

# UK rail sector on track to diesel-free trains

November 22 2021, by Ben Perry

---



While electric trains emit 60 percent less carbon than their diesel counterparts, only 42 percent of the UK rail network is currently electrified.

As host of the recent COP26 climate summit, Britain's drive to help slash global carbon emissions will involve keeping to its own target of phasing out diesel trains over the next two decades, industry bodies and observers say.

According to the latest government data, about 29 percent of the UK train fleet still runs on [diesel](#) and freight trains run almost entirely on it.

On Thursday, the government unveiled plans to electrify an additional 180 miles (288 kilometres) of track in a new rail strategy.

This would help "to meet the ambition of removing all diesel-only trains from the network by 2040", the Department for Transport said.

## **Diesel dependence**

While [electric trains](#) emit 60 percent less carbon than their diesel counterparts, only 42 percent of the UK rail network is currently electrified, according to official data.

That places the UK far behind European neighbours, such as the Netherlands, where 76 percent of the network is electrified.

With the current surge in electricity prices, some electric-run operators have recently been forced to revert to diesel locomotives, trade body Rail Freight Group (RFG) observed last month.

While the RFG described the switch back to diesel as "regrettable", it insisted it was only temporary.

Its director general, Maggie Simpson, highlighted a need for "more electric wires to support the investment in newer locomotives".

Britain's rail freight is presently 90 percent hauled by [diesel engines](#).



According to the latest government data, about 29 percent of the UK train fleet still runs on diesel and freight trains run almost entirely on it. .

"Of course, in the long term, we need to move to a decarbonised economy, so more use of electric traction is going to be a huge part of that," Simpson told AFP.

Last month saw the launch of a new fully-electric passenger train in the UK—Lumo's London-Edinburgh service carries no auxiliary diesel engine.

Train operators are taking the opportunity to transition also via hybrid models in much the same way as carmakers.

Chiltern Railways, which runs passenger services between London in southeast England and the country's Midlands, recently announced investment in a hybrid battery-diesel train, developed by rolling stock owner Porterbrook and Rolls-Royce, the maker of aircraft engines.

## Hydrogen future

As well as increasing electrification of its [rail](#) tracks, Britain is in the early stages of producing trains that can run on the renewable energy hydrogen.

French train manufacturer Alstom has announced plans to deliver the UK's first-ever fleet of new hydrogen trains, as opposed to rolling stock that has been remodelled.

"Rail is already the lowest emission transport mode, but we can do even more," Nick Crossfield, Alstom's managing director UK and Ireland, said as the group this month unveiled its hydrogen project in collaboration with British trains owner Eversholt Rail.

The COP26 event in Glasgow—attended by Britain's Prince Charles who is a committed environmental campaigner—showcased a hydrogen-powered train.

HydroFLEX, developed by Porterbrook and the University of Birmingham with the help of UK government funding, is a remodelled train that its designers claim can carry sufficient hydrogen to match the performance of a diesel engine.

While Glasgow Central train station displayed HydroFLEX to the [general public](#), the nearby COP26 summit focused on ending sales of road vehicles that run on fossil fuels.

© 2021 AFP

Citation: UK rail sector on track to diesel-free trains (2021, November 22) retrieved 3 May 2024 from <https://techxplore.com/news/2021-11-uk-rail-sector-track-diesel-free.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.