

### The Average Malaysian spending on Motorcycle Maintenance Costs:

Operating Cost Comparison between an Electric & Fuel Motorcycle.  
 36 months with estimate 60 km daily ( Total 65,700 kilometer)  
 Estimate Petrol / Gasoline price at RM 2.00 / litre.  
 Tenaga Nasional Electricity Rate at RM 0.28 / kWh

|     |  | Petrol / Gasoline Bike 110 cc |                                 | Electric Motorcycle – Lead Acid Battery |          | Electric Motorcycle - Removable Lithium |          | Electric Motorcycle - Lithium LiFePo4 Battery |          |  |
|-----|--|-------------------------------|---------------------------------|---|----------|---|----------|---|----------|--|
| No. | Description  | Details                       | Cost RM                         | Details                                 | Cost RM  | Details                                 | Cost RM  | Details                                       | Cost RM  | Recommendation – Maintenance & Service Interval                  |
| A   | TREELETRIK – TL 3000 or TL 70  | No                            |                                 | Yes                                     | 4,300.00 | Yes                                     | 5,500.00 | Yes   | 6,800.00 | Electric Motorcycle – Brand New Purchase Price                   |
| B   | Brand X 110cc  | Yes                           | 4,900.00                        | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Internal Combustion Engine Motorcycle - Brand New Purchase Price |
| 1   | Petrol / Gasoline  | Yes                           | 3,285.00                        | No                                      | N / A    | No                                      | N / A    | No  | N / A    | 40 km/litre  |
| 2   | Electricity  | No                            | N / A                           | Yes                                     | 559.00   | Yes                                     | 559.00   | Yes   | 559.00   | Electricity supply from TNB                                      |
| 3   | Fuel Additive  | Yes                           | 938.00                          | No                                      | N / A    | No                                      | N / A    | No  | N / A    | RM 2.00 per fill up with 469 fill-up                             |
| 4   | Lubricant ( every 3 months )   | Yes                           | 480.00                          | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 5,000 km or 3 months                                |
| 5   | Oil Filter   | Yes                           | 300.00                          |   | N / A    |   | N / A    |   | N / A    | Change every 5,000 km or 3 months                                |
| 6   | Gear Oil   | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 15,000 km or 9 months                               |
| 7   | Spark Plug   | Yes                           | 90.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 20,000 km or 12 months                              |
| 8   | Air Filter   | Yes                           | 180.00                          | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 9   | Fuel Filter  | Yes                           | 120.00                          | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 15,000 km or 9 months                               |
| 10  | Brake Fluid  | Yes                           | 90.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 20,000 km or 12 months                              |
| 11  | Starter Battery  | Yes                           | 180.00                          | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 40,000 km or 24 months                              |
| 12  | Lithium Ion Battery ( LiFePo4)   | No                            | N / A                           | No                                      | N / A    | Yes                                     | N / A    | Yes   | 880.00   | Change every 180,000 km or 98 months                             |
| 13  | Lithium Ion Battery ( LiFePo4)   | No                            | N / A                           | No                                      | N / A    | Yes                                     | 680.00   | Yes   | N / A    | Change every 90,000 km or 48 months                              |
| 14  | Deep Cycle Gel or AGM Battery  | No                            | N / A                           | Yes                                     | 800.00   | No                                      | N / A    | No  | N / A    | Change every 30,000 km or 18 months                              |
| 15  | Tires and wheels   | Yes                           | 480.00                          | No                                      | 480.00   | No                                      | 480.00   | No  | 480.00   | Change every 30,000 km or 18 months                              |
|     |  | Petrol / Gasoline Bike        |                                 | Electric Motorcycle                     |          | Electric Motorcycle                     |          | Electric Motorcycle                           |          |  |
|     | Inspection and Service   | Details                       | Cost                            | Details                                 | Cost     | Details                                 | Cost     | Details                                       | Cost     |  |
| 16  | Clutch System  | Yes                           | 120.00                          | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 17  | Bearing  | Yes                           | 40.00                           | Yes                                     | 40.00    | Yes                                     | 40.00    | Yes   | 40.00    | Change every 15,000 km or 9 months                               |
| 18  | Brake Cable  | Yes                           | 60.00                           | Yes                                     | 60.00    | Yes                                     | 60.00    | Yes   | 60.00    | Change every 10,000 km or 6 months                               |
| 19  | Brake Pad  | Yes                           | 240.00                          | Yes                                     | 240.00   | Yes                                     | 240.00   | Yes   | 240.00   | Change every 10,000 km or 6 months                               |
| 20  | Throttle Operation System  | Yes                           | 30.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 21  | Throttle Cable   | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 22  | Throttle Wiring  | No                            | N / A                           | Yes                                     | 60.00    | Yes                                     | 60.00    | Yes   | 60.00    | Change every 10,000 km or 6 months                               |
| 23  | Controller   | No                            | N / A                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 24  | Converter  | No                            | N / A                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 25  | Hub Motor  | No                            | N / A                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 15,000 km or 9 months                               |
| 26  | Battery, check voltage and cables  | Yes                           | 30.00                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 27  | Switches   | Yes                           | 30.00                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 15,000 km or 9 months                               |
| 28  | Front and Headlights   | Yes                           | 30.00                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 29  | Rear Lights  | Yes                           | 30.00                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 30  | Direction Indicator Lights   | Yes                           | 30.00                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 31  | Crankcase ventilation tube   | Yes                           | 30.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 15,000 km or 9 months                               |
| 32  | Fuel line/system   | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 33  | In-take Valve / Exhaust Valve  | Yes                           | 30.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 34  | Exhaust system, check for leaks and tighten/replace gaskets if necessary | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 15,000 km or 9 months                               |
| 35  | Carburetor sync and idle speed also check choke function                 | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 36  | Cooling system, test fan, coolant level and inspect lines                | Yes                           | 30.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 37  | Air filter, clean with compressed air and re-oil                         | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 38  | Clutch system, check clutch function and adjust if necessary             | Yes                           | 30.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 39  | Forks, check fluid level and for leaks                                   | Yes                           | 60.00                           | Yes                                     | 60.00    | Yes                                     | 60.00    | Yes   | 60.00    | Change every 10,000 km or 6 months                               |
| 40  | Engine Idle  | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
| 41  | Turn signals lights and switches, verify function of all                 | Yes                           | 30.00                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 42  | Cables, inspect lube and adjust  | Yes                           | 30.00                           | Yes                                     | 30.00    | Yes                                     | 30.00    | Yes   | 30.00    | Change every 10,000 km or 6 months                               |
| 43  | Drive Chain and Slider   | Yes                           | 180.00                          | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 15,000 km or 9 months                               |
| 44  | Gear and Gear Box  | Yes                           | 60.00                           | No                                      | N / A    | No                                      | N / A    | No  | N / A    | Change every 10,000 km or 6 months                               |
|     |  |                               | 3 Years Total Cost of Operation |   |          |   |          |   |          |  |
|     |  |                               | 12,583.00                       |   |          | 6,899.00                                |          |   |          |  |
|     |  |                               |                                 |   |          | 7,979.00                                |          |   |          |  |
|     |  |                               |                                 |   |          |   |          | 9,479.00                                      |          |  |

Different in Operating Cost over 3 years:

RM5,684.00

RM4,604.00

RM3,104.00