicates that in practice, the relevant deductions are made prior to calculating royalties. A simplified example is presented below[2].

BOX 1: INDUSTRY PRACTICE	
Revenue:	$100
Beneficiation levy:	$ 3.50
Other deductions:	$ 0.50
Net of deductions:	$ 96
Net royalty @ 7.2%	**$ 6.91**

BOX 2: APPARENT TAI METHOD	
Revenue:	$100
Royalty @ 7.2%:	$ 7.20
Beneficiation levy:	$ 3.50
Other deductions:	$ 0.50
Net royalty:	**$ 3.20**

Applied to the $60 price assumption cited by TAI, the actual royalty per tonne would be **$4.03,** rather than **$0.77**[3] as estimated by TAI.

It is apparent that approved industry practice largely preserves the State's interests in terms of the net royalty income collected. Such an outcome stands to reason. The estimates included in the economic assessment include allowance for the deduction of the relevant levies according to the method exemplified in Box 1. As a consequence, TAI's estimate of royalties, and proposed reduction of these for the purposes of assessment are incorrect and should be disregarded.

In its discussion of corporate taxes, TAI has misinterpreted the estimation method adopted, which is explained in material included in the economic assessment. The relevant table and notes are displayed in Figure 2:

[2] The method adopted includes provision of $0.50 per tonne for the range of levies applying to production. This has also been used in the working for the TAI method, whereas in its submission, TAI assumes $0.05 per tonne for the research levy. A price of $100 per tonne is adopted to more clearly illustrate the net royalty realised per tonne and does not reflect any price assumptions in the economic assessment.

[3] If total other deductions were included (rather than the research levy used by TAI), the royalty per tonne using TAI's method would be **$0.32**.

Figure 2: Excerpt from Angus Place Project economic assessment (p. 16)

Table 2: Estimate of economic benefit – Angus Place Colliery Mine Extension Project

Economic Benefit	Estimation assumptions	Estimate
Mine operation-stage additional/sustained employment	Direct operations employment sustained: 225 FTE positions. Contractors employment sustained: 75 FTE positions. Construction positions: 100 (periodic engagements)	Assessed NPV ≈$418 million. Assessed NPV ≈$37 million. Assessed PV ≈ $18 million.
Coal royalties (State Government)	Based on assessed output over mine life extension period 2016-2041, and royalty rate of 7.2%[2]	Assessed NPV ≈ $203 million
Other State taxes/Local Government rates & charges	e.g. Payroll tax; council rates	Assessed NPV ≈ $16 million
Federal taxes (e.g. Corporate income taxes)	Based on assessed corporate income & corporate tax rates	Return to NSW at 30.1%, assessed NPV ≈$39 million[3][4][5]
Biodiversity offset provision	Refer to Appendix 2	NPV ≈ $778K
Project impact controls and mitigation provisions[6]	Particulars included in Table 10, rehabilitation section.	NPV ≈ $38 million
Total economic benefit		**≈ $770 million**

[2] Deep underground coal (+400m) 6.2 per cent; **other underground coal 7.2 per cent**, open cut coal 8.2 per cent.
[3] Commonwealth of Australia (2012): Budget 2012-13 Budget Paper No 3, Part 3, General Revenue Assistance. Table 3.2 General revenue assistance by State.
<http://www.budget.gov.au/2012-13/content/bp3/html/bp3_04_part_3.htm >
[4] Includes provision for tax treaty impacts associated with foreign ownership.
[5] No provision is allowed for the former Mineral Resources Rent Tax and the Carbon Tax, due to uncertainty as to their retention as Government policy.
[6] The benefit of the conservative mine plan proposed (NPV $3 million) assumed as an environmental benefit to the community, is offset by the cost to the community of $3 million in government revenues (royalties) foregone.

The relevant sections of the material relating to federal taxes are highlighted. The highlighted sections explain the key assumptions underpinning the method used. Important points to note in the context of TAI's comments (pp. 4-5) are:

- The figure of '30 per cent' cited by TAI is assumed to refer to the 'return to NSW at 30.1%' figure in the table. It is important to note that 'return to NSW' indicates that only 30.1 percent of the total taxes associated with production are assumed as accruing to NSW. This proportion is derived from Federal Budget Papers current at the time of initial preparation of the economic assessment. This is included in footnote 3;
- Furthermore, the total tax on which the assessment is based is not the nominal corporate tax rate of 30 per cent, as perhaps assumed by TAI. Footnote 4 states that the estimate provides for tax treaty provisions. As Centennial Coal is Thai-owned, the tax treaty with Thailand is relevant. As a consequence it is assumed that half of the corporate tax rate (15 per cent) is expatriated to Thailand, and thus the equivalent is paid in Australia. The

effective assumed tax rate resulting in the estimate included in the economic assessment is therefore 15.05 percent, which is comparable to the 'independent estimates' of 13.9 per cent suggested by TAI.

TAI (Table 1) suggest that the tax income to be considered should be halved from $39 million, to $19.5 million. It is acknowledged that the material presented above may provide a clearer explanation of the estimation methods than is apparent in the economic assessment document. That notwithstanding, the tax estimate included in the economic assessment has already effectively been reduced from in the order of $256 million (assuming 30 per cent tax rate) to $39 million ***return to NSW***. As such the estimate in the economic assessment should be adopted for the purposes of assessment of the application.

3.3 Biodiversity offset provision and project impact controls and mitigation

The biodiversity offset comprises part of a broader biodiversity off set strategy that is proposed in recognition of the possibility of impacts on Temperate Highland Peat Swamps on Sandstone (THPSS) on the Newnes Plateau, and also in relation to clearing of native vegetation relating to site works.

Findings in the relevant specialist report on biodiversity impacts (cited in the economic assessment, Appendix 2, p. 51) are that expected impacts are likely to be negligible (within pre-mining or natural variations). Table 10 details contingent provisions for restoration of the relevant THPSS should this be required. Clearly, these actions would directly address any impacts that might eventuate.

The offset area contains a critically endangered ecological community (EEC). This has been assessed as being of higher ecological significance or value than the land to be cleared. Coupled with the undertakings to carry out any THPSS remediation that may be required, the proposed strategy represents a valuable contribution to the community in terms of conservation value.

