



Light Rail (UK)

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H2, The Tram Fuel of the Future

TRITON
Hydrogen
Solving Impossible Problems



Gorgie Road Access



Morningside



Access Bow String Bridge

Hydrogen Trams and Hydrogen Infrastructure



P+R Cameron Toll



Hydrogen MC3 Trams x 100 pax x 3



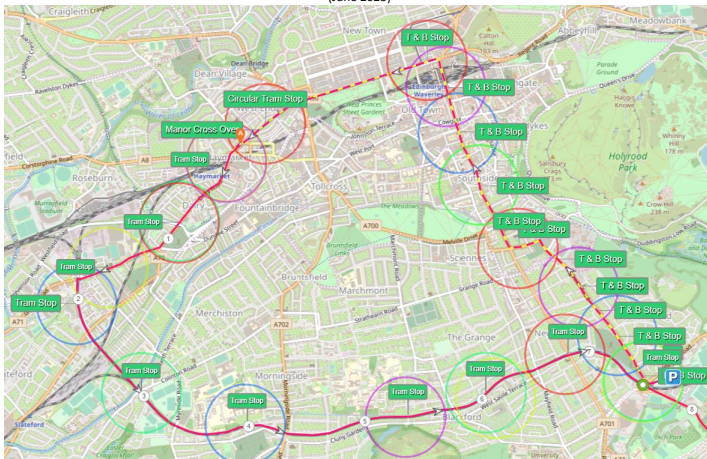
Plastic Waste Ex Leith Project

Green Hydrogen from Waste and Revenue sources for
Edinburgh South Suburban Regeneration.

**H2trams as a Service*

Podcast @ <https://www.railindustryconnect.co.uk/rail-industry-connected-hydrogen-trams-as-a-service-with-jim-harkins-light-rail-uk>

Edinburgh South Suburban Circular & P+R
(June 2025)



Not To Scale 10.51 Km + 7.65Km

Circle catchment area within 5 minutes walk—roughly an 800-metre radius—captures areas with population densities ranging from about 7,000 to 10,000 people.

No Air Pollution at Point of Use!

*

Globally, PM pollution is linked to millions of premature deaths annually. For example, in 2019, nearly 70% of the 4.2 million deaths attributed to ambient air pollution were due to cardiovascular condition

Trams address the "Pollution in Edinburgh Air Quality Task Group report

A non-polluting distributor, steel on steel is clearly needed!

Tourist and City tramcars for all weathers.

A 2nd generation working tram museum line ?

A Clean and Green Recycled transport gateway to the South Edinburgh

No Road/Tyre/Brake Particulates (NEE)

(Trams are genuine zero emission vehicles at point of use!).



Self-powered new build tradition summer tram cars



City Cars (3) autonomously coupled, 300 passengers

Why Green Hydrogen Trams? ©

Edinburgh South Suburban Line.



A Coventry VLR running x 56 Pax
Can be autonomous



Doha VLR in Service x 100 Pax
can be autonomously coupled x 3 cars

Trams have a proven record of getting people out of their cars whilst producing zero emissions and particulates at point of use and that these very light rail* (VLR) offers significant potential for enabling these benefits to be realised on a significant larger scale.



Sheffield Super Tram x Stadler
Citylink Class 399 x 236 Pax

VLR vehicles are now available to order in the UK

*** VLR trams are built to International**

Light Rail Standards and are a low cost starter line.

Less than £10M per track Kilometre and are a significant Public Transport Legacy.

The national delivery of an integrated transport system will often involve initiatives that span local authority and county boundaries and mechanisms for coordination at regional levels are needed to help promote and deliver this project.



Legal utilities are left in place

The new track is laid just 30cm within the road's surface, minimising the need to relocate pipes and cables which is time-consuming and expensive.

Compatible with current vehicles including VLR,
Light Rail & TramTrain

This is achieved by taking advantage of cutting-edge materials, while still making use of standard rail parts



*Precast Advanced Track
Installation less than £10M per Km



*Ingerop and its UK subsidiary Rendel.
30 cm into the road surface Installation
less than £10M per Km

Planning impression

The largest share of transport emissions comes from cars, accounting for 38% a 20% reduction by 2030!...Transport Scotland Jan 2022

As Trams have a high modal switch circa 25% - 32%, this demonstrator line can achieve that target along this corridor

Statistics in Tram integrated Nottingham show that LEZs are not required

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Reality of road space reallocation



Hydrogen/electric buses can only be seen as a welcome interim solution in the short term with no transport legacy, they still remain a source of significant particulate pollution (*NEE) arising from the friction between tyres and road surfaces. Non-exhaust emissions make up over half of particulate pollution from road transport while steel wheels running on steel rails create zero emissions of this type.

***All UK Governments are aware of this (Greenwash) NEE pollution**



*30,000 folk died from Particulates and Heavy metals

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Light Rail Consultants, Transport Engineers,
Private Enterprise, Politicians, Academics,
Environmentalists and others.

Commercial specialists in low cost, VLR,
affordable & sustainable tramways
www.lightrailuk.co.uk

"if you can't get to places, you can't do things: and the things you can't do are important!"

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