

RepRisk Special Report

The Most Controversial Projects of 2014

Foreword from the CEO

I am pleased to announce the release of our Most Controversial Projects Report (MCP Report), which focuses on the projects – such as mines, ports, factories, and travel and leisure complexes – that were most exposed to environmental, social and governance (ESG) risks in 2014.

The MCP Report illustrates the kind of ESG-related risk incidents that can have an impact on project finance, underwriting, investment and supplier-related activities — and lead to potential reputational, compliance and financial risks.

The report is compiled from RepRisk's dynamic ESG risk analytics and metrics and is based on information that is screened, analyzed, and quantified daily from a wide range of publicly-available, third-party sources.

Currently, RepRisk's ESG Risk Platform covers over 12,000 projects that are linked to ESG-related risk incidents. This number increases daily as new information is captured and analyzed. As our clients have shown increasing interest in our coverage of projects, the MCP Report will now become an annual feature on RepRisk's calendar of reports.

We hope you find the report useful and interesting. Our aim is to provide transparency and increase awareness of ESG issues – and to encourage corporations to systematically take into account such issues in their risk management strategies and processes.

Philipp Aeby CEO, RepRisk AG

About RepRisk

RepRisk is a leading business intelligence provider specializing in dynamic environmental, social and governance (ESG) risk analytics and metrics.

On a daily basis, RepRisk systematically screens big data from a broad range of open intelligence sources in 15 languages in order to identify, filter, analyze and quantify ESG risks (such as environmental degradation, human rights abuses and corruption) related to companies, projects, sectors and countries. This external perspective provides valuable insight into whether a company's policies, processes and commitments are consistently translating into performance.

Since 2006, RepRisk has built and continues to grow the most comprehensive ESG risk database that serves as a due diligence tool and early warning system in risk management, compliance, investment management, corporate benchmarking and supplier risk. The database currently includes risk profiles for over 50,000 private and publicly-listed companies and 12,000 projects as well as for every sector and country in the world.

Headquartered in Zurich, Switzerland, RepRisk serves clients worldwide including global banks, insurance companies, investment managers, and corporates, helping them to manage and mitigate ESG and reputational risks in day-to-day business.

RepRisk provides the transparency needed to enable better, more informed decisions. To learn more, visit www.reprisk.com.

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Overview and Ranking

Throughout 2014, RepRisk systematically screened big data from a broad range of public sources in 14 languages in order to identify, filter, analyze and quantify environmental, social and governance (ESG) risks related to companies, projects, sectors and countries.

Our Most Controversial Projects (MCP) Report outlines the ten projects that had the highest Reputational Risk Index (RRI)¹ in 2014 – and therefore, the highest exposure to ESG risks. The projects are based in North and South America, Eurasia, Asia and Australia, and span the extractive, leisure, industrial transportation and utility sectors.

According to the International Labor Organization, an estimated 2.3

million people die every year from work-related accidents and diseases, and over 300 million non-fatal accidents take place annually. Such accidents not only expose a company to personal injury and compensation claims, but also to productivity losses, remedial construction costs, retraining costs, and loss of business opportunities.

Out of the ten projects ranked in the MCP Report 2014, five are related to major workplace disasters caused by hazardous working conditions, which subsequently led to hundreds of deaths and injuries as well as widespread environmental pollution. In most of the incidents highlighted in the Report, workers at the sites had warned management in advance of the

potential dangers, and accidents then occurred because the company failed to take action. Some companies cited in the Report were also accused of trying to cover up the causes of the accidents.

Although some other projects in 2014 had a higher ranking than those highlighted in this report, we have chosen to exclude those that have been completed or are now defunct. The excluded projects are listed below the chart.²

Most Controversial Projects of 2014

MCP 2014 Ranking	Project Name	Peak RRI in 2014	Sector	Country
#1	Kunshan Zhongrong Metal Plating Factory	83	Automobile and Parts	Korea
#2	Buenavista del Cobre Mine	75	Mining	Mexico
#3	Soma Komur Isletmeleri Mine	65	Mining	Turkey
#3	Abbot Point Port Expansion	65	Industrial Transportation	Australia
#4	Mauna Ocean Resort	63	Travel and Leisure	Korea
#5	2022 FIFA World Cup	62	Travel and Leisure	Qatar
#6	Mount Polley Mine	61	Mining	Canada
#7	Qingdao Port	60	Industrial Transportation	China
#7	Moscow Metro	60	Industrial Transportation	Russia
#8	Dan River Steam Station	58	Utilities	United States of America

¹ The RRI is RepRisk's proprietary risk metric that quantifies a project's exposure to ESG risks. See methodology on page 13 for more information.

