

Environmental and Social Data Sheet

Overview

Project Name: BMW LEIPZIG III
 Project Number: 20110503
 Country: GERMANY
 Project Description: The project concerns the promoter's investments at its Leipzig plant for the production of a new compact multi-purpose vehicle (MPV) and a new carbon-fibre-based Mega City vehicle available in electric and range extender variants.

EIA required: NO

Project included in Carbon Footprint Exercise¹: NO

(Details are provided in section: "Carbon Footprint")

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

The project concerns investments in for the manufacture of motor vehicles and as such falls under Annex II of the EIA Directive 2011/92/EU. The plant has been in operation since 2005 and in 2001 when the promoter started the proceedings for its establishment, the local competent authorities declared not to require an EIA on the project, based on the information provided by the promoter and in view of the existing EIA for the industrial park "Industriepark Nord – Leipzig-Plaußig" on which the plant is located. This was confirmed by the competent authority in August 2011, during the authorization process for the addition of the production of the Mega City Vehicle in the plant and consequent increase of the production capacity.

The competent authority has authorized the construction of the facilities necessary for the production of the Mega City Vehicle at the Leipzig plant, thereby authorizing the increase of the production capacity from 195 000 vehicles per year to 250 000 vehicles per year. This figure includes all vehicles that will be produced in the plant.

The project is considered as acceptable with minor negative impact.

Other Environmental and Social Aspects

The existing production capacity for the conventional vehicles (ca. 200 000 vehicles p.a.) will not materially change, and therefore the volumes of the new vehicle are expected to be replacing some of the older existing models. The production capacity for the Mega City vehicle will be added and, with the current investment, it can reach 80 000 units per year. However, the combined production of the plant (conventional and electric vehicles) will not exceed in total 250 000 units per year, according to the promoter's plans and the current operating authorizations. If the promoter decides to increase the produced volume, some of the production would be shifted to alternative BMW facilities.

The promoter will inform the Bank of any updates in the Plant's environmental authorizations that may result from any relevant change in the production volumes and consequently the authorized annual production capacity.

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.

General Information

The "conventional" vehicle will be a small MPV-type vehicle, with CO₂ emissions starting at below 90g/km for the ICE variants. The Plug-in Hybrid electric vehicle (PHEV) variant will have emission levels at around 50g/km. The vehicle will be manufactured using state-of-the-art technologies also deployed in other BMW plants, with one significant improvement coming from the installation of the a new press which requires 30% less energy per part compared to the existing equipment. Overall, the production of the new vehicle is expected to generate about 3% less CO₂ emissions than the equivalent vehicle currently manufactured at the plant.

The Mega City vehicle will have two variants: a full battery electric variant (BEV), and the extended-range electric vehicle (EREV) with CO₂ emissions between 40 to 60 g/km. The vehicle's production will require 50% of the energy required for conventional vehicles, 70% less water, and the volatile organic compound (VOC) emissions will also be reduced by 50%. Furthermore, 100% of the electricity will be provided by renewable sources, and more specifically by wind turbines that will be installed on the plant's premises, and therefore the plant's contribution to the vehicle's production will be CO₂ neutral. Finally, the noise in the body shop will be reduced by 50% as compared to the current practice.

The factory in Leipzig is the BMW benchmark concerning energy consumption. This plant consumes an average of approximately 1.8 MWh/vehicle in comparison to the company's overall average of approximately 2.3 MWh/vehicle. The production of the Mega City vehicle is expected to require about 1.1 MWh/vehicle.

Carbon Footprint Evaluation

The total absolute emissions are estimated at 69 300 tons CO₂ per year, while the relative emissions are estimated at about -11 110 tons CO₂ per year, and therefore the project is not included in the carbon Footprint exercise.