INQUIRY INTO BENEFICIAL AND PRODUCTIVE POST-MINING LAND USE

Organisation:Lake Macquarie Economic Development Company - trading as
DantiaDate Received:25 June 2024



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The Hon. Emily Suvaal MLC Chair, Parliamentary Inquiry – Beneficial and Productive Post-Mining Land Use Parliament House Macquarie Street SYDNEY NSW 2000

Dear Ms Suvaal,

Response to the Standing Committee on State Development Inquiry into Beneficial and Productive Post-Mining Land Use

Dantia welcomes the opportunity to make this submission to the Standing Committee on State Development inquiry into beneficial and productive post-mining land use. Dantia was established by Lake Macquarie City Council in 2014 to lead economic development in the Lake Macquarie local government area. Our vision is for Lake Macquarie to be considered Australia's most thriving regional city.

The City of Lake Macquarie is the largest local government area (LGA) in the Hunter region. Mining and related activity has been a key driver of the local economy for more than a century.

Lake Macquarie has significant tracts of former mining land ideal for development. The city's Northwest Growth Area and Northwest Catalyst Area, includes lands used formerly for mining and lead smelting, has been earmarked as a future regional hub for housing, jobs, and investment. While a former mine site in western Lake Macquarie has been approved for a major international tourism development, the BlackRock Motor Park.

Looking forward, the next five years will potentially see the closure of the Eraring Power Station, with a very high likelihood of flow on impacts to supplying mines and the broader economy of Lake Macquarie. These sites provide both the scale and infrastructure to support mixed used, high density and high value employment lands. Roads, water and sewer, poles and wires and rail can be repurposed to service future growth.

However, the barriers in the current mine planning, approval and rehabilitation framework are a handbrake on realising these opportunities. Generally, rehabilitation by mining operators under its lease requirements focuses on the demolition of infrastructure, geotechnical stabilisation, soil remediation, water treatment and revegetation. Rehabilitation is required to be conducted to address a site's current approved final landform, not any potential future beneficial reuse for employment and investment.

As a result, the land is generally not in a ready state to move immediately into its next use once the mine lease is relinquished.



Recognising that rehabilitation is undertaken progressively over the life of a mine as well as the end of the mining lease, Dantia strongly recommends the urgent establishment of regulatory pathway, which may include an amendment to the Mining State Environmental Planning Policy (SEPP), that allows for adaptive planning for site re-use. Enabling amendments to streamline government regulation of rehabilitation requirements is a priority to allow mine operators to deliver economic, social, and environmental benefits post closure.

From an economic development perspective, it is the opportunity lost by not reusing mining land and mining sites for economic benefits through jobs and continued investment and subsequent flow on impacts to the community, that Dantia is advocating be avoided. These sites have generated jobs and economic activity for years and Dantia would like to see these sites continue to do so for years to come. These sites typically have existing infrastructure, such a roads, powerlines, water, rail, and the like already in place, it is a missed opportunity to require companies remove these without serious consideration of repurposing this infrastructure for some beneficial economic reuse. These sites are prime for reuse rather than impacting other greenfield sites for development. Given the history of mining in Lake Macquarie, we are ready now for Government action in our city, and Lake Macquarie should be considered the testing ground for reforms to achieve beneficial post-mining land use projects.

Tim Browne CEO



Response to the Inquiry's Terms of Reference:

a) The benefits of having multiple successive land uses including the positive benefits for local communities and the economy, business, industry, and the broader state

There are significant benefits of having multiple successive land uses for local communities and the economy, business, industry, and the broader state on former mining sites.

Running parallel with the shortage of land for housing in NSW, Atlas Economics¹ have described a 'silent crisis' where business is struggling with the lack of new industrial land. The research also found that Sydney has less than a year's supply left of serviced land. By comparison, Melbourne has 10 to 14 years of serviced land. Lake Macquarie does not have extensive tracts of industrial land ready for development.

Thinking beyond Sydney, former mining sites offer a viable solution to this 'silent crisis', these sites are typically serviced and ready for re-purposing.

In Lake Macquarie, these sites provide both the scale and the infrastructure to support mixed used, high density and high value employment lands. Existing services, roads, water and sewer, poles and wires and rail lines can be re-purposed to service future growth.

