

# EV CHARGING INFRASTRUCTURE FOR HEALTHCARE FACILITIES



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# Introduction

### EMBRACING THE FUTURE OF HEALTHCARE WITH SUSTAINABLE ENERGY SOLUTIONS

Healthcare facilities are at the forefront of improving public health, not only through medical care but also by leading sustainability initiatives. The integration of electric vehicle (EV) charging stations is a prime example, signaling a commitment to environmental health and operational innovation.

This guide serves as your roadmap to understanding the importance of EV charging in healthcare settings, providing practical insights into its benefits, installation, and maintenance. It's a resource to help you make informed decisions, whether you're exploring the idea or are ready to implement these solutions.

Included are valuable tools such as an ROI calculator, a tax incentive locator, case studies, and more to support you in this venture. By equipping your facility with EV charging stations, you embrace a greener future, enhancing patient satisfaction and setting a standard for environmental responsibility in healthcare.

Welcome to a greener path in healthcare with the Comprehensive Guide to EV Charging Infrastructure for Healthcare Facilities.



#### **CHAPTER**

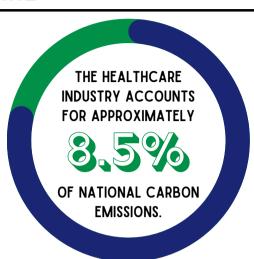
# 01

# WHY EV CHARGING STATIONS MATTER FOR HEALTHCARE FACILITIES



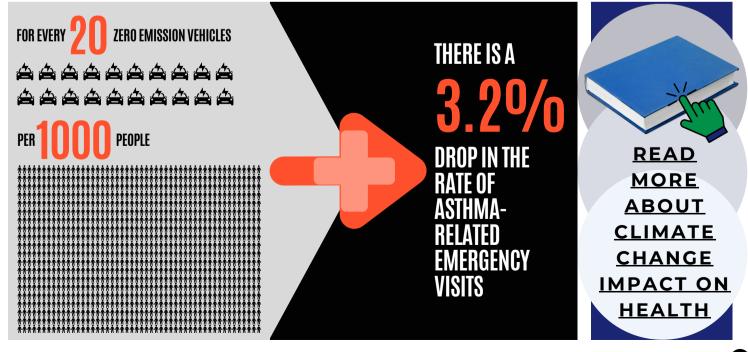
#### EMBRACING SUSTAINABILITY IN HEALTHCARE

In the mission to deliver top-tier healthcare, sustainability is becoming an equally important goal for facilities around the world. By integrating Electric Vehicle (EV) charging stations, healthcare providers can take a significant step towards a more sustainable future, promoting cleaner air and reducing the environmental impact of transportation.



#### A HEALTHIER ENVIRONMENT FOR A HEALTHIER COMMUNITY

The correlation between environmental health and patient outcomes is clear. EV charging stations directly contribute to reducing greenhouse gas emissions, a key factor in chronic respiratory conditions and overall public health. As pillars of health in the community, healthcare facilities equipped with EV charging infrastructure not only signal their commitment to patient care but also to the welfare of the environment where their community resides.



#### **OPERATIONAL BENEFITS AND COST SAVINGS**

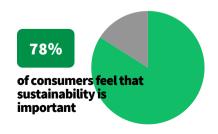
EV charging stations offer more than just environmental benefits; they can lead to operational cost savings. Reduced dependence on traditional energy sources and the potential to generate revenue through charging services can result in a significant decrease in the facility's overheads. Moreover, tax incentives and government grants for green initiatives can provide additional financial benefits.

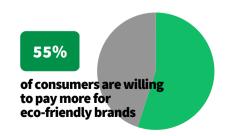


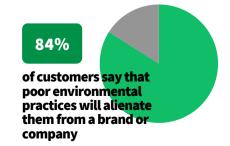
Search for tax incentives & rebates by zip code

#### **ENHANCING REPUTATION AND PATIENT SATISFACTION**

The presence of EV charging stations can enhance a facility's reputation as a forward-thinking and environmentally responsible organization. This can attract patients, staff, and partners who prioritize sustainability, thereby improving satisfaction and loyalty.







