

Electric Car

I N S I D E R

EV BUYERS GUIDE COMPLETE REVIEWS



Ford F-150 Lightning

Kia EV6



Lucid Air



Pair an **Electric Pickup Ride & Drive** with a **Mobile EV Charger Exhibit**



Completely Turn-key Ride & Drive and EVSE Exhibit

We bring the electric pickup trucks, the educators, the event staff, the mobile EVSE exhibit and the gear. You invite your customers. The entire operation is completely turn-key. ECI provides transportation logistics, staff, setup, takedown and transport to the next event.



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Latest production models, including the Ford F-150 Lightning and Rivian R1T



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ECI has created the industry standard Commercial and Residential EVSE Buyers Guides for property & fleet managers and consumers.



From the Editor

After nearly a decade of “Tesla Killer” stories popping up with regularity every time an automaker or startup released a sketch of a new electric car, major OEMs are finally delivering cars that take a few pages from Tesla’s playbook - from six to as many as ten years ago. Fully capable electric cars from legacy automakers are a welcome development. But 300+ mile range, 150kW+ charging speeds, over the air updates, advanced driver assist, enormous touch screens and other innovations Tesla pioneered are just playing catch-up while Tesla readies a new car, Cybertruck, that will completely redefine a category of vehicle not popular since the Ford Ranchero and Chevrolet El Camino were retired in the late 1970s and 80s, respectively.

The one standout innovation that is now becoming widely available that was not introduced years earlier by Tesla is Vehicle to Load (variously called bi-directional charging, V2L or V2X, vehicle to anything), the ability to use your electric car’s enormous battery to power standard 120v tools and appliances. With the right electronics components, you can even connect and power your entire house from some vehicles, like the Ford F-150.

Tesla promises V2X from the Cybertruck, but other Teslas lack this capability which is available not just from Ford, Rivian, and this year’s new trucks and SUVs from Chevrolet, but from sedans from Hyundai. The technology was first available in Japan from Nissan for the Leaf, but wasn’t available in the US. It is such a useful capability that it’s likely to be a common feature for electric vehicles over the next decade.

Eventually, Vehicle to Grid (V2G), now being tested in pilot programs around the world, by companies like NUVVE, ENGIE and OVO, will be a widely available utility service. V2G, a more advanced kind of bi-directional charging, will allow your electric utility to access your EV’s battery as a resource on the grid, with tens or hundreds of thousands of vehicles (millions in large cities) working together to provide a “virtual power plant” (VPP) and supplying power to the grid during times of greatest use. Eventually, these

“V2G will change the economics of car ownership entirely.”

massive distributed battery VPPs will replace expensive peaker plants, some of which run only a few hours per year.

The ability of electric vehicles to be power suppliers as well as power consumers will change the economics of car ownership entirely because utilities will pay for the opportunity to take a few kilowatt hours of energy from your car’s battery when it is most needed - and most valuable. Car owners will be able to set the level of capacity available to the utility, so that for example a 300 mile range car might only give up 100 miles to the utility at maximum, always leaving the owner with 200 miles range, more than enough for any in-town driving.

What is most counter-intuitive to consumers not familiar with the concept is how much utilities may be willing to pay for this service - it could be a couple hundred dollars per month. That would change the economics of car ownership entirely.

This may sound like science fiction but these technologies are currently being tested around the world, including in the United States. Early adopters are commercial fleets with vehicles like school buses, which have predictable schedules and sit unused for long periods each day, but eventually, aggregating hundreds of thousands of passenger car batteries in V2G systems will represent the equivalent of many megawatt hours of generating capacity.

So when some guy at the end of the bar opines on how electric cars are going to crash the grid, rest confident in the knowledge that electric utilities are actively working on planning and engineering technologies that will enable electric cars to stabilize and strengthen the grid - and are planning to pay electric car owners for the use of their resource.

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Electric Automobile Matrix

Specification Quick Reference



BATTERY ELECTRIC

Make	Model	Yr Intro	Battery kWh	Range (mi)	MPGe	MSRP Base	Fed Tax Cr	Page
Audi	Q4 e-tron	2022	82	265	103	\$49,800	--	--
Audi	Q8 e-tron	2019	95-114	~305-373	--	~\$75,000	--	--
Audi	e-tron GT	2022	93.4	238	82	\$104,900	--	--
BMW	i4	2022	70.2-81	256-301	~100	\$52,000	--	11
BMW	iX	2022	105.2	305-324	86	\$84,100	--	14
BMW	i7 xDrive60	2022	105.7	296-318	83-89	\$119,300	--	--
Cadillac	LYRIQ	2022	102	~312	89	\$62,990	--	19
Chevrolet	Blazer EV	2023	--	247-320	--	\$44,995	--	33
Chevrolet	Bolt EUV	2022	65	247	115	\$27,800	\$7,500	--
Chevrolet	Bolt EV	2016	65	259	120	\$26,500	\$7,500	47
Chevrolet	Equinox EV	2023	--	250-300	--	\$30,000	--	56
Chevrolet	Silverado EV	2024	--	~400	--	\$39,990	--	22
Fisker	Ocean	2023	--	250-350	--	\$37,499	--	40
Ford	F-150 Lightning	2022	98-131	240-320	66-70	\$55,974	\$7,500*	23
Ford	Mustang Mach-E	2020	70-91	247-312	--	\$45,995	\$7,500*	39
Genesis	Electrified G80	2022	87.2	282	97	\$79,825	--	--
Genesis	Electrified GV70	2023	77.4	--	--	--	--	--
Genesis	GV60	2022	77.4	235-248	95	\$59,290	--	26
GMC	Hummer EV Pickup	2022	246.8	329-350	43	--	--	20
GMC	Hummer SUV	2023	--	300	--	--	--	--
Hyundai	IONIQ 5	2022	58-77.4	220-303	101-114	\$41,450	--	41
Hyundai	IONIQ 6	2023	53-77.4	270-361	103-140	--	--	45
Hyundai	KONA Electric	2019	64	~258	120	\$33,550	--	46
Jaguar	I-Pace	2018	90	246	76	\$71,300	--	16
Kia	EV6	2022	77.4	206-310	79-117	\$48,700	--	37
Kia	Niro EV	2019	64.8	253	113	\$39,550	--	54
Lexus	RZ 450e	2023	71.4	220	--	\$59,650	--	--
Lucid Motors	Air	2022	--	406-520	111-140	\$87,400	--	9
Mercedes-Benz	EQB SUV*	2022	70.7	243	96-101	\$54,500	--	--
Mercedes-Benz	EQE Sedan*	2022	90.6	260-305	82-98	\$74,900	--	--
Mercedes-Benz	EQS Sedan*	2021	107.8	340-350	103	\$102,310	--	10
Mercedes-Benz	EQS SUV*	2022	108.4	305	77-85	\$104,400	--	--
Mini Cooper	SE	2020	32.6	114	110	\$34,225	--	49
Nissan	ARIYA	2022	63-87	216-304	98-103	\$43,190	--	44
Nissan	LEAF	2010	40-60	212	104-111	\$28,040	\$7,500	--
Polestar	2	2020	78	260-270	89-107	\$48,400	--	32
Polestar	3	2023	111	270-300	--	\$83,900	--	--
Porsche	Taycan	2019	79.2-93.4	208-246	75-83	\$86,700	--	7
Rivian	R1S	2020	105-180	260-321	64-71	\$78,000	\$7,500*	24
Rivian	R1T	2020	162-163	260-400	64-73	\$73,000	\$7,500*	21
Subaru	Solterra	2022	72.8	222-228	102-104	\$44,995	--	38
Tesla	Cybertruck	2023	100-200	250-500	--	--	--	--
Tesla	Model 3	2017	50-75	272-358	131-132	\$39,990	\$7,500*	36
Tesla	Model S	2012	100	396-405	116-120	\$94,990	--	8
Tesla	Model X	2015	100	333-348	98-102	\$97,490	--	17
Tesla	Model Y	2020	74	303-330	111-123	\$46,990	\$7,500*	30
Toyota	bZ4X	2022	71.4	242-252	102-119	\$42,000	--	42
Volkswagen	ID.4	2021	62-82	209-275	99-107	\$38,995	\$7,500*	43
Volvo	C40 Recharge	2021	75	226	87	\$55,300	--	27
Volvo	EX90	2023	111	300	--	~\$80,000	--	--
Volvo	XC40 Recharge	2020	--	223	85	\$53,550	--	31

* With certain options and trim levels. -- Dashes in the matrix represent specs not available at time of printing.

Hybrid Automobile Matrix

Specification Quick Reference



PLUG-IN HYBRID

Make	Model	Yr Intro	Battery kWh	Range (mi)	MPGe/MPG	MSRP Base	Tax Cr	Page
Alfa Romeo	Tonale	2023	15.5	30/290	75/--	\$44,995	--	--
Audi	Q5 55 TFSI e quattro	2021	17.9	23/367	61/26	\$57,400	\$7,500	--
BMW	330e	2016	12	22/297	75/28	\$44,900	\$5,836	--
BMW	530e	2020	12	21/340	64/26	\$57,600	--	35
BMW	X5 xDrive45e	2015	24	31/369	50/20	\$65,700	\$7,500	--
BMW	XM	2023	25.7	30/--	--	\$159,000	--	--
Chrysler	Pacifica PHEV	2016	16	32/--	82/30	\$50,495	\$7,500	52
Ford	Escape PHEV	2020	14.4	37/520	105/40	\$38,500	\$6,843	50
Hyundai	SANTA FE PHEV	2021	13.8	31/409	76/33	\$42,110	--	--
Hyundai	TUCSON PHEV	2021	13.8	33/387	80/35	\$35,400	--	--
Jeep	Grand Cherokee 4xe	2022	17.3	26/444	56/23	\$62,095	\$7,500	--
Jeep	Wrangler 4xe	2021	17	21/348	49/20	\$54,735	\$7,500	25
Kia	Niro PHEV	2018	11.1	33/510	108/--	\$33,840	--	54
Kia	Sorento PHEV	2021	14	32/428	79/34	\$49,990	--	--
Kia	Sportage PHEV	2022	13.8	34/396	84/35	\$38,690	--	--
Land Rover	Range Rover SE P440e	2019	--	48/--	--	\$110,500	--	--
Land Rover	Range Rover Sport Autobiography	2022	--	51/--	42/19	\$104,200	--	--
Lincoln	Aviator Grand Touring	2020	13.6	21/439	56/23	\$69,190	\$6,534	18
Lincoln	Corsair Grand Touring	2021	14.4	28/402	78/33	\$53,385	\$6,843	--
Mazda	CX-90 e-Skyactiv PHEV	2023	17.8	--	--	\$47,445	--	--
Mercedes-Benz	S 580e 4MATIC	2023	21.5	62/--	--	\$122,550	--	--
Mini Cooper	S E Countryman PHEV	2017	10	17/283	73/29	\$41,500	--	48
Mitsubishi	Outlander PHEV	2018	20	38/382	64/26	\$39,845	--	53
Porsche	Cayenne E-Hybrid	2015	17.9	15/355	42/18	\$86,500	--	--
Porsche	Panamera 4 E-Hybrid	2014	17.9	19/461	52/22	\$109,000	--	--
Subaru	Crosstrek Hybrid	2019	8.8	17/463	90/35	\$36,845	--	55
Toyota	Prius Prime	2017	13.6	39-44/550-600	114-127/48-52	\$32,350	--	57
Toyota	RAV4 Prime	2020	18.1	42/558	94/38	\$42,340	--	51
Volvo	S60 Recharge	2020	18.8	40/490	74/31	\$51,250	\$7,500	34
Volvo	S90 Recharge	2017	18.8	38/482	66/30	\$70,500	--	13
Volvo	XC60 Recharge	2017	18.8	36/524	63/28	\$57,200	--	28
Volvo	XC90 Recharge	2016	18.8	36/494	66/26	\$71,900	--	15

-- Dashes in the matrix represent specs not available at time of printing.

Battery
Electric



ACQUISITION

MSRP	\$86,700
60 Month @6% est	\$1,745
Lease	\$1,479
Availability	2019-present
U.S. Sales Units	7,271

RANGE

EV Range	208-246 mi
MPGe	75-83

PERFORMANCE

0-60 mph	2.6-5.1 sec
Top Speed	143-161 mph

BATTERY

Volts	613-723 V
Watts	79.2-93.4 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	240-750/368-774
Drive Type	RWD/AWD

CHARGING

Power Rating	9.6 kW
Charge Time L1	--
Charge Time L2	9.5 hrs
Charge Time DC	22 mins
Connector	CCS

CAPACITY

Passengers	4
Cargo	2.9-14.3 cu ft

DIMENSIONS

Curb Weight	4,566-5,199 lbs
Length	195.4-195.8 in
Width	77.4 in
Height	54.3-55.6 in

2019-2023 PORSCHE Taycan

Porsche began deliveries of the Taycan, its first all-electric vehicle, in 2020. The Taycan now represents about one tenth of Porsche's sales. With typical Porsche svelte looks and spirited performance, Porsche aims to compete with the Tesla Model S, and has recently outsold Tesla's original flagship. Some will judge it the winner of a beauty contest between the two with a stylishly low roof and front-end along with an aerodynamic body that crouches on 19- or 20-inch alloy wheels. As expected of a Porsche, the Taycan is designed to perform. Its four trim levels deliver between 240-750 horsepower and its top "Turbo S" model sprints from 0-60 mph in a hyper-quick 2.6 seconds. The car has an unconventional two speed transmission. Drivers traveling with more pedal discipline can drive for 200 miles before recharging.

The Taycan is tech-savvy, featuring smartphone-activated doors and an innovative charge port touch sensor that prompts the charge door to glide in and up to reveal the charging mechanism, a more elegant solution than the traditional hinge. The cabin boasts a sleek panoramic glass roof, four bucket seats, three standard touchscreens, and an optional fourth on the right side of the dash for more convenient front-passenger operation of the infotainment system. Porsche's InnoDrive autonomous-driving is available for an extra charge. The Porsche Taycan has set the new standard in EV luxury, and promises to satisfy Porsche enthusiasts able to finance top shelf gear.





2012-2023 TESLA Model S

The Tesla Model S and Tesla's Supercharger Network combine to deliver the best performing electric vehicle on the market. Since its introduction in 2012, a succession of improvements have kept the performance sedan at the top of its class. The company's entry level all-wheel drive S is rated at 670 horsepower. The top tier "Plaid" models are rated at 1,020 horsepower and 1,050 lb-ft of torque—a staggering amount of power for a four-door sedan that can haul five adults. In tests by Motor Trend, it was the fastest sedan ever measured and speedier than all other street cars except for the Ferrari LaFerrari hypercar. Consumer Reports found that the Tesla Model S P100D performed better in instrumented tests than any other car.

