

THE EV BUYER'S HANDBOOK



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Thinking about getting an EV?

This CUB consumer guide is designed to help you decide whether an electric vehicle is the right choice for you. It starts by answering a series of key questions about EVs and concludes with questions to ask yourself when considering your next car. Also included is a list of links to peruse for additional information.

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INTRODUCTION

WHAT'S AN EV?

An electric vehicle is any car or truck that plugs into an electric socket. It has a battery that stores energy to power an electric motor (or two. three, or four motors) that propels the vehicle. An all-electric vehicle is often referred to as a **Battery Electric Vehicle** (BEV). A Plug-In Hybrid Electric Vehicle (PHEV) has both an electric motor and a gasoline engine. A PHEV runs on



electricity until the battery runs down and then automatically switches to gas. A PHEV should not be confused with what's commonly called a "hybrid." A hybrid car, such as the standard Toyota Prius, is not an EV because it is fueled entirely by gasoline. The electric motor in such a hybrid car makes it a more fuel-efficient internal combustion vehicle (ICV), but a car must be able to plug into the electricity grid or it is not an EV.

WHY ARE WE NOW SEEING EVS EMERGE?

Although some electric cars were manufactured more than 100 years ago, only in recent decades have batteries that can store enough energy to travel long distances become small enough to fit in a car. Development of this technology has coincided with the recognition that petroleum-fueled cars and trucks are the world's largest sources of carbon dioxide and air pollution.

Generating electricity produces far less carbon dioxide than burning gasoline or diesel fuel, making transportation electrification essential to reducing global climate change. Car companies are investing heavily in EV technology and manufacturing. Falling sticker prices combined with lower operating costs and a boost from federal and state government policies have made EVs more competitive with ICVs. But demand for EVs is primarily market-driven: People are choosing EVs because they prefer them. While ICV sales were flat in 2021, EV sales rose 83% and are now more than 5% of the US car market.



HOW IS AN EV DIFFERENT FROM A GAS-POWERED CAR?

With few moving parts, electric motors are smooth, powerful, quiet, and produce no exhaust fumes. Electric motors have instant torque, so EVs have quick acceleration. And the low center of gravity from the weight of the batteries underneath the floor makes for good road stability and handling. With no spark plugs, catalytic converters, mufflers, radiators, belts, hoses, air filters, water pumps, tune-ups, or oil

EV BENEFITS

- Lower "fueling" costs
- ✓ Lower maintenance costs
- Better handling, smoother ride
- No EPA emissions tests

changes, EVs are low maintenance. The biggest difference from an ICV is that you fuel an EV by plugging it in. That means no more trips to the gas station. And in Illinois you won't have to take your BEV in for EPA emissions testing.

HOW LONG WILL THE EV BATTERY LAST?

Most EV batteries are guaranteed for 8 years or 100,000 miles. In practice, they often last much longer. Over time, the battery capacity degrades, meaning it will hold less energy and need more frequent charging, but this deterioration is slow. Studies have shown that EV batteries lose about 1% to 2% of range per year and may often outlast the life of the vehicle. Then they can have "second life" use for storage in homes or other stationary settings before eventually being recycled.

HOW MUCH POLLUTION AND CARBON DIOXIDE IS PRODUCED BY A GAS-POWERED CAR COMPARED TO THE GENERATION OF ELECTRICITY NEEDED TO CHARGE AN EV?

While EVs themselves emit no pollutants or carbon dioxide, the emissions of an EV are determined by the sources of its electricity when being charged. The overall environmental impact of a vehicle also includes the emissions produced by mining and manufacturing all its components plus its operation and fuel for the 15-year period that an average car is on the road.

The amount of pollutants emitted by power plants to produce electricity is substantially less than the combustion of gasoline to drive a car the same distance— even where high polluting coal is the dominant fuel. In Illinois the largest source of power is carbon-free nuclear and a growing percentage is wind and solar energy. A study by the International Council on Clean Transportation found that life-cycle EV emissions are 60-68% less than gasoline vehicles in the US, an advantage that is growing as the electricity mix moves toward cleaner fuels.



COSTS: EV VS ICV

DOES AN EV COST MORE THAN A GAS-POWERED CAR?

The sticker price of a new EV is higher than a comparable ICV—sometimes much higher. On the other hand, many EVs are eligible for federal rebates and state purchase incentives that trim the costs (which we will discuss in detail later).

