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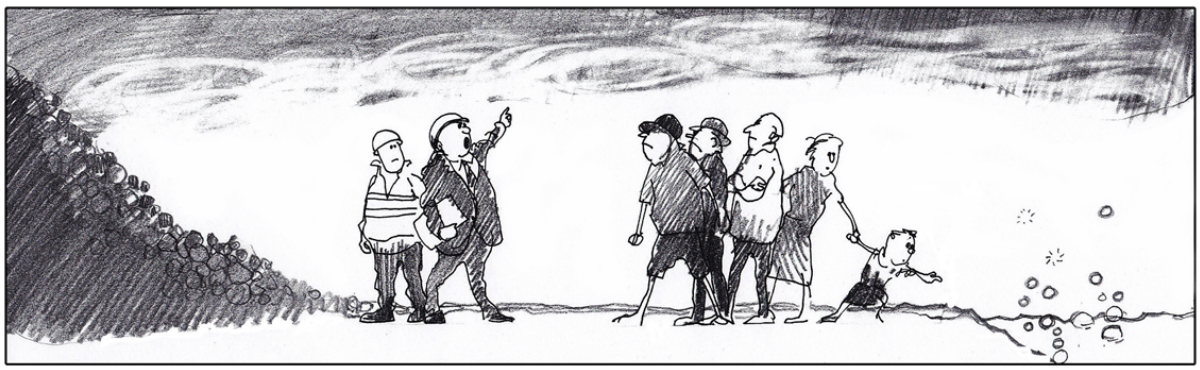
REVIEW OF PORT WARATAH COAL SERVICES
TERMINAL 4 PROJECT (MP10_0125)
PREFERRED PROJECT REPORT
November 2013

OBJECTION

Newcastle Greens
Councillor Michael Osborne



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Notes:

- The writer has used underlines to highlight specific points.
- Quotes attributed to the Proponents for the T4 Project originate from *Response to Submissions and Preferred Project Report, Prepared for Port Waratah Coal Services, September 2013, Main Report Vol 1, Appendix A, Summary of Submissions, EMGA Mitchell McLennan* unless otherwise noted.

INTRODUCTION

Thank you for the opportunity to present my objection to Port Waratah Coal Services' (the Proponent) Preferred Project Proposal for T4.

This document will outline important deficiencies in the "REVIEW OF PORT WARATAH COAL SERVICES TERMINAL 4 PROJECT" (**the Project**).

This document does not focus on the obvious deficiencies of this project with respect to climate change, the unacceptable impact on the Hunter Estuary wetlands, the unacceptable impact on threatened species, the unacceptable impact on the local air quality, surface and ground water. I am aware that these issues are being raised by others who object to this proposal.

This submission will focus on the deficiencies of this proposal and the documentation arranged into four main categories:

- the claimed merits and potential for the Project;
- the scope of the Benefit Cost Analysis in its current form;
- the narrow and unacceptable parameters applied to economic benefits and costs associated with the project; and
- the vast range of externalities overlooked and/or ignored by the proponent in the current proposal document.

By failing to address and misrepresenting the vast range of impacts that the T4 Project will have, the current proposal document necessarily fails to present appropriate measures to avoid, minimise and/or offset these impacts.

Further, the Proponent's Review documents have failed to adequately present any new information to influence or change original objections to the original T4 Project proposal.

CLAIMED MERITS AND POTENTIAL OF THE PROPOSAL

The Preferred Project represents the Port Waratah Coal Services' (**PWCS**) aim to capitalise on accessible regional coal reserves and is driven by the Proponent's anticipated increase demand for coal export capacity.

PWCS anticipates an unsubstantiated expansion of the global coal market, resulting in a proposal that reflects their vested interests, rather than the current industry projections.

As the PWCS website states: "*For the coal industry it* (theT4 Project) *provides certainty that there is a path to developing additional export capacity if it is required, a position which allows potential coal producers to make better investment decisions"**. (PWCS Website 4th September 2013 Planning for future opportunity - Terminal 4 report goes public)***

With regard to the merits and potential for the T4 project, the current Proposal document uses out of date information and inherent contradictions to justify the Project construction. This directly casts doubt on the integrity of the overall review.

This section will argue three main points, that:

- the current Proposal document uses out of date information to justify their position;

- the Proponent incorrectly uses reports to justify their arguments and to substantiate favour for their proposal; and
- the potential for the Project disproportionately benefits the Proponents over the local community and regional, State and National economies.

The Proponents give reference to an IEA 2011 prediction of increased growth of fossil fuels ***(p241 - US Energy Information Administration 2011 IEA 2011)*** as an indication of the increasing export market for coal and the community benefit this will generate.

However, the Proponents 'conveniently' fail to present IEA's 2012 predictions which state *"Investing in clean energy makes economic sense – every additional dollar invested can generate three dollar in future fuel savings by 2050"* ***(Energy Technology Perspectives 2012 Pathways to a Clean Energy System 2012)*** or *"Promoting sustainable development and combating climate change have become integral aspects of energy planning, analysis and policy making in many countries, including all IEA member states"* ***(CO2 Emissions from Fuel Combustion Highlights 2012)***, of which Australia is a member state.

Using selective and at times out of date information to justify the Project's merits and potential, the Proponents have either ignored or are ignorant of relevant pointed forecasts for coal export from Australia.

Examples of recent investigations into the negative potential for Australia's mining industry, and coal export potential include:

- Deloitte Access Economics who project that mining investment in Australia as a proportion of GDP will decline from a high of 7.7% in 2012, to below 4% by 2023. ***(Investment and GDP profile study, Business Council of Australia 1 July 2013)***.
- The National Resources Review, using information from BREE, Resources and Energy Major Projects, which noted in the six months to April 2013:
    - No coal project had progressed from the initial stage of being 'publicly announced' to the 'feasibility' stage;
    - No coal project had progressed to investment 'commitment';
    - A further $19 billion of project investment had reverted to the first stage of the investment cycle, or been cancelled altogether;
    - No new coal infrastructure projects had progressed to the 'committed' stage; and
    - Four coal infrastructure projects had been deferred or cancelled in the past 12 months: the Abbot Point T4–T9 project in Queensland, the Port Waratah Coal Services Kooragang Island Terminal T4 at Newcastle, and the Yarwun Coal Terminal and the Balaclava Island Coal Terminal at Gladstone". ***(Government has a stake in coal industry survival 24 May 2013 National Resources Review)***.
- Australian Mining reported "*According to media reports, that due to falling demand, the company is looking to expand its existing loader on the island instead of building the T4. Coal companies are shipping 20 per cent less coal now than when the deal was struck to build the T4". (**Vicky Validakis, T4 coal loader in doubt amidst coal downturn, 2 May, 2013 Australian Mining**).*
- Last year the head of BHP Billiton's coal division predicted long-term prognosis for thermal coal usage over the next 30-40 years would likely decline. ***(Future of thermal coal cools, Australian Financial Review, 5 Nov 2012, J Freed online edition)***.
- The IEA acknowledges the uncertainty for international steam coal markets and prices, noting that if the world is serious about climate change that coal demand would have to drop by almost an estimated 1.8 billion tonnes of coal a year by 2035. ***(International Energy Agency, World Energy Outlook 2012, Nov 2012 p157).***

- The Australian Coal Association recently acknowledged falling commodity prices and "stiff" competition. Mozambique, Colombia, Indonesia and the United States are providing coal to Australia's traditional customers at a lower cost. Until recently, Australia was the cheapest place in the world to produce coal but is now the highest cost producer in the world at $176 a tonne compared to the rest of the world at $106. ***(Lisa Upton SBS 3 Sept 2013 reporting Comments from Nikki Williams CEO ACA).***

In direct contradiction to the present circumstance of the coal industry, the Proponents state "*Certainty about ongoing viability of the coal chain is reflected in the fact that there are many new mining projects in development and in the approval process and many existing mining consents extend to the 2020s and 2030s".* ***(p259 Distribution of costs and benefits).***

The expansion, opportunity and demand for renewable energy generation also challenges a key but unsupported merit nominated by the Proponents, namely that the T4 Project Proposal will "*ensure Australia and NSW can capture the economic benefits of helping to meet increasing world energy demand*". ***(p239 13.2.4 Conclusion).***

Evidence from many sources, indicates that coal sourced energy will continue to decline as countries move to reduce their CO2 emissions and pollution levels.