Tesla continues to advance driver assist technology, promising "autonomous" driving that nevertheless requires driver supervision at all times. The ultimate viability of this approach is still in question, as distracted or complacent drivers may not be able to react in time when sudden human intervention is needed. Combined front and back cargo space ranges from 25 cubic feet to 61 cubic feet with the rear seats folded down. Tesla's ground-breaking technology, standard-setting performance, and sexy sports-car appearance lead the market. Although other automakers have fielded their own premium long-range all-electric cars, Tesla is expected to continue dominating luxury EV sales for the foreseeable future.

ACQUISITION

MSRP	\$94,990
60 Month @6% est	\$1,842
Lease	\$1,595
Availability	2012-present
U.S. Sales Units	--

RANGE

EV Range	396-405 mi
MPGe	116-120

PERFORMANCE

0-60 mph	1.9-3.1 sec
Top Speed	149-200 mph

BATTERY

Volts	407 V
Watts	100 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	670-1,020/--
Drive Type	AWD

CHARGING

Power Rating	16.5 kWh
Charge Time L1	30 hrs
Charge Time L2	7 hrs
Charge Time DC	38 min
Connector	UMC

CAPACITY

Passengers	5
Cargo	25-61.4 cu ft

DIMENSIONS

Curb Weight	4,766 lbs
Length	197.7 in
Width	78.2 in
Height	56.3 in





ACQUISITION

MSRP\$	\$87,400
60 Month@6% est	\$1,755
Lease	\$1,790
Availability	2022-present
U.S. Sales Units	4,369

RANGE

EV Range	406-520 mi
MPGe	111-140

PERFORMANCE

0-60 mph	<2-4 sec
Top Speed	200+ mph

BATTERY

Volts	--
Watts	--
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	480/443 - 1,200/1,025
Drive Type	RWD/AWD

CHARGING

Power Rating	19.2 kW
Charge Time L1	--
Charge Time L2	--
Charge Time DC	--
Connector	250-300kW CCS

CAPACITY

Passengers	5
Cargo	22.1 cu ft

DIMENSIONS

Curb Weight	5282 lbs
Length	195.9 in
Width	76.2 in
Height	55.4 in

2022-2023 LUCID MOTORS Air

Lucid Motors' new Air large luxury sedan takes the title of the highest range EV on the market. With a range of up to 520 miles, the Lucid Air travels about 100 miles further than any other EV currently available. Led by Peter Rawlinson, who was the chief engineer for the groundbreaking Tesla Model S, Lucid is one of the few automakers that has a realistic opportunity to become a genuine competitor to Tesla in the high end of the market. With its sleek body shape, attractive design, quality materials, and roomy interior, the Air represents what a large luxury car of the future could be, except it's available now.

The car that is nearly devoid of compromises, which may be one of the Air's best selling points. With 480 to a whopping 1,200 horsepower available, the Air offers a wide range of performance levels and pricing. Starting at \$87,400 and topping out at over \$180,000, the Air has one of the widest pricing ranges of any new car. The now sold out Dream Edition Performance model could hit 60 mph in 2.6 seconds, earning its bonafides as a genuine contender. Most models are equipped with a 112 kWh battery and AWD, with range of at least 406 miles. Lucid Motors' driver assist system is called DreamDrive. A "Pro" edition will be available as a \$9,000 over the air update. A new limited production ultra high performance Sapphire trim boasting sub-two second 0-60 and sub-nine second quarter mile will launch in the first half of 2023 for the eye watering price of \$249,000.





2021-2023

MERCEDES-BENZ EQS

Mercedes is introducing a whole new line of EVs under the line "EQ" with a letter following those as designation of the ICE version of the same class. The first EQ vehicle in the US is the EQS, the "EV S-Class." However, unlike some upcoming EQ models, the EQS is an entirely different vehicle, sharing no real similarity with the more expensive S-Class. The EQS is an original design. Shaped unlike anything else in the Mercedes lineup, the EQS has the lowest drag coefficient of any production vehicle, an astonishing 0.20. That is more aerodynamic than the Tesla Model S and Lucid Air. The EQS has a smooth, almost egg-like shape that looks much more like a concept car than actual production vehicle.

Nowhere does the EQS distinguish itself more than on the interior. Debuting in the EQS is the Hyperscreen, a huge, 56-inch wide infotainment system. The optional setup is made from one continuous glass panel, combining two 12.3 inch displays for both the driver and passenger, as well as a massive 17.7 inch central touchscreen. This system, combined with the traditional finish of a high end Mercedes, lead to a vision of the future of luxury vehicles. Mercedes makes many refined options standard on the EQS, like a Burmester 3D Surround Sound system, Augmented Video for Navigation, and 10-degree rear axle steering.

With 340-miles range and all of the amenities, the EQS stands out as a thoroughly luxurious entry in the EV sedan lineup.

ACQUISITION

MSRP\$	\$102,310
60 Month@6% est	\$1,977
Lease	-
Availability	2021-present
U.S. Sales Units	-

RANGE

EV Range	340-350 mi
MPGe	103

PERFORMANCE

0-60 mph	3.7-5.9 sec
Top Speed	131 mph

BATTERY

Volts	-
Watts	107.8 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	329-516/417-631
Drive Type	RWD/AWD

CHARGING

Power Rating	9.6 kW
Charge Time L1	55 hrs
Charge Time L2	11.25 hrs
Charge Time DC	31 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	22-63 cu ft

DIMENSIONS

Curb Weight	5,597-5,806 lbs
Length	207.28 in
Width	83.66 in
Height	59.57 in



Battery
Electric



ACQUISITION

MSRP\$	\$52,000
60 Month@6% est	\$1,150
Lease	\$707
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	256-301 mi
MPGe	~100

PERFORMANCE

0-60 mph	4-5.7 sec
Top Speed	118 mph

BATTERY

Volts	398.5 V
Watts	70.2-81 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	281/295 - 335/317
Drive Type	RWD/AWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	--
Charge Time DC	32 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	16.6 cu ft

DIMENSIONS

Curb Weight	4,553-4,665 lbs
Length	188.5 in
Width	72.9 in
Height	57 in

2022-2023

BMW i4

BMW's new i4 combines the performance, efficiency, and simplicity of an EV with the traditional styling that drivers love about the BMW 3 and 4 series models. Based on the CLAR (cluster architecture) platform, the i4 is a hybrid design, incorporating the body shell of the 4 series Gran Coupe with BMW's proprietary one piece motor(s), reduction gearing, and power control electronics in a single unit. The i4 is capable of DC fast charging at up to 200 kW.

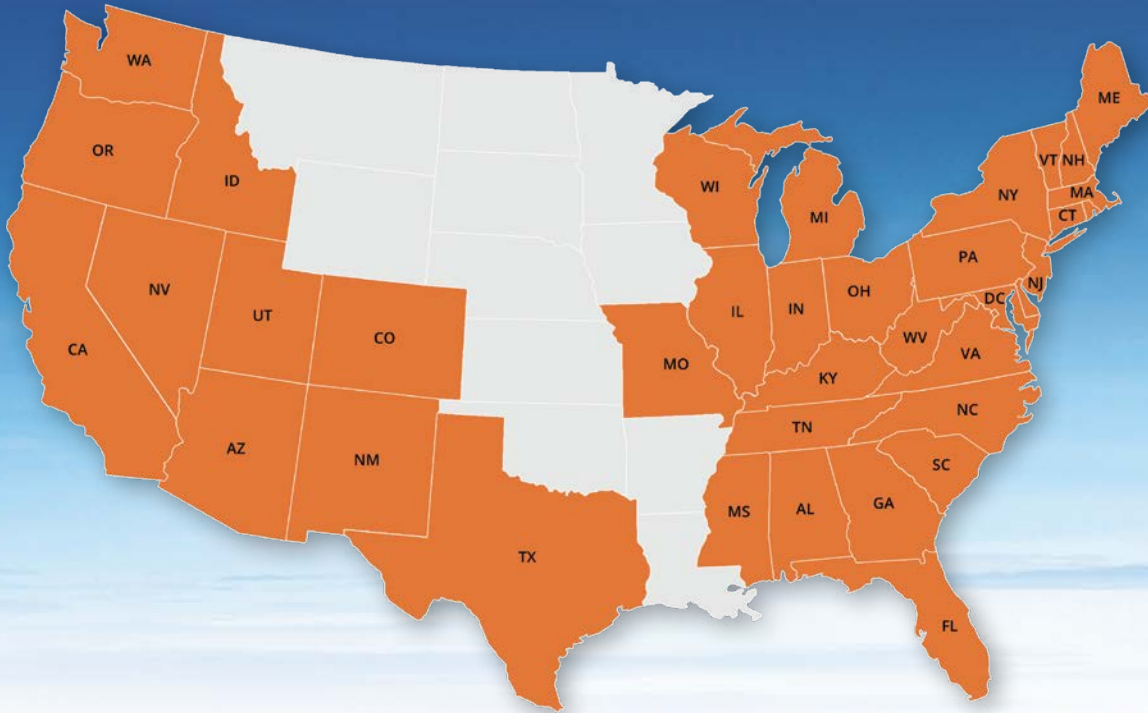
The i4 impresses with its traditional look, faster than M3 performance (on the M50 model) and surprising efficiency. It's a logical step for BMW, as they introduce future electric models with less traditional styles, it's important for them to include models that current owners would consider as their next step into the EV space.

The i4, along with the iX, are BMW's newest eDrive models, and as such, are introducing new technologies that will proliferate the model range. One of the most impressive new features is the seamless BMW Curved Display, combining a 14.9 inch iDrive 8 infotainment display and a 12.3 inch dashboard functions in one panel. Over the air updates are part of the iDrive 8 system as well. Performance wise, the M50 model can rocket to sixty in less than 4 seconds, beating some versions of the traditional sport sedan king, the venerable M3. The standard eDrive40 model can go 0-60 in 5.7 seconds while delivering up to 300 miles on a charge.



Join our Team

Electric Car Guest Drive is Growing Rapidly



Over the past eleven years Electric Car Insider has successfully held over 130 Electric Car Guest Drives across the U.S. Past and current year events include California, Oregon, Washington, Idaho, Colorado, Nevada, Arizona, New Mexico, Michigan, Missouri, New York, Virginia, Tennessee, Mississippi and Florida.

We are looking for EV Advocates to join our team:

- **EV Presenters** who enjoy educating the public about electric cars and charging
- **EV-Savvy Event Staff** to help attendees with registration and directions
- **EV Event Managers** who are strong leaders and passionate about a great customer experience

Contact us for more information and current openings



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619-559-8613

Plug-In
Hybrid



ACQUISITION

MSRP	\$70,500
60 Month @ 6% est	\$1,315
Lease	\$1,216
Availability	2017-present
U.S. Sales Units	--

RANGE

EV/ICE Range	38/482 mi
MPGe/MPG	66/30

PERFORMANCE

0-60 mph	4.6 sec
Top Speed	112 mph

BATTERY

Volts	--
Watts	18.8 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	455/523
Drive Type	AWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	--
Charge Time DC	N/A
Connector	--

CAPACITY

Passengers	5
Cargo	13.5 cu ft

DIMENSIONS

Curb Weight	4,628 lbs
Length	200.4 in
Width	74.6 in
Height	57.1 in

2017-2023 VOLVO S90 Recharge

Volvo entered the luxury sedan market with the S90, its flagship four door, in 2017. Its prominent mid body line and classic shape reinforce the brand's heritage while its sedan body offers a fresh and contemporary look. The S90's Recharge variant uses the Volvo XC90 Recharge's plug-in drivetrain. The S90 Recharge runs on smooth, silent electric power for about 38 miles before the gas engine takes over. The "twin engine" drivetrain mates the S90's electric motor to a 2.0-liter, four-cylinder that is both supercharged and turbocharged, improving fuel efficiency while giving the engine plenty of power throughout its RPM range. The gas engine drives the front wheels while the electric motor powers the rear axle. Adding to the S90 Recharge's overall efficiency is Volvo's crankshaft-integrated starter generator, which starts and charges the car and seamlessly transitions between the vehicle's gas engine and electric motor. The system also provides additional power to eliminate lag before the supercharger and turbocharger kick in.

The interior's Scandinavian-style design is uncluttered and sophisticated. Volvo's soft Nappa leather seats wrap around safety features designed to prevent spinal injury in the event of a severe crash. A central nine-inch center touchscreen provides easy and intuitive access to all of the car's infotainment and climate control features. Vertical air blades on the vents, Orrefors crystal in the shift lever, and diamond-cut metal on the knobs are subtle flourishes in the S90 Recharge's otherwise serene cocoon.





2022-2023

BMW iX xDrive50

The BMW iX is a new chapter for BMW's EV lineup. It's the brand's most original vehicle yet and has already received accolades for its interior, performance, and range. Different from the i4, the iX is built on a separate architecture but has commonality with CLAR models. It's built using an aluminum space frame that supports an inner carbon fiber reinforced plastic core, which debuted on the previous generation 7 series and i3. The standard eDrive50 model comes with a 516 horsepower, dual motor arrangement for standard all wheel drive. It can reach 60 miles per hour from zero in 4.4 seconds, nearly matching the M50 performance model of the i4. Like the i4, it supports 200 kW fast charging for its 105.2 kWh battery, enabling a 10% to 80% charge in 35 minutes. With dimensions similar to an X5, the iX introduces a new entry in BMW's Sports Activity Vehicle lineup.

The interior of the iX is really the star of the show. As a premium offering from a premium brand, there are certain expectations for a vehicle like this, and those are met by the iX. The interior is concept car worthy, with simple lines yet full featured, including the BMW Curved Display and iDrive 8 interface. Unique interior materials are offered, including faux leather and what BMW calls Loft, which is made from microfiber cloth. Also unique to the iX are a hexagonal steering wheel and a panoramic glass roof that can be tinted in real time, using electrochromic elements in the glass. An 18 speaker Harman/Kardon audio system is standard.



