RepRisk

Most

Controversial

Projects

RepRisk Special Report

Most Controversial Projects (MCP) 2018

February 2019

About RepRisk

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Since 2006, RepRisk has been leveraging artificial intelligence and human analysis to translate big data into actionable business intelligence and risk metrics. With daily-updated data synthesized in 20 languages using a rules-based methodology, RepRisk systematically flags and monitors material ESG risks and violations of international standards that can have reputational, compliance, and financial impacts on a company.

Our flagship product, the RepRisk Platform, is the world's largest database of its kind, consisting of 100k+ public and private companies and 25k+ projects of all sizes, in every sector and market. Leading organizations around the world rely on RepRisk as their key due diligence solution to prevent and mitigate ESG and business conduct risks related to their operations, business relationships, and investments.

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Foreword CEO

I am delighted to announce the release of our Most Controversial Projects (MCP) Report, which lists the ten projects that were most exposed to environmental, social, and governance (ESG) issues in 2018.

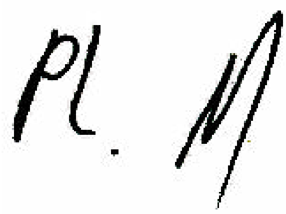
Many of the case studies in this report describe a sequence of events that had catastrophic consequences for employees and local communities. Sadly, the risk incidents faced by nine out of the ten projects were described as “foreseeable” or were blamed on negligence.

The projects ranked in the report are located in both developed and emerging markets, and stem from a range of sectors, including industrial metals, leisure, oil & gas, and utilities.

Interestingly, three projects in this year’s MCP Report were linked to salmonella or listeria epidemics. Two companies in RepRisk’s Most Controversial Companies 2018 Report, also faced salmonella outbreaks, meaning that a quarter of the 20 companies and projects ranked in RepRisk’s MCC and MCP 2018 Reports were linked to food contamination scandals.

Currently, RepRisk’s ESG Risk Platform covers more than 29,000 projects linked to ESG related risk incidents. This number increases daily as new information is captured and analyzed.

The aim of the report is to raise awareness regarding the kinds of risk incidents faced by projects around the globe, and to encourage investors and corporations to proactively assess ESG issues that may pose financial, reputational, or compliance risks.



Dr. Philipp Aeby, CEO, RepRisk

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#2	Sanchi Tanker	**78**	Ships	Panama
#3	Craon Celia Factory	**77**	Food and Beverage Production	France
#4	Polokwane Factory	**75**	Food and Beverage Production	South Africa
#5	One Belt One Road Initiative (Belt and Road Initiative)	**73**	Unspecified	China
#6	Patel Dam	**72**	Water Supply and Irrigation Systems	Kenya
#7	Hyde County Farm	**67**	Food and Beverage Production	United States of America
#8	Tuticorin Copper Smelter	**64**	Nonferrous Metal (except Aluminum) Production and Processing	India
#9	Ituango Hydroelectric Power Project	**63**	Hydropower Plants (Dams)	Colombia
#10	Barcarena Alumina Refinery	**63**	Aluminum Production and Processing	Brazil

1 The most controversial projects are primarily selected based on their Peak RepRisk Index (RRI). Projects with the same Peak RRI are ranked according to the number of severe and very severe incidents in the given year. RepRisk may have chosen to exclude projects if they were extensively covered in previous reports and no new developments were reported in the previous two years.

2 As some of the projects ranked had completely untarnished reputations prior to the issues they experienced during 2018, the impact on their RRI was greater due to the novelty of such incidents (the RRI emphasizes projects that are newly exposed, while projects with a history of risk exposure are less affected by new incidents). For more information on the RRI, please refer to the methodology on page 27.

Overview and ranking

RepRisk's report on the Most Controversial Projects of 2018 provides case studies of the projects that had the highest RepRisk Index (RRI)[1] – and therefore, the highest exposure to ESG risks.

The projects ranked in first and second place suffered catastrophic accidents that could have reportedly been avoided. The fire in the Winter Cherry Trade and Leisure Center, which caused at least 64 deaths, was blamed on negligence by security staff. The collision between the Sanchi oil tanker and a freighter in the East China Sea that killed Sanchi's entire 32-member crew, was allegedly because the ships' pilots had failed to verify the size of the other vessel.

The report shows that the food and beverage sector was significantly exposed to ESG risk incidents in 2018. Three of the projects ranked in this year's report faced serious salmonella or listeria outbreaks. The three food processing facilities, which were located in developed countries, namely the US, South Africa, and France, each faced high clean-up costs and global recalls that had a significant impact on their financial performance. The companies that owned the Craon Celia facility in France, and Hyde Country Farm in the US, had been linked to similar salmonella outbreaks before 2018.

The utilities sector was exposed to two major risk incidents in 2018. The collapse of the Patel Dam in Kenya, and the partial collapse of the Ituango dam in Colombia, caused flooding that devastated communities downstream. Once again, there were reports that both accidents were foreseeable as the dams had allegedly been constructed on sink holes.

Two projects in the industrial metals sector were harshly criticized for pollution. Acid rain allegedly caused by the Tuticorin Copper Smelter Plant in India, and a toxic waste spill from the Barcarena Alumina Refinery in Brazil, led to massive protests by local communities and the temporary closure of both facilities.