"New data showed China's demand for thermal coal had fallen sharply due to Beijing's rapid switch to low-emissions hydro, wind, nuclear and solar energy. "In China thermal [coal] is in deep shit," Professor Garnaut said.

But Professor Garnaut told the conference the "awful reality" was that "parts of corporate Australia had dissipated shareholders' funds by underestimating the seriousness of Chinese commitments to reduce the emissions intensity of economic growth". This had led to "wasteful over-investment in thermal coal mining and exporting capacity".

Professor Garnaut said coal-fired electricity production in August was more than 7 per cent lower than in August 2011.

"Coal's share of energy production was down from 85 per cent in February to 73 per cent in August," he said. Chinese domestic coal production fell 5.3 per cent in August. Non-fossil fuels sources accounted for a record 27 per cent of China's electricity production in August as renewables soared. Despite China's slowing economy, electricity production has risen 15 per cent this year. But the growth has been in renewables." ***(Chinese demand not so great: Garnaut, Australian Financial Review, 02 Nov 2012).***

For a number of years market challenges for coal exports have been accounted for by both the industry and Government, including thermal coal losing market share to other sources of energy production as a result of global environmental pressures and carbon emission trading/pricing. ***(Infrastructure Australia and the National Transport Commission Background Paper 5 for the NPS "The possible future market challenges for relevant ports" April 2010).***

The ongoing strength of economic growth in Asia, one of the Proponents' repeated justifications for the project, is currently in doubt.

"Major trading partner weakness was seen as one of the five most likely risks to Australia, and one of the five most severe. This represents a shift from 2010, where the risk of subdued Asian economies was seen as severe in impact but very unlikely. China, Australia's biggest two-way trading partner is anticipating slower growth". ***(p9, Australia Report 2011 – Risks and Opportunities ADC KPMG).***

PWCS advises ***(p28)*** they are presently accepting voluntary reductions in coal capacity and that their predicted growth trend has still not yet been triggered. However, the industry has cast doubt that "capacity demands" will ever be "triggered".

In fact "capacity demands" have slumped as a result of increased competition, China's slowing growth, high industry production costs, and cost-effective growth in renewable energy.

Beyond their own unsubstantiated assertions, the Proponents produce no evidence of an increased demand trend for export coal, and as a consequence do not present the potential or circumstance to justify the T4 Project.

The Proponents state that the Australian Rail Track Corporation (ARTC) 2013-2022 Hunter Valley Corridor Capacity Strategy June 2013 reports contracted and prospective coal export volumes increasing and stabilising at 284Mtpa in 2020. Given that the port's approved coal export capacity is 211Mtpa, "*it is considered that this information would confirm that additional capacity is required in the future****".*** This is an absurd conclusion.

The ARTC Strategy relies upon the information supplied by its customers – the coal industry, including PWCS - to ensure that rail corridor capacity in the Hunter Valley can stay ahead of coal demand. If the information provided by customers is incorrect or misleading, or changes because of circumstance, the ARTC Strategy will change accordingly.

The ARTC Strategy states: "*The fundamental approach of ARTC in developing this Strategy has been to provide sufficient capacity to meet contracted volumes based on the principles of the ARTC*

Hunter Valley Access Undertaking (HVAU), while also having regard to and identifying those projects that would be desirable to accommodate prospective volumes that have not yet been the subject of a contractual commitment. In particular, this Strategy identifies a preliminary scope of work to accommodate prospective volumes for 2016 and beyond that would require the proposed Terminal 4 (T4) on Kooragang Island or other terminal capacity expansion."

Importantly, ARTC recognises "*Over the past year there has been a notable decline in the price of coal, which in turn has impacted future volume expectations."*

The proponents maintain that "*The 'T4 Project will be assessed and determined on its merits and is proposed to be developed in response to demand for more port capacity for the export of coal. It would not be generating the coal demand or production****". (p300).***

However, the Proponents' have contradicted this statement, indicating a true intent to capitalise on accessible coal reserves, when they state *"The BCA in the EA identified that because the NSW coal resource is in fixed supply, the T4 Project allows the mining of coal to be brought forward in time. Instead of mining and exploring the resource at the rate established by current approved capacity at the Port of Newcastle, port capacity can be increased to meet projected demand and the rate of mining and export can be increased."* ***(3.2 Appendix S BCA Results in the EA).***

It stands to reason that the Project Proposal is driven by PWCS' joint venture partners desire to capitalise on their individual investments from regional coal mines. The Proponents partners have already invested in related infrastructure over the past decade to link to their anticipated T4 development and understandably want to capitalise on these investments as long as they can. Joint venture partners will attempt reduce on site costs, including employment opportunity, in order to balance the high cost of coal production in NSW.

PWCS is an "unlisted public company owned by the Hunter Valley Coal Industry (70%) and Japanese Coal Customers (30%)".

It identified the "Port Waratah Coal Services Effective Ownership" as comprising Coal & Allied 30%, Importers 29.6%, Bloomfield Colliers 3.5% and Newcastle Coal Shippers" at 35%.

Of the Newcastle Coal Shippers share, Xstrata held 37.1%, Coal & Allied 22.7%, PWCS 9%, Anglo Coal 20%, BHB Billiton 1.7%, Bloomfield Colliers 2.8% with other minor shareholders having the remaining 6.7%. **(*Ownership – PWCS "About Us" PWCS website)***.

All planning and scheduling of coal exports from the Hunter Valley through PWCS is facilitated by the Hunter Valley Coal Chain Coordinator Limited ('HVCCC'). HVCCC's express objective is to plan and coordinate the cooperative operation and alignment of the coal chain in order to maximise the volume of coal transported through the coal chain, at minimum total logistics cost in accordance with the agreed collective needs and contractual obligations of Producers and Service Providers. ***(PWCS Website).***

The T4 Proposal cannot be considered in isolation from the industry it services. Assessment of the current Project document indicates the Proponent's key goals revolve around protecting and maximising profits for its primary shareholders, rather than providing merit to community and Government stakeholders.

SCOPE OF THE BENEFIT COST ANALYSIS

The current proposal document contradicts its own assertions as to whether the project should be viewed within, or aside from the wider mining environment. The proponents have stated on one hand "*the T4 project cannot be considered in isolation from the industry it services"* and yet on the other hand state "*The T4 Project is not a component of a larger action". **(Revised Benefit Cost Analysis results 3.1 Intro Appendix S p4)***

The Proponents state "*It is not appropriate to assess potential impacts of these upstream and downstream activities as a part of the T4 Project EA. Certainly this was not required by the DGRs" **(p300).***

However, we are advised the T4 Project's purpose and 'economic context' is to service the coal industry by generating coal export earnings. *"PWCS is a key driver and facilitator of the Hunter Valley Coal Chain. All the costs and benefits of the T4 project, including mining and their partnerships with the transport and shipping companies for the export of additional coal are relevant to BCA."* ***(p236)***

EMGA Mitchell McLennan, The Terminal 4 Project, Referral of Proposed Action, June 2011 Prepared for PWCS http://www.environment.gov.au/epbc states T4 is not a "*component of a larger action":*

2.7 A staged development or component of a larger project

If you have identified that the proposed action is a component of a larger action (in section 1.11) you must complete this section. Provide information about the larger action and details of any interdependency between the stages/components and the larger action. You may also provide justification as to why you believe it is reasonable for the referred action to be considered separately from the larger proposal (eg. the referred action is 'stand-alone' and viable in its own right, there are separate responsibilities for component actions or approvals have been split in a similar way at the state or local government levels).

The proponent's response – "*Not applicable. The T4 Project is not a component of a larger action".*

It is not acceptable that when attempting to justify the proposal on economic grounds PWCS admits its participation in the larger action of the operation of the coal chain and therefore benefits from their anticipated shared cumulative economic benefits, but when applying for development approval fails to account for the dependence of their (vested interest) Project relying on the expansion of the coal chain.

