

## EV POWERTRAIN OPTIONS IN U.S.

- ➔ 61 Battery EVs
- ➔ 48 Plug-in Hybrid EVs
- ➔ 2 Fuel Cell EVs

[Learn More About 2023 Q3 EV Sales](#)

## Public Charging Infrastructure

<b>Level 2</b> <b>116,692</b>	<b>DC Fast</b> <b>34,611</b>	<b>Hydrogen</b> <b>59</b> <small>(57 in California)</small>
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Through September 2023

## PROGRESS, BUT WORK TO DO:

- ➔ 13.3 million light-duty vehicles sold in the U.S. in 2022
- ➔ EV Sales: 10.1 percent of light vehicle market in Q3 2023
- ➔ Goal of selling 8 million EVs annually by 2030 with supportive policies in place

## ELECTRIFYING INVESTMENTS

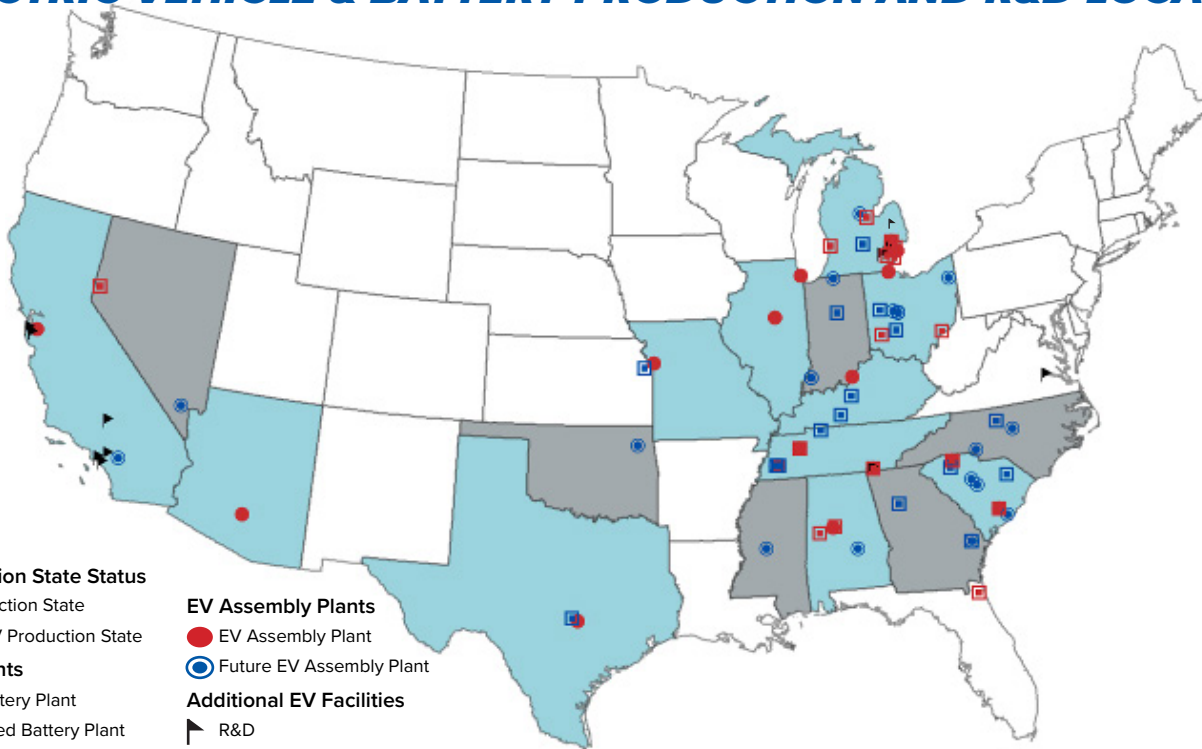
On a global scale, automakers are planning to spend an estimated \$1.2 trillion through 2030 to develop and build new battery-powered vehicles.

# \$125B

From new assembly plants and battery factories to retooling and upgrading existing facilities, the automotive industry is investing in vehicle electrification.

Since 2017, automakers and their battery partners have already committed to investing over \$125 billion specifically in the U.S. to electrify products, and the U.S. continues to gain investment dollars as more of these planned investments are allocated.

