

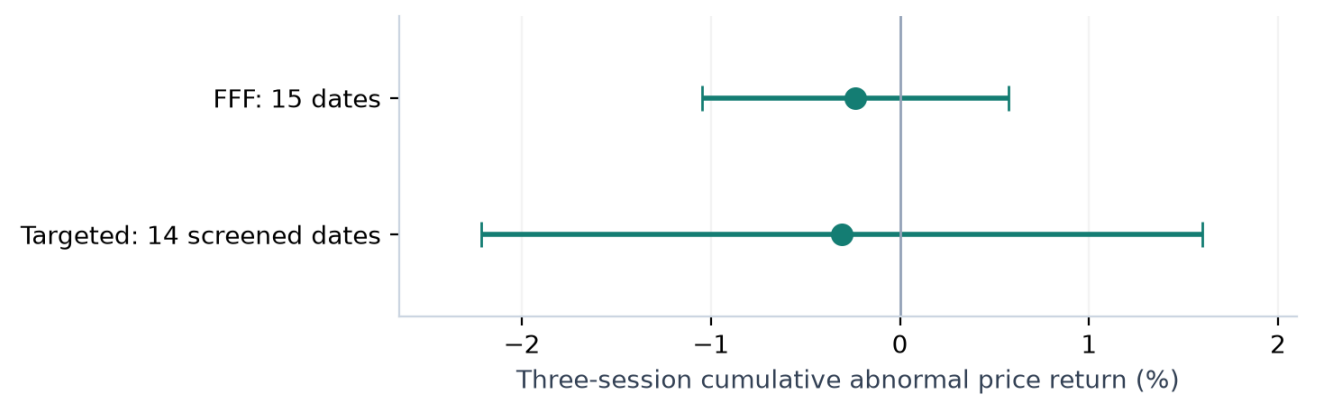
Climate protests and stock returns

An exploratory event study and weekly analysis
Research completed 18 September 2026

We did not find a statistically reliable average short-term decline in this sample. That does not establish that protests are harmless. The estimates allow meaningful losses, and selected environmental disasters and scandals show much larger financial effects.

Main test: prior, event and next session	Mean abnormal return	95% interval	Raw p
FFF: 15 dates, eight firms	-0.24%	-1.05% to +0.57%	0.540
Direct targets: 14 screened dates	-0.31%	-2.22% to +1.60%	0.733

Two-sided date-level tests. Both Holm-adjusted p-values are 1.000 across the two main tests. Intervals use the same date-level model; they are not causal confidence bounds.



What the study covers

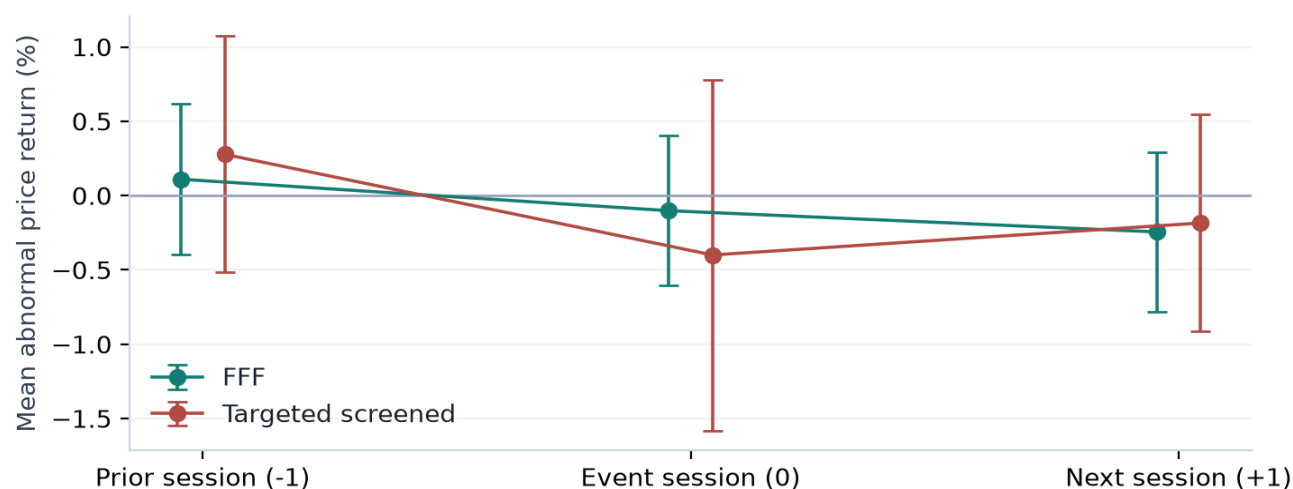
15 major FFF dates in 2019-2024; 25 named-company actions involving eight listed issuers in 2018-2024; and six company observations from five separate environmental incidents. The main targeted pool excludes ten documented company-news/AGM conflicts and one prolonged campaign. Another 13 table weeks and a 313-week FFF archive panel support sensitivity checks.

What it cannot establish

This is a sourced convenience sample, not a census or randomized experiment. Absence of statistical significance cannot justify saying that companies need not worry. The three-session intervals extend to losses of about 1.05% for FFF and 2.22% for screened targets.

