

PROJECT

## **InjectoReducer**

### **Integrated reducer-filter-injector unit for natural gas engines**

**Funding:** European (Horizon 2020)

**Duration:** Oct 2016 - Mar 2017

**Status:** Complete

**Total project cost:** €71,429

**EU contribution:** €50,000



[CORDIS RCN : 207111](#)

#### **Objectives:**

Converting conventionally fuelled vehicles to run on cheaper and more sustainable fuel alternatives like Liquefied Petroleum Gas (LPG) and Compressed Natural Gas (CNG) has become increasingly important as society is moving towards creating cities with minimum emissions. This requires modifying the fuel injection system to use the alternative fuels via a conversion kit. As Rail, we envisaged a novel approach to conversion kits manufacture and have developed as well as patented an innovation that will transform the performance of conversion kits. Our solution, InjectoReducer, provides an enabling technology towards meeting the rule requirement for Euro 4-6 Regulation Compliance. It offers reduced (handling, installation and maintenance) costs, increased energy efficiency, reduced emissions, increased ease and speed of installation as well as servicing.

As such, InjectoReducer has been developed in line with Europe's transport and mobility goals for the year 2050. Our solution will be an enabling innovation towards ridding cities of conventionally-fuelled cars in cities as well as reducing 60% of transport emissions by the middle of the century. InjectoReducer will be relevant to the Autogas equipment kit Original Equipment Manufacturers (OEMs) and the Aftermarket fitment market for 1-2 cylinder and 3-4 cylinder vehicles. The market is estimated to grow from 15million to 25million units with an attached forecast value from €6.27B to €10.75B by 2021.

#### **Methodology:**

In our Phase 1, we will conduct a feasibility study that will position us to develop a comprehensive business plan for InjectoReducer. This plan will provide the layout and procedure we will employ so as to fully exploit the conversion kit market for both the OEMs and the Aftermarket fitment market segments.

We will develop a market-ready product prototype in our Phase 2 in anticipation of the InjectoReducer commercial version release.

#### **Parent Programmes:**

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

#### **Lead Organisation:**

**Rail Srl**

**Address:**

VIA GRANDI 16  
42030 VEZZANO SUL CROSTOLO  
Italy

**EU Contribution:** €50,000

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## Technologies:

Alternative fuels  
Conversion kit for alternative fuels

**Development phase:** Demonstration/prototyping/Pilot Production

**STRIA Roadmaps:** Low-emission alternative energy for transport

**Transport mode:** Road transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Environmental/Emissions aspects

**Geo-spatial type:** Other