## ELECTRIC VEHICLE & BATTERY PRODUCTION AND R&D LOCATIONS



### EV Production State Status

- EV Production State
- Future EV Production State

### Battery Plants

- Open Battery Plant
- Announced Battery Plant

### EV Assembly Plants

- EV Assembly Plant
- Future EV Assembly Plant

### Additional EV Facilities

- ▲ R&D

## RESEARCH & DEVELOPMENT



**\$26  
BILLION**

In 2021, the National Science Foundation estimated the auto industry spent more than \$26B in R&D in the U.S. alone.

## U.S. & CHINA GLOBAL SUBCOMPONENT CAPACITY SHARE

	Current		Under Development	
	U.S.	China	U.S.	China
Cathode Share	0.7%	63.0%	0.0%	84.0%
Anode Share	0.6%	84.0%	0.0%	91.0%
Separator	3.0%	66.0%	0.0%	76.0%
Electrolyte	7.0%	69.0%	2.0%	75.0%

## BATTERY PLANT MANUFACTURING CAPACITY IN THE U.S. INCREASING 649%



99 GWh  
+  
643 GWh  
=  
742 GWh

In 2020, there was about 630 GWh of global battery production capacity, which is expected to grow about 2,300 GWh by 2025.

# ELECTRIC VEHICLE & BATTERY PRODUCTION AND R&D LOCATIONS

STATE	PLANT TYPE	COMPANY	MODEL	CITY	STATUS
Alabama	Battery	Mercedes-Benz U.S. International		Woodstock	Open
		Accumotive		Vance	Open
	Assembly	Hyundai	Genesis GV70	Montgomery	On Sale Now!
		Mercedes-Benz U.S. International	EQE SUV	Vance	On Sale Now!
			EQS SUV	Vance	On Sale Now!
Arizona	Battery	American Battery Factory		Tuscon	Announced
		KORE Power		Phoenix	Announced
	Assembly	Lucid	AIR	Casa Grande	On Sale Now!
California	Battery	Statevolt		Imperial Valley	Announced
	Assembly	Fisker/Karma		Moreno Valley	Coming Soon
		Tesla Motors	MODEL 3	Fremont	On Sale Now!
			MODEL S	Fremont	On Sale Now!
	MODEL X		Fremont	On Sale Now!	
	R&D	BMW Technology Office		Mountain View	Open
		Hyundai America Technical Center, Inc. (California Proving Grounds)		California City	Open
		Hyundai-Kia Technical Center		Irvine	Open
Hyundai America Technical Center, Inc. (Chino)			Chino	Open	
Mazda R&D			Irvine	Open	
Mitsubishi Motors R&D of America, Inc.			Cypress	Open	
Subaru Research & Development, Inc.			Cypress	Open	
Volkswagen: Innovation and Engineering Center California (IECC)		Belmont	Open		
Florida	Battery	SAFT		Jacksonville	Open

STATE	PLANT TYPE	COMPANY	MODEL	CITY	STATUS
Georgia	Battery	SK Innovation		Atlanta	Open
					Announced
	Assembly	Hyundai Motor Group (Hyundai, Kia, Genesis)		Bryan County	Announced
		Kia	EV9	West Point	Coming Soon
Illinois	Assembly	Ford	AVIATOR	Chicago	On Sale Now!
		Rivian	R1S	Normal	On Sale Now!
			R1T	Normal	On Sale Now!
			EDV	Normal	On Sale Now!
Indiana	Battery	Stellantis/Samsung SDI		Kokomo	Announced
		General Motors/ Samsung SDI		New Carlisle	Announced
	Assembly	Electric Last Mile Solutions (ELMS)		Mishawaka	Coming Soon
		Toyota	SUV	Princeton	Coming Soon
Kansas	Battery	Panasonic		De Soto	Announced
Kentucky	Battery	Envision AESC		Bowling Green	Announced
		Ford		Glendale	Two Plants Announced
	Assembly	Ford	CORSAIR	Louisville	On Sale Now!
			ESCAPE	Louisville	On Sale Now!
Michigan	Battery	Ford		Rawsonville	Open
				Marshall	Announced
		General Motors		Brownstown	Open
		General Motors/LG Energy Solution		Lansing	Announced
		LG Energy Solution		Holland	Open
		AKASOL		Hazel Park	Open
		JCI Brookfield		Holland	Open
		Samsung SDI		Auburn Hills	Open
		Xalt Freudenberg		Midland	Open