Compliance of associated projects and infrastructure, reliant on Port infrastructure, obviously affects community welfare within and beyond Newcastle Port. However, the proponents state "*Those activities are the responsibility of others. Upstream activities include rail transport of coal and the coal mines that will use PWCS services. Downstream activities are shipping of coal to overseas customers for consumption. These organisations require regulatory approvals to undertake these activities."* ***(14.10.1 Coal Industry Impacts).***

The T4 Project Proposal cannot be considered as a 'stand-alone' project, and even the Proponents have admitted as much, being a key driver of the coal chain and when describing benefits resulting from the Proposal, the proponents nominate Voluntary Planning Agreements by mining companies ***(p258).***

PWCS is a major stakeholder in all undertakings of the coal chain upon which their proposal depends. Therefore, the costs and impacts associated with the coal chain must be considered in PWCS' Benefit Cost Analysis . This has not occurred. As a result, we are presented with a Benefit Cost Analysis that fails to "*provide information that will assist decision makers make efficient use of available resources to maximise the wellbeing or welfare of the community"* ***(Distribution of costs and benefits p257).***

Rather than examine the external issues related to the expansion of the coal industry, the proponents have only dealt with the T4 site specific remediation and mitigation measures and have stated "*The Commonwealth and NSW approval processes leave the ultimate judgement of whether a project's unquantifiable environmental costs outweigh its quantified net production benefits to the decision maker and not to a project proponent."* ***(Updated Statement of Commitments Chptr 15).***

However, mitigation measures and offset proposals dealing with adverse impacts of the on-site T4 Project proposal do not indicate a true picture of the potential, external negative impacts of the Project.

It is understood that the purpose of a benefit cost analysis is to appraise ***all*** the social and economic costs and benefits accruing from a decision or project.

A transparent Benefit Cost Analysis should show predictable, productive and sustainable economic outcomes in order to establish the Project's economic benefit.

Therefore, consideration of the external negative costs to the community resulting from expansion of the coal mining industry which the proposal will service must be considered and accounted for.

The Project Proponents have failed to produce a Benefit Cost Analysis where all likely costs and benefits are estimated in monetary terms so that all costs and benefits of the Project proposal can be compared.

Guidelines for the use of Cost Benefit Analysis in mining and coal seam gas proposals, NSW Government states: *"It would be inappropriate to set up an arbitrary point scoring system as an*

alternative measure of the net public benefit or cost". However, this is exactly what the proponents have done.

Many of the costs and benefits likely to occur as a result of the T4 Project Proposal are not traded in the market place like coal, and so do not have an obvious price or commercial value. If these unpriced values are not included in the decision-making process, the final decision will favour outcomes which only have a commercial value.

External matters to the Project proposal require consideration in the Benefit Cost Analysis*: "Most externalities fall into the category of so-called technical externalities; that is, the indirect effects have an impact on the consumption and production opportunities of others, but the price of the product does not take those externalities into account. As a result, there are differences between private returns or costs and the returns or costs to society as a whole".* ***(Thomas Helbling IMF Externalities: Prices Do Not Capture All Costs, Finance and Development March 28 2012).***

The proponents acknowledge: *"conflicts can present significant challenges in balancing the costs and benefits to communities and industry"* ***(section 5.3.2.5 Coates Consulting 2012 Appendix S),*** however this should not be an excuse to fail to address the scope and economic consequence of the recognized "significant challenges" the T4 Project proposal creates.

The cumulative, external costs of the proposal are undoubtedly substantial, and consequentially, should be factored into the Project Proposal net production benefits and costs.

Without the factoring in of external costs occurring, the Proponents' claim that in their Benefit Cost Analysis framework *"any residual (unmitigated) environmental impacts of T4's coal chain to Australia can be weighed up against estimated net production benefits to Australia to determine whether the project is justifiable in economic efficiency terms"* ***(13.2.2 p 236)*** simply cannot occur.

Further, the Proponent's acknowledge that "*by allowing coal export to be brought forward in time, has potential benefit to Australia however will forfeit any future net production benefits which may have arisen",* but fail to account for community costs.

ECONOMIC BENEFITS AND COSTS

"*Only when benefits exceed costs, is there net public benefit" (****Guidelines for the use of Cost Benefit Analysis in mining and coal seam gas proposals, NSW Government November 2012).***

As a matter of due diligence, and to give a fair indication of the net production costs versus external costs, PWCS should establish a break-even point on cost competitiveness with the rest of the world for their network of vested interest coal production - in both short and long terms – that they state dictates the requirement for the T4 Project.

The proponents need to establish a Benefit Cost Analysis methodology which validates the external costs to the community of the coal industry. Without this analysis, a true case for economic benefit, given the extent of external factors, of the project cannot be established.

The Proponents flippantly state that *"the T4 Project BCA is fundamentally concerned with whether aggregate benefits to Australia exceed aggregate costs. If they do then Australia as a whole is better off****". (p258 Distribution of costs and benefits)*** and that Governments can address any perceived inequities.

It is understood, most production figures would be 'commercial in confidence' and it is improbable that the coal industry would publicly produce information which perhaps advised against expansion of infrastructure and production.

Decision makers, however, are responsible to ensure that the proponent's anticipated net production benefits can be realistically substantiated in the face of known risk warnings:

> *"Given its nationally-significant base of coal mining and support activities, the Hunter is especially vulnerable to a softening of commodity demand from Asian economies and a decrease in Australia's terms of trade (principally from lower mineral and energy prices).*
>
> *A reduction in commodity prices would considerably reduce profitability across the mining industry. It would also involve decreased economic activity in the large cluster of industries which support mining and resource operations, as well as lower household income and consumption.*
>
> *Scenario analysis, under which commodity prices decline by approximately 30%, shows economic output in the Hunter could fall by around $4.0 billion in present value terms over the period to 2036. Notably, the economic impacts are likely to be more acute in the upper Hunter where mining activity is more heavily concentrated.*
>
> *A key facet to these adjustments is that, in a diversified economy, a moderation in commodity prices and resource related earnings also involves some economic 'upside'. In particular, the region's farming, tourism and education sectors stand to benefit as a lower currency improves their international cost competitiveness.*
>
> *However, much will depend on ensuring these sectors are well positioned to capitalise on new opportunities".* ***(Key threat: Moderating Asian commodity demand Prospects and challenges for the Hunter region vii Deloitte Access Economics: A strategic economic study Regional Development Australia Hunter March 2013)***

The proponents have identified the anticipated capacity shortfall nominated in their 2010 EA has been reduced from 120 million tonnes per annum (Mtpa) throughput capacity to 70Mtpa.

It is obvious, that in the present volatile coal market the proponents cannot reliably predict demand for regionally sourced coal. As a consequence, figures for net production benefits presented in their Project Review remain inaccurate and misleading.

Capacity demands anticipated by the proponents represent little more than biased guesswork. It is apparent PWCS' obligations to suppliers to facilitate additional export of coal are not likely to be triggered.

Quantifying benefits of the T4 Project is thus heavily dependent on the accuracy of forecasting demand of export coal, which the proponent's claim is positive, but industry experts have argued is convincingly negative.

The proponents do not present an alternative case for their project proposal, simply that the project will only go ahead if demand dictates. Where the coal industry may be able to carry the cost of reduced returns, as a result of lower prices and higher export costs, the community could be left to bear the burden of the inherent external/hidden costs resulting from expansion of a potentially unviable coal industry.

Quantifying benefits of the proposal requires accounting of all costs related to mining as part of PWCS economic feasibility. One glaring hole in the current proposal document is a lack of reference to Government subsidies to the coal Industry.

We know Australian taxpayers provide substantial subsidies to the mining industry in the Hunter Region.

Information provided for the Benefit Cost Analysis should include the extent of government subsidies through the coal supply chain. The public should have an opportunity to observe 'value for money' however this opportunity is not presented in the current proposal.

NSW Minerals Council chief executive Stephen Galilee has stated that mining generates about $1.3 billion each year in royalties for NSW, $9.3billion in wages, salaries and goods and services and about 20% or $15billion in exports ***(The Land, 10 October 2013)***.

Mr Galilee failed, as the PWCS Benefit Cost Analysis does, to account for the high level of taxpayer funding for the industry.

