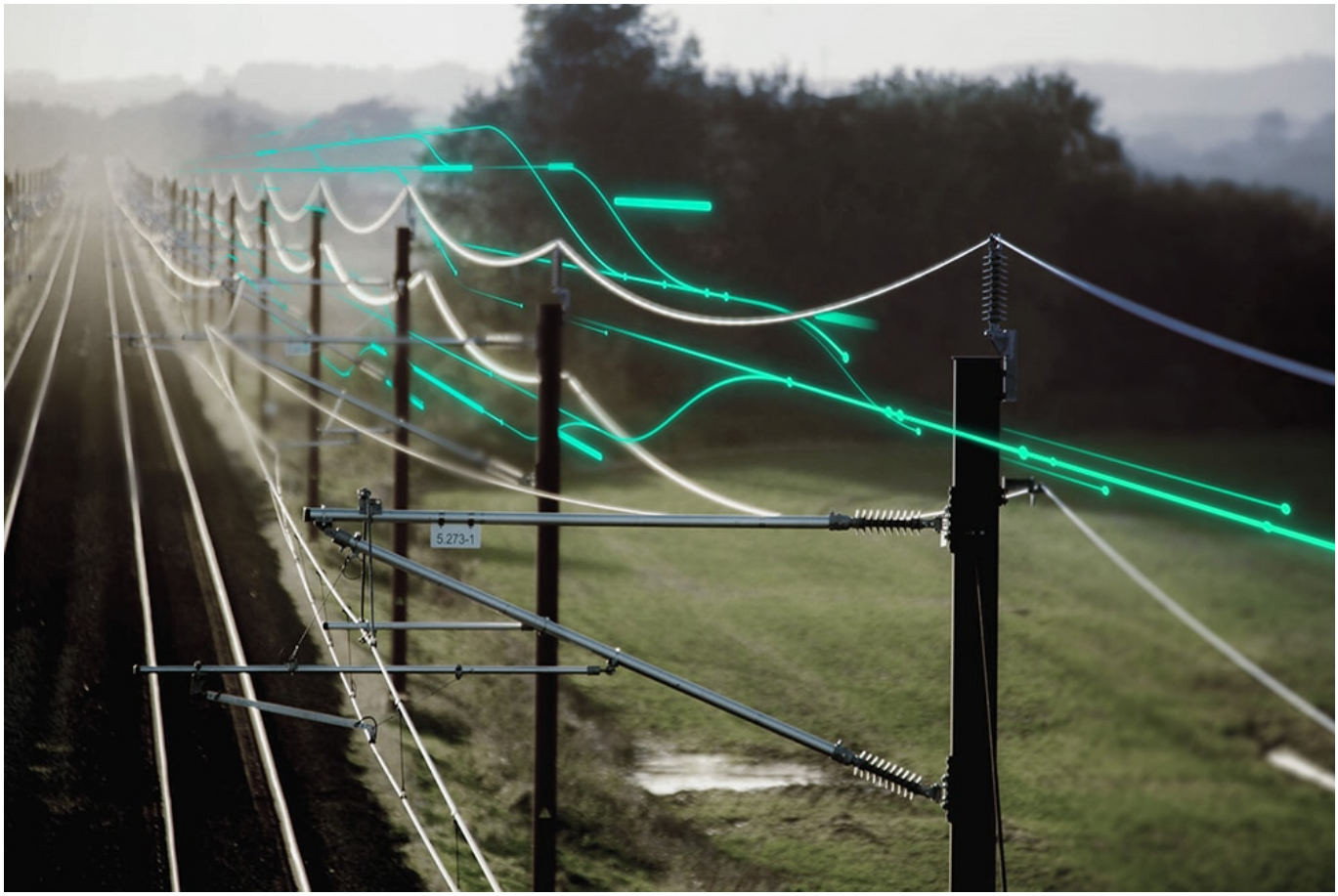
RailBusinessDaily

Siemens Mobility to develop revolutionary solutions to power UK railways

January 6, 2023



Siemens Mobility, with its partners the University of York and British Solar Renewables, has been awarded two separate funding streams to help develop revolutionary solutions to power UK railways.

The first contract will enable the company to complete the final stages of technical development to feed solar energy directly to trains. Funded by the Department for Transport through Innovate UK's First of A Kind programme, this feasibility study aims to solve the engineering incompatibilities that have prevented renewable power feeding 25kV trains worldwide. This supports plans to demonstrate solar power of trains running on the East Coast Mainline, a key rail artery, during 2023.

The second will explore the introduction of a charging station, and how it can enable charging on-train batteries in areas not yet electrified, creating green routes for trains powered by battery or electric depending on where they are on the network. This allows nationwide phase out of diesel trains for electric, providing faster, quieter journeys with no local air pollution and a big carbon saving.

Rob Morris, managing director, Rail Infrastructure for Siemens Mobility said: "Transportation in Britain accounts for 27 per cent of carbon emissions and electrification of the country's rail network is vital to

transform the everyday journeys for passengers and accelerate the journey to net zero.

“Our findings could revolutionise how electricity powers UK railways, opening up the possibility of a large-scale shift to green electricity across the whole country, reducing costs and creating a raft of new job opportunities at the same time.”

Piran White, professor of environmental management from the University of York said: “We’re excited to be supporting the decarbonisation of Britain’s railways. We bring a strong evidence-based approach to support engineering and design to optimise for railway demand, maximisation of solar efficiency, biodiversity gain and test the potential for combined agricultural use in a world-leading collaboration.”

Photo credit: Siemens Mobility