

Environmental and Social Data Sheet

Overview

Project Name:	BOSCH R&D CENTRE & CAR ELECTRIFICATION
Project Number:	2009-0358
Country:	Germany
Project Description:	The project concerns Robert Bosch GmbH's investments for a new R&D centre in Renningen, Germany, which will host all the Bosch Automotive Corporate Research and Advance Engineering activities. The project also includes the promoter's selected R&D Vehicle Electrification activities for the development of an innovative Electric Machine and Power Electronics technology platform as well as Advanced Systems technology for application in hybrid and electric vehicles.
EIA required:	NO (R&D programme) YES (R&D centre)
Project included in Carbon Footprint Exercise ¹ :	NO

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

The project part concerning the investments in research and development are expected to be carried out in existing facilities already authorized for the same purpose. Hence, the project does not require an Environmental Impact Assessment (EIA) under the Directive 2011/92/EU.

The construction of the R&D centre in a greenfield area in the city of Renningen, in the Stuttgart region in Germany, is covered by Annex II of the Directive, and an EIA has been requested. The promoter has provided evidence to be properly fulfilling the required environmental procedures and is on track for obtaining permits and authorisations. No impact on protected flora and fauna (Habitats 92/43/EEC and Birds 79/409/EEC) has been reported.

The municipal council of Renningen decided in open court² - public hearing on May 23rd 2012, to approve the change of the land use for the construction of an R&D centre. The district office of Böblingen gave its approval for the change of the land use with a letter on 21st of June 2012. The construction approval (Baugenehmigung Nr. 21/12) was released on 27th of June 2012.

Environmental and Social Assessment

Environmental Assessment

R&D activities

The R&D project component is specifically focused on the development of clean transport technologies, i.e. vehicle electrification components. The project will contribute to increasing the promoter's knowledge and know-how in the field of innovative low-carbon, and safe powertrain and vehicle technologies.

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 tons CO₂e/year absolute (gross) or 20 000 tons CO₂e/year relative (net) – both increases and savings.

² Der Gemeinderat der Stadt Renningen hat am 23. Mai 2012 in öffentlicher Sitzung die Änderung des Flächennutzungsplanes für den Geltungsbereich des Bebauungsplanes "Forschungs- und Entwicklungszentrum (FEZ) Hart" nach § 6 Absatz 6 Baugesetzbuch (BauGB) beschlossen / festgestellt. Das Landratsamt Böblingen hat die Flächennutzungsplanänderung mit Schreiben vom 21. Juni 2012 gemäß § 6 Abs. 1 BauGB genehmigt.

R&D Centre Renningen

The R&D campus, which highlights the promoter's commitment to the region of Stuttgart and to maintaining high value-added R&D activities and skilled jobs in Europe, will adopt advanced sustainability and environmental concepts, including the recovery of waste heat, the installation of photovoltaic modules, the storage and use of rain water and the reuse of cleaned wastewater. The promoter is on track for fulfilling the procedure on getting the energy efficiency certification (Energiausweis).

Social Assessment, where applicable

The region of Stuttgart and the municipalities involved in the project are actively supporting the promoter; the latter having a clear willingness to safeguard its long-term relationship with the region.

Other Environmental and Social Aspects

Surrounding ecosystem. Sustainable energy management - Bosch's ecological building technologies to be applied in the R&D campus.

In its plans for the new site, Bosch has placed greater importance on eco-friendly building technologies. The aim is to use materials and equipment that help conserve resources. The planned heat recovery from the laboratory and workshop buildings will cover about 50% of the entire site's heating needs. Moreover, the rainwater collected in the location's ponds and underwater wells will serve to cool the buildings. Combined with the use of a membrane water treatment system, some 30 000 cubic meters of clean drinking water per year can be saved. Solar power stations (photovoltaic modules - 5 000 sqm) are set to be installed on the grassy roofs of the buildings. Bosch's own four-stage sewage plant will allow reusing the cleaned waters. Bosch will also install its own products and systems in other areas, such as heating, air conditioning, and access control. The company will also equip the buildings with (Bosch's) intruder and fire alarms.

The north part of the land was formerly used by the German Bundeswehr and is currently used for gliders and parachute jumping exercises. Between the army and gliding field, and in the south of the planning area, there are agricultural and grassland areas.

No relevant impact in the surrounding flora and fauna has been identified. Moreover, Bosch aims to keep the impact of the construction project on the region's flora and fauna to a minimum. Inevitable effects on the ecosystem will be minimized and offset through efforts to maintain the ecological balance. To this end, the company plans to countervail the ecological balance, whose efforts include improving the water quality of a local lake, renaturalizing a local pond, and planting new fruit orchards. For the rare animal species whose habitat is on the north end of the property, new habitats beyond the property have already been created. In addition to these measures, Bosch has removed materials left behind by the German military from the property, as well as from the neighbouring former training grounds. It will also decontaminate the former landfill for household and commercial waste.