For instance, the Federal Government funding for the Hunter Valley Corridor Capacity rail upgrade cost $855 million. The tax rebate on the diesel that fuels the trucks and machinery amounts to a $2 billion a year subsidy for the Australian mining industry. This is equivalent to an $87 annual contribution from every Australian. ***(Rosewarne, S. & Connor, L. (2012) Coal curse: the black side of the subsidised resources boom, The Conversation, 3 July 2012)***.

Government subsidies to the industry should be included in the Benefit Cost Analysis so that assessment of a true cost and a valid indication of not only international competitiveness of regional coal, but external costs to existing alternative and potentially competitive industries can be established.

EXTERNALITIES IGNORED

This section examines a range of externalities that must be taken into account when considering the economic benefit of the Proposal and will point out that although difficult to quantify, it is the Proponent's duty to adequately acknowledge and assess these externalities in their Benefit Cost Analysis assessment. The current Proposal document does not do this.

The Proposal document clearly overstates the benefits to the Proponents and understates the social costs of the Project. The Proponents conclude that *"if aggregate benefits exceed aggregate costs, a project is said to improve economic efficiency and is desirable economically .... that the main aim of an economic evaluation is to provide information that will assist decision makers make efficient use of available resources to maximise the wellbeing or welfare of the community"* ***(James and Gillespie 2002 Guideline for Economic Effects and Evaluation in Environmental Impact Assessments p257).***

Obviously *all* externalities should be considered by the proponents, not only those that are easily quantifiable. Failure to address the external economic impacts of the proposal favours what is best for PWCS, not the wider range of stakeholders including citizens, government, local tourism, agricultural and business operators.

Both negative and positive externalities of the coal chain require consideration: "*In the case of pollution—the traditional example of a negative externality—a polluter makes decisions based only on the direct cost of and profit opportunity from production and does not consider the indirect costs to those harmed by the pollution. The indirect costs include decreased quality of life, say in the case*

of a home owner near a smokestack; higher health care costs; and forgone production opportunities, for example, when pollution harms activities such as tourism. Since the indirect costs are not borne by the producer, and therefore not passed on to the end user of the goods produced by the polluter, the social or total costs of production are larger than the private costs." (**Thomas Helbling IMF Externalities: Prices Do Not Capture All Costs, Finance and Development March 28 2012**).

This section will address the following externalities that will be adversely impacted by the proposed T4 Project and the necessary expansion of their joint venture partners' coal mining interests it represents.

1. Effect on the Australian Dollar
2. Cumulative impacts of coal production.
3. Social Impacts
4. The Proponent's Social License to Operate
5. Health Impacts
6. Employment Opportunities
7. Environmental Impacts
8. Impacts on local industry including
    a. Agriculture
    b. Wine Making
    c. Horse Breeding and
    d. Tourism

1. Effect on the Australian Dollar

The proponent states, "*Numerous national and international macro-economic factors influence the value of the AU$, not just one project* ***(p252)*** and that "*While the strong AU$ can negatively impact export and import, overall it is considered a positive for the economy"* ***(AMP Capital Investors, Edition 9, 30 March 2011).***

In it is unclear whether the Proponent read all of the AMP Capital Investors report, because further down in the same report a more relevant and pointed quote regarding the resource sector reads: "*From a longer-term perspective, the rise in the AU$ will present challenges. It's helping to shift economic resources to the strongly growing resources sector of the economy, which is appropriate from a technical economic perspective but such restructuring will invariably have significant social and regional consequences.* ***(AMP Capital Investors, Edition 9, 30 March 2011).***

The mining industry impact on the Australian dollar is well documented. *"Over the past decade, the Australian dollar (AUD) has appreciated strongly against the US dollar (USD), rising from less than US $0.50 in 2001 to a peak of over US $1.10 in 2011. While the rise can be attributed to a number of factors, the mining boom has been the key driver of the appreciation over this period."* ***(Understanding the appreciation of the Australian dollar and its policy implications Phil Garton, Danial Gaudry, and Rhett Wilcox from Macroeconomic Policy Division, the Australian Treasury 3 July 2012).***

It is irresponsible of PWCS not to acknowledge that the Project, driven by and itself part of the 'mining boom', does not influence the value of the Australian dollar and the resultant negative impacts that this has on competing industries.

2. Cumulative Impacts

Standout risks from coal expansion in the region (greenhouse gas emissions, environmental, social impacts, employment opportunity, and depletion of natural resources) have been dismissed as beyond the control of the proponents.

It is understood – *"Cumulative impacts are the successive, incremental and combined impacts (both positive and negative) of an activity on society, the economy and the environment. They can arise from the compounding activities of a single operation or multiple mining and processing operations, as well as the interaction of mining impacts with other past, current and future activities that may not be related to mining".* ***(Cumulative Impacts, A Good Practice Guide for the Australian Coal Mining Industry, Daniel Franks, David Brereton, Chris Moran, Tapan Sarker, Tamar Cohen, University of Queensland ISBN 978-0-9581710-2-1, 2010).***

"The central idea behind the assessment and management of cumulative impacts is that it is insufficient to only consider the impacts of a single project or action. Sustainable development requires that the full range of human generated stresses are understood in their environmental, economic and social context. The role of the assessment of cumulative impacts is to identify, examine, and respond to such impacts. The aim of cumulative impact management is to keep the total effects of all stresses at acceptable levels and to enhance opportunities through co-ordination." ***(Cumulative Impacts, A Good Practice Guide for the Australian Coal Mining Industry, Daniel Franks, David Brereton, Chris Moran, Tapan Sarker, Tamar Cohen, University of Queensland ISBN 978-0-9581710-2-1, 2010).***

The T4 Project Proposal comes at a cost to this region's competing resource interests development. The interests of PWCS and joint venture partners should not confuse and override the best long term interests of the rest of the community. Net production benefits and economic benefits cannot be the sole justification for a project, acknowledged by the proponents who state: "*The need for the project is only one consideration in project determination and is not justification enough for approval".* ***(p271 13.2.2).***

This being the case, due consideration of the cumulative, incremental impacts of facilitating expansion of the coal industry which the T4 Project plans to service, must be carried out by the Proponents

3. Social Factors

The Proponents explain that "*Projects that result in net social benefits to the current generation mean that future generations inherit a society that has greater stock of wealth, for example goods and services. Future generations are therefore made better off by society investing in projects now that have net benefits to society, including projects involving use of non-renewable resources like coal."*

The Proponents support such a statement with a skewed Benefit Cost Analysis in favour of the proposal as a result of their dogged refusal to account for the adverse impacts and social costs of their industry (see health).

The external costs relating to the expansion of coal mining in the Hunter region are opaque and heavily disputed in multiple regional community and industrial conflicts.

As will be outlined later in this section, multiple competing industries in the region have been, and will be adversely affected by the T4 expansion. This fact must be acknowledged and addressed in the Proponents' Benefit Cost Analysis document.

The T4 Project Benefit Cost Analysis irresponsibly rests its' case on short term economic return outweighing unquantified longer term adverse impacts.

The proponents claim that the economic benefits from their proposal will be so large that unquantifiable and external/hidden costs are worth incurring, and assumes that the community prefers to reap such benefits now rather than in the future.

According to Thomas Helbling, social costs grow with the level of pollution, which increases in tandem with production levels, so goods with negative externalities are overproduced when only private costs are considered in decisions and not costs incurred by others. ***(Thomas Helbling, IMF Externalities; prices Do Not Capture All Costs, Finance and Development, March 28 2012)***

The proponents do not present an alternative case for their proposal, simply that the project will only going ahead if capacity demand dictates. A transparent Benefit Cost Analysis should show predictable, productive and sustainable economic outcomes.

The Benefit Cost Analysis peer review, does not include estimates of the monetary value of impacts and health issues, sensitivity tests to indicate variance of proposal outcomes, verifiable information regarding quantitative impacts, transparent and testable results that can be validated, valuation of impacts on health, environment, infrastructure, and business. Nor does it test uncertainty and risk. ***(Guideline for the use of Cost Benefit Analysis in mining and coal seam gas proposals Nov 2012 NSW Government)***. As a result the document is flawed.

