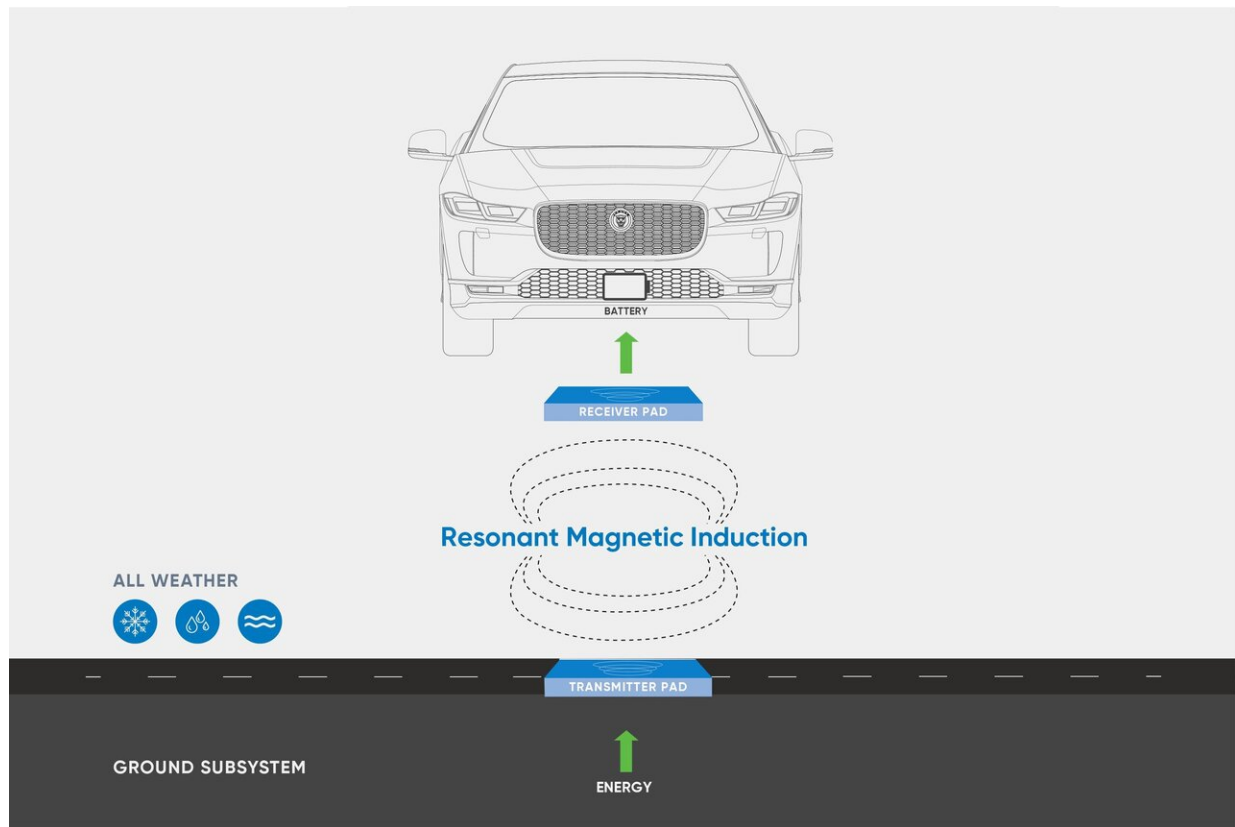


Norway to build wireless charging network for Jaguar taxis

June 26 2020, by Peter Grad



Credit: Jaguar

In its bid to become auto-emissions free by 2024, Oslo is poised to become the first city in the world to boast a network of high-powered wireless automotive-battery charging bays.

Under a project called EletecriCity, the Norwegian capital city teamed up with British auto giant Jaguar Land Rover to set up charging stations for the city's taxi fleet that will allow them to charge wirelessly and effortlessly and without the need to go off route. Taxis will be able to charge batteries throughout the day at pick-up and drop-off stations while they wait for their next fares.

Charging pads embedded in the road will provide six to eight minutes of drive time per each charge up to 50kW. No physical connections are needed. Statistics on charging amounts and times will be collected to help determine optimal recharging schedules.

Also participating in the joint project are Momentum Dynamics, a U.S. inductive charging [technology company](#); Fortum Recharge, a Finnish clean energy enterprise; and Cabonline, the largest taxi-fleet service in the Nordic countries.

Norway is a major world leader in the green movement. The government has set a target date of 2025 to end sales of all new gasoline-powered vehicles while the country switches to zero-emission automobiles. Last year, nearly half of new cars sold in Norway were electric. The top-selling car was the Tesla Model 3, an electric auto boasting a 322-mile range on its long-range models.

Fittingly, the Tesla was named in honor of inventor, [electrical engineer](#), [mechanical engineer](#) and futurist Nikola Tesla, whose exploration of the dynamics of alternating currents, electromagnetism and electricity more than 120 years ago laid the groundwork for today's wireless charging of everything from smartphones to automobiles.

Jaguar Land Rover will provide 25 I-PACE models to the Cabonline taxi fleet, which will be retrofitted with induction charge receivers manufactured by Momentum Dynamic. Jaguar's I-PACE is the first

premium all-electric performance SUV. It was named 2019 World Car of the Year by a jury of 82 international automotive journalists from 24 countries.

Announcing the project on its web site Thursday, Jaguar stated: "The Oslo ElectriCity partnership is part of Jaguar Land Rover's ambition to make societies healthier and safer, whilst reducing emissions. Delivered through relentless innovation to adapt its products and services to the rapidly changing world, the company's focus is on achieving Destination Zero, a future of zero emissions, zero accidents and zero congestion."

According to Andy Daga, CEO of Momentum Dynamics, it's all about simplicity.

"There is no human interaction required whatsoever. You simply park over a pad," he said. "You don't even need to think about charging at all. It makes the connection automatically."

He also noted that economics is also a key factor.

"Taxicabs can't get along on one charge per day. They have to be in service," he said. "If they are not in service, they are not making money."

The ElectriCity project may well give a major boost to global efforts to minimize and possibly halt the use of fossil fuel for transportation needs. Inductive charging has obvious benefits of contributing to fully autonomous cars of the future, unencumbered by the need to stop or connect cables for charging, and promoting production of smaller, lighter batteries that won't require the massive capacities current batteries hold once induction stations are universally available.

But some challenges await developers: despite substantial gains in energy

efficiency, induction charging still allows for much energy waste due to power lost during charging. Also, implementing charging stations along nations' infrastructures will incur massive costs, particularly challenging during a period of economic retrenchment due to COVID-19. And more research will be required to study the potential effects on motorists as well as nearby wildlife of radiation stemming from charging stations.

More information: [media.jaguarlandrover.com/news ... owered-charging-rank](https://media.jaguarlandrover.com/news/2020-06-norway-wireless-network-jaguar-taxis.html)

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