² Excluded projects: Sewol Ferry, Korea, RRI: 91; 2014 FIFA World Cup, Brazil; RRI: 79; Sochi 2014 Winter Olympics, Russia, RRI: 76; Rana Plaza, Bangladesh, RRI:65; MS Costa Concordia, Italy, RRI: 58.

Kunshan Zhongrong Metal Factory

Sector: Automobiles and parts; Location: China; Peak RRI: 83

The Kunshan Zhongrong Metal Plating Factory in China, owned by Zhongrong Metal Products Co (Zhongrong Metal), is ranked first in our MCP Report 2014 due to a massive explosion on August 2, 2014 that killed over 70 workers and injured more than 180 others. Zhongrong Metal Products, a subsidiary of Formosa International Enterprises, is subcontracted by Citic Dicastal Wheel Manufacturing to supply wheels to General Motors, Volkswagen and Mitsubishi Motors.

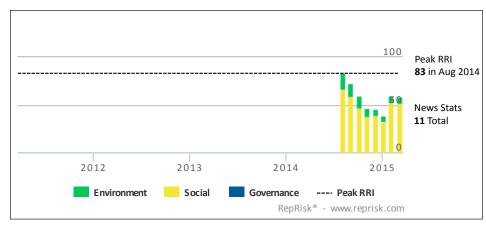
Investigators claimed that the blast, which tore two large holes in the walls of the factory, had been caused by a spontaneous combustion of metal dust that had accumulated on the premises.

The authorities accused the company of failing to prevent the build-up of aluminum dust at the factory and detained five Zhongrong executives for questioning. Apparently, between 2009 and 2012 there had been several other factory fires in China that had been similarly caused by the spontaneous combustion of metal particles.

Allegedly, there had been another dustrelated fire at the Kunshan Zhongrong factory two months before the August 2014 explosion, and the company had repeatedly ignored warnings from local work safety authorities about the risks associated with metal dust. Zhongrong Metal had also been criticized for environmental and safety issues related to its waste gas and water discharges. Apparently, Zhongrong Metals had not purchased work accident insurance and high-risk industry insurance for its employees.

The NGO China Labor Watch claimed that General Motors and its subsidiary General Motors China were partly responsible for the accident as the

RepRisk Index (RRI) Trend of Kunshan Zhongrong Metal Factory



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Kunshan Zhongrong Factory was their second-tier supplier and they should have helped ensure safe working conditions. The NGO described the factory as being in a "dilapidated state", and claimed it did not meet the necessary safety standards.

Factory staff also complained about long working hours, with one worker claiming that employees had to work a minimum of 12 hours a day.

At the end of August, the Chairman, General Manager, and Production Manager of Zhongrong Metal were arrested for their roles in the accident.

On December 30, an official report by the Chinese State Administration of Work Safety, confirmed that the final death toll from the accident had reached 146.

At the time of writing, 15 officials of the Kunshan city government were facing prosecution in relation to the accident, together with three of the Zhongrong Metal executives arrested in August.

Top ESG issues linked to Kunshan Zhongrong Metal Factory

- Occupational Health and Safety Issues
- **Violation of National Legislation**
- **Poor Employment Conditions**
- Waste Issues
- Impacts on Communities

Sector: Mining; Location: Mexico; Peak RRI: 75

The Buenavista del Cobre Mine in the Mexican state of Sonora, also known as the Cananea Mine, ranks second on our MCP 2014 Report due to a spill of 40,000 cubic meters of sulfuric acid into the Rivers Sonara and Bacanuchi on August 6, 2014. The mine is owned by Grupo Mexico through Southern Copper Corporation and is operated by Buenavista del Cobre SA.

The spill reportedly deprived 20,000 people of water, destroyed crops and cattle, and contaminated wells and soil. Greenpeace Mexico estimated that it would take up to 20 years to decontaminate the area.

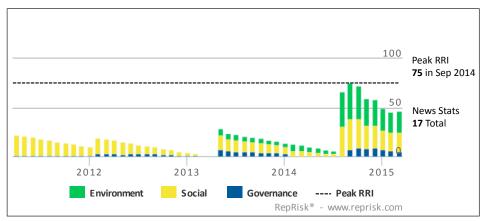
The company's claim that the accident had been caused by an "unusual amount of rain," was rejected by Mexico's Ministry of the Environment, who described the incident as the "worst environmental disaster in the country's mining history." Mexico's environmental protection agency, Profepa, then filed charges against Buenavista del Cobre SA for violating environmental laws and for possible negligence in the handling of hazardous substances.

