



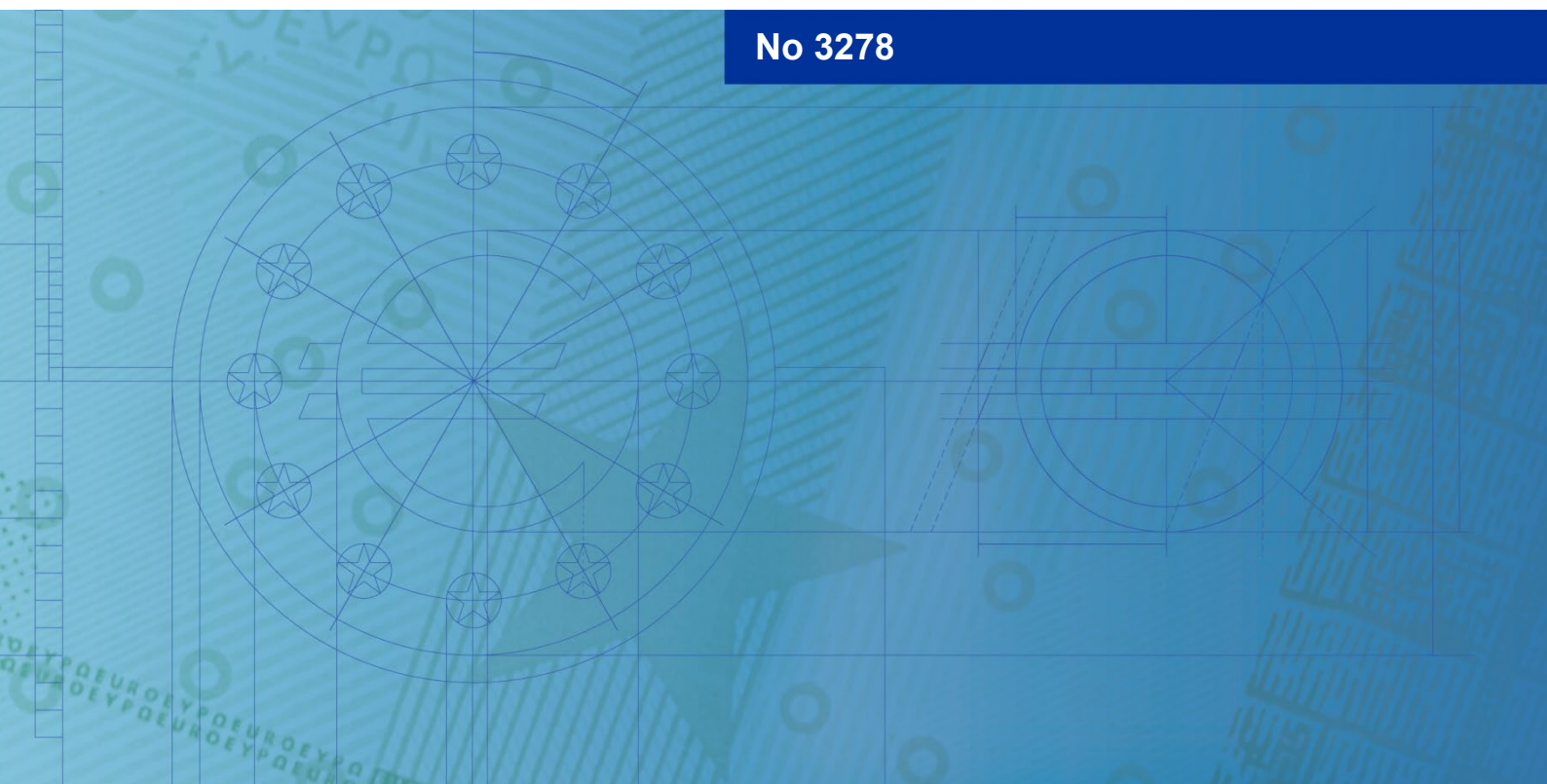
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Environmental policy uncertainty and cleantech FDI

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Abstract

This paper examines whether environmental policy uncertainty undermines clean-technology investment in the United States by weakening policy-induced investment incentives. Using quarterly project-level data on U.S. greenfield investments from 2007Q1 to 2019Q1, combined with novel news-based indices that separately measure environmental policy salience and environmental policy uncertainty, we find that policy uncertainty substantially offsets the positive investment effects of environmental policy. At the aggregate level, a one-standard-deviation increase in environmental policy uncertainty eliminates roughly 75% of the policy-induced increase in the number of cleantech projects and around 50% of the increase in capital expenditure. The deterrence effect is substantially stronger for foreign than for domestic investors, consistent with greater informational frictions facing cross-border capital. These effects persist for at least two years following an uncertainty shock and are corroborated by country- and firm-level analyses, though results for capital expenditure are less robust at disaggregated levels. The findings imply that policy credibility is a first-order determinant of clean investment: an environmental policy framework that is ambitious but perceived as unstable may fail to mobilize the capital it is designed to attract.

Keywords: Environmental policy, Policy uncertainty, Foreign direct investment, Green investment.

JEL Classification: Q58, F21, F23, E22.

1 Executive Summary

The deployment of clean technologies requires large and sustained private investment. Governments worldwide have responded with ambitious environmental and industrial policies designed to mobilize that capital. Yet the effectiveness of these policies depends not only on their stringency but also on their credibility. When the future direction of environmental policy is uncertain, investors may delay or scale back commitments even when current policy remains supportive — and that deterrence effect need not wait for policy to turn negative. Uncertainty alone is sufficient.

This paper provides the first systematic evidence that environmental policy uncertainty materially undermines cleantech investment in the United States. The analysis covers greenfield investment — new productive capacity created through the construction of a new facility or affiliate — from 2007Q1 to 2019Q1. Greenfield projects involve large upfront expenditures, long planning horizons, and significant sunk costs; once undertaken, they are largely irreversible. These features make them especially sensitive to uncertainty about future policy conditions, and make the setting well-suited for identifying the uncertainty channel.

The empirical analysis combines project-level investment data with novel news-based indices of environmental policy salience (EnvP) and environmental policy uncertainty (EnvPU), constructed using supervised machine learning on ten major U.S. newspapers. A key feature of these indices is that they decompose the policy environment into a level component and an uncertainty component, allowing us to separately identify the investment effects of policy support and policy instability. Statistical validation confirms that EnvPU is empirically distinct from all existing climate and environmental policy measures: it is near-orthogonal to indices of climate news, climate policy uncertainty, and policy salience, with pairwise correlations ranging from -0.13 to 0.09 .

The main findings are as follows. At the aggregate level, a one-standard-deviation

increase in environmental policy uncertainty offsets roughly **75%** of the positive investment effect of environmental policy at the extensive margin (number of projects) and around **50%** at the intensive margin (capital expenditure). These effects are substantially larger for foreign than for domestic investors. Domestic cleantech investment also declines significantly with uncertainty, but foreign investors — who face greater informational frictions when assessing the U.S. policy environment — respond more sharply to uncertainty signals. Local projection estimates show that the negative effect of uncertainty *persists for at least two years* following an uncertainty shock, and outlasts the positive investment effect of policy itself. Consistent findings emerge at the source-country and firm levels, where the estimated offset ranges from approximately 40% to 55%.

These results carry direct implications for climate and industrial policy design. Policy credibility is not a secondary concern: it is a first-order determinant of whether environmental policy incentives translate into actual investment. A policy framework that is ambitious on paper but perceived as unstable or reversible may fail to attract the capital it is designed to mobilize. For policymakers seeking to attract internationally mobile clean investment, the stability and predictability of the policy environment can be as important as the generosity of the incentives it provides.

2 Introduction

The transition to a low-carbon economy requires unprecedented investment in clean technologies. Governments increasingly rely on environmental and industrial policies to mobilise private capital and accelerate the deployment of low-carbon technologies. As a result, policy has become an important determinant of investment location and timing. While much attention has focused on the stringency of environmental policy, investors also care about its stability and credibility. Uncertainty about the future direction of

policy may discourage investment even when current policy remains supportive.

This sensitivity is especially acute for clean technology projects. Investments in renewable energy, battery production, electric vehicles, and other clean technologies typically involve large upfront expenditures, long planning horizons, and substantial sunk costs. Their profitability often depends on expectations about future environmental regulation and policy support. In line with real options theory, uncertainty raises the value of waiting — and, critically, need not resolve negatively to deter investment. It only needs to exist.

In this paper, we examine how environmental policy uncertainty affects cleantech greenfield investment in the United States. Greenfield investment — the establishment of new productive capacity through the creation of a new facility or affiliate, as distinct from the acquisition of existing assets through mergers and acquisitions — is largely irreversible once undertaken, making it especially sensitive to uncertainty about future policy conditions. We analyse both foreign and domestic investors, with foreign direct investment (FDI) as our primary focus; domestic projects serve as a benchmark for assessing whether environmental policy uncertainty disproportionately affects cross-border capital.

The paper contributes to three strands of literature. First, it contributes to the literature on policy uncertainty and investment. A large body of work shows that uncertainty surrounding economic, political, and regulatory policies discourages firm investment, innovation, and international capital flows (Bloom, 2009; Baker et al., 2016; Julio and Yook, 2016; Gulen and Ion, 2016). Within this literature, the closest antecedent to our approach is Azzimonti (2019), who shows that partisan conflict about trade policy significantly deters FDI inflows to the U.S. using a news-based uncertainty index and a specification framework we follow closely. We extend this approach by (i) focusing on environmental rather than trade policy uncertainty, (ii) exploiting quarterly project-level greenfield data that allow us to isolate cleantech from non-cleantech investment,

and (iii) jointly identifying the effects of policy activity and policy uncertainty — a decomposition that is central to our identification strategy.

A related strand of the asset-pricing literature studies how political and environmental policy uncertainty is priced in financial markets. Pástor and Veronesi (2013) show that political uncertainty commands a risk premium whose magnitude rises in weaker economic conditions, as uncertainty about future government policy reduces the value of the implicit protection that stable policy provides to asset prices. Ilhan et al. (2021) and Hsu et al. (2023) apply this logic to climate and environmental policy specifically, showing that carbon-intensive and high-emission firms are priced as bearing systematic policy risk, with both papers documenting that this risk premium *declined* around the 2016 U.S. election — a short-horizon asset-pricing response we revisit and reconcile with our own investment-based evidence in Section 3.

Second, the paper contributes to the rapidly growing climate-finance literature that develops textual measures of climate-related information. Existing measures capture broad climate news and attention (Engle et al., 2020), firm-level climate exposure (Sautner et al., 2023), climate policy uncertainty (Gavriilidis et al., 2026; Basaglia et al., 2025), and environmental policy uncertainty (Palikhe et al., 2024). Our analysis builds on the Environmental Policy (EnvP) and Environmental Policy Uncertainty (EnvPU) indices of Noailly et al. (2024) and Noailly et al. (2022). A distinctive feature of these indices is their joint decomposition of the policy environment into a level component and an uncertainty component: without it, one cannot separately identify the investment effects of policy support from the investment effects of policy instability. Unlike keyword-based environmental uncertainty measures, the supervised classifier was trained to identify articles expressing ambiguity specifically about future *policy* direction or implementation, rather than scientific, economic, or firm-level uncertainty that may co-occur with environmental policy coverage in newspaper text. Section 3 discusses construction and validation in detail, including evidence that EnvPU is near-orthogonal to all existing

climate and environmental policy measures, confirming that it captures a distinct dimension of the policy environment.

Third, the paper contributes to the literature on environmental policy and investment location. Existing studies have primarily examined how the stringency of environmental and climate policies affects plant location, foreign direct investment, and the geographic allocation of production (Jaffe et al., 1995; Keller and Levinson, 2002; Levinson and Taylor, 2008; Pienknagura, 2024). We instead emphasise the credibility and predictability of environmental policy as determinants of investment — a distinction that is particularly relevant for long-lived clean technology projects whose profitability depends on the policy environment over extended horizons. Because foreign firms typically face greater informational frictions when evaluating investment opportunities, they should be more sensitive to policy uncertainty than domestic firms. Consistent with this prediction, we find substantially stronger effects for foreign than for domestic investors.

Our main findings are as follows. At the aggregate level, a one-standard-deviation increase in environmental policy uncertainty offsets roughly 75% of the positive effect of environmental policy on the number of cleantech projects, and around 50% of its effect on investment expenditure. These effects are substantially larger for foreign than for domestic investors. Local projection estimates indicate that the negative effect of uncertainty persists for at least two years following an uncertainty shock — longer than the positive effect of policy itself. At the source-country level, the offset is approximately 55% at the extensive margin; at the firm level, around 40%. Together, the results suggest that the deterrence effect of environmental policy uncertainty is both large and durable. For policymakers, this implies that the credibility and predictability of environmental policy frameworks can be as consequential as their stringency.

The remainder of the paper is organised as follows. Section 3 describes the data and measurement of environmental policy uncertainty. Section 4 presents the aggregate results. Sections 5 and 6 examine heterogeneity across source countries and firms.

Section 7 concludes.

3 Data

3.1 Cleantech Investment

We use the project-level database fDi Markets, produced by the Financial Times, which tracks greenfield investment worldwide from publicly available sources in 25 languages since 2003 (International Monetary Fund, 2023; Gopinath et al., 2025; Aiyar et al., 2024; Crescenzi et al., 2022).¹ Each observation records the quarter and year of the deal, estimated capital expenditure and jobs created, source and destination country, the parent and investing company, and the sector and subsector of the recipient entity.

The key feature of this database for our purposes is that it identifies investments in “environmental technology” (ET) across a range of sectors, including renewable energy, environmental consulting, and recycling.² The ET label thus allows us to track green investments across sectors and to distinguish domestic (within-U.S.) from foreign-sourced greenfield investment—both of which are otherwise difficult to identify in standard FDI datasets. A limitation of the database is that it covers only greenfield investment, not mergers and acquisitions, and provides no further information on the parent company. To ensure reliability, the provider cross-checks all deals against multiple sources and removes investments that were announced but not completed.

Figure 1 shows the composition of the foreign investor sample: Germany accounts for 17% of U.S. cleantech greenfield investments, Spain for 11%, and Canada for 10%. Figure 2 documents substantial time-series variation in ET deals, driven by both foreign and domestic investors. In the 2007Q1–2019Q1 estimation period, the sample covers

¹<https://www.fdimarkets.com/>

²Sub-sectors classified under the ET cluster are: renewable energy, biomass, geothermal, hydroelectric, marine electric, solar, wind, environmental consulting, recycling, air purification, environmental remediation, water treatment and desalination, sewage treatment, and solid waste treatment. This classification is assigned by the data provider (fDi Markets/Financial Times) as part of their proprietary sectoral taxonomy.

41,080 FDI projects, of which approximately 30% are from foreign firms. About 24,000 distinct firms invested over the period.

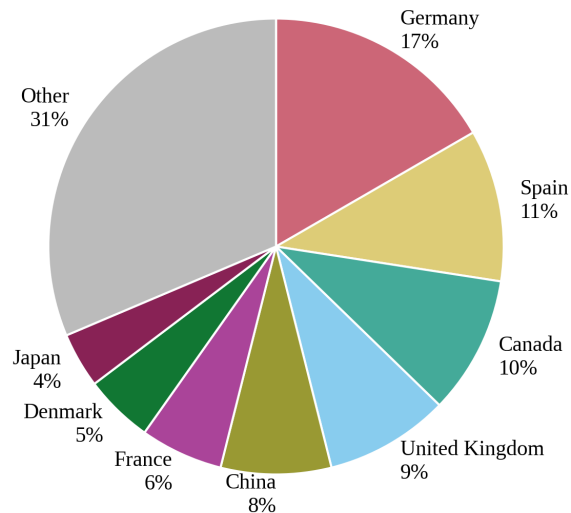


Figure 1: Sample composition of environmental technology greenfield investment in the U.S. by largest foreign firms by cumulative count, 2003–2019. Shares are rounded.

3.2 Environmental Policy Indices

We capture the evolution of the U.S. environmental policy context using two novel news-based indices constructed in earlier work.

