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# IN SEARCH OF TRANSPARENCY :

ENDING OPACITY  
IN BRAZIL'S  
EXTRACTIVE  
SECTOR

REPORT SUMMARY

An action-research  
case study of the  
Minas-Rio iron  
ore mine



## REPORT SUMMARY

### IN SEARCH OF TRANSPARENCY:

### ENDING OPACITY IN BRAZIL'S EXTRACTIVE SECTOR

#### AN ACTION-RESEARCH CASE STUDY OF THE MINAS-RIO IRON ORE MINE

October 2021<sup>1</sup>

The extractive (oil, gas and mining) industries are controversial and problematic for many reasons. To address decades of sector opacity, extractive companies incorporated and/or publicly listed in Canada, the European Union, Norway and the United Kingdom are required by law to disaggregate and publish their payments to governments annually for every country of operation.<sup>2</sup> In 55 countries, although not currently in Brazil, under the Extractive Industries Transparency Initiative (EITI) extractive companies and governments disclose their respective payments and receipts, alongside a broad range of information about the governance of the sector.<sup>3</sup> Publish What You Pay, which campaigned for years to achieve these transparency and accountability measures, recognises that much more still needs to be done to make oil, gas and mineral governance truly open, accountable, sustainable, equitable and responsive to all people.

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1 Please cite this summary as IBASE, PWYP UK and PWYP International Secretariat, *Report summary – In Search of Transparency: Ending Opacity in Brazil's Extractive Sector – An action-research case study of the Minas-Rio iron ore mine*, 2021.

2 A similar United States law dating from 2010 still awaits implementation, as does a Swiss law of 2020.

3 <https://eiti.org/>

# THE STUDY

**This case study reports on an action-research collaboration between IBASE (Instituto Brasileiro de Análises Sociais e Econômicas/ Brazilian Institute for Social and Economic Analysis, <https://ibase.br>, a member of Publish What You Pay's Latin American affiliate coalition, RLIE)<sup>4</sup> and Publish What You Pay UK ([www.pwyp.org/pwyp\\_members/united-kingdom](http://www.pwyp.org/pwyp_members/united-kingdom)).<sup>5</sup> We report on using mandatory payments-to-governments data as a starting point to investigate Brazil's extractive sector and to promote transparency, public participation and accountability.**

Research took place from 2019 to 2021. Following early scoping, we focused on a single mining project: Anglo American's Minas-Rio open-pit iron ore mine in the municipality of Conceição do Mato Dentro, Minas Gerais State, and its associated tailings facility. Minas-Rio is the world's ninth largest iron ore mine, holding an estimated 1.28 billion tonnes of resources with an expected lifetime of 48 years.

In selecting Minas-Rio for study we applied five criteria: (a) significant subnational payments to government reported by the company; (b) clearly identifiable project(s) and/or subnational government entities associated with reported

payments; (c) mine location accessible from IBASE's office in Rio de Janeiro; (d) operating company within PWYP UK's main mandate (UK incorporation and/or London Stock Exchange/ LSE listing) and accessible for information requests and dialogue; (e) intrinsic importance of the mine(s) from a civil society perspective.

The full report combines fiscal analysis with discussion of the quality of federal and subnational financial management, issues of public accountability, and impacts of the mine on the local environment and on local communities' livelihoods, access to clean water, physical and psycho-social health, and other social consequences including their gender, ethnicity and other human rights dimensions. It includes a contribution from the Responsible Mining Foundation, summarising evidence-based desk research on Minas-Rio using the RMF's Mine Site Assessment Tool. The report's Postscript describes Brazil's easing of environmental licensing rules in May 2021 and reflects on issues of natural capital accounting, ecological debt and communities' right to say no to extraction.

<sup>4</sup> RLIE (Latin American Network on the Extractive Industries): <http://redextractivas.org/>

<sup>5</sup> "Action research ... seeks transformative change through the simultaneous process of taking action and doing research, ... linked together by critical reflection": [https://en.wikipedia.org/wiki/Action\\_research](https://en.wikipedia.org/wiki/Action_research)

Our findings and recommendations highlight key challenges surrounding the mine's governance and how these can and should be addressed, both for Minas-Rio and more widely across Brazil's extractive sector. The report and recommendations are intended for a wide readership: Brazilian federal and subnational government officials, extractive company officials, international organisations, and Brazilian, regional and international civil society.