Possibly due to the aggressive pursuit of corruption by the authorities in the EU and North America, only one project in this year's MCP Report has been linked to bribery, namely the One Belt One Road Initiative (OBOR), a development strategy that spans countries in Asia, Africa, the Middle East, and Europe. The case study in the report focuses on four infrastructure projects that are being constructed as part of the OBOR program. However, the Chinese-led initiative has caused geopolitical tensions, and other OBOR projects are facing serious ESG-related criticism.

1 Please refer to the methodology on page 27 for more information on the RRI.

#1 Winter Cherry Trade and Leisure Center

Project type: Retailers; **Location:** Russian Federation; **Peak RRI:** 80

The Winter Cherry Trade and Leisure Center in the Russian city of Kemerovo is the most controversial project in the MCP 2018 Report due to a fire that broke out on the fourth floor of the center on March 25, 2018, engulfing an area of nearly 1,600 square meters. Russia's Investigative Committee and the Kemerovo Ministry of Emergency Situations put the final death toll at 64. However, local people estimated that 78 people had died, including 41 children, as well as approximately 200 animals in a nearby commercial zoo.

The fire reportedly ranks among the four most serious fires in Russia in the past century. Local residents claimed that safety exits and other doors were locked when the fire broke out. Eyewitnesses alleged that security guards had prevented children from leaving the burning building, and an Investigative Committee representative said that an employee of Tsentr Zashchity, a private security company, had turned off the fire alarm system when he received notification of the fire. Allegedly most of the security guards in the leisure center were not licensed. Russia's President claimed that the incident was due to negligence. Zimnyaya Vishnya-Kemerovo is a tenant on the fourth floor of the center where the fire reportedly broke out, while the owner of the building is KDV Grupp's Kemerovskiy Konditerskiy Kombinat.

Most related companies:
Winter Cherry Trade and Leisure Center

- Zimnyaya Vishnya-Kemerovo
- Kemerovskiy Konditerskiy Kombinat (KKK)
- ChOP Tsentr Zashity (Tsentr Zashchity)
- Investitsionnaya Stroitelnaya Kompaniya Resurs (ISK Resurs)
- KDV Grupp (KDV Group)

Top ESG Issues:
Winter Cherry Trade and Leisure Center

- Impacts on communities
- Corruption, bribery, extortion and money laundering
- Fraud
- Occupational health and safety issues
- Products (health and environmental issues)

#1 Winter Cherry Trade and Leisure Center

The Governor of the Kemerovo Region resigned in the immediate aftermath of the fire following criticism of the emergency response to the incident. The fire also prompted mass fire safety checks in Russia, as well as in Kazakhstan, Kyrgyzstan, Ukraine, and Uzbekistan.

So far, 11 people, including a government official, the Technical Director of the Winter Cherry Trade and Leisure Center, the General Director of Zimnyaya Vishnya-Kemerovo, the General Director of Kemerovskiy Konditerskiy Kombinat, the Director of Sistemnyi Integrator, the company that maintained the fire alarm system, and a private security guard from Tsentr Zashchity, have been arrested in relation to the fire. They are facing criminal charges for negligent homicide and violating fire safety regulations.

On November 1, a lawsuit was filed against the General Director of Kemerovskiy Konditerskiy Kombinat on charges of receiving RUB 7 million (USD 105,000) in bribes between 2013 and 2014 for “illegal actions and inactions” during the reconstruction of the shopping and entertainment center. The Russian authorities have since declared him to be “internationally wanted.”

Top ESG Topic Tags:
Winter Cherry Trade and Leisure Center

- Negligence

The fire reportedly ranks among the four most serious fires in Russia in the past century. Local residents claimed that safety exits and other doors were locked when the fire broke out.

#2 Sanchi Tanker

Project type: Ships; **Location:** Panama; **Peak RRI:** 78

The Panama-registered oil tanker Sanchi ranks second in the MCP 2018 Report due to a collision in the East China Sea on January 6, 2018 that killed its entire crew of 32 members. The local media reported that Sanchi, which according to the International Maritime Organization is owned by Hong Kong-based Bright Shipping on behalf of the National Iranian Tanker Company, had collided with the Hong-Kong-registered freighter CF Crystal approximately 300 kilometers from Shanghai, and subsequently caught fire.

Apparently, the tanker was being rented by Hanwha Total, a partnership between the Hanwha Group and Total SA, and was on its way to South Korea. The collision reportedly caused Sanchi to spill some of its cargo of 136,000 tons of condensate oil, which is highly toxic and volatile, near important fish spawning grounds and on a migratory route for three species of whales.

In May 2018, China's Maritime Safety Administration stated that both vessels had violated navigation protocols and "watch-keeping codes." Apparently, the crews on both ships had wrongly identified the other vessel as being a small boat, and neither party carried out additional checks to verify the size of the other vessel after failing to obtain the information from radar readings.