3.2.1 Index Construction and Design

- The **EnvP index** measures the monthly share of U.S. news articles covering environmental and climate policy. Noailly et al. (2024) show that the index captures salient events in the history of U.S. environmental regulation and co-moves with established measures of policy stringency.
- The **EnvPU index** measures the monthly share of *environmental policy* articles that report on *uncertainty* about future policy direction or implementation, scaled

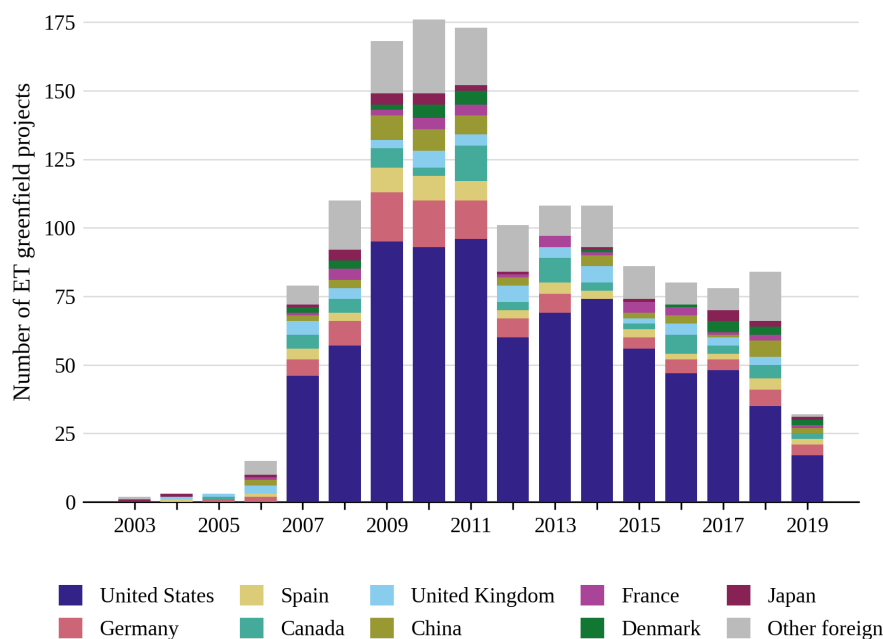


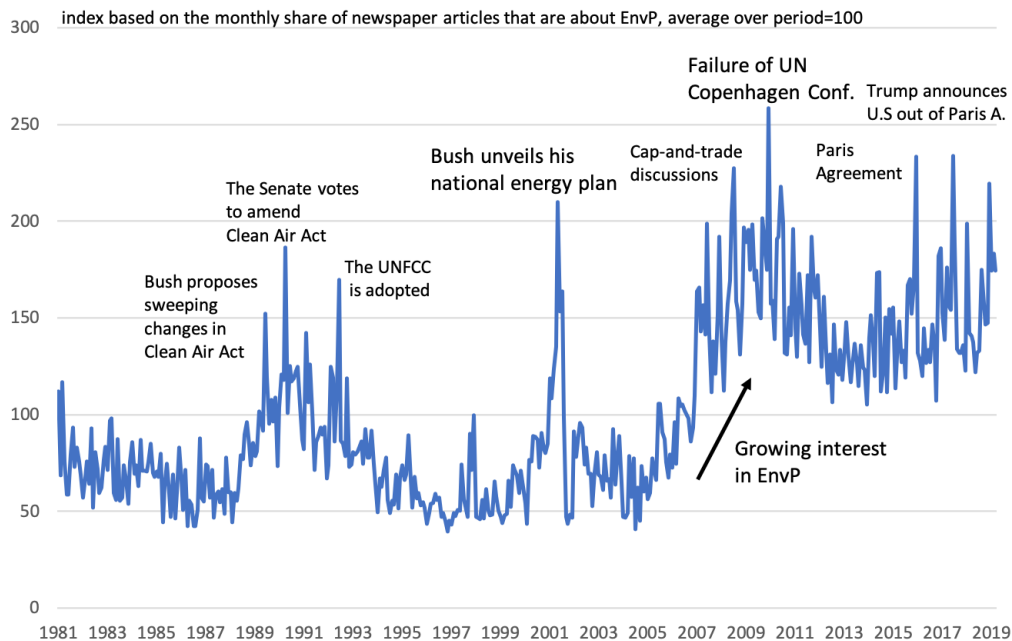
Figure 2: Annual composition of environmental technology greenfield investment in the U.S. by U.S. and foreign firms, largest by cumulative count, 2003–2019.

by the total monthly volume of environmental policy news. Noailly et al. (2022) show that the index correctly captures major spikes in policy uncertainty and tracks changes of political power in U.S. elections.

A critical feature of the index design is the distinction between the two measures. EnvP captures the overall salience or intensity of environmental policy coverage, which correlates with the *level* of policy activity or stringency. EnvPU, by contrast, is constructed from the *subset* of those articles that specifically report on ambiguity, contestation, or unpredictability surrounding policy outcomes — not on the direction of policy itself. This design implies that EnvPU can, in principle, be elevated even when policy signals are positive (e.g., during contentious legislative debates over ambitious climate bills), and it is not mechanically driven by negative policy news. Formally, because EnvPU is scaled by the volume of EnvP articles, it measures uncertainty *conditional on* policy salience, which further separates it from directional changes in the policy level.

Both indices are built using a combination of supervised and unsupervised machine learning applied to the archives of ten major U.S. newspapers.³ The supervised classification relies on manually annotated training sets developed from a codebook of criteria for identifying environmental policy content, applied to articles from the full cross-newspaper sample. While EnvP is available on a monthly basis over 1981–2019, EnvPU, which requires a sufficient stock of classified environmental policy articles to construct a stable conditional share, is available from 1990 onwards. Detailed construction and validation of both indices are provided in Noailly et al. (2024) and Noailly et al. (2022), respectively.

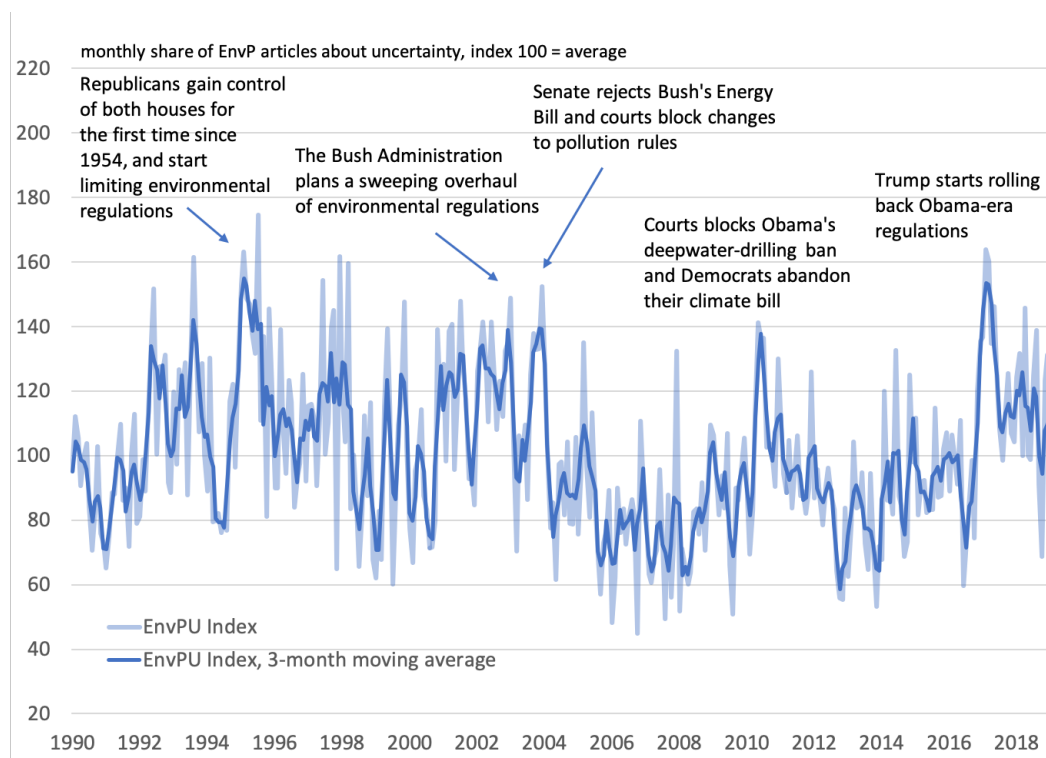
Figure 3: EnvP — Index of environmental policy



Figures 3 and 4 plot both indices. The EnvP index correctly captures salient policy events, including major UNFCCC climate conferences, the failure of the Senate to pass

³Accessed via Dow Jones Factiva. Newspapers included: *New York Times*, *Washington Post*, *Wall Street Journal*, *Houston Chronicle*, *Dallas Morning News*, *San Francisco Chronicle*, *Boston Herald*, *Tampa Bay Times*, *San Jose Mercury News*, and *San Diego Union Tribune*.

Figure 4: EnvPU — Index of environmental policy uncertainty



national cap-and-trade legislation, and Trump's announcement of the U.S. withdrawal from the Paris Agreement in June 2017. The EnvPU index spikes during the 1995–96 government shutdown dispute over environmental spending, in the early 2010s following the collapse of the cap-and-trade bill, and during the Trump presidency — all periods characterised by genuine ambiguity about the direction of U.S. climate policy, rather than simply negative policy outcomes.

3.2.2 Case Study: EnvPU and the 2016 Election of Trump

To further illustrate how the EnvPU Index can be interpreted, we use the 2016 election of Trump as a case study. Asset-pricing evidence shows that climate-related risk premia *fell* around the same event (Ilhan et al., 2021; Hsu et al., 2023). This finding is consistent

with financial markets interpreting the election as resolving uncertainty in a deregulatory direction, at least over the horizon relevant to options and near-term equity returns. Therefore, it may initially appear inconsistent that the EnvPU *spikes* following the 2016 election of Trump.

However, this pattern is compatible with our interpretation of the EnvPU spike for two reasons. First, the asset-pricing evidence concerns the pricing of *existing* carbon-intensive assets and short-horizon financial claims, whereas our setting concerns new, irreversible greenfield investment decisions with payoffs realised over 10–20 year horizons. An event that clarifies near-term regulatory direction for incumbent polluting firms can simultaneously raise long-run uncertainty for prospective cleantech investors, since the credibility of future policy support — rather than its current level — is what governs the profitability of a new clean energy project.

Second, the EnvPU index by construction captures the volume of newspaper coverage expressing *ambiguity* about current and future policy direction or implementation, which is elevated by genuine uncertainty in either direction: a sharp reversal of the existing policy trajectory generates extensive media speculation about whether, how far, and how durably that reversal will proceed, regardless of whether financial markets ultimately price the most likely resolution as favorable or unfavorable to a given asset class. The 2016 episode, in this sense, is illustrative rather than anomalous: short-horizon asset prices and long-horizon investment decisions can respond in different directions to the same political event, precisely because they are exposed to different moments of the same uncertainty distribution.

3.2.3 Comparison with Existing Indices

A natural question is whether our EnvPU Index adds information beyond what is already captured by related climate and environmental policy measures in the literature. Appendix A.2 provides a formal comparison. The empirical correlations reinforce the

conceptual distinctions drawn above: while EnvP is moderately correlated with the climate attention index of Engle et al. (2020) ($\rho = 0.64$), the climate policy uncertainty indices of Basaglia et al. (2025) ($\rho \approx 0.3 - 0.6$) and Gavriilidis et al. (2026) ($\rho = 0.72$), and the environmental policy uncertainty index of Palikhe et al. (2024) ($\rho = 0.50$), EnvPU is near-orthogonal to all of them, with correlations ranging from -0.13 to 0.19 . This pattern suggests that uncertainty surrounding the future direction of environmental policy constitutes a distinct empirical phenomenon that is not captured by existing climate or environmental policy indices, whether they measure attention, stringency, or uncertainty in the broader sense.

3.2.4 Statistical Validation

The statistical properties of the two indices are consistent with this conceptual distinction. Unit root tests reported in Appendix A.1 reveal a striking asymmetry: EnvPU is unambiguously stationary ($ADF = -6.11$, $p < 0.001$), consistent with a mean-reverting uncertainty process that spikes episodically and then reverts, while EnvP exhibits near-unit-root behaviour, reflecting the secular rise in media attention to environmental policy over the sample period. To assess directly whether EnvPU is mechanically driven by EnvP, we regress EnvPU on a distributed lag of EnvP and, separately, on first-differenced EnvP. In both specifications, the lagged EnvP terms are jointly insignificant and the regression R^2 falls below 7%, confirming that knowledge of the current and past level of environmental policy coverage has little predictive power for environmental policy uncertainty (Appendix A.1, Table A2). This asymmetry in persistence, together with the low predictive relationship between the two series, provides empirical support for treating EnvP and EnvPU as distinct dimensions of the policy environment rather than as proxies for one another.

3.3 Other Controls

We collect macroeconomic and trade controls from standard sources. From the FRED database: the Federal funds rate, U.S. real GDP, year-on-year real GDP growth, inflation, the real effective exchange rate, real imports and exports, the oil price, the Leading Index, and the University of Michigan Consumer Confidence Index. We construct U.S. trade openness as $\Delta\text{Trade} = \Delta(\text{Imports}_t + \text{Exports}_t)/\text{GDP}_t$.

From the OECD: the annual net installed capacity of renewables (in MWe),⁴ the annual number of environment-related patents granted, and a quarterly index of real energy prices—all for the U.S. and for source countries. From the IMF's International Financial Statistics database: quarterly bilateral import and export data, bilateral exchange rates, and source-country CPI and GDP. Bilateral trade openness is constructed as $\Delta\text{BilateralTrade}_{s,t} = \Delta(\text{Imports}_{s,t}^{US} + \text{Exports}_{s,t}^{US})/\text{GDP}_{s,t}$.

Finally, we include the Economic Policy Uncertainty (EPU) index of Baker et al. (2016) for both the U.S. and source countries as a control for broader policy uncertainty.

4 Aggregate Cleantech Investments

4.1 Model Specification

We investigate the effect of US environmental policy uncertainty on cleantech investment in the U.S. from both foreign and domestic investors. We start with the aggregate level, using quarterly data from 2007Q1 to 2019Q1. The dependent variable is either the share of cleantech deals in total deals (extensive margin) or the share of capital expenditure on cleantech deals in total capital expenditure (intensive margin). Figure 5 plots both series alongside the standardised EnvPU index.

⁴Derived from solar thermal, geothermal, hydro, and wind.

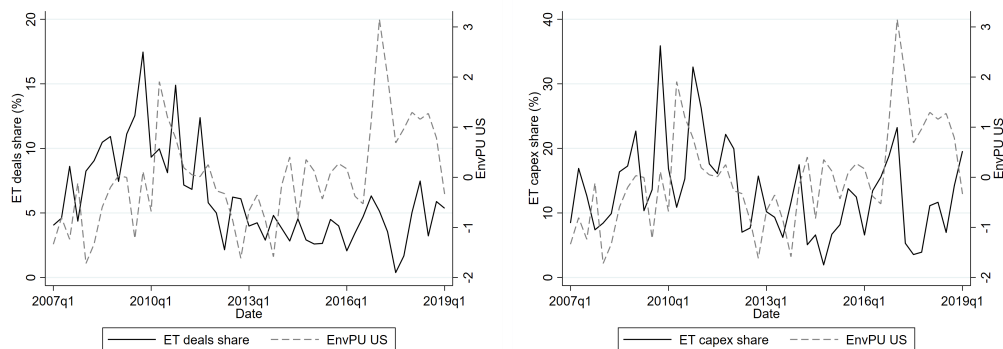


Figure 5: Share of cleantech deals (left) and cleantech capital expenditure (right) as a share of total, with standardised EnvPU index, 2007Q1–2019Q1.

The benchmark specification is:

$$CleanInvShare_t^{US} = \beta_0 + \beta_1 EnvPU_{t-1}^{US} + \beta_2 EnvP_{t-1}^{US} + \beta_3 \Phi_{t-1}^{US} + \varepsilon_t \quad (1)$$

where $CleanInvShare_t^{US}$ is the cleantech deal share or cleantech capital expenditure share. EnvP and EnvPU are standardised versions of the two policy indices, lagged one quarter to reflect the lead time in greenfield investment decisions. Φ_{t-1} is a vector of controls: the growth rate of U.S. installed renewable capacity, a U.S. energy price index, and—in extended specifications—U.S. real GDP growth, the Federal funds rate, inflation, trade openness, the real effective exchange rate, the EPU index, the Leading Index, and consumer confidence.⁵ Standard errors are reported as heteroscedasticity-robust.

⁵The choice of controls follows the aggregate and source-country specifications of Azzimonti (2019), who examines the effect of trade-policy partisan conflict on U.S. FDI inflows using a closely related framework. We also tested a control for agglomeration effects (cumulative cleantech deal share), which proved insignificant and is omitted.

4.2 Results

4.2.1 Extensive Margin

Table 1 presents the results. All policy indices are standardised, and coefficients reflect the response of the ET deal share to a one-standard-deviation change, in percentage points.

The key finding is that EnvP raises the ET deal share by approximately 1.6 percentage points (pp), while EnvPU lowers it by approximately 1.2 pp—both significant at the 1–5% level across specifications. Interpreting this jointly, above-average environmental policy uncertainty offsets roughly 75% of the investment incentive created by environmental policy. This estimate reflects the extent to which uncertainty erodes the economic incentives underpinning the low-carbon transition.

Across the column sequence (models 1–8), we progressively add controls for seasonality, market size (renewable capacity growth), technological progress (green patent growth), energy prices, macroeconomic conditions, EPU, and business cycle expectations. The coefficients on EnvP and EnvPU are stable throughout. The one notable exception is model (6), which includes the full set of macroeconomic and trade controls: the Fed funds rate, GDP growth, inflation, trade openness, and the REER. Here, only GDP growth is individually significant—a one-pp increase in U.S. GDP growth lowers the ET deal share by about 0.8 pp. This is consistent with evidence that fiscal stimulus during recessions tends to favor clean-technology investment (Noailly et al., 2024), or alternatively that non-ET investment is more cyclical than ET investment (Noailly and Smeets, 2019).