In quantitative terms, it should be noted that Table 10 ('Biodiversity') states the nominal value of the offset land and management commitments ($778,000) against the estimated cost to the community of biodiversity impacts associated with land clearing ($612,000). As a consequence, the net 'value' of the offset is an economic benefit of $166,000. It should be noted that in the context of the assessed benefits and costs of the project, the offset may not meet conventional measures of materiality. Therefore, if the consent authority determined that this should be excluded, such exclusion would not materially impact on the net positive benefit determined in the economic assessment.

With regard to the other mitigation and project control measures that have been included as benefits, these too are 'netted off' against the assessed cost of impacts. The details of each of these 'offsets' are included in Table 10. This does not appear

to have been recognised by TAI. Given the blanket discounting of all quantitative assessments of impacts proposed by TAI based on its contestation of the valuation methods contained in Table 3 of the economic assessment, this material may not have been considered.

This is a particular example of the intent of the economic assessment to invert the focus of the analysis, as discussed in the introductory remarks. TAI suggests that these commitments should be treated as costs to the business, which of course they are, in the conventional or orthodox sense in which TAI insists all assessment should be based. The alternative focus used in the economic assessment is to recognise the costs of the mine's activities, and offset these against the benefit of the mitigation and other appropriate measures aimed at redressing the costs/impacts. This exemplifies the approach of turning the assessment method in '180°'; that is rather than focusing on the internal costs and benefits of operations, focus the analysis on the external costs and benefits to the community, for the purposes of providing the community with comprehensible information. Adopting this perspective, the costs of acquisition and management of the offset are incurred by company, with the benefits associated with those disbursements accruing to the community through the maintenance of conservation values and the return of the conservation lands to public ownership. Similarly, the remediation costs borne by the company in relation to mine sites or other affected areas return similar benefits to the community.

3.4 Environmental impacts

TAI acknowledges that the benefits transfer method, while not ideal, can be an acceptable method for assessing impacts given constraints around generating project-specific metrics. Furthermore, the NSW Office of Environment and Heritage (OEH) Environmental Valuation Reference Inventory (EVRI) webpage specifically identifies benefits transfer as a method that '*can provide estimations for cost-benefit analyses and impact assessments, encouraging the internalisation of pollution costs and appreciation of natural capital tradeoffs*'[4]. This is the approach taken in the economic assessment, with the costs being estimated, and appropriate prevention and mitigation activities put in place to address these.

TAI notes that the method is acceptable '*particularly where the alternative is to include a zero value for environmental damage'* (p. 6, italics added); TAI then proceeds to revalue the assessed costs to a zero value, apparently justifying this on the basis of questions on the suitability of the studies used for valuation. Those questions appear not to acknowledge the recognition of limitations of the approach taken, which are included in the economic assessment (pp. 17-18), nor the explanatory material in Table 3 (pp 19-20) that explains how the studies used in the analysis were applied in the evaluation. The table also identifies that in instances where a range of values where calculated in the relevant studies, that the upper

[4] http://www.environment.nsw.gov.au/publications/evri.htm

bound value was adopted for valuation, thus introducing an element of conservatism (i.e. placing a higher value) when assessing potential impacts.

In addition to the general observations made above in relation to valuations, certain issues raised by TAI (Table 2, p. 6) require individual responses. These are addressed below.

- **Noise**: TAI states that *'it is unclear how these 17 year old results have been adapted to current prices in Australian dollars'* (italics added). Footnotes 9 & 11 to the Table 3 (economic assessment, pp. 19-20) state that; '*All values adjusted by three percent per annum to allow for inflation*'. Although not stated in the economic assessment, it should be added that all currency conversions required in adopting the studies used were based on exchange rates contemporaneous with each study. These data can be found on the Reserve Bank of Australia website[5]. This study was preferred on the basis that it is included in EVRI[6], and was the most suitable study in respect of noise available in the inventory.
- **Subsidence, soil and water**: TAI states that how the values of this study have been applied is 'unclear'. TAI then contradicts this conclusion by contesting the valuation (derived from Table 3 of the economic assessment) on the basis that its geographic scope is inadequate. TAI also asserts that all households in NSW or Australia will be relevant for consideration, as the assessment relates to a national park. BBOP is an international partnership promoting best practice on biodiversity offsets in particular. In discussing the scope of assessment methods, BBOP (2009), stated that its approach "*focuses in particular on people living in and around the project and POTENTIAL OFFSET SITES*"; further, "*This is not to deny the importance of biodiversity losses and gains for non-local stakeholders but these global values are complex and controversial to estimate in monetary terms and arguably are addressed adequately by the direct measurement approach*" (italics added). This approach is consistent with that applied in the economic assessment. As is the case with its approach to employee incomes, TAI fails to recognise that it is the local and regional communities that will be impacted most directly, and which thus should be afforded particular attention in the assessment process.
- **Air**: As stated by TAI, this study is commonly used for such analyses. The estimation of the number of receptors is based on the air shed identified in the specialist report included in the EIS. The commentary erroneously states '**17** individuals', whereas the economic assessment identifies **21** residents. With respect to use of the findings for the GMR, a map of that area is included in Appendix 1. For the purposes of the source study, the Lower Hunter and Illawarra regions were also included. The very close proximity of

[5] http://www.rba.gov.au/statistics/historical-data.html#exchange-rates
[6] Access to the Environmental Valuation Reference Inventory (EVRI) is via the NSW Government Office of Environment and Heritage website: http://www.environment.nsw.gov.au/publications/evri.htm

Lithgow to the GMR area itself was considered as providing a basis for adopting the measures from the report.

- **Heritage**: This study was adopted in recognition of the fact that the project area also includes items of 'historic' or 'European' heritage, in addition to Aboriginal heritage items and sites.
- **Biodiversity**: TAI's speculation that AG '*appear not to have read this source study*' is surmise. In assessing studies to be applied to valuation, AG personnel have in fact read the source study. However, in order to facilitate simpler access to the valuation method adopted for stakeholders wishing to do so, the EVRI reference is retained for use in the economic assessment. It should also be noted that AG continues to assess available studies with a view to refining those used in terms of comparability and application to Centennial sites, however retains a preference for the use of studies included in EVRI, on the basis of its association with OEH.
- **Visual**: TAI states that (a) the study used relates to the Queensland Wet Tropics World Heritage Area and (b) is use is 'completely unsuitable' in the context of this proposal. The NSW OEH National Parks and Wildlife Service webpage for the Gardens of Stone National Park notes that it is part of the Greater Blue Mountains World Heritage Area. The study was applied on the basis that, notwithstanding the undisputed differences in biophysical characteristics, there is certainly some degree of equivalence between the two areas compared, in terms of their conservation status. The likelihood of impacts on this area is discussed subsequently.