To help ensure the accuracy of the case study, and to promote informed dialogue, we sent a draft version of this report for comment to the Minas Gerais State Public Prosecutor's Office, to Conceição do Mato Dentro municipality officials, to industry (Anglo American) and to civil society representatives ahead of publication. We have taken all comments received into consideration in revising the report for publication.<sup>6</sup>

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6 Anglo American's written comments on the draft are available at <http://bit.ly/3jrPUWW>

# PROJECT APPROACH AND ACTIVITIES

- ✦ IBASE commissioned an independent consultant, Dr Tadzio Peters Coelho, to undertake research, analysis, local stakeholder interviews, a field visit to the mine area and, with IBASE team members, consultations with local social movements, a non-governmental organisation and residents.
- ✦ We used Anglo American's payments-to-governments data published under UK transparency regulations and public domain data in Brazil to analyse fiscal flows between the company and its main host municipality, Conceição do Mato Dentro.
- ✦ We drew on existing research to document key impacts of mining on the local economy and public welfare, including on agricultural livelihoods. Our consultant undertook semi-structured interviews with city hall (municipal) officials, representatives of social movements and other civil society, and local residents. With IBASE he held two consultation and information exchange meetings with stakeholder groups in Conceição do Mato Dentro.
- ✦ PWYP UK requested and received a perspective on the mine from the London Mining Network, which has published a briefing on Minas-Rio.
- ✦ We wrote to Anglo American with questions arising from the company's UK payments-to-governments reporting relating to Minas-Rio and Minas Gerais State and municipalities.
- ✦ IBASE provided a brief commentary reflecting on several human rights concerns relating to Minas-Rio.
- ✦ As noted above, we accepted an offer from the Responsible Mining Foundation to provide analysis from application of its Mine Site Assessment Tool to Minas-Rio.
- ✦ Also as previously noted, we sent a draft version of this report for comment to the Minas Gerais State Public Prosecutor's Office, to Conceição do Mato Dentro municipality officials, to Anglo American and to civil society representatives and adjusted the text after receiving comments, and we added a final Postscript in May 2021.

## BRAZIL COUNTRY CONTEXT<sup>7</sup>



© 2021, Mrs Arno Peters. Map supplied by Oxford Cartographers [www.oxfordcartographers.com](http://www.oxfordcartographers.com) and adapted with permission. Map by Zoludesign / IBASE.

Brazil, the largest economy in Latin America, produced more than 1 billion barrels of oil in 2019 and holds the world's 15th largest proven oil reserves.

Brazil also has the world's sixth largest mining industry, with production and export of about 80 mineral commodities and major reserves of bauxite, iron ore, niobium, nickel and gold. It is the world's second largest producer of iron ore, with 17% of global production and five of the world's 11 largest iron ore mines, mainly under the control of the now fully privatised former state-owned company Vale. Mineral resources including oil and gas account for 2% of Brazil's GDP and a significant share of exports. Brazil has at times "reaped windfall gains from high commodity prices and from rising global demand for its natural resources"; but "regulatory challenges and corruption scandals" have "plagued the economy for decades", although these were "masked by the commodity boom". "[E]xternal risk for the economy ... results from low commodity prices, in particular [for] oil and iron ore" – OECD.

<sup>7</sup> Information sources are provided in the full report and its footnotes and references.

Brazilian social movements organised by mining-affected local populations and civil society organisations have for years criticised the negative impacts of mining and the failure of government promises to allocate receipts from mineral wealth to address such impacts. Despite much discussion about how mining can be profitable for companies, little is done to compensate producer municipalities for mining-related problems or to develop inclusive economic alternatives in anticipation of the exhaustion of finite mineral resources.

