

CRITICAL APPENDICES

Supporting information for the Mined The Gaps report

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CONTENTS

Appendix A: Potential additional lines of inquiry	4
Appendix B: Temporal parochialism in action – are these really critical times for critical minerals?	7
Appendix C: What is a social impact?	10
Appendix D: Examples of trust path models, data and other research	19
• Translation of Brújula Minera LATAM 2024	26
Appendix E: Incentives and disincentives for adaptive governance	35
Appendix F: Are corporate sustainability standards and reporting actually working?	23

Appendix A: Potential additional lines of inquiry

The following is a list of topics that were briefly considered during the research of the main report but were not pursued in order to constrain the scope. They are all, however, worthy of further consideration.

1. Minerals and metals processing. This report focuses predominantly on the exploration for and extraction of critical minerals but does not investigate issues surrounding the refining or processing of those minerals. There is no doubt that increased production is only one part of the wider critical minerals supply chain, and that there are some minerals that are considered 'critical' primarily due to the concentration of processing and refinement facilities in China.

2. Mine waste processing and end-product recycling: Research exists that shows future demand for critical minerals could be met through new ways of minerals processing to capture minerals that are currently discarded as 'waste' from the mining of other metals. 'Waste' rock from existing or historic mines may consist of:

- Minerals that were the original target mineral of the mine, but which existed at grades (i.e., the percentage of the rock that contains the target mineral) that were too low at the time of extraction to be economic.
- Minerals that were not the original target mineral of the mine, where either the costs of extraction at the time were prohibitive, or the technology did not exist to efficiently extract the mineral. Many mines are in fact 'polymetallic', but due to the high capital costs of extracting and separating minerals, lower value minerals are often discarded entirely or are extracted with lower efficiency than the target mineral.

At the other end of the value chain, increased investment in recycling end-use products (e.g., batteries, e-waste) also has the potential to provide non-mine sources of critical minerals.^[1] In this regards there has been some research into what is known as 'urban mining' in which current or historic landfill sites might be 'mined' for minerals and metals in discarded machinery, building waste, consumer electronics, etc.

[1] Energy Department Announces \$500 Million to Strengthen Domestic Critical Materials Processing and Manufacturing', US Department of Energy March 13, 2026, accessible at: <https://www.energy.gov/articles/energy-department-announces-500-million-strengthen-domestic-critical-materials-processing>

The key advantage of both of these potential sources of critical minerals is that the materials have already been ‘mined’ and are above ground, and in that regards production could be started much more quickly than a greenfields mine site, so long as the project economics stack up.

3. Closure and equitable transitions around fossil fuel projects. The debate around the rapid expansion of critical minerals projects sits in difficult contrast to how fossil fuel companies and the communities that host them are transitioning or might transition in the future. The goal of energy transition can only be achieved through massive dislocation and trauma for workers (e.g., coal miners) and communities that, in some cases, have had a multi-generational dependence on fossil fuels.

In many cases, there is extensive crossover between the companies, the workforces, and the regulators involved. Australia, for example, is the world’s single largest exporter of coal but is also one of the largest producers of critical minerals. How these transitions and closures are addressed and managed will impact on and influence how critical minerals projects are developed. It is difficult to imagine a scenario in which companies or governments that are seen to abandon and punish fossil fuel projects and their host communities will simultaneously be trusted to develop new projects and relationships.

4. Now multiply that by the entire world – the major geopolitical risks of energy transition. While it is striking how much research, commentary, and search for solutions there is around the issue of critical minerals and energy transition, it is notable how little research and how few programs appear to exist around the geopolitical risks of a successful energy transition. Existing fossil fuel exporting countries are framed predominantly as reactionary blockers of progress or are completely invisible in the discussion of the impacts of energy transition.

And yet many of the countries that are dependent on fossil fuel exports are characterised by high levels of autocracy, poor governance and corruption, and high levels of military expenditures. The potential global security consequences of those countries being progressively pushed off an economic cliff (starting with the highest cost producers first) if energy transition successfully displaces fossil fuels, is genuinely terrifying. Much more needs to be done in this space – to help those countries also transition, as well as to avoid or mitigate potentially catastrophic geopolitical risks.

5. Community engagement practice in the energy transition sectors. There is an emerging body of research that focuses on social risks and community engagement practices around the development of renewable energy projects and new energy infrastructure, such as lines and batteries. The zero-sum 'greater good' framing of the need for companies and governments to deliver these projects much faster, regardless of the costs to communities, is in many ways similar to the issues considered in this report:

[Research] clearly shows that the technological capacity and engineering nous required for major infrastructure delivery is well in hand, at least in Australia. A failure to acknowledge, engage, and respect the communities who will host our energy infrastructure is what needs most urgent attention... [But] It's not a lack of social licence that will short-circuit the energy transition, it's presumed benevolence and all of the assumptions and expectations it entails.^[2]

6. Cumulative strategic social impacts: A number of the above factors are already combining and have the potential to combine further to create significant instability in communities, in countries, and globally. Some communities, for example, are experiencing a layered impact of the closure of coal mines or coal-fired electricity plants, combined with the installation of new renewable energy generation and lines infrastructure.

Cumulatively, this is experienced as significant dislocation and change, as well as the further industrialisation of regional and rural landscapes. The addition into this already delicate mix of, for example, the onshoring of minerals processing, combined with an overlay of geopolitical instability, has the potential to take an already friable situation and push it over the edge into a state of significant community conflict and rejection of any element of what is seen as imposed change from far away decision-makers and by global forces which are experienced but which feel uncontrollable.

[2] Bice, S. (2024), "How presumed benevolence will short circuit the energy transition", Next Generation Engagement Project, August 9, 2024.

Appendix B: Temporal parochialism in action – are these really critical times for critical minerals?

Temporal parochialism is the cognitive tendency to regard one's own moment in time as being uniquely significant, turbulent, or transformative. It leads people to overweigh the intensity and novelty of current events relative to those of other eras. This phenomenon is reinforced by the gap between the vivid immediate experience of the present and the static (and in some cases poorly understood) quality of historical knowledge. As a result, people often tend to believe that they face a uniquely accelerated pace of change, an unusually polarised political climate, or an especially precarious civilisational moment, largely unaware that equivalent situations have faced previous generations.

This certainly appears to be the case with the critical minerals debate. Looking at long-run data of minerals and metals production provides us with a very different perspective on the current day. The following graphs draw on the United States Geological Survey (USGS) historical data on minerals commodities that, in some cases provides estimates of global production of commodities as far back as 1900. In these graphs, three commodities are used – iron ore as a proxy for industrialisation in general; copper as an ‘intermediate’ metal – i.e., one that has been instrumental for both industrialisation but is also vital to energy transition; and lithium, which is much more explicitly an energy transition metal.

For each of these commodities, these graphs show, firstly, the global production over time, and then the global production per capita. This helps us to understand how much of the increase in production is being driven simply by increased population, as opposed to increased usage. This is an important consideration because, as the first graph shows, the global population has increased more than fourfold since 1900.

