

Project Title

The Impacts of Federal EVSE Funding Pause on Emerging Firms: A Case Study of Strategic Adaptation and Leadership Challenges at EVBOLT Inc.

Project Team

Dr. Selahattin Bekmez

Dr. Yaseen Bhutto

Dr. Javed Iqbal

Duration of the Project: 12 months

Summary

The expansion of Electric Vehicle Supply Equipment (EVSE) infrastructure in the United States has been significantly supported by federal programs such as the National Electric Vehicle Infrastructure (NEVI) initiative. However, the recent funding pause initiated by the new administration has raised concerns about the resilience and strategic adaptability of small and emerging firms in the EVSE sector. This research proposal outlines a case study aimed at examining the effects of this funding disruption on a U.S. based early-stage EVSE company. The study will explore how such firms are financially and operationally impacted and will analyze leadership responses to strategic uncertainty. Using a qualitative methodology that includes interviews, document reviews, and secondary data analysis, the research aims to offer insights into how small cleantech businesses navigate federal funding volatility. The study will contribute to the literature on clean energy transitions, entrepreneurial leadership, and policy resilience, while also informing policymakers on how to design more inclusive and stable funding mechanisms for the green economy.

1. Introduction

The electric vehicle supply equipment (EVSE) sector is a cornerstone of the U.S. transition to clean transportation. Federal funding, particularly through programs like the National Electric Vehicle Infrastructure (NEVI) initiative and Bipartisan Infrastructure Law (BIL), has played a vital role in enabling small firms to enter and scale within this highly technical and capital-intensive market. However, with the new administration's temporary pause and review of federal EVSE funding mechanisms, emerging firms face serious strategic uncertainty. This study explores the impact of the funding pause on a small U.S based EVSE firm and investigates leadership responses to maintain resilience.

The intersection of clean technology innovation, public policy, and entrepreneurial leadership has gained scholarly attention in the last decade. Several scholars highlight how federal subsidies and grants have enabled innovation and market entry in energy technology (Armanios & Eesley, 2021; Zhang & Bai, 2018). However, policy instability is a recurring theme in cleantech failure (Hart, 2017; Kirsch & Sutch, 2020).

Recent literature emphasizes the vulnerability of small firms in transitional policy contexts (Shukla & Adams, 2023). Leadership agility and dynamic capabilities are critical factors in how firms navigate these uncertainties (Wesseling et al., 2015). Meanwhile, studies like those by Carley et al. (2023) and Gatti et al. (2024) suggest that federal pauses not only slow deployment but can also weaken investor and customer confidence.

While most literature addresses the broader ecosystem, there is a lack of micro-level, firm-specific studies that focus on the strategic leadership responses of small businesses during such pauses—making this case study timely and relevant.

2. Problem Statement

The pause in federal EVSE funding has disrupted business plans and financial forecasts for small companies in the EVSE market. Emerging firms, often with limited capital buffers and reliant on grant-backed deployment models, are especially vulnerable. There is a gap in the literature about how leadership in small cleantech firms navigates such disruptions, balancing operational decisions, stakeholder trust, and strategic planning.

3. Research Objectives

The research objectives are outlined as follows.

1. To examine how funding pauses affect small firms' financial, operational, and strategic outlook.
2. To assess leadership responses to uncertainty in the federal funding environment.
3. To understand how small EVSE firms adapt business models in response to disrupted public support.
4. To contribute case-based evidence to cleantech policy and entrepreneurial leadership literature.

4. Research Questions

Key research questions are outlined below.

1. What are the direct and indirect impacts of the federal EVSE funding pause on the case study firm?
2. How is the leadership of the firm responding to the uncertainty?
3. What strategic adaptations are being implemented?
4. How can leadership in emerging industries ensure resilience during regulatory and funding disruptions?

5. Methodology

This research adopts a qualitative case study approach to explore the operational and strategic experiences of an early-stage Electric Vehicle Supply Equipment (EVSE) company that has participated in federal and/or state grant programs. A qualitative design is appropriate for this study because it allows for the in-depth exploration of complex, context-dependent processes such as business formation, funding navigation, and strategic decision-making in the emerging clean technology sector. Qualitative research emphasizes understanding meanings, experiences, and processes from the perspective of those involved (Denzin & Lincoln, 2011), making it well-suited for this investigation.

The study will involve **semi-structured interviews**, which strike a balance between flexibility and consistency. This format enables the researcher to follow a core set of questions while also allowing participants to elaborate on issues they find most relevant. Such interviews are particularly valuable in exploratory research where participants' insights can reveal nuances and context not captured through structured surveys or quantitative analysis.

Interviews

Interviews will be conducted with:

- **Company founders**
- **CFO/COO**

- **Key team members** involved in strategic planning, finance, grant compliance, or product development

Interviews will be conducted virtually (via Zoom or another secure platform) or in person, depending on participant availability and location. Each session will last approximately 45–60 minutes, with informed consent obtained in advance. All interviews will be audio recorded (with permission) and later transcribed verbatim for thematic analysis. Follow-up interviews may be scheduled to clarify points or delve deeper into emerging themes.

The semi-structured interview guide will include open-ended questions covering:

- The company's founding vision and evolution
- Experience applying for and managing public funding
- Challenges and opportunities in the current EVSE landscape
- Internal decision-making processes
- Perceived impact of federal/state programs on business outcomes

Data Sources

In addition to interviews, the study will draw upon:

- **Internal documentation**, including business plans, financials (as available), and submitted grant proposals
- **Secondary data**, such as federal grant announcements, industry reports, and trade publications, to triangulate findings and situate the case within a broader policy and industry context

By combining primary interview data with internal and external documentary sources, this approach ensures both data triangulation and a comprehensive understanding of the firm's trajectory.

6. Theoretical underpinnings

It is intended to use the Resource Dependence theory to operationalize the research. Organizations depend on external resources (like funding, regulatory support, or partnerships) and must manage this dependence to survive and thrive. When critical resources become uncertain or constrained—such as federal funding for EVSE deployment—organizations adapt by altering strategies, structures, or partnerships to reduce vulnerability.

Why RDT Fits This Study?

- **Funding as a Resource:** The NEVI/BIL funding represents a key external resource. The pause disrupts access, creating uncertainty.
- **Small Firms Are Vulnerable:** Emerging EVSE firms lack diversified funding streams or political influence, making them heavily dependent.
- **Leadership Focus:** RDT emphasizes strategic choices leaders make in response to resource scarcity—perfect for your leadership-centered case study.
- **Strategic Response:** The firm's shift toward new markets, alternative partnerships, or private investment could be examined through the lens of power, dependence, and adaptation.

How to operationalize RDT in the context of this research?

RDT Concept	Operationalization in Study
Resource Dependence	Degree of reliance on federal grants (e.g., % of revenue, core business tied to funded programs)
Environmental Uncertainty	Perceptions of policy instability, abruptness of funding change
Strategic Response	Leadership actions: cost reduction, diversification, lobbying, private investment pursuit
Power Asymmetry	Ability to influence or respond to changes in policy (firm size, industry networks)

7. Significance of the Study

This study offers insights into how small cleantech firms are destabilized by policy shifts and highlights the leadership strategies used to sustain business operations during transitional periods. It will also contribute to improving the design of EVSE funding policies that are sensitive to the realities of small firms and startups.

8. Expected Outcomes

It is expected that the study will result in timely information for firms to adapt to the funding pauses. Key expected outcomes include the following.

- Identification of leadership responses to sudden policy changes.
- Insights into how business models and partnerships evolve in response to uncertainty.
- Policy and industry recommendations to support small EVSE firms during future funding disruptions.

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