New coal plans for NSW are larger than Adani's monstrous Queensland mine

There are now 11 contested new coal projects proposed in New South Wales poised to mine more coal and take up more land and water than Adani's controversial coal mine in Central Queensland.¹

In addition, a new coal seam gasfield threatens to open up a polluting industry that will put critical groundwater at risk.

¹ Note: The eleven coal projects featured in this briefing are not the only coal expansion projects under consideration in New South Wales. The featured projects all face opposition from local communities concerned about their impacts on water, land and the social fabric of rural areas.
**COAL**

- **NEW MINES IN NSW:** 75 million tonnes per year
- **ADANI’S COAL MINE:** 60 million tonnes per year

**LAND**

- **NEW MINES IN NSW:** 39,000 hectares
- **ADANI’S COAL MINE:** 28,000 hectares

**PEAK WATER**

- **NEW MINES IN NSW:** 23.5 billion litres per year
- **ADANI’S COAL MINE:** 21.5 billion litres per year

**GREENHOUSE EMISSIONS THREAT**

- **NEW MINES IN NSW:** 181 million tonnes CO₂
- **ADANI’S COAL MINE:** 120 million tonnes CO₂
The state’s strategic farmland and water resources are in jeopardy from mining proposals that would together do damage comparable to Adani’s Carmichael mine in Central Queensland.

Taken together, eleven new coal projects threaten farmland, bushland and water supplies in New South Wales. Together they would extract more new coal than Adani’s controversial Carmichael coal mine in central Queensland.

In coal volume, in the size of the landscape destroyed and the extent of the water demand, these NSW mines would be bigger together than Adani’s controversial Carmichael coal mine in Queensland.

In addition, over the next twelve months, NSW will consider the largest coal seam gasfield ever proposed in this state. Santos are seeking approval for 850 CSG wells over 950km2 near Narrabri in the State’s North West. This proposed gasfield is three times the size of Penrith council area.

Over the next twelve months, crucial decisions will be made about these mining projects.

Water demand at these mines would be 23.5 gigalitres of water per year.

The Narrabri gasfield would draw down a recharge aquifer of the Great Artesian Basin – an ancient water source relied upon by farms, businesses, households and communities in the west of the state. It risks contamination of surface and groundwater and will lock in high energy prices.2

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YOUR WATER AT RISK

The imminent NSW coal projects would together have annual water demand more than that of Adani’s Carmichael coal mine. Three of them are in major drinking water catchments.

In the five major drinking water catchments that are specially managed to provide drinking water for 4.5 million people in Sydney, the Illawarra, Blue Mountains, Southern Highlands, Goulburn and Shoalhaven regions, underground coal mining is affecting the quality and quantity of water in the catchment. The 2016 Catchment audit, tabled in parliament in August 2017, warned:

“The cumulative, and possibly accelerated, impact of mining on flow regimes in the Catchment is likely linked to the increased prevalence of the current longwall methods of underground mining.”

The Hume coal mine in the Southern Highlands would undermine the catchment of the Wingecarribee River which feeds Warragamba Dam. Dendrobium mine has already done considerable damage to the Special Areas of Sydney’s catchment and is seeking approval for extensive further mining. And Wallarah 2 would undermine the catchment of the Wyong River, which supplies drinking water to the Central Coast.

New mining projects would worsen this damage. The Bylong coal project would cause 10 metres drawdown of a productive alluvial aquifer currently used for irrigation and beef production.

The United Wambo project would worsen cumulative drawdown caused by a cluster of large mines. Drawdown of more than 5 metres is expected in the Wollombi Brook alluvium. Cumulative impacts from approved mining at Hunter Valley Operations, Mount Thorley Warkworth and Wambo mine will reduce the net baseflow to Wollombi Brook by more than half.

The Narrabri gas project would drill through and dewater aquifers beneath the Pilliga Sandstone, a crucial recharge for the Great Artesian Basin. Experts have warned that the Pilliga Sandstone could be subjected to greater than 2 metres drawdown in some places.

The project would bring hundreds of thousands of tonnes of toxic salts to the surface that would need to be disposed of, bringing risk of contamination and leaching.

FARMLAND AT RISK

The eleven new mining projects would occupy nearly 39,000 hectares of land, comprising farmland, forests and water catchments.

In the Hunter region, some of this land is mapped as being strategic agricultural land. On the Liverpool Plains, mining is proposed next to the richest soils in the state.

In the Hunter Valley, mining is already causing considerable damage to water resources. Mine pits in the central part of the Hunter Valley already cover an area of 148 km2 and have been estimated to be causing more than 2 metres drawdown below 123 km2 of productive Hunter river alluvial aquifers.

In the Bylong Valley, a coal mine will directly open cut a floodplain. It is mapped to be part of the critical cluster of the Hunter thoroughbred breeding industry.