TAI's analysis concludes that the environmental costs assessed are understated, but do not clearly state why, other than to question the selection and use of the studies adopted, in a method that they acknowledge has some validity.

4. CONCLUSIONS

In revaluing the economic aspects of the EIS, TAI's discounting of economic benefits in Table 2 results in an aggregate outcome that is approximately equivalent to the environmental impact valuations included in the economic assessment. The effect of this is to bring the net outcome for the 'NSW community' (p. 8) to a maximum of zero. This approach has also been taken in a number of TAI's responses to other Centennial EIS documents. TAI's analysis implies that this is the 'best-case' outcome, based on its unquantified assertion that the environmental costs of the proposal have been undervalued.

There are some significant contextual issues that this approach fails to recognise. The stated focus on the NSW community fails to recognise the importance of the *continuation of this established business* in the Lithgow regional community, and the benefits of this that extend to state and national communities. This is particularly relevant in relation to the broad assumptions applicable to the treatment of employee incomes in state or national-level economies, which are used by TAI as a

basis for its arguments. The regional context is highly significant in this application and there is evidence that regional impacts may be positive. For example, Hajkowicz, Heyenga and Moffat, while not attributing causality, found that "mining is positively associated with income, housing affordability, communication access, educational attainment, and employment at Australian regional scales" (2011, p.37). This study observed 71 LGAs across Australia in which mining activity was conducted. This indicates that the state and national 'standards' applied by TAI cannot unquestioningly be applied to regional assessment. This is emphasised by the analysis of submissions detailed in Appendix 1. In recognition of the fact that total employee incomes may result in an overestimation of this value, alternative **net present values** for the project in the range of **$361 million to $384 million** have been estimated, and may be preferred by decision-makers in assessing the application.

A second major issue is TAI's assertion that potential damage to the Gardens of Stone National Park has been underestimated. Appendix 2 includes a diagram indicating the Project Application Area (PAA) and the Mining Lease Boundary[7]. The diagram indicates that the PAA has been specifically altered so as not to undermine the national park. Table 8.2 from the EIS is also appended. It demonstrates that the higher order risk elements of undermining and angle of draw have been eliminated in relation to the national park. The table indicates that there is some potential for 'far field' effects, however the EIS details mine design and adaptive management strategies that will significantly reduce this risk. The assessment of environmental impacts of the proposed operations suggests that in practicality, for many stakeholders who use the area for active and passive recreation, their experience of the area will not change. This being the case, it is submitted that the economic assessment appropriately values potential impacts on the national park, and, of equal importance, impacts on stakeholders, within the acknowledged constraints of the methods used.

[7] Refer to the diagram legend to compare the two areas.

Australian Bureau of Statistics (ABS) Census 2011 website. http://www.abs.gov.au/websitedbs/censushome.nsf/home/census?opendocument&navpos=10

Business and Biodiversity Offsets Programme (BBOP). 2009. *Biodiversity Offset Cost-Benefit Handbook*. BBOP, Washington, D.C. http://www.forest-trends.org/documents/files/doc_3094.pdf

Environmental Valuation Reference Inventory. https://www.evri.ca/Global/Splash.aspx

Forest Trends Association website: http://www.forest-trends.org/program.php?id=117

Hajkowicz SA. Heyenga S. Moffat K. (2011): The relationship between mining and socio-economic well being in Australia's regions, *Resources Policy* 36: 30-38 www.elsevier.com/locate/resourpol

Index mundi (2014): Coal, Australian thermal coal Monthly Price - US Dollars per Metric Ton. Retrieved from: http://www.indexmundi.com/commodities/?commodity=coal-australian&months=360

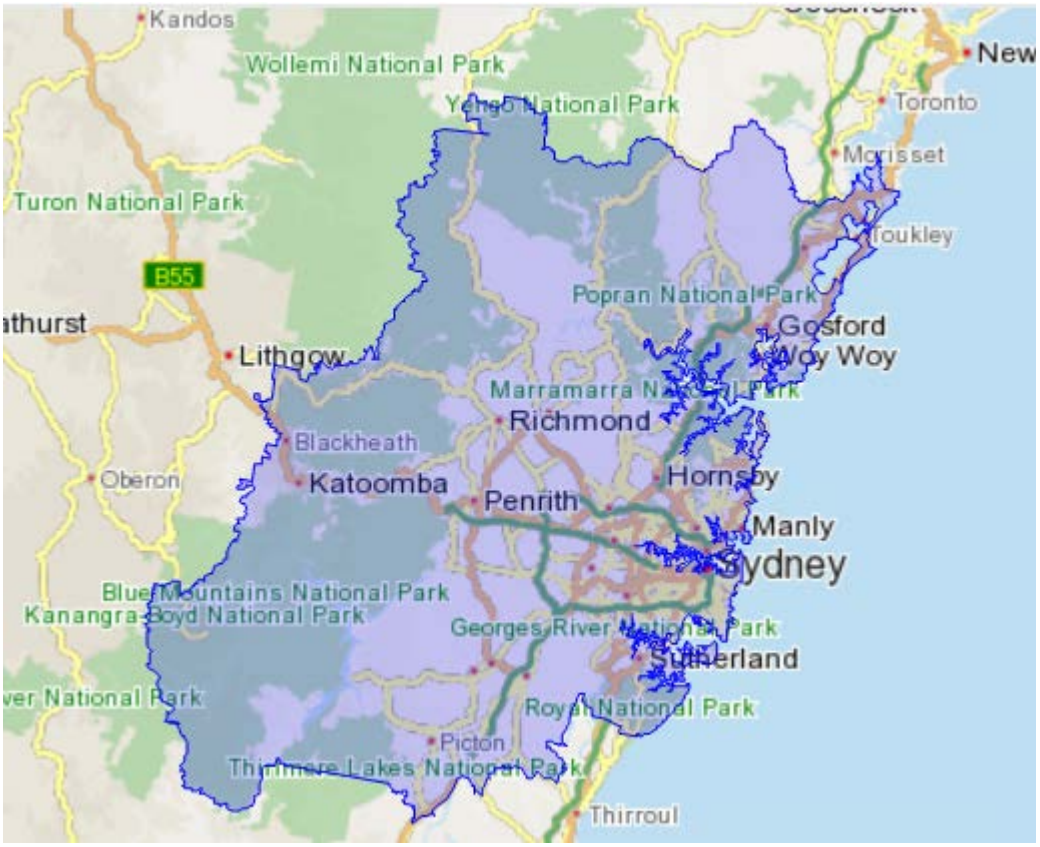
NSW Minerals Council. (2014). *NSW Mining 2012: A snapshot.* Retrieved from: http://www.nswmining.com.au/NSWMining/media/NSW-Mining/Publications/NSW-Mining-2012-A-Snapshot-FINAL.pdf