In September, Grupo Mexico finally admitted that a defective pipe seal had caused the accident.

However, later that month, another toxic spill from the Cananea Mine into the Bacanuchi River prompted the Sonora State Civil Protection Agency to announce it was severing its relationship with Buenavista del Cobre SA.

The National Miners' Union then accused Grupo Mexico of violating human rights by dismissing 1,200 miners who had been on strike at the mine. The company was also accused of denying health services to retired miners, and medical attention to

RepRisk Index (RRI) Trend of Buenavista del Cobre Mine



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workers who had been contaminated by the company's operations.

At the beginning of November, the mayors of the municipalities affected by the spill accused Grupo Mexico of blackmailing them into signing a statement falsely confirming that a team of 1,200 workers from companies including M3, COESIN, Ocitrimix, Tierra Caliente, Gluyas, ICCSA and McDesert had almost completed the clean-up of the 250-kilometer stretch of river that had been contaminated. The mayors claimed, however, that the company had done little to remedy the situation.

In December, local residents staged a protest in response to Grupo Mexico's decision to stop the provisional water supply arranged following the leak. They further claimed that had not received any money from the USD 148 million compensation fund set up by the company, and there were rumors that Grupo Mexico had falsified the data and that the August spill was greater than the official figure. At the end of December, a representative of the National Miners' Union warned that the mine's tailings dam could completely collapse at any moment and destroy the villages that house 25,000 people.

Top ESG issues linked to Buenavista del Cobre Mine

- .. Impacts on Ecosystems and Landscapes
- 2. Local Pollution
- 3. Impacts on Communities
- 4. Violation of National Legislation
- 5. Human Rights Abuses and Corporate Complicity

Soma Komur Isletmeleri Mine

Sector: Mining; Location: Turkey; Peak RRI: 65

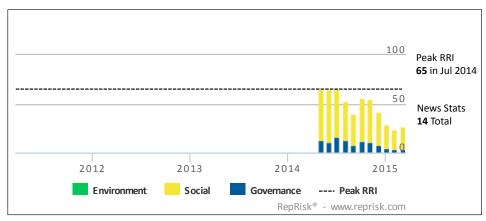
The Soma Komur Isletmeleri Mine (Soma Mine) in Turkey is ranked third on the MCP 2014 Report due to an explosion on May 13, 2014 that caused 301 deaths. The mine is operated by Soma Komur Isletmeleri AS (Soma Mining) and owned by Soma Holding. At first it was thought that a transformer had exploded and had subsequently caused a fire, however, other reports alleged a spontaneous combustion of coal had caused the accident. In the immediate aftermath of the accident, up to 274 miners were confirmed dead and a further 120 were trapped underground. The final death toll was put at 301 and the autopsies showed that carbon monoxide poisoning had caused 85 percent of the deaths.

Following the accident, workers accused the mine owners of "operating in a culture of bullying and cost cutting." Soma Mining was also denounced for using faulty equipment and of hiding serious safety issues during inspections. Police subsequently detained 25 individuals, including the CEO and the Operations Manager of the company, accusing them of negligence leading to multiple deaths and injuries.

In July, Soma Mining was accused of falsifying records of gas measurements at the mine. Allegedly, hard copies of the operator's gas measurement logs indicated that there should have been no cause for alarm on the day of the accident. However, digital readings recorded in the mine during the same period reportedly showed high levels of carbon monoxide.

In October, a report commissioned by Turkish Public Prosecutors blamed the disaster on "negligent practices and complete disregard for worker safety." Apparently, miners had continued to work despite excessively high temper-

RepRisk Index (RRI) Trend of Soma Komur Isletmeleri Mine



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atures and fluctuating carbon monoxide readings during the three months leading to the accident. The report also found that safety records had been repeatedly falsified, gas and carbon monoxide sensors had been broken or improperly calibrated, and there had been no evacuation plans or compulsory health and safety training for workers. The company was also criticized for reportedly failing to provide proper gas masks or a refuge chamber in the mine.

The IndustriALL Union claimed that severe negligence by Soma Mining, Turkish Coal Enterprises and Turkish government agencies had led to a tragedy that could have been prevented.

In November, Turkish prosecutors sought first-degree murder charges and 301 consecutive life sentences for the CEO and seven senior officials of Soma Holding. Up to 20 years in prison were sought for another eight Soma Mining employees accused of negligent homicide.