#### THE DRIVE FOR GREEN CERTIFICATIONS

Many healthcare facilities aim for green certifications like LEED to demonstrate their commitment to sustainability. EV charging stations contribute to achieving these certifications, which can elevate a facility's status and qualify it for further benefits and recognition.

#### PREPARING FOR THE FUTURE

As the adoption of EVs continues to grow, healthcare facilities with EV charging stations will be ahead of the curve, prepared for the increasing number of patients, visitors, and staff who will choose electric vehicles for their transportation needs.



#### Conclusion

EV charging stations are not just an amenity; they are a statement of a healthcare facility's dedication to a greener, healthier future. By considering the implementation of EV charging infrastructure, healthcare facilities can play a crucial role in driving environmental change and showcasing leadership in sustainable practices.



#### **CHAPTER**

# 02

# ASSESSING YOUR FACILITY'S EV CHARGING NEEDS



#### UNDERSTANDING THE BASICS OF EV CHARGING

Before diving into the installation of EV charging stations, it's crucial to understand the basics. Electric Vehicle Supply Equipment (EVSE) is available in various levels, each providing a different charging speed. Level 1 chargers use a standard household outlet and are suitable for long-term parking. Level 2 chargers require a higher power outlet but offer faster charging, making them ideal for employees and patients. DC Fast Chargers are the quickest option but also the most costly and are typically used for short-term parking or quick top-ups.







#### CONDUCTING A SITE ASSESSMENT

A thorough site assessment is the first step in implementing an EV charging solution. This includes evaluating your electrical infrastructure, understanding the parking layout, and assessing user needs. You must also consider ADA compliance and the potential need for future expansion. It's essential to partner with an experienced electrical contractor who understands the complexities of installing EV charging stations.



Make this step easy! Click to book a complimentary site assessment with Energy Options!

#### ANALYZING USAGE PATTERNS

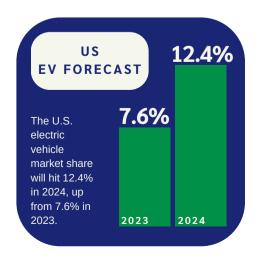
Understanding how and when potential users will charge their vehicles is vital. For employees, charging might take place during work hours, suggesting that Level 2 chargers would be most appropriate. For patients and visitors, the length of time spent at the facility will guide whether Level 2 or DC Fast Chargers are more suitable. An employee survey can help gather data on the current number of EV drivers and the interest in transitioning to electric vehicles.

# Click to download our free EV Workplace Charging Survey

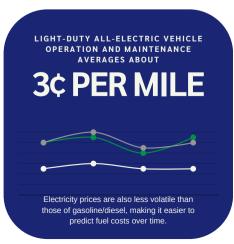


#### PLANNING FOR THE FUTURE

The healthcare sector is rapidly evolving, and so is the adoption of EVs. When planning your EV charging infrastructure, it's important to think ahead. Anticipate growth in EV usage and consider scalable solutions that can accommodate an increasing number of EVs over time. This might involve installing more charging ports than currently needed or ensuring that the electrical system has the capacity for future expansion. In addition, consider your organization's internal plans for electrifying fleet vehicles and the strategic benefits of creating an interconnected EV infrastructure across multiple sites.







#### SECURING FINANCING FOR YOUR EV CHARGING PROJECT

Investing in EV charging stations is not only an investment in sustainability but can also be financially feasible thanks to a variety of incentives. Tax credits, rebates, and grants offered by federal, state, and local entities can significantly lower installation costs. Our tax incentive locator tool, introduced in Chapter 1 and accessible below, will help you discover the financial incentives available in your area.

Moreover, at Energy Options, we understand the importance of manageable financing. That's why we've teamed up with leading financing companies to provide you with competitive leasing options and flexible payment plans tailored to your organization's needs. These partnerships are designed to ease the financial impact and accelerate your journey toward a greener footprint.