Some of the observations that we can draw from these data are as follows:

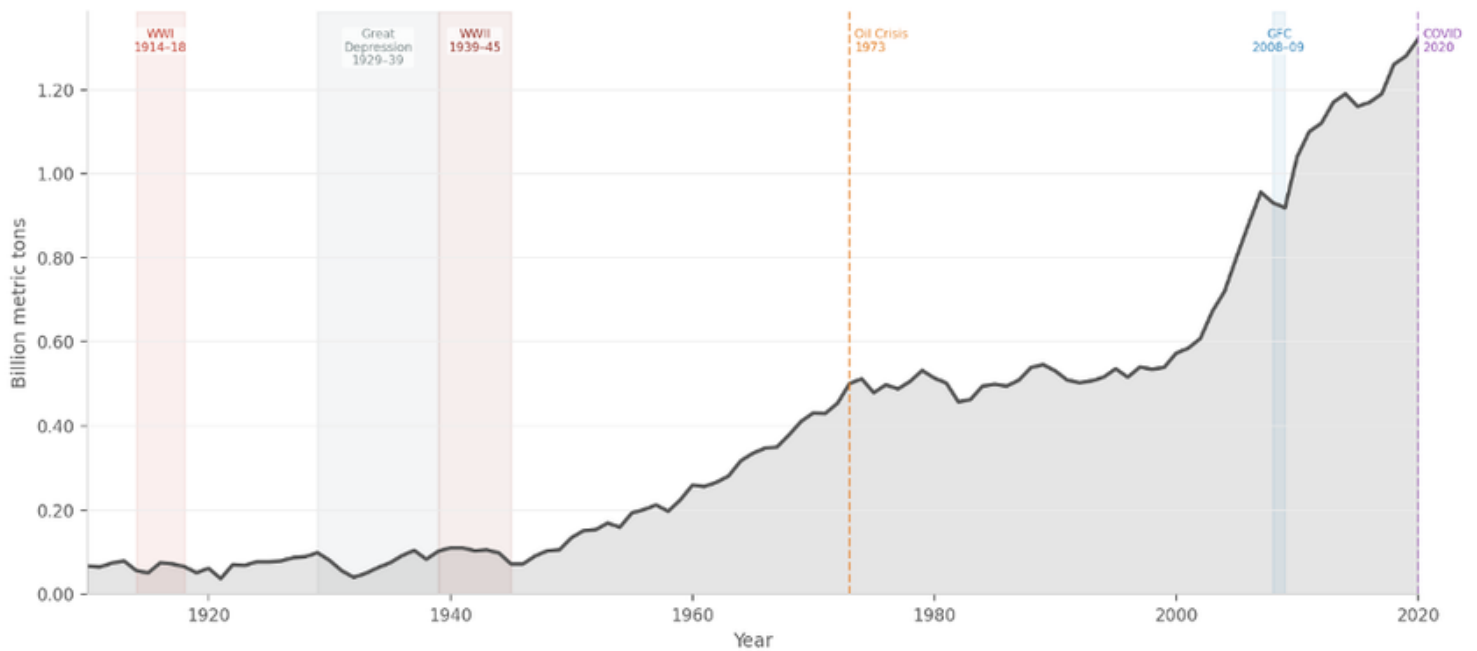
- The increase in production of virtually all metals and minerals is a combined function of global population increase and increased per capita use.

- Increases in per capita iron production are heavily influenced by the industrialisation of China (with the 2000s seeing the highest growth), and post-war recoveries, with the 1920s and 1950s being the second and third highest growth decades.
- While an enormous amount of the critical minerals debate has focused on the importance of copper, it is notable that when we consider growth rates across the decades, the increase in per capita global copper production in the 2010s (i.e. the most recent complete decade) was only the seventh highest increase in production (compared to the preceding decade) of the twelve decades of data considered. The highest growth in per capita copper production actually occurred in the early 20th century with the second industrial revolution and the post war reconstruction booms of the 1920s and 1950s.
- This leaves us with lithium, where the critical minerals revolution actually is happening, albeit the USGS only gives us useful production data from 2000 onwards. But the latest production data is still pretty staggering.



Iron ore – total and per capita production since 1900 - 2020

World Pig Iron Production, 1910-2020



Sources: USGS Iron & Steel Statistics (ds140), June 2023 edition | Population: Gapminder Population Dataset v8 (2024)

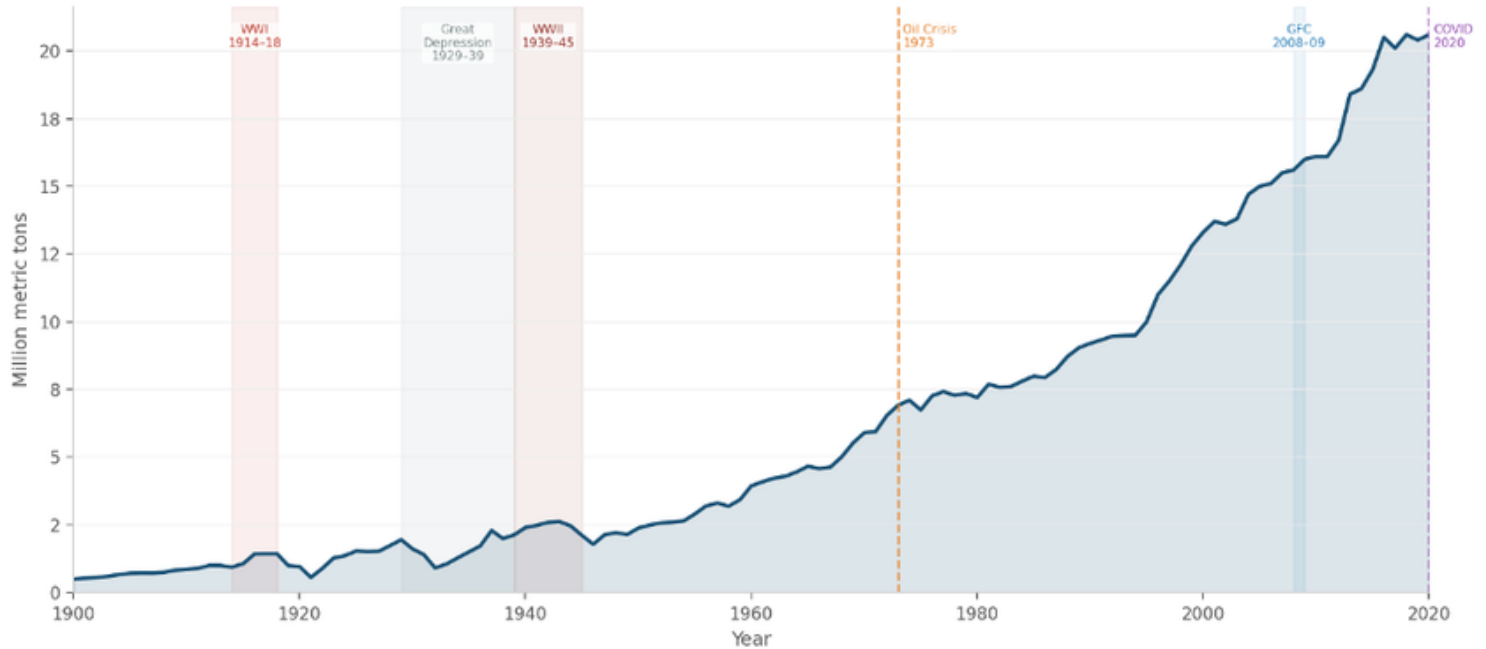
World Pig Iron Production Per Capita, 1910-2020



Sources: USGS Iron & Steel Statistics (ds140), June 2023 edition | Population: Gapminder Population Dataset v8 (2024)