Top ESG issues linked to Soma Komur Isletmeleri Mine

- Occupational Health and Safety Issues
- 2. **Violation of National Legislation**
- Fraud
- Corruption, Bribery, Extortion and Money Laundering
- **Forced Labor**

Abbot Point Port Expansion

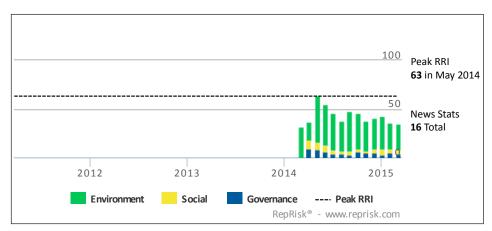
Sector: Industrial Transportation; Location: Australia; Peak RRI: 63

A surging energy demand from Asia is driving the construction of liquefied natural gas terminals and coal terminals on Australia's northeast coast. The expansion of one such terminal, the North Queensland Bulk Ports terminal at Abbot Point, drew severe criticism in 2014 and has resulted in the Abbot Point Port Expansion being ranked in joint third place in the MCP 2014 Report. A consortium comprised of Adani Group, North Queensland Bulk Ports and GVK Hancock is overseeing the construction of the project. Reportedly, the project would produce about three million cubic meters of dredged debris, which would be dumped on the seabed near the Great Barrier Reef. The Reef is designated as a World Heritage Site and is home to over 600 types of coral and 1,625 species of fish, as well as other marine animals.

Greenpeace and other environmental groups warned that the project will negatively impact marine life as well as Australia's fishing and tourism industry, and Australia's Greens Party called on the Australian government to revoke the license. Meanwhile, UN experts, the Australian Institute of Marine Science, and the Australian Conservation Foundation warned that even apart from the waste issues, the dredging activities alone would endanger coral and seagrass. Furthermore, the North Queensland Conservation Council began a court battle to stop the Abbot Point expansion.

BlackRock also flagged the environmental risks and warned that operating near the Reef might pose high reputational risks and potential loss of a social license to operate. The Great Barrier Reef Marine Park Authority estimated that the number of ships crossing the reef would increase by 250 percent in the next 20 years, and warned that this would severely harm marine life.

RepRisk Index (RRI) Trend of Abbot Point Port Expansion



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In September, the construction consortium suggested dumping the dredging waste onshore instead of on the Great Barrier Reef. However, Australia's Green Party warned that this alternative would still contribute to climate change, as the project would increase coal transportation.

In October, the Rainforest Action Network (RAN) called on international banks to stop financing the Abbot Point Coal Terminal. Following protests from Friends of the Earth and Fight for the Reef, Deutsche Bank and HSBC decided to withdraw their investments in the Abbott Point Port Expansion.

In November, there were allegations that dredging activities were already severely damaging the Reef and UNESCO warned that it might include the Great Barrier Reef on its list of World Heritage Sites in Danger.

Following criticism from several NGOs, including ATTAC France, Société Générale also announced in December that it was withdrawing from the Alpha Coal project, which includes the Abbot Point Port Expansion.

Top ESG issues linked to Abbot Point Port Expansion

- Impacts on Ecosystems and Landscapes
- 2. Waste Issues
- 3. **Local Pollution**
- 4. Global Pollution (Including Climate Change)
- Impacts on Communities

Mauna Ocean Resort

Sector: Travel and Leisure; Location: Korea; Peak RRI: 63

The Mauna Ocean Resort in Gyeongiu, South Korea, is fifth in our MCP 2015 Report due to an accident at the resort's gymnasium on February 17, 2014, that killed at least ten people and injured more than 100. The resort includes hotel facilities and a golf course, and is operated by Mauna Ocean Development.

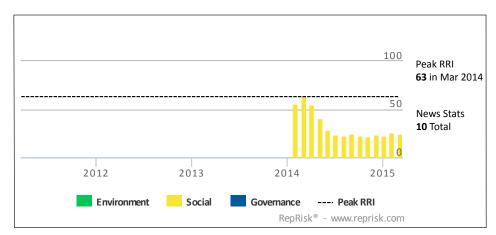
Allegedly, the roof of the gymnasium caved in while more than 560 first-year college students were attending a freshmen orientation event. Fire services blamed the collapse on the weight of snow on the roof of the building, leading police to question why the roof had not been cleared following a severe snowfall on the day of the accident. Although many students were able to escape, some became trapped under the debris. The weather conditions also hampered the rescue work.

