

RP SIA “Rīgas satiksme” is a coordinator of international project “H2Nodes” (action plan No. 2014-EU-TM-0643-S). The project is funded from the Connecting Europe Facility (CEF) for Transport No. INEA/CEF/TRAN/M2014/1025986.

The goal of “H2Nodes” project is to build a chain of hydrogen refuelling stations (HRS) along the North Sea-Baltic Sea European Transport Network Corridor (TEN-T) and to boost demand for fuel cell electric vehicles (FCEV) and their use in the European Union. The implementation of the project will ensure an active implementation of the European Alternative Fuel Strategy and implementation of requirements for hydrogen infrastructure set forth in the Directive on the deployment of alternative fuels infrastructure (2014/94/EU). The project provides for conducting several studies and building hydrogen refuelling stations in Estonia, Latvia and the Netherlands, which will boost further deployment of HRS network and the use of hydrogen as fuel. Passenger transport – fuel cell electric buses/trolleybuses or fuel cell electric cars refuelling at HRS, will ensure initial basic demand for hydrogen. Public access to hydrogen refuelling stations built will provide other users of FCEV with hydrogen fuel.

The beneficiaries involved in the project (partners):

1. RP SIA “Rīgas satiksme” (Rīga) – Latvia
2. Ministry of Infrastructure and the Environment (IenM) – the Netherlands;
3. Arnhem Municipality (Arnhem) - the Netherlands;
4. Province Gelderland (Gelderland) - the Netherlands;
5. Connexion Openbaar Vervoer N.V. (COV) - the Netherlands;
6. PitPoint.CNG B.V. (PitPoint) - the Netherlands;
7. NT Bene OU (NTB) – Estonia;

Three activities can be singled out in achieving the project goal:

1. “Sustainable production of hydrogen”

As part of this activity, studies will be conducted in places where hydrogen refuelling stations will be built within the project (Pärnu – Estonia, Riga - Latvia and Arnhem – the Netherlands) on the available hydrogen production methods. The studies will look into places where the hydrogen infrastructure will be developed (places in which HRS will be located), as well as will identify and evaluate the most sustainable method of producing hydrogen from the primary energy resources available.

2. “Hydrogen refuelling stations (HRS)”

As part of this activity, hydrogen refuelling stations (HRS) will be built in Pärnu (Estonia), Riga (Latvia) and Arnhem (the Netherlands). In Latvia and Estonia, these will be the first hydrogen refuelling stations. The further deployment of hydrogen infrastructure in regions and along the North Sea-Baltic Sea European Transport Network Corridor (TEN-T) will be also studied.

3. "Fuel cell electric vehicles (FCEV)"

As part of this activity, RP SIA "Rīgas Satiksme" will demonstrate an innovative solution for urban public transport – 10 "Hytrolley" trolleybuses. "Hytrolley" trolleybuses will have their back-up diesel generators replaced by hydrogen fuel cell modules. Such technical solution is more energy efficient; it reduces noise pollution and ensures the operation of the trolleybus in exhaust-free mode throughout its service time. "Hytrolley" trolleybuses will be able to run up to 100 km with one hydrogen refuelling. The use of such trolleybuses within public transport route network will make it possible to replace diesel-motor buses on routes with limited contact wire coverage. In addition to demonstrating activities, measures will be taken to develop further the market of fuel cell electric vehicles and boost their use.

The project is supported by:

- the Republic of Latvia Ministry of Transport (LV)
- the Ministry of Transport and Communications of Finland (FI)
- the Republic of Estonia Ministry of Economic Affairs and Communications (EE)
- the Environmental Investment Centre (EE)
- FCH JU - European Fuel Cell and Hydrogen Joint Undertaking (EU)
- City of Pärnu (EE)
- Tallinna Linnatranspordi AS (EE) - the City of Tallinn public transport company (associated partner)
- Kauno Autobusai (LT) – The City of Kaunas public transport company (associated partner)
- HIT-2-Corridors project, ongoing TEN-T hydrogen project (coordinator Sweco on behalf of partners in SE, FI, LV, PL, NL, BE)
- NOW - National Organisation Hydrogen and Fuel Cell Technology (DE)
- WaterstofNet, hydrogen network (BE)
- COHRS project, hydrogen application within Multi annual call objective 2 Innovations (coordinator H2Mobility Germany on behalf of partners in DE, DK, A)



Līdzfinansējusi Eiropas Savienība

Eiropas infrastruktūras savienošanas instruments