# Search for tax incentives & rebates by zip code

#### Conclusion

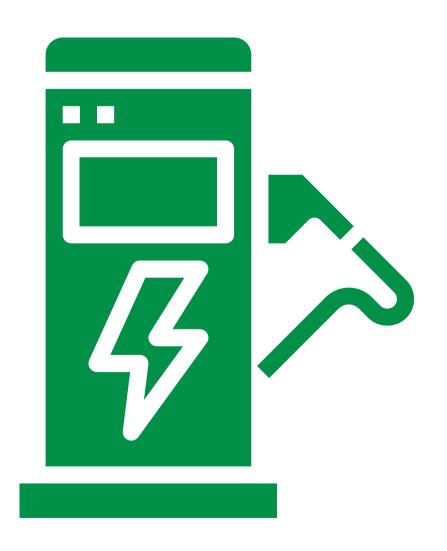
The transition to EVs is not just a passing trend—it's part of a broader movement toward sustainability in healthcare. By thoughtfully assessing your facility's needs and planning accordingly, you can ensure that your investment in EV charging infrastructure meets today's requirements and prepares for tomorrow's growth. Through this process, healthcare facilities can enhance their service offerings, demonstrate environmental leadership, and support the health of their community in a tangible way.



#### **CHAPTER**

# 03

# CHOOSING THE RIGHT EV CHARGING STATIONS



#### **EVALUATING CHARGING STATION TYPES**

When selecting the appropriate EV charging station for your healthcare facility, consider the three primary levels of charging:

- Level 1 Charging uses a standard 120V AC plug and offers the slowest charging speed. While it can take 8 hours or longer to fully charge a vehicle, making it more suitable for home use, it may still be considered for workplace charging if employees have longer shift durations or there are dedicated spots for overnight charging.
- Level 2 Charging employs a 240V (residential) or 208V (commercial) plug and provides a much quicker charge compared to Level 1 Charging. For example, a vehicle that requires over 8 hours to charge on a Level 1 charger can typically be charged in about 4 hours with a Level 2 charger, making it ideal for patients and visitors as well as staff. This efficiency not only offers greater convenience but also increases turnover, allowing multiple users to access the same charging station throughout the day.
- DC Fast Charging, also known as Level 3 Charging, is the quickest method available, often providing an 80% charge in just 20-30 minutes. These stations are particularly valuable for facilities with limited parking or a high turnover of vehicles. Strategically placing these chargers in areas visible to the public not only showcases your facility's commitment to sustainability but may also attract additional usage from the community, potentially generating more revenue.







#### SITE-SPECIFIC CONSIDERATIONS

Your facility's unique characteristics will largely determine the type of EV charging stations to install. Factors such as the availability of space, the existing electrical infrastructure, parking patterns, and anticipated EV adoption rates among staff and visitors are critical to consider.



#### INCORPORATING USER NEEDS AND EXPECTATIONS

Understand the needs of your EV users—both current and future. Regular surveys of facility users can provide insights into the types of vehicles they drive and their charging needs. This information will guide your decisions about the number of charging stations, their locations, and the appropriate level of charging.

Click to download our free EV Workplace Charging Survey



#### **TECHNOLOGY AND SMART FEATURES**

Modern EV charging stations are equipped with a variety of smart features that enhance functionality and user experience. This includes network connectivity for real-time monitoring and management of usage, billing capabilities for cost recovery or feebased charging, and seamless integration with renewable energy sources like solar panels. When evaluating these features, consider how they align with your facility's sustainability objectives and the convenience they offer to users.

Furthermore, most Level 2 and Level 3 chargers from Energy Options come with the ACDI Energy Services Dashboard. This intuitive software simplifies the management of your charging stations and users, providing a comprehensive view of energy consumption, access control, and reporting features. It's designed to streamline operations and support your facility's green initiatives with ease and efficiency.