ACQUISITION

MSRP\$	\$84,100
60 Month@6% est	--
Lease	--
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	305-324 mi
MPGe	86

PERFORMANCE

0-60 mph	4.4 sec
Top Speed	124 mph

BATTERY

Volts	369 V
Watts	105.2 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	516/564
Drive Type	AWD

CHARGING

Power Rating	11 kW
Charge Time L1	--
Charge Time L2	11 hrs
Charge Time DC	40 mins
Connector	CCS

CAPACITY

Passengers	5
Cargo	36-92 cu ft

DIMENSIONS

Curb Weight	5659 lbs
Length	195 in
Width	77.4 in
Height	66.8 in

Plug-In
Hybrid



ACQUISITION

MSRP	\$71,900
60 Month @ 6% est	\$1,396
Lease	\$1,172
Availability	2016-present
U.S. Sales Units	--

RANGE

EV/ICE Range	36/494 mi
MPGe/MPG	66/26

PERFORMANCE

0-60 mph	5 sec
Top Speed	112 mph

BATTERY

Volts	--
Watts	18.8 kWh
Cooling	Liquid

DRIVETRAIN (HYBRID)

HP/Lb-ft	455/523
Drive Type	AWD

CHARGING

Power Rating	3.6 kW
Charge Time L1	--
Charge Time L2	5 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	6-7
Cargo	65.5-85.7cu ft

DIMENSIONS

Curb Weight	--
Length	195 in
Width	79.1 in
Height	69.9 in

2016 - 2023

VOLVO XC90 Recharge

The Volvo XC90 Recharge is a radical departure from the classic square Volvo of past decades. In fact, toss out everything you know about Volvo—except its reputation for safety and practicality—before acquainting yourself with the XC90 Recharge.

The Volvo XC90 Recharge is exciting and powerful, sporting a “twin engine” that powers its front wheels with gas and its rear wheels with electricity. With impressive specs including 455 horsepower, 523 pound-feet of torque, and a 0-60 mph time of 5 seconds, Volvo has packed this hybrid SUV with an unprecedented punch.

The XC90 Recharge’s brawn is paired with an entirely new level of beauty. Its interior is Volvo’s most luxurious to date. Natural grain wood and Nappa leather accent classy interior panels and bezels. A large Sensus touchscreen, equipped with GPS navigation and Apple CarPlay, fills the center console. Apple’s Siri reads text messages aloud and enables voice operation of the vehicle’s phone and music system. An optional 19-speaker, 1,400-watt Bowers & Wilkins sound system offers inspiring high fidelity.

With the XC90 Recharge, Volvo has transformed itself from a mild-mannered Swedish automaker into a bona fide luxury performance SUV competitor.



Battery
Electric



2018-2023 JAGUAR I-Pace

Jaguar began delivering the I-Pace in 2018 as the EV industry's second all-electric SUV. The 2023 I-Pace benefits from software updates that improve the car's regenerative braking and increase its range to 246 miles, up from an original 234 when the car first launched. Both Level 2 and DC Fast charging have been upgraded for 2023. Level 2 is now 11kW, up from 7kW. The car will charge to full overnight. DC fast charging is now 100kW, slower than the competition but functional if you're not on a multi-leg cross country trip.

The I-Pace has a handsome body with a crossover roofline and a sporty door stripe on either side. Its handles, which recede into the doors when locked, endow the I-Pace with a stylishly flush, aerodynamic exterior. The I-Pace boasts a cab-forward profile and ample cargo space—perks made possible by the low placement of its battery and drive components. Its interior features an all-digital dash and dual touch screen center console. Large multifunction knobs also have digital displays inset. The upscale cabin has a thoroughly modern feel. The infotainment system offers navigation, and audio supports Carplay and bluetooth connectivity. With the Go I-Pace app, drivers can precondition the cabin from their smartphone.

Another 2023 improvement is an upgrade to the navigation system to make finding chargers easier. It will now show you availability, cost, and estimated charging time.

The I-Pace's sexy styling and classy presentation make it a desirable electric SUV.

ACQUISITION

MSRP	\$71,300
60 Month @ 6% est	\$1,378
Lease	--
Availability	2018-present
U.S. Sales Units	--

RANGE

EV Range	246 mi
MPGe	76

PERFORMANCE

0-60 mph	4.5 sec
Top Speed	124 mph

BATTERY

Volts	--
Watts	90 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	394/512
Drive Type	AWD

CHARGING

Power Rating	11 kW
Charge Time L1	--
Charge Time L2	10 hrs
Charge Time DC	--
Connector	CCS

CAPACITY

Passengers	5
Cargo	--

DIMENSIONS

Curb Weight	4,784 lbs
Length	184.3 in
Width	79.2 in
Height	61.3 in





ACQUISITION

MSRP\$	\$97,490
60 Month@6% est	\$1,500
Lease	\$1,339
Availability	2015-present
U.S. Sales Units	--

RANGE

EV Range	333-348 mi
MPGe	98-102

PERFORMANCE

0-60 mph	2.5-3.8 sec
Top Speed	155-163 mph

BATTERY

Volts	375 V
Watts	100 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	670-1,020/ --
Drive Type	AWD

CHARGING

Power Rating	16.5 kW
Charge Time L1	20 hrs
Charge Time L2	~10 hrs
Charge Time DC	38 min
Connector	UMC

CAPACITY

Passengers	6-7
Cargo	88.2-92 cu ft

DIMENSIONS

Curb Weight	5,185-5,390 lbs
Length	199.1 in
Width	78.7 in
Height	66.1 in

2015-2023 TESLA Model X

Tesla's Model X is the original electric SUV. The Silicon Valley automaker began delivering the world's first production sports utility EV back in 2015. The convention defying Model X got competitors serious about delivering their own electric SUVs although none have been as innovative to date.

The Model X sports a long, arched glass roof and 20- or 22-inch wheels. Its aerodynamically invisible recessed door handles confer both sleek styling and fuel efficiency. In any parking lot, the Model X still wows with rear falcon-wing doors that open vertically to afford easy entry and exit in tight spaces.

The Model X is at the top of its class in performance. Its 100-kWh battery pack supplies a 333-mile range, and the drive train efficiency nets the Model X a class-leading 98 combined MPGe. If 3.8-second 0-60 mph isn't fast enough for you, the top trim's Ludicrous Mode will get you there in 2.5 seconds. Tesla is known for its technology. The vehicle is equipped with all the latest safety features including auto e-braking, lane-departure warning, and adaptive cruise control. Its enormous 17-inch center touchscreen activates its music and climate systems and its semi-autonomous driving Autopilot mode.

For those with an ample budget, the Model X is a stellar choice for consumers in search of the ultimate high-end electric SUV.



Plug-In
Hybrid



2020-2023 LINCOLN Aviator Grand Touring

Ford's luxury division Lincoln launched the Aviator Grand Touring plug-in hybrid in 2020. The three-row, six-seat SUV is hefty at 5,673 pounds but drives with ease thanks to a robust powertrain. A 75-kW electric motor is paired with a 3.0-liter, twin-turbo V6 engine to produce 494 total horsepower and 630 pound-feet of torque. The combo hurtles the Grand Touring to 60 mph in just five seconds. Lincoln's Air Glide suspension uses air springs and a dozen sensors to assess the road ahead and adjust accordingly. The vehicle's 13.6-kWh battery permits 21 miles of all-electric range. Lincoln caters more to clients' desire for power and performance than fuel economy, yet the Aviator bests many of its competitors' electric range, including the Porsche Cayenne S E-Hybrid's, the Volvo XC90's, and the Range Rover PHEV's. The Aviator Grand Touring lines are distinguished by its downward-sloping roof, sculpted accent lines, and a big pearly grille. Blue accents in the Lincoln emblem and "Aviator" badge telegraph its plug-in capabilities. The doors benefit from phone-as-key and soft-close technologies. If your phone is unavailable, a traditional key or a pin pad passcode provide backup entry methods. Once inside, drivers will enjoy a soft-touch interior with 30-way adjustable seats and a 10-inch landscape-oriented touchscreen. A supplementary touchscreen in the second row allows backseat passengers to customize their climate and audio settings. The Lincoln Aviator Grand Touring is a posh and surprisingly efficient way to shuttle a family or clients around, and will tow up to 5,600 lbs.

ACQUISITION

MSRP	\$69,190
60 Month @ 6% est	\$1,365
Lease	\$1,213
Availability	2020-present
U.S. Sales Units	--

RANGE

EV/ICE Range	21/439 mi
MPGe/MPG	56/23

PERFORMANCE

0-60 mph	5 sec
Top Speed	145

BATTERY

Volts	--
Watts	13.6 kWh
Cooling	Liquid

DRIVETRAIN (HYBRID)

HP/Lb-ft	494/630
Drive Type	AWD

CHARGING

Power Rating	3.6 kW
Charge Time L1	--
Charge Time L2	3.5 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	7
Cargo	18.3-77.7 cu ft

DIMENSIONS

Curb Weight	5,673 lbs
Length	199.3 in
Width	79.6 in
Height	69.2 in





ACQUISITION

MSRP\$	\$62,990
60 Month@6% est	--
Lease	--
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	~312 mi
MPGe	89

PERFORMANCE

0-60 mph	5.7 sec
Top Speed	118 mph

BATTERY

Volts	--
Watts	102 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	340/325 - 500/450
Drive Type	RWD/AWD

CHARGING

Power Rating	19.2 kW
Charge Time L1	~15 hrs
Charge Time L2	~10hrs
Charge Time DC	30 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	28-60.8 cu ft

DIMENSIONS

Curb Weight	5,610 lbs
Length	196.7 in
Width	86.9 in
Height	63.9 in

2022-2023 CADILLAC LYRIQ

Cadillac is launching its EV transition with the impressive new Lyriq crossover. Based on GM's Ultium platform, the Lyriq looks to reset what customers can expect a Cadillac to be. Moving upmarket, the Lyriq will be one of the most original and expressive car that Cadillac has ever produced. The new production model looks more like a concept car versus a production vehicle yet it has an attainable price tag.

The interior is dominated by a huge curved screen, measuring 33 inches, that contains both the driver information center and the infotainment system, similar to the Escalade. It will also feature GM's Super Cruise, the first and most prolific hands-free semi autonomous driving system in the industry.

Two drivetrains and one battery pack are offered, with the capacity sitting at nearly 100 kWh, allowing the single motor version to go 312 miles on a charge. Selecting the AWD option adds power, going from 340 to 500 horsepower.

A high end 19 speaker AKG audio system will be available in the Lyriq, allowing for an immersive audio experience. An interesting feature of the Lyriq is the approach/welcome lighting show, that makes the exterior lights "dance" as you approach the car. All of these features help Cadillac change its once stodgy brand image and bring in new customers.





2022-2023

GMC Hummer EV Pickup

The Hummer is back, reincarnated as a battery electric. GM set out to make a statement and reestablish their chops in the EV engineering field with the new Hummer EV. Built upon their new Ultium architecture, the Hummer EV represents the limits of what a consumer EV can be, and in the case of this monster, what one can do as well. It isn't without some reasonable criticisms, as the necessity of such a huge, heavy passenger vehicle outfitted as a truck is definitely questionable, but if nothing else, GM has created something that will probably end up as a museum piece sometime in the future.

The Hummer EV has a lot of tricks that are only possible with an EV drivetrain. For a behemoth that weighs over 9,600 lbs, the 0-60 time of 3.3 seconds is definitely a sight to behold. Something that big has no business moving so quickly, yet it will, unleashing 0.74 g on occupants in the process. It can also "Crab Walk," which is GM's term for the trick 4 wheel steering program, which can essentially allow the Hummer EV to move diagonally, allowing it to negotiate rough terrain with finesse.

With a 246 kWh battery, 1,000 horsepower, 350 kW charging, and 329 miles of range, the Hummer EV really pushes the envelope of what an EV is capable of. The Hummer EV is only available in very limited quantities, and at over \$120k plus stunning dealer markups, this Transformers exosuit will be reserved for people with very particular requirements.

ACQUISITION

MSRP\$	---
60 Month@6% est	---
Lease	---
Availability	2022-present
U.S. Sales Units	---

RANGE

EV Range	329-350 mi
MPGe	43

PERFORMANCE

0-60 mph	3 sec
Top Speed	---

BATTERY

Volts	400-800 V
Watts	246.8 kWh
Cooling	---

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	1,000/11,500
Drive Type	e4WD

CHARGING

Power Rating	---
Charge Time L1	---
Charge Time L2	---
Charge Time DC	35 mins
Connector	CCS

CAPACITY

Passengers	---
Cargo	payload up to 1,300 lb

DIMENSIONS

Curb Weight	9,063 lbs
Length	216.8 in
Width	86.7 in
Height	79.1 in





ACQUISITION

MSRP\$	\$73,000
60 Month@6% est	\$1,566
Lease	--
Availability	2020-present
U.S. Sales Units	--

RANGE

EV Range	260-400 mi
MPGe	64-73

PERFORMANCE

0-60 mph	3-4.5 sec
Top Speed	--

BATTERY

Volts	--
Watts	162-163 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	600/600 - 835/908
Drive Type	AWD

CHARGING

Power Rating	11.5 kW
Charge Time L1	--
Charge Time L2	13 hrs
Charge Time DC	68 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	62 cu ft

DIMENSIONS

Curb Weight	--
Length	217.1 in
Width	81.8 in
Height	78.2 in

2020-2023 RIVIAN R1T

It is essentially a law of nature that when an individual rises to the top, a competitor soon emerges to rival its dominance. Such is the case with Rivian. The sustainable transportation startup aims to dethrone Tesla and become the industry's new king of the hill and is making its case with two impressive high-caliber electric adventure vehicles. Even at a glance, the quad-motor AWD R1T is as remarkably different as its engineers intended. The pickup's sparse accent lines, which swoop upward at near 90-degree angles along the back doors and haunches, convey a futuristic, minimalist look. Its four-bulb stadium headlights and daytime light-bar add to its uniqueness. Torque vectoring for responsive offroading, along with 14 inches of ground clearance, three feet of water fording, and 11,000 pounds of towing are just some of the R1T's many robust performance capabilities. The truck's bed, with a liftgate that swings down 180 degrees for easy loading, is a modest 3.5 feet long. The R1T offsets this with auxiliary storage, including an 11-cubic-foot frunk and a cargo tunnel adjacent to the rear wheels wide enough to fit skis or a surfboard. The shallow back affords a spacious five-seat cabin for comfortable trips with friends. Rivian took a page out of Tesla's book in crafting the R1T's interior, which employs a simple wood dash interrupted only by a digital gauge cluster and a landscape-oriented infotainment touchscreen. With ingenious design and specs that speak for themselves, Rivian has positioned the R1T a frontrunner in the EV pickup race.



