Oct 28th 2026 LEAD Group objection to Bowdens lead mine

Can proposed NSW lead mines be stopped? What do we even need the lead for?

By Elizabeth O'Brien, Lead Scientist and Lead Advisor, orchestrated by Ian Smith, Systems Analyst, using OpenClaw on top of Claude AI and Ollama local AI models where possible, on solar-powered infrastructure. © The LEAD Group Inc. November 2026

The LEAD Group Inc's third submission objecting to Bowdens Silver SSD-5765, by Elizabeth O'Brien, lodged with the Independent Planning Commission of NSW on 28 October 2026 and published at https://www.ipcn.nsw.gov.au/sites/default/files/2026-10/87376%20-%20Elizabeth%20O%27Brien%20Redacted.pdf*[LID 30025]. Originally lodged 24 October 2023 as Submission 184 to the NSW Parliamentary Inquiry into gold, silver, lead and zinc mining [LID 27620].*



"You do realise that you are directly co-creating a future world don't you?" wrote Ken Wilber. "We're in this together, to create a world our children and grandchildren can flourish in," says Grandma Lead. And as the Australian Story episode broadcast on 2 October 2023 put it: "They say it's the people who are crazy enough to think they can change the world, who do!"

"In This Together" - painted sign photographed by Elizabeth O'Brien

Context

Broken Hill New South Wales (NSW) is home to the most productive lead mine in the world. NSW is the most populous state of Australia, which is the world's largest exporter of lead. Practically all the lead that was ever added to petrol came from Australia. It's time NSW sets the balance sheet right and makes amends for the lead we've already added to the world, rather than adding more.

The World Bank study published in The Lancet Planetary Health estimated that children younger than 5 years lost 765 million IQ points and that 5.5 million adults died from cardiovascular disease in 2019 due to lead exposure, 95% of the IQ loss and 90% of the deaths occurring in Low- and Middle-Income Countries (LMICs). The global cost of lead exposure was estimated at US$6 trillion in 2019, 6.9% of global gross domestic product (GDP). We argue that Australian lead, as the world's largest lead exporter, has caused so much damage globally that it is time to stop mining lead and start taking back the lead that is out there in the world, returning it and recycling it as safely as possible in Australia to create a 100% recycled lead product stream for the transition to renewables.

The impact of decisions made in NSW about whether to open a new mine that will produce lead, as in the Bowdens Silver Mine near Mudgee, or to expand an existing lead mine, per Cadia Lead Mine near Orange, don't just stop in the vicinity of Orange or Mudgee. The impacts go on, down the ore transport corridor, interstate to the smelter and thence overseas, to add to the man-made disaster that is Australian lead's impacts on global intelligence and early deaths, especially in LMICs.

Change the mine approval system

Based on the submissions I've read and the evidence I've heard at the Orange and Mudgee hearings, the current NSW metalliferous mine approvals system comprises: a metalliferous mine is proposed; it is approved ignoring all objections; investors are found, the Environment Protection Authority (EPA) issues a licence and the mine begins operation under our current lax occupational health and safety (OHS) lead regulations; tiny fines and changed licence conditions may be applied if the community notices, tests and repeatedly complains about damage to indigenous heritage, lead dust emissions, tailings dam breaks and acid mine drainage, water overuse and contamination, loss of biodiversity and increased body burdens of toxic metals in humans, livestock, wildlife, bees and crops; and when profitability wanes, the mine site is left unrehabilitated, leaching lead and other toxic metals into the environment, with all mine jobs lost.

The LEAD Group proposes changing to a product stewardship system based on a circular economy in which toxic metals can only be mined if the life cycle is controllable: suspend all current approvals for new gold, silver, lead and zinc mines and mine expansions in NSW; require all proponents to develop stewardship plans over the whole life cycle of their toxic metal products, and to devise alternative scenarios whereby the lead that's already out there is collected, recycled and manufactured endlessly instead of freshly mined; run a NSW government-run, industry-funded baseline blood lead survey of all ages with annual follow-ups; and carry out supply chain analysis and isotopic fingerprinting research, within and beyond NSW borders, to properly assess the economic impacts on education, crime and health of lead that was mined in NSW, wherever it has gone.

