

RELATED INITIATIVES

CHAPTER XVI

INVESTOR MINING AND TAILINGS SAFETY INITIATIVE

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1. INTRODUCTION

The Investor Mining and Tailings Safety Initiative ('the Initiative') was established following the Brumadinho tailings dam disaster that occurred at a Vale owned iron ore mine in Brazil on 25th January 2019. The Initiative, chaired by the Church of England Pensions Board and the Council on Ethics of the Swedish National Pension Funds, is supported by 112 international investors with over USD \$14 trillion

in assets under management. The Initiative aims to improve understanding and transparency related to the social and financial risk associated with tailings dams and to act to ensure that best practice and standards in the management of mine tailings are implemented. It has been successful, especially within the investor community, in raising awareness of the potentially catastrophic damage that tailings dam failure can have on communities and the environment.

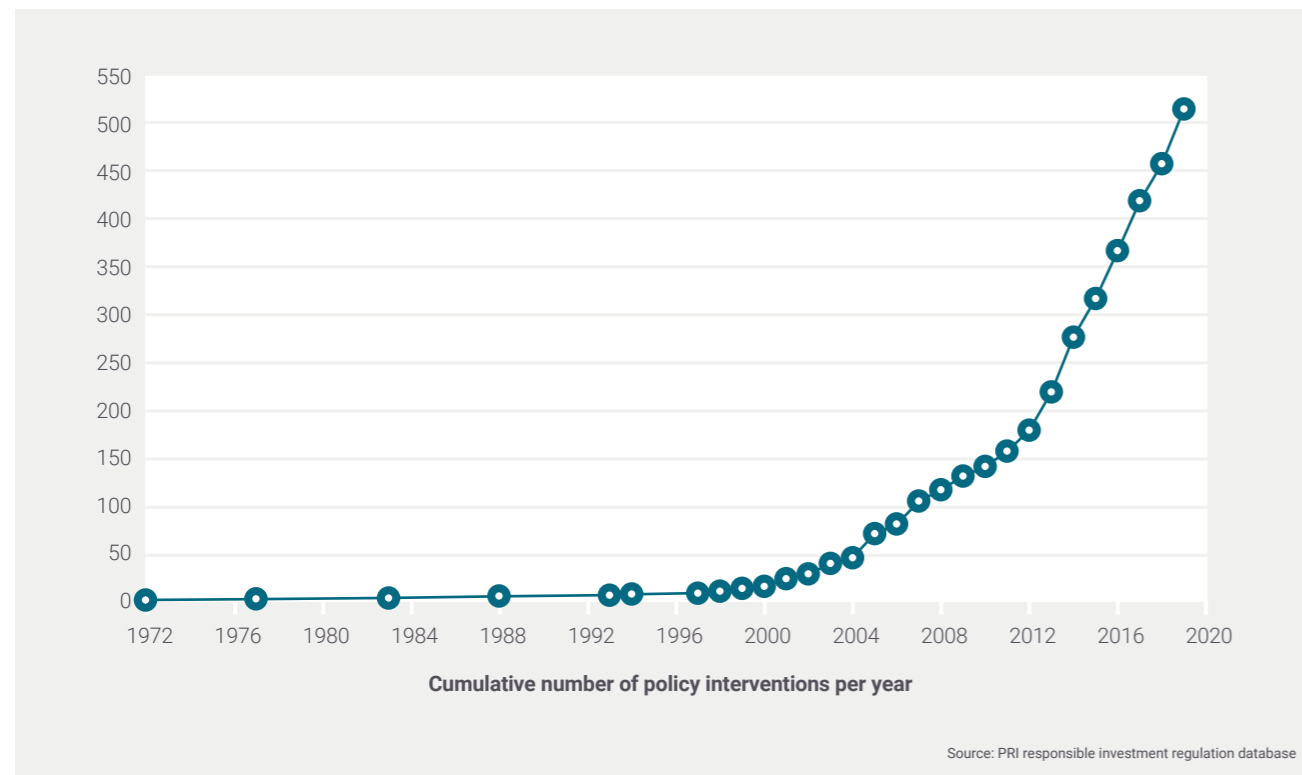


Figure 1: Global cumulative number of 'hard and soft law' policy interventions per year promoting consideration of ESG factors

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It has also invited and gathered extensive new disclosures on tailings storage facilities, and it continues to work on ways to encourage and assess safe tailings practice. This chapter provides some context in relation to the responsible investment approaches of investors more broadly, and outlines the interventions made by the Initiative in 2019 and early 2020.