Results by investor origin (foreign-only and U.S.-only subsamples) are reported in Appendix A.3.2. Foreign investors display larger absolute responses to EnvP and EnvPU (+2.4 pp and –1.7 pp, respectively) than domestic investors (+1.3 pp and –1.1 pp), consistent with the view that information asymmetries could amplify the signal value

of policy news for foreign investors. Relative to their own EnvP response, domestic investors are slightly more deterred by EnvPU (offsetting 85% of policy incentives) than foreign investors (71%).

Table 1: Environmental policy and aggregate cleantech FDI deals

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share
L.EnvP US	1.6024*** (0.3261)	1.6312*** (0.3096)	1.6061*** (0.3383)	1.5819*** (0.3294)	1.6002*** (0.3250)	0.8583** (0.4124)	1.6487*** (0.3292)	1.4489*** (0.3469)
L.EnvPU US	-1.1784*** (0.3411)	-1.1311*** (0.3240)	-1.2207*** (0.3619)	-1.1602*** (0.3287)	-1.1793*** (0.3164)	-0.8028** (0.3372)	-1.1738*** (0.3287)	-0.9652*** (0.3411)
Q1		-1.2777 (1.0381)						
Q2		-1.0963 (0.8597)						
Q3		-0.7376 (0.8987)						
L.Δ% RE installed capacity US			-0.0568 (0.1417)	-0.0659 (0.1461)		0.0047 (0.1510)	-0.1266 (0.1429)	-0.0002 (0.1326)
L.Δ Oil price			-0.0163 (0.0130)					
L.Δ% Energy price US				-0.0346 (0.0316)	-0.0336 (0.0301)	0.0739 (0.0809)	-0.0457 (0.0317)	-0.0391 (0.0312)
L.Δ% Env patents US					0.0265 (0.0476)			
L.Fed funds rate US						0.2985 (0.3887)		
L.GDP growth US						-0.7767** (0.3164)		
L.Inflation US						-0.8940 (0.6820)		
L.Δ Trade openness US						0.5953 (0.3817)		
L.Δ REER US						-0.0199 (0.0865)		
L.Δ EPU US							0.5903* (0.3374)	
L.Δ Leading US								0.3436 (0.5683)
L.Δ Sentiment US								-0.6614 (0.4000)
Constant	5.6330*** (0.2908)	6.4113*** (0.8161)	6.0309*** (1.0190)	6.0411*** (1.0437)	5.3613*** (0.5205)	8.3483*** (1.6107)	6.4341*** (1.0410)	5.6360*** (0.9626)
Observations	48	48	44	44	44	44	44	44
R ²	0.41	0.45	0.43	0.42	0.43	0.58	0.47	0.47

The table presents results of an OLS regression based on our full sample of quarterly data (only RE installed capacity is annual) from 2007Q1:2019Q1. Results separated by the US and foreign investor base can be found in Table A5 and A6, respectively. Robust standard errors are in parentheses. The dependent variable corresponds to the share of clean-tech Greenfield deals in the US of total Greenfield deals in the US. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure A4 in Appendix A.3.2 shows local projection estimates over an eight-quarter horizon. A one-SD increase in EnvP raises the ET deal share by roughly 1.5 pp for six consecutive quarters, tapering thereafter. A one-SD increase in EnvPU reduces the share by approximately 1.2 pp for seven quarters. Strikingly, the negative effect of EnvPU is more persistent than the positive effect of EnvP—a finding consistent with path dependence in the investment and innovation process (Acemoglu et al., 2012).

4.2.2 Intensive Margin

Table 2 reports results using the capital expenditure share as the dependent variable. A one-SD increase in EnvP (EnvPU) raises (lowers) the ET capex share by approximately 6 pp (3 pp) in baseline specifications (3)–(5), implying that EnvPU offsets about 50% of the policy-induced investment incentive at the intensive margin. The smaller deterrent effect relative to the extensive margin suggests that investors who have already committed to an ET project are less responsive to temporary policy volatility, and instead calibrate their capital pledges more to macroeconomic conditions—consistent with the observation that GDP growth and business cycle expectations seem to absorb the EnvP and EnvPU signals in models (6) and (8). Energy prices are a significant additional determinant of capital expenditure, likely reflecting operating cost considerations.

4.2.3 Summary

Environmental policy raises the cleantech investment share while environmental policy uncertainty offsets roughly 75% of that effect at the extensive margin (number of deals) and 50% at the intensive margin (capital expenditure). Effects are stronger for foreign than for domestic investors, and persist for over two years following a policy uncertainty shock.

Table 2: Environmental policy and aggregate cleantech investment — intensive margin

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share
L.EnvP US	5.8996*** (2.0177)	5.9820*** (2.1804)	6.1252*** (1.8442)	5.9140*** (1.8386)	6.0261*** (1.8311)	2.2169 (1.7896)	6.2084*** (1.7989)	5.4973*** (1.9255)
L.EnvPU US	-3.2366* (1.6583)	-2.9856* (1.5134)	-3.4506** (1.5167)	-2.9247** (1.3293)	-3.0906** (1.2960)	-0.9401 (1.6874)	-2.9844** (1.2724)	-2.0835 (1.3208)
Q1		-2.1615 (4.7296)						
Q2		-3.9475 (4.5879)						
Q3		-6.0028 (3.9495)						
L.Δ% RE installed capacity US			-0.0232 (0.6506)	-0.1490 (0.6132)		0.1872 (0.6797)	-0.4165 (0.5556)	0.0954 (0.5562)
L.Δ Oil price			-0.1304* (0.0679)					
L.Δ% Energy price US				-0.2989* (0.1516)	-0.3050** (0.1440)	0.3903 (0.4213)	-0.3479** (0.1571)	-0.3376** (0.1620)
L.Δ% Env patents US					0.1580 (0.1980)			
L.Fed funds rate US						1.2266 (1.9113)		
L.GDP growth US						-4.0775*** (1.3695)		
L.Inflation US						-5.0016 (3.4647)		
L.Δ Trade openness US						-1.8892 (1.9068)		
L.Δ REER US						-0.0881 (0.3764)		
L.Δ EPU US							2.5997** (1.2636)	
L.Δ Leading US								0.3467 (2.8348)
L.Δ Sentiment US								-2.9699* (1.4931)
Constant	17.0516*** (1.4699)	20.0798*** (3.6350)	17.4335*** (4.6894)	17.8171*** (4.4736)	15.3077*** (2.3341)	31.4099*** (7.9650)	19.5479*** (4.1343)	16.3568*** (4.0620)
Observations	48	48	44	44	44	44	44	44
R ²	0.25	0.29	0.35	0.36	0.37	0.57	0.41	0.41

The table presents results of an OLS regression based on our full sample of quarterly data (only RE installed capacity is annual) from 2007Q1:2019Q1. Robust standard errors are in parentheses. The dependent variable corresponds to the share of capital expenditure on US clean-tech Greenfield deals of total US capital expenditure on Greenfield deals. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5 Country-Level Cleantech Investments

5.1 Model Specification

We disaggregate to the source-country level, restricting the sample to the 12 countries with more than 10 ET deals over the sample period (Australia, Canada, China, Denmark, Finland, France, Germany, Italy, Japan, Portugal, Spain, and the United Kingdom) to ensure sufficient within-country variation. The source-country specification follows the multi-country framework of Azzimonti (2019), augmented with environmental and sector-specific controls suited to cleantech investment. Figure 6 plots the ET deal share and capital expenditure share by country alongside the standardised EnvPU index.

We estimate via OLS with source-country fixed effects:

$$\begin{aligned} CleanInvShare_{s,t}^{US} = & \beta_0 + \beta_1 EnvPU_{t-1}^{US} + \beta_2 EnvP_{t-1}^{US} + \beta_3 \Psi_{t-1}^{US} \\ & + \beta_4 \Phi_{s,t-1}^{Source \& Bilateral} + \beta_5 Q + \gamma_s + \varepsilon_t. \end{aligned} \quad (2)$$

where Ψ_{t-1}^{US} includes U.S. macroeconomic and environmental controls (as in Section 4), $\Phi_{s,t-1}$ adds the same set of variables for source countries plus the bilateral exchange rate and bilateral trade volume, Q is a vector of quarter dummies, and γ_s are source-country fixed effects. Standard errors are clustered at the source-country level.

5.2 Results

5.2.1 Extensive Margin

Table 3 reports the results. A one-SD increase in EnvP (EnvPU) raises (lowers) the ET deal share by approximately 3.6 pp (2.0 pp) in baseline specifications (3)–(5), implying that EnvPU offsets around 55% of the policy-induced investment incentive—qualitatively consistent with the aggregate finding. Coefficients are significant at the 1–10% level.

One additional finding of note: an increase in the growth rate of green patents in the source country is associated with a drop in the ET deal share in the U.S. of approximately 5.3 pp, consistent with a “home-base advantage” mechanism whereby green technological progress at home reduces the incentive to invest abroad. When the full set of macroeconomic and trade controls is included (model 6), bilateral trade openness emerges as a dominant predictor—a one-pp increase in bilateral trade is associated with a 4.2-pp increase in the ET deal share—suggesting that the government’s stance on international trade is partly collinear with the policy uncertainty signal for foreign investors. Results are robust to double-clustering at the source-country and year level (Table A21 in Appendix A.4.2).

Table 3: Environmental policy and country-level cleantech FDI deals — extensive margin

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share
L.EnvP US	3.9359*** (1.0893)	4.0064*** (1.1002)	3.6128*** (1.0612)	3.6414*** (1.0352)	3.6454*** (1.0597)	2.5628* (1.2696)	2.6271** (0.8184)	3.3556*** (0.9152)
L.EnvPU US	-1.9146* (0.8855)	-1.7768* (0.9309)	-1.8175* (0.9012)	-1.9507** (0.8368)	-1.8734** (0.8153)	-2.1785 (1.5598)	-1.0869* (0.5693)	-1.6189* (0.8022)
Q1		-3.7173 (2.4800)	-5.3939* (2.9146)	-5.4226* (2.9125)	-5.4213* (2.9218)	-3.4225 (2.7990)	-3.5614 (3.0100)	-4.5408 (2.7226)
Q2		-3.4113* (1.5781)	-4.5010* (2.1213)	-4.3545* (2.0955)	-4.3805* (2.1336)	-1.3892 (2.3000)	-2.7503 (2.1968)	-3.5253* (1.8316)
Q3		-2.0724 (2.8231)	-3.0605 (2.9532)	-2.9224 (2.8974)	-2.9410 (2.8846)	-5.7166 (3.9216)	-2.9065 (2.8480)	-2.6355 (2.8753)
L.Δ% RE installed capacity US			-67.0140 (50.9297)	-66.6576 (51.0303)		-95.7041 (76.7144)	-20.3683 (18.3776)	-54.1699 (54.2589)
L.Δ% RE installed capacity source			20.2348 (25.2763)	16.6179 (23.7125)		42.3469 (37.3248)	31.8484 (24.3566)	15.6386 (24.6816)
L.Δ Oil			0.0528 (0.0511)					
L.Δ% Energy price US				0.2670 (8.4657)	3.0643 (10.8963)	10.0870 (22.6654)	-4.3067 (7.9186)	-1.6216 (9.4460)
L.Δ% Energy price source				24.6767 (29.9380)	25.0649 (31.0979)	13.7628 (30.6886)	32.6958 (30.4697)	28.3317 (31.4907)
L.Δ% Env patents US					10.3440 (11.0646)			
L.Δ% Env patents source					-5.2987** (2.1451)			
L.Fed funds rate US						5.4809 (3.2490)		
L.GDP growth US						-0.7400 (0.6128)		
L.GDP growth source						-19.2534 (17.8227)		
L.Inflation US						-1.1964 (2.6227)		
L.Inflation source						-1.3294 (132.0362)		
L.Δ Trade openness US						4.1829* (2.1452)		
L.Δ Bilateral FX						-32.4649 (22.8129)		
L.Δ Bilateral Trade						-0.6637 (0.8205)		
L.Δ EPU US							1.3622** (0.4575)	
L.Δ EPU source							-0.3909 (0.4408)	
L.Δ Leading US								0.8994 (1.6324)
L.Δ Sentiment US								-1.1678 (1.1491)
Constant	11.5813*** (0.0315)	13.8823*** (1.5660)	17.5577*** (4.5014)	17.4418*** (4.5195)	13.9739*** (2.3931)	17.1551*** (3.5754)	10.7733** (3.7953)	16.1695*** (4.3966)
Source country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	576	576	484	484	484	484	396	484
Countries	12	12	11	11	11	11	9	11
R ²	0.14	0.15	0.16	0.16	0.16	0.19	0.22	0.16

The table presents results of an OLS regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors clustered at the source-country level are in parentheses. The dependent variable corresponds to the share of clean-tech Greenfield deals in the US of total Greenfield deals in the US. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.2.2 Intensive Margin

Table 4 reports results for the capital expenditure share. EnvP retains a positive and significant effect (approximately 4 pp in baseline specifications), but EnvPU has no

systematic relationship with capital expenditure at this level of disaggregation. This contrasts with the aggregate result and likely reflects compositional differences: investors from the 12 most-engaged countries may only commit to U.S. ET investments when the policy environment is sufficiently supportive, leaving little residual intensive-margin adjustment driven by uncertainty.

Table 4: Environmental policy and country-level cleantech FDI — intensive margin

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share	ET capex share
L.EnvP US	4.6597** (1.6536)	4.5534** (1.6663)	4.0383** (1.6768)	4.0221** (1.5825)	4.0219** (1.6707)	1.4339 (2.7548)	3.1006* (1.5864)	3.4567** (1.4969)
L.EnvPU US	-1.4834 (1.6309)	-1.2478 (1.6958)	-1.1169 (1.7984)	-1.2191 (1.7179)	-1.0974 (1.7815)	-0.7919 (3.0258)	0.0848 (1.6379)	-0.2606 (1.8013)
Q1		-3.8998 (3.3819)	-5.8556 (4.1223)	-5.9103 (4.1271)	-5.9129 (4.1264)	-2.8871 (4.0878)	-4.7425 (4.9238)	-3.3595 (3.7877)
Q2		-7.7966*** (1.7962)	-9.5526*** (1.6021)	-9.3127*** (1.5522)	-9.3549*** (1.5381)	-5.3315* (2.4545)	-8.2290*** (2.1853)	-6.4969*** (1.9642)
Q3		-2.7553 (3.2844)	-4.5231 (3.5984)	-4.3595 (3.5617)	-4.3916 (3.5292)	-6.7046 (5.7273)	-5.0614 (3.8755)	-3.1991 (3.3262)
L.Δ% RE installed capacity US			-81.6771 (73.9488)	-82.8726 (75.9577)		-1.3e+02 (98.4978)	-22.7459 (49.6170)	-51.2187 (80.3788)
L.Δ% RE installed capacity source			20.2099 (34.9835)	13.6526 (32.3069)		42.1598 (40.9161)	35.4186 (33.4803)	14.9322 (34.0091)
L.Δ Oil			0.0680 (0.0652)					
L.Δ% Energy price US				-10.1067 (16.9373)	-6.3074 (18.8363)	24.0612 (39.8297)	-18.9198 (18.3184)	-15.2027 (16.1715)
L.Δ% Energy price source				56.0900 (43.2847)	55.9448 (44.7526)	20.1100 (50.0429)	70.5061 (46.4215)	58.4747 (44.5417)
L.Δ% Env patents US					9.8248 (22.3047)			
L.Δ% Env patents source					-4.9827 (5.9563)			
L.Fed funds rate US						7.9083* (4.0175)		
L.GDP growth US						-1.8052 (1.5184)		
L.GDP growth source						-38.7663 (25.1109)		
L.Inflation US						-3.4716 (5.4757)		
L.Inflation source						232.9726 (234.9909)		
L.Δ Trade openness US						4.8868 (3.4211)		
L.Δ Bilateral FX						-55.1822** (19.4955)		
L.Δ Bilateral Trade						-2.5667* (1.3756)		
L.Δ EPU US							1.9121* (0.9980)	
L.Δ EPU Source							0.6878 (1.2524)	
L.Δ Leading US								0.8520 (1.8655)
L.Δ Sentiment US								-3.6869** (1.4565)
Constant	20.9910*** (0.0500)	24.5996*** (1.6873)	30.1672*** (5.0134)	29.8274*** (4.9315)	25.1567*** (3.5051)	31.1547*** (5.2496)	23.7532*** (2.9195)	26.1703*** (4.9774)
Source country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	576	576	484	484	484	484	396	484
Countries	12	12	11	11	11	11	9	11
R ²	0.09	0.10	0.10	0.11	0.11	0.15	0.13	0.12

The table presents results of an OLS regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors are in parentheses. The dependent variable corresponds to the share of capital expenditure on clean-tech Greenfield deals in the US of total capital expenditure on Greenfield deals in the US. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.2.3 Summary

At the extensive margin, EnvPU offsets approximately 55% of the cleantech investment incentive generated by EnvP. Foreign investors appear to use bilateral trade flows as an additional signal for ET investment attractiveness, reflecting a close link between trade openness and the broader climate policy stance. At the intensive margin, EnvP remains positive and significant but EnvPU exerts no systematic influence, consistent with committed foreign investors calibrating capital pledges to macroeconomic rather than policy signals.

