



Charging Ahead of the Competition:
Why EV Charging Provides
a Strategic Advantage



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In the dynamic landscape of modern business, the integration of sustainable practices has emerged as not just a commendable endeavor but a **strategic imperative**. As the world accelerates towards a cleaner, more efficient future, **the electrification of transportation stands at the forefront of this transformative journey**.

This whitepaper examines the compelling business case for the installation of electric vehicle (EV) chargers at businesses or destinations, uncovering various strategic advantages to filling a growing need for e-mobility infrastructure. Beyond contributing to the global shift towards sustainable mobility, EV chargers emerge as dynamic assets that drive customer engagement, enhance brand reputation and unlock new revenue streams.

Join us as we delve into the economic, environmental, and societal benefits, unveiling how embracing EV charging is not just an eco-conscious choice, but a forward-thinking step toward fostering growth for businesses and their communities.



Executive Summary

The electric vehicle (EV) industry's remarkable ascent can be attributed to a dual focus on sustainability and advancements in battery technology, complemented by government incentives. BloombergNEF's 2023 forecast projects a significant 75 percent market share for zero-emission vehicles by 2040, reflecting the increasing alignment of consumer preferences. Ongoing innovations in battery tech promise enhanced energy density, making EVs more practical and cost-effective.

This whitepaper delves into the business rationale for becoming an EV charging destination, addressing the challenges and opportunities in navigating this dynamic landscape for public sector decision-makers and private enterprises alike.





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Exploring the Electric Frontier

While several compounding factors have boosted overall interest and adoption in EVs, there are parallel factors that have empowered the movement to provide reliable public charging solutions. Central to this progression is the resurgence of travel and brick-and-mortar experiences in the years following the pandemic. Per data published by data firm Advantage Group, 70 percent of travelers have resumed travel, while 54 percent of consumers prefer brick-and-mortar shopping to any other channel, according to Insider Intelligence.

The data clearly shows that in-person experiences are back – and further research demonstrates that driving is largely the preferred method of getting there. In fact, the University of Michigan's Center for Sustainable Business reports that automobiles and light trucks account for 87 percent of passenger miles traveled. For EV drivers, which number more than 2.4 million per the U.S. Department of Energy's Alternative Fuels Data Center, charging is a central consideration to their travel habits and day-to-day behavior. As the car itself evolves, so too have drivers' behaviors and routines. EV



drivers typically seek out places central to their daily routine to charge up, and often, patronize businesses that support their sustainable values. Harris Poll research commissioned by Google Cloud reveals that 82 percent of shoppers prefer businesses and organizations with values that align with their own, and 52 percent are especially interested in supporting sustainable brands.

As consumers increasingly prioritize sustainability, businesses that invest in EV charging infrastructure not only align with the values of a growing demographic but also position themselves as preferred destinations. The shift towards electric mobility is not just a reflection of technological advancement, but a broader cultural and economic transformation, making investments in charging infrastructure a strategic imperative for businesses and organizations aiming to cater to the preferences of the modern, environmentally conscious consumer.

Key Takeaways

- Driving is largely the preferred method of travel
- Charging is a central consideration to EV drivers' travel habits and day-to-day behavior
- 82 percent of shoppers prefer businesses and organizations with values that align with their own, and 52 percent are especially interested in supporting sustainable brands



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Driving Ahead: A Roadmap for EV Charging Infrastructure

The significant momentum driving the electrification of transportation raises some pivotal questions. What strategies can be employed to build the charging infrastructure required to adequately facilitate the anticipated increase in EV adoption? Furthermore, if such infrastructure can be established, which methods and locations will be optimal for powering up electric vehicles across America? Lastly, what are the most effective entry points and strategies for businesses seeking to enter the EV charging market and develop a successful approach?

According to an analysis by PwC, the EV charging market will need to grow nearly tenfold to satisfy the charging needs of the 27 million EVs expected on the road by 2030. While today's national charging network numbers about 4 million charge points, by 2030 that number will have to reach an estimated 35 million. For its part, the electric vehicle supply equipment (EVSE) market is projected to grow from \$7 billion today to \$100 billion by 2040. So how can,



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and why should, forward-looking businesses and organizations participate in this rapidly advancing industry?

Beyond the clearly evident benefits of reducing collective reliance on fossil fuels for transportation, the environmental impact of electric vehicles extends to the widespread adoption of the charging infrastructure, as the availability of chargers to the public encourages EV adoption.

The deployment of charging stations also offers opportunities for economic growth, brand enhancement, and strategic positioning within the dynamic landscape of sustainable mobility. By examining the multifaceted benefits of adopting EV charging solutions, decision-makers can recognize the compelling case for actively engaging in the electrification movement and contributing to a cleaner, more sustainable future.

Per information released by the White House in 2023, the EV sector has attracted more than \$152 billion since 2021, supporting the record-setting one million electric vehicles purchased throughout 2023. Demand for and interest in electric vehicles is no longer niche, with a survey from



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Consumer Reports publishing that 71 percent of U.S. drivers saying they would consider buying an EV in the future. This demonstrated interest makes a strong case for investment in charging infrastructure, for which the federal government rolled out \$623 million in grants in January 2024 for the creation of a comprehensive charging network. This funding is a crucial piece of the Biden administration's goal to make 500,000 electric vehicle chargers available by 2030.