Most related companies: Sanchi Tanker

- National Iranian Tanker Co (NITC)
- Bright Shipping Ltd
- Glory Shipping Co Ltd
- Hanwha Group
- Hanwha Total Co

Top ESG Issues: Sanchi Tanker

- Impacts on landscapes, ecosystems and biodiversity
- Local pollution
- Occupational health and safety issues
- Products (health and environmental issues)

The Sanchi accident is considered one of the largest oil spills in the past 30 years, since the 1989 accident involving the Exxon Valdez, which spilled 37,000 tons of crude oil into Prince William Sound in Alaska.

#3 Craon Celia Factory

Project type: Food and Beverage Production; **Location:** France; **Peak RRI:** 77

The Craon Celia Factory, located in Mayenne, a department in the northwest of France, ranks third in RepRisk's MCP 2018 Report due to a salmonella outbreak that was traced to one of the drying towers at the site. Groupe Lactalis (Lactalis), one of the world's largest dairy companies, had owned the Craon Celia Factory since 2006 and was producing baby formula at the site. It was claimed that Lactalis had already identified Salmonella at the Craon Celia Factory in August 2017, and again in November 2017, but had only made the findings public four months later in December 2017.

At the beginning of December 2017, the French Ministry of Health confirmed that 20 infants had suffered salmonella poisoning that had been traced to baby milk produced at the Craon Celia Factory and ordered the recall of 12 batches of baby formula that had been produced at the plant. On December 12, and 21, the Ministry ordered a further recall of more than 625 batches of baby milk produced at the site.

On December 18, 2017, the Association of Lactalis Victims filed a lawsuit against Lactalis. The families of infants linked to the salmonella poisoning rejected compensation offered by the company, claiming that Lactalis was trying to buy their silence. French government officials accused the company of negligence.

Most related companies: Craon Celia Factory

- Groupe Lactalis SA
- Auchan Holding SA
- Carrefour SA
- Systeme U Centrale Nationale SA
- Celia-Laiterie de Craon SNC

Lactalis closed the Craon Celia Factory on December 8, and on January 11, 2018 announced that 250 workers at the site would be temporarily laid off. One day later, on January 12, the CEO announced a recall of all products ever produced at the Craon Celia site from retail outlets in 83 countries.

By mid-January, 37 babies in France and one infant in Spain had been diagnosed with salmonella poisoning that had been traced back to the Craon Celia facility. On January 17, 2018, French police raided five sites owned by Lactalis, including the Craon Celia Factory, following claims that the company's powdered baby milk products could still be found in hospitals and on the shelves of supermarkets and pharmacies. At the end of January, the Pasteur Institute confirmed that the new salmonella cases originated from the same bacteria strain that had been identified at the

#3 Craon Celia Factory

Craon Celia site in 2005, when a salmonella outbreak affected 140 infants.

At the beginning of February, the CEO of Lactalis admitted that the Craon Celia Factory might have been producing salmonella-contaminated baby milk since 2005 and conceded that the current outbreak could cost the company EUR hundreds of millions.

On February 14, 2018, the consumers association Foodwatch filed a lawsuit in the Superior Court in Paris, accusing Lactalis, the distributors, the laboratories, and the French authorities, of failing in their obligations to prevent health risk.

At the end of November, the French Ministry of Health linked the "production environment" around a second tower of the Craon Celia Factory to the *Salmonella* bacteria. The disclosure was firmly rejected by Lactalis, who had resumed production at the Craon Celia facility in July 2018, after claiming that the contamination had been restricted to the first tower.

In December, Lactalis was accused of having withheld information regarding salmonella-contaminated products at its Craon Celia Factory since 2011, and French prosecutors launched an investigation against the company for unintentional harm, aggravated deceit, and for failing to follow recall procedures.

Top ESG Issues:
Craon Celia Factory

- Products (health and environmental issues)
- Fraud
- Impacts on communities
- Anti-competitive practices
- Corruption, bribery, extortion and money laundering

Top ESG Topic Tags:
Craon Celia Factory

- Negligence

#4 Polokwane Factory

Project type: Food and Beverage Production; **Location:** South Africa; **Peak RRI:** 75

The Polokwane Factory in South Africa has been included in the MCP 2018 Report after being held responsible for what the UN World Health Organization called the "largest listeria outbreak ever recorded globally." The factory, owned by Tiger Brands, a subsidiary of Enterprise Foods, is located in Polokwane, the capital of the Limpopo Province of South Africa.

In March 2018, South Africa's Health Ministry traced a listeria epidemic that had reportedly killed approximately 180 people and infected nearly 1,000 others since January 2017 to a sausage product known as "polony" that had been produced at the Polokwane Factory. Listeria can cause nausea, diarrhea, fever, and can, in some cases, lead to septicemia or meningitis. South Africa's Health Minister warned consumers to avoid ready-to-eat processed meats, claiming that cross-contamination with the affected products could have occurred in retail outlets.

Namibia, Mozambique, and Zambia halted all imports of the processed meat products from South Africa, and Botswana announced that it would recall them. Local supermarket chains in South Africa such as Pick n Pay, Shoprite, Spar, and Woolworths offered refunds to customers who had bought the products. The South African authorities also carried out tests at other processed food manufacturers including a second factory owned by Tiger Brands and a plant owned by RCL Foods.

