# RESPONSIBILITY SUSTAINABILITY EFFICIENT



### **BUS RAPID TRANSIT IN METROPOLITAN MAKASSAR**

improving the region's public transport, connectivity and climate footprint

Indonesian cities are facing severe challenges regarding public transport and urban mobility. The non-existence, degradation or under design of public transport systems have led to an increased usage of private vehicles (cars and motorcycles) over the last decades, contributing to traffic congestion, economic losses and high pollution by greenhouse gas emissions (GHG) and other pollutants. Projected emissions from private cars in Indonesian cities account for 140 million tCO<sub>2</sub> annually by 2030, whilst motorcycles contribute to a four to six times higher amount than cars.

To address these challenges, Indonesia's national midterm development planning 2020-2024 emphasizes the development of low-carbon urban transportation (roadbased public transportation) in six major metropolitan cities, one of them being Metropolitan Makassar. The development of proper road-based public transportation is perceived as one important component to contribute to the achievement of the Nationally Determined Contributions (NDCs), which stipulate emission reductions by 29% (purely with national means) respectively 41% (with international support) until 2030 (in comparison to 2010 baseline figures).

## Bus Rapid Transit (BRT) Development in Metro Makassar

Metropolitan Makassar is the major urban agglomeration and development hub in eastern Indonesia. Located in the south-west of Sulawesi island and including several cities and municipalities (Makassar, Maros, Sungguminasa, Takalar) it is also known as MAMMINASATA, with a total population of around 3.9 million inhabitants in 2019.



#### **FELICITY** in a nutshell

"Financing Energy for Low-carbon Investment-Cities Advisory Facility" is an initiative of GIZ and the European Investment Bank (EIB) to support low-carbon infrastructure projects in cities that significantly contribute to sustainable development and climate change mitigation.

As a project preparation facility, FELICITY offers technical assistance to cities in designing and structuring their infrastructure investment projects.

FELICITY prioritizes the interest of cities and incorporates the perspective of international financiers.

Typical for many other major metropolitan areas in Indonesia, the absence of a capable, reliable and safe public transport system and the high motorized individual transport are causing manifold adverse impacts, such as traffic congestion, poor connectivity, a high rate of casualties and severe environmental pollution. This hinders a sustainable future development of the agglomeration.



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Commencing in November 2019, MAMMINASATA started to plan for a BRT system, supported by the GIZ programmes SUTRI NAMA and INDOBUS.

The system currently foresees the planning and construction of corridors with segregated and mixed traffic lanes (around 32 km total length), multimodal stations, bus depots, ticketing system as well as the procurement of a bus fleet running on low-carbon propulsion technologies. As such, the development of BRT aims to contribute to an inclusive and climate optimized metropolitan development and a green post pandemic recovery.

#### FELICITY's support to Metro Makassar

FELICITY supports the project promoter, i.e. South Sulawesi Provincial government and the local governments of MAMMINASATA, in preparing a bankable project in line with international financing requirements, capacitating the project promoter and facilitating the project's financing. Hereby, FELICITY cooperates with SUTRI NAMA and INDOBUS to align forces, increase expertise and provide the most efficient technical assistance to the project promoter.

Crucial challenges in early stage project preparation such as feasible and best fit technological options, net GHG emission reductions, environmental and social impact assessments, clear and sound funding and financing schemes as well as required institutional arrangements, are addressed by FELICITY's and SUTRI NAMA and INDOBUS's technical assistance.





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