2. ROLE OF THE ETHICAL/RESPONSIBLE INVESTMENT IN TAILINGS REFORM

A significant and growing proportion of investors take the view that thinking about and acting on environmental, social, and governance (ESG) considerations represents an important part of what it is to be a good long term investor. For many financial institutions, attending to these aspects of the companies they own helps them to control for risk and create competitive advantage. Academic research appears to support the view that there is a positive relationship between ESG factors and corporate financial performance (Busch *et al.* 2018), and globally there is increasing regulatory guidance indicating that ESG considerations ought to be integrated into decision making (Figure. 1)

For some investors, uncovering troubling policies, practices, or events results in divestment and exclusions, where an investor excludes a particular company from their portfolio. Standard exclusions cover companies involved in the manufacture of controversial weapons (e.g. cluster bombs, chemical and nuclear weapons) and the most carbon intensive companies (e.g. thermal coal and tar sands producers). Exclusions may also include so called 'sin stocks' such as companies that derive revenue from tobacco, gambling, and pornography. Where concerns are raised about a company that does not fall under these headings, standard practice is for investors to engage with the board of the company over a period of time, to try to seek improvements.

Some investors, including the Church of England's investing bodies, the Swedish AP Funds and Germany's Union Investments, have excluded investment in Vale (Financial Times 2019). However, the approach of the Investor Mining and Safety Initiative is one of positive engagement with the industry, recognising that good practice exists in the sector and seeking to bring influence to bear in order to improve safety practices¹.

1. Investors have long engaged with mining companies on other safety matters, for example in relation to welfare, operational health and safety, and fatalities.

Responsible investors seek improvements in the underlying companies in their portfolios, and they do this using a number of tools. These include: letters engaging directly with the Board (e.g. the Chairman, CEO and lead independent Director); face to face meetings between shareholders and Board members; proxy voting; and the filing of shareholder resolutions (where shareholders vote or raise issues to be voted on at the Annual General Meeting). Investors also seek to influence companies indirectly, such as through the development of formal shareholder expectations or assessment tools, where investors publish and support particular standards they expect to be met; and through regulatory influence, where investors seek to improve the regulatory environment.

It is relatively unusual for investors to attempt to engage with an entire sector. However, there are some examples where systemic challenges are evident, such as in relation to climate change. At some of the early investor roundtables, the Investor Mining and Tailings Safety Initiative ('the Initiative') began to develop the shared view that tailings represent a systemic challenge for the sector and for other sectors linked to mining through the supply chain. This confirmed and developed views previously expressed by GRID Arendal (Roche, Thygesen, and Baker eds. 2017) and the Church of England (Church of England Ethical Investment Advisory Group 2017), among others.

3. INTERVENTIONS

On 31st January 2019, after the official mourning period for the victims of the Brumadinho disaster ended, members of the Initiative first made a public call for new global tailings standards to be developed, based upon the consequences of failure. Investors called for the standards to be developed independently from industry and with an emphasis on public accessibility (Church of England Media Briefing 2019a). This was one of the key drivers for establishing the Global Tailings Review (GTR). It led to the Principles for Responsible Investment (PRI) becoming a co-convenor of the GTR, in conjunction with the Church of England Pensions Board and Swedish Council on Ethics as the PRI's investor representatives. During the consultation phase of the GTR, the PRI investor representatives consulted with the wider Investor Mining and Tailings Safety Initiative members to develop the PRI's input into the GTR process.

The prospect of a standard is particularly significant for investors because it presents an opportunity to drive safety and operational standards in tailings management globally, in a way that is (or should be) applicable to the whole industry. First and foremost, this may save lives, but in investment terms, will also control for environmental and social risks, while improving governance around an aspect of mining that has often lacked transparency. A high degree of exposure to tailings risk may be a factor in investment decisions. For ‘universal owners’ (investors so large and diversified they effectively own a portion of the entire market, and are therefore exposed to systemic risks), long term investors, and those with stewardship responsibilities exposed to the mining sector through e.g. passive investment or in the supply chains of other holdings, opportunities to understand, assess and mitigate risk will be welcome.

Recognising the systemic challenge posed by tailings, investors interrogated the state of corporate reporting and investor analysis on the risks and exposure to tailings in their portfolios. Consensus among investors was that while tailings may be mentioned in the risk reporting companies undertake, this fell short of the level of detail investors required. The second intervention by the Initiative was therefore to make a disclosure request of publicly listed extractive companies – 727 in total – requiring them to disclose answers to 20 questions on each tailings facility at operations they directly controlled, or where they were a joint venture partner.