Most related companies:
Polokwane Factory

- Enterprise Foods (Pty) Ltd (Port Packers Abattoir)
- Tiger Brands Ltd
- Pick n Pay Holdings Ltd
- Shoprite Holdings Ltd

Top ESG Issues:
Polokwane Factory

- Products (health and environmental issues)

In March 2018, when the first listeriosis victim associated with the Polokwane Factory was reported in Namibia, Richard Spoor, a human rights lawyer in South Africa, encouraged victims to join a class action lawsuit against Tiger Brands.

On March 19, Tiger Brands recalled another batch of products and set aside ZAR 425 million (USD 29.7 million) to settle the class action lawsuit. By the end of March, Tiger Brands had also recalled products originating from its Clayville, Germiston, and Pretoria sites due to the alleged presence of the *Listeria* bacteria. It was estimated that the recalls could cost the company up to ZAR 800 million (USD 26 million).

#4 Polokwane Factory

In April 2018, the National Institute for Communicable Diseases reported that the number of deaths resulting from the food-borne disease had reached 189. In the same month, the South African-based law firm, Richard Spoor Attorneys, sought class action certification in the High Court of Johannesburg for its law suit against Tiger Brands and Enterprise Foods, which accused the companies of negligence and of breaching their legal duty as stipulated under section 61 of the Consumer Protection Act.

In May, the Chief Executive of Tiger Brands admitted that the recalls had "significantly impacted headline earnings." The company began deep-cleaning all its facilities and put aside ZAR 50 million (USD 3.5 million) to cover the cleaning costs.

Top ESG Topic Tags: Polokwane Factory

- Negligence

In March 2018, South Africa's Health Ministry traced a listeria epidemic that had reportedly killed approximately 180 people and infected nearly 1,000 others since January 2017.

#5 One Belt One Road Initiative

Project type: Unspecified; **Location:** China; **Peak RRI:** 73

The One Belt One Road Initiative (OBOR) is a development strategy, proposed by the President of the People's Republic of China in 2013, that focuses on improving regional cooperation and connectivity on a trans-continental scale and strengthening infrastructure, trade, and investment links between China and some 65 other countries in Asia, Europe, and Africa. The initiative consists primarily of the Silk Road Economic Belt, linking China to Central and South Asia and then to Europe, and the New Maritime Silk Road, linking China to South East Asia, the Gulf Countries, North Africa, and Europe. Six other economic corridors will link other countries to the Belt and the Road.

The OBOR initiative includes more than 7,000 infrastructure projects, including tunnels, dams, roads, and power lines. Concerns have been raised about their potential impact on the climate, the environment, and on indigenous communities living near the projects. According to the WWF, the six key land corridors of the OBOR initiative could impact 46 biodiversity hotspots and the habitats of 265 threatened species, including 81 endangered and 39 critically endangered species. There are also allegations that OBOR is undermining the economies of participating countries by offering bribes and planning "debt traps."

Most related companies: One Belt One Road Initiative

- Export-Import Bank of China (China Eximbank)
- 1Malaysia Development Berhad (1MDB)
- China National Petroleum Corp (CNPC)
- China Petroleum Pipeline Engineering Co Ltd
- North Sumatera Hydro Energy (PT NSHE)

Batang Toru Hydroelectric Power Plant: Indonesia

The USD 1.6 billion Batang Toru Hydroelectric Power Plant in northern Sumatra, Indonesia, is being funded by the Bank of China as part of the OBOR initiative. The operating company is North Sumatra Hydro Electric, and the contractor is Sinohydro Corporation. In May 2018, the NGO Rainforest Rescue sent an online petition to the President of China, the President of Indonesia, and the CEOs of Sinohydro Corporation and the Indonesian state-owned utility company Perusahaan Listrik Negara, calling on them to halt construction due to concerns about the survival of approximately 800 Tapanuli orangutans, a critically endangered species discovered by scientists in November 2017. There are also fears about the impact of the

#5 One Belt One Road Initiative

project on endangered Sumatran tigers and 18 other species considered endangered by the International Union for the Conservation of Nature. Local communities are worried that, in the event of an earthquake, the project could pose threats to approximately 100,000 people living downstream. The NGO Friends of the Earth Indonesia also filed a lawsuit against North Sumatera Hydro Energy, one of the project's developers, to try to stop construction of the power plant. In July, 25 of the world's top environmental scientists also called for a halt to the project.

Hambantota Port: Sri Lanka

The Hambantota Port in Sri Lanka is another controversial project that forms part of the OBOR initiative. In June 2018, the New York Times claimed that China had used a "debt trap" to obtain control of the port for a period of 99 years from December 2017. The port was built by China Harbour Engineering, a subsidiary of China Communications Construction Company. Allegedly, throughout Sri Lanka's 2015 presidential election, China Harbour Engineering paid at least USD 7.6 million to directly support the campaign of the incumbent president, including USD 1.7 million that was directly delivered to his residence. The president eventually lost the election. China Harbour Engineering was also suspected of inflating costs during the port's expansion in 2011. The Hambantota Port was built with loans totaling USD 1.1 billion from Chinese entities including China Export-Import Bank. Although initially offered at moderate terms, the loans allegedly became onerous and eventually forced Sri Lanka to hand the port over to an entity controlled by China Merchants Port.

