

FACTSHEET KATHMANDU



Demonstration City

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Kathmandu - Nepal

In Kathmandu, a demonstration action will contribute to create an ecosystem for electric mobility in Kathmandu by demonstrating different Evs to enhance public transport, as well as suitable charging solutions and related services. The main demo activities include conversion of diesel bus to E-bus and production of remodeled e-3 wheelers, e- shuttle van and e-micro bus carried out by local manufacturers with the technical support from the consortium and equipment imported. As mentioned in the study by GGGI (2018), the local manufacturing of Evs in Kathmandu offer direct benefits such as increased affordability, generation of local employment, increased industrial independence, increased scope of customization, improved after-sales vehicle servicing, increased economic development, and reduced trade deficit long-term.



E-bus conversion

Test category: Test under real operational conditions
Vehicles involved: 1 e-bus (20 seater)

An old diesel bus will be converted to E-buses, mainly replacing the drive system (motor, transmission and rear axle). The required components for the conversion will be imported and assembled locally. As charging infrastructure is poor or non-existent in public, suitable options for charging Evs and batteries will be suggested.



E-3 wheelers

Test category: Test under real operational conditions
Vehicles involved: up to 6 e-3 wheelers (6 seater)

Upto 6 new E-3-wheelers with Li-ion batteries will be equipped with a fast charging system together with innovative business model, such as battery leasing/pay-per-use model. This will provide better services for E-3-wheelers as public transportation in the city. The route for the remodelled e-3 wheeler will be discussed and defined later.



E-shuttle van

Test category: Test under real operational conditions
Vehicles involved: 1 e-microbus (16 seater)

The 6-seater e-shuttle van will be developed with local manufacturers, using Power train from Valeo (iBSG4W @48V) and other components either imported or locally manufactured. This will be basically used for heritage site-seeing purposes. Lalitpur Municipality is willing to develop more such vehicles in Kathmandu. Therefore, the replication of this demo is high.



E-microbus

Test category: Test under real operational conditions
Vehicles involved: 1 e-microbus (16 seater)

SOLUTIONSplus will collaborate with local manufacturers to develop an electric modular concept of microbus (16 seater). The e-microbus will be used as a public transportation (feeder) and has a high potential to replace thousands of diesel-powered micro buses running in different routes of the Kathmandu valley. The project has a high potential of replication and the local partner wishes to develop involving local manufacturers (who will also carry out Conversion of diesel bus to E-bus). SOLUTIONSplus will invest 7500 EUR as a Lumpsum and the local manufacturer (Shree-ecovisionary) will provide the rest of the budget.