South Korea's National Forensic Service launched an investigation to determine the cause of the accident and allegedly discovered that the gymnasium had been built in only 75 days by Songwon Construction, a sub-contractor of Kolon Construction, which is part of the Kolon Global Corporation. There were also claims that the gymnasium had not had an independent safety inspection since 2009.

The authorities then claimed that the building had been used for unauthorized purposes: although the building had only been given a permit for use as a sports facility, investigations revealed that the gymnasium had in fact been used as a multi-use facility for events such as orientations and concerts.

Experts were of the opinion that the modern, pre-fabricated building had been made of flimsy materials and had been poorly constructed. There were also claims that the building had not

RepRisk Index (RRI) Trend of Mauna Ocean Resort



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been properly equipped for the heavy lighting system that had been installed. Following investigations, it was alleged that the construction blueprints had not been followed, that the ceiling and pillars had not been properly connected, and that the recommended construction materials had not been used.

South Korean police then conducted search and seizure operations against Mauna Ocean Resort, as well as its operator, constructor, and building suppliers for possible safety violations in connection to the collapse. The police announced they would take legal action against 20 parties who were held responsible for the accident and issued arrest warrants for executives of Mauna Ocean Resort on grounds of negligent manslaughter.

In September, the Daegu District Court handed out various prison sentences to 13 executives and employees of Mauna Ocean Resort, as well as executives of the construction companies that built the complex.

Top ESG issues linked to Mauna Ocean Resort

- 1. Impacts on Communities
- 2. Products (Health and Environmental Issues)
- 3. Violation of National Legislation

Sector: Travel and Leisure:

Sector: Travel and Leisure; Location: Qatar; Peak RRI: 62

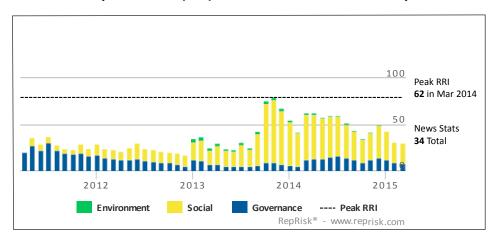
During 2014, the 2022 World Cup to be hosted by Qatar faced widespread criticism for the allegedly "inhumane" working conditions of around 1.4 million migrant workers who were building the facilities for the event. There were repeated reports of workplace accidents caused by dangerous working conditions and lack of safety equipment, as well as allegations that workers had died from heart failure after being forced to work in temperatures that reached 50 degrees centigrade.

In May, claims by The Guardian newspaper that workers were dying at the rate of one per day, triggered an official investigation by the Qatari authorities. The investigation showed that 430 Nepalese workers and 567 Indian workers had died between January 2012 and April 2014 on construction sites for the 2022 event. The International Trade Union Confederation estimated that up to 4,000 laborers working on the infrastructure for the tournament could die before the 2022 completion date.

In July, the Qatar Foundation highlighted the role of corrupt recruitment agencies in the workers' country of origin, who allegedly charged exorbitant fees, demanded kickbacks and used unfair practices that exposed workers to debt bondage and forced labor. The Foundation warned that some of the labor practices violated the ILO Conventions and Qatari national law. There were also claims that 90 percent of the salaries of the North Korean workers working on Qatar's World Cup facilities was expropriated by North Korean authorities.

During 2014, construction and engineering companies including Carillion, Hochtief, Bilfinger, Siemens, Bouygues and Vinci were accused of benefiting from the exploitation of workers, and in October, Amnesty International

RepRisk Index (RRI) Trend of 2022 FIFA World Cup



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claimed that Qatar Petroleum, Hyundai Engineering & Construction and OHL were subcontracting work for the 2022 World Cup construction projects to companies that allegedly exploited migrant laborers.

Allegations of corruption concerning the 2022 World Cup also continued throughout 2014. In March, UK Members of Parliament called on the Fédération Internationale de Football Association (FIFA) to strip Qatar of the event after an investigation by the Daily Telegraph newspaper revealed that Jack Warner, the former vice-president of FIFA, and his family members had been

paid almost USD 2 million by Kemco, a company owned by the former executive committee member for Qatar, shortly after the Gulf state was awarded the tournament. There were also claims that the Qatari former president of the Asian Football Confederation had channeled up to USD 5 million to FIFA officials to help Qatar win the bid. The US Treasury Department also linked the event to terrorism by claiming that the former President of the Qatar Football Association had facilitated transfers worth USD hundreds of thousands to Al Qaeda and its affiliates.