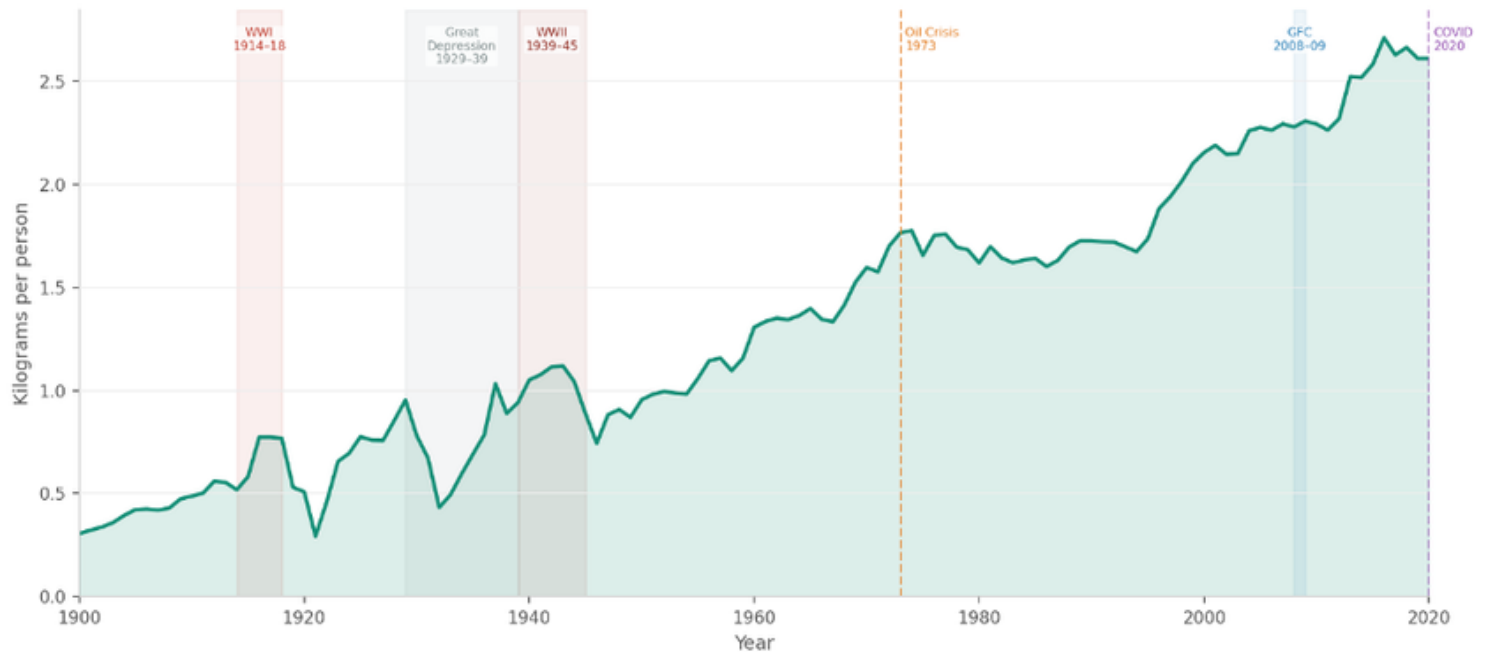
Copper – total and per capita production 1900 - 2020

World Copper Production, 1900-2020



Sources: USGS Copper Statistics (ds140), June 2023 edition | Population: Gapminder Population Dataset v8 (2024)

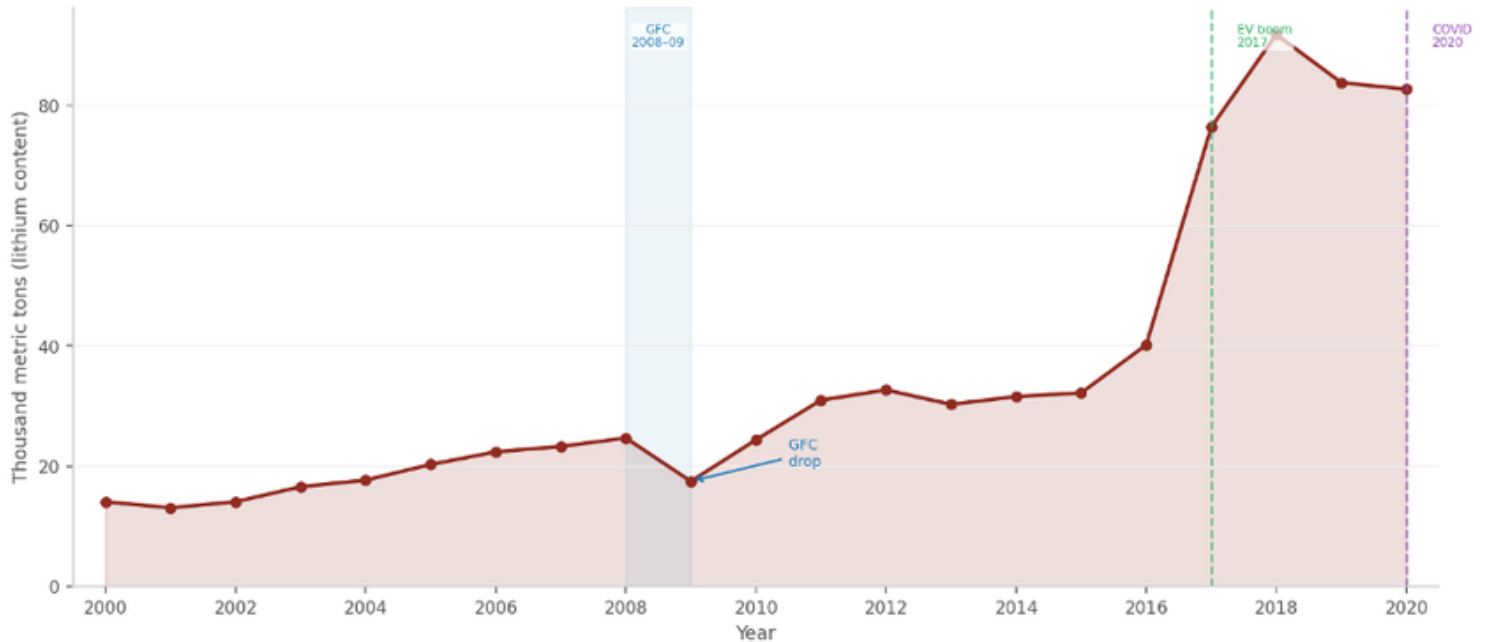
World Copper Production Per Capita, 1900-2020



Sources: USGS Copper Statistics (ds140), June 2023 edition | Population: Gapminder Population Dataset v8 (2024)

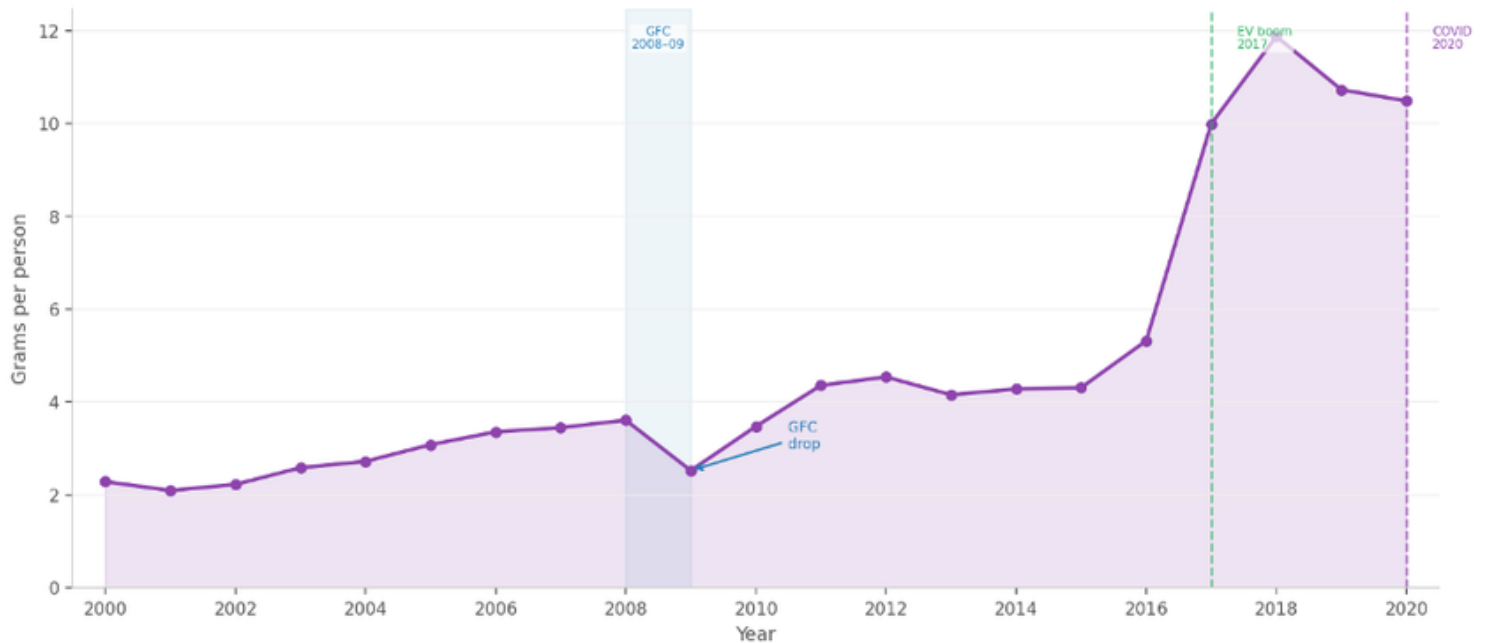
Lithium - total and per capita production 2000 – 2020

World Lithium Production (Lithium Content), 2000-2020



Sources: USGS Lithium Statistics (ds140), August 2023 edition. World production = lithium content (metric tons Li). Data available from 2000 only. | Population: Gapminder Population Dataset v8 (2024)

World Lithium Production Per Capita (Lithium Content), 2000-2020



Sources: USGS Lithium Statistics (ds140), August 2023 edition. World production = lithium content (metric tons Li). Data available from 2000 only. | Population: Gapminder Population Dataset v8 (2024)

Appendix C: What is a social impact?