**Natural resource ownership and use:** “Mineral deposits, under exploitation or not, and other mineral resources ... for the purpose of exploitation or use, [are] a property separate from that of the soil and belong to the Union ... [P]rospecting and mining of mineral resources and the utilisation of the potentials mentioned ... may only take place ... in the national interest” – Constitution of Brazil, art. 176.

**Extractive Industries Transparency Initiative (EITI) status:** Not yet implementing.

**NRGI Resource Governance Index:** Score (oil and gas) 71/100. Rank 6/89 countries.

**NRGI country profile:** <https://www.resourceprojects.org/country/BR>

**Transparency International Corruption Perceptions Index:** Score 35/100. Rank 106/198 countries.

Population:

**211.05 million**

Real per capita GDP:

**US \$8,717.2**

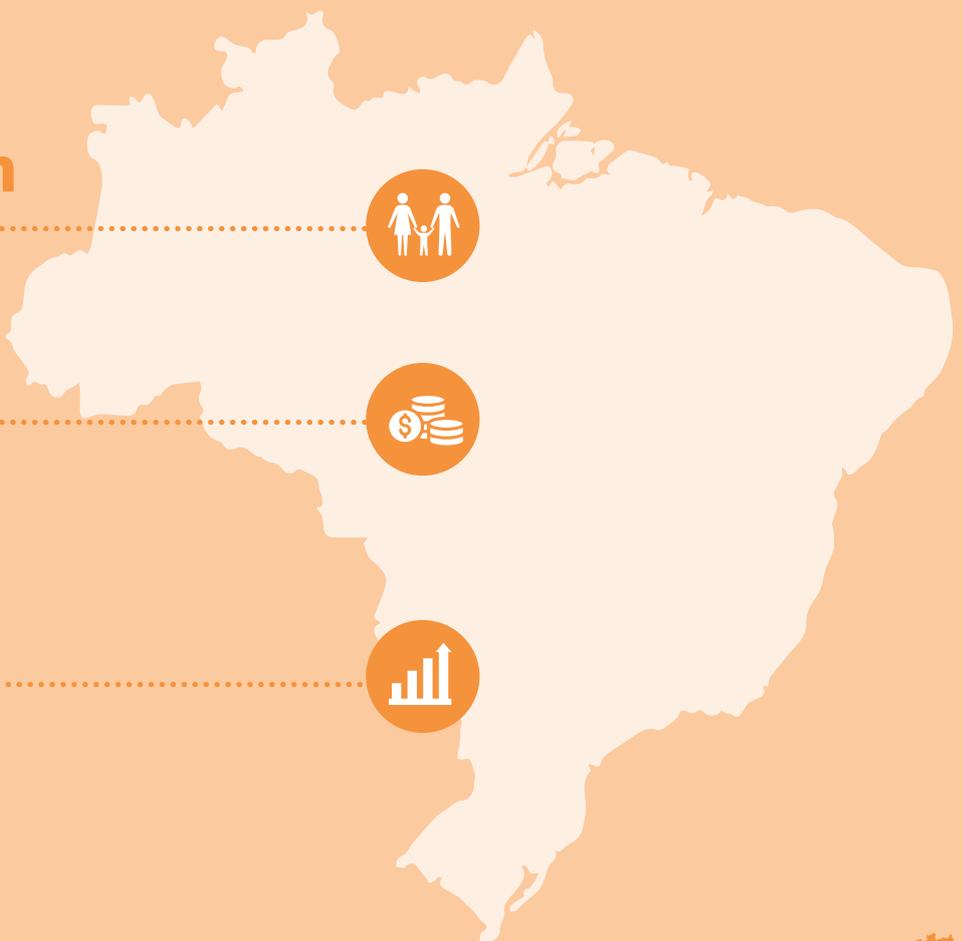
UNDP Human Development Index:

Score

**0.761/1.000**

Rank

**79/189** countries.



## MINAS-RIO AND ITS PIPELINE<sup>8</sup>



Location of the Minas-Rio mine and pipeline. Map by Zoludesign / IBASE.