NSW Government Office of Environment & Heritage: *EVRI – Environmental value reference inventory.* http://www.environment.nsw.gov.au/publications/evri.htm

NSW Government Office of Environment & Heritage: NSW National Parks and Wildlife Service. *Gardens of Stone National Park* http://www.environment.nsw.gov.au/NationalParks/parkHome.aspx?id=N0087

Productivity Commission. (1998). *The Australian Black Coal Industry*, Inquiry Report, AusInfo, Canberra.

APPENDIX 1: Map of Greater Sydney Metropolitan Region



APPENDIX 2: Diagram of Project Application Area and Mining Lease Boundary

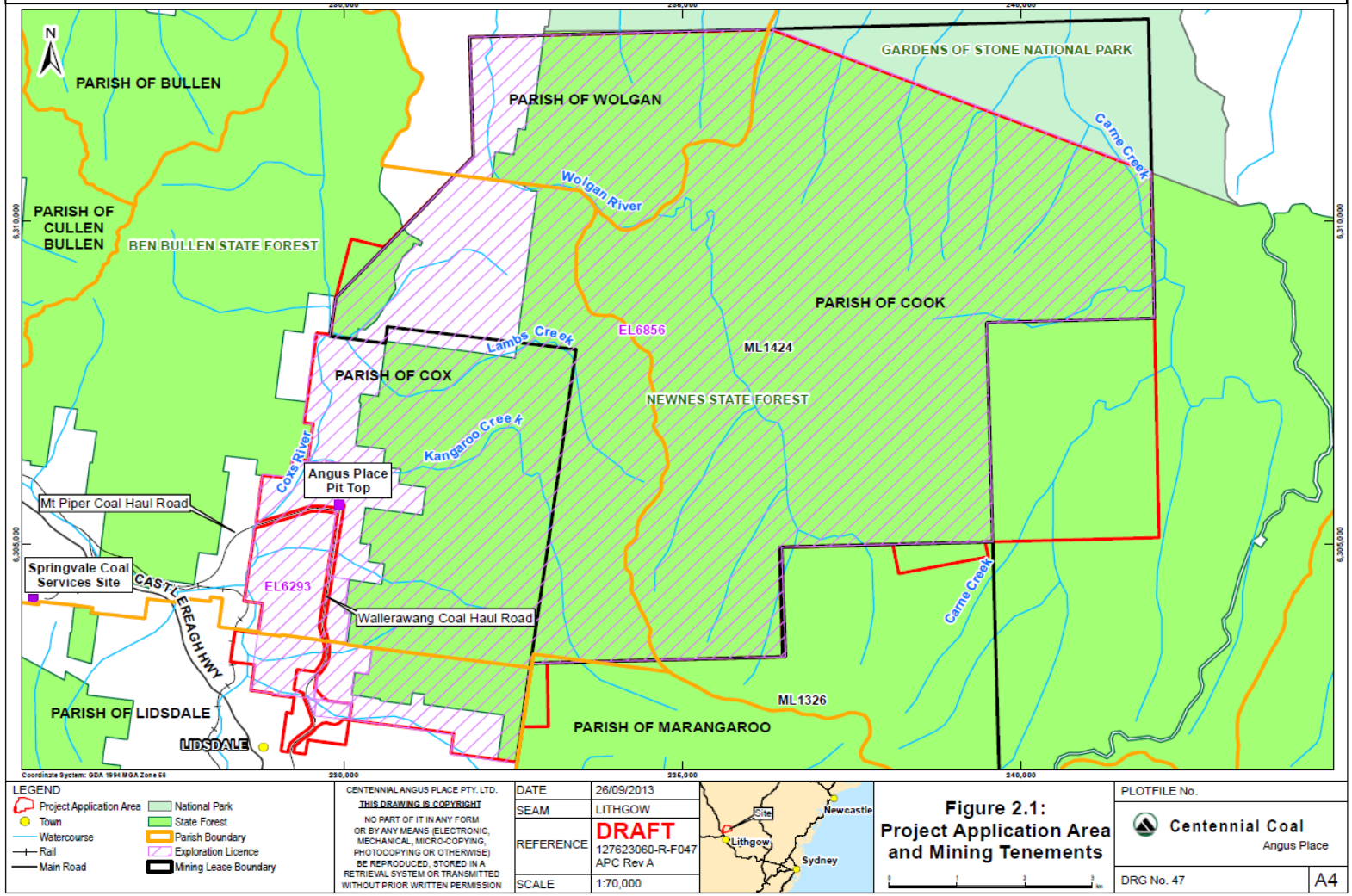


Table 8.2 Hierarchy of Subsidence Management Controls

Management Control	Cliff & pagoda zone	Twin Gully Swamp	Tri Star and Trail 6 Swamp	Perennial watercourse zone	Gardens of Stone National Park	Aboriginal heritage zone	Low risk zone
Elimination Measures							
Extraction directly underneath zone.	Eliminated	Eliminated	Proposed	Eliminated	Eliminated	Mostly eliminated, rock shelter above LW 1007.	Proposed
Within angle of draw.	Mostly eliminated, 2 cliffs and some isolated pagodas within.	Yes	Yes	Mostly eliminated, Wolgan River within 240m of LW 1002, Carne Creek within 400m of LW 1019.	Eliminated	Mostly eliminated, rock shelter 150 m west of LW 1006.	Proposed
Within far field effects.	Yes	Yes	Yes	Yes	Yes	Yes	Yes

JAMES MARSHALL & CO.