The Northwest Growth Area in Lake Macquarie has the potential to be one of NSW's most significant urban and employment land redevelopment precincts. This precinct includes large areas of developable land adjacent to existing urban and commercial areas, roads, M1 Motorway, and rail. Fully realising the value of this area requires long term attention on additional enabling infrastructure; and planning to facilitate mixed used, high density and high value employment lands to utilise significant tracts of former mining land.

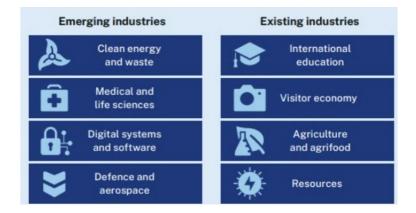
The BlackRock Motor Resort in Lake Macquarie is an example of the successful reuse of former mining land. Located on the repurposed site of the former Rhondda Colliery site, the \$95 million project includes a 5.25km track, go-kart track, driver training, luxury accommodation and function centre, and café. The facility is expected to be operating by 2026, and fully completed in 2027, and is projected to inject more than 450 jobs during construction, and 229 jobs ongoing.

The long and complex process of having a mining lease relinquished under the existing mining legislation to then enable the site to be approved for adaptive reuse took seven years to resolve. Dantia believes a streamlined process will likely facilitate a faster transition and enable reuse opportunities to be realised sooner.

Dantia is advocating for the government to simplify the process for beneficial and productive reuse of mining lands, to provide opportunities for new employment generating development that will support transitioning economies allowing opportunities to be promptly pursued.

b) Changes in land use potential and demand in established or traditional mining areas, particularly those generated by the decarbonised economy, renewable technology, manufacturing, defence, skills, and training.

Given the challenges with getting employment generating projects off the ground, there is an urgent need to prioritise the development of post-mining land for employment and residential purposes to support the realisation of land use potential in these locations. The transition of Lake Macquarie's economy is in step with the NSW Industry Development Framework² emerging and existing industries for the state:



While manufacturing and coal mining sectors have contracted in Lake Macquarie from 37% of local output in 2011 to 23% in 2022, the local economy has continued to prosper, adding 22,000 jobs, with in-migration driving rapid population expansion and gross regional product growing at 2.3% annually. Construction rose from 10% to 20% of local output, becoming the largest sector. Health care and social assistance showed the second largest increase, from 5% to 9%.

Continuing the region's long history as an energy powerhouse, the Hunter is host to the NSW Government's Hunter and Central Coast Renewable Energy Zone. In Lake Macquarie, a highly skilled workforce in engineering, manufacturing and advanced manufacturing is part a sophisticated industry network supporting this transition to a decarbonised economy as well as the creation of new industries in clean energy, advanced manufacturing, and defence. There are a number of existing businesses successfully operating in these sectors and access to post-mining land will only enhance the opportunities for existing and new businesses.

3ME Technology, a heavy-vehicle battery manufacturer, is designing and producing energy-dense, lithium-ion battery systems in a modular format to power mining and military electric vehicles (EV) and equipment. At the Eraring power station, Origin has committed to the construction of a large-scale battery. The first phase of the project consists of a 460 MW two-hour battery located adjacent to the power station, with an operational target date of late in 2025.

Unitronix is an innovative engineering-capable distributor and manufacturer of rugged, embedded computing solutions for military, aerospace, and high-end industrial applications. Goal Group is a key provider of project and asset management services to the Australian Defence sector. Over 80% of Goal's team are Australian Defence Force veterans. The Nupress Group is a Defence approved material supplier and has been supplying precision manufactured metal components for over 20 years.

Leveraging its proximity to power stations and coal mines in transition, Lake Macquarie is also leading the development of the circular economy in collaboration with Lake Macquarie City Council and the University of Newcastle. This includes the Dantia-led Circular Economy Living Lab. Among current projects, the Circular Economy Living Lab is working is on a project exploring different materials to use in roads and undertaking a feasibility assessment of a Circular Economy Precinct on the western side of Lake Macquarie.

- c) Opportunities for investment and growth in training and skills in established or traditional mining areas:
 - i. the need to reskill and or retrain current workforces

Providing Lake Macquarie's communities with access to the education they need for new job opportunities is incredibly important. In Lake Macquarie there is a need to capitalise on our communities' strong appetite to be job-ready for new opportunities in a de-carbonised economy. Institute for Regional Futures' latest research has found that 65% of the working population in Lake Macquarie are willing to retrain for new job opportunities.

