

POWERING PROPERTY VALUE:

the influence of EV charging stations on real estate value

BY NATALIA KOURANT, P. APP., AACI, B. ECON., MBA

Have you noticed more green license plates on the road lately? It's not just a coincidence. In 2022, electric vehicles (EVs) made up 14% of global vehicle sales, a substantial leap from 9% in 2021. In Canada, the shift toward zero-emission vehicles (ZEVs) is even more dramatic. With regulations requiring at least 20% of new vehicles sold to be ZEVs by 2026 and an ambitious target of 100% by 2035, the momentum is undeniable.

This rapid expansion is mirrored by the tenfold increase in ZEV registrations across Canada since 2017, particularly in provinces like Quebec, Ontario, and British Columbia, which, along with the territories, accounted for over 92% of new ZEV registrations between 2018 and 2022. As the country marches toward these

ambitious goals, projections suggest there could be 10 million ZEVs on Canadian roads by 2035 – a seismic shift that property owners and appraisers simply cannot afford to overlook.

EVs are no longer a fleeting trend; they are becoming an integral part of our everyday lives. As more drivers embrace this green technology, the demand for accessible EV charging stations is skyrocketing.

But it's not just about convenience. These charging stations are redefining property values. For property owners and appraisers, grasping the impact of EV charging infrastructure is now essential. This article delves into the various types of EV charging stations, the costs and installation processes involved, and their influence on both residential and commercial properties.



THE BASICS OF EV CHARGING STATIONS

If you are new to the world of EV charging, consider this your crash course. EV charging stations are categorized into three main types: Level 1, Level 2, and Level 3. Each type caters to different needs and offers unique benefits that can impact property value.

Level 1 charging stations

Level 1 charging stations use standard household outlets (120 V). These chargers are slow, typically taking up to 50 hours to fully charge an EV. Due to their basic nature and minimal infrastructure requirements, Level 1 chargers **have no impact** on property value. They are often considered temporary or portable solutions, primarily used when no other options are available.

Level 2 charging stations

Level 2 charging stations are more common in residential and commercial properties. They operate on 240 V, similar to an electric stove, and provide faster charging, typically taking 4-10 hours to fully charge an EV. The convenience and efficiency of Level 2 chargers make them a valuable addition to properties, significantly enhancing their appeal and increasing their market value.

Level 3 charging stations

Level 3 charging stations, also known as DC Fast Chargers, are high-power public charging stations operating at 480V. These chargers can significantly boost an EV's charge within 25-30 minutes. However, they require specialized equipment and

infrastructure, making them more common in high-traffic areas such as shopping malls and highways. Their installation is typically seen in commercial zones, where they can substantially enhance property value by attracting customers and tenants who need quick charging solutions.

WHAT ABOUT INSTALLATION AND COSTS?

Now for the big question: How much are property owners paying for EV charging stations? The installation costs can vary widely, based on the type of property and the specific charging station. Understanding these factors is essential for property owners and appraisers to make informed decisions.

Residential home installation

For a standard residential installation, in 2024, the setup typically involves a 60-amp breaker, #6 gauge cable, an outdoor connector, and the charger itself. Factoring in labor costs, the total investment for a typical home installation ranges between \$3,000 and \$5,000. This covers all essential materials and services, resulting in a reliable and efficient charging solution.

For new construction owners in Quebec, there is a built-in benefit: the 2018 building code requires EV charger wiring to be installed from the start. This foresight cuts the cost of installing a charger down to an affordable \$1,500 to \$2,000.

Condominium installation

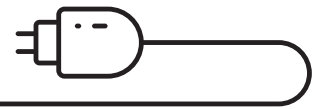
When installing EV charging stations in condominiums and multi-residential buildings, the costs can vary significantly based on several factors. If the installation is planned during the construction phase, it allows for a more optimal and cost-effective setup. However, retrofitting an existing building often involves higher expenses due to the additional complexities involved. The number of chargers required and the type of installation – whether pedestal, wall-mounted, indoor, or outdoor – will also influence the overall cost.

