

New EV Truck and SUV Models Coming Soon

Key Findings

- Rivian Automotive unveiled an electric truck and full size SUV.
- Co-ops could consider the truck for their fleets. However, it is targeted at the luxury "adventure" market and not the commercial sector.
- Announcements from other automakers point to expanded electric lineups over the coming years.

What has changed?

Rivian Automotive unveiled their long awaited electric pickup and full size SUV at the Los Angeles Auto Show in late November. Many co-ops have inquired about the availability of an electric pickup. While the truck is designed for non-commercial purposes, it could find its way into co-op fleets.

General Motors just announced the closing of several plants and the elimination of the Chevy Volt. The Volt will end production in March 2019. GM is also ending production of the Cruze, Impala, and Cadillac XTS. GM cited the changing auto market and a desire to expand their offerings in automatous and electric vehicles. Ford announced earlier in the year the elimination of almost all sedans from their future lineup.



Rivian Automotive Electric Pickup Truck

What is the impact on cooperatives?

The Rivian pickup named the R1T will be available for delivery in the Fall of 2020. Some of the unique features of the truck include a trunk where the engine compartment would be and a pass-through compartment under the bed that spans the width of the truck. According to Rivian, the truck will have:

- 3 battery configurations: 105 kWh, 135 kWh, 180kWh
- 4 electric motors
- 147 kW per wheel
- Range: 230, 300, 400 miles (depending on battery chosen)

- 0-60 in 12.5 seconds for the smaller battery and roughly 8 seconds for the 180kWh battery version
- Off-road approach angle for 34 degrees
- Off-road departure angle 30 degrees
- Payload capacity: approximately 1,700 lbs
- Ground clearance: approximately 14 inches
- MSRP: Starting at \$69,000

The SUV named the R1S has similar off-road and capacity capabilities. Rivian is branding both vehicles as "Adventure VehiclesTM". The R1S will have a base price of \$72,500. Both vehicles are eligible for applicable tax credits.

The vehicles are not designed or intended for commercial users. They are geared at upper income drivers that desire an off-road car... even if they never use that capability. A more utilitarian ruggedized interior could make the truck useful for commercial purposes. It is unknown if there are plans for that.

Rivian was founded in 209 as Mainstream Motors. In 2011 the company changed its name for a third time to Rivian and formally launched their first two products at the LA Auto Show. Rivian plans on manufacturing their vehicles at the former Mitsubishi assembly plant in Normal, Illinois. According to Rivian, they have raised \$450 million in financing. Two of their chief investors are Abdul Latif Jameel (a Saudi Arabian manufacturing company) and Sumitomo Corporation of Americas (a diversified Japanese corporation). Rivian has also received over \$50 million in Illinois state and local incentives¹.

Tesla has dropped multiple hints about a possible Tesla truck. The most concrete hint being a December 2017 tweet from founder Elon Musk that a truck would be made after the Model Y is in production. That would put a Tesla truck sometime after 2020. Other manufactures such as Workhorse (https://work-horse.com/pickup/), Atlis (http://www.atlismotorvehicles.com/xt-truck/) and Bollinger (https://www.bol-lingermotors.com/) are taking reservations for hybrid or electric trucks. Workhorse is planning a hybrid pickup and they are also working on an automated drone deliver platform for packages. Atlis plans to produce 100 units in 2020. Bollinger plans production in 2019 with all cars being hand built. There are certainly other startups attempting to gain traction in the market. What makes Rivian interesting is that they chose a high profile venue, the LA Auto Show, to unveil their truck and their leadership team is comprised of experienced executives from a variety of global automotive companies. None of these companies have a proven track record and the road to success is very long.

Ford, maker of the world's most popular truck, has been relatively quiet about an electric F-150. Bill Ford was quoted in October 2018 as saying "[The 2020 Ford F-150 Hybrid is] going to be a truck that takes you farther without sacrificing power and a truck that helps you do more when you get there, with electricity for everything from your tools to your camping gear. And then we'll keep innovating. When it comes to building the best trucks in the world, we never rest. Whether they're gas, diesel, hybrid — or when the time comes, fully electric — we will ensure they power the world in a sustainable way and remain Built Ford Tough.²"



¹ <u>https://www.chicagotribune.com/business/ct-biz-rivian-funding-normal-auto-plant-20180524-story.html</u>

² https://insideevs.com/bill-ford-hints-pure-electric-ford-f-150/

What do cooperatives need to know or do about it?

An electric pickup truck and large SUV have been desired by many co-ops. Both of Rivian's products are aimed at the luxury off road market. Rivian's offerings as well as statements from other manufacturers do indicate that they are looking at expanding electric vehicles to other model types either underrepresented by EVs or with no EV choices.

The announcements from General Motors and Ford serve as an indication of three trends. The first is a move away from small and mid-size size. Second is the trend to new electric models. The final trend is more research into autonomous vehicles. Because of the amount of sensors on an autonomous vehicle, most people expect those vehicles to be electric.

Co-ops should consider how or if the R1T or R1S could fit into a co-op fleet. While these are not direct competitors to today's work truck lineup, they are an indication of the features and capabilities that an electric pickup could bring to the market.

Any co-op purchasing a vehicle from a startup automotive manufacturer should assume that the company will have limited ability to service and support the vehicle. There is a higher than average risk of the company going out of business.

Creating a new car is not easy. Creating a new car company is really, really not easy. Whether companies such as Rivian are able to produce, distribute and service products remains to be seen. What is of interest will be the response of the passenger and commercial markets to these offerings and the response from the legacy car manufacturers.

Additional Resources

- <u>Rivian Automotive</u>
- Electric Trucking Approaches Reality
- Gearing Up for Electric Vehicles

Contact for Questions

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