Before, during and after

The prior trading day, protest trading day and next trading day each show no reliable average negative effect. For Friday strikes, the next session is usually Monday; market holidays can move it to Tuesday.



Average abnormal return	Prior session	Event session	Next session
FFF dates	+0.11%	-0.10%	-0.25%
Screened targets	+0.28%	-0.40%	-0.19%

No pooled daily/short-window test survives the ten-test Holm correction. Returns are market-model residuals, not simple changes in the quoted share price.

The two striking individual declines have competing explanations

Event	Three-session CAR	Interpretation
Barclays branch actions, 2 March 2020	-8.76%	Holm case $p=0.006$. COVID banking turmoil; the next day brought the Fed emergency cut. Sector-model CAR is -5.01%, with adjusted case $p=0.061$.
RWE Hambach protest, 6 October 2018	-12.40%	Holm case $p=0.004$. The window includes the preceding court halt to forest clearance. Most of the decline preceded the Saturday protest.

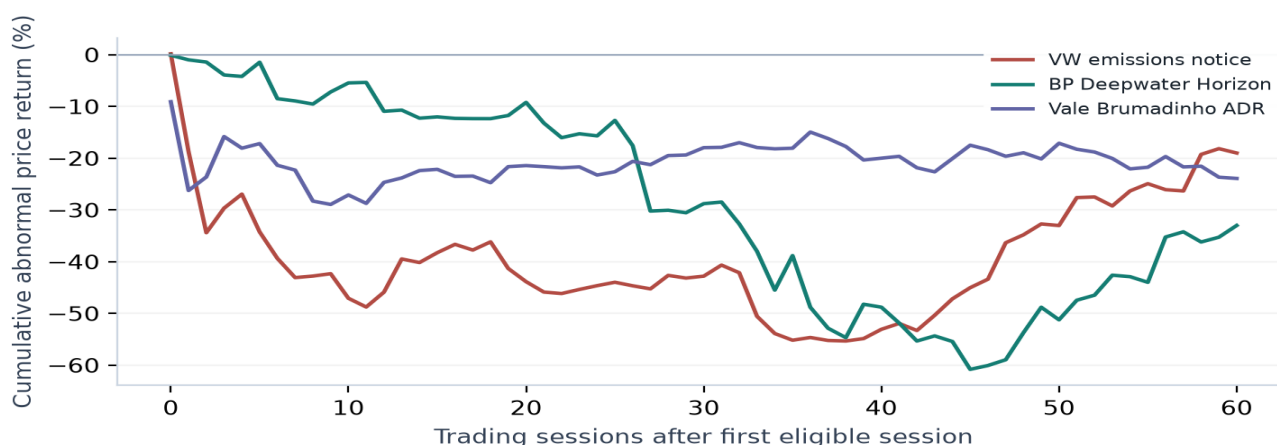
Other checks

Same-weekday placebo comparisons do not make either pooled result unusual (two-sided frequencies 0.544 and 0.945). Results remain non-significant using sector controls where available, excluding known broader context flags, or omitting dividend-affected FFF dates. The 25-event table retains positive and negative cases alike.

Environmental shocks are a separate question

Environmental failures can coincide with substantial valuation losses. These cases combine liability, operational and regulatory news. They are not estimates of the effect of a protest.

Case / first eligible session	Three-session CAR	[0,+60] benchmark-relative price return
Volkswagen / 18 Sep 2015	-19.85%	-24.47%
BP Deepwater / 21 Apr 2010	+0.09%	-27.07%
Samarco, BHP / 6 Nov 2015	-7.92%	-29.50%
Samarco, Vale ADR / 5 Nov 2015	-11.34%	-40.10%
Brumadinho, Vale ADR / 25 Jan 2019	-25.74%	-22.40%
Duke Dan River / 3 Feb 2014	+1.72%	-0.21%



Timing changes the measured shock

Volkswagen is -19.85% over $[-1,+1]$ when anchored on the EPA notice date, and -34.48% when anchored on the following Monday; exact release timing remains unresolved. Both are shown rather than selecting the larger fall. BP is almost flat in the initial three-session window, with a much larger decline as the disaster unfolds.