#### COMPLIANCE AND SAFETY STANDARDS

Ensure that the charging stations comply with relevant safety and accessibility standards. They should be ADA compliant, and if you're seeking green building certifications like LEED, the chargers should contribute positively to your overall sustainability score.



#### Conclusion

Selecting the right EV charging stations requires careful consideration of your facility's current needs and future goals. By making informed decisions now, you set the stage for a more sustainable and efficient operation that caters to the evolving demands of healthcare providers, patients, and visitors.



#### **CHAPTER**

# 04

# FINANCING YOUR EV CHARGING STATION INSTALLATION



#### UNDERSTANDING THE INVESTMENT

Installing EV charging stations is a forward-thinking move that, while initially an investment, can lead to long-term savings, benefits, and potential revenue. Understanding the various costs involved, including hardware, installation, maintenance, and electricity, is crucial. Equally, it's important to consider the revenue that can be generated from charging fees, which can offset the initial costs and contribute to the financial sustainability of the project.

#### **EXPLORING INCENTIVES AND REBATES**

- **Federal Incentives:** The federal government is offering substantial tax credits and grants for installing EV charging stations.
- **State and Local Incentives:** Many states and local governments provide additional incentives, which can include rebates, tax deductions, and grants.
- Utility Company Programs: Some utility companies offer rebates or special pricing plans for EV charging.

Click to download our free EV Funding Cheat Sheet



#### MAKING USE OF TAX INCENTIVES

- **Database of Incentives:** Use this <u>tax incentive locator tool</u> to search by zip code for federal, state, and local financial opportunities in your area.
- IRS Credits and Deductions: It is crucial to consult with a tax professional and engage a grant writer to ensure your facility maximizes the benefits from available IRS tax credits, deductions, and any applicable grants for the installation of EV charging stations. Their expertise can unlock additional funding opportunities and streamline the financial planning for your project.



#### Click to use the rebate finder

57105

#### PARTNERING WITH EV CHARGING COMPANIES

Select EV charger companies may offer financing solutions:

• **Turnkey Solutions:** Energy Options provides full-service packages that include the cost of chargers, installation, and maintenance in a single financing plan.



#### **EVALUATING RETURN ON INVESTMENT (ROI)**

- Cost-Benefit Analysis: Perform a detailed cost-benefit analysis to weigh potential savings from incentives and operational efficiencies, the estimated increase in revenue from increased traffic and direct from the equipment, against the costs associated with EV-friendly upgrades.
- ROI Calculators: Our ROI calculator is designed to help you estimate the payback period for your investment in EV charging stations. Taking into account the cost of equipment, maintenance, and electricity, it compares these expenses against estimates of usage, charging fees, and other potential revenue streams that arise from the presence of charging services. To start evaluating the financial benefits for your facility, click the link below to access Energy Options' ROI Calculator.







#### Conclusion

Securing financing for your EV charging station installation is a multifaceted process that requires a strategic approach. With the current substantial tax incentives and grants available, acquiring EV charging stations has become increasingly budget-friendly. By carefully exploring a combination of these incentives, rebates, and financing options, healthcare facilities can make EV charging stations a viable and beneficial investment, often with a swift return.