In these multi-residential settings, installations are particularly intricate and often necessitate additional components like a Demand Charge Controller (DCC) to legally and safely manage power distribution. Security measures to prevent unauthorized use are also critical. As a result of these complexities, the cost of installing EV charging stations in condominiums and multi-residential buildings typically starts at \$5,000 for one charging station.

Commercial installation

Commercial installations come with their own unique challenges, demanding meticulous planning and often significant infrastructure upgrades. Costs can vary widely depending on the project's scope, the need for specialized engineering studies, and the availability of grants and incentives.

Selecting the right equipment, determining the optimal number of charging stations, and choosing the best installation type are strategic decisions that hinge on projected ROI. To ensure a tailored solution that meets both budget and business goals, it is essential to collaborate closely with an expert.



IMPACT ON PROPERTY VALUE

The integration of EV charging stations is becoming a key factor in property appraisals, as they can significantly enhance the value and marketability of both residential and commercial properties. For appraisers, understanding this impact is crucial in accurately assessing a property's value in today's evolving market.

Residential properties

In residential settings, the presence of EV charging stations is more than just a modern convenience – it is a selling point. Imagine having the luxury of filling up your car at home. A stress free, low cost, and safe energy source for your daily commute.

Homes equipped with these stations are increasingly appealing to the growing number of EV owners, leading to faster sales and often higher price points. As EV adoption continues to rise, properties with built-in charging infrastructure are positioned to stand out in the market, making them a valuable addition in appraisals.

Commercial properties

For commercial properties, EV charging stations are a magnet for environmentally conscious businesses and tenants. Properties that offer this amenity not only command higher rents, but also benefit from improved occupancy rates.

In an era where sustainability is a top priority for many companies, the availability of EV charging infrastructure is becoming a critical factor in property desirability. For appraisers, this means recognizing the potential for increased revenue streams and overall property value when EV charging is part of the equation. To assess the value of a commercial installation, I would recommend asking the property owner for a copy of the invoice for the work completed and paid for, to give you an idea of the costs incurred.

Factors influencing value increase

Now that you know the impact EV charging stations can have, the challenge is determining their value contribution to a property. These factors will help you assess their influence accurately.

- **Location:** Urban properties often experience a greater value boost compared to rural areas, driven by higher rates of EV adoption and demand for charging infrastructure.
- **Quality and type of installation:** High-quality, well-executed installations – whether Level 2 or DC fast chargers – tend to offer greater value. It's not just about the charger itself, but also its surroundings. The choice between pedestal or wall-mounted setups, and whether they are indoors or outdoors, can impact the valuation. In commercial settings, factors such as lighting, the overall appearance of the charging spots, and the placement of chargers within the parking lot also play a significant role in influencing value.
- **Market demand:** As EV adoption accelerates, so does the demand for properties equipped with charging capabilities. This growing demand directly correlates with increased property values, making these installations a forward-looking investment. In the future, we might even consider charging stations as a must-have, much like in-unit laundry or air conditioning.

TAKING THE NEXT STEPS: ENHANCING PROPERTY VALUE WITH EV CHARGING STATIONS

As we've explored, EV charging stations have a profound impact on property value, making them a strategic consideration for property appraisers and owners alike. But what if you are ready to take action and leverage this trend to enhance the value of your properties?

If you are considering recommending EV charging stations to clients as a way to boost property value, or if you are looking to optimize the value of your own property, you could consider partnering with MaBorne. We specialize in designing tailored EV charging solutions that not only increase market value, but also provide a solid return on investment for those holding onto their buildings for the long term.

Sources: <https://www.statcan.gc.ca/o1/en/plus/5497-watts-electric-vehicles-and-future-electricity-generation-needs>

About the Author

With over 25 years of experience in the real estate industry as a financial analyst and appraiser, Natalia Kourant has a deep understanding of urban development economics and real estate evaluation. She studied at the University of British Columbia and earned her MBA from McGill University. Five years ago, Natalia co-founded Actif, a company specializing in heating and hot water systems, where she honed her expertise in navigating grants and subsidies. Today, she brings this skill to a new venture as the head of MaBorne. 🏠