

**Submission
No 171**

SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Name: Ms Sophie Nichols

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Inquiry into the sustainability of energy supply and resources in NSW

Addressed to: The Environment and Planning Committee of the NSW

My name is Sophie Nichols and I am an Honours student at the University of Newcastle studying Environmental Anthropology. My family have been farming in the Upper Hunter region for five generations, but through my Aboriginal heritage my family have been living and working this land for much longer. I am currently writing a thesis titled *Land Use Conflicts in the Hunter Valley: retirement in mining communities*. The research explores how older residents living in the Singleton Shire experience mining and how mining informs their reflections about old age. The research focuses on the Upper Hunter township of Singleton in NSW, Australia, which presently has 14 operating coal mining pits, with three being underground operations. Neighbouring these mining operations are small villages and townships that are home to communities with social structures and often long family histories. As the mines have expanded their footprint, they have moved closer to the rural villages, changing the social and biophysical composition of their area. This expansion has led to the depopulation of rural communities and, in certain cases, the loss of entire villages.

In a report commissioned by the New South Wales Research Service, titled *Mining in NSW*, statistical data revealed that:

[b]etween 1986–1987 and 2010–2011 total coal production (tonnage) in NSW increased by almost 57%. Coal production from underground coal mining increased by approximately 16% and coal production from open cut mining increased by 74% during the same period (Wales 2012: 3).

The extraction of coal through open-cut coal mining has become favourable in NSW since the late 1980s. Unlike underground methods, open-cut mines go wide instead of deep, creating a much greater horizontal footprint of the mine than underground mines. A centre for the Australian coal boom has been the Hunter region, where almost half of the operating open-cut operations in NSW are located (Walters 2016). In 2011, 76 per cent 'of all open-cut coal production in NSW came from within the Hunter Valley region' (Merritt et al., 2013:57).

The region has seen a significant increase in production of coal through open-cut mining over the past 20 years. The extractions have also increased the number of 'final voids', marking a long-term legacy of coal mining on landscapes and environments. A final void, is a term used to describe the formation of large pits or voids, when open cut mining displaces the overburden (earth and sediment on top off and in between seams) to gain access to an underground resource. When a void is left after mining operations have finished, it is referred to as a final void (NSW DPE, 2017). In the United States, under the *Surface Mining Control and Reclamation Act of 1977 (SMCRA)*, it is illegal for mining companies to leave final voids after mining operations have stopped. Mining companies operating in the United States, are legally required to 'backfill, compact and grade in order to restore the approximate original contour of the land' (*SMCRA*, 1977). Currently, there is no state-based legislation in NSW, similar to that enacted in the United States, that assesses final voids or requires mining companies to backfill. As at 2015, the NSW Department of Planning, has

approved 30 final voids in the Hunter Valley (NSW PAC, 2015). There has however, been a shift in mining rehabilitation, with the NSW Department of Planning and Environment (2017) proposing reforms in the, *Improving Mine Rehabilitation in NSW* discussion paper. The paper made seven draft policy principles in relation to mining rehabilitation in NSW. The second draft principle, referred to final voids, stating that, “disturbed areas must be returned to conditions that are safe, stable, non-polluting, and environmentally sustainable” (NSW DPE, 2017:11). This draft principle is yet to be enacted and legislated in NSW.

The rural communities of Singleton are located in close proximity to large-scale coal mining activities and final voids (Merrit et al., 2013). This is unique to the Hunter as, unlike other mining areas such as Kalgoorlie, Mt Isa or the Bowen Basin in Queensland, the Upper Hunter has far higher densities of populations who live within the vicinity of the mines (CDIS, 2011). The residents who chose to remain and live within their mining affected community are often left in a liminal situation in which changes to the physical and social environment pose increased risks. On the outskirts of Singleton’s Local Government Area, the rural villages of Ravensworth, Warkworth and Hebden no longer exist due to the expansion of coal mining operations. Other rural villages that still have a community presence are faced with issues pertaining to the future survival of their village. The mining lease for the Bulga Coal mine located in the Singleton Shire, for example, is due to expire on the 15th of September 2036 (NSW Minister for Resources and Energy, 2015). By the year 2036, “the Bulga village [will be] approximately 2.6 km from the mine disturbance area and 2.8 km from the mining areas” (BMPA Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited, 2013). The proximity between mine site and village will not cease at the cessation of the mining operation as the NSW Department of Planning has approved that Bulga Coal can leave a final void, which will be 310m in depth and 550 hectares in total size (NSW PAC, 2014: 5). With the Bulga Coal mine being one of 11 operating open mines in the Singleton District, this scenario of expanding mining leases and final voids will be repeatedly experienced by residents who chose to reside in mining affected communities in the Singleton Shire.

My suggestions for the committee is to consider legislation to address mining rehabilitation, paying particular attention to final voids. Review the United States approach to final voids and implement a similar policy. I highly suggest that the committee also support the Hunter Renewal Roadmap (www.hunterrenewal.org.au/road_map) which is working to support communities here, particularly with regards to public investment, community participation, worker re-training and re-employment and constructing a diversification planning. An ideal model for a transition away from coal mining is in Germany, in the Ruhr Valley, where a decision was taken in 2007 to manage the adjustment over an eleven-year period, involving communities, stakeholders and unions in an orderly process. Germany transitioned away from coal with great success and I believe if done successfully so can the Hunter Valley.

I look forward to seeing the results of this parliamentary inquiry.

Regards



Sophie Nichols

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