#### **CHAPTER**

# 05

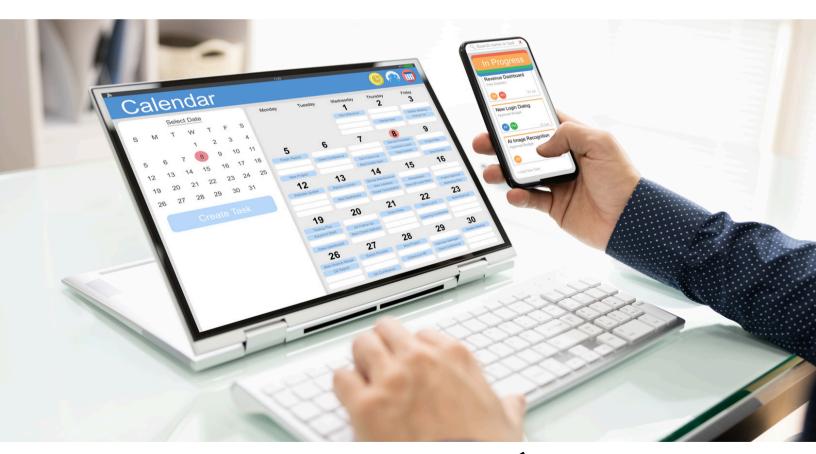
# INSTALLATION AND MAINTENANCE BEST PRACTICES



#### STRATEGIC INSTALLATION

A successful installation sets the foundation for the effective operation of EV charging stations:

- Site Planning: Evaluate the most accessible and visible locations for your chargers to ensure ease of use and security.
- Professional Installation: Use certified professionals for installation to ensure compliance with electrical and safety codes.
- Infrastructure Readiness: Assess and upgrade your electrical infrastructure if necessary to handle the increased load from EV chargers.





Make this step easy! 🐙



CLICK HERE TO SCHEDULE A SITE ASSESSMENT WITH ENERGY OPTIONS

#### PROACTIVE MAINTENANCE

Effective maintenance ensures not just the longevity of your EV charging stations but also their availability and reliability, which are crucial for user satisfaction:

- Maintenance Plans: Energy Options offers maintenance plans that can be rolled into the project cost, ensuring consistent upkeep and swift repairs to keep uptime high. High availability is key to maintaining customer satisfaction and trust in your facilities.
- Scheduled Inspections: Regular inspections help prevent outages by identifying and fixing issues early.
- Preventative Maintenance: Routine preventative care reduces the likelihood of unexpected downtime, ensuring that charging stations are always ready for use.
- Software Updates: Keeping software up to date ensures optimal performance and functionality, contributing to overall user satisfaction.

#### 1 in 5 EV Charging Attempts Fails











Maintenance is crucial to keeping customer satisfaction high.



#### TRAINING FOR RELIABILITY

Comprehensive staff training ensures that your EV charging stations are used to their full potential:

- Software Proficiency: We train your staff on utilizing the software to its fullest, including how to generate detailed financial and usage reports. These insights are crucial for assessing the real ROI and understanding the usage patterns to effectively plan for current and future infrastructure needs.
- **Essential Troubleshooting:** The training also covers basic troubleshooting, empowering staff to address and resolve common issues promptly.
- **Expert Support:** For more complex situations, Energy Options is just a call away, ready to provide expert support and ensure consistent uptime for your charging stations.

#### WE TRAIN YOUR STAFF!



#### **ENSURING LONG-TERM SUCCESS AND USER SATISFACTION**

To provide the best experience for users and ensure the longevity of your EV charging stations, consider the following integrated approach:

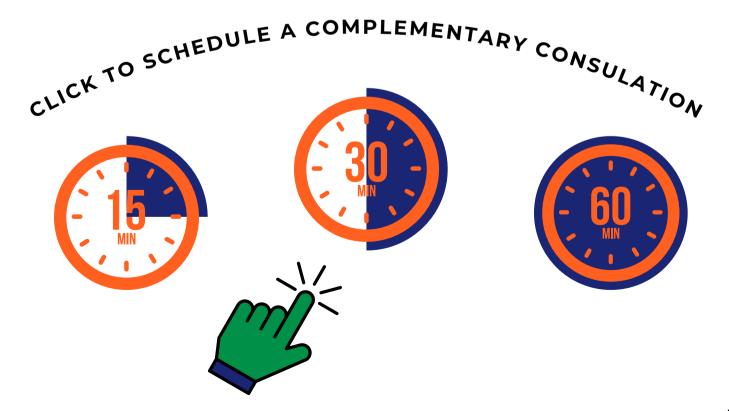
- User Experience: Install clear, intuitive signage and provide easy-to-follow instructions to enhance usability. Offer dependable customer support for immediate assistance with any charging issues.
- **Technology Utilization:** Take advantage of remote monitoring tools for proactive maintenance, and energy management systems to optimize efficiency. Keeping technology up-to-date is crucial for both operational excellence and security.