'Social impact' is a broad term, and the use of Social Impact Assessments (SIAs) and Social Impact Management Plans (SIMPs) are relatively recent concepts. While they have been used in extractives projects for ~20 years, they have only more recently started to be used in other sectors.



While the use of social impacts in the extractive industries has largely focused on impacts that are positive and negative, direct and indirect, intended and unintended, there are other very different disciplines that also use the term 'social impact' to measure the entirely beneficial outcomes of corporate, not-for-profit or government programs, where measuring outputs and outcomes may have traditionally been difficult.

A useful definition of what constitutes social impacts is as follows:

Types of social impacts include:

- *changes to community values and/or the way the community functions*
- *impacts on how people live, work, play, and interact with one another on a day-to-day basis*
- *impacts on culture, history, and the ability to access cultural resources*
- *impacts on communities' physical safety, exposure to hazards or risks, and access to and control over resources*
- *impacts on communities' quality of life, including liveability and aesthetics, as well as the condition of*
- *their environment (for example, air quality, noise levels, and access to water)*
- *impacts on communities' access to, and quality of, infrastructure, services, and facilities*
- *impacts on communities' physical and mental health and well-being, as well as their social, cultural, and economic well-being*
- *changes to livelihoods, for example, whether people's jobs, properties, or businesses are affected, or whether they experience an advantage/disadvantage.*^[3]

[3] Diagram from the New South Wales Department of Planning, Housing and Infrastructure (2025), Social Impact Assessment Guideline for State significant projects, accessible at <https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines/key-guidance/social> Text drawn from the Queensland Government Social Impact Assessment Guideline (2025), accessible at https://www.statedevelopment.qld.gov.au/_data/assets/pdf_file/0017/17405/social-impact-assessment-guideline-july-2025.pdf

Appendix D: Examples of trust path models, data and other research

In addition to the CSIRO Australian attitudes towards mining survey and trust model that are discussed in the main body of the report, some further examples are provided here. The first one provided here is from the Transfert / Voconiq Social Acceptability Barometer of the Canadian Mining Sector. The trust model here is much more complex than most models, but still contains most of the familiar drivers of trust and acceptance in mining that we see in other models.^[4]

The second example is taken from a specific large-scale gold mining operation in Western Australia. In general, site-specific data remains confidential to individual Voconiq clients and only highly generalised community surveys are provided. While this summary is not presented in the form of a path model, it does show the scores for each of the major drivers on a standard Likert scale (where 1 is lowest, 3 is the midpoint, and 5 is highest). The advantage of this specific mine's data is that it has been tracking its performance since 2019 and while detailed results are not publicly available, this particular mine has been public about the long-term decline in community trust and acceptance over that period, albeit starting from a high base.^[5]

Example 3 provides a breakdown of questions in the Canadian survey for questions related to critical minerals. Example 4 then shows a trust model from a different sector – energy transmission to demonstrate that the key drivers of trust identified in the main report are also commonly seen in other sectors with significant tangible impacts on communities.

Finally, it is important to note that it is currently not possible to identify comparable data that would help to prove whether drivers of trust and acceptance in mining are fundamentally different in non-OECD countries. Voconiq has carried out site-specific research in key critical minerals countries such as Chile and Indonesia, but detailed data and trust models are not publicly available.

In general, the author is aware that models from non-OECD countries tend to have a stronger emphasis regulation drivers. Non-Voconiq research is available, on benefits, distributional fairness, and environmental impacts, but with a lower

[4] Transfert/Voconiq, Social Acceptability Barometer – Canadian Mining Sector, 2025. The summary report of the survey was initially accessible at the Transfert website here:

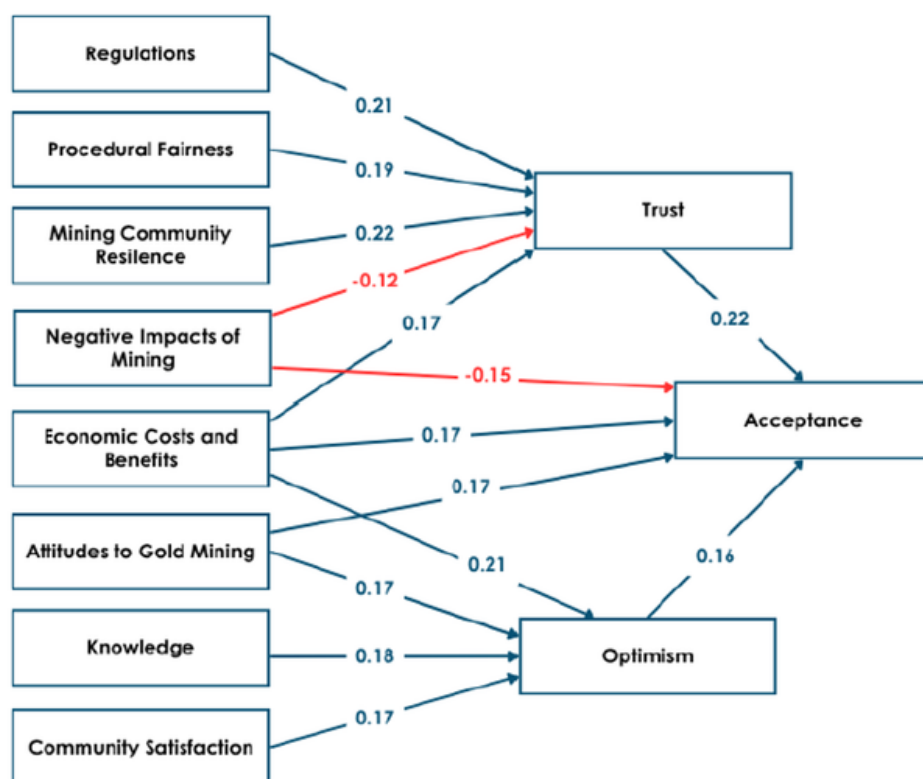
<https://transfertconsult.ca/en/barometer/> but at the point of writing is no longer publicly available, though the author was able to download a copy before it was withdrawn.

[5] Access to the summary of Voconiq data for Northern Star's Kalgoorlie Operations can be found here: <https://voconiqlocalvoices.com/en/kalgoorlie-boulder/results/>

(but still important) emphasis on procedural fairness and but obviously uses different question-sets and different models of measuring social licence. The Brújula Minera LATAM 2024 survey of eight Latin American countries is perhaps the most useful here, though again, detailed data and analysis of drivers is not available.^[6] What is available shows:

- Low levels of trust in most countries' mining and energy ministries.
- Low levels of trust in mining companies in general (27% across the region), contrasted with positive views on whether mining is positive for a country (64% across the region).
- A clear recognition of the importance of mining to the overall economy and to energy transition specifically.
- That concerns about environmental impacts are the greatest driver of community-company conflict.
- That there is a large gap between the different types of benefits that people believe mining companies are capable of delivering, as opposed to what they are perceived as actually delivering.

