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## FLEXIWAGGON ISLAND GRID

### WE HAVE DEVELOPED, PROTOTYPED AND VALIDATED THE COMPLETE ISLAND GRID FOR THE FLEXIWAGGON.

GOTHENBURG, SWEDEN – (20/03/2020) - This is not a hyper car, and it's not a shiny electric motorbike nor a power speed boat. But it is something revolutionary. Something that could greatly impact a very large industry and the way we think about transporting goods. The past half a year we have been working on a project that play a key role in this innovation!

So, what is it? The innovation is called Flexiwaggon, a mobile truckstop designed for intermodal freight transports on railways and roads. It enables lorries, buses, cars and containers to be transported on a unified train wagon. Also, Flexiwaggon enables individual loading and unloading of wagons. Imagine this as a regular train, where people jump on and off depending on where they are going. It's the same thing, but for vehicles. But it gets better! Imagine that there would be no need for train stations in order for the train to stop. That's exactly what the Flexiwaggon is capable of. The loading and unloading of Flexiwaggon can take place almost anywhere as long as the rail are surrounded by a firm base and there is access to a nearby road.

So, what are the key benefits of a system like this? One of the obvious benefits is the environment, since it leaves a significantly lower environmental footprint, by reducing emissions of carbon dioxide, exhaust and tire particles, all without compromising flexibility. Another benefit is economy, since it requires less fuel, less service, less maintenance and less costs of drivers. Imagine that while the driver is on break hours, he will be able to load the truck on the Flexiwaggon and jump into the separate cabin wagon and rest while the transportation continues with 120 km/h.

The Flexiwaggon is not dependent on any outside electrical power supplies. Shaft generators on the Flexiwaggon create energy which is stored in batteries located on the Flexiwaggon. Electrical outlets are built into the Flexiwaggon, so you can charge electric vehicles and power refrigeration units with the generated energy. And this is where Abtery comes into play!

We have developed, prototyped and validated the complete island grid which powers the units on the wagons. It may sound fairly simple, but the challenges are many when you want to place such a large island grid on a moving train wagon. Both in terms of safety and compatibility with all sorts of different inlets and voltage levels, especially when it's a fully automatic plug & play system.

We are very happy to finally say that we did it! We are very proud to take part in the innovation of the Flexiwaggon, and we can't wait to see it all come together with our system on-board!

Read more about the Flexiwaggon project here: <https://www.flexiwaggon.se>