Within this context, Lake Macquarie is ideally placed to host the proposed TAFE Centre of Excellence at Glendale – centrally located for the Hunter region and leveraging the existing technology high school, which had a student enrolment of 759 in 2023. Dantia is calling on the Government to fund the Manufacturing centre of excellence at Glendale.

ii. the impact and effectiveness of existing and new education, training, and skills providers for mining communities

The Hunter region hosts a leading education ecosystem that is providing education and training for mining communities.

The region is home to NSW's largest embedded school-based STEM programs. The University of Newcastle is ranked in the top 200 universities globally, in the top eight in Australia for research, and number one for industry collaboration. There are 13 TAFE NSW campuses and many Registered Training Organisations. Lake Macquarie is also home to Avondale University.

Lake Macquarie is well placed to leverage off the existing education organisations to maximise the opportunity for workers to transition to new jobs.

- d) Opportunities to encourage innovative post-mining land uses including:
 - i. the planning and implementation of essential supporting infrastructure for future site use

Former mining sites offer land that is typically serviced and ready for re-purposing. In Lake Macquarie, these sites provide both the scale and the infrastructure to support mixed used, high density and high value employment lands. Existing roads, water and sewer, poles and wires and rail can be re-purposed to drive economic growth and help de-risk future, employment generating projects. As outlined below, Lake Macquarie is well positioned to leverage off existing infrastructure in the region.

Morisset has been identified by the NSW Government as 'the largest future growth area in the Central Coast and Hunter' region. Its potential as a freight and logistics hub has been highlighted due to its strategic location on the National Highway between Melbourne and Brisbane, and road connections to the Liverpool Plains and New England. Morisset also benefits from access to rail line networks with existing freight capability, which will eventually link to the Inland Rail.

Within the wider Hunter region, Port of Newcastle is the eastern seaboard's only berth-side rail line connected to the national rail network. The Port will also connect to the Inland Rail route via an existing heavy rail route.

For air freight, Newcastle Airport's code E runway will open in 2026 paving the way for wide-bodied commercial aircraft such as Boeing 787s and Airbus A330s to land in the Hunter. The upgrade is projected to generate \$6.5 billion in additional business activity through increased freight.

ii. the development of solar farms, pumped hydro, and other clean energy industries

The Hunter region is emerging as an important location for hydrogen futures. The region has been producing hydrogen for decades using traditional technologies to produce derivative products for the resources and associated sectors. The Hunter Hydrogen Roadmap³ highlights the relevance of the region as a cluster that can bring together expertise, technologies, resources, capital, and knowledge of businesses to drive supply chain coordination, connection, and development in the emerging hydrogen fuel industry.

Lake Macquarie's strategic location on the National Highway and significant mining lands and Eraring power station with existing infrastructure (especially poles and wires) makes it an important part of the hydrogen cluster in the Hunter Hydrogen Roadmap.

Lake Macquarie's Northwest Growth Area's connectivity is a strategic advantage, for example, by capitalising on its proximity to the M1 motorway, to offer a green hydrogen refuelling station for passenger vehicles. Another opportunity leveraging the area's transport connections is the establishment of a service centre for electric vehicles (EVs) in Morisset. The Eraring Power Station has been flagged as a potential location for an EV battery station.

iii. the compatibility of post-mining land sites with commercial projects

There are significant opportunities for delivering beneficial and productive post-mining land use for commercial enterprises. However, it can take up to 20 years from a mine closing to see a new land use.

Industry simply cannot wait this long to realise an investment. To provide confidence to entrepreneurs and investors, there needs to be an established defined regulatory pathway for the assessment, risk transfer and uptake for transition to beneficial land use options at former mines.

Other projects with defined timeframes have been undertaken, with a clear prioritisation of projects that serve as economic anchors, market signalling examples, or have multiple benefits. For example, attracting anchor commercial tenants to the Northwest Catalyst Area, the Cedar Mill tourism and events development in Morisset, or the Black Rock Motor Park.