Change NSW legislation so that the most toxic, greatest-estimated-weight metal product of any mine proposal gives its name to the mine. In most cases this will mean that "gold mine", "silver mine" and "zinc mine" proposals will be called "lead mine" from the start of the exploration licence and Environmental Impact Statement (EIS) process.

Broken Hill wrote the warning decades ago

One resident of Broken Hill has contacted my free lead information and referral service over 80 times since 1996. In 1999 I published her letter to Professor Brian Gulson, a founding member of The LEAD Group's Technical Advisory Board. Her words need no commentary:



"I am writing with my concerns for the children of Broken Hill. I have been talking to parents of children who have developed tumors in their hip sockets and their knees. Children who have developed cysts on their ovaries... We have a growing number of young children with mental illness attempting suicide, and young children with cognitive dysfunction. These children can't learn, and are branded as bad behavioural children or their families are blamed or they're given the label Attention Deficit Hyperactivity Disorder (ADHD)... I cannot understand how they can cart this toxic material CERRUSSITE through the streets uncovered... Workers are sick, some of the men had lead readings of 80 micrograms per decilitre (µg/dL) and had to be treated... This company is making millions out of the open cut, and as a side line is putting young children's lives at risk to feather their own nest... Normandy mining company and Craig Williams will leave the town with millions, and the children will be left with no future." - Jenny Rowbottom, Broken Hill, 8 March 1999

Eighteen years later, in 2017, the same resident wrote again, of surface mining restarted in 2002 with no working air monitors, of children treated for heavy metal poisoning only when their parents took them to Adelaide, of children labelled disruptive rather than lead poisoned: “How do parents keep their children safe from Lead Exposure when the very government departments set up to protect our children are not naming it as LEAD POISONING in the children of Broken Hill[?]”



Photo: Broken Hill Line Of Lode, from Visit NSW website.

http://www.visitnsw.com/destinations/outback-nsw/broken-hill-area/broken-hill/attractions/line-of-lode

Bowdens on the record in 2013

In February 2013, Jayne Bentivoglio of Rylstone Olive Press asked The LEAD Group for Professor Mark Taylor’s statistics on dust from open-cut silver and lead mines and the impact it would have on olives and olive oil production, with a number of growers within a six-mile radius of the proposed Bowdens mine in the direct line of prevailing winds. Professor Taylor replied that dust fallout “can affect really large areas, especially in smelter cities. However the fallout’s effect tends to be most pronounced over ~4km (based on my Mt Isa work).”

I then phoned the proponent. The Manager of New Projects told me the EIS “probably doesn’t take olives into account”. The project’s environmental consultant told me, among much else: “We’ve seen lead in tanks where there is lead flashing or paint or washers on the roof… We recommend a first flush device… And we recommend repainting lead flashing.” I advised instead that they recommend replacing lead flashing with non-lead flashing, because we’ve never found a paint company that will guarantee their paint will adhere to lead flashing for more than a few years. I had actually advised their consultant that replacing lead washers and lead flashing on rainwater collection roofs in the vicinity of the proposed mine would reduce lead in rainwater tanks, but they evidently preferred to have their neighbours continue to drink leaded rainwater so that the mine emissions might seem minor in comparison.

