

Environmental and Social Data Sheet

Overview

Project Name:	GETRAG INNOVATIVE TRANSMISSION TECHNOLOGY
Project Number:	2013-0165
Country:	Germany
Project Description:	Financing of a portion of Getrag's R&D programme with the primary objective of improving the efficiency of vehicle transmission systems, and thus reducing fuel consumption.
EIA required:	no
Project included in Carbon Footprint Exercise ¹ :	no

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project concerns investments in research and development that will be carried out in existing facilities without changing their already authorised scope. An Environmental Impact Assessment (EIA) is therefore not required by EIA Directive 2011/92/EU. Being a pure R&D project, it does not per se have any impact on the environment; in addition as products of the programme will have lower fuel consumption improving the current situation overall, it is considered as environmentally acceptable.

Environmental and Social Assessment

Environmental Assessment

The project concerns selected R&D activities for the (i) development of new transmission technologies and concepts, (ii) development of new and improvement of existing manual and dual clutch transmissions (DCT); (iii) development of hybrid transmissions for application in mild, full and plug-in hybrid vehicles and (iv) development of electric drives for fully electric and range extender applications. The primary objective is to improve the transmissions' efficiency thus reducing fuel consumption from the cars they will be deployed in.

The company's product portfolio includes manual, automated manual, and dual clutch transmissions, as well as hybridised transmissions for mild, full or plug-in hybrids, transmissions for range extender powertrains and finally electric drives. However, its main focus is on dual clutch transmissions (DCT), a manual automated transmission (it can be operated in a fully automatic or in a manual mode), with high performance in terms of driveability and especially fuel economy when compared to automatic transmissions.

The most important activities in the current R&D portfolio concern the development of the next generation the DCT platform. With the implemented efficiencies the company is confident that it will be able support the OEMs 2020 and 2025 CO₂ targets for drastic reduction to 95 gCO₂/km and below.

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100 000 tonnes CO₂e/year absolute (gross) or 20 000 tonnes CO₂e/year relative (net) – both increases and savings.

In parallel to the next generation development, the company is focusing on the development of hybrid modular platform. The mild hybrid applications are expected to bring 15-20 % improvements in fuel efficiency, while in plug-in applications the improvements could be of the order of 40-45%.

The fuel efficiency of the manual transmissions (MT) (which however are not the DCTs' main competition) in real driving conditions is slightly better than the DCT. However the performance depends a lot on the driving skill and style, parameters that are somehow normalised with the automatic function of the DCT.

Other Environmental and Social Aspects

All the company's sites have an environment, health and safety management system in accordance with the standards ISO 14001 and BS OHSAS 18001. The GETRAG Operations sites in Italy and Germany are validated according to Eco-Management and Audit Scheme (EMAS)ⁱ as well.

Corporate objectives take social aspects into account and GETRAG is committed to basic principles of social responsibility that are not only the basis of the corporate activities, but also determine the cooperation with their business partners. These basic principles are based on internationally recognised guidelines such as the Universal Declaration of Human Rights of the UN, Core Labour Standards of the ILO, ILO Declaration of Fundamental Principles and Rights at Work and the OECD Guidelines for Multinational Enterprises.

The company's suppliers should have implemented an environment, health and safety management system. If not, GETRAG requires its partners to work towards introducing an EMAS or ISO 14001-certified environmental protection management system and a BS OHSAS 18001-certified occupational health and safety management system in the near future. The company's partners must also ensure that the environmental and occupational health and safety requirements placed on them are also met by their sub-suppliers.

ⁱ A voluntary environmental management instrument, which was developed in 1993 by the European Commission.