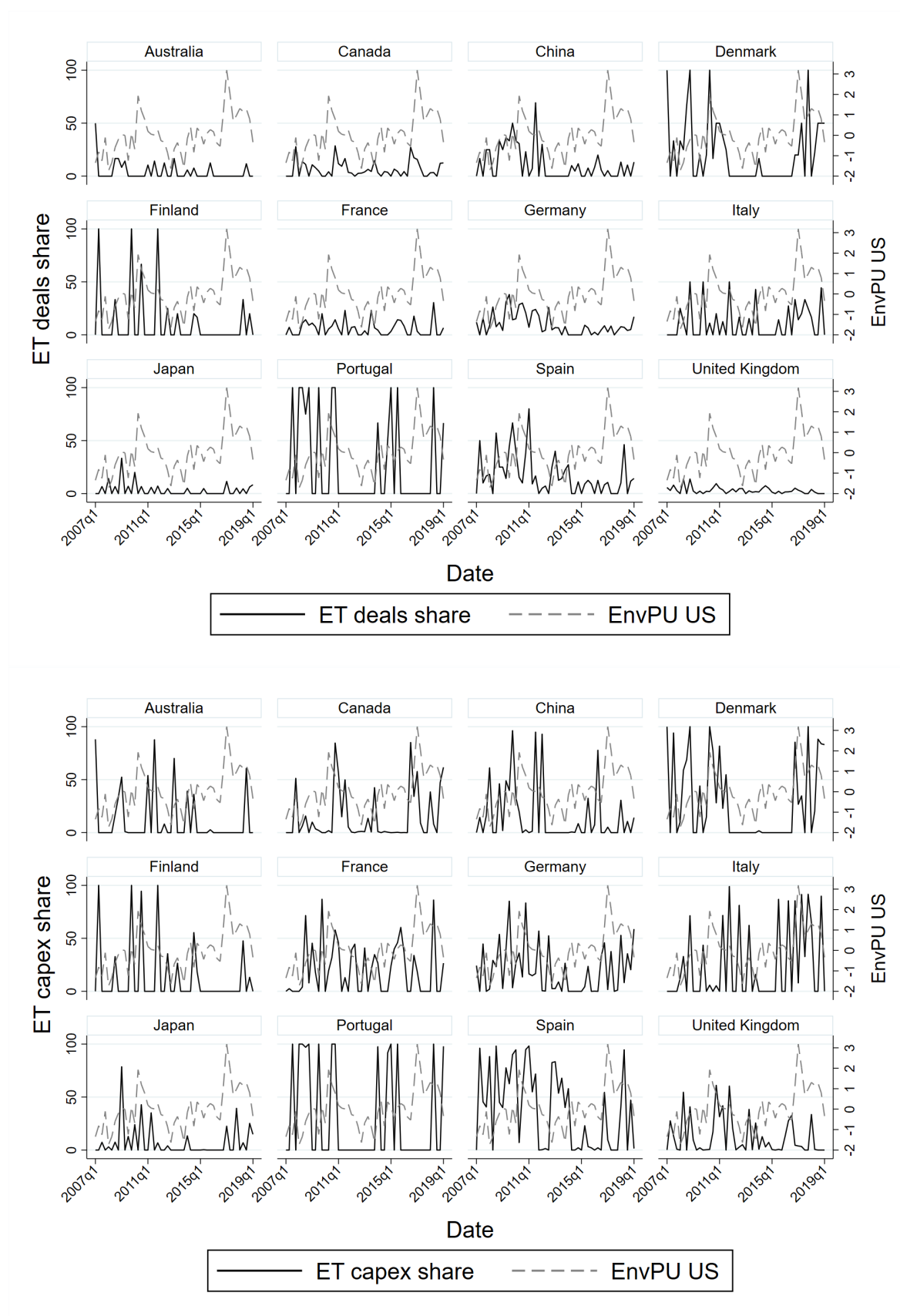


Figure 6: Share of cleantech deals (left) and cleantech capital expenditure (right) as a share of total, by source country, with standardised EnvPU index, 2007Q1–2019Q1.

6 Firm-Level Cleantech Investments

6.1 Model Specification

At the firm level we compare greenfield investment behaviour of firms active in the ET cluster to those active in non-ET clusters, exploiting cross-sectional variation across firm- sectors. The dependent variable is either the number of deals (extensive margin) or capital expenditure (intensive margin) at the firm-quarter level. Firms active in both ET and non-ET clusters are excluded.

We estimate our coefficient of interest via Poisson Pseudo Maximum Likelihood (PPML) following Correia et al. (2020), which accommodates the many-zeros structure of firm-level investment data and allows for high-dimensional fixed effects without the incidental parameters problem that afflicts Probit/Logit estimators. Table 5 confirms that ET deals are substantially more capital-intensive than non-ET deals across all subsamples—consistent with the view that greenfield cleantech investment is largely irreversible and therefore especially sensitive to policy risk.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Agribusiness	1.00	0.35	0.40	0.38	0.04	0.13	0.54	0.40	0.32	0.40	0.17	0.54	0.06	-0.12	0.45	0.34	0.35
2 Construction	0.35	1.00	0.43	0.37	0.03	0.05	0.56	0.34	0.28	0.46	0.23	0.44	0.03	-0.09	0.45	0.23	0.20
3 Consumer Goods	0.40	0.43	1.00	0.31	-0.08	0.31	0.53	0.40	0.16	0.48	0.17	0.56	0.02	0.08	0.29	0.39	0.23
4 Creative Industries	0.38	0.37	0.31	1.00	0.02	0.26	0.65	0.38	0.24	0.44	0.19	0.73	0.03	-0.16	0.41	0.35	0.24
5 Energy	0.04	0.03	-0.08	0.02	1.00	0.53	0.26	0.32	0.12	0.06	-0.09	0.06	0.08	0.44	0.28	0.24	-0.03
6 Environmental Technology	0.13	0.05	0.31	0.26	0.53	1.00	0.46	0.48	0.05	0.15	-0.01	0.45	-0.33	0.39	0.10	0.29	-0.09
7 Financial Services	0.54	0.56	0.53	0.65	0.26	0.46	1.00	0.58	0.34	0.51	0.22	0.81	0.25	-0.01	0.53	0.47	0.35
8 ICT & Electronics	0.40	0.34	0.40	0.38	0.32	0.48	0.58	1.00	0.23	0.35	0.15	0.57	0.29	0.42	0.46	0.58	0.35
9 Industrial	0.32	0.28	0.16	0.24	0.12	0.05	0.34	0.23	1.00	0.53	-0.01	0.36	0.13	-0.02	0.35	0.23	0.18
10 Life sciences	0.40	0.46	0.48	0.44	0.06	0.15	0.51	0.35	0.53	1.00	0.21	0.63	0.16	0.05	0.45	0.48	0.27
11 Physical Sciences	0.17	0.23	0.17	0.19	-0.09	-0.01	0.22	0.15	-0.01	0.21	1.00	0.17	0.19	-0.06	0.22	0.23	0.14
12 Professional Services	0.54	0.44	0.56	0.73	0.06	0.45	0.81	0.57	0.36	0.63	0.17	1.00	0.15	0.03	0.44	0.64	0.36
13 Retail Trade	0.06	0.03	0.02	0.03	0.08	-0.33	0.25	0.29	0.13	0.16	0.19	0.15	1.00	0.05	0.07	0.50	0.60
14 Tourism	-0.12	-0.09	0.08	-0.16	0.44	0.39	-0.01	0.42	-0.02	0.05	-0.06	0.03	0.05	1.00	0.01	0.12	0.01
15 Transport Equipment	0.45	0.45	0.29	0.41	0.28	0.10	0.53	0.46	0.35	0.45	0.22	0.44	0.07	0.01	1.00	0.40	0.33
16 Transportation & Warehousing	0.34	0.23	0.39	0.35	0.24	0.29	0.47	0.58	0.23	0.48	0.23	0.64	0.50	0.12	0.40	1.00	0.44
17 Wood, Apparel & Related Products	0.35	0.20	0.23	0.24	-0.03	-0.09	0.35	0.35	0.18	0.27	0.14	0.36	0.60	0.01	0.33	0.44	1.00

Figure 7: Heatmap of greenfield investment deals in the U.S. by cluster, 2003–2019.

Table 5: Summary statistics: ET vs. non-ET greenfield investment (fDi Markets)

	Overall			Domestic			Foreign		
	Env Tech	Non Env Tech	Difference	Env Tech	Non Env Tech	Difference	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	99.782	33.693		98.365	32.137		101.837	36.538	
	169.095	199.370		181.047	172.065		150.170	241.402	
			66.089*** (16.667)			66.228*** (12.154)			65.299*** (11.449)
Jobs created (#)	64.338	79.859		62.286	77.645		67.314	83.906	
	111.415	217.563		124.316	230.346		89.455	191.954	
			-15.521*** (-5.645)			-15.359*** (-3.904)			-16.593*** (-4.664)
Observations	1938	41010	42948	1147	26507	27654	791	14503	15294

This table reports the mean (top) and standard deviation (bottom) for all environmental-technology as well as non-environmental-technology investment deals in the fDi Markets database between 2003Q1:2019Q1. It also reports a t-test for the difference in mean between the two samples. The statistics are reported for the full sample, the domestic (US-only) as well as the foreign (non-US) sample. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

The benchmark specification is:⁶

$$\begin{aligned}
Inv_{f,c,s,t}^{US} = & \beta_0 + \beta_1 ET_{f,c,s} \times EnvPU_{t-1}^{US} + \beta_2 ET_{f,c,s} \times EnvP_{t-1}^{US} \\
& + \beta_3 ET_{f,c,s} \times \Psi_{t-1}^{US} + \beta_4 ET_{f,c,s} \times \Phi_{s,t-1}^{\text{Source \& Bilateral}} \\
& + \beta_5 ET_{f,c,s} \times Q + \gamma_f + \gamma_c + \gamma_s + \gamma_t + \varepsilon_{f,c,s,t}
\end{aligned} \tag{3}$$

All controls are interacted with the ET exposure dummy ($ET_{f,c,s} = 1$ for firms active in the ET cluster) to avoid collinearity with the quarter fixed effects. Coefficients β_1 and β_2 therefore capture the *differential* response of ET-cluster firms relative to non-ET firms. Standard errors are double-clustered at the firm and year level.

6.2 Results

Summary statistics are in Table A22 (Appendix A.5.1).

6.2.1 Extensive Margin

Table 6 reports results for the full foreign-firm sample. In the baseline specification (model 2), EnvP is associated with an increase of approximately 0.63 deals per quarter for ET firms relative to non-ET firms; EnvPU is associated with a reduction of

⁶Equivalently: $Inv_{f,c,s,t}^{US} = \beta_0 + (ET_{f,c,s} \times [EnvPU_{t-1}^{US}, EnvP_{t-1}^{US}, \Psi_{t-1}^{US}, \Phi_{s,t-1}, Q]) \times \beta + \gamma_f + \gamma_c + \gamma_s + \gamma_t + \varepsilon_{f,c,s,t}$.

approximately 0.23 deals, offsetting around 40% of the policy-induced incentive. Coefficients are robust across specifications, though they attenuate somewhat in model (4), which includes macro and trade controls—suggesting that part of the EnvPU effect is transmitted through the trade attractiveness channel identified in Section 5.

6.2.2 Intensive Margin

Table 7 reports results for capital expenditure. EnvP is positively and consistently associated with higher ET capital expenditure (approximately USD 539,000 per quarter in model 2), but EnvPU has no statistically significant effect—offsetting a negligible 6% of the policy-induced incentive. This pattern mirrors the country-level intensive-margin results and confirms that, conditional on investment, capital commitment is driven primarily by macroeconomic conditions rather than policy uncertainty.

6.2.3 Summary

At the extensive margin, EnvPU offsets around 40% of the policy-induced ET investment incentive at the firm level, with part of the effect operating through the macro/trade channel. At the intensive margin, EnvPU has no significant effect, consistent with committed investors responding primarily to macroeconomic conditions rather than to policy uncertainty shocks.

Table 6: Environmental policy and firm-level cleantech FDI — extensive margin (foreign firms)

	(1)	(2)	(3)	(4)	(5)	(6)
	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)
ET=1 × L.EnvP US	0.5963*** (0.1491)	0.6292*** (0.1195)	0.6576*** (0.1245)	0.2909** (0.1335)	0.5607*** (0.1232)	0.5908*** (0.1134)
ET=1 × L.EnvPU US	-0.2279*** (0.0752)	-0.2281*** (0.0677)	-0.2586*** (0.0654)	-0.1476** (0.0737)	-0.1853*** (0.0594)	-0.1976*** (0.0710)
ET=1 × L.Δ% RE installed capacity US	2.3925 (3.5147)	2.5436 (3.8292)		6.3371** (2.9810)	3.0485 (4.1468)	3.5332 (3.8182)
ET=1 × L.Δ% RE installed capacity source	1.0075*** (0.2074)	1.0262 (1.3007)		2.3176* (1.3093)	2.2969 (1.5344)	1.0426 (1.3157)
ET=1 × L.Δ Oil price	0.0024 (0.0043)					
ET=1 × L.Δ% Energy price US		-0.3021 (1.1090)	-0.5353 (1.1217)	4.6826** (2.0368)	-1.0357 (0.9817)	-0.5523 (1.1881)
ET=1 × L.Δ% Energy price source		1.6051 (1.2076)	1.7849 (1.1678)	2.1709* (1.1203)	2.9604** (1.2909)	1.7521 (1.2451)
ET=1 × L.Δ% Env patents US			0.5857 (0.7741)			
ET=1 × L.Δ% Env patents source			0.0757 (0.1979)			
ET=1 × L.Fed funds rate US				0.1622*** (0.0483)		
ET=1 × L.GDP growth US				-0.1973*** (0.0591)		
ET=1 × L.GDP growth source				-0.9523 (0.6980)		
ET=1 × L.Inflation US				-0.3988** (0.1589)		
ET=1 × L.Inflation source				-3.9467 (4.6740)		
ET=1 × L.Δ Trade openness US				0.0480 (0.1504)		
ET=1 × L.Δ Bilateral FX				-0.4198 (1.1079)		
ET=1 × L.Δ Bilateral Trade				-0.1278* (0.0657)		
ET=1 × L.Δ EPU US					0.0970 (0.0937)	
ET=1 × L.Δ EPU Source					-0.0125 (0.0594)	
ET=1 × L.Δ Leading US						0.0435 (0.0554)
ET=1 × L.Δ Sentiment US						-0.0962 (0.0744)
Constant	-3.2648*** (0.0250)	-3.2607*** (0.0275)	-3.2500*** (0.0286)	-3.1985*** (0.0296)	-3.2904*** (0.0347)	-3.2577*** (0.0274)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster FE	Yes	Yes	Yes	Yes	Yes	Yes
Source-country FE	Yes	Yes	Yes	Yes	Yes	Yes
Seasonality	Yes	Yes	Yes	Yes	Yes	Yes
Observations	373,799	360,386	359,538	359,305	312,776	360,386
Firms	7,800	7,500	7,500	7,500	6,600	7,500
Pseudo R ²	0.07	0.07	0.07	0.07	0.07	0.07

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the number of Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 7: Environmental policy and firm-level cleantech FDI — intensive margin (foreign firms)

	(1) Capex (firm)	(2) Capex (firm)	(3) Capex (firm)	(4) Capex (firm)	(5) Capex (firm)	(6) Capex (firm)
ET=1 × L.EnvP US	0.5194* (0.2815)	0.5387** (0.2574)	0.5108** (0.2337)	-0.0584 (0.2546)	0.5204* (0.2688)	0.4199* (0.2437)
ET=1 × L.EnvPU US	-0.0805 (0.1743)	-0.0611 (0.1533)	-0.0318 (0.1500)	0.1753 (0.1591)	0.0128 (0.1514)	0.0696 (0.1486)
ET=1 × L.Δ% RE installed capacity US	-0.2139 (7.2720)	-0.7441 (7.8970)		1.1539 (7.8272)	0.4289 (8.8949)	3.5874 (7.2195)
ET=1 × L.Δ% RE installed capacity source	0.4847 (0.7925)	-0.4580 (0.8901)		1.3511 (1.6069)	0.8967 (1.6083)	-0.3317 (0.8340)
ET=1 × L.Δ Oil price	0.0002 (0.0067)					
ET=1 × L.Δ% Energy price US		-1.8275 (1.9772)	-1.8456 (1.8201)	1.4029 (4.3069)	-2.4936 (2.0211)	-2.6640 (2.1111)
ET=1 × L.Δ% Energy price source		4.3108 (3.0048)	4.3514 (2.8336)	3.3211 (2.9231)	4.2883 (2.8465)	4.3248 (2.7970)
ET=1 × L.Δ% Env patents US			-1.0691 (1.6872)			
ET=1 × L.Δ% Env patents source			0.2398 (0.3596)			
ET=1 × L.Fed funds rate US				0.2166** (0.0914)		
ET=1 × L.GDP growth US				-0.3188*** (0.1139)		
ET=1 × L.GDP growth source				-1.5741 (1.4411)		
ET=1 × L.Inflation US				-0.2204 (0.2931)		
ET=1 × L.Inflation source				8.4087 (12.1165)		
ET=1 × L.Δ Trade openness US				0.4237* (0.2280)		
ET=1 × L.Δ Bilateral FX				-1.1403 (2.0994)		
ET=1 × L.Δ Bilateral Trade				-0.2512* (0.1333)		
ET=1 × L.Δ EPU US					0.2429*** (0.0909)	
ET=1 × L.Δ EPU source					0.0512 (0.1285)	
ET=1 × L.Δ Leading US						0.1083 (0.1113)
ET=1 × L.Δ Sentiment US						-0.4100*** (0.1305)
Constant	1.3706*** (0.1143)	1.3684*** (0.1284)	1.3664*** (0.1503)	1.5504*** (0.1677)	1.3704*** (0.1967)	1.3650*** (0.1296)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster FE	Yes	Yes	Yes	Yes	Yes	Yes
Source-country FE	Yes	Yes	Yes	Yes	Yes	Yes
Seasonality	Yes	Yes	Yes	Yes	Yes	Yes
Observations	373,655	360,242	359,394	359,161	312,681	360,242
Firms	7,800	7,500	7,500	7,500	6,600	7,500
Pseudo R ²	0.33	0.34	0.34	0.34	0.34	0.34

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the capital expenditure on Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

7 Conclusion

This paper examines the effect of environmental policy uncertainty on cleantech green-field investment in the United States. Combining quarterly project-level investment data with novel news-based measures of environmental policy and environmental policy uncertainty, we find that policy uncertainty significantly reduces cleantech investment.