Battery
Electric



2024

CHEVROLET Silverado EV

The Chevrolet Silverado EV is a strong, durable, performance truck that debuts this year in the RST and WT (Work Truck) models. With a GM estimated range of up to 400 miles and DC Fast Charging up to 350 kW, it adequately compares to the popular Rivian R1T and Ford F-150 Lightning.

Most notably, this EV truck has a frunk (eTrunk, as they call it) that can fit a large suitcase, a 5'11" bed, multi-flex mid-gate, and a multi-flex tailgate. With four positions on the mid-gate and six positions on the tailgate, there are many ways that you can comfortably fit gear, storage, and passengers in the 10'10" of total storage. Plus, a tonneau cover is available.

The Silverado EV offers 10,000 lbs towing capacity and 1,300 lbs payload, is capable of charging other EVs, and introduces the first super-cruise option for towing – making this the industry's first driving assistance technology that is compatible with trailering.

The interior boasts a 17" infotainment screen, along with an 11" driver display and a heads-up display on the front windshield. As you may have seen in other EVs, the Silverado has a fixed glass roof and a hands-free start.

Another competitor in the EV Truck market is always welcomed, but the Chevy Silverado is bound to become the best in its class. The high-tech design makes driving, working, and adventuring, easy and enjoyable.



ACQUISITION

MSRP\$	\$39,990
60 Month@6% est	--
Lease	--
Availability	Fall 2023
U.S. Sales Units	--

RANGE

EV Range	~400 mi
MPGe	--

PERFORMANCE

0-60 mph	<4.5 sec
Top Speed	--

BATTERY

Volts	--
Watts	--
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	510/615 - 754/785
Drive Type	--

CHARGING

Power Rating	10.2 kW
Charge Time L1	--
Charge Time L2	--
Charge Time DC	--
Connector	CCS

CAPACITY

Passengers	5
Cargo	5'11" truck bed

DIMENSIONS

Curb Weight	--
Length	233.1 in
Width	83.8 in
Height	78.7 in



ACQUISITION

MSRP\$	\$59,974
60 Month@6% est	\$1,129
Lease	\$995
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	240-320 mi
MPGe	66-70

PERFORMANCE

0-60 mph	--
Top Speed	--

BATTERY

Volts	--
Watts	98-131 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	462/775 - 580/775
Drive Type	AWD

CHARGING

Power Rating	11.3-19.2 kW
Charge Time L1	--
Charge Time L2	8-19 hrs
Charge Time DC	41-122 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	52.8 cu ft

DIMENSIONS

Curb Weight	6,015-6,893 lbs
Length	232.7 in
Width	80 in
Height	78.3 in

2022-2023

FORD F-150 Lightning

Ford's refined all-electric F-150 Lightning represents a substantial pivot from cool dismissal to the embrace of EVs. For over thirty years, the most popular vehicle sold in the US has been the F-150, and now with an electric option, Ford has come out swinging in the EV truck race. Unique to the segment, Ford has blended traditional F-150 parts and legendary looks with a dedicated EV platform. For example, the cab is exactly the same as any other of the same generation, yet the frame is completely new, designed to incorporate the batteries and drivetrain components seamlessly. In fact, this is the only EV truck with a frame at all, as the Rivian, Hummer, and Silverado EVs are unibody. All of this has enabled Ford to accelerate the development and launch of the truck.

The specs are impressive as well. The payload and towing capacities max at 2,000 and 10,000 lbs respectively, very close to the Rivian R1T. Two battery choices are available, both with AWD standard: 98 kWh and 131 kWh, giving a rated 240 to 320 mile range. A feature certain to find fans among both contractors and campers is the Pro Power Onboard generator feature. Similar to the hybrid F-150, this can turn the truck into a mobile power station to power up to a whole house if needed. With the Lightning, Ford has established itself as the EV truck leader. Although lead times on new orders are greater than one year, there are plenty of units on dealer lots and listed on CarGurus and Autotrader.





2020-2023 RIVIAN R1S

Unsatisfied with kicking off its brand with just one breakthrough vehicle, Rivian launched the R1S sports utility vehicle alongside the R1T pickup truck. The R1S is a seven-passenger AWD high-performance EV that brings some healthy competition to Tesla's Model X—formerly the only three-row all-electric SUV. While the two vehicles belong to the same segment, their appearances are strikingly different. The R1S's flat, boxy exterior contrasts with the Model X's curvy body. The R1S, unlike the Model X, is off road-capable, sharing the R1T's 14.5-inch ground clearance, 3.5-foot wading depth, and sophisticated torque vectoring enabled by a dedicated electric motor at each wheel. Its 34.8° approach angle, 34.3° departure angle, and 28.9° breakover angle enable durable all-terrain climbing. Both the R1S and the R1T are built using the same electric platform and boast exceptional specs, including 600-835 horsepower, 600-908 pound-feet of torque, and a 0-60 mph time of three seconds. Their top trims carry identical 180-kWh battery packs that endow them with a 320+ mile range. The batteries are aligned in single rows on their “skateboard” chassis, achieving a low-center of gravity for superb handling. The R1S doesn't quite match the R1T's towing capacity, but manages 7,700 lbs. Inside, the R1S sports light-up accents throughout the cabin and an electric flashlight set in the door trim. Its interior is made of leather and sustainably sourced wood. Although the initial cargo space is tight at 5.1 cubic feet, the third row is removable for increased capacity. Look for the R1S to turn heads in the nascent EV off-roading segment.

ACQUISITION

MSRP\$	\$78,000
60 Month@6% est	\$1,672
Lease	--
Availability	2020-present
U.S. Sales Units	--

RANGE

EV Range	260-321 mi
MPGe	64-71

PERFORMANCE

0-60 mph	3-4.5 sec
Top Speed	--

BATTERY

Volts	--
Watts	105-180 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	600/600 - 835/908
Drive Type	AWD

CHARGING

Power Rating	11.5 kW
Charge Time L1	--
Charge Time L2	13 hrs
Charge Time DC	68 min
Connector	CCS

CAPACITY

Passengers	7
Cargo	5.1-105 cu ft

DIMENSIONS

Curb Weight	--
Length	200.8 in
Width	81.8 in
Height	77.3 in



Plug-In
Hybrid



ACQUISITION

MSRP	\$54,735
60 Month @ 6% est	--
Lease	--
Availability	2021-present
U.S. Sales Units	--

RANGE

EV/ICE Range	21/348 mi
MPGe/MPG	49/20

PERFORMANCE

0-60 mph	6.8 sec
Top Speed	--

BATTERY

Volts	400 V
Watts	17 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	375/470
Drive Type	4WD

CHARGING

Power Rating	7.2 kW
Charge Time L1	12 hrs
Charge Time L2	2 hrs, 15 min
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	5
Cargo	27.7-67.4 cu ft

DIMENSIONS

Curb Weight	--
Length	188.4 in
Width	73.8 in
Height	73.5 in

2021-2023 JEEP Wrangler 4xe

The most iconic off-roader in the US has transitioned into a new era with the new Jeep Wrangler 4xe. Available exclusively as a four-door (Unlimited) and powered by a unique plug-in hybrid powertrain, the 4xe is Jeep's first foray into the electrified vehicle space.

Touted by Jeep as the "Industry's First Electrified Open-Air SUV" the 4xe combines a turbo 4 cylinder engine along with an electric motor built into the 8 speed automatic transmission. This allows for full EV, Hybrid, or E-Save modes, selectable with a push of a button. In full EV mode, the 4xe can go up to 21 miles before the turbo 4 cylinder takes over. Interestingly, the 4WD system of the 4xe is exactly the same as the normal gas models, allowing for the same capability off road. This was done purposely, to prove the capabilities of the PHEV system and show there is no compromise with the 4xe.

While not the most efficient PHEV by any stretch of the imagination, it is one of the only ones that can claim to ford 30 inches of water (Jeep later issued guidance of 19 inches). The interior is water resistant but not waterproof. The most important and unique characteristic of the Wrangler 4xe may be simply that it is a Wrangler, which includes all the capabilities, quirky features, and compromises that come with one. Some of those include being able to tow 3,500 pounds, removing the doors, and 20 MPG.





2022-2023 GENESIS GV60

Hyundai Motor's luxury brand Genesis developed the new GV60 based on the same E-GMP platform as the Kia EV6 and Hyundai Ioniq 5. The dual motor, all wheel drive arrangement delivers muscle-car level output. If the 429 hp of the "Performance" version isn't quite enough to complete your freeway merge, the GV60 will willingly provide a heart-quickenning "overboost" of 483 horses, scooting you from 0-60 mph in just 3.7 seconds. Insert superlative exclamation here. With more rational accelerator control, driving range varies from 235 for the Performance model while the more mild mannered Advanced trim manages 248 miles per charge, both from a 77.4-kWh battery. DC fast charge rates peak at 250kW, which is enough to refuel from 10-80% in 18 minutes.

When entering the GV60, a camera on the B-pillar scans your face and unlocks the doors. Once inside, a fingerprint reader will start the vehicle. Welcome to the machine. Rest easy though. The GV60's tranquil, silent cabin, with its clean, uncluttered appearance soothes. Heated and ventilated front seats provide an additional level of comfort. Two side-by-side 12.3-inch screens mounted on a center pod display a digital gauge cluster directly ahead of the driver and a center multifunction touchscreen provides navigation, temperature control and management of the standard-equipment Bang & Olufsen stereo system. On the center armrest, a crystal sphere flips to reveal a gear selector when the SUV is powered up.

Genesis clearly has confidence in the reliability of the GV60. Its standard warranty covers 5 years or 60,000 miles. The powertrain warranty covers 10 years or 100,000 miles.

ACQUISITION

MSRP\$	\$59,290
60 Month@6% est	--
Lease	--
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	235-248 mi
MPGe	95

PERFORMANCE

0-60 mph	--
Top Speed	--

BATTERY

Volts	697 V
Watts	77.4 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	314/446 - 429/516
Drive Type	AWD

CHARGING

Power Rating	10.9 kW
Charge Time L1	68 hrs
Charge Time L2	7 hrs
Charge Time DC	18-73 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	54.7 cu ft

DIMENSIONS

Curb Weight	4,696-4,890 lbs
Length	177.8 in
Width	74.4 in
Height	62.4 in





ACQUISITION

MSRP\$	\$55,300
60 Month@6% est	--
Lease	\$603
Availability	2021-present
U.S. Sales Units	--

RANGE

EV Range	226 mi
MPGe	87

PERFORMANCE

0-60 mph	4.5 sec
Top Speed	112 mph

BATTERY

Volts	--
Watts	75 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	402/487
Drive Type	AWD

CHARGING

Power Rating	11 kW
Charge Time L1	--
Charge Time L2	8 hrs
Charge Time DC	37 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	49 cu ft

DIMENSIONS

Curb Weight	4,737 lbs
Length	174.8 in
Width	75.2 in
Height	62.8 in

2021-2023 VOLVO C40 Recharge

Volvo's C40 Recharge is the automaker's model to be launched as a full EV. The C40's clean lines improve aerodynamic efficiency which extends range as well as drawing approving glances.

The interior receives new technology that Volvo will introduce to the model range in the years ahead. Based on the same CMA (Compact Modular Architecture) as the XC40, the vehicles actually share quite a few components. The front end, all the way to the front doors, is nearly identical to the XC40. Positioned as a premium offering, the C40 shows off the stylish fastback roof, new Android Automotive infotainment system with integrated Google Maps, and new interior materials choices.

Sold as only a single model in Ultimate trim, the C40 Recharge is equipped with a dual motor AWD layout, providing 402 horsepower and 487 lb-ft of torque. The power yields 0-60 performance of 4.5 seconds. Driven sensibly, the 75 kWh battery provides 226 miles of range. It's 150 kW fast charging speed, while slower than Tesla's 250kW, is still fast enough to allow a 10% to 80% charge in about 35 minutes. The C40 is the first Volvo model to be completely leather-free. The interior is detailed by subtle backlit trim panels on the dashboard and doors.



Plug-In
Hybrid



2017-2023 VOLVO XC60 Recharge

The XC60 Recharge is a thoroughly modern Volvo that matches up favorably with German SUVs on every axis. Like the larger XC90, the XC60 has a “twin engine” configuration, which combines a gas engine that drives the front wheels with an electric motor that drives the rear wheels. The 2.0-liter, four-cylinder engine is both supercharged and turbocharged to yield an impressive combined 455 horsepower and 523 pound-feet of torque. 0-60 mph is impressive at 4.5 seconds. Volvo’s philosophy for driver assist technology is making sure the driver stays engaged while driving. Lane-keeping does not keep the car centered in the lane, but will steer off the side of a lane if the car drifts toward a lane marker. It will also gently correct if a car is in the driver’s blind spot during lane changes. A nine-inch Sensus touchscreen on the center console is angled slightly toward the driver. The panel provides navigation, Apple CarPlay, and 360-degree visibility including a rear parking camera. The cross-traffic alert system guards against cars approaching from the side when backing up. Hands-free controls are provided by Apple’s Siri. Volvo has incorporated some thoughtful and clever usability features. The rear lift gate can be opened by sweeping your foot under the rear bumper, permitting hands-free entry when loading groceries or packages. Switches located on the rear edge of the cargo area fold down the rear seats. Storage areas under the rear seats can be used to store personal electronics safely out of sight. The five-passenger XC60 Recharge has a 3,500-pound towing capacity.

ACQUISITION

MSRP	\$57,200
60 Month @ 6% est	\$1,116
Lease	\$960
Availability	2017-present
U.S. Sales Units	--

RANGE

EV/ICE Range	36/524 mi
MPGe/MPG	63/28

PERFORMANCE

0-60 mph	4.5 sec
Top Speed	112 mph

BATTERY

Volts	--
Watts	18.8 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	455/523
Drive Type	AWD

CHARGING

Power Rating	3.6 kW
Charge Time L1	--
Charge Time L2	5 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	5
Cargo	22.4-63.3 cu ft

DIMENSIONS

Curb Weight	--
Length	185.4 in
Width	78.7 in
Height	65.3 in



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2020-2023 TESLA Model Y

Based on the best-selling Model 3's electric platform, the Model Y sports a wide, dipping midline, high rear roof, and relatively low ride height.