The least expensive BEV on the market today is the basic Nissan Leaf, with a 2022 sticker price of \$27,400 and range of 149 miles. The Chevy Bolt lists for about \$32,000, but the range is 248 miles. The Ford Mach-E, with similar range as the Bolt, lists for about \$37,500 and the Ford Lightning pickup truck (due on the road in Spring 2022) starts at about \$40,000 for the 230-mile version— about \$10,000 more than the gas-powered version. The highest selling EV is Tesla's Model 3, with a 272-mile range and price of about \$45,000. Due to friendly state policy, Illinois has a burgeoning EV industry, led by Rivian. The company hopes to lead in the high-end "adventure vehicle" market, with its R1T truck (\$67,500) and R1S sport utility vehicle (\$72,500), which both have a range of at least 260 miles.

While EVs offer drivers the opportunity to save in the long run, the initial price tag will be higher than ICV models. Consumers have become accustomed to getting discounts off the list price of a car, but the opposite has been happening in today's market, where 80% of all new cars have been selling at no discount— especially EVs. Rising gas prices have spurred greater EV demand, while the automotive supply chain has been disrupted by the COVID-19 pandemic, raw materials price spikes, and shortages of computer chips and other parts. While the EV you want may be in short supply right now, that will change soon, as manufacturers ramp up production.



Source: Automobile industry and https://www.nbcnews.com/business/personal-finance/will-owning-electric-vehicle-money-rcna20256

CAN I SAVE MONEY BY DRIVING AN EV?

EV operating costs are lower than ICVs. In addition to 40% lower maintenance costs (according to the Department of Energy), electricity is far less expensive than gasoline. If you are a ComEd or Ameren customer on standard residential flat rates, you pay a total of about 14 cents per kilowatt-hour (kWh) for electricity (not including the fixed monthly fees you pay regardless of how much you use). An average EV goes about 3.7 miles on a kWh, so the fuel cost comes to about 3.8 cents per mile. An ICV getting the national average of 26 mpg and paying \$4.00/gallon costs about 15.4 cents per mile, or more than four times higher fuel costs than a typical EV. Depending on how much you drive, those savings add up, and can fully offset the higher purchase price over time.

ARE THERE ELECTRIC RATE PLANS THAT CAN MAKE EV CHARGING EVEN CHEAPER?

All ComEd and Ameren customers can choose a variable rate plan, called Hourly Pricing by ComEd and Power Smart Pricing by Ameren, which can be a particularly good deal for EV drivers. Illinois is the only state that gives most residential customers this option—electricity sold at prices that change each hour based on the fluctuating wholesale market price of energy. You can program your EV to charge overnight, when market prices are usually much lower than peak daytime periods. Your electricity usage is communicated to the utility through the smart meter that ComEd and Ameren customers have. Daytime market electricity prices can get very high during peak periods, so this rate plan is not for everybody because it applies to your entire household usage.

A CUB study has shown that most households would save money under hourly pricing, but if you have high central air-conditioning usage, you may have difficulty saving under this program. Analyze your usage pattern to see if time-variant rates will save you money. CUB supports a time-variant rate that would apply only to EV charging, as well as a requirement that utilities provide a comparison of your costs under such alternative rate plans and standard electricity rates.

WILL AN EV SAVE ME MONEY IN THE LONG RUN?

The opportunity is there, especially during periods of high gas prices. Saving with an EV depends on the cost of the car, its fuel efficiency, how much you drive it, how long you keep it and whether you employ smart charging practices. For a car traveling 12,000 miles per year, typical fuel cost savings in Illinois today would add up to about \$1,400, if you do all your charging at home. For some drivers, the fuel cost savings over time will fully offset the higher initial cost of the EV. There are interactive calculators available—including one from a not-for-profit trade and research organization called ChargeEVC and a tool on ComEd's website—that allow you to plug in your own variables to project relative EV costs and savings.

EV RANGE

HOW FAR WILL AN EV TRAVEL BEFORE IT HAS TO BE RECHARGED?

EV range depends on the storage capacity of the battery and the efficiency of the vehicle. Early models had low range, but today some BEVs approach 300 miles or more. Bigger batteries mean higher costs. For example, a 2022 Nissan Leaf BEV has a standard battery pack of 40 kWh, with a range of 149 miles and list price of \$27,400. It's also available with a 62 kWh battery that extends the range to 226 miles—but costs \$5,000 more.