The effects are economically large. At the aggregate level, a one-standard-deviation increase in environmental policy uncertainty offsets approximately 75% of the positive effect of environmental policy on the number of projects and around 50% of its effect on investment expenditure. Similar patterns emerge at the source-country and firm levels. The effects are particularly pronounced for foreign investors and persist for at least two years following an uncertainty shock.

These findings suggest that policy credibility is an important determinant of clean investment. Environmental policies may fail to generate their full investment response when investors perceive future policy support as uncertain or reversible. The results therefore point to a complementarity between policy ambition and policy credibility: stronger policy incentives are likely to be most effective when embedded in stable and predictable policy frameworks.

The validity of this interpretation is supported by a battery of time-series and cross-index comparisons: EnvPU is stationary and near-orthogonal to existing climate-policy and environmental-policy indices, confirming that it captures a distinct uncertainty dimension rather than a rescaled version of policy attention or stringency.

The results have implications for climate and industrial policy. As governments increasingly rely on policy incentives to mobilise private capital for the green transition, the stability and predictability of policy frameworks become important determinants of investment outcomes. Reducing uncertainty about the future direction of environmental policy may therefore enhance the effectiveness of measures designed to attract clean

investment.

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A Appendix

A.1 Statistical Properties of EnvP and EnvPU

Our identification strategy requires that EnvP and EnvPU capture distinct dimensions of the environmental policy environment. This appendix provides formal evidence in support of that assumption, examining the univariate properties of each index and the dynamic relationship between them.

A.1.0.1 Unit root tests. Table A1 reports results from a battery of unit root and stationarity tests. The two indices exhibit strikingly different time-series properties. For EnvPU, the Augmented Dickey-Fuller (ADF) test strongly rejects the null of a unit root ($\text{ADF} = -6.11, p < 0.001$), a result corroborated by the DF-GLS test and the Zivot–Andrews test allowing for an endogenous structural break. The KPSS test — whose null hypothesis is stationarity — also rejects, pointing to a level shift around January 2004 rather than to non-stationarity per se; the overall weight of evidence from the four tests is consistent with EnvPU being an $I(0)$ process with a discrete mean shift. For EnvP, the picture is different. The ADF test fails to reject the unit-root null ($p = 0.13$), and the Zivot–Andrews test likewise does not reject even when accommodating an endogenous structural break. The DF-GLS test sits marginally below the 5% critical value, and the KPSS test rejects stationarity. Taken together, the evidence characterises EnvP as a highly persistent, near-integrated series — consistent with the secular rise in media attention to environmental policy visible in Figure 3.

This asymmetry in persistence is substantively informative. A stationary uncertainty index that spikes episodically and mean-reverts is exactly what one would expect from a process driven by political events (elections, legislative battles, court challenges) that create temporary ambiguity before resolving. A near-integrated policy salience index is consistent with an underlying trend in environmental policy coverage that has grown

persistently over four decades. The two indices are therefore not merely scaled versions of one another.

A.1.0.2 Distributed-lag regressions. To examine directly whether EnvPU is mechanically driven by EnvP, Table A2 reports distributed-lag regressions of EnvPU on contemporaneous and six lagged values of EnvP in levels and in first differences. The results are clear. In the levels specification, the joint set of EnvP lags explains only 6.4% of the variation in EnvPU; in the differenced specification, 4.2%. The pattern of individual coefficients shows no consistent sign or magnitude across lags, and the contemporaneous effects — while statistically significant — are small in economic terms. Knowledge of the current and past level of environmental policy coverage therefore has little ability to predict environmental policy uncertainty. This rules out the concern that EnvPU is simply a noisy function of EnvP, and supports treating the two as measuring conceptually and empirically distinct dimensions of the policy environment.

A.1.0.3 Divergence episodes. Figure A1 provides a complementary visual characterisation. The upper panel marks months in which one index lies in its upper quartile while the other remains below its median — periods during which the two indices diverge sharply. Both EnvPU-only and EnvP-only spikes occur with meaningful frequency, confirming that neither index subsumes the other. Prominent EnvPU spikes with low concurrent EnvP are particularly informative: they indicate periods of heightened uncertainty about environmental policy that were not accompanied by unusual levels of policy coverage. This pattern is inconsistent with EnvPU simply capturing variation in policy attention, and supports the interpretation that it measures a distinct uncertainty dimension. The lower panel plots the standardised spread ($\text{EnvPU}_z - \text{EnvP}_z$); sustained departures from zero indicate extended periods of divergence consistent with the same conclusion.

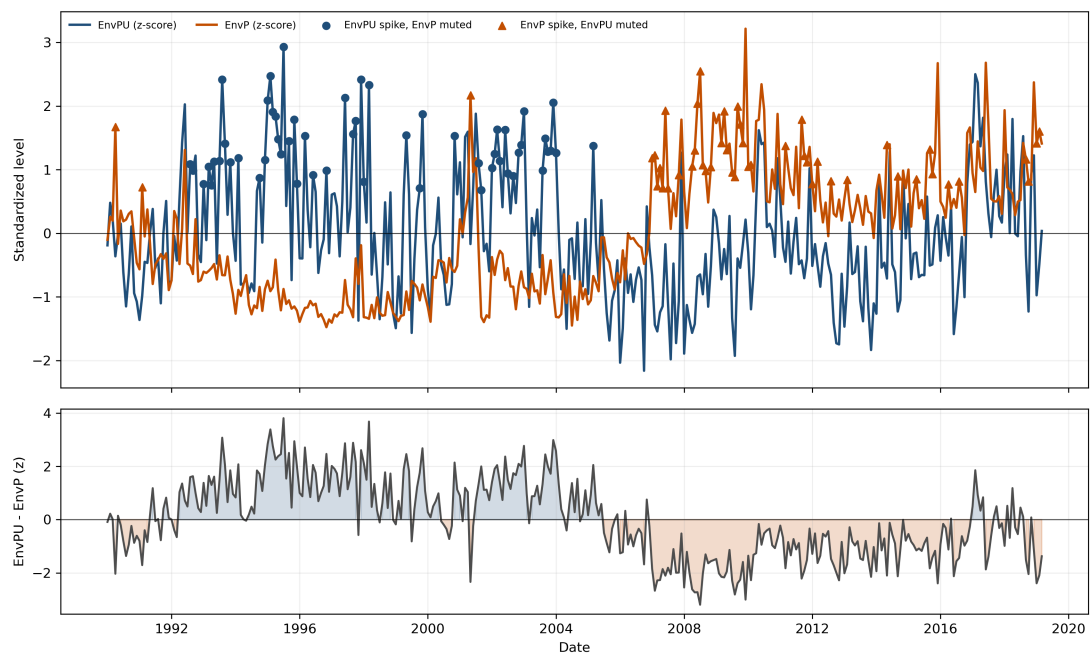


Figure A1: Divergence episodes between EnvP and EnvPU. Upper panel marks months in which one index lies in its upper quartile while the other remains below its median. Lower panel plots the standardised spread ($\text{EnvPU}_z - \text{EnvP}_z$); sustained non-zero values indicate extended periods during which the two indices move independently.

Table A1: Unit Root and Structural Break Tests for EnvPU and EnvP

Series	Test	Stat.	p -value	Lags	Break	5% CV	Decision
Panel A. Unit-Root Null							
EnvPU	ADF	-6.1127	0.0000	2	—	-3.4232	Reject
EnvPU	DF-GLS	-6.1102	—	2	—	-3.1900	Reject
EnvPU	Zivot-Andrews	-7.4478	0.0010	2	2004-01	-5.0733	Reject
EnvP	ADF	-3.0094	0.1295	6	—	-3.4233	Fail to re- ject
EnvP	DF-GLS	-3.1996	—	6	—	-3.1900	Reject
EnvP	Zivot-Andrews	-4.4546	0.2331	6	2006-11	-5.0733	Fail to re- ject
Panel B. KPSS (Stationarity Null)							
EnvPU	KPSS	0.1887	0.0203	9	—	0.1460	Reject
EnvP	KPSS	0.2975	0.0100	10	—	0.1460	Reject

Notes: All tests include a constant and linear trend. For ADF, DF-GLS, and Zivot-Andrews, the null hypothesis is a unit root; rejection indicates evidence of stationarity. For KPSS, the null hypothesis is trend stationarity; rejection indicates evidence against stationarity. DF-GLS uses ERS GLS detrending with AIC lag selection (maximum lag length = 12). The Zivot-Andrews test allows for an endogenous structural break in both intercept and trend.

A.2 Comparison with Related Indices

This section situates our indices of Environmental Policy (EnvP) and Environmental Policy Uncertainty (EnvPU) within the landscape of existing textual measures of climate and environmental information. The purpose is to verify that EnvPU captures a dimension of the policy environment that is not already contained in available alternatives — a precondition for interpreting its estimated coefficient as reflecting the effect of policy uncertainty rather than some other correlated feature of the policy landscape.

A.2.0.1 Conceptual distinctions. The existing literature on text-based measures of climate and environmental information can be organized into four broad families, distinguished by their domain, their unit of analysis, and whether they isolate uncertainty from the level of policy activity. A first family consists of Environmental Policy Uncertainty indices closest to ours in spirit, including Palikhe et al. (2024), who — like

Table A2: Distributed-Lag Regression of EnvPU on EnvP

	Levels: EnvPU on EnvP	EnvPU on Δ EnvP
Constant	109.9145*** (3.7728)	99.9332*** (1.3673)
EnvP, lag 0	0.1910*** (0.0546)	0.2067*** (0.0557)
EnvP, lag 1	-0.1090* (0.0571)	0.1116* (0.0625)
EnvP, lag 2	-0.0420 (0.0635)	0.0735 (0.0670)
EnvP, lag 3	0.0521 (0.0640)	0.1450** (0.0661)
EnvP, lag 4	-0.0938 (0.0651)	0.0606 (0.0629)
EnvP, lag 5	-0.0336 (0.0620)	0.0424 (0.0632)
EnvP, lag 6	-0.0577 (0.0557)	0.0054 (0.0581)
Observations	345	344
R^2	0.0644	0.0422

Robust (HC1) standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Notes: Dependent variable is EnvPU. Regressors are contemporaneous and six monthly lags of EnvP (left column) and of Δ EnvP (right column). Low R^2 values confirm that the level and recent changes in environmental policy coverage have limited predictive power for environmental policy uncertainty.

us — construct a companion policy-level index alongside their uncertainty measure. A second family comprises Climate Policy Uncertainty indices, including Basaglia et al. (2025) and Gavriilidis et al. (2026), who apply news-based uncertainty measurement to climate policy specifically rather than to the broader environmental policy domain. A third family consists of aggregate climate news and attention measures not restricted to policy, exemplified by Engle et al. (2020). A fourth family operates at the firm level rather than the aggregate level, exemplified by Sautner et al. (2023), who measure individual firms’ exposure to climate risk rather than the state of the policy environment itself. We discuss each family in turn below, before turning to the empirical correlations between our indices and some alternative measures.

Palikhe et al. (2024) construct an index of Environmental Policy Uncertainty based on a two-stage procedure that builds directly on Baker et al. (2016). First, they identify all articles already classified as Economic Policy Uncertainty articles under the Baker et al. (2016) framework. Then, among those, only articles containing at least one keyword from a list of 31 environmental terms spanning air and water pollution, climate change, non-renewable energy, renewable energy, and biodiversity are retained. In addition, the authors also construct a companion Environmental Policy activity index, showing that failing to control for policy activity biases estimated uncertainty effects — the same identification concern that motivates our joint decomposition.

This two-stage design is more restrictive than an independent newspaper search, but also more tightly bound to the Baker et al. (2016) EPU classification. This facilitates a neat comparability of EPU and how much of this is due to EnvPU. On the other hand, the index may include articles expressing uncertainty about *general* economic policy that mention an environmental term in passing, even when the primary subject is not environmental policy. This is because, by construction, the index inherits the thematic scope and keyword choices of the broader EPU framework.

The key methodological distinction is that our supervised machine learning classifier

was trained on manually annotated articles. These annotations bear the distinct advantage of reflecting a real human assessment of whether an article expresses ambiguity *about* the future direction or implementation of *environmental policy* or not — independently of any broader EPU classification and without relying on keyword co-occurrence to determine the object of uncertainty. This distinction is reflected in the within-pair correlations: Palikhe et al. (2024) report $\rho = 0.62$ between their EnvPU and EnvP, whereas ours exhibit $\rho = -0.06$. This is consistent with Palikhe et al. (2024)’s EnvPU retaining a larger component of general policy coverage volume alongside the environmental uncertainty signal, in part because the first-stage EPU filter captures economic policy coverage broadly rather than environmental policy coverage specifically.

Basaglia et al. (2025) and Gavriilidis et al. (2026) both construct Climate Policy Uncertainty (CPU) indices focused on *climate* policy, excluding the broader environmental policy domain our indices cover. Both draw on a keyword search approach in the spirit of Baker et al. (2016) as a starting point, but use bespoke dictionaries for the ‘climate’ and ‘policy’ dictionaries and then diverge in important ways.

Basaglia et al. (2025) extend the standard three-block search by requiring keywords from the climate and policy dictionaries to co-occur within the same paragraph, a precision criterion intended to ensure that the policies discussed actually relate to climate. They additionally construct sub-indices capturing the *direction* of climate policy — distinguishing uncertainty about tightening versus loosening of regulation — using a proximity criterion between policy-dictionary terms and a tightening/loosening dictionary.

Gavriilidis et al. (2026) use the standard three-block search. Acknowledging that their CPU index might be partly driven by media attention to climate policy rather than uncertainty specifically, they additionally construct a version of their index scaled by the volume of climate policy news, which correlates at $\rho = 0.73$ with their unscaled index (Appendix D.2.2, Figure D.5 of their paper) — evidence that, by their own account,

scaling does not fully resolve the conflation between uncertainty and coverage volume. They further construct a narrative-based instrumental variable from a record of 146 major U.S. climate policy events, the most elaborate causal identification strategy among the measures reviewed here.

Neither paper constructs a companion policy-level index as a primary, independently published output. Basaglia et al. (2025) do not address the level–uncertainty separation directly. Gavriilidis et al. (2026) construct a climate policy sentiment index to control for first-moment policy news and show their uncertainty results are robust to its inclusion; however, this series functions as a robustness control rather than a standalone validated measure, and the separation from the uncertainty index is achieved through inclusion in a VAR rather than through a joint decomposition published as a primary contribution.

By contrast, our indices of Environmental Policy and Environmental Policy Uncertainty are jointly constructed as primary, independently validated indices, enabling researchers to separately quantify both the investment effect of policy support and the investment effect of policy instability within a single transparent framework.

Engle et al. (2020) construct an aggregate climate news index from the *Wall Street Journal* by extracting innovations in newspaper coverage, designed to construct climate risk hedge portfolios. Indices like this capture broad climate attention as priced in financial markets — encompassing physical risk, litigation risk, and scientific developments — without separating policy news from other climate content, or uncertainty from directional signals about policy stringency.

Finally, Sautner et al. (2023) construct firm-level measures of climate change exposure from earnings conference call transcripts, capturing analysts’ assessments of individual firms’ opportunity, physical, and regulatory climate risks. This is an inherently micro-level, cross-sectional measure of perceived firm vulnerability, rather than a time-series characterization of the general climate policy environment.

Table A3 summarizes these distinctions.