Sustainability and Upkeep: Regularly review and upgrade your charging
infrastructure to keep pace with technological advancements. Maintain a robust
support and service agreement for continued care, and ensure your staff is trained
to assist users effectively.

By combining user-friendly design, advanced technology, and a commitment to ongoing maintenance, your charging stations will not only satisfy current needs but also adapt to future demands, ensuring your facility is seen as a leader in sustainable infrastructure.

#### Conclusion

The successful implementation of EV charging stations extends beyond the installation process. By adhering to best practices for installation and proactive maintenance, healthcare facilities can ensure their investment remains robust and user-friendly, contributing to a sustainable and innovative environment.



**CHAPTER** 

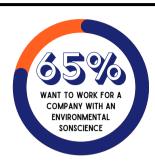
06

# PROMOTING EV CHARGING



#### INTRODUCTION TO PROMOTION

Promoting the availability and benefits of your EV charging stations is vital to maximize their use and enhance your facility's reputation as an environmentally responsible organization.



#### **COMMUNICATION STRATEGY**

- <u>Internal Communications:</u> Announce the availability of new charging stations via email newsletters, staff meetings, and intranet posts to ensure all staff members are informed.
- <u>Patient Outreach:</u> Include information about charging stations in appointment reminders, facility maps, and welcome packets for patients and visitors.



#### MARKETING AND VISIBILITY

- **Signage:** Implement clear, well-placed signage that directs users to the charging stations and provides simple instructions for use.
- Online Presence: Feature the charging stations on your facility's website, including a map and information page. Register your EV charging stations on EV driver apps and maps.



#### **INCENTIVIZATION PROGRAMS**

- Promotional Offers: Launch with promotional offers such as discounted or complimentary charging periods to boost initial usage and familiarity with the charging stations.
- Loyalty Rewards: Develop a loyalty program that rewards frequent usage, which
  could be particularly appealing to regular patients or visitors of your healthcare
  facility.
- Employee Incentives: Consider offering preferred charging rates or dedicated charging times as perks for staff, possibly varying them by tenure. Additionally, providing special charging incentives can be an attractive benefit for prospective employees.



#### **EDUCATIONAL CAMPAIGNS**

- Benefits of EVs: Conduct educational campaigns that highlight the benefits of EVs for the environment and personal health, aligning with the healthcare mission of promoting wellness.
- **How-to Guides:** Provide simple guides or videos on how to charge an EV, especially targeting first-time EV drivers.

#### COMMUNITY ENGAGEMENT AND PUBLIC ACCESS

- Public Access Benefits: Assess the advantages of offering public access to your
  charging stations. Such openness not only fosters community goodwill but can also
  serve as an extra source of revenue. Establish clear usage policies to ensure that
  both visitors and staff can access the facilities smoothly.
- Publicize Accessibility: Should public charging be an option, proactively share this
  news via local press, community groups, and online platforms, positioning your
  facility as a proponent of sustainable practices.
- Engage Through Events: Get involved in EV and environmental events, leveraging
  them to showcase your chargers and commitment to green initiatives. If your facility
  is transitioning to an electric fleet, these events are perfect for displaying your
  vehicles and reinforcing your role as a community leader in sustainability.

#### MONITORING AND USER FEEDBACK

- Soliciting User Insights: Encourage regular feedback to refine the user experience with the charging stations. Consider placing a QR code on or near each charger that directs users to a quick survey or feedback form.
- Analyzing Usage Patterns: Keep tabs on charging station data to identify peak
  usage times and user behavior. This information is invaluable for tailoring future
  promotions and planning for potential infrastructure expansion.