What's in a name

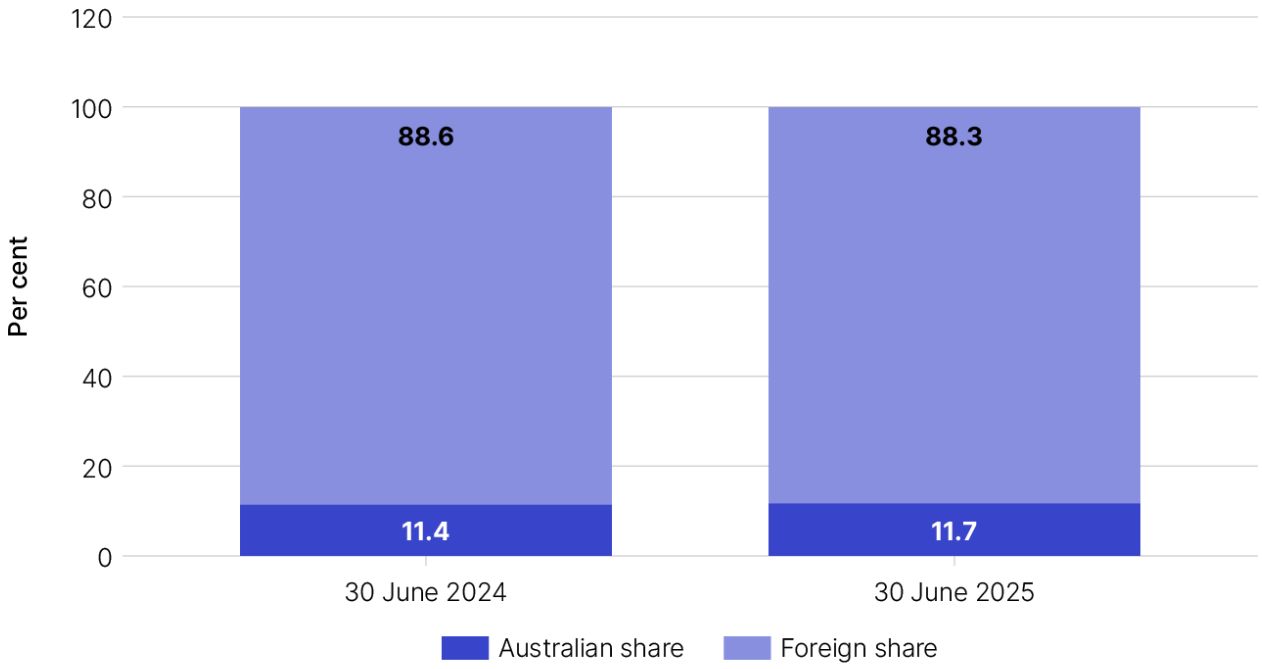
Calling a mine a gold mine, a silver mine, a tin mine, a copper mine or a zinc mine is a marketing technique based on the dollar signs in the eyes of the mine proponent, because the truth, calling it by the most toxic and voluminous mine product, "a lead mine", is so much harder to sell. So in popular culture Broken Hill is "a former gold-mining town" (e.g. in the Desert Horizon sleepcast narrated by Eric Bana in the Headspace App) but in reality it has been, and is today still, the world's most productive lead mining town.



The Headspace App's Desert Horizon sleepcast calls Broken Hill "a former gold-mining town"

And who owns most of the mines in Australia? Australia's mining industry is 86% foreign owned. Although many people think of BHP and Rio Tinto as Australian companies, BHP is 76% foreign owned and Rio Tinto 83%, and between them they constitute 70% of listed mining company resources. The industry has spent over $541 million in the last ten years lobbying Australian governments through its peak lobby groups, which are dominated by foreign interests. Capture by mining interests of regulatory and political processes voids the fitness for purpose of the mine approvals process, with no true independent oversight. The EIS, bought and paid for by mining interests, has become a tick-the-box exercise, its contents left unconsidered for merit or scientific rigour. Statements and assumptions of the proposed Bowdens lead mine are a case in point: many assertions are without scientific basis, yet accepted, and the mine approved without question.

Figure: Foreign and Australian share of registered interests



Mining in Australia: foreign ownership tabled. Source: Australian Tax Office (ATO) 2026

Additional Reference for this November 2026 version for LEAD Action News

ATO (Australian Tax Office) (2026) **Figure 2: Foreign and Australian share of registered interests from,** Mining or production tenements and exploration tenements: Data on foreign ownership of mining or production tenements and exploration tenements as at 30 June 2025. **Last updated** 5 March 2026, https://www.ato.gov.au/individuals-and-families/investments-and-assets/foreign-resident-investments/foreign-investment-in-australia/register-of-foreign-ownership-of-australian-assets/register-of-foreign-ownership-of-australian-assets-reports/register-of-foreign-ownership-of-australian-assets-2024-25-report/mining-or-production-tenements-and-exploration-tenements#ato-ForeignandAustralianshareofregisteredinterests [LID 30140]