Table A3: Taxonomy of Text-Based Climate and Environmental Policy Measures

Measure	Unit	Domain	Uncertainty	Level index	Method
Noailly et al. (2024) & Noailly et al. (2022)	Aggregate	Environmental policy	Yes	Yes	Supervised machine learning on human-annotated data
Palikhe et al. (2024)	Aggregate	Environmental policy	Yes	Yes	Baker et al. (2016) EPU subset + env. keywords
Basaglia et al. (2025)	Aggregate	Climate policy	Yes	No	Adjusted dictionaries + paragraph co-occurrence; directional sub-indices
Gavriilidis et al. (2026)	Aggregate	Climate policy	Yes	No*	Adjusted dictionaries; salience-scaled robustness index; narrative IV
Engle et al. (2020)	Aggregate	Climate news	No	No	Climate-change hedge portfolio (WSJ text innovations)
Sautner et al. (2023)	Firm	Climate exposure	No	No	Machine learning keyword discovery (earnings calls)

Notes: “Uncertainty” indicates whether the measure is designed to capture policy uncertainty. “Level index” indicates whether a companion policy-level (salience or activity) index is published as a primary, independently validated measure, enabling separate identification of level and uncertainty effects. *Gavriilidis et al. (2026) construct a climate-policy-news control series used only as a robustness check, not released as a standalone validated index; see main text. “Environmental policy” denotes the full range of U.S. environmental regulation (air, water, waste, land use, and climate); “Climate policy” denotes measures restricted to greenhouse gas and climate-change-related policy content.

A.2.0.2 Empirical correlations. Figure A2 plots standardised values of EnvP and EnvPU alongside six related measures, and Figure A3 reports the full pairwise correlation matrix. The headline finding is immediate: EnvPU is near-orthogonal to all existing measures. Correlations with EnvPU range from -0.13 with Engle et al. (2020) to 0.19 with the negative CPU sub-index of Basaglia et al. (2025), and are below 0.10 for Palikhe et al. (2024) ($\rho = 0.09$) and Gavriilidis et al. (2026) ($\rho = 0.05$). EnvPU is likewise only weakly correlated with EnvP itself ($\rho = -0.06$). No existing measure, whether it captures climate news, climate policy uncertainty, or environmental policy uncertainty, explains more than 4% of the variation in EnvPU.

EnvP, by contrast, co-moves moderately with the same set of measures. Its strongest correlation is with the climate policy uncertainty index of Gavriilidis et al. (2026) ($\rho = 0.72$), followed by Engle et al. (2020) ($\rho = 0.64$), the Basaglia et al. (2025) base CPU series ($\rho = 0.56$), and Palikhe et al. (2024) ($\rho = 0.50$). Among the Basaglia et al. (2025) sub-indices, the negative CPU series ($\rho = 0.45$) co-moves more strongly with EnvP than the positive series ($\rho = 0.32$), consistent with media coverage of environmental policy activity being driven disproportionately by episodes of regulatory tightening. This pattern is also striking more broadly: indices ostensibly designed to capture policy *uncertainty* display substantial positive correlations with EnvP, suggesting they partly reflect heightened media attention to environmental and climate policy rather than uncertainty about its future direction alone.

A particularly revealing comparison involves Palikhe et al. (2024). Despite sharing our domain and our focus on uncertainty, their index correlates with our EnvP at $\rho = 0.50$ but with our EnvPU at only $\rho = 0.09$. This pattern is consistent with the keyword-based classification retaining a policy-salience component that the supervised ML classifier has separated out: articles discussing uncertain regulatory outcomes are included in the Palikhe et al. (2024) index even when the uncertainty expressed is not specifically about the future direction of policy, generating co-movement with EnvP that

their approach cannot fully remove. Our classifier, trained to identify articles expressing ambiguity about future policy direction or implementation specifically, yields an uncertainty index that is near-orthogonal to both our own policy salience index and to Palikhe et al. (2024).

Taken together, the evidence confirms that EnvPU captures a largely orthogonal component of the environmental policy environment. This supports the identifying assumption that the estimated coefficient on EnvPU in our investment regressions reflects the effect of policy uncertainty rather than a correlated feature of overall policy salience or climate attention.

A.3 Aggregate Cleantech Investments

A.3.1 Summary Statistics

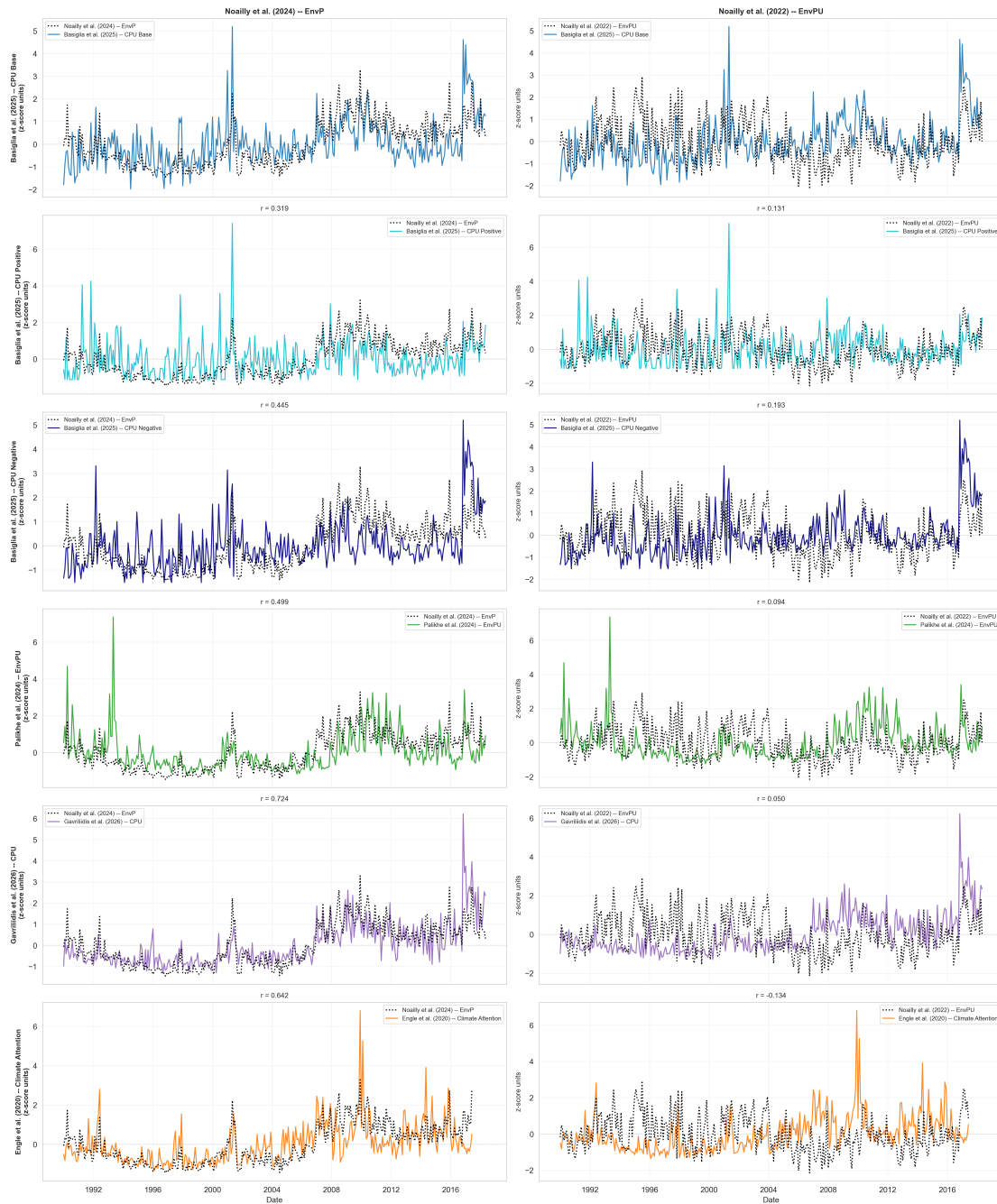




Figure A3: Pairwise Pearson correlation matrix across all eight indices, monthly, over the common sample. Rows and columns correspond to the Basaglia et al. (2025) monthly CPU base, positive, and negative sub-indices; the Palikhe et al. (2024) EnvPU index; the Gavriilidis et al. (2026) CPU index; the Engle et al. (2020) Climate Attention index; EnvP (Noailly et al., 2024); and EnvPU (Noailly et al., 2022). Colour intensity indicates the magnitude of the correlation, with dark red denoting strong positive correlation and light blue denoting negative correlation.

Table A4: Summary statistics — aggregate estimations

	Observations	Mean	Std. Dev	Min	Max
<i>Clean-Tech Greenfield Investment:</i>					
ET deals share	44	4.9227	2.3937	1.8868	13.7931
ET capex share	44	15.6928	12.1660	2.5256	63.1390
<i>Policy Indices:</i>					
EnvP US	44	0.0258	1.0280	-1.6054	2.5559
EnvPU US	44	0.1184	0.9699	-1.6167	3.1532
Δ EPU US	44	-0.0365	1.0336	-2.3586	3.3062
<i>Macro, Trade and Environmental Variables:</i>					
Fed funds rate US	44	0.5373	0.6981	0.0700	2.4100
GDP growth US	44	1.6318	1.7362	-4.0000	3.8000
Inflation US	44	1.7094	1.2770	-1.6234	5.3028
Δ Trade openness US	44	0.0725	0.7661	-2.7447	1.4095
Δ REER US	44	1.1622	5.9490	-9.7767	13.1267
$\Delta\%$ RE installed capacity US	44	6.4021	1.8310	3.8251	9.8887
$\Delta\%$ Energy price US	44	-1.9585	12.4218	-33.9695	19.7137
$\Delta\%$ Env patents US	44	10.2048	7.4812	-0.8741	30.3787
Δ Oil price	44	-1.7600	26.6140	-64.5133	58.9767
<i>Business Cycle Expectations:</i>					
Δ Leading US	44	0.0530	1.0206	-2.5583	3.6482
Δ Sentiment US	44	0.0928	0.9806	-2.7964	2.2319

The summary statistics are based on the baseline specification (4) for the aggregate extensive-margin results in Table 1 or else on the respective specification, where the variable in question is used. The sample period is 2007Q1:2019Q1.

A.3.2 Additional Results

A.3.2.1 Extensive margin by investor origin. Tables A5 and A6 replicate the aggregate extensive-margin results separately for U.S.-sourced and foreign-sourced deals.

Table A5: Aggregate cleantech investment — extensive margin, U.S. sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share
L.EnvP US	1.3670*** (0.3023)	1.3970*** (0.2928)	1.3579*** (0.3214)	1.3289*** (0.3092)	1.3335*** (0.3057)	0.9146** (0.4080)	1.3989*** (0.3014)	1.2139*** (0.3222)
L.EnvPU US	-1.1277*** (0.3195)	-1.0792*** (0.3014)	-1.1290*** (0.3261)	-1.0565*** (0.2906)	-1.0531*** (0.2807)	-1.0695*** (0.3820)	-1.0707*** (0.2995)	-0.8592*** (0.3009)
Q1		-1.1066 (1.0041)						
Q2		-0.9859 (0.8124)						
Q3		-0.8854 (0.8284)						
L.Δ RE installed capacity US			-0.0555 (0.1274)	-0.0584 (0.1289)		-0.0103 (0.1562)	-0.1221 (0.1230)	0.0032 (0.1301)
L.Δ Oil price			-0.0216 (0.0144)					
L.Δ Energy price US				-0.0418 (0.0334)	-0.0395 (0.0316)	0.1229 (0.0900)	-0.0534* (0.0311)	-0.0487 (0.0314)
L.Δ Env patents US					0.0073 (0.0381)			
L.Fed funds rate US						0.0999 (0.3511)		
L.GDP growth US						-0.6027 (0.3831)		
L.Inflation US						-0.9338 (0.7006)		
L.Δ Trade openness US						0.5983 (0.3824)		
L.Δ REER US						0.1187 (0.0825)		
L.Δ EPU US							0.6187* (0.3172)	
L.Δ Leading US								0.2063 (0.5552)
L.Δ Sentiment US								-0.6839* (0.3586)
Constant	4.9859*** (0.2870)	5.7308*** (0.7415)	5.3946*** (0.8894)	5.3570*** (0.9027)	4.9144*** (0.4715)	7.7212*** (1.5045)	5.7689*** (0.8953)	4.9828*** (0.8870)
Observations	48	48	44	44	44	44	44	44
R ²	0.36	0.39	0.42	0.40	0.40	0.51	0.47	0.46

The table presents results of an OLS regression based on quarterly data (only RE installed capacity is annual) from 2007Q1:2019Q1. Robust standard errors are in parentheses. The dependent variable corresponds to the share of US clean-tech Greenfield deals of total US Greenfield deals. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: Aggregate cleantech investment — extensive margin, foreign sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share
L.EnvP US	2.3744*** (0.5476)	2.4162*** (0.5069)	2.4235*** (0.5831)	2.4200*** (0.5539)	2.4455*** (0.5513)	0.8972 (0.6460)	2.5003*** (0.5595)	2.2283*** (0.5834)
L.EnvPU US	-1.4915** (0.6295)	-1.4315** (0.6367)	-1.6727** (0.6518)	-1.6644** (0.6232)	-1.6876*** (0.6010)	-0.4616 (0.5458)	-1.6807*** (0.6108)	-1.4327** (0.6867)
Q1		-2.0566 (1.6708)						
Q2		-1.5903 (1.8099)						
Q3		-0.7301 (1.8018)						
L.Δ% RE installed capacity US			-0.0883 (0.2744)	-0.1080 (0.2824)		-0.0152 (0.2503)	-0.1810 (0.2876)	-0.0215 (0.2605)
L.Δ Oil price			0.0024 (0.0240)					
L.Δ% Energy price US				-0.0040 (0.0587)	-0.0019 (0.0575)	-0.0392 (0.1419)	-0.0174 (0.0605)	-0.0053 (0.0568)
L.Δ% Env patents US					0.0369 (0.0957)			
L.Fed funds rate US						1.4266* (0.7975)		
L.GDP growth US						-1.2237*** (0.3651)		
L.Inflation US						-0.8865 (1.2445)		
L.Δ Trade openness US						0.8299 (0.6548)		
L.Δ REER US						-0.3479** (0.1600)		
L.Δ EPU US							0.7090 (0.6603)	
L.Δ Leading US								0.6521 (0.8679)
L.Δ Sentiment US								-0.7612 (0.8016)
Constant	8.1238*** (0.5450)	9.2187*** (1.4735)	8.7575*** (1.9775)	8.8750*** (2.0161)	7.8240*** (1.0254)	11.0653*** (2.9651)	9.3471*** (2.0527)	8.3320*** (1.8842)
Observations	48	48	44	44	44	44	44	44
R ²	0.28	0.32	0.30	0.30	0.30	0.56	0.32	0.33

The table presents results of an OLS regression based on quarterly data (only RE installed capacity is annual) from 2007Q1:2019Q1. Robust standard errors are in parentheses. The dependent variable corresponds to the share of foreign-sourced clean-tech Greenfield deals in the US. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.3.2.2 Local projections. Figure A4 plots the impulse responses of the ET deal share to one-SD shocks in EnvP and EnvPU over eight quarters, estimated via:

$$CleanDealshare_{t+h} = \beta_0^h + \beta_1^h EnvPU_{t-1} + \beta_2^h EnvP_{t-1} + \beta_3^h \Phi_{t-1} + \varepsilon_{t+h} \quad (4)$$

with robust standard errors.

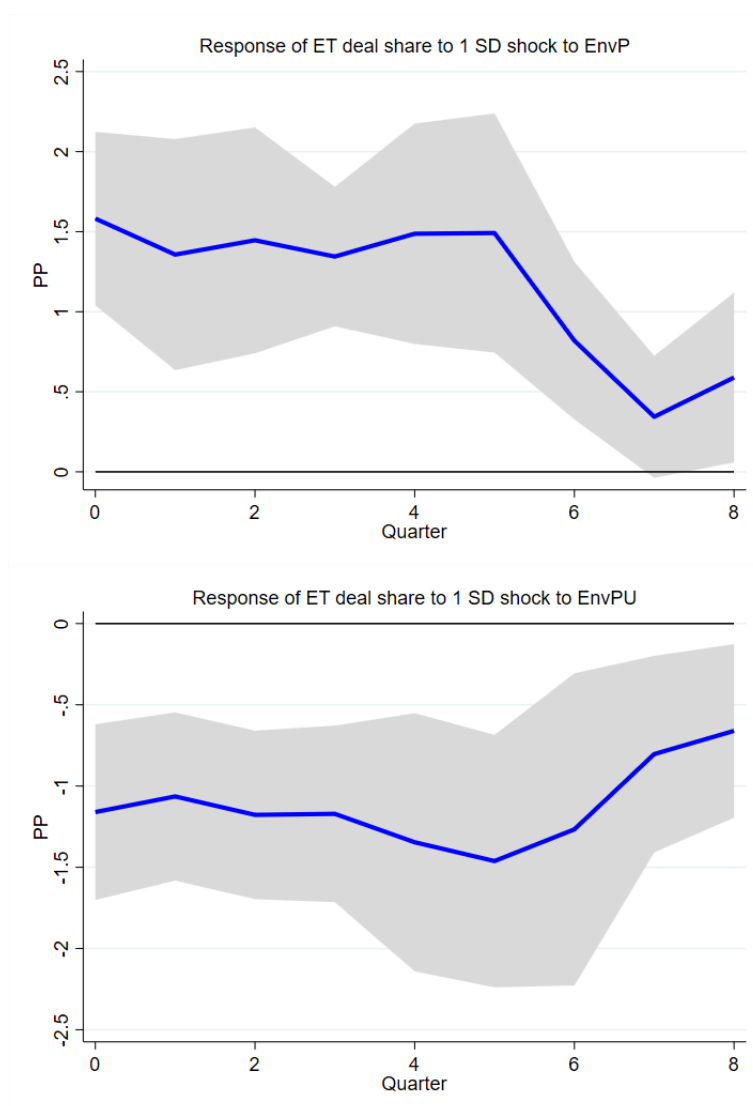


Figure A4: Response of cleantech deal share to a one-SD shock in EnvP (top) and EnvPU (bottom), local projections over 8 quarters, full sample 2007Q1–2019Q1.