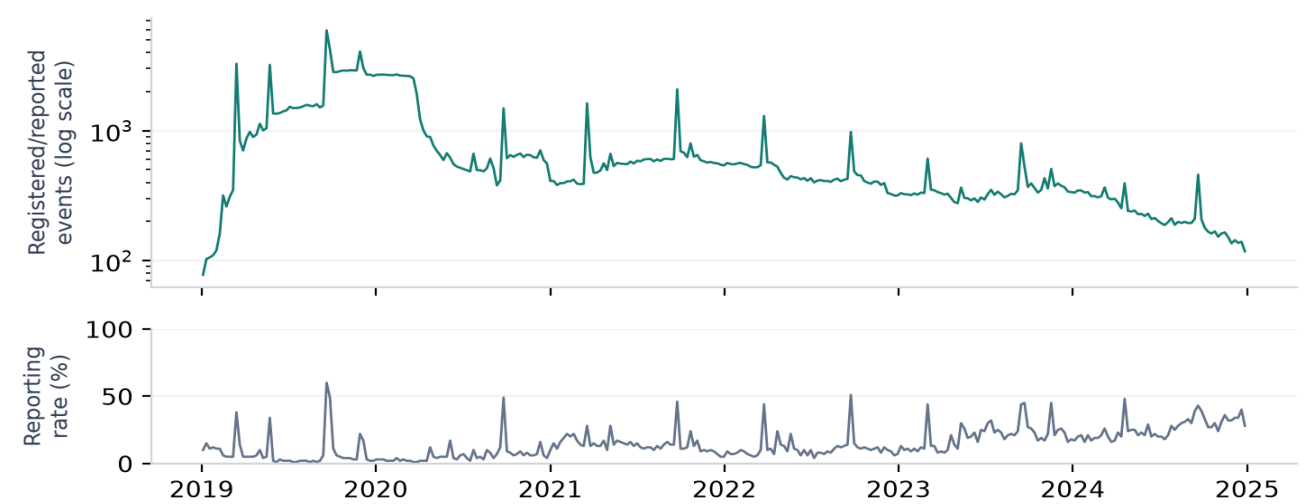
Longer windows are descriptive

The $[0,+60]$ column compounds share-price returns and subtracts the local benchmark's compounded return. It includes ordinary news, further disclosures and omitted dividends. Samarco's two owners are one incident, not two independent disasters.

In the separate screened protest sample, mean $CAR[0,+60]$ is -6.87% (nominal $p=0.024$; illustrative four-test correction $p=0.097$). This negative drift merits further research, but overlapping campaigns and other news prevent attribution. The available sector-model subset is -2.67% ($p=0.390$). It is not an established delayed protest effect.

What the deeper FFF website adds

Following the supplied statistics page into its historical list selector recovered **25 historical archive lists and 329 consecutive Friday-labelled weeks**, September 2018-January 2025. For 2019-2024, 313 weeks are in scope and 309 have complete usable price outcomes.



Weekly association, with year/month controls

Activity measure	Outcome	Approx. effect of doubling activity	Raw p
Registry event count	Same week	-0.069%	0.523
Registry event count	Following week	+0.031%	0.812
Reported attendance	Same week	-0.008%	0.868
Reported attendance	Following week	-0.041%	0.259

HAC uncertainty allows serial dependence over four calendar weeks; eight-week sensitivity agrees. All four multiplicity-adjusted p-values are 1.000. The doubling calculation is coefficient $\times \ln(2)$, an approximation for $\log(1+\text{count})$.

The archives are useful, but imperfect

Friday labels aggregate Monday-Sunday activity. Event counts include registration/recurrence conventions, not independently verified completed protests. Attendance is self-reported, with suspicious outliers. Twenty-one boundary weeks are duplicated and 16 have conflicting values; a fixed archive-selection rule preserves an audit trail.

Country rows in these archives differ in unit from the country-summary table and are often missing. We retained missing values and did not run a misleading country-intensity regression. Reporting-rate controls, a higher-reporting subset, removal of extreme attendance and exclusion of 2020 do not reveal a robust weekly association.

How to use these findings

Include the target company, wherever it trades

A London action against JPMorgan belongs in a US-listed target analysis. Shell actions in Rotterdam can be assessed using its London line. This study uses one listing per issuer and that listing's market calendar and local benchmark. It does not infer exposure simply from a London listing. The FFF UK-versus-foreign comparison is non-significant (paired $p=0.599$); operational exposure and headquarters proximity need better company-level data.

Method in plain English

For each event, estimate the stock's normal relationship with its market using 220 possible trading sessions ending 31 sessions before the event (minimum 160 observations). Subtract the predicted return from the actual closing-price return. Add those differences over the chosen window. Average firms within each global date before testing dates; eight correlated stocks are not eight independent protests.

Data quality changed the return measure

The independent audit found London dividend adjustments roughly 100 times too small in the price feed. We switched to split-adjusted closing-price returns before inspecting outcomes and retained dividend-date sensitivity checks. German stocks use the DAX price index. Source prices and adjustment defects remain in the package; this is not a total-shareholder-return study.

Published evidence is conditional too

Ramelli, Ossola and Rancan (2021) report lower abnormal returns for more carbon-intensive European firms around the first global strike. Their firm-level estimate is about 42 basis points per standard deviation of carbon intensity, not a loss for every company. Schuster and colleagues (2023) examine 11 strikes and find mixed reactions rather than consistent underperformance by environmentally weaker firms.

Files and reproducibility

The full report explains all choices. The event register links evidence and confounds; result tables show every window and company. Frozen source inputs, independent numerical replication, placebo draws, source discrepancies and executable analysis are included. The README gives the rerun command. No private account or paid market-data API is required for the frozen analysis.

Selected primary sources

[FFF strike statistics and historical archive selector](#)

[Historical quarterly list archive](#)

[Ramelli et al.: EU JRC publication record](#)

[Schuster et al.: accepted manuscript](#)

[US EPA: Volkswagen notice, 18 September 2015](#)