Workers are not second-class citizens

Given that mine workers are not immune to the health impacts of lead, and cannot evolve such immunity by over-exposure at work, it has never been reasonable to permit workers' action blood lead levels to sit at six or more times the non-worker action level. OHS regulations that do so are treating workers as second-class citizens whose future health is sacrificed in the name of mining company profit. If governments required mine operators to take action whenever a worker's blood lead level exceeded 1 µg/dL, mining would quickly be recognised as not economically viable. Add in protecting the community, livestock and wildlife from excess lead exposure, and the only possible conclusion is that lead mining is only economically viable if all involved are lead poisoned, like in Broken Hill. That is, ongoing lead mining means that no one in the world has ever been found to have a blood lead level of zero.

Stop all new lead mines

It is time to draw a line and STOP NEW LEAD MINES globally, with the logical place to stop being Bowdens Lead Mine at Lue. It's time for the NSW government to demonstrate to the world that it can reject the old toxic material we've mined, exported and contaminated the planet with, and start to transition to cleaner solutions to every use of lead, while collecting and recycling to fulfil all current lead needs during the transition. While there's no pit at Lue, there's hope!

As the Wiradjuri man said at the water ceremony at Lue after the Mudgee hearing on 4 October 2023: "Our ancestors are watching us." From a First Nations point of view, lead should remain in the ground. Prior to white settlement in Australia, not one single Indigenous person was ever lead poisoned, yet every blood lead study in lead mining towns that I've ever seen where race is distinguished shows higher blood lead levels in Aboriginal children.

From 1994, when the Ethyl Corporation tetraethyl lead (TEL) plant closed in North America, the only remaining TEL plant, Innospec in the UK, was using Australian lead, and had been doing so since it started operations in 1956. I asked then Prime Minister Julia Gillard to stop Australian lead being used in Innospec's TEL, but she played the free trade card to justify inaction, such that, now the century of leaded petrol use has finally ended, it is still very likely Australian lead being used by Innospec to make the lead additive for all the leaded AvGas sold in the world. Leaded AvGas is the final frontier awaiting our attention to achieve a global phase-out.

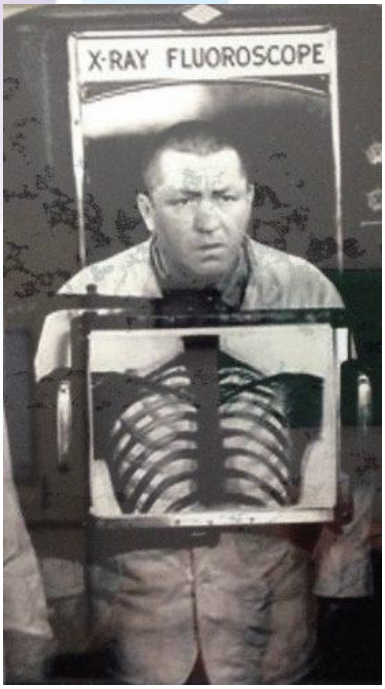
From largest lead exporter to largest exporter of lead safety wisdom



My vision is that Australia will switch from being the world's largest exporter of lead to being the world's largest exporter of lead-safety wisdom, as a way to reconcile the damage that's been caused. There are good jobs awaiting creation: researchers who can figure out how to detox lead from our bodies so our brains don't age so fast and we live longer, healthier lives free from dementia, cardiovascular disease, osteoporosis, and the hearing and balance problems which cause falls. In our lead-safe future, the only source of lead in air will be volcanoes.