Top ESG Issues:
One Belt One Road Initiative

- Corruption, bribery, extortion and money laundering
- Impacts on landscapes, ecosystems and biodiversity
- Impacts on communities
- Fraud
- Climate change, GHG emissions, and global pollution

Top ESG Topic Tags:
One Belt One Road Initiative

- Endangered species
- Hydropower (dams)
- Indigenous people
- Predatory lending

Petrochemical and gas pipelines in Malaysia

In July 2018, Malaysian Prime Minister Mahathir Mohamad froze over USD 20 billion in Malaysian infrastructure projects that formed part of the OBOR initiative following suspicions of corruption. A USD 2.5 billion project by China Petroleum Pipeline

#5 One Belt One Road Initiative

Bureau, a subsidiary of China's state-owned National Petroleum Corporation, to build petrochemical and gas pipelines in Malaysia and in the state of Sabah on the island of Borneo, came under particular scrutiny. There are suspicions that Malaysia's Finance Ministry diverted part of the USD 2 billion in loans for the project from Export-Import Bank of China into a Cayman Islands-based company called Silk Road Southeast Asia Real Estate (Silk Road). The company is purportedly owned by an associate of a Malaysian financier allegedly involved in the negotiations for the pipeline deal, as well as in the USD 4.5 billion corruption scandal linked to Malaysia's sovereign wealth fund 1Malaysia Development Berhad, a company that ranked in first place on RepRisk's MCC 2016 Report.

Bishkek-Osh Alternative Road: Kyrgyzstan

The Bishkek-Osh Alternative Road, linking Kyrgyzstan's two major cities, Bishkek and Osh, is another controversial project being funded with a loan (USD 850 million) from the Export-Import Bank of China under the OBOR initiative. In August 2018, it was alleged that the former and current Kyrgyz Ministers of Transport and Communications had colluded with the construction company China Road and Bridge to embezzle funds of up to USD 100 million from the project by inflating the costs, and issuing fraudulent documents to justify them. Several Kyrgyz officials, including two former prime ministers, have been arrested on corruption charges in relation to the allegations.

In November 2018, a corruption trial against a representative of a Shanghai-based CEFC China Energy put a spotlight on China's alleged use of bribery to win foreign contracts for the OBOR. According to the US Department of Justice, CEFC China Energy paid at least USD 2.9 million in bribes disguised as charitable donations to high-level politicians from Chad, Senegal, and Uganda.

The OBOR initiative includes more than 7,000 infrastructure projects, including tunnels, dams, roads, and power lines. Concerns have been raised about their potential impact on the climate, the environment, and on indigenous communities living near the projects.

#6 Patel Dam

Project type: Water Supply and Irrigation Systems; **Location:** Kenya; **Peak RRI:** 72

The Patel Dam in Kenya, also known as the Milmet or Solai Dam, ranks sixth in the MCP 2018 Report as part of the dam collapsed on May 9, 2018, releasing 70 million liters of water that destroyed hundreds of houses across a wide area of farmland. More than 2,000 people were made homeless, and power lines and school buildings were destroyed.

The dam is on one of three reservoirs on the Patel Coffee Estate owned by the Solai Group of Companies, in Solai in the county of Nakuru, about 190 kilometers from the capital, Nairobi. The reservoir was allegedly used for irrigation and fish farming.

Toward the end of May, the death toll was put at 47. Initial reports suggested that the Kenyan Water Resources Management Authority had approved the dam, despite claiming earlier that the project was illegal.

Most related companies: Patel Dam

- Patel Coffee Estates Ltd (Tindress Farm)
- Solai Group of Companies (Solai)

Top ESG Issues: Patel Dam

- Impacts on communities

Top ESG Topic Tags: Patel Dam

- Negligence

Local residents employed on the estate claimed, however, that working conditions had been "inhumane" even before the collapse of the dam. Workers claimed that they had received very low wages and had not been allowed to take a bathroom break during eight-hour shifts. It was alleged that Solai had dismissed workers for small mistakes, and that a manager had once ordered a clerk to withhold the wages of three workers because they had been found drinking water. There were also claims that the owner had threatened to dismiss workers who wanted to join a union.

In early July, several government officials and two farm managers were arrested and charged with manslaughter in relation to the collapse of the dam. Reportedly the dam had design flaws, had been built by untrained staff using farm equipment, and its construction had violated several environmental laws. The government's environmental regulators were criticized for failing to conduct compliance checks. Later in July, several defendants, including two executives of Patel Coffee Estates, were freed on bail after being charged with manslaughter and negligence in connection with the collapse.

#6 Patel Dam

In September, the Director of Public Prosecutions in Kenya suggested moving the court case surrounding the collapse of the Patel Dam from the town of Naivasha to Nairobi City, following allegations that there had been attempts to interfere with witnesses and tamper with evidence. However, this request was declined by a High Court judge in Naivasha in October 2018.

In November, the courts ruled that the owner of Solai Dam could travel to India and Sudan at the beginning of December, even though prosecutors had alleged he was a "flight risk."