A.4 Country-Level Cleantech Investments

A.4.1 Summary Statistics

Table A7: Summary statistics — country-level estimations

	Observations	Mean	Std. Dev	Min	Max
<i>Clean-Tech Greenfield Investment:</i>					
ET deals share (%)	484	11.1348	20.1119	0	100
ET capex share (%)	484	21.1009	30.9343	0	100
<i>Policy Indices:</i>					
EnvP US	484	0.0261	1.0277	-1.6219	2.5821
EnvPU US	484	0.1196	0.9697	-1.6333	3.1855
Δ EPU US	396	-0.0369	1.0338	-2.3833	3.3408
Δ EPU Source	396	-0.0284	1.0141	-4.6619	4.2747
<i>Macro, Trade and Environmental Variables:</i>					
Fed funds rate US (%)	484	0.5373	0.6908	0.0700	2.4100
GDP growth US (%)	484	1.6318	1.7181	-4.0000	3.8000
GDP growth source (%)	484	0.0270	0.0967	-0.2865	0.3261
Inflation US (%)	484	1.7094	1.2637	-1.6234	5.3028
Inflation source (%)	484	0.0140	0.0120	-0.0228	0.0486
Δ Trade openness US (p.p.)	484	0.0725	0.7581	-2.7447	1.4095
Δ Bilateral FX (currency / USD; p.p.)	484	-0.0217	0.1076	-0.5482	0.2402
Δ Bilateral Trade (p.p.)	484	-0.0248	0.8557	-5.0000	4.0000
$\Delta\%$ RE installed capacity US (%)	484	0.0640	0.0181	0.0383	0.0989
$\Delta\%$ RE installed capacity source (%)	484	0.0687	0.0539	-0.0136	0.2889
$\Delta\%$ Energy price US (%)	484	-0.0196	0.1229	-0.3397	0.1971
$\Delta\%$ Energy price source (%)	484	0.0092	0.0664	-0.2766	0.1797
Δ Oil price (USD)	484	-1.7600	26.3371	-64.5133	58.9767
<i>Business Cycle Expectations:</i>					
Δ Leading US	484	0.0536	1.0205	-2.5852	3.6864
Δ Sentiment US	484	0.0938	0.9805	-2.8257	2.2553

The summary statistics are based on the baseline specification (4) for the aggregate extensive-margin results in Table 3 or else on the respective specification, where the variable in question is used. The policy indices as well as the business cycle indices are standardized to a mean of zero and a unit standard deviation. The sample period is 2007Q1:2019Q1.

The tables below report mean and standard deviation for ET and non-ET deals in fDi Markets (2003Q1–2019Q1), with t-tests for differences in means, for the full, domestic, and foreign subsamples.

Table A8: fDi Markets summary — Australia

	Australia		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	171.658 208.011	34.310 97.569	137.348* (2.868)
Jobs created (#)	78.684 88.209	74.301 185.738	4.383 (0.203)
Observations	19	598	617

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A9: fDi Markets summary — Canada

	Canada		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	90.940 122.943	38.853 216.951	52.087*** (3.492)
Jobs created (#)	57.650 56.942	87.491 207.090	-29.841*** (-3.538)
Observations	80	1401	1481

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A10: fDi Markets summary — China

	China		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	81.983 239.716	79.176 321.559	2.807 (0.082)
Jobs created (#)	67.322 70.132	141.349 340.467	-74.027*** (-4.316)
Observations	59	550	609

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A11: fDi Markets summary — Denmark

	Denmark		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	68.097 83.244	26.821 96.787	41.276** (2.707)
Jobs created (#)	109.897 192.765	66.532 83.365	43.365 (1.376)
Observations	39	171	210

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A12: fDi Markets summary — Finland

	Finland		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	19.325 18.625	18.418 35.973	0.907 (0.158)
Jobs created (#)	58.643 52.030	66.592 68.376	-7.949 (-0.532)
Observations	14	157	171

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A13: fDi Markets summary — France

	France		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	146.502 98.584	31.247 124.931	115.255*** (7.859)
Jobs created (#)	73.857 107.433	73.435 120.011	0.422 (0.027)
Observations	49	933	982

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A14: fDi Markets summary — Germany

	Germany		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	80.872	27.718	53.155*** (4.717)
	128.018	82.571	
Jobs created (#)	78.552	88.313	-9.761 (-1.051)
	92.249	181.672	
Observations	134	1452	1586

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A15: fDi Markets summary — Italy

	Italy		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	195.378	42.939	152.440*** (4.839)
	165.394	205.959	
Jobs created (#)	50.000	92.620	-42.620* (-2.295)
	74.664	229.177	
Observations	32	308	340

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A16: fDi Markets summary — Japan

	Japan		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	89.072	53.557	
	95.586	179.804	
			35.515 (1.944)
Jobs created (#)	72.100	111.943	
	94.210	270.591	
			-39.843* (-2.093)
Observations	30	1101	1131

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A17: fDi Markets summary — Portugal

	Portugal		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	184.410	17.988	
	121.171	25.753	
			166.422*** (6.217)
Jobs created (#)	56.429	69.842	
	46.661	110.888	
			-13.414 (-0.649)
Observations	21	38	59

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A18: fDi Markets summary — Spain

	Spain		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	140.911	26.608	114.303*** (5.497)
	189.711	81.030	
Jobs created (#)	58.442	68.638	-10.197 (-1.071)
	58.536	155.054	
Observations	86	473	559

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A19: fDi Markets summary — United Kingdom

	United Kingdom		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	98.771	20.299	78.472*** (4.905)
	136.051	80.614	
Jobs created (#)	50.973	58.896	-7.924 (-0.882)
	73.690	130.474	
Observations	73	2697	2770

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A20: fDi Markets summary — United States

	United States		
	Env Tech	Non Env Tech	Difference
Capital investment (mln USD)	98.365 181.047	32.137 172.065	66.228*** (12.154)
Jobs created (#)	62.286 124.316	77.645 230.346	-15.359*** (-3.904)
Observations	1147	26507	27654

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.4.2 Additional Results

Table A21: Country-level cleantech FDI deals — extensive margin (double-clustered SE)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share	ET deals share
L.EnvP US	3.9359*** (1.2345)	4.0064*** (1.0775)	3.6128*** (1.1124)	3.6414*** (1.0274)	3.6454*** (0.9957)	2.5628* (1.4075)	2.6271*** (0.7809)	3.3556*** (1.0184)
L.EnvPU US	-1.9146 (1.0703)	-1.7768 (1.0233)	-1.8175* (0.9139)	-1.9507* (0.9121)	-1.8734** (0.7886)	-2.1785 (1.2375)	-1.0869* (0.4966)	-1.6189 (0.9588)
Q1		-3.7173 (2.8257)	-5.3939 (3.1662)	-5.4226 (3.1033)	-5.4213 (3.0124)	-3.4225 (3.2268)	-3.5614 (3.0874)	-4.5408 (3.0926)
Q2		-3.4113** (1.3180)	-4.5010** (1.9887)	-4.3545* (2.0192)	-4.3805* (2.0432)	-1.3892 (2.9898)	-2.7503 (1.9035)	-3.5253* (1.6553)
Q3		-2.0724 (2.5944)	-3.0605 (2.7893)	-2.9224 (2.6084)	-2.9410 (2.4953)	-5.7166 (3.2349)	-2.9065 (2.7996)	-2.6355 (2.6727)
L.Δ% RE installed capacity US			-67.0140 (65.3510)	-66.6576 (66.5938)		-95.7041 (82.4451)	-20.3683 (48.9223)	-54.1699 (66.8134)
L.Δ% RE installed capacity source			20.2348 (24.9368)	16.6179 (23.9654)		42.3469 (39.3203)	31.8484 (26.8418)	15.6386 (25.8958)
L.Δ Oil			0.0528 (0.0546)					
L.Δ% Energy price US				0.2670 (11.2567)	3.0643 (13.4747)	10.0870 (14.2939)	-4.3067 (7.1722)	-1.6216 (13.2313)
L.Δ% Energy price source				24.6767 (29.9935)	25.0649 (32.5937)	13.7628 (32.3694)	32.6958 (28.2695)	28.3317 (32.1343)
L.Δ% Env patents US					10.3440 (12.3723)			
L.Δ% Env patents source					-5.2987 (5.2873)			
L.Fed funds rate US						5.4809* (2.9446)		
L.GDP growth US						-0.7400 (0.7097)		
L.GDP growth source						-19.2534 (15.4734)		
L.Inflation US						-1.1964 (1.7261)		
L.Inflation source						-1.3294 (126.0834)		
L.Δ Trade openness US						4.1829** (1.7525)		
L.Δ Bilateral FX						-32.4649 (24.2247)		
L.Δ Bilateral Trade						-0.6637 (1.0758)		
L.Δ EPU US							1.3622 (1.0189)	
L.Δ EPU Source							-0.3909 (0.3482)	
L.Δ Leading US								0.8994 (1.6456)
L.Δ Sentiment US								-1.1678 (1.0208)
Constant	11.5813*** (0.6565)	13.8823*** (1.6540)	17.5577*** (5.5127)	17.4418*** (5.4588)	13.9739*** (1.4776)	17.1551*** (2.9431)	10.7733* (4.9613)	16.1695** (5.1167)
Source country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	576	576	484	484	484	484	396	484
Countries	12	12	11	11	11	11	9	11
R ²	0.14	0.15	0.16	0.16	0.16	0.19	0.22	0.16

The table presents results of an OLS regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors clustered at the source-country and year level are in parentheses. The dependent variable corresponds to the share of clean-tech Greenfield deals in the US of total Greenfield deals in the US. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.5 Firm-Level Cleantech Investments

A.5.1 Summary Statistics

Table A22: Summary statistics — firm-level estimations

	Observations	Mean	Std. Dev	Min	Max
<i>Greenfield Investment:</i>					
Number of deals (#)	359305	0.0294	0.2191	0	52
Capex (mln USD)	360242	0.9522	22.1581	0	4000
<i>Policy Indices:</i>					
EnvP US	359305	0.4851	0.5563	-0.4054	1.9095
EnvPU US	359305	0.0343	0.9964	-1.7418	3.2072
Δ EPU US	312776	0.0823	1.0881	-2.5037	3.7064
Δ EPU Source	312772	0.0362	1.0550	-8.7413	5.0665
<i>Macro, Trade and Environmental Variables:</i>					
Fed funds rate US	359305	0.8402	1.2473	0.0700	5.2500
GDP growth US	359305	1.6592	1.6512	-4.0000	3.8000
GDP growth source	359305	0.0279	0.1391	-5.5424	10.8993
Inflation US	359305	1.8374	1.3026	-1.6234	5.3028
Inflation source	359305	0.0163	0.0138	-0.1124	0.2378
Δ Trade openness US	359305	0.0704	0.7345	-2.7447	1.4095
Δ Bilateral FX	359305	-0.0166	0.1175	-1.6748	1.4432
Δ Bilateral Trade	359305	-0.0200	0.8841	-34.2389	20.3706
$\Delta\%$ RE installed capacity US	359305	0.0633	0.0176	0.0383	0.0989
$\Delta\%$ RE installed capacity source	359302	0.0835	0.0701	-4.2837	2.5326
$\Delta\%$ Energy price US	359305	-0.0125	0.1218	-0.3397	0.1971
$\Delta\%$ Energy price source	359302	0.0092	0.0664	-0.2766	0.2388
Δ Oil price	373799	-0.1475	26.2951	-64.5133	58.9767
<i>Business Cycle Expectations:</i>					
Δ Leading US	360386	-0.0251	1.0591	-2.7630	3.8790
Δ Sentiment US	360386	-0.0382	1.0044	-2.8764	2.2272

The summary statistics are based on the baseline specifications for the firm-level results in Tables 6 and 7. The policy indices as well as the business cycle indices are standardized to a mean of zero and a unit standard deviation. The sample period is 2007Q1:2019Q1.

A.5.2 Additional Results

A.5.2.1 Foreign firms — extensive margin (fixed effects variants).

Table A23: Firm-level cleantech FDI — extensive margin, foreign firms (FE variants)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)
L.EnvP US	-0.2653*** (0.0551)	-0.2648*** (0.0559)					
L.EnvPU US	0.1267*** (0.0427)	0.1255*** (0.0430)					
ET=1	0.0511 (0.1349)						
ET=1 × L.EnvP US	0.5619*** (0.1727)	0.5622*** (0.1749)	0.5641*** (0.1753)	0.5641*** (0.1753)	0.5619*** (0.1780)	0.5811*** (0.1481)	0.5814*** (0.1428)
ET=1 × L.EnvPU US	-0.1727** (0.0705)	-0.1729** (0.0731)	-0.2014** (0.0913)	-0.2014** (0.0913)	-0.1953** (0.0922)	-0.1959** (0.0854)	-0.2008** (0.0821)
Constant	-3.5818*** (0.0412)	-3.1875*** (0.0350)	-3.2707*** (0.0050)	-3.2707*** (0.0050)	-3.2609*** (0.0051)	-3.2745*** (0.0255)	-3.7148*** (0.0143)
Quarter FE	No	No	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	Yes	Yes	Yes	Yes	No
Cluster FE	No	No	No	Yes	Yes	Yes	Yes
Source-country FE	No	No	No	No	Yes	Yes	Yes
Seasonality	No	No	No	No	No	Yes	Yes
Observations	509,606	446,323	446,323	446,323	446,323	446,323	509,510
Firms	11,000	9,300	9,300	9,300	9,300	9,300	11,000
Pseudo R ²	0.003	0.06	0.06	0.06	0.07	0.07	0.01

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the number of Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A24: Firm-level cleantech FDI — intensive margin, foreign firms (FE variants)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Capex (firm)	Capex (firm)	Capex (firm)	Capex (firm)	Capex (firm)	Capex (firm)	Capex (firm)
L.EnvP US	-0.2732*** (0.1051)	-0.2721*** (0.1055)					
L.EnvPU US	0.1799** (0.0772)	0.1785** (0.0832)					
ET=1	1.2203*** (0.2333)						
ET=1 × L.EnvP US	0.6095** (0.2434)	0.6107** (0.2468)	0.6348** (0.2663)	0.6348** (0.2663)	0.6342** (0.2668)	0.6308** (0.2861)	0.6293** (0.2787)
ET=1 × L.EnvPU US	-0.2147 (0.1653)	-0.2165 (0.1739)	-0.2095 (0.1697)	-0.2095 (0.1697)	-0.2047 (0.1687)	-0.1768 (0.1701)	-0.1789 (0.1636)
Constant	-0.0809 (0.0689)	2.0970*** (0.0251)	2.0761*** (0.0149)	2.0761*** (0.0149)	2.0805*** (0.0150)	1.9652*** (0.0882)	0.2937*** (0.0793)
Quarter FE	No	No	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	Yes	Yes	Yes	Yes	No
Cluster FE	No	No	No	Yes	Yes	Yes	Yes
Source-country FE	No	No	No	No	Yes	Yes	Yes
Seasonality	No	No	No	No	No	Yes	Yes
Observations	509,606	446,179	446,179	446,179	446,179	446,179	509,510
Firms	11,000	9,300	9,300	9,300	9,300	9,300	11,000
Pseudo R ²	0.02	0.35	0.37	0.37	0.37	0.37	0.14

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the capital expenditure on Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.5.2.2 Foreign firms — intensive margin (fixed effects variants).

Table A25: Firm-level cleantech FDI — extensive margin, most active countries (FE variants)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)
L.EnvP US	-0.2460*** (0.0596)	-0.2502*** (0.0622)					
L.EnvPU US	0.1264*** (0.0433)	0.1293*** (0.0456)					
ET=1	0.0827 (0.1344)						
ET=1 × L.EnvP US	0.5366*** (0.1606)	0.5400*** (0.1635)	0.5433*** (0.1664)	0.5433*** (0.1664)	0.5427*** (0.1665)	0.5658*** (0.1376)	0.5579*** (0.1337)
ET=1 × L.EnvPU US	-0.1641** (0.0735)	-0.1676** (0.0762)	-0.1987** (0.0938)	-0.1987** (0.0938)	-0.1981** (0.0938)	-0.1974** (0.0858)	-0.1903** (0.0821)
Constant	-3.5814*** (0.0460)	-3.1688*** (0.0413)	-3.2442*** (0.0052)	-3.2442*** (0.0052)	-3.2437*** (0.0052)	-3.2645*** (0.0306)	-3.7179*** (0.0176)
Quarter FE	No	No	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	Yes	Yes	Yes	Yes	No
Cluster FE	No	No	No	Yes	Yes	Yes	Yes
Source-country FE	No	No	No	No	Yes	Yes	Yes
Seasonality	No	No	No	No	No	Yes	Yes
Observations	343,562	299,678	299,678	299,678	299,678	299,678	343,562
Firms	7,200	6,300	6,300	6,300	6,300	6,300	7,200
Pseudo R ²	0.003	0.06	0.07	0.07	0.0658	0.07	0.01

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the number of Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.5.2.3 Foreign firms from most active countries — extensive margin.