"Elizabeth O'Brien and the Volcano", painting by Tony Lennon

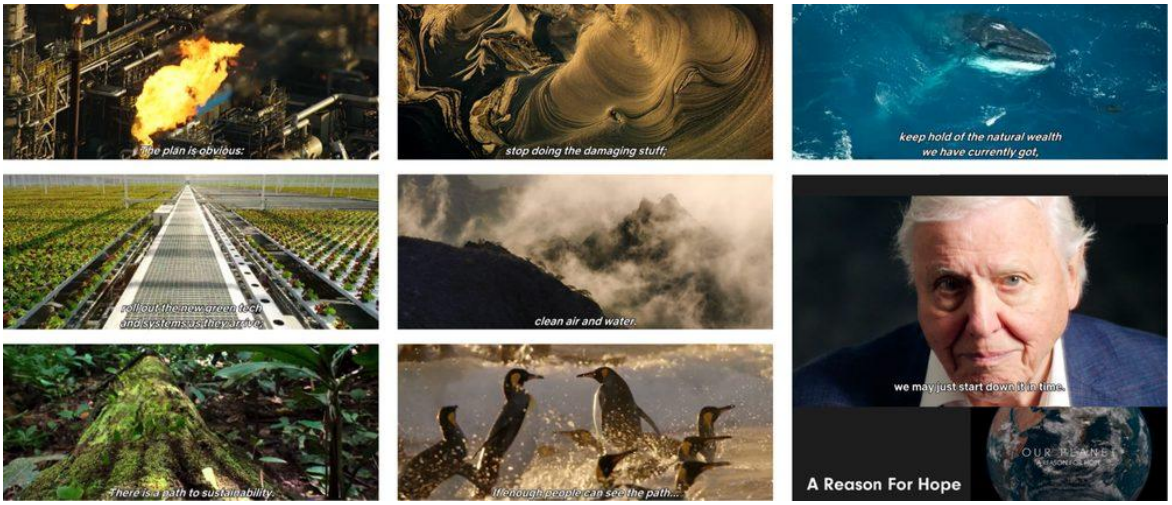
Lead products that can be collected and recycled until all lead uses are phased out include lead acid batteries, leaded ammunition, lead sinkers, lead flashing, roofing, guttering and piping, lead-contaminated ceiling void and building cavity dusts, lead paint removed from buildings and infrastructure, lead radiation shielding, and lead ballasts and weights. A Lead Hazard Reduction Credits system would reward lead collection and fund independent research, including purchasing bone lead XRF (X-ray fluorescence) equipment and setting up an institute for independent research into which lead detox methods decrease the bone lead level and thus the body lead burden. Currently, people have to travel to the US or Canada for bone lead tests on these rare XRF instruments.



X-ray fluoroscope, from the era when shoe shops X-rayed feet. Bone-lead XRF is today's safe, rare descendant