Toward the end of May, the death toll was put at 47. Initial reports suggested that the Kenyan Water Resources Management Authority had approved the dam, despite claiming earlier that the project was illegal.

#7 Hyde County Farm

Project type: Food and Beverage Production; **Location:** United States of America; **Peak RRI:** 67

Hyde County Farm, a facility owned by the family-owned company Rose Acre Farms in the US state of North Carolina, ranks in seventh place on the MCP 2018 Report due to a salmonella outbreak that prompted a recall of more than 200 million eggs in April 2018, allegedly the largest recall of eggs in the US since 2010. The farm had reportedly distributed the eggs to restaurants and stores in nine states, including the Food Lion Store, Crystal Farms, Publix, Sunshine Farms, Walmart, and the Waffle House restaurant chain. The US Food and Drug Administration inspected the farm between late March and mid-April and reportedly found live rodents in the production area, dirty equipment, and employees who were handling eggs in an unsanitary manner. The observations apparently corroborated laboratory tests and other evidence that had pinpointed the farm as the source of the outbreak. According to the Center for Disease Control and Prevention, the cases of salmonella poisoning had started in November 2017. By March 22, there were 22 reported cases.

Shortly after the recall, Hong Kong's Centre for Food Safety suspended the importation of eggs from Hyde Country Farm due to fears that they were contaminated with *Salmonella*, an infection that can cause fever, gastrointestinal problems, and sometimes even death. It was reported that around 2 million eggs had been imported into Hong Kong by companies such as Maxim's Caterers, General Hero, Shun Hing Hoo, Tai Cheong Eggs, and Luen Tai Hong.

The Food and Drug Administration had reportedly warned Rose Acre Farms about the risk of salmonella poisoning in 2011 after finding a rodent infestation at the company's White County Egg Farm in Indiana.

By mid-June, the number of people affected by the salmonella outbreak rose to 45 across ten US states. The Center for Disease Control and Prevention eventually declared an end to the salmonella outbreak in June 2018.

Allegedly in 1990 salmonella outbreaks from three farms in Indiana that had caused sickness in approximately 450 people had also been traced to Rose Acre Farms. At that time, the company had reportedly almost gone out of business, as the government ordered it to stop selling eggs from the three farms and to conduct an extensive cleaning program.

Most related companies:
Hyde County Farm

- Rose Acre Farms Inc
- Food Lion LLC
- Crystal Farms Inc
- Waffle House Inc
- Walmart Inc

Top ESG Issues:
Hyde County Farm

- Products (health and environmental issues)
- Supply chain issues

#8 Tuticorin Copper Smelter Plant

Project type: Nonferrous Metal (except Aluminum) Production and Processing; **Location:** India; **Peak RRI:** 64

The Tuticorin Copper Smelter Plant in the port city of Tuticorin, known officially as Thoothukudi, in the Indian state of Tamil Nadu ranks eighth on the MCP 2018 Report due to violent clashes with local residents who had been complaining for two decades about air pollution and groundwater contamination from the plant.

The plant, located in the State Industrial Promotion Corporation of Tamil Nadu (SIPCOT) complex, is operated by Sterlite Copper, a business unit of Vedanta Limited, which in turn is a subsidiary of London-based Vedanta Resources. Sterlite Copper had been formerly known as Sterlite Industries, and changed its name when it was merged into Vedanta Limited. The Tuticorin plant reportedly meets over 30 percent of India's copper demand.

Opposition to the plant began in 1996, when the Tamil Nadu government granted 428 acres of land for the plant and reportedly allowed construction to begin without a public hearing or environmental impact assessment. According to the Centre of Science and Environment, three other Indian states had rejected the project due to its "highly polluting nature." The Tuticorin facility is reportedly located 14 kilometers from an ecologically sensitive biosphere reserve in the Gulf of Manner in the Indian Ocean, in breach of regulations that require a minimum buffer zone of 25 kilometers.

The plant was temporarily shut down in March 2013, after hundreds of people suffered breathing problems, nausea, and throat infections from an alleged gas leak, but the National Green Tribunal later allowed it to reopen.

Most related companies:
Tuticorin Copper Smelter Plant

- Vedanta Resources Plc
- Verdanta Ltd
- State Industries Promotion Corp of Tamil Nadu Ltd (SIPCOT)

Top ESG Issues:
Tuticorin Copper Smelter Plant

- Local pollution
- Impacts on communities
- Impacts on landscapes, ecosystems and biodiversity
- Human rights abuses and corporate complicity
- Local participation issues

In March 2018, thousands of people in the Tuticorin district participated in a protest against a planned expansion of the Tuticorin Copper Smelting Plant, claiming that the facility was causing health hazards and damaging the environment.

The activist group Anti-Sterlite Movement had been campaigning against the plant's sulphur dioxide and radiation emissions and improperly processed liquid waste, which were allegedly harming public health, causing acid rain, and contaminating the groundwater. The plant was also criticized for failing to implement adequate safety measures,

#8 Tuticorin Copper Smelter Plant

and there were claims that there had been at least 13 work-related deaths and 139 serious injuries between 1996 and 2004. The activist group further accused the government of ignoring the demands of the community, alleging that politicians had received donations from Vedanta and its business unit Sterlite Industries.

