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# eWayBW
## pilot project with a catenary-based electric road system

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**Summary**

To continue the activities of the ENUBA projects, three pilot projects for the electrical operation of hybrid power line trucks will be implemented in Germany. One of these projects will take place in Baden-Württemberg and is called eWayBW. To demonstrate the project, special features and the current state of the project are presented.

## 1 Research Questions

With the adoption of the Climate Protection Program 2020, the Federal Government has decided to run pilot projects to test electric drives in heavy-duty trucks. Three projects in Germany are in preparation or already in implementation: ELISA in Hessen, FESH in Schleswig-Holstein and eWayBW in Baden-Württemberg. These projects are intended to continue the activities of the ENUBA and ENUBA 2 projects, in which the Federal Ministry for Environment has funded research and development to an overall system for the electrical operation of hybrid power line trucks that can be used on public streets.

The aim of eWayBW is the realization of a catenary infrastructure for a further research of the ehighway technology. In a three-year operational phase, the overhead line technology is to be examined with regard to road-planning and operational effects. The project will be accompanied by scientifical research.

## 2 Methodology

On an 18 kilometer test field on the federal road B 462, three sections with a total length of almost 6 km will be equipped with overhead lines. The pilot route brings several unique characteristics with it: The pilot route is not on a highway, but on a main road that brings some limited space ratio with it: One of the electrified sections has only one lane in each direction. A special technical construction will be needed to span both lanes from one side.

Furthermore a railway line runs parallel to the pilot route. This provides the opportunity to compare directly the conveyance of goods on the road with the transport of goods on the railway. Opportunities and obstacles for both options can be explored.

In addition there is also a tunnel on the pilot route the vehicles have to pass through. Although the tunnel is not electrified, there is the possibility of researching the effects of electric vehicles in an infrastructural facility.

# 3 Results

eWayBW has, like ELISA in Hessen and FESH in Schleswig-Holstein, the intention to lay the foundation for a decision on a rollout of catenary-based electric road systems. With the evaluation of the three pilot projects the decision-making process can be supported.

*Figure 1: visualization of eWayBW*

# Authors


Isabell Krüger is working in the Ministry of Transport in Baden-Württemberg. Since 2017 she coordinates the german pilot project eWayBW. Prior, she has studied infrastructure management at the University of Stuttgart with the graduation Master of Engineering.