Angus Place and Springvale Mine Extension Projects

Socio-Economic Response to Submissions Received in Support of Angus Place and Springvale Mine Extension Projects.

September 2014

Contents

Summary

The Angus Place and Springvale Mine Extension Projects have received a substantial number of submissions in response to the projects being placed on exhibition. On review of the submissions that were written in support of these projects, it is found that mining brings about a direct and significant social and economic benefit to local communities which would be lost should the projects be refused. A review of submissions received in support of the projects has found:

- The majority of support submissions are from the local community (Lithgow LGA) or immediate surrounding LGA's.
- The submissions outline the risks to the local community if the projects are not approved, which include:
    - The importance of ongoing secure employment.
    - Reduction in flow-on effects to other business and subsequent negative impacts.
    - The possible need for families to relocate should employment continue to decline across the sector.
    - The loss of financial and in-kind sponsorship to local community events, charities and projects.
    - The long history of mining in the LGA and also the multi-generational employment history amongst families will be lost.
    - The environmental performance of the projects is important to the workforce and that local people (including the sector workforce) access and enjoy the areas where mining is undertaken for leisure and recreation.
    - The mining sector is an important training resource for new employees and those wishing to pursue a career in the industry.
- Direct mine industry sector employment sits at 15% of Lithgow's workforce compared to 1.0% of the NSW workforce (2011 Census).
- The Lithgow Economic Development Strategy (Version 2) highlights the clear link between economic sustainability and population growth. Lithgow's current population is 20,161 (2011 census) and the projected population is forecast to be 20,650 people in 2036.
- A large proportion of Angus Place and Springvale's workforce reside in the Lithgow LGA, many of whom are long term residents and have been employed in the mining

sector for many years. The workforce is more likely to own their own home and directly contribute to the social and financial economy of their community.

- For the 2013 – 2014 financial years Angus Place spent $64,923,494.15 on external contractors. Over 18% of this contribution was for contractors based in the Lithgow LGA and 80% for contractors based in other LGA's. For the same period, Springvale spent $78,887,424.62 on external contractors. 30% of this contribution was for contractors based in the Lithgow LGA and 70% for contractors based in other LGA's.

- The financial contribution to other LGA's does not represent lost income to the Lithgow economy as it generates spending in other non-mining related sectors (i.e. accommodation, food, fuel, engagement of additional contract support services etc.). This type of expenditure would not occur if funds remained within the LGA. Therefore the indirect spend is significant.

- Case studies over the last 2 – 3 years illustrate the importance of mining to the general economy. There are many stories that recognise the link between mine related employment and the broader economy.

1. Introduction

Submissions written in support of both the Angus Place and Springvale Mine Extension Projects were most likely to come from people who live within the Lithgow Local Government Area (LGA) and those objecting to the projects were most likely to come from outside of the LGA. Tables 1 and 2 identify the distribution of submissions and whether they are in support, object or make comment in relation to each project.

The key themes expressed in the submissions of support, along with the number of occasions that each theme was raised are shown in Tables 3 and 4. Table 5 provides an overview of the content of the submissions in relation to the identified key themes.

Table 1: Angus Place Summary Table: Submission Distribution (415)

Angus Place	Support (158)	Object (250)	Comment (8)
Local (139)	127	12	1
Regional* (102)	22	79	1
NSW (155)	9	142	4
Other State (19)		17	2

* Region: Blue Mountains, Bathurst, Mudgee, Orange.

Table 2: Springvale Summary Table: Submission Distribution (307)

Springvale	Support (79)	Object (224)	Comment (4)
Local (73)	62	11	
Regional* (81)	16	65	
NSW (136)	1	132	3
Other State (17)		16	1

* Region: Blue Mountains, Bathurst, Mudgee, Orange.

Table 3: Angus Place: Key Themes Raised in Support Submissions

Angus Place	Local LGA	Region*	NSW	Interstate
Jobs	102	11	5	
Local business	63	10	2	
Relocate	32	3		
Sponsorship	68	4	3	
History	8	1		
Environment	41	6	2	
Training	2			

* Region: Blue Mountains, Bathurst, Mudgee, Orange.

Table 4: Springvale: Key Themes Raised in Support Submissions

Springvale	Local LGA	Region*	NSW	Interstate
Jobs	55	12		
Local business	48	9		
Relocate	25	1		
Sponsorship	35	8		
History	6			
Environment	27	2		
Training	2	1		

* Region: Blue Mountains, Bathurst, Mudgee, Orange.

Table 5: Summary of Points Raised in Submission of Support (for both Angus Place and Springvale Mine Extension Projects).

Heading	Points Raised
Jobs	• Strong messages that jobs and job security is required. • Concern about the decline in the minerals / energy sector and reduced opportunities for jobs in this area. • AP and SV are long term employers and approval would allow this to continue. • Jobs and job security is vital to the LGA.
Local business	• Indirect benefit from mining is vital to the Lithgow economy. • Recognised flow on effects and adverse impact if jobs lost. • Recognise that there is benefit via the engagement of local contractors. • The benefit from local spending is also recognised. • Loss of jobs will 'decimate' local business.
Relocate	• Given the decline in the industry families will need to relocate which will have a devastating impact on the LGA. • Strong networks and social ties have been established which would be threatened if people have to relocate.
Sponsorship	• Support of many local charities, events and groups is recognised. • Employees are also involved in these charities, events and groups so there is a strong link between the company and grass roots

	activities.
History	• Long history of mining in the area and employees also have a long history with mining and Centennial. • Many employees are multi-generational.
Environment	• Recognise environmental performance is important. • Local people recognise the value of the environment and utilise it for leisure / recreation. • Not happy with outsiders opposing jobs and signing petition against mining • Mined for many years with no adverse impact to the environment.
Training	• Training of new employees (traineeships and apprenticeships) is important and provides a career pathway into the industry.