4. Social License to Operate

The proponents understanding that the T4 proposal is generally supported by the community, i.e. has social license to operate, is not evidenced from other sources, including from their own industry:

- *"The Australian Centre for Corporate Social Responsibility (ACCSR) was engaged by the NSW Minerals Council in 2010 to conduct a survey to understand community concerns regarding the cumulative impacts of mining in the Upper Hunter Valley. The results of the survey indicate that the community has a negative perception of the coal mining industry as a whole. People gave below average scores on a range of questions used to measure community perceptions, including social license to operate, reputation, relationship quality and social capital (comprising trust and shared goals). Although the industry as a whole was rated negatively, the community rated relationships with individual mining companies more favourably".* ***(The Australian Centre for Corporate Social Responsibility Report on the Stakeholder Survey For the NSW Minerals Council 2011)*** **(Rio Tinto Coal Australia Media).**

- *"Community support is a key controlling variable for the social license of the coal industry to operate and expand in the Hunter Valley. Local opinion surveys conducted by the HVRF found that 39% of residents of the Upper Hunter heartland of the coal industry thought the costs of the coal industry for the Hunter Region outweighed the benefits, up from 32% in 2005 (HVRF 2007b: page 7). According to the surveys, people in the 18–24 years age group strongly disagreed with the proposition that the benefits of coal mining outweighed the costs (HVRF 2007b: page 4)."* ***(Transformation from "Carbon Valley" to a "Post-Carbon Society" in a Climate Change Hot Spot: the Coalfields of the Hunter Valley, New South Wales, Australia***

Geoffrey R. Evans ***University of Newcastle (Australia), Ecosystem Health Research Group 2008).***

- *'Don't judge it on economics alone'* ***(Newcastle Herald October 21 2013, Michelle Harris)*** *"The region's councils have warned that state government plans to focus on economic benefits when assessing mine proposals is a "dangerous basis for decision making".*

5. Health issues

It is not acceptable that the proponents have failed to adequately scope the health impacts resulting from their proposal, assuming that *"the T4 Project is not expected to significantly impact community health through environmental factors (refer to the contamination, noise and sir quality assessments), it is predicted that there will be a negligible impact on health service costs as a result of the project".* ***(p259 Distribution costs and benefits).***

The environmental and health impacts already existing from coal mining and its' transportation to the Port will be exacerbated by the Project. Failure to consider the range of impacts along the coal chain upon which the Project depends should not be tolerated by decision makers.

The Hunter valley has one of the highest concentrations of coal mining in close proximity to communities in Australia. As a result, the following health impacts should be addressed when assessing the benefits and costs of the proposal.

"Adults in coal mining communities have been found to have:

- *Higher rates of mortality from lung cancer, chronic heart, respiratory and kidney diseases*
- *Higher rates of cardiopulmonary disease, chronic obstructive pulmonary disease (COPD) and other lung diseases, hypertension, kidney disease, heart attack and stroke, and asthma*
- *Increased probability of a hospitalisation for COPD (by 1% for each 1,462 tons of coal mined), and for hypertension (by 1% for each 1,873 tons of coal mined).*
- *Poorer self-rated health and reduced quality of life*
- *Children and infants in coal mining communities have been found to have:*
- *Increased respiratory symptoms including wheeze, cough and absence from school with respiratory symptoms although not all studies reported this effect*
- *High blood levels of heavy metals such as lead and cadmium*
- *Higher incidence of neural tube deficits, a high prevalence of any birth defect, and a greater chance of being of low birth weight (a risk factor for future obesity, diabetes and heart disease)"* ***(Health and Social Harms of Coal Mining in Local Communities 2012 Spotlight on the Hunter Region, Ruth Colagiuri, Johanne Cochrane and Senham Girgis, Health and Sustainability Unit, The Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders, University of Sydney).***

"As more coalmines are opened, as has occurred in parts of the Hunter Valley in New South Wales, the social fabric of a region changes, the role and function of a township alters, and many inhabitants of these regions have developed depression, anxiety and ill health.13

The health costs of burning coal are equivalent to a national health burden of around $A2.6 billion per annum. Coal-fired power stations also produce more greenhouse gases (such as CO2) per unit of energy than any other type of power station. Combining greenhouse and health damage costs for Australia gives representative total external costs of $A52/MWh for brown coal, $A42/MWh for black coal and $A19/MWh for natural gas.24 By the ATSE analysis, carried out before the costs of the

2011 Fukushima nuclear meltdown could begin to be calculated (ATSE specifically excluded nuclear disaster costs), the external costs of nuclear power would have been around $A7/MWh. The external costs of genuinely renewable sources of power generation, such as wind and solar power, are even less. If the external costs of burning coal were recovered by a coal tax, coal would be the most expensive of all energy-generating fuels. Epstein and colleagues recently reported an analysis of the health and environmental costs of coal in the US and concluded that the damage caused by coal should double or triple the costs of coal-generated electricity.25"

(The mining and burning of coal: effects on health and the environment William M Castleden Sep 19, 2011 – The Medical Journal of Australia ISSN: 0025-. 729X 13 Connor L, Albrecht G, Higginbotham N, et al. Environmental change and human health in Upper Hunter communities of New South Wales, Australia. EcoHealth 2004; 1 (2 Suppl): 47-58. 24 Australian Academy of Technological Sciences and Engineering. The hidden costs of electricity: externalities of power generation in Australia. Melbourne: ATSE, 2009. http://www.apo.org.au/sites/default/files/ATSE_Report_Hidden_Costs_Electricity_2009.pdf (accessed Jun 2011). 25 Epstein PR, Buonocore JJ, Eckerle K, et al. Full cost accounting for the life cycle of coal. Ann NY Acad Sci 2011; 1219: 73-98.)

6. Employment

One of the main economic benefits nominated by the proponents is employment, stating the T4 project will create 80 direct and 222 indirect jobs if capacity demand is triggered and the project warranted.

No job in the coal mining industry is guaranteed or secured, and in this particular instance the Proponents have stated that the T4 Project will only go ahead in response to "capacity demands" that have not been established.

Earlier this year Energy and Resources Minister Chris Hartcher announced 1476 jobs had been lost in NSW from the coal industry, including 709 suppliers and contractors, because of a global downturn in commodity prices. ***(NSW mining shrinks by 1500 jobs 16 Aug 2013 13:31:07 Print Edition 2013 Australian Financial Review).***

Australian Mining reports that both BHP Billiton and Rio Tinto plan to cut as much as $US10 billion from operating costs over the next two years. The cost cutting measures come as the miners attempt to deal with stabilising commodity prices, and increased investor demand for larger returns, noting it is the suppliers, contractors and employees that are expected to feel the squeeze ***(BHP and Rio expected to slash combined $10bn off costs31 January, 2013 Alex Heber Mining Australia).***

- *"Weak demand in the resource sector has forced mining equipment manufacturer Komatsu to cut its full-year operating profit forecast by a third to $2.16 billion. Komatsu said the drop in demand for mining equipment had been worse than expected, stating it expects operating profit for the year to next March to total 210 billion yen ($2.16 billion), down from its prior forecast of 305 billion yen... Heavy equipment maker Caterpillar has also cut its full-year profit forecast, blaming weak demand for mining equipment. BHP and Rio are among Komatsu customers who have announced billions of dollars worth of cuts to capital expenditure over the coming years".* ***(Komatsu cuts profit target as mining demand drops 30 October, 2013 Vicky Validakis Mining Australia).***
- *"Mining giant Xstrata is blaming a slowdown in demand for coal for its decision to axe 46 workers at its Ravensworth mine near Singleton, in the New South Wales Hunter Valley".*

(Xstrata cuts jobs at Ravensworth coal mine in NSW Hunter Valley ABC News Updated Tue 25 Jun 2013, 12:04pm AEST)

- *"Centennial Coal is cutting 120 jobs from its operations across New South Wales, with the majority of positions to come from the Mudgee and Lithgow areas. Centennial is blaming high production costs and weak prices for its decision to shed jobs across its operations. The company has seven operational mines across New South Wales. Around 80 staff and contractor positions are expected to be lost at its operations in the Lithgow and Mudgee regions. While another 40 will be cut from mines near Toronto and Morisset in the Lake Macquarie area. Less than a year ago Centennial Coal stopped operations at its Airly Coal mine at Capertee and its Mannering Mine at Morisset. The company says despite placing the mines on care and maintenance mode, further costs savings were needed. It says the job cuts are essential for ensuring the sustainability of the company. The announcement comes just days after another major coal miner in the Lithgow region, Coalpac, went into administration. Centennial says high production costs, the strong Australian dollar and weak thermal coal prices are behind the decision. It says with no signs of an immediate improvement it is essential the redundancies are made".* **(Centennial Coal announces job cuts across mines in NSW Natalie Whiting Updated *Fri 25 Oct 2013,* ABC News).**

If the traditional and future agricultural industries of the region are jeopardised by coal mining expansion, then the risks associated with a mining down turn must be taken into account when looking at the employment and economic implications of the Project.