The Model Y is 10 percent bigger than the Model 3 but smaller than the Model X, offering consumers a compact SUV option. It is nonetheless spacious with a max cargo space of 76 cubic feet and an all-glass roof for increased headroom. The Model Y is seven-seat-capable with an optional \$3,000 third row. Omitting a standard dash cluster, Tesla's famous 15-inch center mounted touchscreen is perhaps more notable for its outstanding navigation and entertainment software. The navigation is unmatched by any other competitor. The system will plan an entire trip for you, reporting leg time, charge time, how many chargers are available and currently in use, and what nearby amenities are available (WiFi, food, shopping).

Tesla's controversial "Full Self-driving" is promised sometime in the indeterminate future with an over the air update. For now, the company instructs drivers to keep their eyes on the road and hands on the wheel during operation of what are really only active driver assist technologies. The Model Y is rated best-in-class for safety. All four trims are equipped with 360-degree camera-enabled visibility, a dozen ultrasonic sensors to detect nearby vehicles, and collision warning and auto e-braking to prevent accidents. With access to over 14,000 Superchargers around the world, the Model Y is outstanding for long distance road tripping.

ACQUISITION

MSRP\$	\$46,990
60 Month@6% est	\$720
Lease	\$519
Availability	2020-present
U.S. Sales Units	--

RANGE

EV Range	303-330 mi
MPGe	111-123

PERFORMANCE

0-60 mph	3.5-4.8 sec
Top Speed	135-155 mph

BATTERY

Volts	--
Watts	74 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	283/307 - 456-471
Drive Type	RWD/AWD

CHARGING

Power Rating	11 kWh
Charge Time L1	23.75 hrs
Charge Time L2	8 hrs
Charge Time DC	30 min
Connector	UMC

CAPACITY

Passengers	5-7
Cargo	17-76 cu ft

DIMENSIONS

Curb Weight	4,363-4,398 lbs
Length	187 in
Width	75.6 in
Height	64 in





ACQUISITION

MSRP	\$53,550
60 Month @ 6% est	\$1,042
Lease	\$812
Availability	2020-present
U.S. Sales Units	--

RANGE

EV Range	223 mi
MPGe	85

PERFORMANCE

0-60 mph	4.7 sec
Top Speed	112 mph

BATTERY

Volts	--
Watts	--
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	402/486
Drive Type	AWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	7-8 hrs
Charge Time DC	37 mins
Connector	CCS

CAPACITY

Passengers	5
Cargo	16-57.5 cu ft

DIMENSIONS

Curb Weight	--
Length	174.8 in
Width	75.2 in
Height	65 in

2020-2023 VOLVO XC40 Recharge

The XC40 Recharge was Volvo's first all electric SUV, heralding the company's coming era of EV only production. Like its petrol-powered counterpart, the XC40 Recharge sports the traditional exterior characteristic of Volvo's crossovers. Its boxy shape allows for a roomy cabin and decent trunk storage along with a one-cubic-foot frunk under the hood. Inside the cabin, you'll find an all-black interior and a stylish moonroof. A center touchscreen tilted slightly toward the driver's side houses its Android-based infotainment system. Volvo says the system will come equipped with Google Assistant, Maps, and Play, boast a top quality voice assistant, and permit over-the-air software updates.

The XC40's performance is competitive. With an electric AWD powertrain, the vehicle has 402 horsepower and a 0-60 mph time of 4.7 seconds along with 2,000 pounds of towing. Its 78-kWh battery, housed in an aluminum safety cage beneath its floor, provides 223 miles of range. The XC40 was the first car to include Volvo's new Advanced Driver Assistance System of state-of-the-art cameras, radar, and ultrasonic sensors, which, according to Volvo, "lays the foundation for...autonomous drive technology."

The XC40 Recharge gives us a glimpse of what's to come in Volvo's campaign to make half of its fleet fully electric and reduce its carbon footprint 40 percent by 2025.





2020-2023 POLESTAR 2

Volvo's spinoff Polestar aims to shake up the EV world with a fleet of futuristic automobiles. The Polestar 2 sits between the Polestar 1 coupé and the Polestar 3 SUV, blurring the line between sedan and crossover by combining a beveled rear roof with an elevated seating position. The Polestar 2 has several different option packages available, so the customer has more customization options than most EVs. Along with the usual choice of AWD, the Polestar 2 has "Plus," "Pilot," and "Performance" packs that can be further added to the vehicle. Each pack represents a specific area of upgrades; the Plus adds premium features like heated rear seats, steering wheel and washer fluid wiper nozzles, an energy saving heat pump, and "high-level" interior illumination. The Pilot pack adds driver assistance features and the Performance pack adds a software upgrade for more power, among other improvements.

With the Polestar Connect app, the car senses the driver and unlocks when the door handle is touched. The app also applies the driver's seat and mirror preferences and makes an automatic emergency call in the event of an accident or theft. The Polestar 2 boasts a vegan, "WeaveTech" interior made of moisture-resistant PVC material.

A frameless 11.5-inch center touchscreen powers the cabin's infotainment system, equipped with voice-activated Google apps and over-the-air software updates à la Tesla. With standard safety technology such as 360-degree vision and adaptive cruise control, the Polestar 2 offers an EV experience that is stylish and secure.



ACQUISITION

MSRP	\$48,400
60 Month @ 6% est	\$960
Lease	\$757
Availability	2020-present
U.S. Sales Units	--

RANGE

EV Range	260-270 mi
MPGe	89-107

PERFORMANCE

0-60 mph	4.2-7 sec
Top Speed	100-127 mph

BATTERY

Volts	--
Watts	78 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	231-476/243-487
Drive Type	FWD/AWD

CHARGING

Power Rating	11 kW
Charge Time L1	--
Charge Time L2	8 hrs
Charge Time DC	35 mins
Connector	CCS

CAPACITY

Passengers	5
Cargo	15.4-38.7 cu ft

DIMENSIONS

Curb Weight	4,396-4,658 lbs
Length	181.3 in
Width	71.2-73.2 in
Height	58-58.2 in



ACQUISITION

MSRP\$	\$44,995
60 Month@6% est	--
Lease	--
Availability	Summer 2023
U.S. Sales Units	--

RANGE

EV Range	247-320 mi
MPGe	--

PERFORMANCE

0-60 mph	<4 sec
Top Speed	--

BATTERY

Volts	--
Watts	--
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	--
Drive Type	FWD/RWD/AWD

CHARGING

Power Rating	11.5 kW
Charge Time L1	--
Charge Time L2	--
Charge Time DC	--
Connector	CCS

CAPACITY

Passengers	5
Cargo	--

DIMENSIONS

Curb Weight	--
Length	--
Width	--
Height	--

2023

CHEVROLET Blazer EV

This all-new midsize SUV will be available in four trim levels: 1LT, 2LT, RS and SS in front-wheel drive, rear-wheel drive, and all-wheel drive. Driving range stretches from 247 for the LT1 to 320 miles for the RS. The 557 hp SS delivers 290 miles, but only when driven gently. When not, the SS can rocket from 0-60 in under 4 seconds.

A full package of automated safety and driver assist features is available, including forward collision alert, automatic emergency braking, lane keeping assist and lane departure warning. One Pedal Driving allows the driver to slow the vehicle by releasing the accelerator, with the motor putting the car's kinetic energy back into the battery instead of turning it into brake dust.

An 11 inch diagonal screen centered behind the steering wheel provides standard driver information. In the center console, a 17.7 in diagonal multifunction display screen provides navigation, temperature control and stereo controls, moving almost all of the usual compliment of buttons to the touch screen. Retro style round air vents at the left, right and center provide temperature controlled fresh air.

The hands-free Power Liftgate eases loading groceries and supplies into the cargo area.

A Dual Level Charge Cord providing either 120v or 240v home charging is now standard issue. The myChevrolet Mobile App will help plan your routes, find and show availability of public charging stations and manage the vehicle remotely.



Plug-In
Hybrid



2020-2023 VOLVO S60 Recharge

In the coming decade, Volvo wants the concepts “electricity” + “luxury” to be evoked when its name is uttered and is using the Polestar-engineered S60 Recharge luxury sedan to help establish this association. The S60 Recharge’s modern, sporty look marks a definitive split from the boxy Volvos of the past. With a sharp, low-riding body that sits on 20-inch wheels, The S60 Recharge is as easy on the eyes as the BMW 330e or the Mercedes C350e. Volvo’s signature “Thor’s Hammer” LED headlights and gold brake calipers and valve stem covers further accentuate the vehicle’s design. On the inside, you’ll find a roomy cabin with a soft-touch interior and a panoramic sunroof reinforce the S60 Recharge’s premium image. A nine-inch Sensus touchscreen embedded in the dash operates an infotainment system that is 50 percent faster than the previous year’s. Like other PHEV Volvos, the S60 Recharge employs a “twin engine” powertrain consisting of a twin-charged 2.0-liter, four-cylinder gas engine and an 87-hp electric motor. Despite a healthy 455 horsepower and 523 pound-feet of torque, the S60 Recharge does not take off from a standstill as quickly as pure electric EVs manages a 4.3-second 0-60 mph time. An 18.86-kWh battery delivers 40 miles of all-electric range. The S60 Recharge delivers both power and class, proving Volvo has what it takes to compete with veteran luxury automakers.

ACQUISITION

MSRP	\$51,250
60 Month @ 6% est	\$997
Lease	\$767
Availability	2020-present
U.S. Sales Units	--

RANGE

EV/ICE Range	40/490 mi
MPGe/MPG	74/31

PERFORMANCE

0-60 mph	4.3 sec
Top Speed	112 mph

BATTERY

Volts	--
Watts	18.8 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	455/523
Drive Type	AWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	--
Charge Time DC	N/A
Connector	--

CAPACITY

Passengers	5
Cargo	11.6 cu ft

DIMENSIONS

Curb Weight	4,425-4,448 lbs
Length	187.4 in
Width	75.4 in
Height	56.6 in



Plug-In
Hybrid



ACQUISITION

MSRP	\$57,600
60 Month @ 6% est	\$1,091
Lease	\$925
Availability	2017-present
U.S. Sales Units	--

RANGE

EV/ICE Range	21/340 mi
MPGe/MPG	64/26

PERFORMANCE

0-60 mph	5.7 sec
Top Speed	146 mph

BATTERY

Volts	--
Watts	12 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	288/310
Drive Type	RWD/AWD

CHARGING

Power Rating	3.7 kW
Charge Time L1	7 hrs
Charge Time L2	3 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	5
Cargo	14.5 cu ft

DIMENSIONS

Curb Weight	4,314 lbs
Length	195.8 in
Width	73.5 in
Height	58.4 in

2020-2023

BMW 530e

BMW has no shortage of plug-in hybrid vehicles, and the 530e is another gorgeous option. This 5-series boasts the class expected of the line while adding improved fuel economy. Whereas the past 530e capped out at 16 miles of electric range, the 2020-2023 model, by virtue of a larger 12-kWh battery pack, tacks on five extra miles for a total of 21. While the under-the-trunk battery placement shaves the rear cargo space down from 19 cubic feet in the gas model to 14.5 in the 530e, sacrificing four cubes for the ability to make a short commute petroleum-free is a sensible trade-off.

The 530e's 113-horsepower electric motor is joined by a 2.0-liter TwinPower Turbo inline four-cylinder engine and a generator that burns gas to juice up the battery when your plug-in charge runs out. The trio provides a total range of 330 or 360 miles depending on whether the 530e is outfitted with rear-wheel drive or all-wheel drive.

The 530e has three main drive modes. To extend your overall mileage, switch on Eco mode. For maximum performance, engage Sport mode. For a happy medium, select Comfort mode. There are also three sub-modes. Max eDrive runs exclusively on electricity unless you floor it. Battery Control maintains battery-charge via electricity generation. Auto eDrive engages the powertrain in the most efficient manner for given driving conditions.





2017-2023 TESLA Model 3

Tesla's Model 3 is the second best-selling EV in the United States, exceeded only by its sibling Model Y. Cumulative global sales exceed 1.9 million units, about half of Tesla's total output to date. Its attractive sleek lines, long range, outstanding efficiency, high tech infotainment, and competitive price make Tesla's third production vehicle the best value on the market. The Model 3 shares the classic Tesla Model S profile with a shorter nose and a slightly elevated rear roofline. Among its many creative features are its streamlined, flush mounted door handles which lever up from one side when pressed at the other. The Model 3 comes in four trims: Standard, Standard Plus, Performance, and Long Range AWD. The Standard and Standard Plus offer affordability while the Performance and Long Range provide increased power and high capacity battery. The latter three are available on Tesla's website while the least expensive Standard must be ordered by phone.

The Model 3's interior employs a minimalist aesthetic, with a dashboard concealing a single continuous air vent. One large, landscape-oriented center touchscreen is mounted in the center of the dash. Its glass roof stretches from the front windshield to the backseat-headrests, providing the feeling of a huge interior. The Model 3 offers semi-autonomous driving. The car will speed up, slow down, and change lanes under the supervision of the driver. The Model 3 is rated as one of safest cars on the road, boasting a perfect five-star score from NHTSA.

ACQUISITION

MSRP	\$39,990
60 Month @ 6% est	\$605
Lease	\$419
Availability	2017-present
U.S. Sales Units	--

RANGE

EV Range	272-358 mi
MPGe	131-132

PERFORMANCE

0-60 mph	3.1-5.8 sec
Top Speed	162 mph

BATTERY

Volts	375 V
Watts	50-75 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	201/258 - 450/471
Drive Type	RWD/AWD

CHARGING

Power Rating	7.6-11.5 kW
Charge Time L1	13-23 hrs
Charge Time L2	4.5-8 hrs
Charge Time DC	15-30 min
Connector	UMC

CAPACITY

Passengers	5
Cargo	23 cu ft

DIMENSIONS

Curb Weight	3,862-4,048 lbs
Length	184.8 in
Width	72.8 in
Height	56.8 in



Battery
Electric



ACQUISITION

MSRP\$	\$48,700
60 Month@6% est	\$973
Lease	\$744
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	206-310 mi
MPGe	79-117

PERFORMANCE

0-60 mph	3.4-7.2 sec
Top Speed	115-161 mph

BATTERY

Volts	697 V
Watts	77.4 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	225/258 - 576/545
Drive Type	RWD/AWD

CHARGING

Power Rating	10.9 kW
Charge Time L1	68 hrs
Charge Time L2	7:10 hrs
Charge Time DC	18 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	24.4-50.2 cu ft

DIMENSIONS

Curb Weight	4,255-4,795 lbs
Length	184.3-184.8 in
Width	74-74.4 in
Height	60.8 in

2022-2023

KIA
EV6

Kia's new EV6 represents a new and style forward take on what an EV can be, just like its stablemate, the Ioniq 5. Both share the same 800v Electric Global Modular Platform, or E-GMP, which allows them to share drivetrain and battery components, yet look and feel completely different. This synergy has long been something Kia and Hyundai have been good at and with the EV6, Kia takes it to another level. Side by side, they do not appear to be related. The EV6 evokes a stylish, flowing design language, appearing as if it's moving while stopped in place, accentuated with a wedge-like profile and distinctive LED head and taillights. The interior features a distinctive control panel that switches between infotainment and climate controls with the touch of a button, reducing button clutter but allowing for sufficient physical controls.

