

Porterbrook, South Western Railway and Eminox partner to clean up Britain's railway

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Porterbrook, is working with South Western Railway and Eminox Limited ('Eminox') to trial ground-breaking, emissions-reducing, technology which could be rolled out to hundreds of diesel trains across the UK's rail network.

The partnership between Porterbrook, the rolling stock asset management company and Eminox, the exhaust manufacturer, aims to reduce diesel emissions by fitting a catalyst that could reduce NOx (nitrous oxide) emissions by over 80% and CO (carbon monoxide) and hydrocarbons by over 90% from current levels.

Porterbrook's investment in Eminox's technology is being supported by the Department for Transport through InnovateUK's first-of-a-kind funding ('Foak2').

The Foak2 funding will allow trial fitment of Eminox SCRT® technology to a South Western Railway ('SWR') Class 159 diesel multiple unit. Once the trial is completed this innovation is likely to be deployed on a number of existing fleets serving communities across Britain's railway.

State-of-the-art telemetry will be fitted to the trial Class 159 to provide real-time diagnostics and performance data from the system. Rail-specific challenges, such as high exhaust temperature duty cycles, will be overcome as part of the project, utilising advanced catalyst technology in this first on-rail application. Mary Grant, CEO of Porterbrook, said: "As a rolling stock asset management business, Porterbrook takes seriously its responsibility to develop innovative ways of reducing emissions. We are particularly pleased to be able to do this by drawing on proven technologies from other sectors.

"Porterbrook believes by partnering with automotive after-treatment specialists, Eminox, we can

accelerate the delivery of cleaner and more environmentally friendly trains to Britain's railways."

Neil Drury, Engineering Director for South Western Railway, said: "SWR is very pleased to be involved in this project. Environmental sustainability is a key element of our Sustainable Development Strategy which is embedded across every part of the business. Energy and resources are a key theme in this strategy alongside use of innovative technology, all designed to ensure we are an employer of choice actively supporting the communities we serve.

"SWR has committed to a 56% reduction in traction carbon emissions by 2023/24 and it is hoped that this type of technology could help make a major contribution to achieving that target."

Carlos Vicente, Retrofit Sales Director for Eminox, said: "We have taken our 20 years' experience of on-road retrofit technology into the rail market so operators can utilise the best available technology to mitigate for the growing number of Clean Air Zones, across the UK.

"Eminox retrofit technology will help reduce diesel particulate matter from the rail network and deliver environmental benefits to the communities the railway serves. This is part of the government's drive to a cleaner, greener economy by cutting emissions and removing diesel-only trains from the network by 2040." Porterbrook's winning submission is part of the Department for Transport's Accelerating Innovation in Rail scheme.