Stop doing the damaging stuff

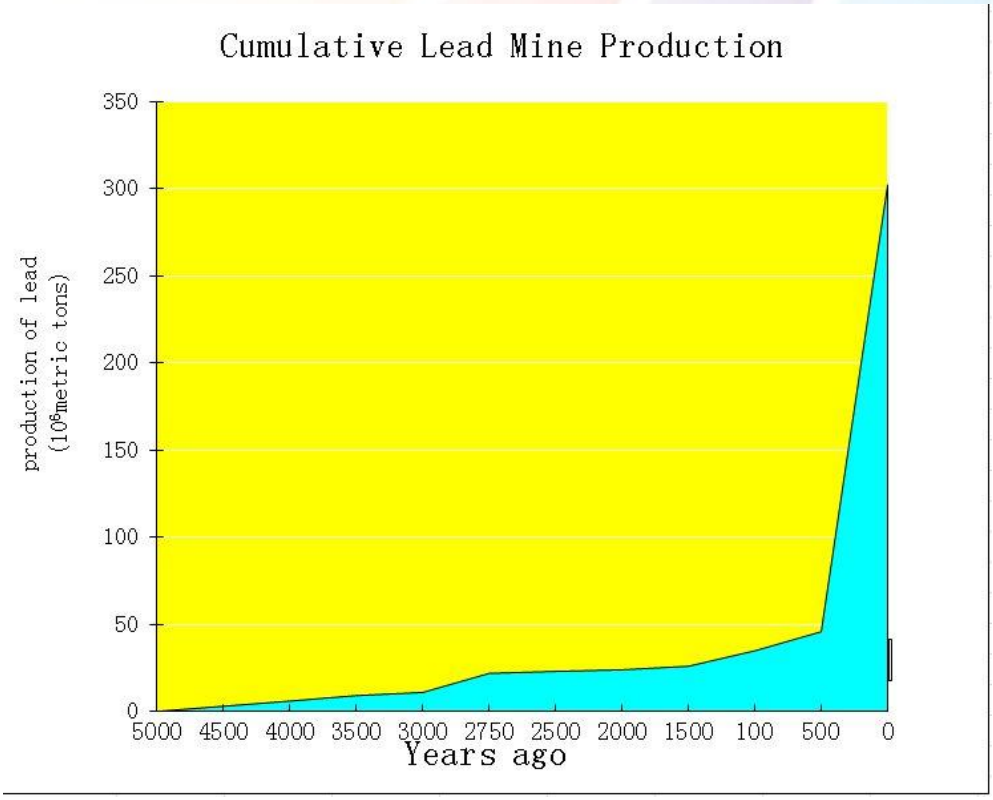
The vast majority of submissions and evidence presented to the 2023 Inquiry are from ecocentric people who've evolved beyond the egocentric epoch of the industrial revolution where greed was good. Mining companies embedded their interests in government regulation and the mine approval process in the 1950s and it's time for the process to catch up with the values of all stakeholders. As David Attenborough says, "The plan is obvious: stop doing the damaging stuff…"



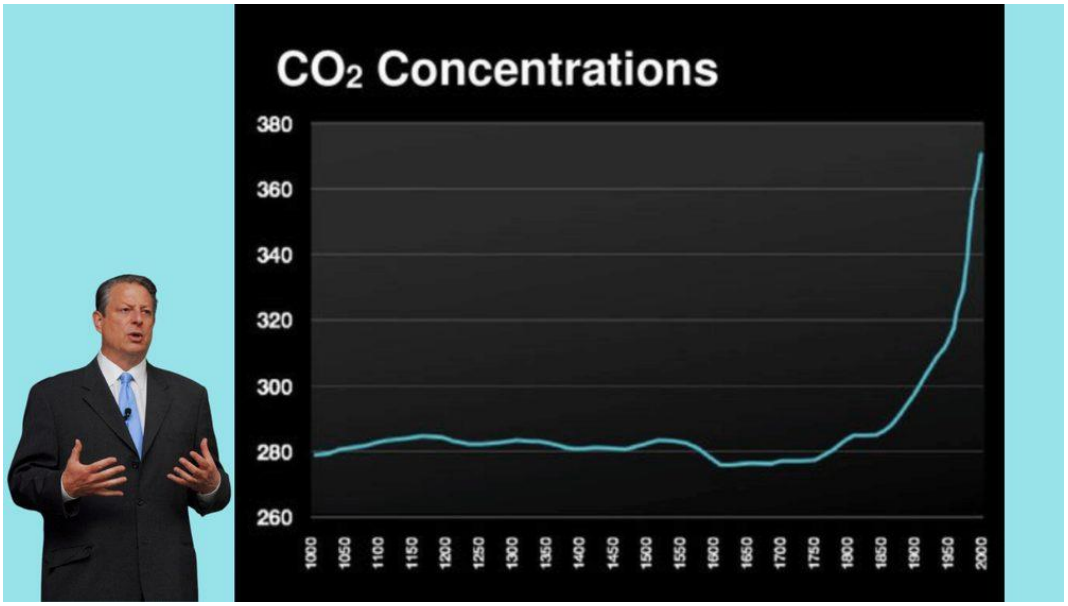
"The plan is obvious: stop doing the damaging stuff…" (Attenborough 2019). Video screenshots collaged by Lucinda Curran and Elizabeth O'Brien

I contend that in order to avert climate crisis, we must make the world lead-safe. It cuts both ways: sharper minds than lead-affected minds are needed to avert climate crisis, and anyone who is already lead poisoned will be worse off in hotter temperatures, which move lead from bone stores back into the circulating blood where it increases the risk of fatal heart attack, stroke, dementia and kidney failure.