The Narrabri gasfield is proposed to mostly occupy the Pilliga forest, the largest temperate woodland in New South Wales. It’s a beloved place of recreation and home to myriad threatened wildlife.

## Coal Projects in New South Wales

<table>
<thead>
<tr>
<th>Project</th>
<th>Company</th>
<th>Location</th>
<th>Type</th>
<th>Coal (Mtpa)</th>
<th>Land (ha)</th>
<th>Peak Water (MLpa)</th>
<th>Status</th>
<th>CO2e/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watermark Coal</td>
<td>Shenhua Energy</td>
<td>Breeza, Liverpool Plains</td>
<td>New Mine</td>
<td>6.15</td>
<td>4084</td>
<td>1539</td>
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<td>Whitehaven</td>
<td>Near Boggabri, Namoi Region</td>
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<td>Pre-EIS</td>
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<td>Wilpinjong Coal Extension</td>
<td>Peabody</td>
<td>Next to Wollar, far Upper Hunter</td>
<td>Expansion</td>
<td>13</td>
<td>1990</td>
<td>1270</td>
<td>Approved</td>
<td></td>
</tr>
<tr>
<td>Bylong Coal</td>
<td>Kepco</td>
<td>Near Bylong, far Upper Hunter</td>
<td>New Mine</td>
<td>6</td>
<td>1160</td>
<td>2049</td>
<td>Assessment</td>
<td></td>
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<td>Wallarah 2</td>
<td>Kores</td>
<td>Central Coast Catchment</td>
<td>New Mine</td>
<td>5</td>
<td>4053</td>
<td>3987</td>
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<tr>
<td>West Muswellbrook</td>
<td>Idemitsu Kosan</td>
<td>Muswellbrook, Hunter</td>
<td>New Mine</td>
<td>15</td>
<td>8100</td>
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<td>United Wambo</td>
<td>Glencore/Peabody</td>
<td>Central Hunter</td>
<td>New Mine</td>
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<td>3269</td>
<td>5861</td>
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<td>Hume Coal*</td>
<td>POSCO</td>
<td>Southern Highlands</td>
<td>New Mine</td>
<td>3</td>
<td>3474</td>
<td>2290</td>
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<td></td>
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<tr>
<td>Mount Pleasant</td>
<td>Mach Energy</td>
<td>Muswellbrook, Upper Hunter</td>
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<td>Rocky Hill Coal</td>
<td>Gloucester Resources</td>
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<td>New Mine</td>
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<td>1100</td>
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<td>Dendrobium*</td>
<td>South32</td>
<td>Sydney's Water Catchment</td>
<td>Expansion</td>
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<td><strong>Total</strong></td>
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<td><strong>75.75</strong></td>
<td><strong>38,971</strong></td>
<td><strong>23,503</strong></td>
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<td><strong>181.8</strong></td>
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### Adani Comparison

<table>
<thead>
<tr>
<th>Project</th>
<th>Coal (Mtpa)</th>
<th>Land (ha)</th>
<th>Peak Water (MLpa)</th>
<th>CO2e/year</th>
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<td>Adani Comparison</td>
<td>60</td>
<td>28,000</td>
<td>21,500</td>
<td>120</td>
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</tbody>
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### Notes

* The coal from Dendrobium and Hume will be steel-making, not thermal coal.

- Adani figures for land and water are drawn from 2013 Supplementary EIS. Adani CO2 estimate is from Individual Report to the Land Court of Queensland on Climate Change – Emissions, Expert report of Dr Malte Meinshausen (climate change) for Land Services Coast and Country for (OL013; Exh 35). All NSW CO2 estimates use 2.4 factor of coal to CO2.

- Vickery land area is the area of Coal Lease 316.

- Dendrobium water use and land area are indicative, being the current water use and land area of this mine, since the wholly new areas are roughly as extensive as the current area.

- Watermark land area is the disturbance estimate in the 2003 EIS.

- Wilpinjong land area is the disturbance estimate in the 2016 EIS and the water use estimate from the same source.

- Bylong land and water estimates are from the Department of Planning's March 2017 Preliminary Assessment Report.

- Land area for West Muswellbrook is Assessment Lease 19. The mine is likely to occupy a smaller area within this lease.

- The land area for Wallarah 2 is the size of Mining Lease Application 342; the water demand estimate is drawn from Table 39 of the Main Report of the 2013 EIS.

- Rocky Hill land area is ML application 446 and water demand estimate is taken from DPI water Sept '16 comment on the EIS.

- United Wambo water use estimate from the 2016 EIS and land area is the combined area of ML1572 and CL775.

- The Hume area of land and volume of water used are drawn from the 2017 EIS.

- The Mount Pleasant area of land is the area of ML 1645 and the water estimate is derived from Appendix E of the Environmental Assessment for Modification 3.