A translation of the key findings from the report is attached at the end of this Appendix, though Note: this translation was produced using AI assistance. The author does not speak Spanish and cannot independently verify its accuracy.



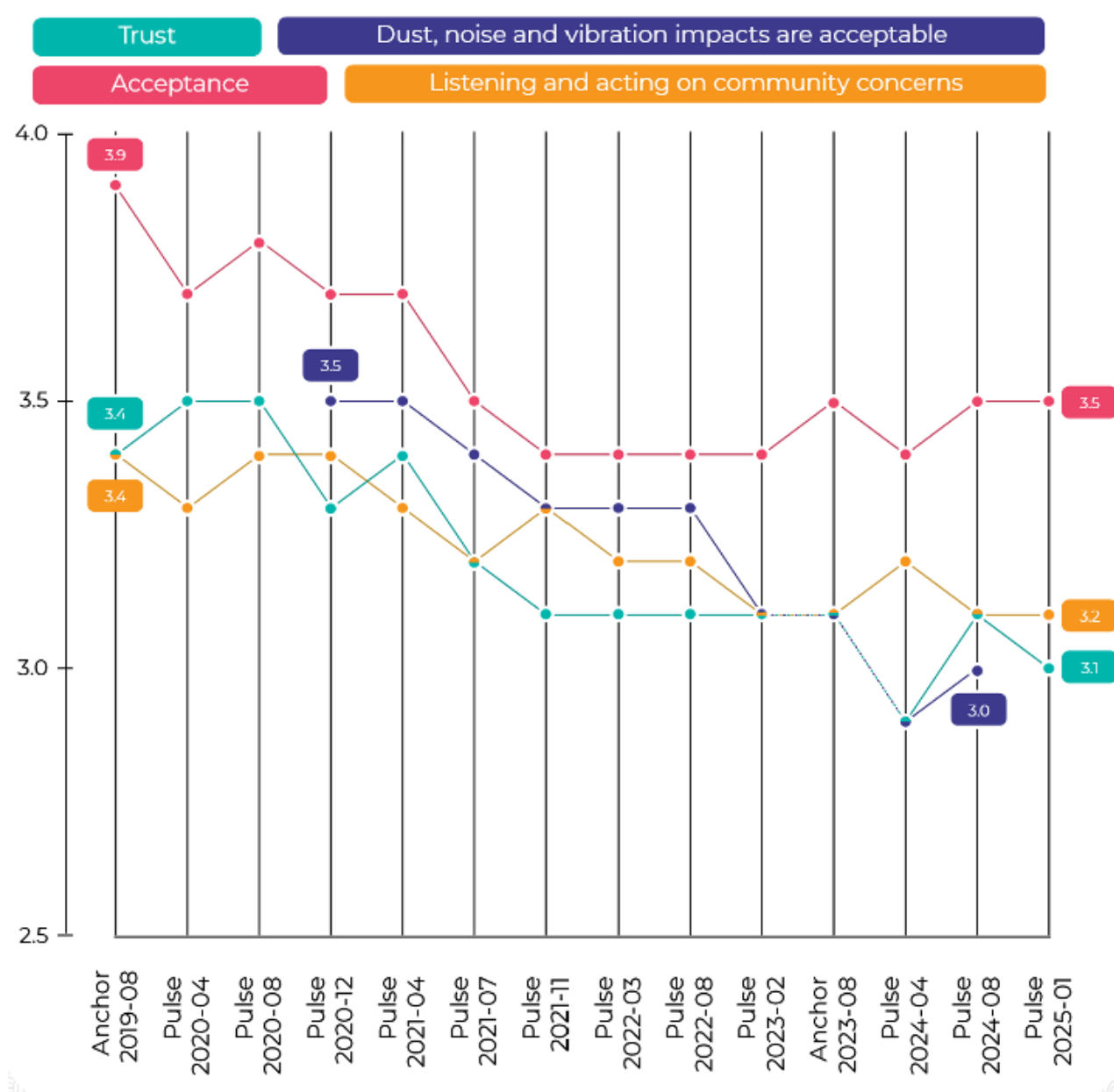
Example 1: Canadian citizen trust path model – Transfert / Voconiq Social Acceptability Barometer: Canadian Mining Sector, 2025

[6] Summary presentation is accessible here:

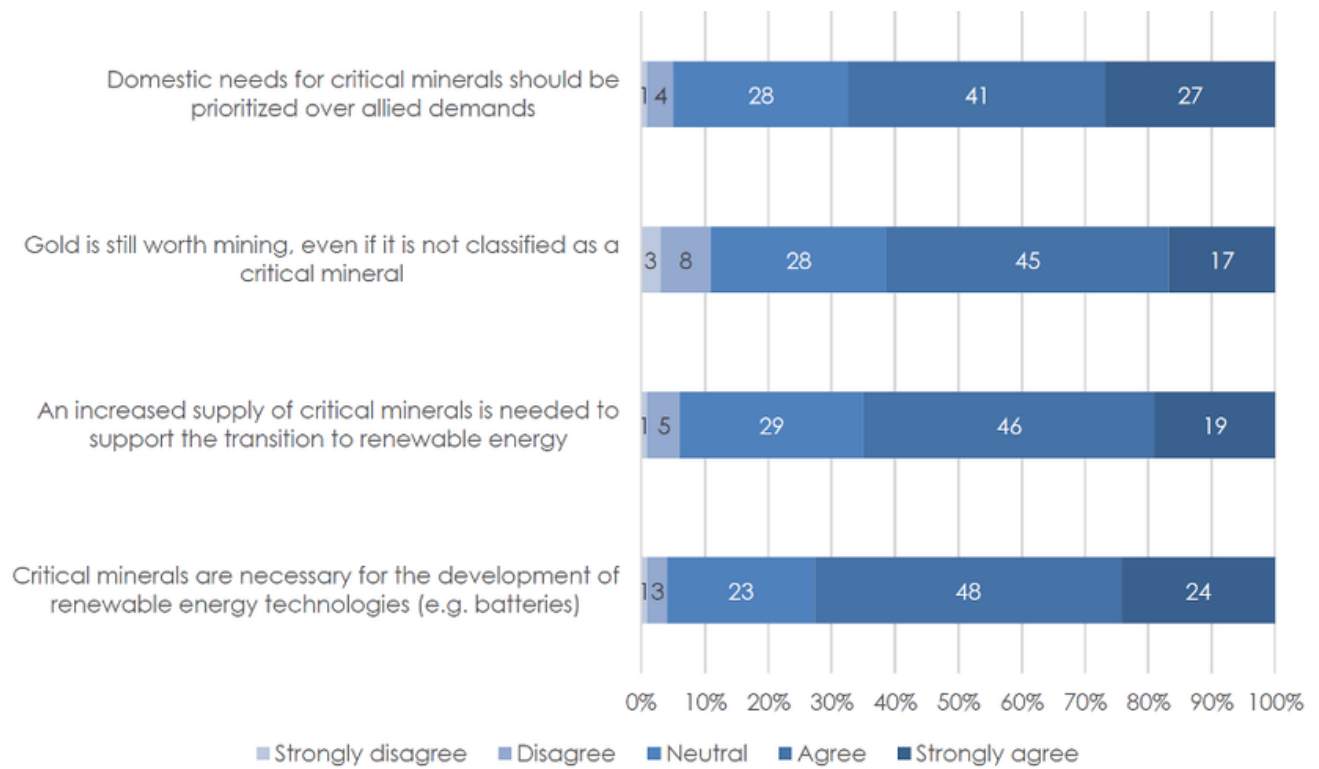
<https://static1.squarespace.com/static/63063c1c96b0f90641b73952/t/6654b52506ec2b47ad58ac3e/1716827532072/Presentacio%CC%81n+Bru%CC%81jula+LATAMLOW+2024+DCR+-+InnSumm+COMPARTIR.pdf>