HOW MUCH RANGE IS ENOUGH?

Deciding how much range you need is a key consideration when EV shopping, but you may not need as much as you think. With the average car in Illinois traveling less than 40 miles a day and the typical all-battery EV (BEV) having a range of at least 100 miles (and growing), this concern is largely unfounded for local driving. Of course there's no such thing as having too much range, but if you can charge conveniently at home and your daily driving needs are mainly around town, spending more for a bigger battery may not be necessary. On the other hand, if you make frequent highway trips and don't want to stop to charge up very often, or you can't plug in at home, a bigger battery may save you time and diminish your "range anxiety."

Instead of the "fill 'er up" idea of a gas tank, think of EV charging more as "top it off." Home charging every night will keep your battery well-charged most of the time. But EV batteries last longer when charged to about 80%, so you may decide to use a maximum charge only when you expect to need it the next day.

Keep in mind that the usable range of your EV will be less than the full battery capacity. For starters, batteries operate less efficiently in cold weather (plus the battery will use a lot of energy to heat the car). You'll have from 5% to as much as 40% less range during the Illinois winter, depending on the vehicle, the outside temperature, and how warm you want your car to be. Some EVs use heat pumps for more efficient interior heating, which adds winter range. And you can preheat the interior while the car is plugged in, which will extend the range a bit. EVs also lose a small amount of range in extremely high temperatures, especially when the car A/C is on.

So what's the right range? It's a good idea to estimate your maximum daily travel and get a vehicle with at least twice that amount of range.

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EV REBATES AND FEES

WHAT'S THE STATUS OF FEDERAL EV PURCHASE INCENTIVES?

For many years, the federal government has provided a tax credit to EV buyers. The credit is \$7,500 for most EVs but it's based on battery capacity so it's less for some PHEVs with limited electric range. Keep in mind that:

- A rebate only applies to the purchase of a new EV. It does not apply at the point of sale, so you must pay full price and take the credit on your tax return. It reduces your taxes whether you itemize deductions or take the standard deduction.
- If you lease an EV, the leasing company that buys the car gets the tax credit, not you directly.
- You have to owe federal taxes in the purchase year equal to or greater than the rebate amount to take full advantage of the credit. It can't be carried forward or backward.
- The rebate only applies to the first 200,000 units sold by a manufacturer. After that, it is phased out over two years. That means there are no longer tax credits for buyers of EVs made by Tesla or GM—and Nissan, Ford, and BMW are getting close to beginning the phase-out.

The U.S. Congress is (always) considering changes to the EV rebate law. It could be increased to a higher amount, perhaps be applied to used vehicles as well as new, perhaps be reinstated for phased-out manufacturers, or perhaps be eliminated altogether.

IS THERE A FEDERAL REBATE FOR INSTALLING A HOME CHARGER?

Not now. There was a 30% tax credit for the cost of home Level 2 chargers but it expired at the end of 2021 and may (or may not) be extended for 2022 and beyond. This guide will be updated with legal changes as they occur.

DOES ILLINOIS PROVIDE EV REBATES AND OTHER INCENTIVES?

An Illinois law, the Climate & Equitable Jobs Act (CEJA), supports a statutory goal of at least 1 million EVs on Illinois roads by 2030. Under its provisions, state EV purchase rebates may be available in Illinois in addition to any federal tax credits. Initial details of the new program include:

- \$4,000 rebate for purchasing a BEV (it's not applicable to PHEVs).
- The rebate will apply to any eligible vehicle purchased (not leased) in Illinois by a state resident after July 1, 2022.
- You must apply to a state agency to get the rebate—it will not be a tax credit.
- Both new and used vehicles will be eligible, but you must keep ownership of the vehicle and Illinois residency for at least one year after buying it. A particular vehicle is only eligible for the rebate one time, and a purchaser is only eligible once in 10 years.

As with other state-funded programs, the EV rebate is subject to legislative appropriation, so it is not known how much money will be available.

Other key provisions of the new Illinois law:

- "Beneficial Electrification Plans" to be approved by state regulators in 2023 for ComEd and Ameren. These customer-funded plans will expand the network of public charge stations and provide EV opportunities in low-income and environmental justice communities.
- Support for electric school buses and transit buses.
- New rate plans to make public and private charging more affordable.
- Rebates or grants for high-speed charge stations.