#### Conclusion

Effectively promoting your EV charging stations can significantly enhance their usage and your facility's environmental image. Through strategic communication, marketing, educational campaigns, and community engagement, you can encourage the adoption of EVs and support the overall sustainability goals of your healthcare facility.



## Conclusion

## EMBRACING THE FUTURE OF HEALTHCARE WITH SUSTAINABLE ENERGY SOLUTIONS

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Welcome to a greener path in healthcare with the Comprehensive Guide to EV Charging Infrastructure for Healthcare Facilities.



# ADDITIONAL RESOURSES

(Click to Access)

**ROI CALCULATOR** 

SEARCH FOR TAX INCENTIVES BY ZIP CODE

VISIT THE HEALTHCARE PAGE ON OUR WEBSITE

**DOWNLOAD EMPLOYEE SURVEY** 

DOWNLOAD EMPLOYEE FLYER

DOWNLOAD VISITOR FLYER

**EV CHARGER MODELS** 

SERVICE OFFERINGS

**BOOK A CONSULTATION** 

**BOOK A SITE ASSESSMENT** 

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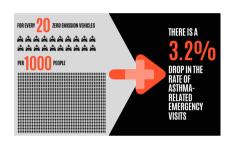
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# SOURCES



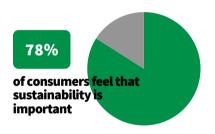
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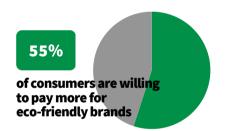
The Joint Commission. (n.d.). Sustainable Healthcare Resource Center. Retrieved from <a href="https://www.jointcommission.org/our-priorities/sustainable-healthcare/sustainable-healthcare-resource-center/">https://www.jointcommission.org/our-priorities/sustainable-healthcare-resource-center/</a>

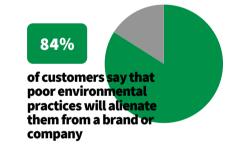


#### Source:

Keck School of Medicine of USC. (February 02, 2023). Study links adoption of electric vehicles with less air pollution and improved health. Retrieved from <a href="https://keck.usc.edu/news/study-links-adoption-of-electric-vehicles-with-less-air-pollution-and-improved-health/">https://keck.usc.edu/news/study-links-adoption-of-electric-vehicles-with-less-air-pollution-and-improved-health/</a>







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The Roundup. (December 22, 2023). Environmentally Conscious Consumer Statistics. Retrieved from <a href="https://theroundup.org/environmentally-conscious-consumer-statistics/">https://theroundup.org/environmentally-conscious-consumer-statistics/</a>



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CBT News. (March 5, 2024). J.D. Power Lowers 2024 Electric Vehicle Sales Forecast. Retrieved from <a href="https://www.cbtnews.com/j-d-power-lowers-2024-electric-vehicle-sales-forecast/">https://www.cbtnews.com/j-d-power-lowers-2024-electric-vehicle-sales-forecast/</a>

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#### Source:

Alternative Fuels Data Center. (n.d.). Electric Vehicle Fleets. Retrieved from <a href="https://afdc.energy.gov/vehicles/electric\_fleets.html">https://afdc.energy.gov/vehicles/electric\_fleets.html</a>

#### 1 in 5 EV Charging Attempts Fails



Maintenance is crucial to keeping customer satisfaction high.

#### Source:

Green Car Reports. (August 18, 2023). Study: 1 in 5 EV charging attempts fails. Retrieved from <a href="https://www.greencarreports.com/news/1140533">https://www.greencarreports.com/news/1140533</a> st <a href="https://www.greencarreports.com/news/1140533">udy-1-in-5-ev-charging-attempts-fails</a>



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LinkedIn. (November 23, 2022). How Important is Sustainability in Employer Branding? Retrieved from <a href="https://www.linkedin.com/pulse/how-important-sustainability-employer-branding-/">https://www.linkedin.com/pulse/how-important-sustainability-employer-branding-/</a>

We sincevely hope this eBook was of value to you and your organization.

Thank You,



WE WELCOME FEEDBACK:

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