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Clean European Rail-Diesel





Project duration: 1 June 2009 – 31 May 2013

Budget: 13.4 million Euros

Partners: 26

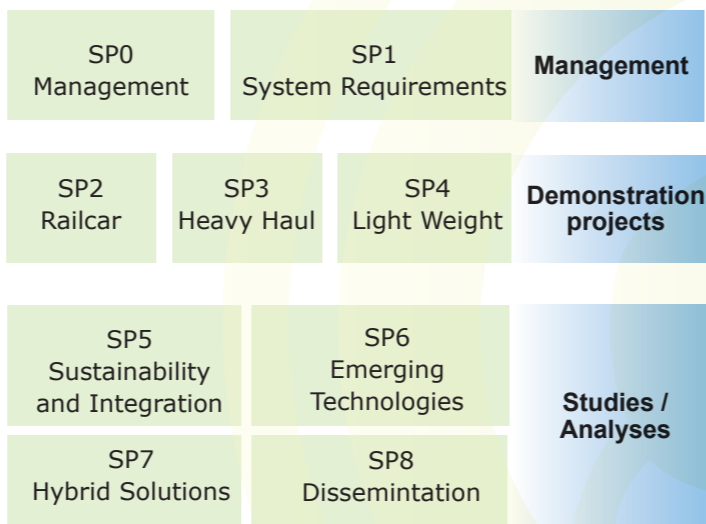
Overview

Clean European Rail-Diesel (CleanER-D) is a partly European Commission funded project that aims to develop, improve and integrate emissions reduction technologies for diesel locomotives and rail vehicles. Its target is to achieve emission levels below the limits established by the new European Directive 2004/26/EC and to evaluate innovative and hybrid solutions for the best possible contribution to reductions in CO₂ emissions.

Motivation

-  to offer competitive rail vehicles to the market
-  to avoid a modal shift from rail to road
-  to enable the industry to evaluate different solutions to fulfill stage IIIB emission limits on rail vehicles

Project Structure:



Objective

The aim of the project is to demonstrate the feasibility and reliability in service of railway rolling stock powered with diesel engines compliant with the requirements of stage IIIB of the Non-Road Mobile Machinery (NRMM) European Directive.

The project contains 3 different vehicle developments.



The sustainability activities will deal with the socio-economic and environmental impacts on the railway sector. The emission reduction measures and future solutions developed will be assessed via life cycle cost and cost/benefit analysis methods. Possible trade offs and sub-optimizations of technical solutions will be identified.

Two scientific subprojects will address the development of innovative solutions to further the competitive advantage of rail transport over other modes in terms of sustainable development.

The Emerging Technologies subproject will evaluate existing and future after-treatment technologies for integration into diesel vehicles and will deliver recommendations to the manufacturing industry. Furthermore, best practices from other transport modes will be investigated.

The Hybrid Solutions subproject will evaluate the potential energy savings and associated reduction in pollutant emissions (as well as CO₂ production) resulting from the implementation of temporary energy storage equipment.