## **Environmental and Social Data Sheet**

#### **Overview**

Project Name: **MVV NETZWERKE** Project Number: 2011-0558 Country: GERMANY Project Description: The project consists of a programme of investments to be carried out over the period 2011-2015 for the expansion, optimisation and renovation of the distribution networks of Mannheim metropolitan area for the supply of (i) district heating, (ii) electricity, (iii) natural gas and (iv) drinking water. The investments are typical for the activity of energy and water network operation and the individual components are mostly of small size. The programme does not directly concern the production of energy, but includes some investments in drinking water production (wells and water conditioning).

EIA required: None of the planned components of the project are considered to meet the requirements for an EIA; however a condition has been included in the contract in the event that an EIA may be requested by the competent authority for a project competent. The condition requires that the promoter completes any EIA or nature conservation area impact assessment and receives approval from the competent authorities prior to allocating the Bank's funds to the project component, and that copies of the relevant documents, including the consents, are furnished to the Bank.

Project included in Carbon Footprint Exercise<sup>1</sup>: "Carbon Footprint") YES (Details are provided in section:

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

This is a typical energy and water distribution project applying standard technologies undertaken by an experienced promoter. The impacts which can be typically expected from the individual components are not expected to be significant due to the small size and location of the components. The main impacts occur during construction, are temporary in nature, and are mitigated according to established practices in the sector.

The project components fall under Annex II of Directive 85/337/EEC and its amendments as transposed into German legislation.

The promoter has provided evidence of sound practice with respect to environmental management and confirmed that all new projects are screened for environmental impacts. These practices are acceptable to the Bank.

#### **Environmental and Social Assessment**

#### **Environmental Assessment**

The promoter has a comprehensive environmental management system in place which assesses new projects and monitors ongoing operations and follows regulations.

The operation will provide environmental benefits through the substitution of less efficient and more polluting fuel sources by gas, and through the switching to a higher efficiency CHP source for the district heat.

### **EIB Carbon Footprint Exercise**

Over the 4 components of the project - gas, electricity, water and district heating - only the district heating (DH) has an impact of significance in terms of GHG emissions. The investments in the DH include the connection to a new coal-fired power generating unit that will so be able to be operated in high-efficient CHP mode, as well as expansions of the network. The project emissions considered are the future annual emissions associated essentially to the heat supplied from the new generating unit, estimated to be 4776 kt  $CO_{2-e}/y$ . The baseline emissions are those from the electricity generated with the new unit in non-CHP mode, as well as the heat supplied by the old CHP units currently in use and to be substituted, and from the individual gas and gasoil boilers of the customers who are expected to switch to the district heating in the future, estimated in total at 6435 kt  $CO_{2-e}/y$ . Compared to the baseline, the project is expected to save 1659 kt  $CO_{2-e}/y$ .

The loan is expected to cover about 43% of total investment outlays. Pro-rated to this amount, the absolute emissions will be 2054 kt  $CO_{2-e}/y$ , avoided emissions 2767 kt  $CO_{2-e}/y$  and estimated net emission savings 713 kt of  $CO_{2-e}/yr$ .