8 Electric Vehicles Reviewed by Consumer Reports

Evaluating Some of the Latest EVs

The EV Club welcomed Gabe Shenhar, Associate Director of the auto test track at Consumer Reports for an enlightening Zoom meeting to discuss the results of recent CR testing of 8 EVs. Gabe is a mechanical engineer with 32 years of experience at Consumer Reports and has had a role in developing its testing protocol. Below are summary slides of the vehicles discussed, more or less ranked by how well they were rated, along with a few remarks. CR testing of the Equinox and Cybertruck is still in progress.

We note the base price for each vehicle at the time of this writing based upon what is posted on the manufacturer websites. We also note incentive eligibility. For the federal incentive, this is based on the vehicle and does not take into account buyer income limits or whether a seller has registered for the incentive or transfer provision. As of this writing on 12/28/24, the Federal Department of Energy has not updated its website of eligible vehicles for 2025. Hopefully, the seller can provide reliable advice. This is exactly (part of) what concerned us about the convoluted incentive structure. (The incentive is determined at the time of delivery, not when an order is placed.) Of course, with the federal incentive, the restrictions only apply to purchases as any lease is eligible. With the state incentive, eligibility is consistent across a purchase or lease.

The final point about incentives is that the incoming administration has been very public that it wants to kill the federal EV incentive, so this information may not age well. If you are in the market, there is no time like the present!

We thank Gabe for the time and effort that went into this presentation.

Chevy Equinox

The two GM vehicles tested fared well, with the Equinox said to be a particularly good value, so much so that CR questioned whether it's more expensive stablemate, the Blazer, is worth the premium. The car rides quietly, handles well and has decent range. The only knocks are GMs decision to do away with Apple CarPlay and Android Auto and that the DC fast charging rate is a bit on the slow side at 150 kW. The starting price for the Equinox is $33,600. This vehicle is eligible for both the federal and state EV purchase incentives.

Chevrolet Equinox EV

- Based on GM's Ultium platform
- CR Highway Range/***EPA:*** TBD/***285 miles***
- AC acceptance rate: 11.5 kW
- DCFC acceptance rate: 150 kW
- Makes the Blazer EV irrelevant?

- Comfortable ride
- Responsive handling
- Quiet cabin
- Quick acceleration
- Long range for a relatively affordable EV
- Quick AC charging (33 mi/hr)
- No Apple CarPlay or Android Auto

Genesis GV60

The Genesis, a luxury EUV, was praised for its handling, build quality, outstanding audio system, easily adjustable regenerative braking, and fast charging. The Genesis is built on the Hyundai 800-volt architecture platform. The main criticisms were a relatively low range for the price and visibility. It has a starting price of $52,350. This vehicle

is not eligible for either the federal or state incentive.

Genesis GV60

- CR Highway Range: 251 miles
- AC acceptance rate: 10.9 kW
- DCFC acceptance rate: 240 kW
- Public charging (L2 & DCFC) in Nav system

- Quick AC & DC charging
- Quick acceleration
- Quiet cabin
- Excellent fit & finish
- Easy to adj. regen
- Outward visibility
- Not so competitive range

SOC level indicator

Cadillac Lyriq

A luxury EUV, the Lyriq shares the GM EV platform that used to be called Ultium with the Blazer and Equinox. The Lyriq was praised for its responsiveness and overall driving performance. Criticisms were less than ideal visibility and high cost. The starting price is $58,595. This vehicle is eligible for the federal incentive but not for the state incentive.

Cadillac Lyriq

- CR Highway Range: 315 miles
- AC acceptance rate: 19.2 kW (opt.)
- DCFC acceptance rate: 190 kW
- Google-based public charging info & route planning

- Quick AC charging (w/100 Amp)
- Quick acceleration
- Taut & agile chassis
- Quiet cabin
- Excellent fit & finish
- Can modulate regen w/paddle
- Excellent Supercruise ADAS
- Outward visibility

Acura ZDX

The Acura ZDX moniker was formerly on an unsuccessful internal combustion model but is now a premium EUV. GM is building these for Honda, as well as its lower-priced Honda Prologue model. So, the ZDX is basically a Cadillac Lyric. It is rated a notch lower because, while the drive train is the same, GM may have held back on some of the features as the handling was not as refined. Starting MSRP is $64,500. This vehicle is eligible for the federal incentive but not for the state incentive.

Acura ZDX

- Built by GM alongside Cadillac Lyriq
- CR Highway Range: 313 miles
- AC acceptance rate: 11.5 kW
- DCFC acceptance rate: 190 kW
- Google-based route planning

- Quick AC charging (30 mi/hr)
- Quick acceleration
- Quiet cabin
- Short on agility
- Rear 3/4 visibility
- Must get top trim Type S for GM's Supercruise

Mercedes EQE SUV

This mid-sized EUV was praised for its luxury cabin touches, build quality, and quick acceleration, but was criticized for distracting controls and a mushy brake pedal. Starting price is $77,900. This vehicle is not eligible for either the federal or state incentive.