2. Mining Industry Sector

2.1 Status of Lithgow Economy

An analysis of the jobs held by the workforce in Lithgow City in 2011 shows the three most popular industry sectors were:

- Mining (1,120 people or 15.0%)
- Health Care and Social Assistance (804 people or 10.7%)
- Public Administration and Safety (715 people or 9.6%)

In combination these three industries employed 2,639 people in total or 35.3% of the total workforce. In comparison, New South Wales employed 1.0% in Mining; 11.8% in Health Care and Social Assistance; and 6.0% in Public Administration and Safety.

The major differences between the jobs held by the workforce of Lithgow City and New South Wales were:

- A *larger* percentage of people employed in Mining (15.0% compared to 1.0% in NSW).
- A *larger* percentage of people employed in Electricity, Gas, Water and Waste Services (5.0% compared to 1.1% in NSW).
- A *larger* percentage of people employed in Public Administration and Safety (9.6% compared to 6.0% in NSW).
- A *smaller* percentage of people employed in Professional, Scientific and Technical Services (2.8% compared to 8.0% in NSW).

Figure 1 Shows the Employment by Industry Sector for the Lithgow LGA (2011 Census)

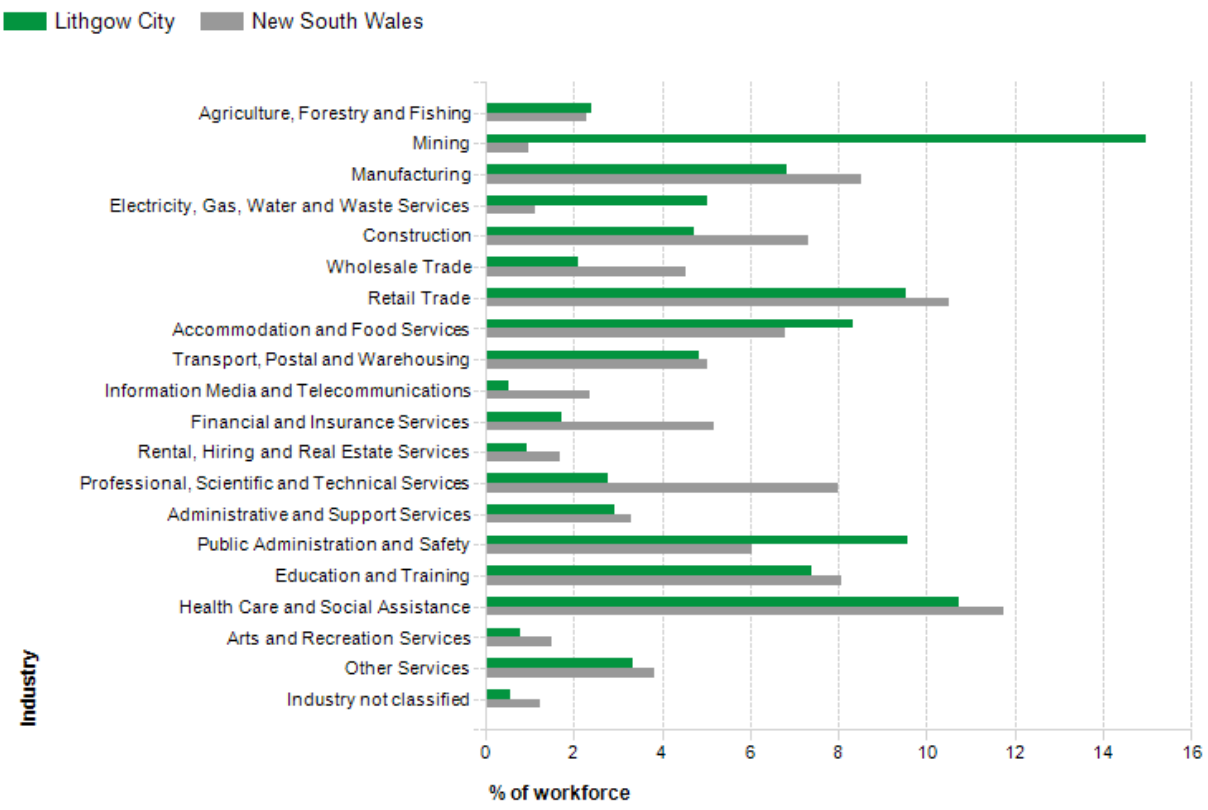

Lithgow City
New South Wales
Agriculture, Forestry and Fishing
Mining
Manufacturing
Electricity, Gas, Water and Waste Services
Construction
Wholesale Trade
Retail Trade
Accommodation and Food Services
Transport, Postal and Warehousing
Information Media and Telecommunications
Financial and Insurance Services
Rental, Hiring and Real Estate Services
Professional, Scientific and Technical Services
Administrative and Support Services
Public Administration and Safety
Education and Training
Health Care and Social Assistance
Arts and Recreation Services
Other Services
Industry not classified
Industry
0
2
4
6
8
10
12
14
16
% of workforce

Figure 1: Employment by Industry Sector for the Lithgow LGA (2011 Census)

The mining industry sector (including the sector sub-categories) employs a total of 1,120 people (2011 Census). Industries within the mine industry sector are identified in Table 6.

Table 6: Employment by Mining Industry Sector.

Lithgow LGA	2011			2006			Change
Industry	**Number**	**%**	**NSW %**	**Number**	**%**	**NSW %**	**2006 - 2011**
Mining	1,120	15.0	1.0	842	12.3	0.7	+278
Mining Industry Sector Sub-Categories							
Coal Mining	1,048	14.0	0.6	769	11.2	0.4	+279
Oil and Gas Extraction	0	0.0	0.0	0	0.0	0.0	0
Metal Ore Mining	3	0.0	0.1	5	0.1	0.1	-2
Non-Metallic Mineral Mining and Quarrying (nfd)	3	0.0	0.0	0	0.0	0.0	+3
Construction Material Mining	25	0.3	0.1	20	0.3	0.0	+5
Other Non-Metallic Mineral Mining and Quarrying	3	0.0	0.0	0	0.0	0.0	+3
Exploration and Other Mining Support Services (nfd)	0	0.0	0.0	0	0.0	0.0	0
Exploration	11	0.1	0.1	9	0.1	0.0	+2
Other Mining Support Services	9	0.1	0.0	16	0.2	0.0	-7
Mining (nfd)	18	0.2	0.1	23	0.3	0.1	-5

(Source: 2011 Census Data. Id Profile)

2.2 Emerging Groups

The largest changes in the jobs held by the workforce between 2006 and 2011 in Lithgow City were for those employed in:

- Mining (+278 people)
- Health Care and Social Assistance (+123 people)
- Public Administration and Safety (+85 people).

