

## ELECTRIC BIKE

### *Project Title:*

Renewal of 400,000 old gasoline powered 125 cc motorcycles and supply of electric powered bikes with equivalent usage and performance.

### *Brief Description:*

This project is basically aiming at reducing gasoline fuel consumption by shifting the energy source share of the operating fleet from gasoline to electric. In this project, gasoline powered 125 cc motorcycles older than 10 years, are considered to be retired and replaced by new electric powered motorcycles. The earned value of replacing every single motorcycle in its first five years of operation shall be paid back to the investor(s) of the project at seasonal intervals.

### *Project Timeline:*

The supply of new electric motorcycle has been predicted to be accomplished in 5 years according to table (a). Relatively, the total annual cash flow of repayment to the investor(s) is calculated in table (b) which extends the total duration of the project to 9 years.

Table (a)

Year	2014	2015	2016	2017	2018	2019	2020	2021	Total
# of supplied electric motorcycle	10000	40000	100000	150000	100000	0	0	0	400000

### *Project Payments:*

The payments are based on replacement of every single old motorcycle by a new electric bike. In such condition the investor(s) shall receive 480 USD per single bike replacement.

Table (b)

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Maximum annual payment (M USD)	0	4.8	14.4	28.8	38.4	38.4	33.6	24	9.6	192

### *Project Achievements:*

The major achievements of implementation of such project, considering benefits of first five years of operating new electric motorcycles are potentially as follow;

Maximum Gasoline Fuel volume replaced by electric: 600 (million liters)

Maximum carbon emission reduction: 1 (million tons) of CO<sub>2</sub> equivalent