Mercedes EQE SUV

- CR Highway Range: 284 miles
- AC acceptance rate: 9.6 kW
- DCFC acceptance rate: 170 kW
- EV specific displays, route planning, nav to EVSE

Displaying both SOC & range w/door opening

- Quick acceleration
- Quiet cabin
- Comfortable seats
- Excellent fit & finish
- Short stopping distance
- Mushy brake pedal feel
- Distracting controls

Volvo XC60

This is the only plug-in hybrid included in the evening's lineup, sporting an 18.8 kWh battery pack yielding 35 miles of electric range before moving to conventional hybrid mode for another 525 miles of range. CR praised its seat comfort and acceleration but felt its controls were unintuitive and the ride was stiff. MSRP starts at $59,345. This vehicle is not eligible for either the federal or state incentive.

Volvo XC60 PHEV (Plug-in Hybrid EV)

- PHEVs can drive on electric power for 20-50 miles
- Transition to regular hybrid once electric power is gone
- All-electric range: 35 miles from 18.8 kWh battery
- AC (120V) charge time: 17 hrs/ 240V: 5 hrs
- Fuel economy as a regular hybrid: 28 mpg
- Gauge to guide drivers to stay in EV mode

- Quick acceleration
- Drives on electric power part time
- Good fuel economy as a hybrid/long range
- Comfortable, supportive seats
- Interior fit and finish
- Stiff ride
- Unintuitive controls

Tesla Cybertruck

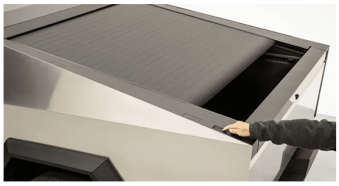
The Cybertruck is arguably the most polarizing vehicle ever made. Of course, style preferences are in the eye of the beholder and these reviews focused on the vehicle operation. CR liked the acceleration and handling. The CT had the longest range of all the vehicles reviewed. Like the Genesis, it has 800-volt architecture and charges quickly. However, as with all Teslas, there is no Apple CarPlay or Android Auto. The steer-by-wire takes some getting used to and CR did not particularly like it. The visibility is poor. This is somewhat compensated for with cameras, but those images appear on the large center console, which means taking your eyes off the

road. Tesla is no longer offering the Foundation Series. The lower-cost versions start at $79,990. The lowest trim level of the CT is eligible for the federal EV incentive but is too pricey for the state incentive.

Tesla Cybertruck

- CR Highway Range/***Tesla:*** TBD/ ***340 miles***
- AC acceptance rate: 11.5 kW
- DCFC acceptance rate: 250 kW

- Quick acceleration
- Responsive handling
- Powered bed cover
- Quick DCFC
- Long range
- No Apple CarPlay or AA
- Non-linear steering
- Lousy outward visibility
- Unintuitive controls



Lexus RZ

Toyota’s one BEV platform is used for the this vehicle, the Toyota bz4x, and the Subaru Solterra. The reviewers, including CR, haven’t been that kind to it. While this vehicle has some nice Lexus cabin touches, it has a low range and slow charging. Strangely, it lacks a glove box, and the controls were felt to be unintuitive.

The starting MSRP is $43,975. This vehicle is not eligible for the federal incentive. The 300e, 300e Premium, and base 450e are priced low enough that they should qualify for the state CHEAPR incentive but they are not listed as eligible on the CHEAPR website.

Lexus RZ

- Shares a platform with Toyota bz4x/Subaru Solterra
- CR Highway Range: 202 miles
- AC acceptance rate: 6.6 kW
- DCFC acceptance rate: 150 kW

- Comfortable ride
- Quiet cabin
- Quick acceleration
- Uncompetitive range
- Slow AC & DC charging
- Unintuitive controls
- Short on EV specific displays
- No glove box

EV and Distributed Energy Resource Provide Resiliency During FL Hurricane

An Example of How Distributed Resources Create Resilience

A club-member received this text message from a friend who lives in Stuart, FL, a city on the eastern coast of the state where Hurricane Milton came through as a category 1 storm after spawning tornadoes. It is a good illustration of how EVs and distributed energy resources can contribute to resilience.

“Thanks for checking in. Our home is fine…survived beautifully….never lost power thanks to Tesla Powerwalls. The rest of the community and county had some major power issues. Tornado touched down about 3 blocks away, no injuries, just more power outages in the area. Also, some trees down and turned over a semi-truck. Hospital (family run Vet hospital) lost power around midnight, but I powered it from the Cybertruck until the power came back around 2pm this afternoon. At home, we had trimmed all the trees earlier this week, so only a few branches down. That’s about it. Nothing like North Carolina.”

Club President Attends Tesla Cybertruck Reveal

Club president Bruce Becker was invited by Tesla to attend the Cybertruck reveal.

The event took place on Nov. 21 at 9:00 PM Pacific Time. The early reviews of the design have been somewhat divided. Elon Musk, himself, described it as “pointy.” It has a distinctively high-tech, angular, military look.

The vehicle is certainly capable. The top trim level will travel over 500 miles on a single charge. Tesla showed videos of the vehicle towing a Ford F-150 and beating a Porsche 911 in a drag race. Musk invited an employee to sledgehammer the vehicle and he was unable to dent the stainless steel

exoskeleton. The windows were less successful with their torture test. As Musk said, “Room for improvement.”

Tesla is taking reservations now. A refundable $100 deposit is required. Production of the vehicle is scheduled for 2021. This post is being written two days after the reveal and there is a report in TechCrunch that Tesla has taken 146,000 reservations, which would translate to about $8 billion worth of orders if all are delivered.

These are photos of Becker at the event, held near the Tesla Design Center in Los Angeles.