

# Sweden installs section of electrified road

13 April 2018, by Bob Yirka



Credit: eRoadArlanda

A team making up the eRoadArlanda project has announced that they have electrified a section of road near Stockholm, which will be tested by a battery-powered test truck. The team is part of an initiative set up by the Swedish government's Transport Administration to meet its goal of carbon neutrality by 2050.

The Swedish government has been funding projects aimed at developing a fossil-free [road](#) transport system for many years. In this new effort, the focus was on implementing a road technology that could be used by currently available vehicles. The result is what some have called a human-sized slot car system.

Slot cars are toy-sized cars that run on a track that also provides power via a metal drop-down rod on the undercarriage that slips into an electrified slot in the track. In the Swedish road project, the test truck has a similar drop-down arm that slips into a slot in the road and touches an electrified element that carries power to an onboard battery.

For the project, the researchers installed an electrified slot along two kilometers of road between the Rosersberg logistics site near

Stockholm and the Arlanda Cargo Terminal. While other vehicles will be able to use the road, only a test truck will make use of the electrified rail.

In announcing the deployment of the rail, team members also reported that the cost of laying it was approximately €1m per kilometer, which they claim is 50 times lower than installing a tram line.

The rail is actually two rails, like a light socket, the team explains, installed in 50-meter sections. An arm from a vehicle settles inside the slot between the two rails, drawing power while the car is in motion. They note also that the rail only offers power when there is a vehicle present to draw power from it. They have also taken measures to ensure the [rail](#) is functional during inclement weather. The system also measures how much power is used by a [vehicle](#) so that the owner can be charged for it.

The eRoadArlanda [project](#) members suggest that more such rails will be installed soon, and that commercially available battery-powered cars and trucks will soon be outfitted with arms for accessing the rails, allowing them to get [power](#) on the go, instead of having to stop and charge up.

## More information:

[eroadarlanda.com/globally-uniq...free-road-transport/](http://eroadarlanda.com/globally-uniq...free-road-transport/)

© 2018 Tech Xplore

APA citation: Sweden installs section of electrified road (2018, April 13) retrieved 15 October 2018 from <https://techxplore.com/news/2018-04-sweden-section-electrified-road.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.*