If the region develops a core concentration of highly related workforce and industries, as has occurred over the last ten years, and the projected mining downturn continues, then there will be a continuing and major dislocation of the workforce, misdirection of government funds and a series of stranded assets.

The Proponents insult the intelligence of the general community with inane comments like "From an economic efficiency perspective, reallocation of resources from one use to another will result in change of economic activity levels and the distribution of economic activity" **(p242)**.

Of course, if a project calls for the relocation of "economic resources" it is bound to have a flow on economic impact.

The Proponents fail to consider advice from The Reserve Bank of Australia, who have stressed that considerable investment needs to be made in the non-mining sectors if the Australian economy is to return to trend growth. (***Future investment in Australia Saturday 2 November 2013 7:30AM)*** or Regional Development Australia (Hunter) Regional Plan 2010-2012 "*A more diverse economic base, including more employment in higher 'added value' industries and more future facing sectors, including renewable energy are essential elements for economic growth".* ***(p11).***

7. Environmental Impacts

The current Project proposal resembles an opportunistic short term business plan benefiting the Proponents, not a Benefit Cost Analysis which should establish the best interests of the community and the environment.

The coal industry is not sustainable. As noted by the Proponents "*It is recognised that supply and demand conditions for coal will change in the future and all export will cease at some point in the future regardless of the T4 Project".* ***(p.259).***

That being the case, it is extremely important for the Proponents to present information that reflects the economic and environmental 'values' of the community and whether an equitable balance of competing short and long term ecological, economic, social and cultural objectives can be established.

"Sustainable development is a prescribed legal obligation in the NSW Environmental Planning and Assessment Act – the legislation which the appeal against the expansion of Rio Tinto's Mount Thorley Warkworth open-cut coalmine was determined. One object of this Act is "To encourage ecologically sustainable development". The legal meaning for 'ecologically sustainable development' under this Act imposes a legal obligation that "requires the effective integration of economic and environmental considerations in decision-making processes" – the pathway followed by Preston CJ.

A sustainable solution for an environmental problem is found by balancing competing short-and long-term ecological, economic, social and cultural objectives. Equity is a key consideration, as a sustainable solution seeks to secure as much available value as possible for government, industry, business and the community. A sustainable solution does not place inordinate weight on one objective such as economics – as would be the case for the proposed change to NSW planning policy. ***(Bulga, Rio Tinto, Coal Mining and Environmental Dispute Resolution: Finding a Sustainable Solution or Must History Repeat? 21 August 2013 Dr Ted Christie, Environmental Dispute Resolution Services).***

The T4 Project proposal will have considerable effect on the region's environmental assets including the destruction of areas of native vegetation upstream of the proposal and as well on its immediate environs.

"In the Upper Hunter Valley, 64% (1280 sq km) of land is taken up by mining leases, while 16% of the land (315 sq km) is open-cut mines. Although mining lobby groups such as the NSW Minerals Council claim "mining is a temporary use of land", mined land is sterile and can never be used again for productive rural enterprises." ***(Coal curse: the black side of the subsidised resources boom Stuart Rosewarne, Dept Political Economy and Linda Connor, Professor Athropology University of Sydney).***

A timeframe for the Project cannot be established, as it will only occur if capacity demand dictates it is required. Therefore, the Benefit Cost Analysis cannot guarantee net production benefits, nor an extent or community benefit.

"The costs and benefits should be estimated over the timescale of the impacts of a project. Where a project has environmental impacts (positive or negative), the impacts may continue well after the productive life of the project under consideration. It is recommended that long-term projects should use a 50 year time-frame and where applicable a residual value for impacts beyond that time-period. However, where predictable and material, a longer time-frame can be adopted" ***(Guideline for the use of Cost Benefit Analysis in mining and coal seam gas proposals NSW Government).***

The Benefit Cost Analysis does not include a dollar estimate of long term environmental and ecological losses, the losses that will be carried by the State after cessation of the coal industry. Such value cannot be 'offset'.

"Regulatory biodiversity trading (or biodiversity "offsets") is increasingly promoted as a way to enable both conservation and development while achieving "no net loss" or even "net gain" in biodiversity, but to date has facilitated development while perpetuating biodiversity loss". ***(Walker S, Brower, AL Theo Stephens, RT & Lee WG 2009. Why bartering biodiversity fails. Conservation Letters 2 (2009) 149-57, Wiley Periodicals Inc).***

It is not acceptable that the proponents fail to address the likely and costly environmental impacts of the Project Proposal: "Environmental economics provides many tools for estimation of such values and alternative decision criteria such as Safe Minimum Standards, for use on occasions where irreversible damage such as species extinction is a risk***."(Submission on Major Project Assessment Processes, Economists at Large Pty Ltd March 2013)***

The Australia Report 2011 addresses the risks and opportunities facing Australia over the next decade and highlights the need for proactive planning for risks and to anticipate longer-term, cumulative risks. The Report notes "*risks emerging from our natural environment are among the most likely and costly confronting Australia, with climate change regarded as the most severe of all risks*". Further, sustainable alternatives exist to this Project proposal. KPMG advises "*global markets for low-carbon technologies are forecast to grow rapidly, to at least $500 billion annually by 2050. Australia has the capability to boost exports of clean technology, renewable energy and carbon capture, storage and market services"* ***(ADC Forum in collaboration with KPMG: The Australia Report 2011 Risks and Opportunities p16).***

8. Ramsar Wetlands & Hunter River Estuary:

The Lower Hunter Estuary system is recognised for its ecological values both nationally and internationally.

In July, the State Government commissioned research to understand how the Hunter River Estuary will cope with further development. ABC News **(*12 July 2013 State Starts Hunter River estuary plan)*** reported the community are worried about the impact of increasing coal exports on the surrounding region.

Environment Minister Robyn Parker stated: *"Whatever development occurs in and around our river, our wetlands and more broadly needs detailed planning. It needs to be backed up by the scientific investigations that we're announcing (today)".*

The T4 Project Proposal should not go ahead until the scientific research necessary to assess the Proponent's mitigation and offset proposals can be transparently considered.

Ecological impacts and resultant losses as a result of the Project will be far reaching.

The ecological value of this area cannot be understated in terms of its' strategic location and support of present ecological communities. The potential for the development site area to either enhance the environmental integrity of the adjoining National Park and Ramsar wetland or adversely affect the environmental integrity of those areas needs to be more fully considered. The area is presently acting as a buffer zone between heavy industry and an area of international significance.

