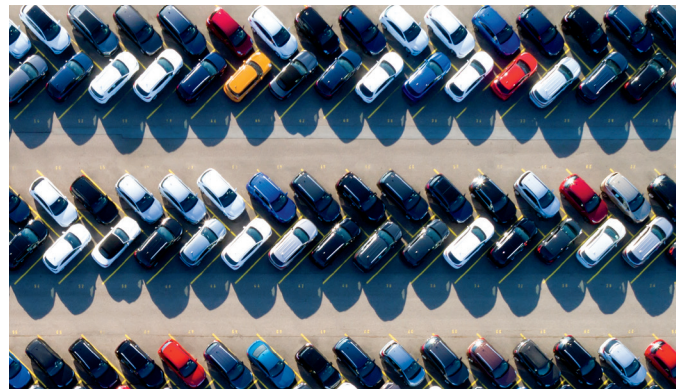


# THE CAR, THE BATTERY AND THE ECONOMY

In 2018, the "Make America Great Again" year, Americans bought 19 million cars. Last year, manufacturing slowed down in North America and approximately 17 million cars were sold. In 2020, 16.5 million cars are expected to be sold.



**Economic Clouds** – Are they appearing due to cars? Cars are lasting longer. Millennials and younger generations are not as attached to cars as the older generations.

There's also talk about electric cars and the future. Californians love their Teslas. I've been reading about the lithium battery that goes into these cars. Ouch! Alert! 45% of the cost of the car is in the battery.

**Production Costs** – Electric cars cost more in terms of money and energy to manufacture. If a battery dies after 8-10 years, do you get a new battery or a new car?

**Driving Range** – If you can only go about 200-350 miles at the most, does this limit the car to city, suburban driving?

**Charging Stations** – There are about 20,000 in the U.S. compared to 168,000 gas stations. And it takes 30 minutes or more to charge your car.

**Green Thoughts** – The materials in the battery, lithium, cobalt and nickel, require foreign sourcing. Fluctuating prices and environmental and labor policies to make these minerals are concerning.

Recycling these batteries costs 5 times more than extracting virgin lithium from the earth. Are most of these batteries going to the dump?

**Energy to Produce** – If the batteries are produced in a factory powered by fossil fuel, the production can produce up to 74% more carbon dioxide than a conventional car.

**On the Plus Side** – Tesla, VW, U.S. Department of Energy, China and just about every car manufacturer in the world are working fast and furiously to address these issues. Elon Musk, aka "the survivor," and his Tesla have been filing patents for a new lithium-ion super battery that can last a million miles. The next few years should be interesting.

Tesla owners sure love their cars. With a smooth, quiet ride, lack of oil changes and autopilot, they can't imagine driving anything else.

Anyway, Uline's corporate headquarters are in Wisconsin. I said goodbye to my 2008 Land Rover with over 100,000 miles on it. I bought another "regular" car.



*Liz Uihlein*

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We remain a family-run business built on a few core principles: the best products, selection and service you'll find anywhere. Today, we're a proud "family" of over 6,600 employees at 11 locations across North America to serve you.



*The Uihlein Family*