There is a striking similarity in the shape of the following two graphs. The Model National Lead Safety Policy aims to drastically slow the rate of cumulative lead mine production, and eventually stop it. In turn, the reduction in lead in humans will help to reduce carbon dioxide in the atmosphere.



Cumulative production of lead over historic time. Reprinted from Flegal & Smith (NRC 1993, Figure 1-5, page 21), with permission from Measuring Lead Exposure in Infants, Children, and Other Sensitive Populations, 1993, by the National Academy of Sciences, courtesy of the National Academies Press, Washington DC



Al Gore's "1000 years of carbon dioxide", slide from An Inconvenient Truth (Gore 2006)

I'm proud that every child born after leaded petrol was banned in their country, for Australia that was 2002, has a greater chance of reaching their IQ and longevity potentials. I'm not proud that every person in the world, to a greater or lesser extent, carries lead from the leaded petrol era in their body. Guess where most of the lead added to petrol came from? Answer: Australia.

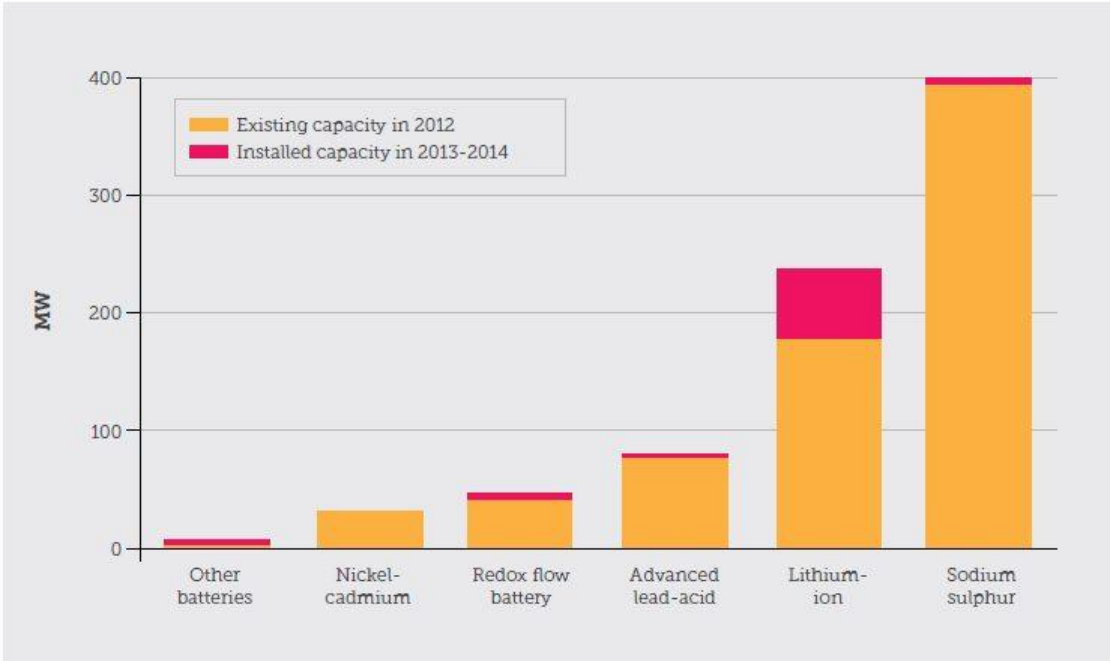
The lead is already out there

News from the Philippines makes the stakes plain. BAN Toxics reports that approximately half of the Philippines' 40 million children have blood lead levels exceeding 5 µg/dL, with exposure from lead paint in homes and schools, toys, cosmetics, and communities located near informal recycling of lead acid batteries.

