

# Deutsche Bahn installs overhead 'charging islands' to supply battery-powered trains

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Deutsche Bahn has begun construction of electrified overhead contact line islands that will charge battery-powered trains.

The islands will provide a future energy supply for battery-powered trains without the need for end-to-end electrification – something standard electric trains currently require.

The construction, which is taking place in Schleswig-Holstein, provides technology that only requires short sections of track or individual stations to be electrified. Battery-powered trains are then able to use the overhead line to charge their batteries for journeys through non-electrified sections.

Deutsche Bahn infrastructure board member Berthold Huber said: “With innovative infrastructure and state-of-the-art technology, we are continuing to push ahead with the expansion of alternative drives.

“Our goal is clear: Deutsche Bahn will be climate-neutral by 2040. We are also helped by creative solutions such as the overhead contact line island for battery-powered trains.”

Deutsche Bahn estimates that this system will enable more than ten million kilometres of train traffic in Schleswig-Holstein to be powered with electricity in the future, rather than diesel. This will see a potential reduction in diesel use of around ten million litres annually.

Schleswig-Holstein's economics minister Claus Ruhe Madsen said: "Thanks to battery-powered trains, most of the diesel multiple units in Schleswig-Holstein will soon be obsolete. New infrastructure solutions are also needed for this innovative solution in the field of vehicles.

"The construction of the overhead line islands for the battery trains is an important step towards climate-neutral local transport for the country."

The first catenary masts are currently being erected at Kiel and Büchen stations. The first substations and overhead line islands will then be constructed by the end of 2023.

Deutsche Bahn is hoping to expand this approach, looking at Rhineland-Palatinate and the Rhine-Ruhr region as next potential areas where the technology could be implemented.