ARE THERE ANY EXTRA FEES FOR EVs?

There is at least one extra cost of owning an EV in Illinois—the state charges a \$100 annual EV fee to make up for the fact that you don't pay any gas taxes into the Road Fund that pays for state highways. Illinois has the nation's second highest gas taxes at 39 cents per gallon and \$100 is the amount you would pay in gas tax to drive about 7,500 miles in a typical ICV. The state Department of Transportation is studying more equitable methods to collect road taxes from all types of vehicles, such as variable fees based on vehicle miles traveled.

You may also find that your insurance costs are higher for an EV, because the value of the car and the cost of parts and labor to fix it after a collision are higher.



Chart data assumes 1,000 miles/month for typical light-duty passenger vehicle travel and 3.7 miles per kWh, the average efficiency of today's EVs. For list of all EVs' fuel consumption see: https://ecocostsavings.com/electric-car-kwh-per-mile-list/

CHARGING YOUR EV

HOW DOES EV CHARGING WORK?

All you need to charge an EV is a place to plug it in. For most people that means a home garage or parking space. How long you need to be plugged in depends on the power of the charge and how far you're going. There are three basic levels of charging speed:



Level 1—All EVs come with a cord that can plug into a standard 120-volt (three-prong) household wall socket. Using about the same amount of electricity as a toaster or hair dryer, this slow charge will provide from 3 to 5 miles of travel per hour of charging. That doesn't sound like much, but the average car is parked more than 20 hours a day, so charging at home on L1 might give you 300-500 miles of weekly travel. You may find that's plenty for around-town driving.



Level 2—Like an electric stove, L2 chargers operate at 240 volts. Depending on the charger and battery, L2 can provide about 12 to 50 miles of travel per hour of charge. All EVs can connect to L2 chargers, which are sprouting in many public garages, parking lots, and workplaces. To have L2 charging at home you need to extend 240-volt wiring to your garage or parking spot and install a charge station (usually on the wall). Some chargers plug into the same type of wall receptacle as a clothes dryer, but the most powerful home chargers need to be

hard-wired. Older electric service might require upgrading, and you should have a qualified electrician check it out and do the installation.



Level 3—Direct Current Fast Charge (DCFC) runs on 480 volts, so you cannot install it at home. Almost all BEVs can accept L3 charging, but the power of the stations and what each EV model can handle varies from 50kW to 250kW—which means a big difference in how long it takes to quick-charge. And there are three different L3 connector standards. This "interoperability" problem may soon get solved, but today you can't fast-charge a non-Tesla at a Tesla L3 charge station. Keep in mind that fast charging only will give you an 80% charge before slowing down

a lot-that last 20% takes longer in order to protect the battery life.

Many EVs can get about 200 miles of travel in an hour of L3 charging, while some cars and chargers are now capable of adding 200 miles of travel in 15 minutes or less. Within a few years it may not take much more time to fill a battery with electricity than to fill a tank with gasoline. But superfast chargers are expensive and their high energy draw means high charging costs—and a bit of extra stress on the EV battery. L3 is necessary on the road for long trips but not well-suited to be the only charging source for daily driving.

WILL I NEED TO INSTALL A CHARGER AT HOME?

For many drivers, a standard 120-volt socket that's already on the wall of the garage provides enough energy to meet their around-town travel needs. But if you drive lots of miles and make multiple trips each day, you may want to have L2 charging at home. That means extending 240-volt wires (on at least a 32 amp circuit) to the garage and installing a plug receptacle, like you would have for a clothes dryer. If you have old electric service that hasn't been updated, you might need to upgrade the panel to handle higher load. For most people this is not a DIY project, so your biggest cost might be for an electrician.



WHAT DO HOME LEVEL 2 CHARGERS COST?

Home L2 chargers cost \$200-\$1,000 and are available from many online sources. Available home chargers differ in electricity draw from 16 amps to 40 amps or more, charging at up to eight times the speed of a 120v wall socket. However, you need to check what your car and home can handle. Most L2 chargers are internet connected and can be controlled through an app. There are more than a dozen manufacturers of home L2 chargers, including ChargePoint, Enel X, GrizzI-E and Evocharge.



CAN I USE MY EV TO CHARGE MY HOUSE IN CASE OF A POWER OUTAGE?

