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RA3

Advanced Propulsion Systems

The Battery Drive-in

struggle to improve market share, mainly due to price limitations and limited battery life. Moreover, the charging process usually takes a considerable amount of time, typically at least half an hour in charging stations up to several hours with house systems.

So why not switch the batteries? At the moment, stations only charge the vehicles. Assuming stations also supplied fully-charged battery packs, swapping the batteries instead of charging them would drastically decrease the time for a stop, allow for quicker trips and shorter queues at the charging points.

when possible, contributing to creating a gre- while on the way •

With today's technology, electric cars ener and cleaner environment. Increasing EVs presence on the road may have a great impact on the pursuit of sustainability.

> The goal of the system is to improve the usage and experience with electric cars, in order to have a greener transport system, while increasing battery life and making the trip more enjoyable.

Instead of charging the EV at stations, the internal battery is swapped with a fully charged one, allowing for shorter stops. Users can reserve their swap, check out availability at home or even on their way, in order to make sure to find one when they approach the station. The Empty batteries, usually charged through Battery Drive-In smart assistant keeps the users the grid, will be charged through solar power updated and gives them advice for their trip