Table A26: Firm-level cleantech FDI — extensive margin, most active countries (baseline controls)

	(1)	(2)	(3)	(4)	(5)	(6)
	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)
ET=1 × L.EnvP US	0.5369*** (0.1395)	0.5418*** (0.1215)	0.5659*** (0.1174)	0.2364 (0.1505)	0.4946*** (0.1233)	0.5044*** (0.1124)
ET=1 × L.EnvPU US	-0.1921** (0.0819)	-0.1980** (0.0810)	-0.2169*** (0.0729)	-0.1227 (0.0837)	-0.1650** (0.0778)	-0.1640** (0.0832)
ET=1 × L.Δ% RE installed capacity US	1.8391 (3.2983)	1.5248 (3.5467)		4.8028* (2.8516)	1.5051 (4.1973)	2.4695 (3.5710)
ET=1 × L.Δ% RE installed capacity source	1.6501 (1.8866)	1.4539 (1.8623)		3.8600** (1.7851)	3.0576* (1.7534)	1.5478 (1.9108)
ET=1 × L.Δ Oil price	0.0028 (0.0043)					
ET=1 × L.Δ% Energy price US		-0.1615 (1.1255)	-0.3437 (1.1561)	4.3194** (1.9239)	-0.7185 (0.9919)	-0.4223 (1.1948)
ET=1 × L.Δ% Energy price source		1.4525 (1.4328)	1.7233 (1.3960)	1.8270 (1.4792)	2.1312* (1.1931)	1.5058 (1.5339)
ET=1 × L.Δ% Env patents US			0.2811 (0.8198)			
ET=1 × L.Δ% Env patents source			0.0019 (0.2324)			
ET=1 × L.Fed funds rate US				0.1971*** (0.0537)		
ET=1 × L.GDP growth US				-0.1436** (0.0643)		
ET=1 × L.GDP growth source				-2.2227** (1.0307)		
ET=1 × L.Inflation US				-0.3608** (0.1770)		
ET=1 × L.Inflation source				-4.4814 (6.8757)		
ET=1 × L.Δ Trade openness US				0.0572 (0.1652)		
ET=1 × L.Δ Bilateral FX				-1.6941 (1.1217)		
ET=1 × L.Δ Bilateral Trade				-0.1605** (0.0777)		
ET=1 × L.Δ EPU US					0.0951 (0.1056)	
ET=1 × L.Δ EPU Source					-0.0267 (0.0549)	
ET=1 × L.Δ Leading US						0.0195 (0.0729)
ET=1 × L.Δ Sentiment US						-0.1064 (0.0857)
Constant	-3.2726*** (0.0361)	-3.2712*** (0.0366)	-3.2601*** (0.0330)	-3.2152*** (0.0398)	-3.2632*** (0.0414)	-3.2663*** (0.0370)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster FE	Yes	Yes	Yes	Yes	Yes	Yes
Source-country FE	Yes	Yes	Yes	Yes	Yes	Yes
Seasonality	Yes	Yes	Yes	Yes	Yes	Yes
Observations	279,023	279,023	279,023	277,944	269,546	279,023
Firms	5,800	5,800	5,800	5,800	5,700	5,800
Pseudo R ²	0.07	0.07	0.07	0.07	0.07	0.07

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the number of Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A27: Firm-level cleantech FDI — intensive margin, most active countries (FE variants)

	(1) Capex (firm)	(2) Capex (firm)	(3) Capex (firm)	(4) Capex (firm)	(5) Capex (firm)	(6) Capex (firm)	(7) Capex (firm)
L.EnvP US	-0.2060* (0.1057)	-0.2034* (0.1084)					
L.EnvPU US	0.0440 (0.0671)	0.0411 (0.0696)					
ET=1	1.4246*** (0.2637)						
ET=1 × L.EnvP US	0.5573** (0.2814)	0.5583* (0.2866)	0.5467* (0.2997)	0.5467* (0.2997)	0.5436* (0.3000)	0.5515* (0.3024)	0.5532* (0.2932)
ET=1 × L.EnvPU US	-0.0367 (0.1542)	-0.0376 (0.1632)	-0.0460 (0.1765)	-0.0460 (0.1765)	-0.0402 (0.1737)	-0.0270 (0.1837)	-0.0308 (0.1765)
Constant	-0.1951** (0.0877)	1.8586*** (0.0395)	1.8385*** (0.0253)	1.8385*** (0.0253)	1.8437*** (0.0254)	1.7018*** (0.1187)	-0.0635 (0.0985)
Quarter FE	No	No	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	Yes	Yes	Yes	Yes	No
Cluster FE	No	No	No	Yes	Yes	Yes	Yes
Source-country FE	No	No	No	No	Yes	Yes	Yes
Seasonality	No	No	No	No	No	Yes	Yes
Observations	343,562	299,582	299,582	299,582	299,582	299,582	343,562
Firms	7,200	6,300	6,300	6,300	6,300	6,300	7,200
Pseudo R ²	0.04	0.34	0.35	0.35	0.35	0.35	0.12

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the capital expenditure on Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.5.2.4 Foreign firms from most active countries — intensive margin.

Table A28: Firm-level cleantech FDI — intensive margin, most active countries (baseline controls)

	(1) Capex (firm)	(2) Capex (firm)	(3) Capex (firm)	(4) Capex (firm)	(5) Capex (firm)	(6) Capex (firm)
ET=1 × L.EnvP US	0.4540 (0.2886)	0.4190 (0.2658)	0.3755 (0.2355)	-0.0979 (0.2683)	0.4236 (0.2708)	0.3019 (0.2405)
ET=1 × L.EnvPU US	-0.0063 (0.1826)	0.0131 (0.1632)	0.0633 (0.1573)	0.2453 (0.1657)	0.0693 (0.1538)	0.1560 (0.1594)
ET=1 × L.Δ% RE installed capacity US	1.5362 (7.9954)	0.7949 (8.4026)		2.1671 (8.9506)	0.7008 (9.6216)	5.0179 (7.5401)
ET=1 × L.Δ% RE installed capacity source	0.0439 (0.9428)	-0.3185 (0.9642)		2.1081 (1.7050)	1.4832 (1.7281)	-0.0830 (1.0220)
ET=1 × L.Δ Oil price	-0.0002 (0.0067)					
ET=1 × L.Δ% Energy price US		-1.8869 (1.9626)	-2.0295 (1.7826)	0.2307 (4.0706)	-2.4108 (1.9253)	-2.7039 (2.1140)
ET=1 × L.Δ% Energy price source		4.4547 (3.1240)	4.6052 (2.9083)	2.8636 (2.9112)	4.6146 (2.9430)	4.1613 (2.9436)
ET=1 × L.Δ% Env patents US			-1.9417 (1.7595)			
ET=1 × L.Δ% Env patents source			0.2941 (0.3796)			
ET=1 × L.Fed funds rate US				0.2499*** (0.0963)		
ET=1 × L.GDP growth US				-0.2440** (0.1173)		
ET=1 × L.GDP growth source				-2.2059 (1.5880)		
ET=1 × L.Inflation US				-0.1983 (0.2826)		
ET=1 × L.Inflation source				18.7398 (12.0044)		
ET=1 × L.Δ Trade openness US				0.4268* (0.2353)		
ET=1 × L.Δ Bilateral FX				-1.7169 (2.2658)		
ET=1 × L.Δ Bilateral Trade				-0.2669* (0.1415)		
ET=1 × L.Δ EPU US					0.2310** (0.1030)	
ET=1 × L.Δ EPU Source					0.0301 (0.1329)	
ET=1 × L.Δ Leading US						0.0737 (0.1236)
ET=1 × L.Δ Sentiment US						-0.4361*** (0.1392)
Constant	1.4238*** (0.1755)	1.4253*** (0.1865)	1.4603*** (0.1817)	1.5405*** (0.2368)	1.4258*** (0.2378)	1.3981*** (0.1773)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster FE	Yes	Yes	Yes	Yes	Yes	Yes
Source-country FE	Yes	Yes	Yes	Yes	Yes	Yes
Seasonality	Yes	Yes	Yes	Yes	Yes	Yes
Observations	278,927	278,927	278,927	277,848	269,451	278,927
Firms	5,800	5,800	5,800	5,800	5,700	5,800
Pseudo R ²	0.35	0.35	0.35	0.35	0.35	0.35

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the capital expenditure on Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A29: Firm-level cleantech FDI — extensive margin, U.S. sample (FE variants)

	(1)	(2)	(3)	(4)	(5)	(6)
	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)	# deals (firm)
L.EnvP US	-0.2586*** (0.0828)	-0.2600*** (0.0837)				
L.EnvPU US	0.1159** (0.0586)	0.1171** (0.0592)				
ET=1	-0.1843* (0.1073)					
ET=1 × L.EnvP US	0.4119*** (0.0933)	0.4125*** (0.0956)	0.4163*** (0.0944)	0.4163*** (0.0944)	0.4198*** (0.0962)	0.4192*** (0.0943)
ET=1 × L.EnvPU US	-0.1482*** (0.0495)	-0.1479*** (0.0506)	-0.1828*** (0.0635)	-0.1828*** (0.0635)	-0.1820*** (0.0598)	-0.1824*** (0.0583)
Constant	-2.9940*** (0.0726)	-2.2628*** (0.0660)	-2.3315*** (0.0014)	-2.3315*** (0.0014)	-2.3425*** (0.0122)	-3.0963*** (0.0267)
Quarter FE	No	No	Yes	Yes	Yes	Yes
Firm FE	No	Yes	Yes	Yes	Yes	No
Cluster FE	No	No	No	Yes	Yes	Yes
Seasonality	No	No	No	No	Yes	Yes
Observations	601,233	594,155	594,155	594,155	594,155	601,233
Firms	13,000	12,000	12,000	12,000	12,000	13,000
Pseudo R ²	0.002	0.17	0.18	0.18	0.18	0.02

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the number of Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.5.2.5 U.S. firms — extensive margin.

Table A30: Firm-level cleantech FDI — extensive margin, U.S. sample (baseline controls)

	(1) # deals (firm)	(2) # deals (firm)	(3) # deals (firm)	(4) # deals (firm)	(5) # deals (firm)	(6) # deals (firm)
ET=1 × L.EnvP US	0.4203*** (0.0881)	0.4143*** (0.0867)	0.4245*** (0.0869)	0.3767*** (0.1282)	0.4335*** (0.0864)	0.3908*** (0.0921)
ET=1 × L.EnvPU US	-0.1830*** (0.0553)	-0.1742*** (0.0570)	-0.1852*** (0.0586)	-0.2299*** (0.0723)	-0.1816*** (0.0566)	-0.1491*** (0.0574)
ET=1 × L.Δ% RE installed capacity US	-1.4082 (2.6707)	-1.1673 (2.6910)		-0.6503 (2.7758)	-2.3255 (2.0130)	-0.5115 (2.6572)
ET=1 × L.Δ Oil price	-0.0031 (0.0020)					
ET=1 × L.Δ% Energy price US		-0.4993 (0.4867)	-0.4841 (0.4707)	2.9684** (1.4792)	-0.7568 (0.4830)	-0.6711 (0.5767)
ET=1 × L.Δ% Env patents US			0.5228 (0.4858)			
ET=1 × L.Fed funds rate US				0.0045 (0.0432)		
ET=1 × L.GDP growth US				-0.0879 (0.0593)		
ET=1 × L.Inflation US				-0.1808* (0.0976)		
ET=1 × L.Δ Trade openness US				0.1204 (0.1063)		
ET=1 × L.Δ REER US				0.0336* (0.0187)		
ET=1 × L.Δ EPU US					0.1036 (0.0663)	
ET=1 × L.Δ Leading US						-0.0041 (0.0532)
ET=1 × L.Δ Sentiment US						-0.0831 (0.0623)
Constant	-2.3399*** (0.0128)	-2.3407*** (0.0127)	-2.3465*** (0.0125)	-2.3194*** (0.0197)	-2.3296*** (0.0139)	-2.3368*** (0.0131)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster FE	Yes	Yes	Yes	Yes	Yes	Yes
Seasonality	Yes	Yes	Yes	Yes	Yes	Yes
Observations	594,155	594,155	594,155	594,155	594,155	594,155
Firms	12,000	12,000	12,000	12,000	12,000	12,000
Pseudo R ²	0.18	0.18	0.18	0.18	0.18	0.18

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the number of Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.5.2.6 U.S. firms — intensive margin.

Table A31: Firm-level cleantech FDI — intensive margin, U.S. sample (FE variants)

	(1) Capex (firm)	(2) Capex (firm)	(3) Capex (firm)	(4) Capex (firm)	(5) Capex (firm)	(6) Capex (firm)
L.EnvP US	-0.0681 (0.1192)	-0.0768 (0.1210)				
L.EnvPU US	0.0031 (0.0592)	0.0104 (0.0643)				
ET=1	0.8492*** (0.1838)					
ET=1 × L.EnvP US	0.8525** (0.3906)	0.8600** (0.4192)	0.8152* (0.4210)	0.8152* (0.4210)	0.8573** (0.4077)	0.8487** (0.3606)
ET=1 × L.EnvPU US	-0.1703* (0.1009)	-0.1766 (0.1115)	-0.1733 (0.1348)	-0.1733 (0.1348)	-0.1675 (0.1324)	-0.1614 (0.1254)
Constant	0.3424*** (0.0929)	2.4295*** (0.0760)	2.4518*** (0.0467)	2.4518*** (0.0467)	2.4558*** (0.0705)	0.4775*** (0.0608)
Quarter FE	No	No	Yes	Yes	Yes	Yes
Firm FE	No	Yes	Yes	Yes	Yes	No
Cluster FE	No	No	No	Yes	Yes	Yes
Seasonality	No	No	No	No	Yes	Yes
Observations	601,233	594,011	594,011	594,011	594,011	601,233
Firms	13,000	12,000	12,000	12,000	12,000	13,000
Pseudo R ²	0.02	0.40	0.41	0.41	0.41	0.09

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the capital expenditure on Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A32: Firm-level cleantech FDI — intensive margin, U.S. sample (baseline controls)

	(1)	(2)	(3)	(4)	(5)	(6)
	Capex (firm)	Capex (firm)	Capex (firm)	Capex (firm)	Capex (firm)	Capex (firm)
ET=1 × L.EnvP US	0.8192*** (0.2743)	0.7976*** (0.2724)	0.8459*** (0.2864)	0.5815** (0.2326)	0.8189*** (0.2760)	0.7313*** (0.2103)
ET=1 × L.EnvPU US	-0.1677* (0.1011)	-0.1360 (0.1009)	-0.1925* (0.1115)	-0.1929 (0.1804)	-0.1538 (0.1028)	-0.0870 (0.0854)
ET=1 × L.Δ% RE installed capacity US	-0.0766 (5.0706)	-1.0175 (4.7368)		-0.0871 (4.9265)	-3.3698 (3.4074)	-1.8841 (4.9816)
ET=1 × L.Δ Oil price	-0.0091** (0.0040)					
ET=1 × L.Δ% Energy price US		-2.0039** (0.8626)	-2.0279** (0.9023)	5.2422 (3.4406)	-2.5879** (1.0615)	-2.3608*** (0.9135)
ET=1 × L.Δ% Env patents US			1.6532*** (0.4746)			
ET=1 × L.Fed funds rate US				-0.0205 (0.0903)		
ET=1 × L.GDP growth US				-0.1207** (0.0551)		
ET=1 × L.Inflation US				-0.3649* (0.2120)		
ET=1 × L.Δ Trade openness US				-0.5021*** (0.1939)		
ET=1 × L.Δ REER US				0.0274 (0.0356)		
ET=1 × L.Δ EPU US					0.2233* (0.1226)	
ET=1 × L.Δ Leading US						-0.2403** (0.0947)
ET=1 × L.Δ Sentiment US						-0.0889 (0.0765)
Constant	2.4182*** (0.0886)	2.4181*** (0.0822)	2.3817*** (0.0716)	2.5731*** (0.0471)	2.4914*** (0.0783)	2.4536*** (0.0912)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster FE	Yes	Yes	Yes	Yes	Yes	Yes
Seasonality	Yes	Yes	Yes	Yes	Yes	Yes
Observations	594,011	594,011	594,011	594,011	594,011	594,011
Firms	12,000	12,000	12,000	12,000	12,000	12,000
Pseudo R ²	0.41	0.41	0.41	0.42	0.41	0.42

The table presents results of a Pseudo Poisson Maximum Likelihood regression based on quarterly data (only RE installed capacity and environmental patents are annual) from 2007Q1:2019Q1. Robust standard errors double clustered at the firm and year level are in parentheses. The dependent variable corresponds to the capital expenditure on Greenfield deals in the US at the firm level. The EnvP index, EnvPU index, EPU index, the leading index and consumer confidence index are standardized to a mean of zero and unit standard deviation. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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