Table 1. Milestones for the Initiative

Timeline	Date
Call for new global tailings standard	31 January 2019
1 st investor round table	4 March 2019
2 nd investor round table	1 April 2019
Company disclosure request	5 and 17 April 2019
3 rd investor round table	7 May 2019
Initial company response deadline	7 June 2019
4 th investor round table	10 June 2019
Establishment of Financial/Reporting Working Group	10 June 2019
Mine and Tailings Safety Summit	31 October 2019
Global Tailings Summit	25 January 2020
Joint shareholder delegations to Minas Gerais	To be determined

The 20 disclosure questions (see Table 2 below), were developed in consultation with independent technical advisors, the Secretariat of the International Council on Mining and Metals (ICMM) and four mining companies. These questions were primarily designed to elicit basic engineering and governance information, and also to assess the state of risk assessment for each facility (for example, question 19 asks whether engineering assumptions have been adjusted to take climate change into account).

4. TIMELINE

Table 1 below shows the timeline for various milestones of the Investor Mining and Tailings Safety Initiative. These include the interventions outlined in this chapter, and the various meetings that took place that enabled investors to improve their understanding of the issues, engage with industry, and coordinate the interventions. Meetings were hosted in London with some participants dialling-in remotely, each event gathering between 60 and 120 participants from a variety of disciplines under the Chatham House Rule. Attendees included investors, bankers, insurers, representatives of mining companies, engineering and geological experts, community representatives, regulators, government officials, and data experts. A financial/reporting working group was established in June 2019 with participants forming five investor institutions, which presented findings to the October 2019 Summit. This is an ongoing work-stream of the Initiative

5. THE DISCLOSURE REQUEST

The disclosure request letter, originally sent on 5 April 2019, is available online (Matthews and Howchin 2019). The detailed disclosure questions and accompanying notes are provided below in Table 2. It is notable that the letter asked companies to post answers on their website as a matter of urgency within 45 days, and to have them authorised by the Chief Executive Office, and/or the Chair of the board. The letter also attempted to close what might be called disclosure loop-holes by also requiring

disclosure of tailings dams operated by subsidiaries, partnerships and joint ventures, even if the disclosing company was not the ‘operating partner’ in the joint venture.

In all, 727 companies were approached for disclosure, and the net was cast relatively wide in relation to companies’ potential involvement in tailings². For example, we approached companies in the oil and gas sector, due to their potential involvement through tar sands operations.

Table 2. Information sought in disclosure request

Information requested	Instructions
1. ‘Tailings Facility’ Name/identifier	Please identify every tailings storage facility and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.
2. Location	Please provide Long/Lat coordinates
3. Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019
4. Status	Please specify: Active, Inactive/Care and Maintenance, Closed etc. We take closed to mean: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under Care and Maintenance is not considered closed until such time as a closure plan has been implemented.
5. Date of initial operation	(date)
6. Is the Dam currently operated or closed as per currently approved design?	Yes/No. If ‘No’, more information can be provided in the answer to Q20
7. Raising method	Note: Upstream, Centreline, Modified Centreline, Downstream, Landform, Other.
8. Current Maximum Height	Note: Please disclose in metres
9. Current Tailings Storage Impoundment Volume	Note: (m ³ as of March 2019).
10. Planned Tailings Storage Impoundment Volume in 5-years-time.	(m ³ as planned for January 2024.)

2. We approached companies with the following GICS sub-industry categories: Oil and Gas Drilling, Oil and Gas Exploration and Production, Integrated Oil and Gas, Coal and Consumable Fuels, Fertilizers and Agricultural Chemicals, Aluminium, Diversified Metals and Mining, Copper, Gold, Precious Metals and Minerals, Silver, Steel, and Construction Materials. We also incorporated some additional companies at the request of investor participants in the Initiative.

Information requested	Instructions
11. Most recent Independent Expert Review	(Date). For this question we take 'Independent' to mean a suitably qualified individual or team, external to the Operation, that does not direct the design or construction work for that facility.
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?	(Yes or No). We take the word 'relevant' here to mean that you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. More information can be provided in your answer to Q.20.
13. What is your hazard categorisation of this facility, based on the consequence of failure?	
14. What guideline do you follow for the classification system	
15. Has this facility, at any point in its history, failed to be confirmed or certified as stable, or experienced notable stability concerns, as identified by an independent engineer (even if later certified as stable by the same or a different firm).	(Yes or No). We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such, and because remedial action may have been taken, a 'Yes' answer may not indicate heightened risk. Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping etc. If yes, have appropriately designed and reviewed mitigation actions been implemented? We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/information may be supplied in your answer to Q20.
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Note: Answers may be 'Both'.
17. Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of catastrophic failure been undertaken and to reflect final conditions? If so, when did this assessment take place?	Note: Please answer 'yes' or 'no', and if 'yes', provide a date.
18. Is there: a) a closure plan in place for this dam, and b) does it include long term monitoring?	Please answer both parts of this question (e.g. Yes and Yes).
19. Have you, or do you plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g. over the next two years?	(Yes or No).
20. Any other relevant information and supporting documentation.	Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports etc.