Some EVs are becoming equipped with "bidirectional charging" that allows the battery to become a source of power for other uses. Several models, such as the Hyundai loniq 5, already have this capability (called Vehicle-to-Load or V2L). You can't power your whole house from the vehicle, but you can run an extension cord to an appliance. The new Ford F-150 Lightning takes it a step further with Vehicle-to-Vehicle (V2V) technology that allows you to charge up another EV or connect to your home (V2H) during an outage. Plugged-in EVs may eventually become valuable sources of stored power for the electricity grid to draw on during peak demand periods (V2G). But don't try to use your EV battery for a purpose that it wasn't designed for or you may find that the warranty is voided.

WHAT IS "SMART" CHARGING?

Smart charging is technology that manages when your EV is actually charging while it's plugged in. You can program any EV to charge at particular times, such as to coincide with the lowest prices under a time-variant rate plan. It may not be long before you will be able to automatically charge your EV when the wind is blowing and renewable energy is most active on the power grid. And there are programs on the horizon that may give you lower charging rates if you allow the utility to adjust your charging so the electric system doesn't ever get overloaded—such as when many commuters come home around the evening rush hour and plug-in simultaneously on a hot summer day. Smart charging can save you money and it can also put downward pressure on everybody's electricity rates by making the grid more efficient.

CHECKLIST: IS AN EV THE RIGHT CHOICE FOR ME?

WHEN DECIDING WHETHER TO ACQUIRE AN EV, CONSIDER THESE QUESTIONS:

Where will I charge my EV?
Can I rely solely on public charging?
How much will public charging cost me?
How will I use my EV (local driving or long trips)?
Should I buy a PHEV or a BEV?
Should I lease or buy? (How long will I keep the car?)
Should I consider a pre-owned EV?

For more detail on these important questions, please read below.

WHERE WILL I CHARGE MY EV?

Charging at home is convenient, reliable, and low cost-90% of EV owners plug in at home, and most of them have installed L2 chargers. If you live in an apartment building, look into the options for how you could plug-in where you park overnight. If you are a renter, it may not be worth it to spend your money to install an L2 charger (even if the landlord allows it). If the landlord or condo board is not ready to install chargers, you could plug in to a standard 120-volt electric socket in the garage or run a heavy-duty extension cord to your parking space. The building could charge you for the energy through a flat monthly charging fee, or by recording the usage with an inexpensive plug-in device at the socket, or by measuring it with the EV's internal charge monitor. Check the electric rates—a building's common space may not be on the same residential rate as your home usage.



CAN I RELY SOLELY ON PUBLIC CHARGING?

About 9 out of 10 EV drivers plug in at home, because it's convenient and less costly. But if you plan to be among the 10 percent who use public charging stations only, ask these questions before you buy your EV: Is L2 and L3 charging available nearby? When is it available? What will it cost? How fast will it charge my EV? If you're going to rely on public charging, spending more for a longer-range battery might make sense.

HOW MUCH WILL PUBLIC CHARGING COST ME?

The biggest national charge station network is operated by Tesla, but the EVGo. ChargePoint and Electrify America networks are quickly expanding. Public chargers have different pricing models that can vary depending on the location and type of charge. Sometimes it will cost many times what you'd pay at home-though it's still usually cheaper than gasoline today. Some chargers have an hourly fee for being plugged in, and you might pay for being parked there even after vour batterv is full. Others charge for the kilowatt-hours delivered to the battery. Some L2 chargers at shopping



locations are free, but you probably wouldn't park long enough for a full charge, and the charger may not be available when you arrive. Some charge networks require a membership, which may have a small monthly fee, and some networks are proprietary. (You still can't fast-charge a non-Tesla on the company's Tesla L3 "supercharger.") Public charge stations are mapped on apps such as Chargehub or Plugshare, which tell you the availability of the nearest compatible chargers and help you plan where to stop on long trips.

HOW WILL I USE MY EV (LOCAL DRIVING OR LONG TRIPS)?

Because the fuel savings of electricity offset the higher sticker price, the economics of driving an EV get better the more miles you drive one (assuming you do most of your charging at home). But economics are not the only factor. Will you use the EV for commuting to work? How long a trip? Will your workplace have charging available? At what cost? Do you go on frequent long highway trips? Charge stations are sprouting up across the country, but you have to plan your stops and you may have to wait for a fast charger to be available during a peak driving period such as a holiday weekend.