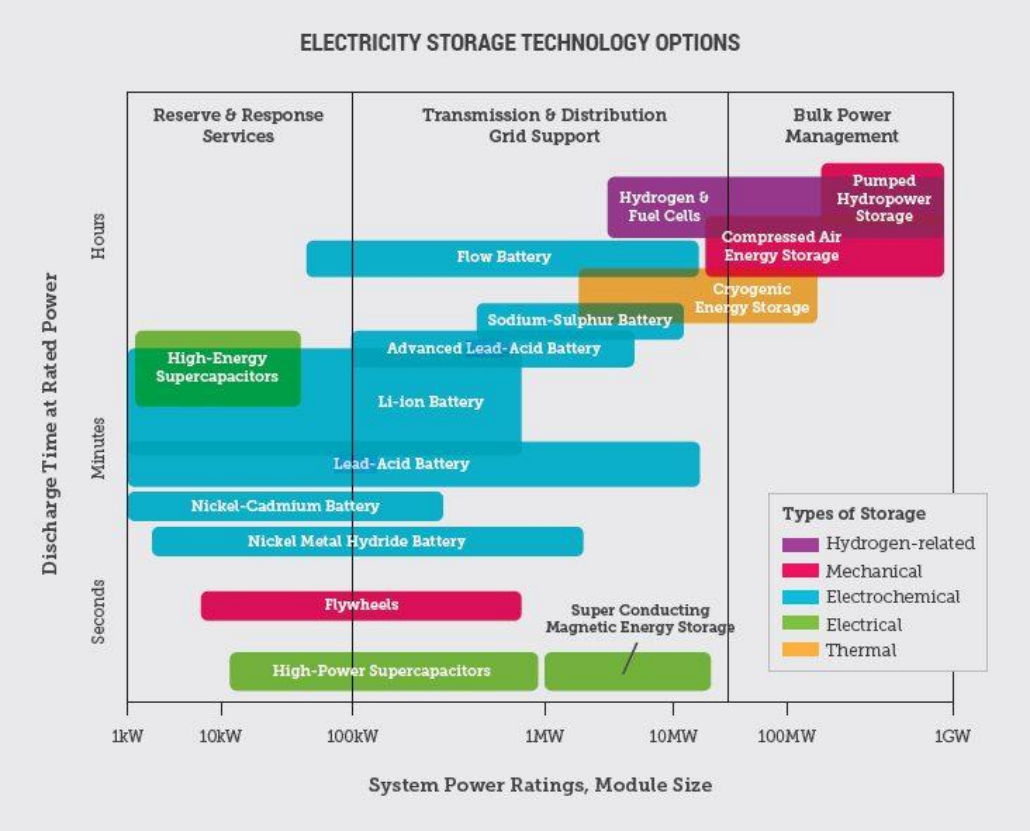


BAN Toxics joins the International Lead Poisoning Prevention Week of Action, Manila, October 2023. Photo: BAN Toxics

If no freshly-mined lead were used to make new lead acid batteries, and all the lead ever spread about the planet were collected and recycled, there would be more than enough lead, without mining more, to fulfil the small role for lead acid batteries in the renewable energy transition, as the Climate Council's battery storage graphs illustrate.



Estimated installed global battery capacity by type for the electricity sector. Source: Navigant Research 2014; IRENA 2015, in Climate Council (2015) Powerful Potential



Characteristics of different energy storage technologies. Source: Centre for Low Carbon Futures 2012, in Climate Council (2015) Powerful Potential

Lead is only still in use because it's cheap, and lead is only cheap because its real costs, the

externalities of worker health, community health, monitoring, remediation, water pollution and loss of biodiversity, are never paid by mining companies. A true accounting of the societal damage indicates the true value of recycling lead instead of mining new lead. There's enough lead, zinc, silver and gold already dug out of the earth. Let's leave the rest in the ground, to honour Indigenous heritage, protect waterways, biodiversity, good jobs and the serenity of local residents.

The full 42-page submission, including all references (apart from the ATO 2026 reference listed above under the Figure about foreign ownership of Australian mining) and the complete responses to the Inquiry's Terms of Reference, is published by the IPC at https://www.ipcn.nsw.gov.au/sites/default/files/2026-10/87376%20-%20Elizabeth%20O%27Brien%20Redacted.pdf