

# NRG – MISION (AUSTRIA)



**SECTOR:** Research and Development, Automotive

**NRG-X MISION:** REDEFINING CHARGING FOR E-MOBILITY. Fully-Automatic. High Power Charging. Efficient. Affordable. Simply Retrofittable to Every Electric Vehicle.

## Automatic charging solution

NRG-X is the world's first fully automatic charging solution, which provides efficient, high power energy transfer, has a great range of parking tolerance, replaces entirely an expensive conventional wallbox and can be simply retrofitted to every electric vehicle. Therefore, NRG-X is the ideal solution for convenient every day charging of your electric vehicle primarily at home. The system comprises two basic components:

- **Connecting Array** - *Mounted on the car's underbody*
- **Base Station** - *The connecting system in or on your driveway*
- **Idea behind NRG-X**

## Fundamental approach

The highly advanced, conductive connecting mechanism of NRG-X enables the reduction of the manually, multi-dimensional plug-in movement of the charging cable to a fully automatic, one-dimensional, vertical movement. For this reason, the innovative, patented, polyphase connecting system, which is located in the base station, can connect to every single point within the area, which is covered by the connecting array. Therefore, no straight to the point parking is required anymore in contrast to inductive systems.

## Entirely new possibilities for AUTONOMOUS driving cars

Due to an 'anytime' automatic grid connection, NRG-X enables entirely new possibilities for autonomous driving/parking cars. Up to now, there is no sufficient solution for upcoming autonomous driving/parking electric vehicles to automatically connect to the power grid. Furthermore, the entire parking time can be potentially used to obtain energy from the power grid when it is reasonable. This enhances new business models for real-time pricing or active load management.

This low-cost system can be easily retrofitted to any electric car to not only increase the comfort for the user significantly, but also completely new possibilities for autonomous driving / parking vehicles by an automatic connection to the power grid to provide. This made possible by an intelligent charging management new opportunities for energy Tend to actively compensate for load fluctuations in the network and integrate fluctuating infeed from renewable energy sources such as wind, photovoltaic better.