

REPRISK CASE STUDIES

Pacific Gas and Electric Company (PG&E) & Vale SA

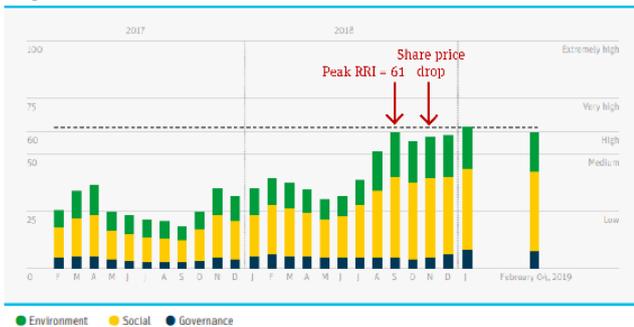
The US-based Pacific Gas and Electric Company (PG&E) and the Brazilian mining company Vale SA were both linked to catastrophic events at the end of 2018 and the beginning of 2019 that had a substantial impact on the companies’ share prices.

PG&E faced allegations in November 2018 that the company’s faulty equipment had caused the Camp Fire in Northern California, which started on November 8, 2018 and swept through the town of Paradise, causing at least 85 civilian deaths, and destroying over 18,000 buildings. By November 15, the company’s share price had fallen by almost 60%.

Vale SA was plunged into crisis when the tailings dam of its Corrego do Feijao B1 iron ore mine collapsed near Brumadinho in the Brazilian state of Minas Gerais on January 25, 2019. Vale’s share price dropped 20% on January 28, 2019 in the wake of the disaster.

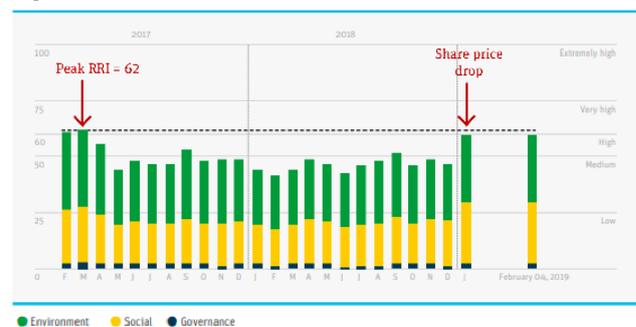
In both cases, RepRisk’s unique research approach and methodology picked up early warning signals around the high environmental, social, and governance (ESG) risks associated with PG&E and Vale SA. Both companies had very high ESG risk exposure levels (Peak RRI* scores) **before** the above tragedies occurred. These high scores had been triggered by a series of allegations and risk incidents that already raised serious concerns about the business conduct of the two companies.

RepRisk Index PG&E



PG&E had a Peak RRI Score of 61 in September 2018. The company’s share price had fallen by almost 60% by November 15, 2018.

RepRisk Index Vale



Vale SA had Peak RRI Score of 62 in March 2018. The company’s share price dropped 20% on January 28, 2019.

RepRisk has published a series of Case Studies that demonstrate the materiality of environmental, social, and governance (ESG) issues – and how RepRisk can serve as an early warning system before these issues translate into reputational, compliance, and financial risks. For more Cases, please visit www.reprisk.com/publications or contact us at media@reprisk.com.

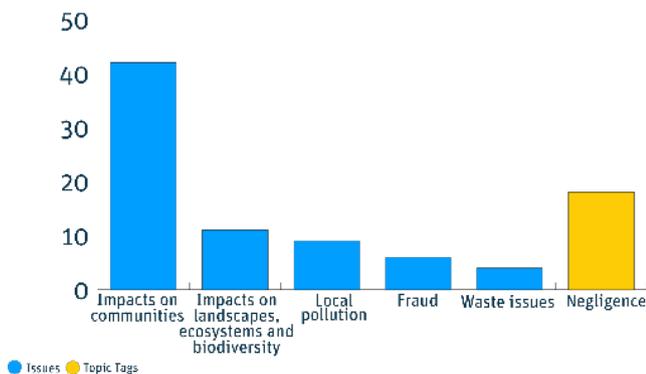
Pacific Gas & Electric Company (PG&E)