### The mine

Anglo American's Minas-Rio mine and associated infrastructure comprise Brazil's fifth largest and the world's ninth largest iron ore operations, holding an estimated 1.28 billion tonnes of resources and with an expected lifetime of 48 years. In 2007/8 when Anglo American acquired the project, Minas-Rio was reported to be the world's most expensive iron ore mine. After numerous delays, production began in 2014, with the first iron ore exports the same year. The mine produced 16.8 million tonnes of ore in 2017 and has a maximum design annual capacity of 26.5 million tonnes, with staged expansion planned to 56 million tonnes per year. In 2019 the company received a licence to expand tailings dam storage of mine waste suspended in water.

The vast majority of Minas-Rio's open pit production is located in Conceição do Mato Dentro municipality (population 120,000) in Minas Gerais State, southeast Brazil. The location is approx. 160 km northeast of the state capital, Belo Horizonte. A small section of the mine, as well as the mineral processing plant and part of the tailings are sited in the adjacent Alvorada de Minas municipality. Anglo American owns (100%) of Minas-Rio, which it operates through its subsidiary Anglo American Ore de Ferro Brasil SA.

<sup>8</sup> Information sources are provided in the full report and its footnotes and references.

The tailings dam for Minas-Rio “uses a downstream construction design and ... an embankment dam structure, built using compacted imported earth-fill material ... placed in controlled layers ... as a water-retaining type of dam” (Anglo American). The tailings dam extends from Conceição do Mato Dentro into Alvorada de Minas. Rural communities located downstream from the dam in Alvorada de Minas and in another neighbouring municipality, Dom Joaquim, would be directly affected in the event of a tailings breach.

Minas Gerais State (literally “General Mines”) has at times supplied more than half the mineral production of Brazil and is the location of more than 360 tailings dams. The better quality mines are being exhausted, with investment moving to mines in Pará State.

### **The pipeline**

The 525 km Minas-Rio pipeline takes iron ore slurry (solids suspended in water) from the mine processing plant to an export facility at the costal port of Açú, from where the ore is shipped to China. The pipeline was part of the original mine project started by the Brazil-based EBX Group, owned by business mogul Eike Batista (currently in prison for his role in Brazil’s “Car Wash” corruption scandal). The world’s longest pipeline of its kind, it crosses 32 municipalities in the states of Minas Gerais and Rio de Janeiro. Construction of the pipeline caused conflict with affected municipalities and smallholders with demarcation of a 20 metre isolation strip around the pipe where no construction or farming was permitted, reportedly imposed without appropriate compensation.

The pipeline uses a system of pumps and valves to speed up or slow down the ore stream, taking four days to reach its destination at 6 km per hour. The water that carries the mineral is collected from a river in nearby Dom Joaquim municipality and has reduced the water supply to local residents. Corrosion of the pipe caused two major spills in March 2018 that discharged nearly 950 tonnes of iron ore pulp in nearby creeks and river basins. The environmental damage was found to be irreparable and resulted in the government fining the company \$50 million, plus loss of 280 days’ production and an 80% fall in annual output at the mine. Production resumed in December 2018 following replacement of 4 km of pipeline.

Anglo American reports that the mine “operates in a challenging socio-political environment and experienced an increase in social-related grievances” following the 2018 pipeline incidents, and that it has been the target of allegations including “hindering the effectiveness of protecting human rights defenders, acts of intimidation by community members, and concerns around environmental impacts”.