These changes are significant in the context of an LGA which is experiencing very low population growth. Figure 2 shows the changes in the industry sectors between 2006 and 2011.

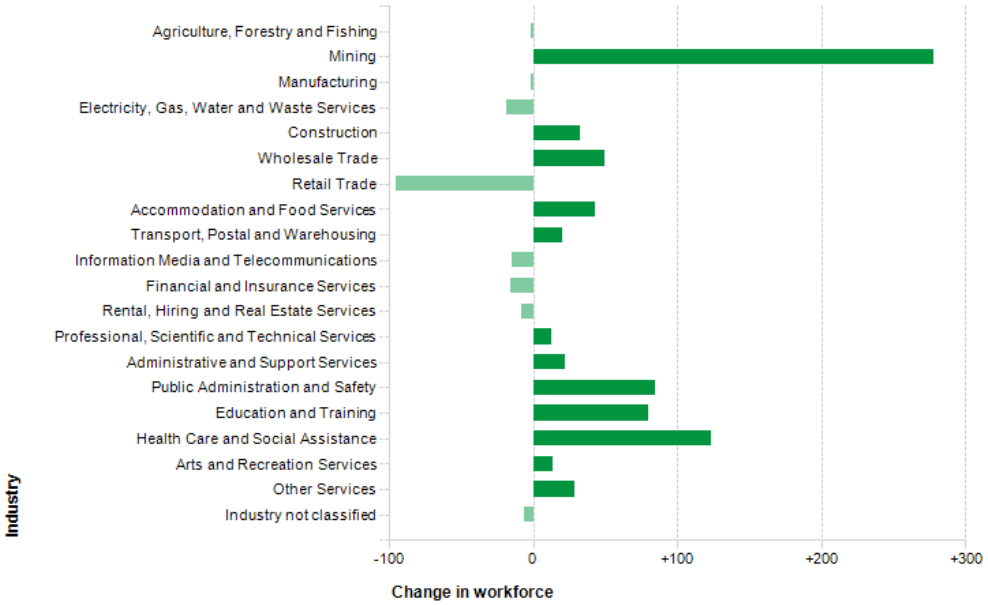


Figure 2: Change in Employment by Industry Sector 2006 – 2011 (Lithgow LGA)

3. Social Benefits of Staying in the Community

3.1 Overview

There are many social benefits of long term business and industry investment in any community, in particular Lithgow. Long term secure employment means that residents are more likely to purchase their home and participate in the social and financial economy of the area where they live. If there are no jobs in the industry sector, within their community, people will potentially relocate and the social and economic contribution that they make will be lost. Population stability and growth require secure employment and adequate hard infrastructure (roads, water supply etc.) and soft infrastructure (social activities, health care, education etc.). Investment in both hard and soft infrastructure requires population mass (ie demand) and growth (sustainability).

3.2 The Lithgow Economic Development Strategy

In support of the above, the Lithgow Economic Development Strategy (EDS) 2010-14: Version 2, states that "… growth in population is a critically important component in economic development. Such growth or decline in population figures has a direct impact on levels of total private and public expenditure in a community. Population growth provides the underlying basis for growth in labour resources, improvements in skill levels, and development of investment and capital within an area".

The EDS goes on to say, "… population growth generates opportunities for business development and public investment, brings into the community new knowledge and expertise, and creates opportunities for innovation and business development. By contrast, if there is no significant increase in population numbers over time, then the population can become an 'ageing' one. The population will begin to stagnate and consequently varying

economic demand levels eventually decline, new skills are slow to develop, innovation and enterprise have limited prospects, fewer people are attracted to in-migrate, and the rate of household and community dependency increases as fewer workers have to support an increasing number of non-workers. This is exacerbated by the out-migration of younger people seeking higher education and employment elsewhere".

These concerns are also reflected in the submissions in support of the Angus Place and Springvale Mine Extension Projects. There is an acute awareness that, given the lack of certainty in the mine industry sector, residents of the area will possibly relocate, resulting in a further decline in the socio-economic profile of the area which is a principle challenge facing the Lithgow LGA.

There are social and extended economic benefits that emerge when people stay in the Lithgow community. In summary these include:

- Investment in housing (i.e. purchasing rather than renting suggesting a stable population).
- Long term planning for the future through access to education, growth in families etc.
- Participation in social activities and maintenance of social ties.
- Long term planning / investment by other businesses that rely on the mine industry sector (directly or indirectly).
- Stability and potential investment growth in other sectors such as retail.

3.3 Population Forecast

Lithgow's current population is 20,161 (2011 census) and the projected population is forecast to be 20,650 people in 2036 (preliminary 2013 projections for Lithgow: Department of Planning and Environment). Further, in relation to the EDS, the median age will increase from the current 42 years to an expected 51 years by 2036.

3.4 Principle Challenges

Without population growth, the Lithgow LGA faces some significant challenges; some of those possibly exacerbated by the loss / decline of the mine industry sector are outlined below.

- It is predicted that the Lithgow Local Government Area will be the 46th oldest in NSW by 2022 (currently 88th). "Premature ageing" caused by migration related loss of young people and/or migration gain in older age groups, combined with general population ageing, means that the Lithgow Local Government Area will age at a significantly higher rate than the populations of NSW, Greater Sydney and the balance of NSW.

- Those renting directly from a Housing Authority in 2006 totalled 23.3% dwellings which compares to 18% in the Central West and 14.9% of dwellings in Australia at the same time.

- 2008 figures from the NSW Department of Health and Ageing, predict that Lithgow's population is expected to progressively decline annually by 0.06% after 2017.

- Social Disadvantage figures from the 2004 Index of Disadvantage (Jesuit Social Services) indicated that Lithgow was one of the most disadvantaged areas in NSW with the Lithgow 2790 postcode ranking within the top 10-15% of most disadvantaged areas.