SHOULD I BUY A PHEV OR A BEV?

If your priority is to avoid gasoline altogether, a Battery Electric Vehicle (BEV) is the right choice. But a A Plug-In Hybrid Electric Vehicle (PHEV) eliminates "range anxiety," since it switches automatically to the gas engine after the battery is depleted. With an electric range of 20-50 miles, that is likely to happen occasionally in local driving, so a PHEV is not a "zero-emissions" vehicle. It can't handle L3 charging, but a PHEV allows you to go anywhere you want without charging. This fits the bill for many drivers, which is why almost one-third of electric cars are PHEVs, despite the fact that some are not eligible for the full federal tax credit (which depends on battery size). PHEVs are often cheaper than BEVs because the extra cost for an auxiliary gas engine is less than a long-range battery. But PHEVs have higher maintenance costs because the engine needs servicing, just like an ICV, and the gas they occasionally use costs more than home charging. If battery costs continue to decline while range increases and public charging expands, PHEVS may eventually be obsolete. For now, PHEV vs BEV is a close call that depends on your driving patterns and preferences.

SHOULD I LEASE OR BUY? (HOW LONG WILL I KEEP THE CAR?)

As we have discussed, EVs today still carry a premium price tag but the extra outlay is offset over time by fuel and operating savings. If you don't expect to keep the car for that many years, look into the economics of leasing instead of buying—you may not want the longer-term commitment of ownership. But make sure the leasing company gives you the full benefit of any tax credits or rebates they get as the original buyer.

SHOULD I CONSIDER A PRE-OWNED EV?

Historically, EVs have not kept their value as well as ICVs in the used-car market—except for Teslas. But that is changing as more models are introduced, EV range increases, batteries prove their long-term reliability, charge stations expand, and more people get comfortable with the idea of electric cars. High gas prices, which may persist for a long time, are fueling a big surge in EV demand. That makes used EVs at reasonable prices harder to find now, but older models with limited range, such as an early Nissan Leaf, can be a bargain.

HELPFUL RESOURCES

Home Charging Advisor—A guide (from the nonprofit group Veloz) to home EV charging stations, including tips on purchasing, installations, tax incentives, and useful information to help jumpstart your EV journey.

Alternative Fuels Data Center: Electricity – A consumer guide to switching away from traditional gas-fueled vehicles, courtesy of the Department of Energy.

Electric Vehicles | ComEd—ComEd's help center for electric vehicles has information on registering your EV, savings and charging for customers.

Electric Vehicles | Ameren Illinois—Ameren's help center for electric vehicles with information on charging, savings and incentives for customers.

IRC 30D New Qualified Plug-In Electric Drive Motor Vehicle Credit | Internal Revenue Service—The IRS guide to the Qualified Plug-in Electric Drive Motor Vehicles tax credit for consumers. This includes an interactive list of electric vehicle makes and models alongside their qualifying tax credit.

Plug In America—The nation's largest association of EV drivers and enthusiasts. They have a helpful guide to getting started with electric vehicles, including a buyer's guide, tax credit information, nearby EV dealers and setting up home charging.

PlugStar—A shopping assistant for buying your electric vehicle through local EV dealers and retailers from Plug In America. This website has a tool to help estimate your incentives, costs, and environmental impact by location.

PlugShare—An interactive trip planner of electric vehicle charging stations worldwide compiled and updated by the world's largest EV driver community. This website is also available as a free app for your smartphone (iOS and Android).

EVSE Rebates and Tax Credits, by State—A comprehensive state-by-state guide to Electric Vehicle Supply Equipment (EVSE) tax credits and rebate programs.

Definitive Guide to Electric Car Batteries—A consumer guide to electric vehicle car battery purchasing and maintenance from Green Cars.

Citizens Utility Board—Illinois' premier utility watchdog has energy efficiency tips and cutting-edge research on how electric vehicles can be a tool to lower energy costs for all consumers. All of CUB's services are free.



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The Citizens Utility Board (CUB) has been called the "gold standard" of consumer groups by the St. Louis Post-Dispatch. Since 1984, the nonprofit consumer watchdog has saved consumers in Illinois more than \$20 billion by advocating for investments in energy efficiency technologies and cleaner sources of power, while also policing against unwarranted utility rate hikes.

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