

BoM for SEC v1 with two motors installed, using VRLAs		maintenance														Research and Development													
prices derived from original invoice 2015 or local prices '20	PPU	fleet	cost	v1	cost	v2	cost	v3	cost	v4	cost	v5	cost	v6	cost	fleet	cost	v1	cost	v2	cost	v3	cost	v4	cost	v5	cost	v6	cost
Solar panel	229	0	0		0		0		0		0		0		0	4	918		0	1	229		0		0	1	229	2	459
Battery 1	27	2	55		0		0	1	27		0		0	1	27	7	191		0		0	2	55		0	2	55	3	82
Battery 2	27	1	27		0		0		0		0		0	1	27	7	191		0		0	2	55		0	2	55	3	82
Battery 3	27	1	27		0		0		0		0		0	1	27	7	191		0		0	2	55		0	2	55	3	82
Battery 4	27	2	55		0	1	27		0		0		0	1	27	6	164		0		0	2	55		0	1	27	3	82
CHARGE CONTROLLER	65	0	0		0		0		0		0	0	0	0	0	6	389	1	65		0	1	65		0	2	130	2	130
general motor 1 (left)	120	0	0		0		0		0		0		0		0	17	2040	4	480	1	120	2	240	2	240	2	240	6	720
motor gears	0	2	0	1	0	1	0		0		0		0		0	12	0		0		0	1	0	3	0	6	0	2	0
stator 2	0	0	0		0		0		0		0		0		0	4	0		0		0	3	0	1	0		0	0	0
general motor 2 (right)	120	0	0		0		0		0		0		0		0	13	1560	2	240	1	120	3	360	2	240	2	240	3	360
motor gears	0	1	0		0	1	0		0		0		0		0	12	0		0		0	3	0	3	0	4	0	2	0
stator 3	0	0	0		0		0		0		0		0		0	3	0		0		0	0	0	1	0		0	2	0
motor controller 1 (left)	15	1	15		0		0		0	1	15		0		0	5	75	1	15	1	15		0	1	15	1	15	1	15
motorcontroller 2 (right)	15	0	0		0		0		0		0		0		0	1	15		0	1	15		0		0		0		0
PAS pedals	3	0	0		0		0		0				0		0	2	5		0		0	1	3	1	3		0		0
PAS handle bars	6	3	18	1	6		0		0		0	1	6	1	6	1	6		0		0	1	6		0				0
Display 1 (left)	30	1	30		0		0		0		0		0	1	30	1	30		0		0	1	30		0				0
Display 2 (right)	30	1	30		0		0		0		0		0	1	30	1	30		0		0		0		0	1	30		0
motor cable 1 (left)	1	0	0		0		0		0		0		0		0	1	1		0		0		0		0		0	1	1
motor cable 2 (right)	1	0	0		0		0		0		0		0		0	1	1		0		0		0		0		0	1	1
hal speed switch 1 (left)	1	1	1		0		0		0		0		0	1	1	1	1		0		0		0		0		0	1	1
hal speed switch 2 (right)	1	1	1		0		0		0		0		0	1	1	1	1		0		0		0		0		0	1	1
Light switch	3	2	5		0		0	1	3	1	3		0		0	0	0		0		0		0		0		0		0
light 1 (front left)	4	0	0		0		0		0		0		0		0	1	4	1	4		0		0		0		0		0
light 2 (front right)	4	0	0		0		0		0		0		0		0	1	4	1	4		0		0		0		0		0
light 1 (rear left)	4	0	0		0		0		0		0		0		0	1	4	1	4		0		0		0		0		0
light 2 (rear right)	4	0	0		0		0		0		0		0		0	1	4	1	4		0		0		0		0		0
horn	2	0	0		0		0		0		0		0		0	0	0		0		0		0		0		0		0
horn switch	3	0	0		0		0		0		0		0		0	0	0		0		0		0		0		0		0
