



Light Rail (UK)

H2, The Tram Fuel of the Future

TRITON
Hydrogen
Solving Impossible Problems



Gorgie Road Access

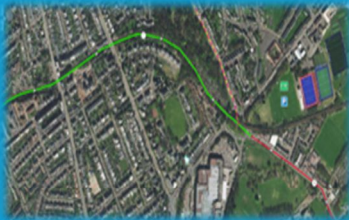


Morningside



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

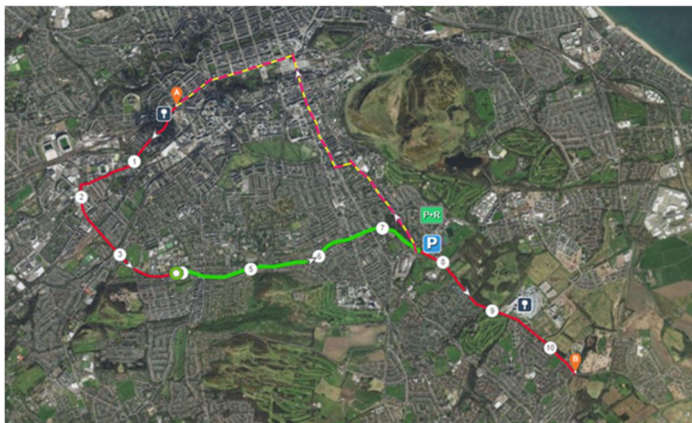
Green Hydrogen from Waste and Revenue sources for
Edinburgh South Suburban Regeneration.

**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

*



Not To Scale 10.51 Km + 7.65Km

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)
(A genuine zero emission vehicle).



Self-powered new build tradition summer tram cars



City Cars (3) autonomously coupled, 300 passengers

Why Green Hydrogen Trams?

Morecambe Bay, a landscape of legends.



A Coventry VLR example.

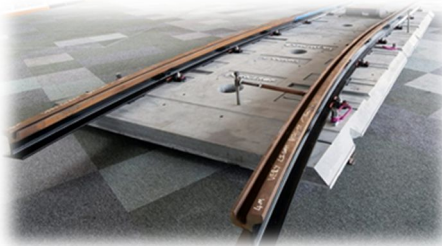
Trams have a proven record of getting people out of their cars whilst producing zero emissions and particulates at point of use and that these very light rail* (VLR) offers significant potential for enabling these benefits to be realised on a significant larger scale.

*** 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.

The proposal is for a demonstrator line for very light rail, a system involving vehicles on much lighter rails compared to current tramways with a dramatic reductions in construction costs, faster construction and less disruption.

Legal utilities are left in place



***Installation less than £10M per Km**

Samples of road space reallocation



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

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

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 while steel wheels running on steel rails create zero emissions of this type.

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

***39,000 folk died from Particulates**

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

Light Rail (UK)
E-mail Jimh@jimmyharkins.com

Auchenshuggle Junction, Moore, Warrington,
Cheshire,
United Kingdom
01925 740675 07721378223
www.lightrailuk.co.uk

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

Commercial specialists in low cost, VLR,
affordable & sustainable tramways

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

Sponsored by Clean & Green Transport and Funded by Triton Hydrogen Ltd