Kia also took a new approach to the trimline nomenclature. Instead of their normal "EX, SX" trim levels, Kia names them "Light, Wind" to convey a sense of grace. Like the Ioniq 5, the EV6 also offers the availability of AWD, and if optioned, they include heat pumps, helpful for fuel efficiency in cold weather environments. With a range of over 300 miles and impressive fast charging enabled by the E-GMP, the EV6 makes an impressive entry in Kia's EV lineup.



Battery
Electric



2022-2023 SUBARU Solterra

Designed in partnership with Toyota and essentially a clone of the bZ4X, the Subaru Solterra is Subaru's first EV. The Solterra, built on what they call the "e-Subaru Global Platform" is their vision for what an electric Subaru should be. Following the same design philosophy as the Toyota, the Solterra was designed to appeal to the "typical" Subaru buyer rather than forge an entirely new path like so many other new EVs.

The drive train provides standard Symmetrical AWD and electric X-Mode, which allow the StarDrive electric motors to provide seamless torque distribution for offroading or low grip situations. With 8.3 inches of ground clearance and a "Grip Control" feature, this Subaru doesn't give up any of the off-roading legacy that the rest of the brand's vehicles offer.

Subaru's on-road active safety features include "EyeSight Driver Assist Technologies", which monitor traffic movement, optimize cruise control, and alert you when you're straying outside your lane.

The Solterra features a 12.3-inch touchscreen with a 360° camera for parking (and offroading). The interior is remarkably similar to the bZ4X, with a digital dashboard and center multifunction display. New interior and exterior variations make the Solterra stand out from the rest of the Subaru lineup, but otherwise the car is rather conservative for a new EV.

ACQUISITION

MSRP\$	\$44,995
60 Month@6% est	--
Lease	\$654
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	222-228 mi
MPGe	102-104

PERFORMANCE

0-60 mph	--
Top Speed	--

BATTERY

Volts	--
Watts	72.8 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	215/249
Drive Type	AWD

CHARGING

Power Rating	6.6 kW
Charge Time L1	--
Charge Time L2	9.5 hrs
Charge Time DC	--
Connector	CCS

CAPACITY

Passengers	5
Cargo	23.8 cu ft

DIMENSIONS

Curb Weight	4,365-4,505 lbs
Length	184.6 in
Width	73.2 in
Height	65 in



Battery
Electric



ACQUISITION

MSRP	\$45,995
60 Month @ 6% est	\$899
Lease	--
Availability	2020-present
U.S. Sales Units	--

RANGE

EV Range	247-312 mi
MPGe	--

PERFORMANCE

0-60 mph	3.8-5.8 sec
Top Speed	--

BATTERY

Volts	--
Watts	70-91 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	266/317, 480/634
Drive Type	RWD/eAWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	--
Charge Time DC	--
Connector	CCS

CAPACITY

Passengers	5
Cargo	29.7-59.7 cu ft

DIMENSIONS

Curb Weight	4,318-4,838 lbs
Length	185.6-186.7 in
Width	74.1 in
Height	64 in

2020-2023

FORD Mustang Mach E

In 2020, Ford rolled out the Mach-E electric crossover and badged it as a member of the Mustang family to the cheers of supporters and howls of classic car traditionalists.

It's a credible addition to the Mustang legacy, though. Ford offers the Mach-E in RWD or AWD with a maximum 428 horsepower, up to 303 miles of range, and a 3.8 second 0-60 mph time. Drivers and passengers will enjoy a new low floor courtesy of Ford's new electric architecture, which houses a 70-kWh standard range or 91-kWh extended range battery pack providing either 247 or 312 miles of range.

All five trims have two-row seating with ample headroom and legroom and 29 cubic feet of storage in the trunk as well as an additional 4.8 cubic feet of cooler-friendly storage under the hood. The Mach-E comes standard with handleless button- or smartphone-activated doors.

Like all new Fords, the Mach E is equipped with Co-Pilot 360 safety features. The Mach-E's Sync 4 infotainment system is operated via a 15.5-inch center mounted touchscreen or steering wheel controls.

In a nod to its namesake, the Mach E retains the Mustang's signature three-stripe headlights and taillights along with its iconic pony emblem. Apparently unable to let go of the past, Ford simulates the classic Mustang growl by piping one of 30 user-configurable synthetic engine sound profiles through the stereo speakers as the car accelerates.





2023 FISKER Ocean

The Fisker Ocean is a four door crossover SUV from the designer who penned the swoopy curves of the BMW Z8, Aston Martin DB9 and the beautiful but tragic Fisker Karma. This celebrated pedigree gives hopeful Ocean owners both a thrill of excitement and tinge of wariness when anticipating the imminent availability of Henrik Fisker's latest brainstorm.

Ocean has solid specifications and technology. If Austria based vehicle contract manufacturer Magna can deliver on Fisker's inspiration, the small all-electric SUV will be a very credible entry in the industry lineup, competing head to head with the Tesla Model Y, Hyundai Ioniq 5, VW ID.4 and many other crossovers in the now-crowded field.

The Ocean is available in three configurations: Sport, Ultra and Extreme, and a special launch model One which is essentially an Extreme. Pricing runs from \$40-\$70k for battery capacities of 80kWh to 113kWh, yielding range of 250-350 miles.

The interior most resembles the modern Ioniq 5, with the addition of a swiveling 17.1-inch touchscreen control panel accompanying the digital gauge cluster. The push of a button will electrically rotate the screen from portrait to horizontal mode, presumably to display video in full screen landscape orientation while charging or otherwise taking refuge from the world in your mobile living capsule.

DC Fast charging on the 400v system occurs at a very respectable 250kW, delivering 80% charge in under 30 minutes. "SolarSky," a small array of solar panels in the Oceans retractable roof can add a couple of miles of range on a sunny day.

ACQUISITION

MSRP\$	\$37,499
60 Month@6% est	--
Lease	\$379
Availability	February 2023
U.S. Sales Units	--

RANGE

EV Range	250-350 mi
MPGe	--

PERFORMANCE

0-60 mph	3.6-6.9 sec
Top Speed	--

BATTERY

Volts	--
Watts	--
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	550/--
Drive Type	FWD/AWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	--
Charge Time DC	--
Connector	--

CAPACITY

Passengers	5
Cargo	--

DIMENSIONS

Curb Weight	--
Length	188 in
Width	78.5 in
Height	64.2 in





ACQUISITION

MSRP\$	\$41,450
60 Month@6% est	\$833
Lease	\$834
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	220-303 mi
MPGe	101-114

PERFORMANCE

0-60 mph	4.5 sec
Top Speed	115 mph

BATTERY

Volts	522.7-697 V
Watts	58-77.4 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	168-320/258-446
Drive Type	RWD/AWD

CHARGING

Power Rating	10.9 kW
Charge Time L1	40 hrs
Charge Time L2	6-7 hrs
Charge Time DC	18-25 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	27.2-59.3 cu ft

DIMENSIONS

Curb Weight	3,968-4,663 lbs
Length	182.5 in
Width	74.4 in
Height	63 in

2022-2023 HYUNDAI IONIQ 5

The Hyundai Ioniq 5 is a popular and widely admired EV. With a “retrofuturistic” retro meets digital modern design, it gets a lot of positive attention on the road. Hyundai Motor Group companies designed an all new 800v architecture and modular platform, called the Electric Global Modular Platform, or E-GMP, that has allowed them to create the Ioniq 5, Kia EV6, and Genesis GV60. It also provides a competitive platform for future electric vehicles. The architecture allows for very fast DC charging speeds. Hyundai claims it is capable of 350 kW charging speeds, although 220 kW is typical real-world performance, close to the industry-leading 250kW real world performance this editor has routinely seen in a Tesla Model S. Under ideal conditions, rarely seen, filling from a 350kW charger enables the E-GMP cars to charge from ten to eighty percent in 18 minutes. Thirty minutes is more common, and quite reasonable even when on long trips requiring two DC fast charge stops. Assuming you’re starting the day with 300 miles of range, that gives you a real-world reach of 650 miles, enough to exhaust most drivers, even with two rest breaks.

The Ioniq 5 interior has modern styling and practical features. The new platform allows for a completely flat floor, and a wheelbase even longer than the three-row Palisade. With an industry-first “Relaxation Comfort Seat” that fully reclines and includes a leg rest for drivers to relax while they are charging, Hyundai has created an electric vehicle capable of handling any commute and which can easily accommodate long distance cross country driving.





2022-2023 TOYOTA bZ4X

Toyota's clunky bZ4X nomenclature stands for "beyond Zero" emissions and "crossover." It may be an inelegant name, but the name and the new design are perhaps the most daring things about the car itself. Toyota is typically conservative when it comes to new technology implementation. While the whole vehicle could be considered "new technology," the specs of the bZ4X are relatively pedestrian. What Toyota decided to prioritize in the bZ4X is what stands out.

There are two versions of powertrains available in the US - single motor, front-wheel drive (FWD) and dual motor, all-wheel drive (AWD). Each has a different battery pack: 71.4 kWh for the FWD or 72.8 kWh for the AWD. Interestingly, the two packs are provided by different suppliers: the 71.4 kWh battery by Panasonic, the 72.8 kWh by CATL. Counterintuitively, the 71.4 kWh FWD battery can charge at up to 150 kW, while the 72.8 kWh AWD charges at up to 100 kW. It's a significant difference on long road trips which will require multiple fast charge stops. The onboard Level 2 charger only supplies 6.6 kW, a charging speed standard first met over 13 years ago. Range is average, at 242 to 252 miles.

The bZ4X introduction was marred by an early recall and production halt related to "the wheels coming off" a condition whose source was not publicly revealed, but from the somewhat lengthy delay in identifying a fix, it appeared to be something more serious than the torque value of the wheel lug nuts.

ACQUISITION

MSRP\$	\$42,000
60 Month@6% est	--
Lease	\$673
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	242-252 mi
MPGe	102-119

PERFORMANCE

0-60 mph	6.4 sec
Top Speed	--

BATTERY

Volts	355 V
Watts	71.4 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	201/196 - 214/248
Drive Type	FWD/AWD

CHARGING

Power Rating	6.6 kW
Charge Time L1	~50 hrs
Charge Time L2	~9.5 hrs
Charge Time DC	~30 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	27.7-56.9 cu ft

DIMENSIONS

Curb Weight	4,266-4,398 lbs
Length	184.6 in
Width	73.2 in
Height	65 in





ACQUISITION

MSRP\$	\$38,995
60 Month@6% est	\$750
Lease	\$469
Availability	2021-present
U.S. Sales Units	-

RANGE

EV Range	209-275
MPGe	99-107

PERFORMANCE

0-60 mph	7.6 sec
Top Speed	99 mph

BATTERY

Volts	-
Watts	62-82 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	201-295/229-329
Drive Type	RWD, AWD

CHARGING

Power Rating	11 kW
Charge Time L1	50 hrs
Charge Time L2	7.5 hrs
Charge Time DC	38 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	30.3-64.2 cu ft

DIMENSIONS

Curb Weight	4884 lbs
Length	180.5 in
Width	72.9 in
Height	64.6 in

2021-2023 VOLKSWAGEN ID.4

Volkswagen's ID.4 is one of several electric vehicle offerings they are marketing worldwide. In the US, the compact crossover ID.4 has already proven to be very popular with the crowd VW was aiming for: an EV alternative to the Toyota RAV4 and Honda CR-V, two of the best selling compact crossovers in the US. With nicely sculpted lines, distinctive front end lighting, and generous cargo capacity for its size, the ID.4 delivers what buyers in this segment are looking for. The ID.4 is one of the most affordable ways to get an EV with AWD. A starting price in the upper 30s helps boost the car's popularity among other more expensive rivals.

A standout feature in the interior is what VW calls "ID. Light," an interactive light bar that reacts to inputs inside and outside the vehicle, sort of making the ID.4 feel "alive." It communicates functions like driver assistance features, infotainment inputs, and voice commands. Located where the windshield meets the dash, it's an innovative and original feature.

VW offers the ID.4 in a variety of trims, with a range spanning 209 to 275 miles. Three years of free Electrify America DC Fast charging included with vehicle purchase make the ID.4 a competent, reasonably priced EV.





2022-2023 NISSAN ARIYA

The Nissan Ariya is a crossover that provides a significant upgrade from the Nissan's original hatch EV, the LEAF. Nissan's new "e-4ORCE" AWD system and a 63 or 87kWh battery make the Ariya capable of 216 or 304 miles of all-electric range. It is available with the choice of front or all wheel drive. With several drivetrain configurations available, 0-60 performance ranges from very mild 7.5 seconds to surprisingly peppy 4.8 seconds.

The Ariya has gone upmarket in several ways, including the availability of the ProPilot 2.0, Nissan's new semi autonomous driving system. The elegant, minimalist interior has evolved, with most of the buttons now accessible through the touch screens.

Two 12.3-inch displays serve as the dash gauge cluster and the center console multifunction display. The infotainment system allows the driver to issue voice commands to a built-in Nissan assistant or Amazon Alexa. In-dash navigation is a standard feature, as are Apple CarPlay and Android Auto. Wireless smartphone charging and head-up display are available as extra cost upgrades.

The Ariya uses a 480v, 130kW CCS coupler for fast charging, signaling the likely retirement in the U.S. of the older, slower CHAdeMO standard used in the Leaf. Despite the welcome upgrade from the older 50kW standard, the Nissan's newest EV still trails rivals Hyundai/Kia and Tesla, which support 220 and 250kW fast charging at similar sticker prices.



