Sustainable Mobility. Proven Technology.

The undertaken Life Cycle Assessments show that the urban ropeway is the eco-friendliest mobility solution in comparison to alternative transport systems. Based on the "Línea Roja" in La Paz (BOL) the well-known consultant institution *denkstatt GmbH* conducted a LCA-study for both existing transportation systems ropeway and bus as well as one for a fictional tram. All Life Cycle Assessments had been undertaken according to ISO 14040/44 and were reviewed by three independent institutions.

Study

denkstatt GmbH (2019): Carbon Footprint of a Doppelmayr Cable Car in La Paz, Placed in the Context of Select Alternative Transport Systems.

The underlying scenario¹ is characterized by a height difference of 402 meters and would only have been possible by bus or tram over a distance of 12,4 kilometres. With the mobility solution "ropeway" the decision-makers considered to use a new level which directly connects both stations over a distance of 2.349 meters without any traffic jams. Apart from the positive effect on the travel time, a trip only takes 10 minutes – passengers of the ropeway system profit from continuous availability of cabins which eliminates waiting time for users.

With the proven ropeway technology in urban mobility we help cities in reaching UN Sustainable Development Goal "11. Sustainable Cities and Communities" to maintain the quality of life for current and future city dwellers. The urban ropeway as an easily integrable, interconnected and reliable solution in urban mobility promotes:

Decarbonization of Cities

- No local pollution such as nitrogen oxides (NO_x) or particulates
- Low environmental impact due to smallest physical footprint to alternative mobility solutions
- Central Electric Drive: Highest Energy Efficiency

Environmentally friendly mobility solutions to increase the general quality of life in cities

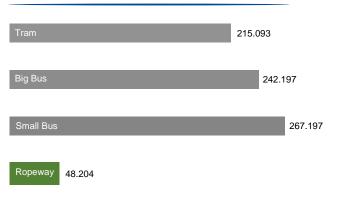
- Livability: Higher air quality (no fumes) and low in noise
- Lowest land sealing through easy integration in existing infrastructure
- Preservation of buildings, parks, and memorials

Accessible mobility without any limitations

- Barrier-free entrance and exit
- Continuous availability of cabins (no waiting) for up to 6.000 passengers per hour and direction
- Cost-effective implementation and operation enable socially acceptable pricing for users

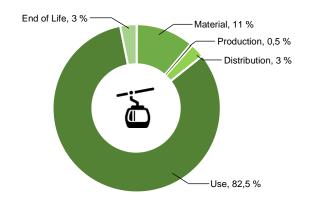
Life Cycle Assessments

of various means of transport (in tCO2eq)



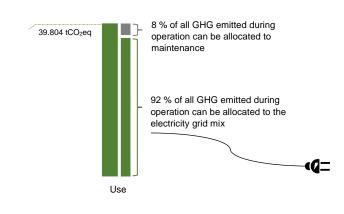
Greenhouse Gases allocated to Life Cycle Phases

LCA of urban ropeway "Línea Roja" (Cradle to Cradle)



Operation of Urban Ropeway (Use)

Divided into electricity grid mix and maintenance



Start: 16 de Julio (El Alto, Bolivia) Finish: Estación Central (La Paz, Bolivia) 69 % Utilization (2.059 pphpd) 17 hours/day, 365 days

¹ Functional Unit

Direct Route: 2,3km (10min) Alternative Route: 12,4km (18min)