



## CER *Fact Sheet*

<b>NAME</b>	Project 4744: BRT Zhengzhou, China
<b>LOCATION</b>	Zhengzhou, China
<b>PROJECT TYPE</b>	Energy efficient public transport
<b>METHODOLOGY</b>	AM0031 ver. 3-Baseline methodology for Bus Rapid Transit projects
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<b>CDM REGISTRY LINK</b>	<a href="https://cdm.unfccc.int/Projects/DB/Germanischer1303804395.51/view">https://cdm.unfccc.int/Projects/DB/Germanischer1303804395.51/view</a>
<b>SUSTAINABLE DEVELOPMENT</b>	Document attached



## SUSTAINABLE *Development*

The objective of the BRT (Bus Rapid Transit) Zhengzhou is to establish an efficient, safe, rapid, convenient, comfortable and effective modern mass transit system based on a Bus Rapid Transit (BRT) system. Zhengzhou is the capital of the Province of Henan and has a population of around 3.5 million inhabitants. Zhengzhou like most Chinese cities is experiencing a rapid rate of motorization with increasing numbers of private vehicles.

Emission reductions are the result of reduced GHG emissions per passenger trip comparing the baseline with the project situation. The BRT Zhengzhou reduces GHG (Greenhouse Gases) emissions by improving the resource efficiency of transporting passengers in the urban area of Zhengzhou i.e. emissions per passenger trip are reduced compared to the situation without project. This is realized through following changes:

- Improved efficiency: new and larger buses are used which have an improved fuel efficiency per passenger transported compared with those used in absence of the project. On trunk routes the project uses articulated buses with a capacity of 160 passengers, which is significantly more than the normal baseline buses.
- Mode switching: The BRT system is more attractive to clients due to reduced transport times, increased safety and reliability and more attractive buses. It can thus attract private car and taxi users with higher emission rates to switch to public transport.
- The integration with feeder lines allows for efficient transport trips of customers combining fine density feeder lines with high capacity trunk routes. On trunk routes a large passenger demand exists which is served with large buses and a high frequency while in less populated areas a lower passenger demand exists which is served with smaller feeder buses operating with a lower frequency.
- Load increase or change in occupancy: The BRT has a centrally managed organisation dispatching vehicles on trunk routes. The occupancy rate of vehicles can thus be increased due to organizational measures.

The project contributes to sustainable development in a significant manner:

- Improved environment through less GHG and other air pollutant emissions, specifically particle matter, NOx and sulphur dioxide. This is achieved through a more efficient transport system and through new buses.
- Improved social wellbeing as a result of less time lost in congestion, less respiratory diseases due to less particle matter pollution, less noise pollution and fewer accidents per passenger transported.
- Economic benefits mainly on a macroeconomic level. Zhengzhou can improve its competitive position by offering an attractive and modern transit system reducing also the economic costs of congestion.