

# COST REPORT

## INTRODUCTION:

Building a economic vehicle has Cost as its main parameter. The cost report is classified based on the departments. The cost of the components are estimated based on the market survey by respective departments. The cost limit is  $\leq 80,000$  rupees (rulebook). With added up features and designs to reduce weight and cost, we have brought down the cost nearer to the limit. On further market survey during fabrication cost may be brought down more closer to the limit.

Cost are in Rupees.

<b>MOTOR AND CIRCUITS</b>			
S no.	Components	Quantity	Cost
1	Hub Motor (Motor+Rim+Wheel+Drum brake)	1	10000
2	Driver Circuit	1	3000
3	Accelerator pedal	1	200
<b>TOTAL</b>			<b>13200</b>

<b>SOLAR PANEL</b>			
S no.	Component	Quantity	Cost
1	Solar Panel	50 Feet	30000
2.	MPPT Algorithm circuit	1	5000
3	Aerodynamic adjustments	4	200
<b>TOTAL</b>			<b>35200</b>

<b>BATTERY &amp; OTHER ACCESORRIES</b>			
S no.	Components	Quantity	Cost
1	Batteries	4	14000
2	Wires	15m	500
3	Switch(DPST)	1	50
<b>TOTAL</b>			<b>14550</b>

<b>FRAME</b>			
S no.	Component	Quantity	Cost
1	1" Pipe 1.2mm thick	9kg	3500
2	0.75" Pipe 1mm thick	5kg	2000
3	0.5" Pipe 1mm thick	3kg	1250
4	Welding (Gas + filler rods)	As required	1000
5	Base covering	40sq. feet	600
<b>TOTAL</b>			<b>8350</b>

<b>STEERING SYSTEM</b>			
S no.	Components	Quantity	Cost
1	Steering Wheel	1	150
2	Steering rod	1	50
3	0.75" Bearing	1	65
4	Steering arm	2	100
<b>TOTAL</b>			<b>365</b>

<b>BRAKING SYSTEM</b>			
S. no	Component	Quantity	Cost
Front Disc Brake			
1	Caliper & Brake pad	2	800
2	Rotor Disc	2	600
3	Tandem Cylinder	1	800
4	Brake Pedal	1	50
5	Tubes	Required	150
6	Brake Fluid	150ml	50
<b>Total</b>			<b>2600</b>

<b>SUSPENSION SYSTEM</b>			
S no.	Component	Quantity	Cost
1	Front Suspension	2	800
2	Rear Suspension	1	500
3	King Pin (Machining)	2	400
4	A arm	2	100
5	C Arm	2	100
6	Bearing (in Kingpin)	2	300
7	Ball Joint	2	400
8	Front wheel	2	1200
<b>TOTAL</b>			<b>3800</b>

<b>ERGONOMICS</b>			
S no.	Component	Quantity	Cost
1	Seat(Seat + seat belt)	1	500
2	Extinguisher	1 (2 Kg)	1500
3	Lock nuts	25	800
4	Kill Switch	2	100
5	Wire covering(PVC)	10m	150
6	Brake light	1	50
7	Steering Indicator	4	200
8	Rear View mirrors	2	200`
<b>TOTAL</b>			<b>3500</b>

<b>INNOVATIONS</b>			
S no	Components	Quantity	Cost
1	Cruze control	1	300
2	Steering retraction	1	400
3	Power source	1	250
<b>TOTAL</b>			<b>950</b>

<b>Miscellaneous</b>			
S no.	Component	Quantity	cost
1	Nut + Bolt	80+80	750
2	Primer and Paint	2.5 liter	400
3	Sticker		100
4	Machining process & tools		1200
5	Lubrication	150ml	70
6	Shaft (King pin to wheel)	2	400
<b>TOTAL</b>			<b>2920</b>

**TOTAL COST =85285/-**

### Cost Distribution