Top ESG issues linked to 2022 FIFA World Cup

- Human Rights Abuses and Corporate Complicity
- 2. Poor Employment Conditions
- 3. Occupational Health and Safety Issues
- Forced Labor
- 5. Corruption, Bribery, Extortion and Money Laundering

Mount Polley Mine

Sector: Mining; Location: Canada; Peak RRI: 61

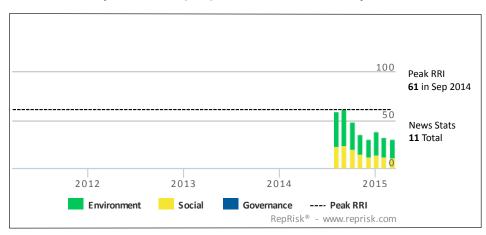
The Mount Polley copper and gold mine, owned by Imperial Metals Corporation (Imperial Metals) in the Cariboo District of British Columbia in Canada, entered the news in the summer of 2014 when the dam of it tailings pond ruptured. The accident, which occurred on August 4, 2014, caused around 17 million cubic liters of water and 8 million cubic meters of mining waste to leak into the lakes of Polley and Quesnel. NGOs claimed that the amount of water released was equivalent to about 2,000 Olympic-sized swimming pools and the accident was described as the worst environmental catastrophe in Canadian mining history.

The authorities immediately banned the use of water from the lakes due to fears that the tailings material could include harmful chemicals such as arsenic, mercury, and sulfur. The ban at first included water from Quesnel Lake, Polley Lake, Hazeltine Creek and Cariboo Creek, but was then widened to include the entire Quesnel and Cariboo river systems right up to the salmon-bearing Fraser River.

Concerns were raised about the long-term damage to livestock and wild animals, and the director of the Watershed Watch Salmon Society said that the chemicals contained in the tailings waste could have both short-term and long-term impacts on aquatic life. He further highlighted the spill's potential impact on about 1.5 million sockeye salmon that were expected to return to the Quesnel Lake system.

British Columbia Ministry of Energy and Mines then issued a pollution abatement order to the Imperial Metals subsidiary, Mount Polley Mining, and warned that the company would have to pay for any mistakes. The Ministry of Environment in British Columbia also ordered Imperial Metals to submit a

RepRisk Index (RRI) Trend of Mount Polley Mine



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preliminary environmental impact assessment for the accident, as well as an action plan to stop the release of tailings by August 13, 2014. Allegedly, the Ministry of Environment had repeatedly warned Imperial Metals about the Mount Polley Mine and a previous foreman of the company had also raised concerns about the dam.

For some time, the Tahltan First Nation elders, known as the Klabona Keepers Elders Society, had been opposing mining activities by Imperial Metals in the area known as the Sacred Headwaters, which is near the site where the rupture occurred. On August 8, they blocked ac-

cess to Imperial Metals' Red Chris Mine, due to fears of a similar tailings dam rupture. The Neskonlith Indian Band then issued an eviction notice against Imperial Metals on the grounds that the company had failed to protect the land and waters of their territory.

The Ministry of Environment is currently overseeing the clean-up efforts in Cariboo, but there are fears that the remedial work could take years.

Top ESG issues linked to Mount Polley Mine

- Impacts on Ecosystems and Landscapes
- 2. Local Pollution
- 3. Waste Issues
- 4. Impacts on Communities
- 5. Violation of National Legislation

47 Qingdao Port

Sector: Industrial Transportation; Location: China; Peak RRI: 60

At the end of May 2014, Qingdao Port in Shandong, China, found itself at the center of an alleged metal financing fraud. The Chinese authorities launched an investigation following suspicions that a private metals trading firm, Decheng Mining, a subsidiary of Dezheng Resources Holdings, had used fake receipts to repeatedly mortgage commodities stored at the port, which is operated by Qingdao Port International.

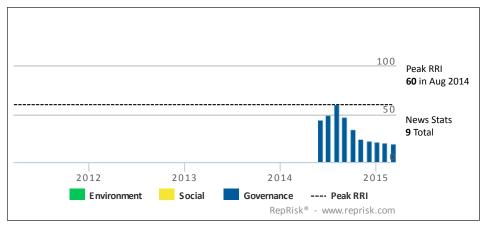
There were allegations that Decheng Mining and Dezheng Resources had illegally pledged the same stockpiles of commodities to secure multiple loans amounting to CNY 6.67 billion (USD 1.1 billion) from 17 banks. It was alleged that the banks held warehouse receipts for around 300,000 tons of aluminum ingots, although the port was storing only 100,000 tons.

