Case study Fastned

Fastned, founded in 2012, is now the market leader of highway fast charging in The Netherlands. With over 200 stations on highway locations, they attempt to relief electric car owners from range anxiety. Fully charging your car at one of these stations takes not much longer than filling it up with fuel, thanks to the advanced fast charging technologies used. Fastned has accomplished a fully covering network in The Netherlands and is now expanding toward the rest of Europe. By constructing a large-scale network in a very short period of time, they achieved high coverage, thereby surpassing the chicken-egg problem for charging infrastructure and offering The Netherlands a basis for developing electric transport. Fastned's charging stations only make use of sustainable energy sources, making charging your car here more sustainable than using the grid. Thanks to Fastned, owning and driving an EV will become a more relaxing, stress-free experience. Today we'll be talking to founder Bart Lubbers about his experiences and vision.

Well, the vision is to give freedom to the electric driver and we believe that all cars will be electric, that all cars will have a long range and can charge superfast in the coming years, and you will have this freedom to drive her out if you can charge everywhere along the highway always.

Well, we are in the forefront of the newer technology, so we already have 63 charging stations which are not just charging poles but whole stations like a small gas station but instead of pumps you have charging equipment and these are high power chargers, so the new chargers they can go up to 350 kilowatts.

Well the size of market is very small at the moment, it's less than a percent, I think, of all cars on the road but we expect that it will grow in the in the coming decennial 10 - 20 years and then ultimately all gasoline-powered cars will disappear and be replaced by electric cars.

Because, the only reasonable thing is to charge fast, it's nice to charge at home if that's possible or at the office but that's slow and it is just a few kilometers per hour extra but if you fast charge you can fill up for with the new technology 500 kilometres in 20 minutes and I think that's the way we should go.

The strategy is find good locations at high traffic locations, build complete stations with eight or more chargers per station.

Well, the funding is from private investors, I'm one of the private investor but most by now is public funding, so some kind of crowdfunding and we give out certificates of shares and we give out bonds and that's how we raise money and we invest the money in stations, so the main cash out, if you call it like that, are our investments, really investments. We have a small team with young people, so the operational costs are limited and also because all stations are unmanned stations, we have very low operational costs, revenues they come from people who charge at our stations, it's like a gas station.

The technology is not so difficult because the cars they come from the car industry and the chargers taken from the charging industry and then we have to combine them and make a system that people can pay, now they pay by phone but we just introduced auto charge where the charger recognizes the car, so that makes it even easier and then from an institutional point of view, well, the most difficult thing is, I think, to find good locations and get the permit from the government and get rental contracts, these are the most difficult things. Organisation was of course a challenge because you have to build a company, we started six years ago with two people, Michiel and I, now we have 30 people so it grows so you have to organise it and but luckily we are very young enthusiastic smart people, so they can organise themselves.

Well, first you download the app of Fastned, you give in your name and your bank account number, so then you're registered and then the first time you charge, the charger will recognise your car and all the other times that you come that we know you because you have been registered and you only have to plug in the plug in your car and that's it and it will start charging automatically. There are three standards actually four, you have AC which comes from the plug in the wall and there's the charger in the car and then you have DC and that charger is not in the car, it's on the pavement and now we still support AC but we see it disappearing and so we mostly support DC, the Japanese standards CHAdeMO and the European American Standard, CCS and we support both and then the fourth standard is of course Tesla, they have their own standard, but they made this handy, how do you call it, thing in between so that with the Tesla you can also charge at our stations.

It's all the same, you buy gasoline or you buy electricity, you have to pay but because this is a new industry, we are on the forefront of the payment systems and we are already paying by mobile phone or other ways. It's just more modern but if if we would wish then people could buy with a credit card or with cash or whatever could be possible.

No, I think, there's an Israeli company who tried it, didn't work and there's also a logistic problem because these cars arrive at your swapping station, you take out the empty batteries and then at the end of the day, you have a pile of empty batteries and you have to fill them and you cannot slow charge them because this takes too long, so you have to fast charge them, so if you start fast charging, why don't you fast charge when the batteries are in the car, it would be more logical, I think that's one thing, the other thing is that the most expensive thing of the electric car, the most valuable thing, is the battery and I think OEMS wouldn't want allow other companies to mess around with their guarantees.