

# Growth in Electric Vehicle Manufacturing: A Factor in the 2023 United Auto Workers (UAW) Negotiations

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The United Auto Workers (UAW) began a [strike against the “Big Three” automakers](#)—General Motors (GM), Ford, and Stellantis—on September 15, 2023, following unsuccessful negotiations among the parties. UAW’s existing national agreements with each automaker ended on September 14, 2023, at midnight. The 2023 [UAW strike is unprecedented](#) in that the labor union acted against all three automakers at once. [UAW represents approximately 146,000 hourly workers](#) at the Big Three’s U.S. factories. According to the U.S. Department of Labor, the U.S. auto sector [employs 1 million workers](#). The current shift in auto industry production toward electric vehicles (EVs) was among several factors that permeated the dialogue between the Big Three and UAW during the 2023 negotiations.

## Future Growth of EV Manufacturing: Impact on UAW Negotiations

As EV production increases, conventional vehicle production may decrease, with potential future job losses resulting from shutdowns of production lines that manufacture internal combustion engine and transmission components. The number of workers in the auto manufacturing sector could fall as EV production and sales grow, or [higher wage assembly labor might be replaced with lower wage battery-related jobs](#). For example, upon commencement of production in 2022, employees at GM’s Ultium battery joint venture started at \$15.50 an hour, half the [top wage at assembly plants](#).

Given recent growth in EV production, UAW sought to include both current and future EV workers in each of the national agreements negotiated with the Big Three. On October 6, 2023, UAW did not expand work stoppages beyond 25,200 workers already on strike, citing closed-door [progress in the negotiations, in particular with GM agreeing to include battery cell workers](#) under the company’s national agreement. UAW delegates approved an agreement with Ford on October 25, 2023, which included, among other things, reported [commitments from the automaker to expand UAW participation at Ford EV plants](#). Stellantis reached a tentative contract agreement with UAW on October 28, 2023, with the automaker also [committing to reopen a long-idled battery plant](#). Finally, GM reached a tentative agreement with UAW on October 30, 2023. UAW has not ratified these agreements.

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## Federal Incentives for EV Manufacturing

According to 2023 estimates from Kelley Blue Book, total new vehicle sales decreased approximately 1.2 million units, while [battery electric vehicles grew approximately 300,000 units over the same period](#).

In the legislation known as the Inflation Reduction Act of 2022 (IRA; P.L. 117-169), Section 13401 authorized “clean vehicle” credits, which provide tax incentives for consumers to buy EVs. Section 13401 provisions require qualifying vehicles to have [final assembly in North America](#), and qualifying vehicles must not include battery components (after 2023) from foreign entities of concern. GM and Ford have created joint ventures (JVs) with foreign battery suppliers to build batteries in the United States and use American labor.

Direct federal assistance for manufacturing has been available to develop new EV battery facilities. The Department of Energy’s (DOE’s) [Advanced Technology Vehicles Manufacturing \(ATVM\) program](#), which provides financial support to manufacturers and suppliers in retrofitting plants to make more fuel efficient vehicles, has provided loans since 2007. The IRA established the DOE [Domestic Manufacturing Conversion Program](#) with \$2 billion of appropriated funds to provide federal cost-share grants for domestic EV production.

GM’s Ultium JV facilities were constructed with the help of a [\\$2.5 billion loan](#) through the ATVM program in 2022. [On June 22, 2023, DOE conditionally offered a \\$9.2 billion ATVM loan](#) to Ford’s battery JV Blue Oval SK.

## UAW Concerns About EV Manufacturing

UAW was critical of the [lack of attached wage protections for factory workers in federal EV manufacturing programs](#). ATVM loans require that borrowers implement prevailing wage protections for [construction workers building new factories only](#). The Biden Administration announced on August 31, 2023, that the Domestic Manufacturing Conversion Program would include grant criteria giving preference to [“projects that are likely to retain collective bargaining agreements.”](#)

Whether growth of EVs will cause long-term reductions of workers in auto manufacturing or shift labor composition from high wage to low wage jobs is uncertain. Ford CEO Jim Farley reportedly stated, [“It takes 40 per cent less labor to make an electric car, so . . . we have to insource, so that everyone has a role in this growth.”](#) However, some preliminary analyses show that labor contribution to [auto production at a subsystem level might remain the same or even increase](#) with EVs. Lastly, other factors may influence longer-term employment patterns in auto manufacturing. [Lower than anticipated production volumes, higher worker productivity](#), or some combination thereof, might have an effect in reducing overall numbers of auto workers or changing the labor mix between higher and lower wage categories.

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