Citic Resources Holdings reported that over 123,000 metric tons of aluminum, worth approximately USD 50 million, had gone missing from the port. Citic's commodities were allegedly stored at the port under a sales partnership with Dezheng's affiliate, Hongtu Logistics, managed by Qingdao Hengtong Import and Export. Foreign companies including HSBC, Citigroup, Mercuria Energy Trading, and Citic Resources Holdings, estimated that their exposure to the fraud would amount to over USD 880 million.

Qingdao Port and the warehouse operators including GKE, CWT, Pacorini Metals, and North European Marine Services, were criticized for failing to detect irregularities in the warehouse receipts.

The scandal had allegedly come to light following the arrest of the owner of Dezheng Resources in late April 2014, in relation to a corruption probe involving a government official in Xining, Qinghai

RepRisk Index (RRI) Trend of Qingdao Port



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province. Dezheng Resources was cofounded by Jiaxin Properties and Shanghai Maide Economic Development.

The Qingdao Port scandal resulted in multiple lawsuits involving cross-country jurisdictions. A Citic subsidiary sued Qingdao Port International and its parent, Qingdao Port Group, for USD 108 million in connection to the fraud. Standard Chartered and HSBC also filed claims against the chairman of Dezheng Resources and his overseas financing vehicle, Zhong Jun Resources, in relation to the scandal.

ABN AMRO and Glencore's Pacorini Logistics also took legal action concerning the case, and CWT Commodities reported that it had also been affected. ABN AMRO also took legal action against Citic Resources' subsidiary, Citic Australia

Commodity Trading, for CNY 1 million (USD 162,000). South Africa's Standard Bank's estimated that its exposure to the fraudulent financing arrangements was around USD 167 million.

In June 2014, a subsidiary of Shanxi Coal International Energy sued several Dezheng affiliates, including Decheng Mining and Yida Mining, at the Shanxi Superior People's Court for CNY 1.1 billion (USD 178.3 million), in payment for commodities that had been stored at Qingdao Port.

Top ESG issues linked to Qingdao Port

- 1. Fraud
- 2. Violation of National Legislation

#7 Moscow Metro

Sector: Industrial Transportation; Location: Russia; Peak RRI: 60

On July 15, 2014, 23 people died and more than 160 people were seriously injured as a result of a train derailment in the Moscow Metro. The accident, which was said to be "one of the worst" metro crashes ever, occurred in the morning rush hour between Slaviansky Boulevard and Victory Park stations, reportedly due to a power surge.

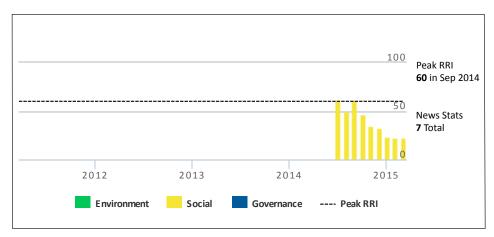
Concerns were raised about the quality of construction work by Engeocom and its subcontractor, Spetstekhrekonstruktsiya. The companies had been contracted to install railroad switches on the metro line between Slaviansky Boulevard and Victory Park stations, and had finished their work one day before the derailment. There were allegations that the companies' workers had failed to properly fix the switch mechanisms, and had used simple metal wires to bind them.

There was also speculation that defective parts supplied by Metrowagonmash had caused the crash. The chairman of the Zaschita Trade Union claimed that faulty parts had been installed due to a failure to control incoming supplies at the company's factory. He also claimed that the compressed air system in the brakes of the metro train had been of poor quality.

The Moscow authorities were also criticized for not spending enough money on the maintenance of the metro.

Several people had reportedly raised concerns about the safety of the metro trains prior to the accident. In April 2014, Metrovagonmash had allegedly fired 16 members of the Zaschita Trade Union and justified the dismissals by staff cuts. The workers insisted however that they had been fired partly because they had refused to attach defective parts to subway cars.

RepRisk Index (RRI) Trend of Moscow Metro



The Peak RRI for this Special Report refers to the highest RRI in 2014.

The News Stats refer to the number of risk incidents captured by RepRisk in 2014 for the project. Each risk incident is added only once to the database, unless the risk profile of the incident changes.

At the end of July, Russia's Investigative Committee launched a criminal case against four employees of Moscow Metro and Spetstekhrekonstruktsiya, on charges of violating safety regulations. The officials said that the accident was due to a lack of discipline, rather than technical issues. In September, experts from the Russian Ministry of Defense were commissioned to assist investigators in determining the causes of the accident.