The regulatory pathway in NSW for beneficial and productive post-mining reuse is time consuming and complex and doesn't enable certainty developments need to progress, constraining investment potential. A defined regulatory pathway for the assessment, risk transfer and uptake for transition to beneficial and productive land use options at closing mines needs to be established.

e) How to ensure the benefit from innovative post-mine land uses are shared between the community and mine operators

Mine closure generally tends to focus on the biophysical dimensions, such as rehabilitation, water management, soil replacement, groundcover monitoring, and vegetation management.

To ensure the benefit from innovative post-mine land uses are shared between the community and mine operators, the process for beneficial and productive reuse of mining lands needs to be simplified to provide opportunities for new employment generating development that will support transitioning economies.

Dantia is calling on the State Government to streamline the pathway for beneficial and productive reuse of mining-related sites, so that new opportunities can be pursued for these lands in a timely manner.

As an example, in Western Australia, the Collie Just Transition⁴ seeks to diversify Collie's economy from a dependence on the coal industry by investing to attract major projects and to bring new and emerging industries to town at the same time as having a primary goal to support affected workers and communities in a coordinated way. Notably, the regions' transition plan was developed with the community, and prioritises equity issues. This includes an objective of 'no one left behind', transparency and access to information, dignity and respect, and a recognition that challenges and opportunities are shared across the community.

f) The expectations of mining communities in relation to post-mine land use, and how to balance this with innovative reuse of existing infrastructure

The expectations of mining communities in relation to post-mine land use is ensuring they can continue to thrive with new job opportunities, housing, and supporting hard and soft infrastructure.

Lake Macquarie is a great example of a community facing economic transition. While manufacturing and coal mining sectors have contracted from 37% of local output in 2011 to 23% in 2022, the local economy has continued to prosper, adding 22,000 jobs, with in-migration driving rapid population expansion and gross regional product growing at 2.3% annually. By comparison, construction rose from 10% to 20% of local output, becoming the largest sector. Health care and social assistance showed the second largest increase, from 5% to 9%.

Additionally, Lake Macquarie is attracting new residents. Between 2016 and 2021, Lake Macquarie added 11,600 residents, a figure only exceeded by eight council areas, all located in Greater Sydney.

Population growth in the 25-34 age group in Lake Macquarie over 2016-21 outstripped the statewide rate by four percentage points, with similarly positive rates in the under 25 population.

In Lake Macquarie, former mining sites provide both the scale and the infrastructure to support mixed used, high density and high value employment lands. As result of past land use, some areas of these former sites have had vegetation removed for mining operations. Rather than impacting vegetation on another site for development, utilising sites already impacted by past operations would be a beneficial outcome.

g) The need to develop a robust independent regulatory framework to maintain and advance best practice in this area

Examples of successful mine site closure, relinquishment and post-mining transition are not common, despite the prevalence and acceleration of mining operations globally.

Currently in NSW, the regulatory pathway for adaptive mining land reuse is time consuming and complex and doesn't enable certainty development needs to progress, constraining investment potential. A defined regulatory pathway for the assessment, risk transfer and uptake for transition to beneficial and productive post-mining land use options need to be established.

This reform should consider that rehabilitation practices by mine operators need to be tailored towards an agreed post-mining land use to enable the land be quickly re-repurposed for the benefit of the local community and economy. This will require streamlined government regulation to allow mining operators to satisfy rehabilitation requirements to deliver economic, social, and environmental benefits post closure.



h) Any other related matters

i) Regional-scale post-mining land use planning and delivery

A key weakness in regulatory frameworks globally is that closure planning is undertaken on a mine-bymine basis. This narrow approach can result in closure implications primarily being considered from the proponent's perspective; that is, a focus on achieving relinquishment.

Further consideration should be given to alignment of site-specific rehabilitation targets to regional land use drivers. A regional scale strategic plan similar to the *Hunter Regional Plan 2041⁵* has the potential to integrate post-mining land use transformations at a landscape scale through the provision of technical studies, multi-stakeholder collaboration, rezoning proposals, and the co-ordinated delivery of prioritised infrastructure.

The Hunter regional plan signalled intention anto reduce the time required to make land developmentready, to expedite change of use provisions where existing infrastructure like roads, rail loops, hard stand areas and workshops are located, and to provide more flexibility in post-mining land uses as part of the development process.