Before the November 2018 wildfires in Northern California, PG&E had admirable policies:

- Reporting on Corporate Responsibility and Sustainability done annually
- Risk management processes “overseen by senior management”
- 2018 launch of updated Employee Code of Conduct
- 2018 launch of revised Code of Conduct for its Boards of Directors

But there were reports of poor ESG performance:

Between January 2016 and October 2018, PG&E was linked 88 times to RepRisk ESG Issues and 21 times to ESG Topic Tags** including:



RepRisk’s core research scope is comprised of [28 ESG Issues](#) that drive the entire research process. The Issues were selected and defined in accordance with the key international standards related to ESG issues and business conduct, such as the Equator Principles, the OECD Guidelines for Multinational Enterprises, the ILO Conventions, and more. In addition, the Ten principles of the UN Global Compact can be specifically mapped to RepRisk’s 28 Issues. RepRisk further covers [57 Topic Tags](#), ESG “hot topics” and themes.

** Please refer to methodology section on page 4

Case Study Timeline

2018

January 26

PG&E fined USD 3 million in the US for pipeline safety violations that reportedly caused a natural gas explosion in the city of San Bruno in 2010, which killed eight people and destroyed 38 homes.

January 31

PG&E blamed for October 2017 wildfire that killed 24 people and destroyed 5,130 homes in US county of Sonoma.

August 12

California Department of Forestry and Fire Protection finds PG&E responsible for 16 fires in Northern California in October 2017 that caused 45 fatalities and destroyed 8,800 buildings.

August 31

PG&E faces at least 780 civil lawsuits that seek compensation for damages caused by October 2017 wildfires in Northern California.

September 23

US state of California provides final terms to close PG&E’s Diablo Canyon nuclear plant following NGO study revealing that reactor design could not withstand potential earthquakes generated by nearby geological faults.

September 2018: PG&E Peak RRI reaches 61

November 8

Fire starts in Butte County, California that eventually covers almost 240 square miles, destroys 18,804 buildings and causes at least 85 civilian deaths.

November 9

PG&E discloses that an outage of its transmission line happened minutes before the fire in Butte County was reported.

November 15

By November 15 PG&E’s stock value had fallen 60% due to investor concerns that the company would be found liable for the fires in Northern California.

December 5

Class action lawsuit filed against PG&E in San Francisco alleging Northern California fires caused by company’s outdated and unsafe electrical equipment.

2019

January 14

PG&E seeks bankruptcy protection as it faces liability claims worth about USD 30 billion for wildfires in 2017 and 2018 in the US.

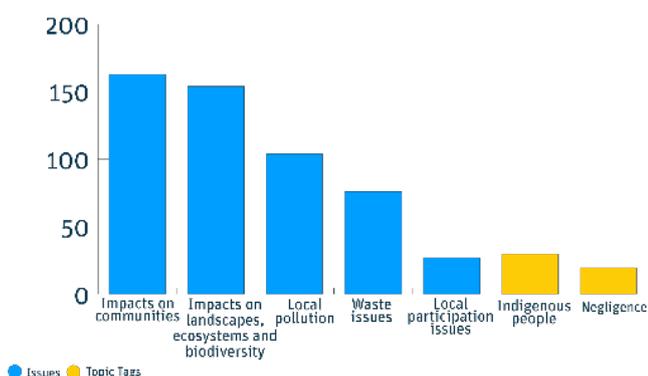
Vale SA

Before the collapse of the Corrego do Feijao B1 Dam in January 2019, Vale had put in place commendable policies:

- Conducted two ESG seminars in 2018
- Created Digital Transformation Program for sustainability
- Was selected to be member of Corporate Sustainability Index in Sao Paulo
- Complied with Global Reporting Initiative
- Committed to Sustainable Development Goals

However, a study of the company’s performance revealed a number of lapses:

Between January 2016 and December 2018, Vale was linked 590 times to RepRisk ESG issues and 99 times to ESG Topic Tags** including:



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Case Study Timeline

2015	November 5 Fundao Tailings Dam in Brazil, operated by Samarco, a joint venture between Vale SA and BHP Billiton, ruptures– killing 19 people and covering villages and waterways with over 60 million cubic meters of iron ore waste.
	2016
	February 5 Vale fined BRL 6 million for pollution at company’s Port of Tubarao in Brazil.
	March 3 Vale criticized for having forced more than 3,000 families from their lands since 2009 to make way for its Moatize Coal Mine in Mozambique.
	March 19 Vale’s subsidiary faces legal proceedings for 2015 spill of emulsified ammonium nitrate at Salobo Copper Mine, Brazil.
	April 14 Brazil’s Xikrin indigenous community files civil action against Vale for social impacts of company’s Carajas Iron Ore Mining Complex.
	October 20 Vale and BHP accused of pressuring Samarco to produce more iron ore despite being aware of structural flaws in Fundao Dam.
2017	March 7 Vale accused of evading BRL 276 million in obligatory Brazilian social security contributions.
	September 14 Brazilian court suspends work at Vale’s Onca Puma Nickel Mining Project due to negative impacts on indigenous people.
	November 7 Thousands of victims of Fundao Dam collapse claim they have not received compensation.
2018	January 25 Fears raised about stability of Vale’s Capao da Serra Dam in Minas Gerais.
	March 2018: Vale’s Peak RRI reaches 62
	October 12 200 people protest about noise and pollution from Vale’s Moatize II Mine in Mozambique.
2019	January 25 Vale’s Corrego do Feijao Dam B1 ruptures near Brumadinho, Brazil.
	January 27 Fears raised about potential collapse of Vale’s Corrego do Feijao Dam B6.
	January 28: Vale’s share price drops 20%

Methodology

RepRisk Case Studies are compiled using information from the RepRisk ESG Risk Platform, the world's largest due diligence database on environmental, social, and governance (ESG) and business conduct risks, used to conduct in-depth risk research on public and private companies as well as projects of all sizes, from all sectors and countries, including emerging and frontier markets.

RepRisk believes it is important to look at performance, not just policies. Therefore, we take an outside-in approach to assessing a company: Our research captures and analyzes information from media, stakeholders, and other public sources external to a company. This perspective helps assess whether a company's policies and processes are translating into actual performance on the ground. RepRisk combines artificial intelligence with human analysis in 20 languages to translate big data into curated and actionable research and metrics, using a proprietary, rules-based methodology. On a daily basis, RepRisk screens over 80,000 media, stakeholder, and third-party sources including print and online media, NGOs, government bodies, regulators, think tanks, newsletters, social media, and other online sources at the international, national, and local level. RepRisk's methodology is issues-driven, rather than company-driven – i.e. RepRisk's daily screening is driven by RepRisk's research scope. The scope is comprised of [28 ESG Issues](#), which were selected and defined in accordance with the key international standards and of [57 Topic Tags](#), ESG “hot topics” that are specific and thematic.

For more information on our research approach and the ESG Risk Platform, please visit our [website](#) or email us at contact@reprisk.com.

The RepRisk Index (RRI)

The RRI is a proprietary risk metric developed by RepRisk that dynamically captures and quantifies a company's or project's reputational risk exposure related to ESG issues. The RRI is not a measure of reputation, but is rather an indicator of ESG-related reputational risk of a company. It facilitates an initial assessment of the ESG and reputational risks associated with financing, investing, or conducting business with a particular company. The RRI ranges from zero (lowest) to 100 (highest). The higher the value, the higher the risk exposure. A value between 50 – 74 denotes very high risk exposure, a value between 75 and 100 denotes extremely high risk exposure.

There are three RRI values:

The **Peak RRI** (highest RRI in the last two years) is to be used for risk assessment as it refers to the **overall ESG risk exposure of a company**.

The **Current RRI** refers to the current level of media and stakeholder coverage of a company related to ESG risks. This value should be used to evaluate the **current media and stakeholder attention that a company receives** but not as a proxy for overall ESG risk exposure, since the attention of the media can be short-lived, and it takes time to address risks.

The **RRI Change or Trend** shows the increase or decrease of the RRI within the past 30 days.

Find out more about RepRisk's suite of risk metrics and how they can support your business [here](#) or email us at contact@reprisk.com.