ACQUISITION

MSRP\$	\$43,190
60 Month@6% est	\$848
Lease	\$6791
Availability	2022-present
U.S. Sales Units	--

RANGE

EV Range	216-304 mi
MPGe	98-103

PERFORMANCE

0-60 mph	4.8 - 7.5 sec
Top Speed	--

BATTERY

Volts	--
Watts	63-87 kWh
Cooling	liquid

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	214/221 - 389/443
Drive Type	FWD/AWD

CHARGING

Power Rating	7.2 kW
Charge Time L1	--
Charge Time L2	10.5-14 hrs
Charge Time DC	35-40 mins
Connector	CCS

CAPACITY

Passengers	5
Cargo	22.8 cu ft

DIMENSIONS

Curb Weight	4,323-4,608 lbs
Length	182.9 in
Width	74.8 in
Height	65.4 in



ACQUISITION

MSRP\$	--
60 Month@6% est	--
Lease	--
Availability	Spring 2023
U.S. Sales Units	--

RANGE

EV Range	270-361 mi
MPGe	103-140

PERFORMANCE

0-60 mph	--
Top Speed	115 mph

BATTERY

Volts	480-697 V
Watts	53-77.4 kW
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	149/258 - 320/446
Drive Type	RWD/AWD

CHARGING

Power Rating	10.9 kW
Charge Time L1	--
Charge Time L2	5-7 hrs
Charge Time DC	18 min
Connector	CCS

CAPACITY

Passengers	5
Cargo	11.2 cu ft

DIMENSIONS

Curb Weight	3,935-4,616 lbs
Length	191.1 in
Width	74 in
Height	58.9 in

2023 HYUNDAI IONIQ 6

The Hyundai Ioniq 6 is essentially a slightly longer, more rounded version of the Ioniq 5, except those aerodynamic curves make it a more stylish, efficient sedan that competes more directly with the Tesla Model 3 or Y and Polestar 2. The specifications are as impressive as its driving dynamics. On the top trim models, the Ioniq 6 can achieve range up to 361 miles from the 77.4-kWh battery pack via an AWD drivetrain providing a combined 320 hp/239 kW, scooting the sleek sedan from 0-60 in just 5.1 seconds.

The entry level model SE Standard Range, at \$41,600, is actually slightly less expensive than the hot hatch Ioniq 5. Its 53.0-kWh battery will supply 240 miles of range from its 149 hp RWD powertrain.

The dashboard is instrumented with two 12.3-inch displays: the driver's digital gauge cluster and a center mounted infotainment screen which contains competent route planning software that allows you to easily select charge stops on longer routes.

Steering-wheel paddles allow the driver to select different modes of regenerative braking on the fly, allowing you to get maximum range on those long trips, or while commuting in town.

The car can make use of up to 250kW on ultra-fast 800V DC chargers, charging the battery from 10% to 80% as quickly as 18 mins under ideal circumstances.

Hyundai provides one of the best warranties in the business: five years or 60,000 miles and a powertrain warranty, including battery, of 10 yrs or 100k miles.





2019-2023

HYUNDAI KONA Electric

The Hyundai Kona Electric is a small crossover similar to its sibling Kia Niro but without the PHEV option. With 258-mile all-electric range, it doesn't need one.

The Kona gets a significant refresh for 2023, with a new grille and headlights.

The Kona sports a trendy mini-SUV exterior in contrast to the Bolt's pod-like body. The Kona Electric's interior is clean and attractive. Its cabin seats five, although somewhat tightly in the back row. Depending on the trim, you'll get a 7-, 8-, or 10.3-inch easy-to-use touchscreen infotainment system. Apple CarPlay, Android Auto, and Bluetooth come standard, but if you want dedicated navigation, you'll have to upgrade to the Ultimate top trim. The Kona offers all the latest safety technology, including a rear camera, auto e-braking, lane-keeping assist, auto high-beams, adaptive cruise control, and a head-up display.

The Kona has regen paddles hidden behind the steering wheel which give the driver outstanding control over slowing down without touching the brake pedal, which will help the Kona's brake pads last a very long time if used properly, perhaps for the life of the car.

While the Kona Electric may not be the fanciest EV on the market, its inexpensive price, good range and solid standard features make it a good buy for prospective EV owners.

ACQUISITION

MSRP	\$33,550
60 Month @ 6% est	--
Lease	\$512
Availability	2019-present
U.S. Sales Units	--

RANGE

EV Range	~258 mi
MPGe	120

PERFORMANCE

0-60 mph	--
Top Speed	--

BATTERY

Volts	356 V
Watts	64 kWh
Cooling	

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	201/291
Drive Type	FWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	9:15 hrs
Charge Time DC	47 mins
Connector	CCS

CAPACITY

Passengers	5
Cargo	45.8 cu ft

DIMENSIONS

Curb Weight	3,715-3,836 lbs
Length	165.6 in
Width	70.9 in
Height	61.2 in



Battery
Electric



ACQUISITION

MSRP	\$26,500
60 Month @ 6% est	--
Lease	\$218
Availability	2016-present
U.S. Sales Units	--

RANGE

EV Range	259 mi
MPGe	120

PERFORMANCE

0-60 mph	6.5 sec
Top Speed	93 mph

BATTERY

Volts	--
Watts	65 kW
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	200/266
Drive Type	FWD

CHARGING

Power Rating	11.5 kW
Charge Time L1	~64.75 hrs
Charge Time L2	~7 hrs
Charge Time DC	78 min
Connector	55kW CCS

CAPACITY

Passengers	5
Cargo	16.6-57 cu ft

DIMENSIONS

Curb Weight	3,589-3,624 lbs
Length	163.2 in
Width	69.5 in
Height	63.4 in

2016-2023

CHEVROLET Bolt

When General Motors CEO Mary Barra unveiled the Bolt prototype in early 2015 at the North American International Auto Show in Detroit, it signaled the beginning of the mass market electric automobile era. The Bolt was the first affordable, mass-produced, long-range electric car, beating Tesla's Model 3 to market. The Bolt continues to be a popular, capable, long-distance BEV despite ceding its first mover advantage to the Model 3, which outsold it by a 6:1 ratio.

Bolt designers were given a clean slate to create the vehicle. Chevrolet used data and survey feedback collected from drivers who had collectively accumulated more than 1.3 billion miles of EV experience on the now-discontinued Chevy Volt to inform the design of its first all-electric vehicle. The Bolt is a compact crossover with upright seating for five adults and much more cargo room than the current selection of short-range electric hatchbacks. Its prior 238-mile range was expanded in 2020 to accommodate 259 pollution-free miles.

The Bolt accepts 55kW DC Fast Charging, making trips out of town possible, if not as fast and convenient as when using a 150-350kW fast charger. Even so, the Bolt's decent range and very inexpensive \$26,500 base price make it an attractive value if you're in the market for a small hatchback EV. Sadly, GM announced that the Bolt will be discontinued at the end of 2023 in favor of more profitable upmarket cars and trucks.



Plug-In
Hybrid



2017-2023

MINI COOPER S E Countryman ALL 4

In 2017, the MINI began production of the Cooper S E Countryman All4 with electric range of just 12 miles. The 2020 model nudged this up to 17 and tacked on a couple more mpgs of efficiency. The total range of the vehicle including gasoline is 300 miles, facilitated by its 134-horsepower, 1.5-liter inline-three engine that drives the front wheels. The 87 hp electric motor powers the back wheels, enabling all-wheel drive.

The S E Countryman's AWD is "intelligent," adjusting power between the front and rear wheels for added grounding, responsiveness, and agility. A Dynamic Stability Control unit facilitates this intelligence, analyzing road conditions and the driver's accelerator input to provide the ideal blend of traction for maximum stability. Under normal operation, only one of the motors supplies power to a single set of wheels. An efficient all-electric mode, driveable to 77 mph, achieves 73 MPGe. Combined, however, the two motors produce 221 horsepower and 284 pound-feet of torque for a 0-60 mph time of 6.7 seconds.

The S E Countryman has MINI's signature two-tone, flat-roofed exterior. On the inside is a standard infotainment system with a 6.5-inch color screen in the center dash. The display shows battery life and the hybrid drive mode. An optional technology package includes satellite navigation and a high-resolution 8.8-inch touchscreen.

For those with short commutes, this Mini PHEV is an economical option for an all-wheel drive plug-in.

ACQUISITION

MSRP	\$41,500
60 Month @ 6% est	--
Lease	--
Availability	2017-present
U.S. Sales Units	--

RANGE

EV/ICE Range	17/283 mi
MPGe/MPG	73/29

PERFORMANCE

0-60 mph	6.5 sec
Top Speed	122 mph

BATTERY

Volts	295.2 V
Watts	10 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	221/162
Drive Type	AWD

CHARGING

Power Rating	3.7 kW
Charge Time L1	--
Charge Time L2	2.5 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	5
Cargo	17.2-47.4 cu ft

DIMENSIONS

Curb Weight	3,986 lbs
Length	169.7 in
Width	71.7 in
Height	61.4 in





ACQUISITION

MSRP\$	\$34,225
60 Month@6% est	\$573
Lease	\$953
Availability	2020-present
U.S. Sales Units	--

RANGE

EV Range	114 mi
MPGe	110

PERFORMANCE

0-60 mph	6.9 sec
Top Speed	--

BATTERY

Volts	--
Watts	32.6 kWh
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	181/199
Drive Type	FWD

CHARGING

Power Rating	--
Charge Time L1	--
Charge Time L2	~5 hrs
Charge Time DC	36 mins
Connector	CCS

CAPACITY

Passengers	4
Cargo	34 cu ft

DIMENSIONS

Curb Weight	3,143 lbs
Length	151.7 in
Width	68 in
Height	56.4 in

2020-2023 MINI COOPER SE

MINI's first all-electric mass production vehicle was released in 2020, ten years after its Mini E prototype was first tested. The hardtop two-door employs its predecessors' compact, flat-roofed styling. Its 32.6-kWh battery pack is among all-electrics' smallest and affords just 114 miles per charge. The good news is that the Cooper SE is affordable at \$34,225. Factor in the \$7,500 federal tax credit and state and local incentives and potential buyers are looking at a sub-\$25,000 EV. The Cooper SE is a reasonably peppy performer, reaching 60 mph in 6.9 seconds, enabled by a 181-horsepower electric motor borrowed from BMW's i3.

The Cooper SE has a four-seat interior upholstered in leatherette along with a standard leather steering wheel. A 6.5-inch touchscreen housed in a round frame lights up during volume and temperature adjustments. App-activated temperature preconditioning, which takes advantage of a heat pump that uses 75 percent less energy than a traditional electric heater, is available.

The base model is surprisingly well equipped, with a standard rear-view camera, rain-sensing wipers, voice navigation, heated front seats, and LED headlights and taillights. If your driving patterns can be served by such short range, the Mini Cooper SE is an affordable option for urban drivers with short commutes.



Plug-In
Hybrid



2020-2023 FORD Escape PHEV

In early 2020, Ford released this plug-in hybrid version of its Escape crossover. For 2023 the Ford Escape PHEV received a complete style make-over, modernizing its appearance with redesigned headlights and grille, while keeping the mechanics the same. Ford also made considerable improvements to the interior including a 13.2-inch touchscreen.

Pre-incentive pricing starts at \$38,500, which is slightly cheaper than its closest competitor, the Mitsubishi Outlander PHEV. The Escape PHEV sports a nimble, athletic body with a honeycomb grille and sits on 18- or 19-inch aluminum wheels depending on the trim. Its 88-kW electric motor powers its all-electric mode. A 14.4-kWh battery pack placed below the floor carries the Escape PHEV approximately 37 miles on a charge. Afterward, a 2.5-liter inline four-cylinder Atkinson-cycle engine activates for plenty of gas-powered range as needed. The Escape PHEV employs a CVT for smooth gear-shifting. Its FWD powertrain supplies a healthy 210 horsepower, 155 pound-feet of torque, and a 3,500-pound towing capacity.

The Escape PHEV's interior is attractively simple with heated cloth front seats and a modest center touchscreen. A 12.3-inch digital cluster adds a modern flourish. The rear seats slide back six inches for increased leg room. Cargo capacity is a generous 34.4 cubic feet and expands to 60.8 cubic feet with the rear seats down. Adaptive cruise control and voice-activated navigation are available for an additional \$695.

ACQUISITION

MSRP	\$38,500
60 Month @ 6% est	\$772
Lease	\$773
Availability	2020-present
U.S. Sales Units	--

RANGE

EV/ICE Range	37/520 mi
MPGe/MPG	105/40

PERFORMANCE

0-60 mph	--
Top Speed	--

BATTERY

Volts	--
Watts	14.4 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	210/155
Drive Type	FWD

CHARGING

Power Rating	3.3 kW
Charge Time L1	10.5 hrs
Charge Time L2	3.5 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	5
Cargo	34.4 cu ft

DIMENSIONS

Curb Weight	3,904 lbs
Length	180.1-181.2 in
Width	74.1 in
Height	66.1 in



Plug-In
Hybrid



ACQUISITION

MSRP	\$42,340
60 Month @ 6% est	--
Lease	\$683
Availability	2020-present
U.S. Sales Units	--

RANGE

EV/ICE Range	42/558 mi
MPGe/MPG	94/38

PERFORMANCE

0-60 mph	5.7 sec
Top Speed	--

BATTERY

Volts	355.2 V
Watts	18.1 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	302/288
Drive Type	AWD

CHARGING

Power Rating	6.6 kW
Charge Time L1	--
Charge Time L2	2.5 hrs
Charge Time DC	NA
Connector	J1772

CAPACITY

Passengers	5
Cargo	33.5-69.8 cu ft

DIMENSIONS

Curb Weight	4,235-4,300 lbs
Length	180.9 in
Width	73 in
Height	67 in

2020-2023 TOYOTA RAV4 Prime

The Toyota RAV4 Prime PHEV is a plug-in version of the hugely popular RAV4. With the Prime, Toyota has not only capitalized on the RAV4's previous success but takes it to new heights. The Rav4 Prime is the most powerful Rav4 yet, with three electric motors—two in the front, one in the back—and a 2.5-liter, four-cylinder Atkinson-cycle gasoline engine. Its “Electronic On-Demand” AWD powertrain supplies 302 horsepower and clocks a zippy 0-60 mph time of 5.7 seconds. The Rav4 Prime's electric range is Toyota's best to date at 42 zero-emission miles. This range holds up in extreme weather thanks to a heat pump that efficiently heats the cabin to conserve electrons for driving. The Rav4 Prime maintains the line's compact SUV body with an added layer of sportiness. Painted 18- or 19-inch alloy wheels, aggressive LED headlights, and piano black accents imbue the exterior with an assertiveness its predecessors lacked. On the inside, a soft-touch interior stitched in red, a leather steering wheel, and an 8- or 9-inch infotainment touchscreen bolster the Rav4 Prime's interior finish. The Rav4 Prime's Toyota Safety Sense (TSS 2.0) package provides collision avoidance, adaptive cruise control, lane-keeping assist, auto high beams, and road-sign assist. Its battery warranty is better than most at ten years or 150,000 miles.