Top ESG Topic Tags:
Tuticorin Copper Smelter Plant

- Indigenous people

In April, the Minister of State in the Ministry of Shipping, Pon Radhakrishnan, confirmed that Sterlite Industries had attempted to bribe him, stating that during the 1998 elections for India's lower house of parliament he had rejected funds offered by Sterlite Industries and "deals" offered by the company to ensure their operations in Tamil Nadu.

On May 22, to mark the 100th day of the protests, around 20,000 people marched toward the District Collector's office in Thoothukudi District to demand the shutdown of the plant. To stop the crowd from entering the office premises, the police reportedly fired into the crowd, killing 13 people, including women and children, and leaving 217 injured, nine of whom are disabled for life. The government claimed that the police had used violence because the crowd had set police vehicles and the Collector's offices on fire. The protestors claimed, however, that the offices were already on fire before the crowd arrived.

At the end of May there were reports that over 100 people remained missing after the protests, and that some people had been arrested and tortured.

Following public outcry over the violence, on May 28, India's Tamil Nadu state ordered the shutdown of the plant. However, on August 9, 2018, India's environmental body, the National Green Tribunal (NGT), allowed Vedanta to have limited access to its plant, claiming that it would cause no environmental impact.

In July, a study carried out by the Central Ground Water Board in the SIPCOT industrial area, where the plant is located, found that ground water was contaminated with heavy metals such as cadmium, chromium, manganese, iron, and arsenic above the permissible limits for drinking water.

In August, the Tamil Nadu government filed an appeal in the Supreme Court of India against allowing Vedanta access to an administrative unit at its closed Tuticorin Copper Smelter Plant.

On October 1, Vedanta Resources was delisted from the London Stock Exchange. On the same day, the company held its Annual General Meeting and the founder and Chairman of the company was strongly criticized for failing to take part. On December 15, the NGT overruled the Tamil Nadu government's order to close the plant and allowed the plant to reopen, claiming that the closure was "unjustified."

The Tamil Nadu government appealed against the NGT's decision, but in January 2019 the Supreme Court of India overturned the appeal, allowing the plant to remain open.

#9 Ituango Hydroelectric Power Project

Project type: Hydropower Plants (Dams); **Location:** Colombia; **Peak RRI:** 63

The Ituango Hydroelectric Power Project is a 2,400-megawatt hydropower venture being constructed by Empresas Publicas de Medellin (EPM) over the River Cauca in Colombia's northwestern region of Antioquia. The USD 3.8 billion megaproject, reportedly the largest hydropower plant in Colombia, includes the construction of a 225-meter high dam and a 79-kilometer long reservoir with a volume of more than 20 million cubic meters. Ituango has reportedly received financing from companies such as Banco Bilbao Vizcaya Argentaria, Banco Santander, and the Inter-American Development Bank Group for the project.

On April 28, heavy rains caused a landslide that blocked a tunnel built to divert the river's flow during the construction of the dam. Two other similar tunnels had already been sealed as the construction was almost finished, meaning that there were no other outlets for the flow of water. On May 10, to decrease the dangers posed by the pressure of the rising waters, EPM flooded the turbine room to lower the water levels. However, on May 12, the continuous water pressure caused one of the sealed tunnels to suddenly become unblocked, which allowed the water to gush through and cause flash floods downstream.

The floods swept through a riverside village, leaving 600 people homeless and destroying two bridges, two schools, and a healthcare center. Antioquia's State Governor declared a "public calamity" and the Colombian government ordered the evacuation of approximately 120,000 people in the state of Antioquia. Twelve communities in the departments of Antioquia, Bolivar, Cordoba, and Sucre, were put on red alert.

Subsequent landslides and cracks in the mountain reportedly left the situation "out of control" and there were fears that the entire dam would collapse. Ecologists in Action claimed that new flooding would impact the lives of tens of thousands of people living in 15 municipalities near the hydropower station.

Most related companies:
Ituango Hydroelectric Power Project

- Hidroelectrica Ituango SA ESP
- Empresas Publicas de Medellin (EPM)
- Inter-American Development Bank (Banco Interamericano de Desarrollo; BID; IDB)
- Banco Bilbao Vizcaya Argentaria SA (BBVA)
- Banco Santander SA (Santander Group)

Top ESG Issues:
Ituango Hydroelectric Power Project

- Impacts on communities
- Impacts on landscapes, ecosystems and biodiversity
- Human rights abuses and corporate complicity
- Local participation issues
- Misleading communication

#9 Ituango Hydroelectric Power Project

By May 22, approximately 25,000 people had been evacuated following fresh floods reportedly caused by the Ituango dam. The incident renewed criticism against EPM's alleged discriminatory management of emergency situations and failure to find solutions for riverside and indigenous communities in 17 localities in four departments who had been affected by the floods. Researchers also accused EPM of criminalizing the riverside communities, especially those who were members of the Rios Vivos Movement, by alleging that they were illegally occupying their own ancestral territory. The flooding also allegedly forced the Ituango jaguars, an endangered species, out of their natural habitat.