Considering this demonstrated interest and strategic financial backing from municipalities, states and the federal government, it can be discerned that supporting electric vehicle drivers and the infrastructure necessary for greater adoption has tangible advantages for communities and businesses alike.



Empowering Main Street

Fueling Local Economies:

For communities and local businesses, the integration of EV charging infrastructure holds transformative potential that extends beyond the benefits of furthering sustainability goals and reducing the overall carbon footprint. The robust local economic impact of EV charging encompasses the development of a new workforce pipeline, increased visitor numbers contributing to tourism revenue, and the substantial funding opportunities afforded to those classified as "first movers," or those who are one of the initial charging stations in a given area.

The Link Between Charging and Spending:

Fiscal progress is a cornerstone of the development of charging networks across the country, as they can attract business, increase foot traffic and enhance overall property values. Charging network providers often see their users shop at local retailers while charging, which further demonstrates the concept of consumers "voting with their wallet," or choosing to patronize businesses that cater to a sustainability-minded demographic. ESource, a consulting and data firm in the utility sector, found that most EV owners were willing to pay up to \$3 per hour to charge. When compared to the average home charging cost of \$0.75, it's evident that EV drivers put a premium on reliable on-the-go charging that fits within their existing routine.

Reliability Results in Loyalty:

A study from Boston University's Questrom School of Business further illuminates the relationship between visitor traffic and charger availability, revealing an average four percent increase in monthly visits to retailers located within 150 meters (a little less than 500 feet) of its local charging station. Researchers found that this effect intensifies when the charger is one of the first introduced in the county.

Boosting Brand Equity:

It's widely demonstrated that access to chargers at a business, property or central location can boost the influx of visitors, increasing spending and engagement, which is a tangible benefit that prospective charging destinations can refer to during the decision-making process. In addition to the "dollars and cents" rationale for charging stations, more research and statistics are emerging about the more intangible, perceived value of EV charging solutions.



Driving Change: The Sustainably Minded Consumer

The word "sustainable" has evolved into a veritable marketing buzzword for businesses of all sizes. While many realize the value of branding their operations as environmentally conscious, Forbes reported that many companies considering themselves to be "sustainable" only meet one-third of the technical definition. Today, more than 90 percent of CEOs state that sustainability is important to their company's success, but it's clear that many struggle with implementing environmental strategies that make a tangible impact.

As climate change has evolved from a far-off warning to a significant driver of disruptive weather events, consumer awareness of the impact of sustainability is at an all-time high. A 2022 study by Deloitte illustrates this phenomenon well, reporting that two-thirds of all respondents were willing to pay a premium for sustainable offerings, and furthermore found those consumers would consider spending up to 41 percent more for environmentally friendly goods or services.

Electric vehicle (EV) charging is a dynamic and highly visible solution that showcases a location's or business' dedication to shared

sustainability values. The deployment of EV charging stations serves as a powerful testament to a business' proactive role in shaping a cleaner and more sustainable future. It not only demonstrates commitment but also invites customers and visitors to actively participate in an eco-conscious lifestyle, forging a meaningful connection between a brand and its environmentally engaged audience. EV charging stations signal an authentic dedication to environmental responsibility in an era where discerning consumers seek genuine, impactful actions from the businesses they choose to support.

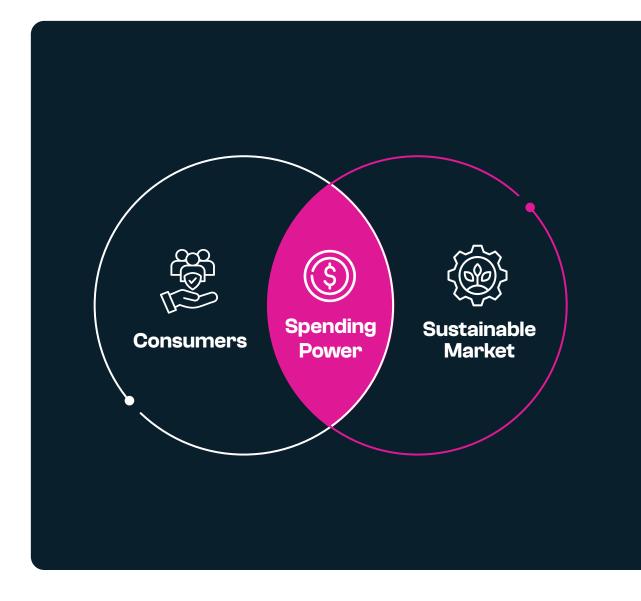


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Revenue Streams

Beyond their environmental impact and societal benefits, EV charging stations present unique opportunities for economic growth. From creative partnerships to advertising ventures and innovative loyalty programs, explore the diverse revenue streams and pricing models that turn sustainability efforts into an engine for business and economic growth.