# KEY FINDINGS<sup>9</sup>

- ✦ There is very limited transparency in Brazil about extractive industry fiscal flows, although the online publication of mining royalty receipts (CFEM) is helpful and shows that the government can do better.
- ✦ Mining royalties are an important source of municipal income, but government entities ignore the legal requirement to disclose how royalties are allocated.
- ✦ The legally required percentage rate at which the National Mining Agency pays mining royalties to mining producer municipalities is constantly disputed and changing, but there is evidence of Conceição do Mato Dentro municipality receiving a smaller proportion of mining royalties than legally required.
- ✦ Conceição do Mato Dentro experiences economic and social costs from the presence of the Minas-Rio mine that may outweigh the benefits. And the distribution of benefits and harms appears to favour urban over rural communities and to disproportionately affect low-income households and people of colour, with especially negative impacts on local water resources and food growing.
- ✦ Subnational government in Brazil, including in Minas Gerais State and Conceição do Mato Dentro municipality, is poorly equipped to regulate and manage large-scale mining, with state and municipal government officials appearing to disagree on the benefits and costs.
- ✦ Our research indicates that Anglo American's engagement with local civil society and communities needs improvement, although the company has written to us citing in some detail its efforts to engage.
- ✦ Anglo American's environmental impact assessments, economic diversification efforts, community dialogue and resettlement plans appear inadequate from the perspective of affected communities, who experience water deficiency, airborne pollution, impaired livelihoods, economic loss, and physical and psycho-social ill-health.
- ✦ Tailings dam breach is a major fear among people downstream of Minas-Rio, especially given Brazil's history of tailings disasters and more than ever with the planned ninefold expansion of the mine's tailings capacity from 40 million to 370 million cubic metres of mineral waste.
- ✦ Project critics suspect that the company may be struggling to make the costly Minas-Rio project more financially viable, a view that the company refutes.

<sup>9</sup> Supporting evidence for points made in this report summary is provided in the full report and its footnotes and references.

# KEY RECOMMENDATIONS<sup>10</sup>

## To the Brazilian federal government

- ✦ Join and implement the Extractive Industries Transparency Initiative (EITI), with a multi-stakeholder group of representatives of government, industry and civil society to enhance natural resource governance and accountability to citizens, build trust and reputation, and reduce the scope for corruption and mismanagement.
- ✦ Make extractive industry data accessible to citizens, including disclosure of taxes paid disaggregated to company level, and publish the full text of all extractive contracts, licences, concessions and other legal agreements governing the exploitation of oil, gas and minerals.
- ✦ Reach fair and lasting agreement with municipalities on sustainable rates of mining royalties ; (CFEM) ensure that Conceição do Mato Dentro and other mining municipalities receive their legally required percentage; publish current percentage rates at which mining royalties are paid to municipalities in real time; and compensate municipalities with backdated payments for previously underpaid amounts.
- ✦ Establish and enforce mechanisms at federal, state and municipal levels to fully meet the public transparency requirement of Law No. 13,540 regarding the use of mining royalty receipts.
- ✦ Ensure that mining-affected states and municipalities have sufficient resources to provide adequate public services and for economic diversification with full public accountability; boost states and municipalities' technical capacity to manage financial flows, infrastructure development, and social and environmental impacts and needs, while ensuring that extractive companies bear prime responsibility for managing impacts.
- ✦ Protect the rights of citizens to fundamental freedoms of expression and assembly, including for people opposing mining projects.
- ✦ Require companies proposing new mining projects to undertake human rights impact assessments, including all internationally recognised human rights as a reference point; and require operators of current mining projects to undertake and publish human rights impact reports with new assessment every three years; also ensure that companies publish and implement human rights management plans to address issues identified.
- ✦ Engage constructively in United Nations negotiations for a broad and strong binding international treaty on business and human rights.

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<sup>10</sup> For the recommendations in full see the full report.

### To the Minas Gerais State government

- ✦ Establish a mechanism to fully meet the public transparency requirement of Law No. 13,540 regarding the use of CFEM royalty receipts.
- ✦ Build the institutional capacity to regulate and monitor mining operations and support municipalities in managing mining-related impacts.

### To Conceição do Mato Dentro municipality

- ✦ Publish at least once a year a report to citizens on the use of CFEM mining royalty receipts to fully meet the public transparency requirement of Law No. 13,540.
- ✦ Pilot a municipal multi-stakeholder group to address mining governance, fiscal management, and environmental, social and human rights issues, drawing on the Philippines, Peru and other subnational EITI models, to include joint decision-making on the allocation of CFEM royalty receipts and monitoring of spending.
- ✦ Demand sufficient resources from the federal government to provide adequate public services, for economic diversification with full public accountability, and for technical capacity to manage financial flows, infrastructure development, and social and environmental impacts and needs, while insisting that extractive companies bear prime responsibility for managing impacts.
- ✦ Implement effective compensatory measures for mining-affected rural, low-income and black communities and for disadvantaged groups within those communities.