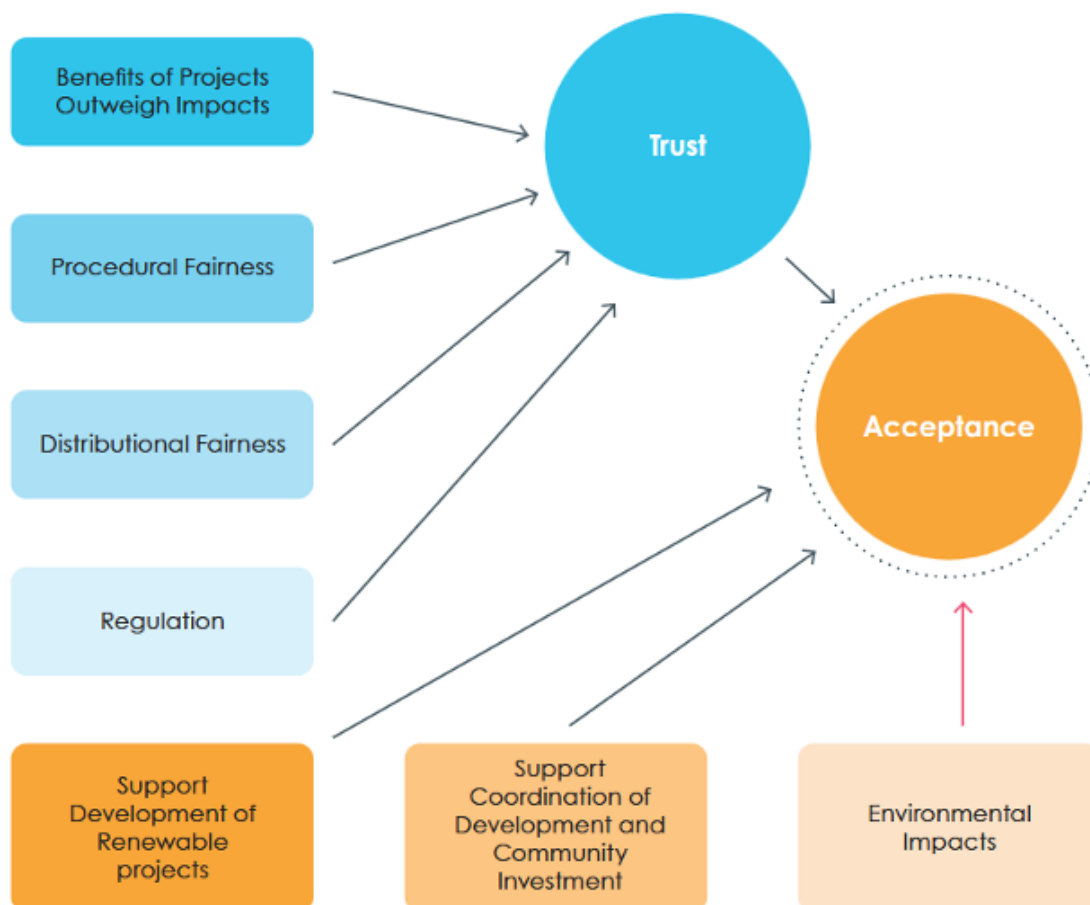
Example 2: Drivers of trust and acceptance at Northern Star Mining's Kalgoorlie Operations – anchor survey results 2023



Example 2: Drivers of trust and acceptance at Northern Star Mining's Kalgoorlie Operations



Example 3: Canadian attitudes towards critical minerals



Example 4: Powerlink Queensland 2025 Trust Model^[7]

[7] Powerlink, “Energy development in regions across Queensland – community perspectives 2025”, accessible here: <https://www.powerlink.com.au/sites/default/files/2026-03/Community%20Sentiment%20Research%20Summary%20-%202025.pdf>

Translation of Brújula Minera LATAM 2024

Public Opinion on Mining — Translated Summary

Original: Jaime Arteaga & Asociados / CNC / Netquest. Translation and summary by Claude.

Methodology

Fieldwork period: 2–29 February 2024

Sample size: 7,239 respondents (adults 18+ years)

Method: Mixed — online and telephone survey

Countries: Argentina (603), Brazil (603), Chile (601), Colombia (2,816), Ecuador (602), Guatemala (604), Panamá (808), Perú (602)

Questions: 29 questions on perceptions of mining

Commissioned by: Brújula Minera (Jaime Arteaga & Asociados)

Conducted by: Centro Nacional de Consultoría (CNC) / Netquest

Funding: Private

Note: Colombia's oversample (2,816 vs ~600 elsewhere) reflects Brújula Minera's Colombian origins. The LATAM average may be weighted accordingly. Guatemala and Panamá were added from the 2023 round.

Trust Context for the Industry

Trust in the Ministry/Secretariat of Mines and Energy

Across the region, only 28% of respondents expressed trust in their country's mining ministry (up from 19% in 2021–2023). Country-level variation is stark:

Country	Trust (TTB)	Low/No Trust (BTB)
Panamá	51%	48%
Guatemala	38%	60%
Colombia	37%	59%
Brasil	25%	63%
Ecuador	23%	72%
Chile	22%	66%
Perú	16%	78%
Argentina	8%	68%
LATAM Average	28%	-

The pattern is clear: the countries with the deepest mining traditions (Peru, Chile) show the lowest trust in their mining regulators. Panama, the newest entrant after the Cobre Panamá crisis, shows the highest trust — possibly because its ministry is less associated with a history of permissive regulation.

Trust in the Ministry/Secretariat of Environment

Environment ministries attract marginally more trust (33% LATAM average in 2024, up from 24% in 2021). Panama leads at 60%, while Argentina trails at 14%.

Where Do Mining Royalties Go?

When asked where mining royalty revenues end up, 31% of respondents across the region said “corruption/bribes/stolen by politicians” (down from 38% in 2021–2022). Argentina leads this perception at 43%, followed by Colombia (38%), Ecuador (34%), and Peru (31%). Chile (24%) and Panamá (18%) show the lowest corruption perceptions around royalties.

Trust in Mining Companies

Only 27% of respondents across the region trust mining companies (up from 20–22% in 2021–2023):

Country	Trust (TTB)	Low/No Trust (BTB)
Panamá	49%	50%
Guatemala	35%	61%
Colombia	25%	70%
Brasil	18%	68%
Ecuador	18%	78%
Chile	38%	55%
Perú	27%	67%
Argentina	8%	75%
LATAM Average	27%	-

Peru stands out: 67% express low or no trust in mining companies, despite 78% believing mining is necessary for modern life and 73% saying it is positive for their country. This is the core contradiction the survey exposes.

Image of Mining

Is Mining Necessary for Modern Life?

Stable at 65% agreement across the region (2021–2024). Chile leads at 78%, followed by Peru (73%), Colombia (72%), and Guatemala (70%). Argentina and Brazil are lowest at 54–55%.

Mining Companies Stopped Operating, Would the Economy Worsen?

This question saw a dramatic jump: 47% now say the economy would worsen (up from 29–32% in 2021–2023). Chile leads at 78%, Peru at 62%. Panamá is lowest at 23% — likely reflecting the post-Cobre Panamá sentiment that the country can do without.

Is Mining Positive for Your Country?

Stable at 64% across the region. The time series by country is instructive:

Country	2021	2022	2023	2024
Panamá	-	-	64%	54%
Guatemala	-	-	58%	67%
Colombia	65%	70%	70%	65%
Brasil	62%	57%	55%	53%
Ecuador	60%	52%	44%	60%
Chile	81%	79%	80%	83%
Perú	81%	79%	77%	78%
Argentina	50%	48%	45%	54%
LATAM Average	68%	65%	63%	64%

Chile and Peru are consistently the most pro-mining countries by this measure. Ecuador has been volatile, dropping to 44% in 2023 before recovering to 60% in 2024. Argentina remains the most sceptical at 54%.

Is Mining Positive for Your Municipality/City?

This drops to 51% LATAM-wide — a 13-point gap between national and local perceptions. Peru leads at 65% (perhaps reflecting direct employment/royalty experience). Argentina is lowest at 34%.