STATE	PLANT TYPE	COMPANY	MODEL	CITY	STATUS
	Assembly	Ford	F-150	Dearborn	On Sale Now!
		General Motors	Chevrolet Silverado	Detroit - Hamtramck & Orion Township	Coming Soon
			Cadillac CELESTIQ	Warren	Coming Soon
			BOLT EUV	Orion Township	On Sale Now!
			GMC Sierra	Detroit - Hamtramck & Orion Township	Coming Soon
			Hummer EV Edition 1 Pickup	Detroit - Hamtramck	On Sale Now!
			Hummer EV Edition 1 SUV	Detroit - Hamtramck	Coming Soon
			BOLT EV	Orion Township	On Sale Now!
			Stellantis	Grand Cherokee 4xe	Detroit
		R&D	Hyundai America Technical Center, Inc.		Superior Township
Mitsubishi Motors R&D of America, Inc.			Ann Arbor	Open	
Nissan Technical Center North America			Farmington Hills	Open	
Subaru Research & Development Inc.			Van Buren Township	Open	
Mississippi	Assembly	Nissan		Canton	Coming Soon
Missouri	Assembly	Ford	E-Transit	Kansas City	On Sale Now!
Nevada	Battery	Panasonic/Tesla		Sparks	Open
		Tesla Motors		Sparks	Announced
New York	Battery	Imperium3		Endicott	Open/Expanding
North Carolina	Battery	Toyota		Greensboro	Announced
	Assembly	Arrival		Charlotte	Coming Soon
		Vinfast		Chatham County	Coming Soon
Ohio	Battery	American Battery Solutions		Springboro	Open
		General Motors/LG Energy Solution		Warren	Open
		Honda (battery case)		Anna	Announced
		Honda/LG Energy Solution		Jeffersonville	Announced
		Assembly	Honda	New EV	East Liberty
			New EV	Marysville	Announced
			New FCEV	Marysville (PMC)	Coming Soon
			Lordstown Motors	Endurance	Lordstown
		Stellantis	WRANGLER 4xe	Toledo	On Sale Now!

STATE	PLANT TYPE	COMPANY	MODEL	CITY	STATUS	
South Carolina	Battery	BMW (assembly)		Spartanburg	Open	
		BMW (assembly)		Woodruff	Announced	
		Envision AESC		Florence	Announced	
			Volvo		Ridgeville	Open
	Assembly	Arrival			Rock Hill	Coming Soon
		BMW	BMW XM		Spartanburg	On Sale Now!
			X5 xDrive45e		Spartanburg	On Sale Now!
		Volvo	Polestar 3		Ridgeville	Coming Soon
			VOLVO S60		Ridgeville	On Sale Now!
			VOLVO EX90		Ridgeville	Coming Soon
		Mercedes-Benz Vans	eSprinter		North Charleston	Coming Soon
		Scout Motors		Columbia	Announced	
	Tennessee	Battery	Envision AESC		Smyrna	Open
Ford				Stanton	Announced	
General Motors/LG Energy Solution				Spring Hill	Announced	
LG Chem (Cathode Manufacturing)				Clarksville	Announced	
Volkswagen				Chattanooga	Open	
Microvast				Clarksville	Announced	
Assembly		Ford			Stanton	Coming Soon
		General Motors	Cadillac LYRIQ		Spring Hill	On Sale Now!
		Nissan	LEAF		Smyrna	On Sale Now!
		Volkswagen	ID.4		Chattanooga	On Sale Now!
	R&D	Volkswagen		Chattanooga	Open	
Texas	Battery	Tesla Motors		Austin	Announced	
	Assembly	Tesla Motors	Model Y	Austin	On Sale Now!	
			Cybertruck		Austin	On Sale Now!
Virginia	R&D	Mitsubishi Motors R&D of America, Inc.		Arlington	Open	