6. RESULTS OF THE DISCLOSURE REQUEST

As of March 2020, just under half of the companies approached had responded, with 152 companies confirming that they have tailings storage facilities (this includes both operator and joint venture interests). The 152 companies represent approximately 83% of the publicly listed mining industry by market capitalisation, and include 45 of the 50 largest companies.

The Church of England Pensions Board has maintained a public record of the companies contacted, and of those that have – and have not – responded.³ Robeco, a Dutch asset management firm, have coordinated an engagement programme among investors to encourage disclosure from laggards.

7. THE PORTAL

These disclosures led to the third intervention, which was the creation of a public and free to use global tailings data portal. The Initiative formed a partnership with the Norwegian Foundation, GRID Arendal, the University of Sydney and UNEP to ensure that the new disclosures are gathered, standardised and presented in an accessible format.

The database was launched as the [Global Tailings Portal](#),⁴ in January 2020, on the eve of the first anniversary of the Brumadinho disaster. It contains detailed information on more than 1,700 tailings storage facilities around the world. Previously, very little information about these facilities was publicly available, and the data that were available were disclosed inconsistently across company annual reports, websites, and regulatory filings. See Franks *et al.* (this volume) for some initial findings from these disclosures.

Investors plan on using the portal for ESG due diligence, to complement the assessment of current and prospective investments. We expect the Portal and the Global Industry Standard on Tailings Management ('the Standard') to be mutually supportive, and that the portal could serve as a repository of relevant disclosure information required by the Standard. The portal could also provide a tool to monitor the progress of adoption of the Standard.

The next steps in the development of the Global Tailings Portal involve the establishment of a board

and governance structure to help further define the role and mission of the portal. At present there are plans to include information on closed and legacy sites to support monitoring and remediation, a system to identify dangerous dams, and links to an alert system.

8. LOOKING FORWARD

The Initiative continues to meet and engage with the sector. Most recently a Global Tailings Summit was convened by the Initiative on the anniversary of the Brumadinho disaster. At the Summit, a delegation of members was announced that will visit mine sites and communities in Brazil. The voice of community members from affected areas in Brazil has been a regular feature of the Initiative's meetings, and this delegation is a positive response to their invitation for investors to 'come and see'.

The Initiative's co-chairs continue to support the GTR as co-convenors on behalf of PRI, because the Standard is a centrally important project that will drive good practice and good governance. There can be no single solution to the kind of challenges that tailings facilities raise. There are human, engineering, environmental, economic and regulatory factors at work. This is all the more reason for all involved to continue to work towards safer tailings.

At recent meetings, the Initiative has also considered 'Investor Expectations' on tailings management, and has called for a global independent monitoring station to be established with the capacity to provide a 24/7 alert system along the lines of those established for the shipping and aviation sectors. Investors are considering how they can support improved reporting and the provision of insurance for tailings facilities. The Initiative has also suggested the need for a systematic identification and removal of the most dangerous tailings facilities.

All of these various activities are in the fascinating space where long term commercial and investor initiatives overlap with the public good – the common good. It is in society's interest to have more transparent and timely information on large structures that can pose risks to people and the environment. It is tragic that it takes such a catastrophe to focus minds and create the urgency that we hope can begin to make tailings facilities safer.

3. See <https://www.churchofengland.org/investor-mining-tailings-safety-initiative>

4. See <http://tailing.grida.no/>

KEY MESSAGES

1. A coalition of 112 international investors with over USD \$14 trillion in assets under management was established in 2019 to improve understanding and transparency related to the social and financial risk associated with tailings dams.
2. Investors are increasingly scrutinising company performance on environmental, social, and governance (ESG) criteria. Tailings storage facilities have implications for all three 'ESG' pillars.
3. Investors have taken the view that tailings represent a systemic challenge for the mining sector and for other sectors linked to mining through the supply chain
4. The Investor Mining and Tailings Safety Initiative has made a number of interventions, including calling for a Global Tailing Standard, asking for improved disclosure from 727 extractive companies, and collating and organising those disclosures in an accessible database: The Global Tailings Portal.
5. The response to the disclosure request has been positive. As of March 2020, 152 companies have confirmed that they have tailings storage facilities (this includes both operator and joint venture interests). The 152 companies represent approximately 83% of the publicly listed mining industry by market capitalisation, and includes 45 of the 50 largest companies.
6. The Initiative continues to work for safer, and more well understood tailings facilities. It is pursuing projects on insurance and disclosure, tailings monitoring, and the removal of the most dangerous dams.

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