Amenity-Based (Free):

Overview: Some charging stations may opt for an amenity-based model, offering free charging as a complementary service to customers. This can be a strategic approach to attract visitors, enhance customer experience, and incentivize repeat business. **Use Case:** Often deployed by businesses aiming to differentiate themselves in highly competitive markets or as part of broader customer engagement strategies.



Time-Based:

Overview: In a time-based pricing model, users pay for the duration of their charging session. This approach reflects the convenience factor and encourages efficient use of charging infrastructure,

Use Case: Suited for locations with high traffic, such as shopping centers or urban areas, where quick charging turnover is essential.



Energy-Based:

Overview: Energy-based pricing charges users based on the amount of electricity consumed during the charging session. It directly links the cost to the resources utilized, providing a transparent billing structure.

Use Case: Ideal for locations aiming to align charging costs with actual energy consumption and encourage users to adopt energy-efficient charging practices.



Fixed-Rate:

Overview: In a fixed-rate model, users pay a predetermined fee for each charging session, regardless of the time spent or energy consumed. This straightforward approach provides predictability for both users and charging station operators **Use Case:** Suitable for locations where consistency and simplicity in pricing are paramount, offering a clear and easily understood cost structure.



Hybrid (Time/Energy):

Overview: A hybrid pricing model combines both time-based and energy-based elements, providing flexibility in how users are charged. This approach can cater to the preferences of a diverse user base.

Use Case: Suited for locations seeking to balance the advantages of time-based and energy-based pricing, providing users with options that align with their charging needs.



Peak/Off-Peak:

Overview: Peak/off-peak pricing involves varying the charging rates based on the time of day or demand levels. Higher rates during peak hours and lower rates during off-peak hours incentivize users to charge during periods of lower demand.

Use Case: Effective in managing grid demand and encouraging users to charge during non-peak hours, optimizing the overall efficiency of the charging infrastructure.



Opportunities for Customer Engagement

Partnerships and Collaborations:

Forge alliances with local businesses and brands to create cross-promotions and joint marketing efforts, increasing foot traffic to charging locations.

Advertising Opportunities:

Utilize charging infrastructure as an advertising space to reach a captive audience during the charging process, providing a new channel to promote initiatives, products or services.

Loyalty Programs:

Implement loyalty programs and subscription models that incentivize repeat customers, fostering customer retention and creating a steady and predictable revenue stream.

Value-Added Services:

Introduce premium charging experiences, convenience features, or partnerships with adjacent industries to enhance the overall customer experience and generate additional foot traffic and income.



Whether driven by government incentives or a commitment to sustainability, the installation of EV charging stations is proven to be a strategic advantage in today's business landscape. The myriad benefits, from economic stimulation and brand enhancement to the creation of diverse revenue streams, offer businesses and destinations a competitive edge.

Key Takeaways:

- Embracing EV charging is not merely an eco-conscious choice; it has become a strategic step toward building resilience, fostering growth, and staying ahead in a world where sustainability and innovation are integral to success.
- For potential investors and stakeholders venturing into the dynamic realm of EV charging infrastructure, strategic considerations are paramount. Firstly, thorough market research is essential to identify high-demand locations and emerging trends.
- Collaborating with local governments and businesses can provide valuable insights and pave the way for mutually beneficial partnerships.



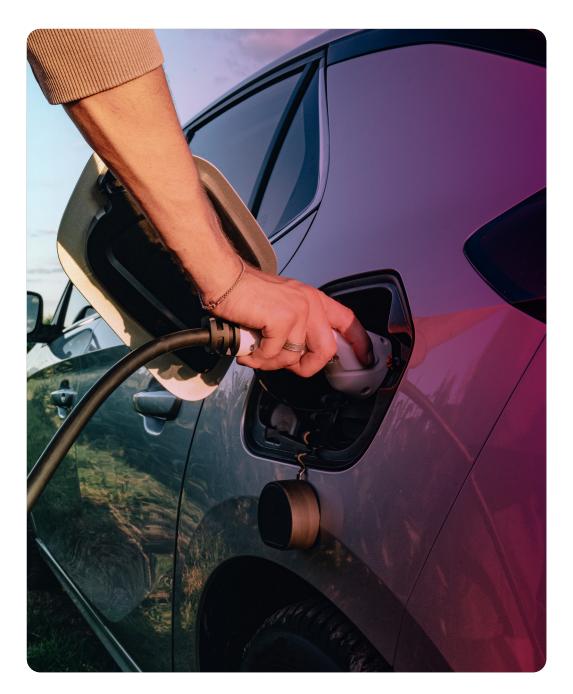




- Diversifying charging models to include both time-based and energy-based options can cater to a broader user base. Moreover, exploring innovative revenue streams, such as community partnerships and value-added services, can enhance profitability.
- Staying abreast of evolving technologies and regulatory landscapes is crucial to ensure long-term viability.
- Finally, fostering a commitment to sustainability not only aligns with the broader environmental ethos but also resonates positively with a growing consumer base.



The EV charging sector continues to expand,
embracing adaptability and innovation will
position investors and stakeholders for
long-term success in this burgeoning market.







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