Ingeokom, which was apparently responsible for the rail works in the Arbats-Pokrovs section where the accident happened, was also investigated. Russian law enforcement authorities searched the company's

offices shortly after the accident in July 2014, and then again in December 2014.

The investigations are still ongoing.

Top ESG issues linked to Moscow Metro

- 1. Products (Health and Environmental Issues)
- 2. Violation of National Legislation
- 3. Impacts on Communities
- 4. Freedom of Association and Collective Bargaining

Dan River Steam Station

Sector: Utilities; Location: United States of America; Peak RRI: 58

On February 2, 2014, a storm water pipe ruptured at Duke Energy's Dan River Steam Station in Eden in the US state of North Carolina, causing between 50,000 to 82,000 tons of coal ash waste to leak into the Dan River. The spill, said to be the third largest in US history, coated the riverbed with toxic sludge for an estimated 70 miles downstream. The US Forest Service warned that the spill had probably caused at least USD 70 million in damages to the economy.

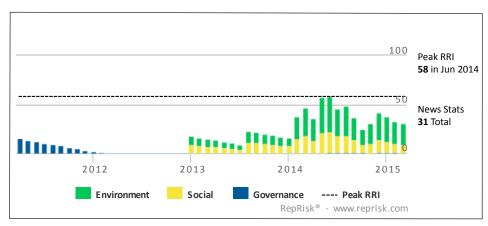
Water samples taken downstream from the spill and analyzed by the NGOs Waterkeeper Alliance and Yadkin Riverkeeper allegedly showed significantly higher levels of arsenic, chromium and lead than samples taken upstream. The levels of arsenic reportedly breached the Environmental Protection Agency's (EPA) standards for the protection of wildlife and fish, and were 35 times higher than the EPA's maximum contaminant standards for drinking water.

A few days after the spill, Waterkeeper Alliance claimed that a discharge pipe from the steam station was still leaking coal ash, and alleged that Duke Energy could have avoided the spill if it had removed the toxic ash heaps when advised to do so years earlier by the EPA.

In May, organizations including the National Association for the Advancement of Colored People and Waterkeeper Alliance criticized Duke Energy for the spill, and protestors at the company's annual general meeting opposed a USD 1.1 million bonus awarded to Duke Energy's CEO.

In June, residents of Dukeville began complaining of cancers, birth defects and heavy-metal contamination in their blood, which are associated with contaminated drinking water. They complained that Duke Energy and the North

RepRisk Index (RRI) Trend of Dan River Steam Station



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Carolina Department of Environment and Natural Resources had known since 2011 that the groundwater near the Dan River Plant contained toxic substances that were above state standards.

Later in the summer, the Dan River Steam Station was cited as an example in a report compiled by Earth Justice and Physicians for Social Responsibility, entitled "Ash in Lungs: How Breathing Coal Ash is Hazardous to Your Health."

Duke Energy was then denounced for burying 3,000 tons of recovered coal ash from the spill at Republic Services' private Upper Piedmont Environmental Landfill. An investigation into the company's coal ash waste revealed that the company had 108 million tons of coal ash, stored in 32 open ponds across North Carolina.

In August 2014, Duke Energy was ordered to cap or remove the ash dumps by 2029 and close four plants, including the Dan River Steam Station, by August 2019.

Top ESG issues linked to Dan River Steam Station

- 1. Impacts on Ecosystems and Landscapes
- 2. Local Pollution
- 3. Waste Issues
- 4. Violation of National Legislation
- 5. Impacts on Communities

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METHODOLOGY

Special RepRisk Reports are compiled using information from the RepRisk database, which monitors environmental, social and governance (ESG) risks for companies, projects, sectors and countries. The RepRisk database currently contains incidents on more than 50,000 private and publicly-listed companies. RepRisk analysts monitor the issues related to ESG risk across a broad shareholder and other stakeholder audience of NGOs, academics, media, politicians, regulators and communities. Once the risk incident has been identified with advanced search algorithms and analyzed for its novelty, relevance and severity, risk analysts enter an original summary into the database and link it to the companies and projects in question. No article is entered twice unless it has been escalated to a more influential source, contains a significant development, or has not appeared for the past 6 weeks.

All data is collected and processed through a strictly rule-based methodology. This helps to ensure the balanced and objective rating and weighting of the risk incident, and thus the company's quantitative measure of risk exposure, the RepRisk Index (RRI). The RRI measures the risk to a company's reputation, not its actual reputation.



Contact Information

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