MINDFULNESS ON THE HIGHWAY

New ultra-fast charging stations for electric vehicles have now been unveiled in the Danish city of Fredericia. The stations are designed by COBE and offer to recharge the batteries of both vehicles and drivers.

In cooperation with Powered by E.ON Drive & Clever, COBE has designed a new type of charging stations for electric vehicles (EVs) in Scandinavia. The stations not only promise to recharge a vehicle in just 15 minutes but also offer drivers and passengers a welcome break and the chance to recharge their own mental batteries while the car is being powered up.

The new charging station is centrally located on the E20 motorway in the Danish city of Fredericia. The first of its kind, it is part of an upcoming network of 48 ultra-fast EV charging stations along Scandinavian highways.

In the future, electricity will replace fossil fuels in our vehicles. However, while it currently takes around five minutes to fill up the gas tank, recharging an EV is a much more time-consuming process.

In our busy everyday lives, every minute counts. Thus, future charging stations should not only optimize the car’s charging time but also offer a meaningful mental break for people to rejuvenate themselves while on the move.
A mental break in a green oasis
COBE’s design, which won the infrastructure award of the 2018 Danish Building Awards for its groundbreaking architecture, revolves around a green rethink of the traditional gas station. The new ultra-fast charging stations, currently being installed, are a place where drivers can quickly and efficiently recharge their vehicle and themselves.

“Electric vehicles are the way of the future. With our design we offer EV drivers a time-out and an opportunity to mentally recharge in a green oasis. The energy and the technology are green, so we wanted the architecture, the materials and the concept to reflect that. So, we designed a charging station in sustainable materials placed in a clean, calm setting with trees and plantings that offer people a dose of mindfulness on the highway,” says Dan Stubbergaard, architect and founder of COBE.

The charging stations consist of a series of structural “trees”. They feature with canopies much like the crowns of trees that filters and offers shade and protection from the elements while defining a green setting and a calming atmosphere. A wild contrast to a traditional gas station where lines of vehicles and the smells of gas fumes and car exhaust are the norm.

Sustainable design
Thanks to a modular design concept the stations are scalable, so a single “tree” can easily become a entire “grove” depending on the need. The stations are constructed in certified wood and concrete, topped by solar panels and surrounded by actual trees, grass and other plantings selected in cooperation with the Danish Society for Nature Conservation with the aim of enhancing biodiversity around the station. All components of the construction can be broken down into usable and recyclable materials and the choice of wood as a building material further emphasizes the building’s sustainable design.

A Zen feel
The first of the ultra-fast charging stations, which opens today, offers a relaxed experience in nature with a capacity of recharging four EVs simultaneously. The Fredericia charging station is constructed as a grove of 12 “trees” with a total crown of 400-m2, rendered in a mix of open and closed roof panels. The goal is for both the new and the coming charging stations to offer users a pleasant, restful and Zen-like feel that may even, hopefully, make the roads safer.

In the longer term, ultra-fast charging stations can also help make it more attractive to invest in EVs and thus promote the transition from fossil fuels to more green, more energy-efficient and CO2-neutral transportation both in Denmark and abroad.

For additional information, please contact
Stine Lund Hansen, Director of Business Development and Communications, COBE, E: slh@cobe.dk, T: +45 3254 4300, M: +45 2729 2442
Illustrations
The enclosed illustrations may be used freely in coverage of COBE and Powered by E.ON Drive & Clever. All illustrations must be credited to COBE.

Press photos:
The enclosed press photos may be used freely. The photos must be credited to Rasmus Hjortshøj – COAST.

About the project:
The project was initiated and is run by a Danish e-mobility provider Clever and the European energy company E.ON as a joint venture under the brand Powered by E.ON Drive & Clever.

Place: Fredericia, Denmark
Client: Powered by E.ON Drive & Clever
Architects: COBE
Engineers: ARUP and AB Claussen
Programme: EV charging stations
Size: scalable modular concept
Status: The first charging station opened in Fredericia on 28 May 2019
Illustrations: COBE

About COBE
COBE is a community of architects founded in Copenhagen in 2006 by architect Dan Stubbergaard. COBE aims to create architecture that revolves around the social space in our cities and buildings. The firm’s projects are always informed by the unique potentials of the given site and insist on creating added value for the future users and the local environment and building sustainable social infrastructures for human life. This approach is clearly evident in some of COBE’s high-profile projects, for example the award-winning library and culture center in Copenhagen’s North-West district; the transformation of Nørreport Station – Copenhagen’s busiest train station; the development of Copenhagen’s North Harbour (Nordhavn) – Scandinavia’s third-biggest and most ambitious urban development project; and a conference center for Adidas in the sports brand’s head office in Germany.

www.cobe.dk

About Powered by E.ON Drive & Clever
The Danish e-mobility provider Clever and the European energy company E.ON have formed a joint venture called Powered by E.ON Drive with the purpose of building and operating ultra-fast charging stations along Scandinavia’s main highways. The goal of Powered by E.ON Drive & Clever is to tie the main cities in Denmark, Norway and Sweden together with a total of 48 ultra-fast
charging stations. Powered by E.ON Drive & Clever thus meets the commitment it made to the European Commission of building 28 co-funded stations in Denmark and Sweden as part of the Connecting Europe Facility project. In addition to this, Powered by E.ON Drive & Clever builds 20 stations in Norway without co-funding from the European Union.

Facts:

• The opening of the ultra-fast charging station in the Danish city of Fredericia marks the first step in the transition to a new way of recharging vehicles en route.

• The ultra-fast charging station is part of a larger Scandinavian network of 48 ultra-fast charging stations along Danish, Swedish and Norwegian highways. This Scandinavian network is the northernmost part of a larger network extending from Norway in the north to Rome in the south.

• The ultra-fast charging stations offer both CCS and CHAdeMO charging, making them compatible with the vast majority of EVs. CHAdeMO is being retrofitted during the second quarter of 2019.

• The charging points provide 150+ kW and will be able to recharge a typical EV battery in a matter of 15–20 minutes.

• The charging points can be upgraded to 350 kW when mainstream EVs come to support the high output.

• The design of the ultra-fast charging station invites travellers to take a meaningful break while they’re on the move. The pioneering architecture received the infrastructure award at the 2018 Danish Building Awards.

• The construction materials are selected for their sustainable properties, and the plants were selected in cooperation with the Danish Society for Nature Conservation to promote biodiversity around the station.

• The ultra-fast charging stations in Denmark and Sweden are built with support from two EU Commission projects: Connecting Europe Facility and High Speed Electric Mobility Across Europe.

• Powered by E.ON Drive & Clever is going to build and operate a total of 48 ultra-fast charging stations in Scandinavia: 8 in Denmark, 20 in Sweden and 20 in Norway.