The Ituango project has faced strong opposition since its conception in 1970, primarily due to concerns about possible seismic activity in the canyon where it is located. In 2011, it was revealed that paramilitaries had carried out several massacres in order to make room for the megaproject, and that communities in Antioquia had been displaced. The title deeds of the appropriated land were reportedly transferred to local officials, who then sold them to EPM. The flooding of the dam's reservoir allegedly covered up the bodies of 2,200 victims of violence perpetrated by armed groups during social conflicts that continued until 2017, thus preventing them from being identified.

Top ESG Topic Tags: Ituango Hydroelectric Power Project

- Hydropower (dams)
- Involuntary resettlement
- Indigenous people
- Negligence
- Land grabbing

Three community leaders from the area were reportedly shot dead by unknown assailants in May 2018. Two of the victims were members of the Ríos Vivos movement who had been campaigning for compensation for communities affected by the Ituango project.

The red alert remains in place, even though EPM has managed to repair the dam. In November, the Rios Antioquia movement accused EPM of manipulating data and records to give the impression that security measures are in place, when, in fact, continuous landslides and rockfalls mean that the dam is still at risk.

In January 2019, a 40-meter-deep sinkhole was discovered near the project and a new flood warning was sent to downstream communities. This new setback may increase the overall cost of the project and further delay construction work, which has been halted since April 2018.

#10 Barcarena Alumina Refinery

Project type: Aluminum Production and Processing; **Location:** Brazil; **Peak RRI:** 63

The Barcarena Alumina Refinery, reportedly the world's largest alumina refinery, is owned by Hydro Alunorte, a subsidiary of Norsk Hydro, in Para state, Brazil.

On February 23, 2018, in response to a bauxite spill, Brazil's Federal Public Ministry (MPF) released a joint report with other governmental bodies which revealed that the new tailings dam, known as the DRS-2 Bauxite Residue Disposal Site, of the Barcarena Alumina Refinery had been operating without an environmental permit. The toxic waste spill was reportedly caused by heavy rains between February 16 and 18, 2018, and led to contamination of water supplies used by over 500 families from nearby villages.

Brazil's Ministry of Health said high levels of lead, aluminum, and other toxins had been detected in drinking water about two kilometers away from the Barcarena refinery, and that the water was extremely alkaline, most likely from caustic soda used in bauxite processing. The spill also apparently contaminated the soil and killed crops and animals, and local residents complained of stomach pains and diarrhea. A report of Alunorte's refinery by Brazil's Ministry of Health also revealed a "clandestine pipeline" that had reportedly been discharging untreated effluents into a section of the Muripi River Springs. The MPF ordered Norsk Hydro to shut down operations at the DRS-2 Bauxite Residue Disposal Site and to immediately remove the illegal pipeline.

Most related companies:
Barcarena Alumina Refinery

- Hydro Alunorte
- Norsk Hydro ASA (Hydro)
- Vale SA
- Valepar SA
- Albras (Aluminio Brasileiro SA)

Top ESG Issues:
Barcarena Alumina Refinery

- Impacts on landscapes, ecosystems and biodiversity
- Impacts on communities
- Local pollution
- Waste issues
- Local participation issues

On February 27, 2018, the Secretariat for the Environment and Sustainability gave Hydro Alunorte 48 hours to reduce the levels of the residue disposal site by at least one meter, and announced that the company would be fined BRL 1 million (USD 269'000) for each day that it failed to comply. The company was also fined BRL 20 million (USD 5.3 million) by the Brazilian Institute of Environment and Renewable Natural Resources, and was ordered to reduce the production of its refinery by 50 percent.

#10 Barcarena Alumina Refinery

The fatal shooting of a community organizer on March 12, 2018 was linked to a campaign for USD 154 million in compensation for environmental and moral damages against the Para state, the Barcarena refinery, and the Albras smelting factory located in an industrial park in Barcarena. The campaign was launched by the NGO Cainquiama, who complained that operations from within the industrial park were contaminating their water, poisoning fish, and causing health problems.

On April 3, 2018, a public civil action filed by the MPF against Hydro Alunorte sought BRL 250 million (USD 67.3 million) in damages connected to the irregular dumping of residues by the Barcarena refinery. The company was eventually ordered to pay BRL 150 million (USD 40.4 million).

On August 13, 2018, the Public Ministry of Para and Federal Public Ministry and the MPF sent a proposal to Hydro Alunorte and the government of Para suggesting that they pay BRL 28.7 million (USD 7.6 million) to support the communities affected by the tailing spill.

In October 2018, Hydro Alunorte announced it would fully shut down production at its Barcarena Alumina Refinery because its DRS-1 Bauxite Residue Disposal Site had almost reached full capacity and the company had been ordered not to use its new press filter or its new DRS-2 Bauxite Residue Disposal.

Top ESG Topic Tags: Barcarena Alumina Refinery

- Indigenous people
- Land grabbing
- Involuntary resettlement
- Negligence
- Protected areas

Brazil's Ministry of Health said high levels of lead, aluminum, and other toxins had been detected in drinking water about two kilometers away from the Barcarena refinery, and that the water was extremely alkaline, most likely from caustic soda used in bauxite processing.

Methodology

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