The Rav4 Prime edges out the Outlander and Escape PHEVs in both range and performance and positions Toyota to maintain Rav4's status as a consumer favorite.



Plug-In
Hybrid



2016-2023

CHRYSLER Pacifica Hybrid

Full-size families can drive sustainably with the plug-in Pacifica Hybrid. Available since 2018, Chrysler's flagship vehicle is the only electric minivan on the market. The Pacifica Hybrid is reasonably stylish with a lean, contoured body and a slatted front grille that distinguishes it from its gas-only counterpart. The Pacifica Hybrid can seat seven in comfort and provides an additional 32 cubic feet of cargo space. While its third row seats are stow-and-go, its second row seats are not due to the vehicle's battery, which is mounted beneath the middle seats. The Pacifica Hybrid's 16-kWh pack affords 32-miles of range and 82 MPGe—impressive numbers for any PHEV, let alone a minivan. The Pacifica Hybrid's dual electric FWD motors are paired with a 3.6-liter Pentastar V6 engine tuned to the Atkinson cycle for plug-in purposes. This combination nets the minivan 260 horsepower and 262 pound-feet of torque. Its power is transferred to an electrically variable transmission (EVT) that achieves seamless transition between hybrid and gas. The Pacifica Hybrid's cabin borders on luxury with a soft-touch interior and a pair of second-row TV screens that can be used to watch blu-rays and play games. A compact center touchscreen houses the vehicle's bluetooth-capable infotainment system, which includes GPS navigation, Apple CarPlay, and Android Auto. While its up-front cost is significantly higher than other minivans', the Pacifica Hybrid's tax credit eligibility and fuel efficiency save owners money in the long run.

ACQUISITION

MSRP	\$50,495
60 Month @ 6% est	\$920
Lease	\$631
Availability	2016-present
U.S. Sales Units	--

RANGE

EV/ICE Range	32/--
MPGe/MPG	82/30

PERFORMANCE

0-60 mph	7.3 sec
Top Speed	--

BATTERY

Volts	360 V
Watts	16 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	260/262
Drive Type	FWD

CHARGING

Power Rating	6.6 kW
Charge Time L1	14 hrs
Charge Time L2	2 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	7
Cargo	32-140.5 cu ft

DIMENSIONS

Curb Weight	5,010 lbs
Length	204.3 in
Width	79.6 in
Height	69.9 in



Plug-In
Hybrid



ACQUISITION

MSRP	\$39,845
60 Month @ 6% est	--
Lease	--
Availability	2018-present
U.S. Sales Units	--

RANGE

EV/ICE Range	38/382 mi
MPGe/MPG	64/26

PERFORMANCE

0-60 mph	6.5 sec
Top Speed	--

BATTERY

Volts	350 V
Watts	20 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	131/144
Drive Type	AWD

CHARGING

Power Rating	--
Charge Time L1	16 hrs
Charge Time L2	6.5 hrs
Charge Time DC	38 mins
Connector	J1772, CHAdeMO

CAPACITY

Passengers	7
Cargo	30.8-64.7 cu ft

DIMENSIONS

Curb Weight	4,607 lbs
Length	185.4 in
Width	73.3 in
Height	68.5 in

2014-2023 (EU) 2018-2023 (US)

MITSUBISHI Outlander PHEV

Americans were finally able to enjoy Europe's best-selling PHEV when Outlander plug-in deliveries began in the US in 2018. For 2023, the Outlander's reworked new front fascia and redesigned bumper give a distinct look and greater visual appeal to the five-passenger crossover SUV. Equipped with dual electric motors and a 2.0-liter, four-cylinder gasoline engine, the system's total output is 131 horsepower and 144 pound-feet of torque. The Outlander can operate in All-Electric, Series, or Parallel Hybrid modes. The All-Electric mode drives the car exclusively with the vehicle's 20-kWh lithium-ion battery pack for 38 pollution-free miles. During longer trips, Series mode allows the gas engine to power the Outlander's electric motors and recharge its battery. Parallel Hybrid mode runs predominantly on the gas engine while drawing extra oomph from the electric motors for strenuous acts such as driving uphill. This electric supplement achieves improved fuel efficiency, earning the Outlander an EPA rating of 64 MPGe. Unusual for a plug-in hybrid, the Outlander comes with DC fast charging. Given such short all-electric range, this has limited practical use but might be helpful in some scenarios like deliveries where home base has a DC fast charger.

This attractive SUV has proven itself capable in world markets and has appealed to American consumers looking for a tall, spacious wagon with all-wheel drive and great fuel efficiency. Its 1,500-pound towing capacity is sufficient to haul small off-road vehicles and boats. The Outlander's MSRP is \$20,000 less than comparable options from BMW, Mercedes-Benz, and Volvo, making this one the most affordable PHEV SUV available.





2018-2023

KIA Niro Electric & PHEV

The Kia Niro has been evolving since its 2016 inception. Initially, the Niro was a conventional ICE vehicle. In 2017, Kia introduced a plug-in hybrid version with 26 miles of all-electric range. In 2019, the Niro also became available as an all-electric.

The Niro EV sports the same compact SUV styling as its predecessors with a 64.8-kWh battery pack under its rear seats, which enables 253 miles of emissions-free driving per charge. While its cabin is roomy, its cargo space is nominally less generous than its competitors' at 22.8 cubic feet, but fold down the rear backrests and the storage expands to a more accommodating 53 cubic feet. The Niro EV is a peppy performer with 201 horsepower, 188 pound-feet of torque, and a 7.1-second 0-60 mph time. However, unlike other vehicles in its class, it is limited to FWD. The Niro EV comes in two trims: EX and EX Premium. Both have automatic climate control, Apple CarPlay, Android Auto, and Bluetooth. For the extra five and a half grand, The EX Premium offers LED headlights and taillights, leather upholstery, and an eight- rather than seven-inch infotainment touchscreen, among other perks. Safety features include adaptive cruise control, lane-keeping, and blind-spot monitoring.

The Kia Niro EV is a reassuringly normal-looking car, which will appeal to those not interested in the edgy design of some all-electrics. This, combined with the vehicle's comfort and affordability make this a safe, if uninspiring, choice.

ACQUISITION

MSRP	\$39,550, \$33,840
60 Month @ 6% est	\$764, \$654
Lease	--
Availability	2018-present
U.S. Sales Units	--

RANGE

BEV, EV/ICE	253, 33/510 mi
MPGe/MPG	113, 108/--

PERFORMANCE

0-60 mph	7.1, -- sec
Top Speed	106, -- mph

BATTERY

Volts	358, 360 V
Watts	64.8, 11.1 kWh
Cooling	liquid, air

DRIVETRAIN (ELECTRIC, HYBRID)

HP/Lb-ft	201/188, 180/195
Drive Type	FWD

CHARGING

Power Rating	11 kW
Charge Time L1	--, 8 hrs
Charge Time L2	--, 2:45 hrs
Charge Time DC	45, -- min
Connector	CCS, J1772

CAPACITY

Passengers	5
Cargo	22.8, 19.4 cu ft

DIMENSIONS

Curb Weight	3,803, 3,336 lbs
Length	174 in
Width	71.9, 71.3 in
Height	61.8, 60.8 in





ACQUISITION

MSRP	\$36,845
60 Month @ 6% est	--
Lease	\$518
Availability	2019-present
U.S. Sales Units	--

RANGE

EV/ICE Range	17/463 mi
MPGe/MPG	90/35

PERFORMANCE

0-60 mph	8.3 sec
Top Speed	--

BATTERY

Volts	352 V
Watts	8.8 kWh
Cooling	air

DRIVETRAIN (HYBRID)

HP/Lb-ft	148/149
Drive Type	AWD

CHARGING

Power Rating	--
Charge Time L1	5 hrs
Charge Time L2	2 hrs
Charge Time DC	N/A
Connector	J1772

CAPACITY

Passengers	5
Cargo	15.9-43.1 cu ft

DIMENSIONS

Curb Weight	3,717 lbs
Length	176.5 in
Width	71 in
Height	62.8 in

2019-2023

SUBARU Crosstrek PHEV

Building off the success of its original ICE Crosstrek, Subaru has made a plug-in hybrid version available for those interested in fuel savings and sustainability. In outward appearance, the PHEV Crosstrek is a near carbon copy of its predecessor with a long nose, rounded back, and high ground elevation of 8.7 inches. The latter makes the Crosstrek Plug-in Hybrid the top off-roading EV of its class. To distinguish it from its ICE sibling, Subaru offers a lagoon blue paint job exclusive to the Plug-in Hybrid. This colorway carries over to the leather seats, which are stitched in electric-blue thread.

One sacrifice of the Plug-in Hybrid is the cargo space, which has been reduced to 15.9 cubic feet from the standard Crosstrek's 20.8 cubic feet. The reason for this is that Subaru was forced to raise the trunk's floor height in order to accommodate the electric battery underneath.

Subaru was a bit too little to late to the game with a modest 17-mile PHEV. But Subaru drivers generally love their cars and all of the Crosstrek's signature features, including all-wheel drive, roof rails, and a Starlink infotainment system, are available in the new Crosstrek PHEV. For those who have a short commute or want to run their errands gas-free the Crosstrek Plug-in Hybrid provides a low emissions electric option.





2023

CHEVROLET Equinox EV

The headline news about Chevrolet's Equinox EV is that GM disclosed at its announcement that the battery-electric would be offered starting at \$30k which, although a few thousand dollars more than the retiring Bolt EUV, is in many respects a much more capable car and to most eyes, has more attractive styling.

The Equinox will be offered in LT and RS trim levels, with the primary differences being a base range of 250 miles for the 1LT, with 300 mi range standard on the 2LT, 3LT, and RS. All trim levels will be available with AWD from dual motors producing 290 hp and 0-60 acceleration in 6 seconds.

The Equinox lacks a front trunk (frunk), the area under the bonnet being occupied by the front drive unit and electronics, but still manages to provide 57.2 cu ft in the rear cargo area.

One Pedal Driving turns the electric motor into a generator when releasing the accelerator, allowing the brake pads to last somewhere between 100k - 200k miles depending on your pedal skills. A 17.7-in display screen replaces dashboard button clutter and provides capable navigation, music and climate controls.

Level 2 home charging of up to 11.5 kW, double the speed of last decade's EV generation, can add up to 34 miles of range per hour of charging if your home or office breaker panel can supply sufficient amperage.

The all-electric Equinox is rated to tow up to 1,500 lbs.

ACQUISITION

MSRP	\$30,000
60 Month @ 6% est	--
Lease	--
Availability	Fall 2023
U.S. Sales Units	--

RANGE

EV Range	250-300 mi
MPGe	--

PERFORMANCE

0-60 mph	6 sec
Top Speed	--

BATTERY

Volts	--
Watts	--
Cooling	--

DRIVETRAIN (ELECTRIC)

HP/Lb-ft	290/346
Drive Type	FWD/eAWD

CHARGING

Power Rating	11.5-19.2 kW
Charge Time L1	--
Charge Time L2	--
Charge Time DC	--
Connector	CCS

CAPACITY

Passengers	5
Cargo	57 cu ft

DIMENSIONS

Curb Weight	--
Length	--
Width	--
Height	--





ACQUISITION

MSRP	\$32,350
60 Month @ 6% est	--
Lease	--
Availability	2017-present
U.S. Sales Units	--

RANGE

EV/ICE Range	39-44/550-600 mi
MPGe/MPG	114-127/48-52

PERFORMANCE

0-60 mph	6.6 sec
Top Speed	--

BATTERY

Volts	650 V
Watts	13.6 kWh
Cooling	--

DRIVETRAIN (HYBRID)

HP/Lb-ft	220/--
Drive Type	FWD

CHARGING

Power Rating	--
Charge Time L1	11 hrs
Charge Time L2	4 hrs
Charge Time DC	N/A
Connector	--

CAPACITY

Passengers	5
Cargo	20.3 cu ft

DIMENSIONS

Curb Weight	3,461-3,571 lbs
Length	181.1 in
Width	70.1-70.2 in
Height	55.9-56.3 in

2017-2023

TOYOTA Prius Prime

The Prius Prime received a serious design refresh for 2023. With better styling, new interior equipment, and sufficient range to get most people back and forth to work entirely on electricity, Toyota finally has a serious plug-in hybrid contender on the market.

The new 2023 Prime features flowing aerodynamic lines replacing the previous edition's aggressive angles. The car is longer, wider, and lower than the early Prius for improved interior space, cargo capacity, and sportier handling.

The Prius Prime's powertrain is a hybrid system with an internal combustion engine and a 13.6-kWh battery. Performance is much better than previous Priuses, now achieving a peppy 6.6 second 0-60 vs the previous model's sedate 10. seconds.

The new aerodynamics and higher capacity lithium battery afford the Prius Prime an estimated 39-44 miles of EV range. Prime drivers with access to a 240v charger can juice up from empty to full in about four hours. Plug the supplied charge cord into any 120v outlet and you can refuel in about eleven hours, plenty for most people who eat and sleep.

The cabin features an 11.6-inch infotainment display, heated seats, and automatic climate control as standard equipment. For Prius lovers, this is a Prime opportunity to electrify more driving miles.



Electric Car Guest Drive 2023

Learn from EV Owners Before You Go to a Dealer

BY CHRISTOPHER ALAN



If meeting with your neighbors at a local park to learn about driving electric sounds like a fun, social and productive way to spend a morning or afternoon, attend an Electric Car Guest Drive in your community. The events are professionally organized by Electric Car Insider, and staffed by people who drive electric cars daily, including members of your community and EV

advocates who travel around the country showing off – and letting people drive - their electric cars. Electric Car Guest Drive is sponsored by electric utilities, air quality agencies, cities, states, and other clean-air, energy security and electric vehicle stakeholders. To attend an event in your region, become a presenter, or to sponsor an event, visit www.electriccarguestdrive.com



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Test drive the latest electric cars and learn from EV owners at a no-pressure social event.

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Large scale interactive exhibits for indoor and outdoor events.

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ECI creates electric vehicle educational resources for utilities, AQMDs, automakers and EVSE manufacturers, integrators and installers.