Bachelor Thesis · B.Sc. International Finance
Frankfurt University of Applied Sciences · Winter Semester 2025/26

# The Influence of U.S. Policy on Clean Energy Markets

## An Event Study

**Paola Hidalgo Lasso**

First examiner: Prof. Dr. Christian Thier, CFA
Second examiner: Prof. Dr. Jens Müller-Merbach

### MOTIVATION

- U.S. presidential elections create **political and regulatory uncertainty** that affects investment decisions, sectoral performance and capital allocation.
- Clean energy funds sit at the **intersection of financial markets and climate policy** and are highly sensitive to regulatory expectations.

### LITERATURE & THEORY

- Elections cause sector-specific abnormal returns in climate-exposed stocks (Ramelli et al., 2021; Pham et al., 2023; Koch & Schiereck, 2025).
- **EMH** (Fama, 1970) vs **behavioral finance** (Barberis & Thaler, 2003); **political uncertainty** is priced (Pástor & Veronesi, 2012).
- **Gap:** fund-level, multi-regional evidence.

### RESEARCH QUESTION

**How did the outcome of the 2024 U.S. presidential election influence the performance of clean energy markets?**

| | | |
|---|---|---|
| **H1** | Clean energy funds show negative abnormal returns vs. the market and conventional energy | SUPPORTED |
| **H2** | U.S. clean energy funds react more strongly than other regions | SUPPORTED |
| **H3** | The effect is short-term and diminishes in the long term | NOT FULLY SUPPORTED |

FRANKFURT UNIVERSITY OF APPLIED SCIENCES

**−4.6%**

BHAR vs energy on day 1 (p<0.01); 99% of funds negative

**−14.6%**

BHAR vs energy around +100 days (p<0.01)

**+20.0%**

BHAR vs energy at +250 days; +4.4% vs market (p<0.01)

### H1 · Overall reaction SUPPORTED

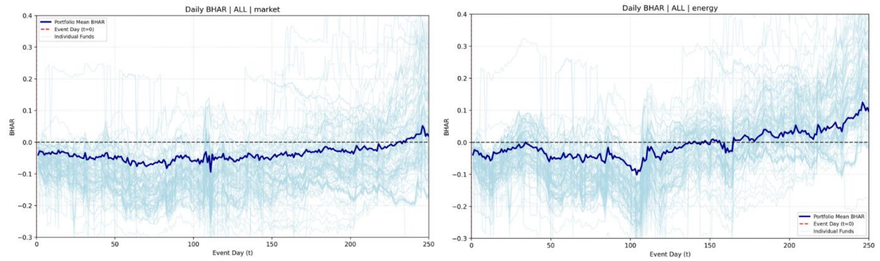


*Figure 1: Daily BHAR trajectories of 'All' clean energy funds (vs MSCI World | vs MSCI World Energy)*

- **Day 1:** −4.6% vs energy and −4.3% vs market (p < 0.01); 99% of funds negative.
- **About +100 days:** −14.6% vs energy and −11.7% vs market.
- **+250 days:** +20.0% vs energy and +4.4% vs market.

### H2 · Regional differences SUPPORTED

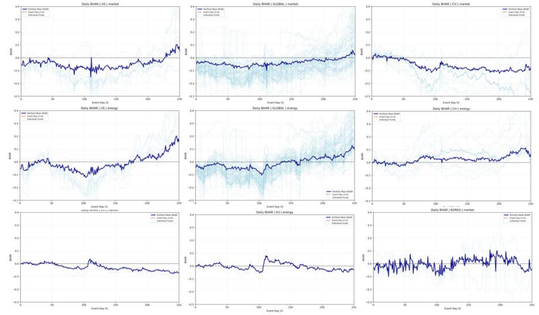

*Figure 4: Clean energy funds BHAR paths per geographical region*

- **U.S. funds react most:** −6.3% vs energy at t+1 (p < 0.01); 90% of U.S. funds negative.
- **At +110 days** U.S. funds trail Europe by −26.3% and China by −19.2% (vs energy; Welch test, p < 0.01).

### H3 · Temporal dynamics NOT FULLY SUPPORTED

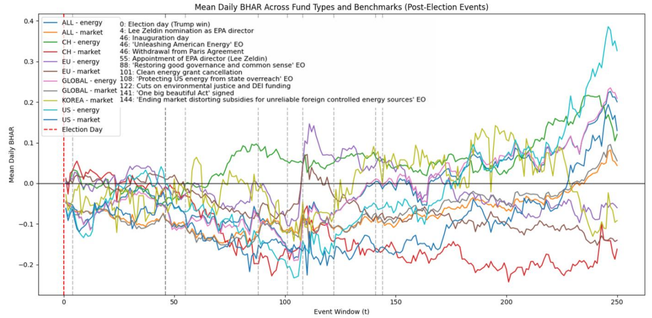


*Figure 7: Daily mean BHAR by regions (market vs. energy benchmarks) with post-election events*

- The effect does not fade: it **deepens into a medium-term trough** (+75 to +125 days).
- **No convergence to zero:** U.S. and Global funds reverse (U.S. +32.7% vs energy at +250 days); China and Europe stay negative vs market.

### Robustness · market model

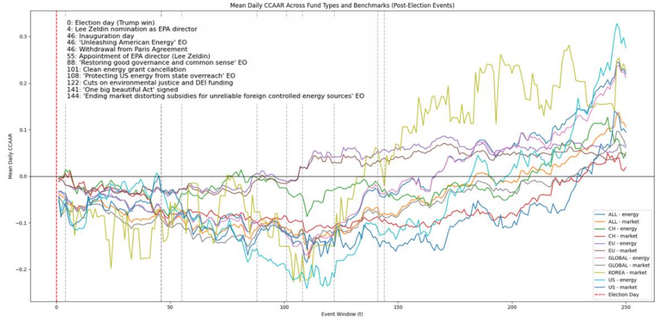


*Figure 9: Daily CCAAR by regions and benchmarks (market-model robustness)*

- The market model confirms the **short- and medium-term** effects.
- European and Chinese funds recover in the long run, so **long-run results depend on the specification**.

### Data & method

- **112 clean energy funds** (69 mutual funds, 43 ETFs), LSEG Workspace; regional market and energy benchmarks.
- Long-horizon event study using **BHAR** over +1 to +250 trading days after 5 Nov 2024; skewness-adjusted t-tests, Welch tests, market-model robustness check.

### Discussion

- Immediate repricing fits the political-uncertainty channel; the medium-term deepening follows sequential policy signals (executive orders, Paris withdrawal, EPA appointment, trade war).
- Possible reasons for the reversal: pessimism already priced in, the boomerang hypothesis, and energy lagging the market.

### Implications

- Election cycles are an additional risk factor.
- Medium-term risk management.
- Geographical diversification.
- Call for table climate regulation.

### Limitations & outlook

- Benchmark proxies; 2025 fund data; survivorship bias; overlapping shocks.

**Future research:** more fund characteristics, alternative benchmarks, broader political event settings.