Mining Conflicts in the Last Year

44% believe mining conflicts have increased (down from 53% in 2023). 45% say they have stayed the same. Only 11% say they have decreased.

Image of Mining Companies

Opinion of Mining Companies

44% hold a positive opinion of mining companies (up from 36–38% in 2021–2023). Chile leads at 58%, followed by Panamá (56%), Guatemala (54%), and Peru (52%). Argentina is lowest at 24%.

Main Reasons for Community–Company Conflicts

Cause of conflict	2021	2022	2023	2024
Concern about environmental impact	33%	31%	25%	30%
Organisations seeking political/economic advantage	30%	27%	32%	24%
Corrupt actors steal mining revenues	16%	13%	14%	14%
Confusion between legal and illegal mining	9%	10%	12%	13%
Land conflicts	-	7%	6%	4%
Concern about social fabric deterioration	2%	2%	2%	3%
Don't know / No response	9%	8%	9%	8%

Environmental impact remains the top-cited cause of conflict (30%), though it has declined from 33% in 2021. The second-most cited cause — organisations seeking political or economic advantage — dropped significantly from 32% (2023) to 24% (2024). Confusion between legal and illegal mining continues to grow as a perceived driver.

The Possibility vs Reality Gap

The survey's most analytically interesting section measures the gap between what people think mining could achieve ("possibility") and what they believe it actually delivers ("performance") across six dimensions. The gap is large and consistent across all countries:

Community progress: ~75% believe mining can benefit communities, but only ~30–35% believe companies are actually committed to community development.

Decent work: ~75–80% believe mining can treat workers well, but only ~30–35% believe companies meet health and safety requirements.

Coexistence: ~70% believe mining can coexist with tourism and agriculture, but only ~30–35% believe companies respect local culture and traditions.

Social responsibility: ~65–70% believe socially responsible mining is possible, but only ~25–30% believe companies care about community concerns.

Environment: ~65% believe environmentally friendly mining is possible, but only ~25% believe companies are environmentally responsible.

Social dialogue: similarly wide gaps on communication and dialogue channels.

Chile, Peru, and Guatemala show the narrowest gaps (higher performance scores). Argentina and Brazil show the widest (low performance, moderate possibility). This gap represents the credibility deficit the industry must close.

Energy Transition: The Opportunity

Should Governments Support Mining for the Energy Transition?

66% agree (up from 55% in 2022). Peru leads at 77%, followed by Chile (74%), Colombia (74%), and Guatemala (72%). Brazil is lowest at 47%.

Are Mining Products Necessary for the Energy Transition?

67% agree (up sharply from 47% in 2022). Peru again leads at 77%, followed by Chile (74%), Guatemala (73%), and Panamá (73%). This is the fastest-moving indicator in the entire survey.

Awareness of Energy Transition

54% now say they know what the energy transition is (up from 35% in 2022). This growing awareness is likely driving the increased support figures above.

Social Licence to Operate (SLO) Index

The survey constructs a Social Licence to Operate index using the Thomson & Boutilier (2011) framework, measured on a 0–1 scale across four dimensions: legitimacy, acceptance, approval, and trust. The thresholds are:

0–0.25 = Withdrawal/Retention (red zone); 0.25–0.35 = Legitimacy threshold; 0.35–0.50 = Acceptance; 0.50–0.60 = Credibility threshold; 0.60–0.75 = Approval; 0.75–0.85 = Trust threshold; 0.85–1.0 = Psychological identification.

Country scores for 2024:

Country	2021	2022	2023	2024	SLO Level
Chile	0.57	0.55	0.60	0.68	Approval
Panamá	—	—	0.59	0.58	Credibility Threshold
Guatemala	—	—	0.45	0.55	Credibility Threshold
Perú	0.52	0.57	0.57	0.53	Credibility Threshold
LATAM	0.46	0.43	0.44	0.48	Acceptance
Colombia	0.45	0.48	0.49	0.44	Acceptance
Ecuador	0.34	0.30	0.32	0.39	Acceptance

Key findings from the SLO data:

Chile is the only country to reach the Approval level (0.68), jumping significantly from 0.60 in 2023. This is the highest score in the survey's four-year history. Peru, Panamá, and Guatemala sit at the Credibility Threshold (0.50–0.60) — better than the regional average but not yet at Approval. Peru has actually declined from 0.57 (2022–2023) to 0.53.

The LATAM average (0.48) remains stuck in the Acceptance band, where it has been since 2021. Movement has been minimal.

Colombia dropped from 0.49 (2023) to 0.44 — the largest single-year decline of any country, likely reflecting the Petro government's anti-mining stance. Argentina (0.35) sits right at the Legitimacy threshold — essentially the border between grudging acceptance and active resistance.

Assessment of the Data

This is a conference slide deck, not a full methodological report, and there are some important caveats:

The survey is privately funded by a mining industry consultancy (Jaime Arteaga & Asociados), which should be noted when citing. The questions are not inherently biased, but the framing and interpretation lean toward identifying opportunities for the industry.

Colombia's large oversample (2,816 vs ~600 per country) means the LATAM averages may be Colombia-heavy depending on weighting methodology, which is not disclosed.

The collection method (online and telephone) skews toward urban, connected populations. This matters enormously for a topic where the most directly affected communities are often rural, remote, and Indigenous.

No sub-national breakdowns are provided — critical for Peru, where Lima vs mining-region attitudes diverge sharply (as the separate IPSOS 2021 poll showed).

Despite these limitations, this is the most systematic, recurring, cross-country public opinion survey on mining attitudes available in Latin America. The four-year time series adds genuine value, and the Thomson & Boutilier SLO framework gives it analytical structure. The possibility-vs-reality gap analysis is particularly useful for the TAI work.

