

Lightyear is set for 2019 debut of its solar-powered car

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(Tech Xplore)—A company called Lightyear aims to make a big difference in pushing electric cars into greener pastures.

This is how they state their mission.

"Currently, all cars of the world combined drive one light year, every year... Our goal is to accelerate the adoption of [electric cars](#) so that by 2030, one light year will have been driven electric...From a fossil fueled powered light year to a solar powered light year."

They have worked on a four-wheel drive solar-powered car and they said it can drive for months—in sunny conditions—without charging.

When not under sunny skies? "The battery stores energy to ensure you can drive at night."

In a FAQ section, the team said, in response to "Can you drive when it is cloudy, or at night, as well?" The answer was "With the internal battery the Lightyear One will drive up to 800 km without any sunlight."

If that were your driving future, then you would not have so much anxiety about charging points. Many love the idea of an electric car, BUT. As the team stated, "at present, electric cars have a scaling problem. Only 3% of the world's population has access to a public charging spot within 15 km and is therefore dependent on third parties to build the infrastructure for them to be able to use an electric [car](#)."

Patrick Caughill in *Futurism*: "The vehicle promised will be powered by energy stored in a battery that can be charged both by a standard (3.7 kW) outlet, as well as [solar panels](#) in the vehicle's body. In a sunny environment like Hawaii, the car could theoretically run for months between charges. Even without the sun, the car could [run](#) for a significant range."

According to the company website, if you plug the Lightyear One in for 1 hour, you can charge with: Household power socket (3.7 kW): 40 km; Standard EV charging point (10 kW): 110 km; and EV fast charger (75 kW): 850 [km](#).

Lex Hoefsloot, CEO of Lightyear, presented a promotional video about the car on June 29.

Long and short of it is that Lightyear is taking reservations with plans to bring their first cars to the market in 2019.

Range is one of the key questions people may have for the car. They said: [Depending](#) on your battery configuration you have between 400—800 km of range buffered in the battery

Stated elsewhere, Lightyear One has a 500-mile driving range and could theoretically cover 10,000 km a year under Dutch sunshine, said *pv magazine's* Ian Clover.

Their video announced their mission. And they are taking reservations. Price starts at €119.000 excluding taxes.

Clover wrote on June 30 that "After spending years developing the race-winning vehicle, the students turned their attention to making the prototype a commercially viable family [saloon](#) option, and now has five orders for its €119,000 car."

The first 10 cars are expected in 2019.

The next 100 cars expected in [2020](#). The dates are stated in their FAQ section.

This is a Dutch company. The CEO said they have been building prototypes for years. They built the first of a series of solar family cars in 2012. The founders are Eindhoven alumni.

Vlad Mitrache in *autoevolution* said, "The five people behind the Lightyear startup are all graduates of the Technical University of

Eindhoven, but more than that, they were all involved in the Solar Team Eindhoven. This project resulted in a vehicle called Stella Lux which was an [energy](#) positive solar car. That meant it could produce more energy than it needed to travel thanks solely to the solar panels on the roof."

"Generally," said *Electrek*, "it's almost impossible to add any meaningful power to an electric vehicle using solar since there's not enough surface to install solar cells in order to supply the power needed to move vehicles that often weigh over 3,000 lbs. To achieve positive energy output, Solar Team Eindhoven designed the Stella Lux to be extremely aerodynamic and used lightweight materials such as carbon fiber and [aluminum](#)."

Electrek's Fred Lambert also added, however, that "the vehicle was built for a student competition and making a street-legal vehicle that can be sold to the public is another thing."

Many comments welcomed the group's determination for a solar electric car as exciting but looked forward to more details.

New Atlas said [the](#) company was planning a reveal in 2018.

Brett Williams at *Mashable* remarked that "the limited run won't cause industry giants like Tesla to lose any sleep just yet, and Lightyear still has to prove it can transfer its experimental tech into a fully [realized](#) consumer experience. If the company succeeds, however, we could be looking at a new automotive future, directly powered by the sun."

More information: www.lightyear.one/

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