The Proponents state: "*The T4 Project will result in the loss of habitat for a range of shorebirds, wetland-dependent birds, the green and golden bellfrog, microbat species and Zannichellis palustris. In addition, the T4 Project will result in the loss of Coastal Saltmarsh EEC, Freshwater Wetlands EEC (other non-listed wetland habitat, mangrove habitat and loss of an area of Deep Pond, which affects deep diving ducks and other species* ***(Appendice Vol 2 Appendix B p12).***

18.5ha of the Hunter Estuary National Park needs to be removed to accommodate the T4 Project. Other land slotted for conservation will also be utilised by the proponents, including the ecologically significant Swan Pond site. The proponents inform the advice from DSEWPC "*offset sites are not intended to make proposals with unacceptable impacts acceptable. Avoidance and mitigation should be primary strategies* ***(Appendice Vol2 Appendix B p17).***

Prof Max Maddock, in his original submission to the T4 Project proposal stated: *"Not enough is known about mitigation, which for the present is a gamble, and it is clearly impossible to guarantee like-for-like replacement. Race and Fonesca (1996, 94) regarded the practice of compensatory mitigation as a matter of serious concern because "it is a bartering scheme that trades permission to damage a known quantity of wetland area for the promise of some kind of replacement, sometimes at locations away from the impacted area". They further add that, based on over a decade of survey results "the cumulative record of past mitigation projects remains undeniably poor overall" (p97).* ***(p6, Why the T4 Coal Loader Proposal Must be dismissed, Summary of its major ecological Problems, Max Maddock AM, Bsc, DipEd,Bed, MS, PhD,DSc (Hon) March 2012).***

Why does valuation matter to Ramsar?

A key concept underlying the principles of the Ramsar Convention is that wetlands have great value. Conservation can only be achieved if wetlands can be shown to be of value and, in some cases, of greater value than proposed alternative uses of the wetland site itself or of the water feeding the wetland. In line with this, Contracting Parties are asked to provide physical and social values of wetlands as part of the information for designation on the List of Wetlands of International Importance. Contracting Parties are also committed to making environmental impact assessments, before initiating schemes that might affect wetlands, which should pay particular attention to maintaining the values of wetlands. ***(Economic Valuation of Wetlands, A Guide for Policy Makers and Planners, Edward B Barbier, Mike Acreman,Duncan Knowler. Ramsar Convention Bureau Department of Environmental Economics and Environmental Management, University of York Institute of Hydrology IUCN- The World conservation Union 1997).***

9. Impacts on the Regional Economy

This section provides information from a wide range of sources, and raises issues that must be taken into account when assessing the current Proposal document.

a) Agriculture

Expansion of the coal industry in the region will increase the extensive adverse effects on prime agricultural land and the economic viability of its industries.

It is incumbent on the Proponent to assess these impacts in their Benefit Cost Analysis, however this has not been attempted. Information such as is provided below is readily accessible, however, has been ignored by the proponents:

> *"The Hunter Region is adjacent to the Liverpool Plains which is considered a prime agricultural region of NSW. It comprises 1.2million hectares which produce 37% of the nation's cereal crop and is an important 'food bowl' for Sydney and other parts of NSW and Australia. As demand grows and issues around food security increase, the sustainability of the Hunter and Liverpool Plains regions is critical to Australia's population carrying capacity. Approximately 4,000 people are employed in the agriculture, fishing and forestry sector in the Hunter Region and the gross value of its agricultural production was about $382 million (AUD) in 2008-09, accounting for just over 4% of the total value of agricultural production for NSW (Thompson et al, 2011). Of the total agricultural production in the Hunter Region beef cattle were the most important produce, accounting for 37% ($140million AUD); followed by poultry at 26% ($100million AUD). The dairy industry also played a major role accounting for approximately 17% ($64million AUD)".* ***(Health and Social Harms of Coal Mining in Local Communities: Spotlight on the Hunter Region, Ruth Colagiuri, Johanne Cochrane and Seham Girgis Health***

and Sustainability Unit The Boden Institute of Obesity, Nutrition, Exercise & Eating Disorders The University of Sydney, for Beyond Zero Emissions 2012 ISBN:978-1-74210-292-4)

"NSW's primary industries had a gross value of over $18 billion in 2004-05 and directly accounted for 6% of the Gross State Product. The sector directly employed over 92,000 people full time and represented 12.4% of regional employment. Primary industries exports were valued at over $16 billion and represented 57.8% of merchandise exports from NSW.

Primary industries have a significant multiplier impact on the economy, when a whole-of-chain approach is taken. For example, agriculture alone is estimated to have a 2.4 times multiplied impact for both value and employment". **(Department Primary Industries, Science and Research www.dpi.nsw.gov.au>research).**

"Climate change that in other parts of the state will dry out areas currently used for food production will have a different impact in the Hunter. Modelling that predicts the likely impacts of temperature rises in coming decades *suggests* the Hunter Valley region will get more rain, possibly making it more suitable for farming and agricultural production."**(The Race to Mine: The Hunter Valley *By* Sarah-Jane Collins *June 13, 2012 The Global Mail).***

Both positive and negative assessment of the impacts of Port expansion to facilitate coal export on the regional agricultural industry should be provided as part of the Benefit Cost Analysis document.

b) Winemaking

The Hunter Region is one of Australia's oldest wine producing areas and a principal winemaking area of NSW, producing 25.4million litres of wine per year valued at approximately $203million(AUD) annually (NSW Department of Trade and Investment, 2012). Viticulture and winemaking are a significant component of the Hunter Region's agricultural industries, with wine-grape farms accounting for 5% (145 farms) of total farms in 2008-09 (Thompson et al, 2011). ***(Health and Social Harms of Coal Mining in Local Communities:Spotlight on the Hunter Region, Prepared by: Ruth Colagiuri, Johanne Cochrane and Seham Girgis Health and Sustainability Unit The Boden Institute of Obesity, Nutrition, Exercise & Eating Disorders The University of Sydney, for Beyond Zero Emissions 2012 ISBN: 978-1-74210-292-4).***

Hunter Valley Wine and Tourism Association spokesman on mining, Ian Napier, said people in the valley were sick of being told mining and wine could co-exist. ''They can't,'' he said. (***Coal killing Hunter, residents say September 15, 2013 Natalie O'Brien SMH)***The leaders of the regions' winemaking industry are opposed to the expansion of coal mining in the area and given their large economic value in terms of both sales and increased tourism, should be considered as important community stakeholders.

The Benefit Cost Analysis document does not suggest that any wine making industry representatives have been consulted during the composition of the current proposal document. As such, the proponent cannot realistically claim to represent the concerns of all community stakeholders.

c) Race horse breeding

"The Upper Hunter Valley is not only Australia's main region for breeding thoroughbred horses (approximately70%) but is one of the largest in the world. Australia's thoroughbred breeding and racing industry contributed sustainable employment of over 65,000 people - especially in regional Australia; over $5.04billion(AUD) in value added to the national economy; investment of $1.1billion(AUD) annually by breeders owners and trainers; and exports of over $750 million(AUD) to 24 countries (Biopharm Australia, 2011) This industry relies on a certain rural attractiveness which

co-exists along with local agribusiness industries such as dairy farming and winegrowing". ***(Health and Social Harms of Coal Mining in Local Communities: Spotlight on the Hunter Region, Prepared by: Ruth Colagiuri, Johanne Cochrane and Seham Girgis Health and Sustainability Unit The Boden Institute of Obesity, Nutrition, Exercise & Eating Disorders The University of Sydney, for Beyond Zero Emissions 2012 ISBN: 978-1-74210-292-4).***

"The Hunter Valley is one of the three major thoroughbred horse breeding regions of the world. In 2007, the politically and economically powerful Upper Hunter Thoroughbred Breeders made the very significant declaration that the impacts of the coal industry threatened the sustainability of their own industry, stating:

The scale of proposed expansion of new coal mines in the Upper Hunter threatens prime agricultural land, jeopardizes hundreds of millions of dollars of investments, the jobs of thousands of people and the rural quality of the Region... [Our organization] calls for:

- *a moratorium on new mines in the Hunter*
- *a cap on coal exports from the Hunter Region*
- *an inquiry into the impacts of the coal industry on the long-term environmental, economic and social sustainability of the Hunter and other industries".*

(Hunter Valley Thoroughbred Horsebreeders Association Inc. et al. 2007: page 2- Transformation from "Carbon Valley" to a "Post-Carbon Society" in a Climate Change Hot Spot: the Coalfields of the Hunter Valley, New South Wales, Australia Geoffrey R. Evans University of Newcastle, Ecosystem Health Research Group 2008).