### To Anglo American

- ✦ Undertake a comprehensive human rights impact assessment, including all internationally recognised human rights as a reference point, of Minas-Rio and its tailings and pipeline; publish (including in Portuguese) and implement a human rights management plan to address issues identified; repeat the exercise every three years.
- ✦ Seek the Free, Prior and Informed Consent (FPIC) of affected communities, whether indigenous or non-indigenous, at every stage of mining operations including prior to the initial decision to extract at any location and before each mine or tailings expansion.
- ✦ Implement comprehensive compensatory measures for mining-affected rural, low-income and black communities.
- ✦ Encourage the Brazilian government to join and implement the Extractive Industries Transparency Initiative (EITI) to broaden dialogue with civil society and improve sector-wide governance.
- ✦ Review the Programa Crescer (Grow Programme) local economic diversification initiative in light of the present report's findings and ensure that its benefits are significantly scaled up.
- ✦ Respond constructively to downstream communities' demands regarding resettlement out of danger from the risk of tailings dam breaches.
- ✦ Review Minas-Rio's tailings management and communications with at-risk communities in light of the present report's findings and ensure that every possible measure is taken to meet, and where feasible exceed, both the 2020 Global Industry Standard on Tailings Management and the higher standards of the 2020 civil society Guidelines for Responsible Mine Tailings Management.

- ✦ Remedy any implementation gaps in company operational-level grievance mechanisms to ensure that provision for affected individuals and communities fully meets in practice the UN Guiding Principles criteria.
- ✦ Publish and consult with the affected municipalities and communities on a plan for closing down Minas-Rio, rehabilitating the damaged environment and fully compensating affected people for harms caused during the project's lifetime.

### **To civil society in Conceição do Mato Dentro municipality, in Minas Gerais State and across Brazil**

- ✦ Advocate and campaign for the recommendations above, including for:
  - Brazil to join and implement the Extractive Industries Transparency Initiative (EITI).
  - Public disclosure of Brazil's extractive taxes, contracts and licences.
  - Transparency in the use of CFEM mining royalty receipts.
  - Sufficient income for mining municipalities to provide adequate public services and for economic diversification.
  - Public human rights impact assessments of current and proposed new mining projects.
  - Anglo American to reach satisfactory agreement on resettlement plans with affected communities, assess Minas-Rio's tailings facilities against the new Global Industry Standard and civil society Guidelines for Responsible Mine Tailings Management, and to remedy areas of risk to affected people.

- ✦ Raise public awareness of the EITI and use it as a mechanism to demand greater government and company accountability for mining in Brazil.
- ✦ Investigate the evidence and arguments that Anglo American's January 2021 letter to IBASE and PWYP UK offers about Minas-Rio<sup>11</sup> and its impacts and report on findings.
- ✦ Document direct and indirect economic, social, environmental and human rights impacts of Minas-Rio and other mining projects, with a focus on differential impacts on women/girls, men/boys, youth and people of colour, and communicate findings to mining company managers to improve the debate with the company.
- ✦ Support the right of currently and potentially affected communities to say no to mining.

### **To international financial and multilateral institutions and institutional donors**

- ✦ Seek out and fund more civil society transparency, participation and accountability initiatives directed at securing more equitable and sustainable outcomes in producer countries and subnational localities from the extraction of non-renewable natural resources.
- ✦ Encourage the Brazilian federal government to implement the EITI at federal and potentially subnational levels in Minas Gerais.
- ✦ Increase support for capacity building for civil society organisations working on extractive sector accountability.

<sup>11</sup> Anglo American's written comments on the draft report are available at <http://bit.ly/3jrPUWW>



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Front cover photo: Minas-Rio mine tailings, with mine works in the background. Photo by Marcelo Cruz.