Appendix E: Incentives and disincentives for adaptive governance

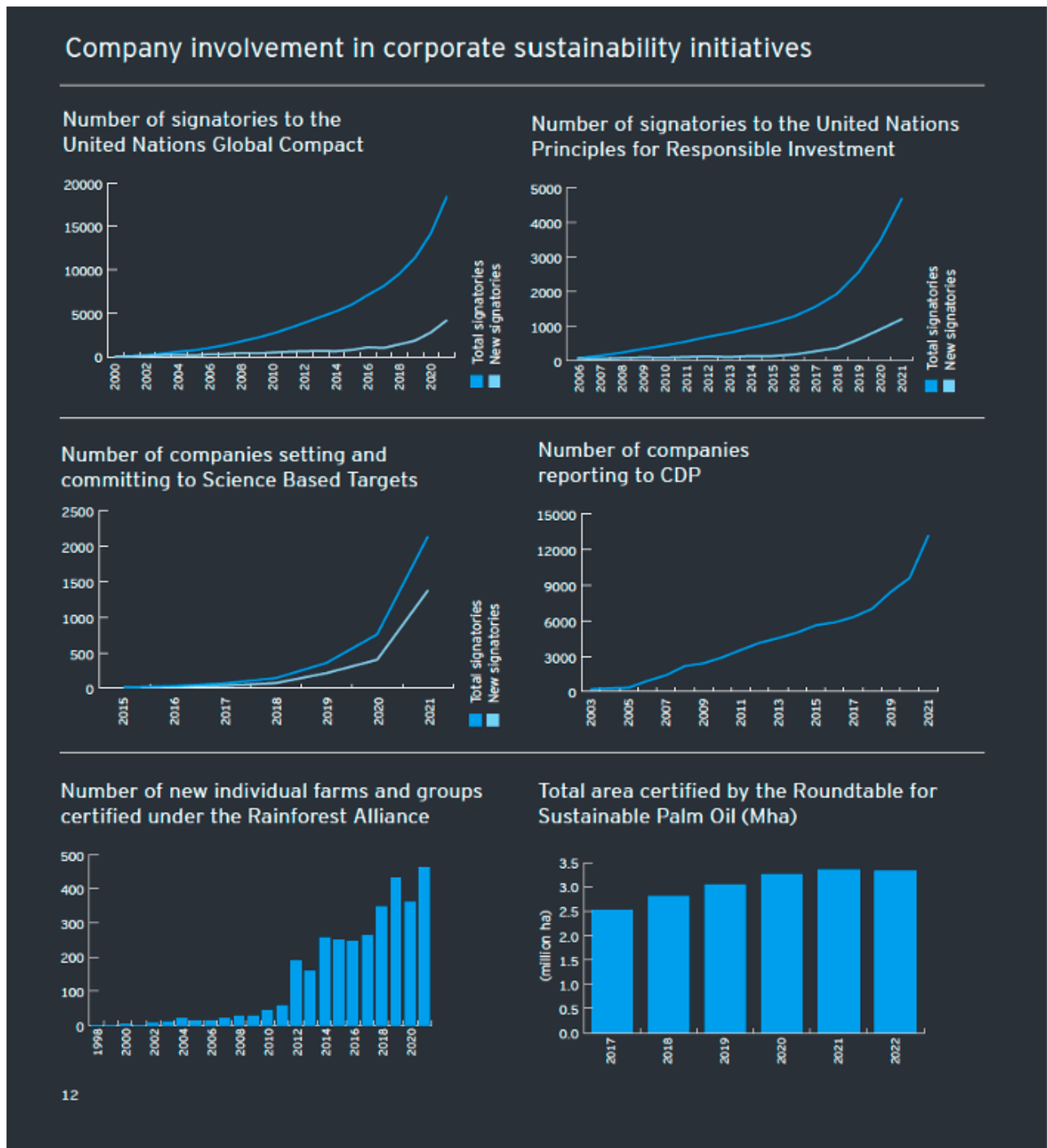
Party	Incentives	Disincentives
Government regulators	More enduring decisions with more stable long-term developments; reduced risk of conflict; reduced risk of decisions being re-opened due to political changes or pressure. Less likely to be blind-sided by surprise decisions or events originating from within the company or community. Regulatory decisions less likely to face legal appeals / challenges. Potential for faster overall project decision-making as issues can be dealt with as and when they arise rather than through set-piece regulatory processes.	Would require significant cultural change – regulators (and politicians) are used to being the ultimate decision-makers. While they are used to negotiating with companies they are far less used to negotiating with communities. Would require new legislation / regulation to make possible and to empower AGP Panels to make decisions.
Companies	More enduring decisions with more stable long-term developments; reduced risk of conflict; reduced risk of decisions being re-opened due to political changes or pressure. Less likely to be blind-sided by surprise decisions or events originating from within regulators or community. Regulatory decisions less likely to face legal appeals / challenges. Potential for faster overall project decision-making as issues can be dealt with as and when they arise rather than through set-piece regulatory processes.	Would require extremely significant cultural change – key project proponents are used to optimising project design, not negotiating it. May initially feel that AGP process is less predictable than normal regulatory process. May have concerns that AGP could be used to fundamentally veto projects (though note – communities would have mirror concern that AGP removes power of veto). Lack of predictability may compromise ability to raise internal or external investment funds. May be seen as a slippery slope towards regulation and governance that they are unable to control in more 'traditional' ways – e.g. through exerting influence over political decision-makers.

Party	Incentives	Disincentives
Communities	Ongoing engagement and opportunity to influence the project and operation at all stages. Greater likelihood of early identification and mitigation of critical social, environmental, and economic risks and impacts. Less likely to be blind-sided by surprise decisions originating from within regulators or the company.	AGP assumes that the project will ultimately go ahead in some form, so would be ultimately unsatisfactory for any groups or communities who were against a project in all and any form. Risk of participation being perceived by others as having been co-opted by government and/or companies. Time and resources – community representatives in consultative mechanisms often do their jobs unpaid.

Appendix F: Are corporate sustainability standards and reporting actually working?

It would appear not.^[8]

What do the NUMBERS SAY?



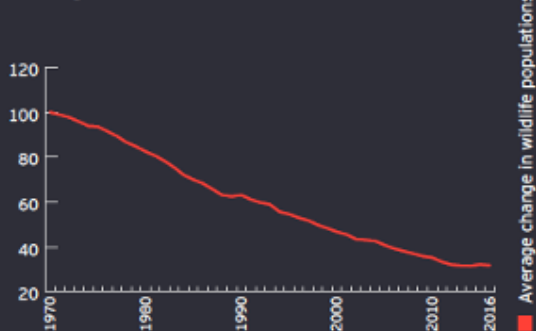
[8] These images are sourced from the EY Australia (2022) report *Enough – A review of corporate sustainability, in a world running out of time* accessible at: https://www.ey.com/en_au/insights/climate-change-sustainability-services/enough-a-review-of-corporate-sustainability

We tend not to contrast the positive data of corporate sustainability uptake with the negative data of biosphere decline. That is because corporate sustainability is judged more on what it can achieve than what it isn't. However, whilst we do not suggest any causal relation between the

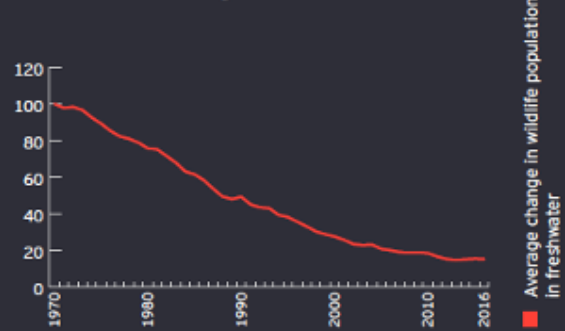
datasets presented below, they do convey the point that whatever we are doing, it is yet to start working in the context of some of the defining environmental crises of our time.

Indicators of the health of the biosphere

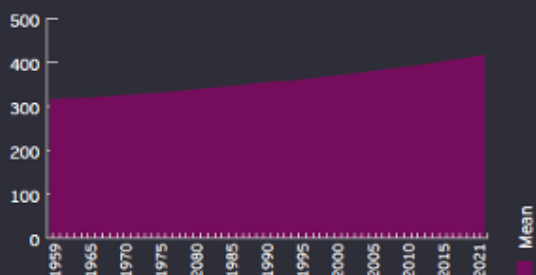
Living Planet Index



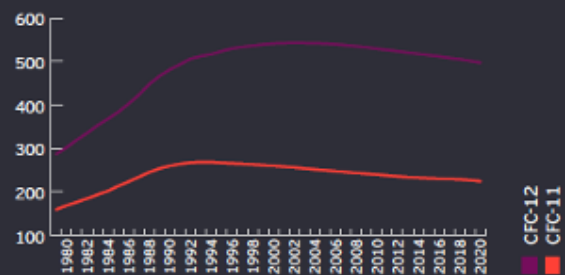
Freshwater Living Planet Index



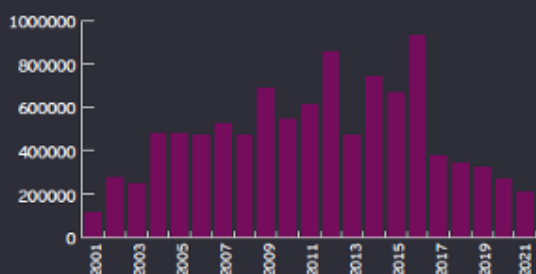
Atmospheric concentration of CO₂ (ppm)



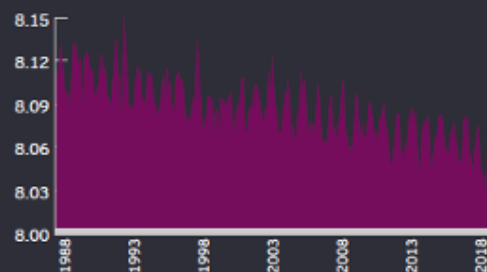
Atmospheric concentrations of CFC-11&12 (ppm)



Primary forest loss in Indonesia (ha)



Ocean acidification levels (pH)





**If you are interested in or have questions about this
work, please let us know what you think at**

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