"In the Hunter Valley, we're a billion-dollar industry. We employ thousands of people. This is a business that's been here for generations on generations, and will be here for generations. "I don't see the mining industry being like that." ***(ABC Hunter Valley boom pressures horses, housing 7.30 Adam Harvey Wed 15 Aug 2012, quoting Coolmore racing and business Manager, Tom Magnier).***

Once again, the current Benefit Cost Analysis document does not suggest that any representatives from the Race Horse breeding industry have been consulted to provide input regarding the future of the Project. The document is clearly not representative of the community or economic stakeholders beyond the Proponents' shareholders.

d) Tourism

Also heavily dependent on rural attractiveness, the Hunter Valley is a prime tourism location. According to a submission by Doctors for the Environment Australia (2011) statistics for the Hunter Region for 2008-09 estimate that $1.3 billion (AUD) was spent by visitors - 58% by domestic overnight visitors. A total of 6.3 million visitors went to the region – 68% were domestic day visitors. Fifty three per cent of domestic visits and 93% of international visits were related to food and wine. Fourteen per cent of domestic visits and 74% of international visits were related to nature-based activities (Tourism Research Australia, 2010). ***(Health and Social Harms of Coal Mining in Local Communities: Spotlight on the Hunter Region, Ruth Colagiuri, Johanne Cochrane and Seham Girgis Health and Sustainability Unit The Boden Institute of Obesity, Nutrition, Exercise & Eating Disorders The University of Sydney, for Beyond Zero Emissions 2012 ISBN: 978-1-74210-292-4).***

“Gloucester's state MP, National Party member George Souris, raised a private member's statement in 2009 opposing the renewal of Gloucester Resources Limited's exploration licence, citing its threat to tourism.

"The possibility that future mining will occur in such close proximity to the township and closely settled areas is creating great anxiety and uncertainty and will undermine the development and growth of businesses," he said.

"Tourism to our area contributed $28 million to the local economy last year and has been growing strongly for many years now. This long-term sustainable industry is now under threat.

"Future mining within the boundaries [of these explorations] will seriously damage the scenic and social features that define the character and appeal of the region." ***(The Race To Mine: The Hunter Valley By Sarah-Jane Collins June 13, 2012 The Global Mail).***

The tourism industry was severely impacted by the rise in the Australian dollar, not just in this region but Australia wide. The Australian dollar was directly linked to the “boom” in mineral commodity prices.

With the end to the “mining boom” and subsequent levelling of the Australian dollar, the tourism industry has great potential. Moreover, this industry is directly linked to the intrinsic qualities that the region presents in all alternative sustainable options to the expansion of the coal industry – none of which were considered by the Proponents for the T4 Project.

CONCLUSION

PWCS rest their case for the T4 Project on a seriously deficient Benefit Cost Analysis which fails to address the full range of benefits and costs associated with the Project, including:

- The use of out of date information
- Inherent contradictions to justify the merits of the Project
- Manipulation of information in order to influence fair consideration of the project (ie T4 cannot be considered as ‘stand-alone’ infrastructure)
- Failure to account for the external negative impacts to the community resulting from the expansion of the regional coal industry necessary to justify the Project
- Failure to establish social license to operate
- Failure to establish credible employment opportunities in light of the fact that the coal industry in general is reducing its workforce as part of current cost saving measures
- Failure to establish a genuine ‘need’ for the Project in light of falling commodity prices, global mining competition and the rise of viable alternative energy production
- Failure to adequately assess the real economic value of negative environmental impacts of the Project on Ramsar Wetlands, The Hunter River Estuary, environmental and social impacts of the coal chain
- Failure to address the economic reality that the T4 Project Proposal can only be seen as economically viable if coal prices recover to “boom” levels

The Proponents fail to acknowledge that coal is only one component of world energy demand, that the worldwide industry is responsible for 26.6 percent of energy use and is responsible for 43.1 percent of global CO_2 emissions. ***(Centre for Climate and Energy solutions C2ES, www.czes.org/energy/source/coal).***

The Proponents state that their Project will assist in meeting world demand for energy, but fail to acknowledge IEA stated that an increase in coal production for energy consumption is "troubling", that carbon capture and sequestration (CCS) will not be available during the outlook period to 2017.

According to Ms van der However, *"CCS technologies are not taking off as once expected, which means CO_2 emissions will keep growing substantially. Without progress in CCS, and if other countries cannot replicate the US experience and reduce coal demand, coal faces the risk of a potential climate policy backlash"*. ***(Coal's share of global energy mix to continue rising, with coal closing in on oil as world's top energy source by 2017, December 2012).***

The IEA (***Energy Technology Perspectives 2012 Pathways to a Clean Energy System)*** advise that investments made today will determine the energy system that is in place in 2050 and that the lack of progress in clean energy is "alarming".

The IEA also advises that investing in clean energy makes economic sense and that every additional dollar invested can generate three dollars in future fuel savings by 2050.

The Proponent's Benefit Cost Analysis does not establish anything other than short-term gain, if it proceeds to construction. It does not address whether the coal industry, which includes the PWCS Project, is able to offer the community a long term, economic reward.

The contents of the proponent's current Proposal document suggests that the only long term benefactor of the Project will be PWCS and their joint venture partners, and that the benefits from the expansion in coal export capacity rely on circumstances that are unlikely, unfounded, and unwanted by the Australian community at large.

The science is clear that we will need to adapt to a changing environment in the future - whether or not present governments respond to Climate Change with appropriate measures to reduce Australia's contribution to carbon emission reductions.

Alternative energy is threatening coal's dominance in energy production in Australia and abroad – influencing government policy and investment decisions on a global scale. It is likely that divestment in the mining industry will continue, resulting in a legacy of a stranded assets. This response document has shown that adding to this legacy, if T4 is approved, would be most irresponsible of government.

This document has highlighted present and future economically sound and sustainable solutions for the growth of this region that are incompatible with the expansion of the coal industry. Not only this, the concentration of the coal industry in this region places undue risk on the realisation of future opportunities. From an economically sustainable perspective we need to diversify our economic base.

Deloitte Access Economics (2013) states: *"A major aspect of addressing the risks presented by lower commodity prices will involve how effectively the region can utilise its natural advantages in agriculture, tourism and education services — especially with a view to harnessing the opportunities presented by a rapidly growing Asian middle class."*

Given its nationally-significant base of coal mining and support activities, the Hunter is especially vulnerable to a softening of commodity demand from Asian economies and a decrease in Australia's terms of trade (principally from lower mineral and energy prices).

A reduction in commodity prices would considerably reduce profitability across the mining industry. It would also involve decreased economic activity in the large cluster of industries which support mining and resource operations, as well as lower household income and consumption.

Scenario analysis, under which commodity prices decline by approximately 30%, shows economic output in the Hunter could fall by around $4.0 billion in present value terms over the period to 2036. Notably, the economic impacts are likely to be more acute in the upper Hunter where mining activity is more heavily concentrated.

A key facet to these adjustments is that, in a diversified economy, a moderation in commodity prices and resource related earnings also involves some economic 'upside'. In particular, the region's farming, tourism and education sectors stand to benefit as a lower currency improves their international cost competitiveness.

However, much will depend on ensuring these sectors are well positioned to capitalise on new opportunities.

This may involve better integrating tourism service offerings across the region, possibly involving the development of new aviation links, permanent cruise shipping and other complementary services.

It could also involve sharpening the focus of the University of Newcastle towards attracting a greater share of overseas students". ***(Key threat: Moderating Asian commodity demand, Prospects and challenges for the Hunter Region, A strategic economic study, Regional Development Australia Hunter March 2013 Deloitte Access Economics).***

This region can strengthen its' economic base without coal production. The reality is '*farming, tourism and education sectors stand to benefit as a lower currency improves their international cost competitiveness'* and without competition from the focus on expansion of the coal industry, the available employment opportunity and regional economies will benefit .

It would be seen as foolish for this State to facilitate expansion of the coal industry.

The Government and the community need to achieve a sustainable return on investment and net benefit to the State, which is not subject to the volatilities of the coal market.

It is acknowledged that Port related industry and infrastructure is vitally important to the region, State and Commonwealth – we need to get its planning and implementation right.

The proposal is not in the best interest of the people of NSW or the people of Newcastle and the Hunter Region. It is certainly not in the best interest of the local or global environment.

It may be in the best interest of PWCS but this is at the expense of the regional and local Newcastle economy.