- Socio-economic indices from ABS also list Lithgow as being within the lowest rankings of economic, educational and occupational disadvantage when compared to the rest of NSW. Lithgow also ranks poorly when compared to neighbouring Local Government Areas.

4. Economic Contribution

4.1 Workforce Contribution

As previously outlined the socio-economic contribution that mine related employment is significant. Surveys of Angus Place and Springvale employees, undertaken in February 2013 illustrate this.

Over 81% of Angus Place Colliery employees live in the Lithgow Local Government Area and 62% of these employees live in the major townships of Lithgow, Wallerawang and Portland. For Springvale nearly 76% of employees live in the Lithgow Local Government Area and nearly 80% of these employees live in the major townships of Lithgow, Wallerawang and Portland.

The survey indicates that employees are more likely to own their own home and have worked in the industry for over 10 years. The majority of employees are married with children and have lived in the Lithgow area most of their life.

Employees and their families also participate in local activities such as sport. Over 70% of those surveyed participating in some type of activity which includes, for example, volunteering their time to coach junior sports, membership in service organisations such as the rural fire service, volunteer in school canteens and participate in P & C meetings. Employee's children attend local kindergartens and schools, attend the local gyms, participate in athletics, swimming, dancing, basketball, water skiing etc. Involvement in these activities is usually in the immediate area where they live but also includes regional participation.

Living in the local area also means that there is a positive contribution into the local economy via direct spending in the communities where the workforce lives. Other than

mortgage costs, food and household expenditure (groceries, household supplies, gardening, cleaning and repairs) are the highest expenditure items.

A survey of **Angus Place** employees undertaken in February 2013, found that the flow-on effects within the community where the employee lived are significant. These are summarised as follows:

- over 81% of Angus Place employees live in the Lithgow Local Government Area and 62% of these employees live in Lithgow, Wallerawang and Portland;
- 45% of those surveyed have been employed in the mining industry for over 10 years;
- 37% are from families that have worked in the industry for two or more generations;
- 79% own their own home;
- on average, each employee surveyed spends 33.5% of their total weekly income in their local residential community;
- over 40% of mine employee's partners participated in some type of work.

For **Springvale:**

- Nearly 76% of employees live in the Lithgow Local Government Area and nearly 80% of these employees live in the major townships of Lithgow, Wallerawang and Portland.
- 70% of those surveyed have been employed in the industry for over 10 years;
- 47% are have worked in the industry for two or more generations;
- 88% own their own home;
- on average, each employee surveyed spends 33.0% of their weekly income in their local residential community;
- over 40% of mine employees partners work and most participate in some regular weekly sport or social activities.

For both **Angus Place and Springvale:**

- most employees and their families participate in some local regular sport or social activities;
- the majority of employee's children, who do not currently attend school, participated in sporting activities in their local community;

- employees have strong connections to their local communities demonstrated via shopping in the communities where they live, coaching junior sport, participating in social activities, supporting local fundraising activities;
- employees are members of the local bush fire brigade and SES, and members of local clubs; and
- employees are aware of and utilise the natural assets throughout the area such as state forests and national parks for family outings.

It is evident that Angus Place and Springvale employees have a strong economic and social interaction with the local surrounding community. The continued mine related employment generated by these projects will potentially maintain a relatively stable population base demonstrated by the long term housing tenure of some employees in the LGA.

This will mean that services and infrastructure will remain viable as they will benefit from the above mentioned flow on effects over the extended life of the Project. It is not expected that the ongoing operation of the Project will create any additional demand for services and infrastructure.

4.2 Contractor Contribution

For the 2013 / 2014 financial year, Angus Place expended $64,923,494.15 on external contractors and for the same period Springvale expended $77,887,424.62. The allocation per LGA is summarised in Tables 7 and 8.

Table 7: Contractor Payments Angus Place July 2013 to June 2014.

LGA	Invoiced Amount	% of Total
Lithgow	$11,857,981.71	18.26%
Bathurst	$908,873.29	1.40%
Oberon	$175,953.50	0.27%
Other	$51,980,721.65	80.06%
TOTAL	**$64,923,494.15**	**100%**

Table 8: Contractor Payments Springvale July 2013 to June 2014

LGA	Invoiced Amount	% of Total
Lithgow	$22,758,454.60	30.0%
Bathurst	$1,136,137.70	1.0%
Oberon	$96,520.00	0.0%
Other	$52,896312.32	69.0%
TOTAL	**$76,887,424.62**	**100%**

With reference to contractor payments:

- Angus Place and Springvale make a significant financial contribution to the LGA and Region (totalling $142,810,918.77 in the 2013 / 14 financial year).
- The contribution is not limited to the mining industry sector alone and includes:

- Engineering
- Printing services
- Security
- Health and Safety
- Environmental Science and Research
- Mine technology
- Drilling
- Surveying
- Earth moving.

- The contribution outside of the LGA does not represent escape expenditure. While difficult to accurately quantify, it is safe to assume that many external contractors will direct money back into the Lithgow economy via:

    - Accommodation
    - Food
    - Fuel
    - Engagement of additional contract support services.

This type of expenditure would not occur if funds remained within the LGA; meaning that the indirect financial flow on effect is again significant.

4.3 Case Studies

Through the preparation of numerous social impact assessments over the past three years, James Marshall & Co. has spoken to many individuals, families and businesses in regards to the contribution that the mining industry makes to the Lithgow community.

These themes are repeated in the employee survey referred to in 4.1 above (i.e. reinforce the positive contribution that people make) and also in the submissions in support of both the Angus Place and Springvale Mine Extension Projects (i.e. state what will be lost to the community if the projects are not approved). Themes include:

- Businesses often state that most of their income comes from people who work in the mines (or their families).

- When preparing for the employee survey a group of miners told a story about how they collected money over a couple of shifts in response to an article in the paper regarding the hospital requiring a piece of equipment.
- Second and third generation miners who would like their children to also work in the industry and the extension of these projects means that this is a possibility.
- People who work in the mines access the Newnes Plateau for recreation and leisure and also value the preservation of the environment.
- There is a strong connection to the area and its people.