Tire 1 (front)	5	1	5		0		0		0		0	1	5		0	8	42		0		0	2	10	2	10	3	16	1	5
Tire 2 (left)	5	5	26		0	1	5	1	5	1	0	1	5	1	5	10	52	1	5		0	2	10	2	10	3	16	2	10
Tire (right)	5	2	10		0		0	1	5	1	0	0	0		0	11	57	1	5	1	5	2	10	2	10	3	16	2	10
inner tube 1 (front)	2	5	9	2	4		0		0	0	2	2	4	1	2	7	13		0		0	1	2	1	2	3	5	2	4
innertube 2 (left)	2	11	20	2	4		0	2	4	3	0	3	5	1	2	8	14		0	1	2	2	4	1	2	3	5	1	2
innertube 3 (right)	2	9	16	2	4		0	3	5	3	0	0		1	2	7	13		0	1	2	1	2	1	2	3	5	1	2
rim liner 1 (front)	1	0	0		0		0		0		0		0		0	0	0		0		0	0	0		0		0		0
rim liner 2 (left)	1	2	1	1	1		0	1	1		0		0		0	0	0		0		0		0		0		0		0
rim liner 3 (right)	1	1	1		0		0		0	1	0		0		0	0	0		0		0		0		0		0		0
break cable 1 br	1	5	3		0	1	1	1	1	1	0	1	1	1	1	1	1		0		0		0		0		0	1	1
break cable 2 bl	1	2	1	1	1		0	1	1		0		0		0	1	1		0		0		0		0		0	1	1
break cable 3 fr	1	6	4	1	1		0	2	1		1	2	1	1	1	0	0		0		0		0		0		0		0
break cable 4 fl	1	2	1		0		0	1	1		1	1	1		0	0	0		0		0		0		0		0		0
disc brake 1 PAD	1	16	16	2		1	1	5	5	4	0	2	2	2	2	0	0		0		0		0		0		0		0
disc brake 2 PAD	1	14	14	2	2	1	1	4	4	4	3	1	1	2	2	1	1		0		1	1		0		0		0	0
disc brake 3 PAD	1	16	16	1	1		0	5	5	4	3	3	3	3	3	1	1		0		0		1	1		0		0	0
disc brake 4 PAD	1	16	16	1	1	1	1	4	4	4	0	3	3	3	3	1	1		0		0		1	1		0		0	0
caliper 1 (disc)	1	0	0		0		0		0		0		0		0	1	1		0	1	1		0		0		0		0
caliper 2 (disc)	1	0	0		0		0		0		1		0		0	0	0		0		0		0		0		0		0
caliper 3 (disc)	1	0	0		0		0		0		1		0		0	0	0		0		0		0		0		0		0
caliper 4 (disc)	1	0	0		0		0		0		0		0		0	1	1		0		0		0		0		0	1	1
disc 1 (left)	2	2	3		0		0		0		0	1	2	1	2	0	0		0		0		0		0		0		0
disc 2 (right)	2	2	3		0		0		0		0	1	2	1	2	1	2		0	1	2		0		0		0		0
rim 1 (front)	2	1	2		0		0	1	2		7		0		0	2	3	1	2		0		0		0	1	2		0
rim 2(left)	2	4	7		0		0	1	2	1	7		0	2	3	3	5	1	2		0		1	2	1	2		0	0
rim 3 (right)	2	8	13	1	2	3	5		0	1	7	1	2	2	3	2	3		0	2	3		0		0		0		0
Break handle 1	1	1	1		0		0		0	1	3		0		0	0	0		0		0		0		0		0		0
break handle 2	1	1	1		0	1	1		0		0		0		0	0	0		0		0		0		0		0		0
housed bearing 1	12	0	0		0		0		0		0		0		0	0	0		0		0		0		0		0		0
housed bearing 2	12	0	0		0		0		0		0		0		0	0	0		0		0		0		0		0		0
free wheel 1	2	0	0		0		0		0		0		0		0	0	0		0		0		0		0		0		0
free wheel 2	2	0	0		0		0		0		0		0		0	0	0		0		0		0		0		0		0
free wheel 3	2	5	8	1	2		0	2	3	1	0	1	2		0	1	2		0	1	2		0		0		0		0
chain 1	2	1	2	1	2		0		0		0		0		0	3	5		0	1	2		0	1	2		0	1	2
chain 2	2	6	11	2	4		0	2	4	1	2	1	2		0	4	7		0	1	2		0	1	2		0	2	4
chain ring	4	1	4	1	4		0		0		4		0		0	3	11		0	1	4		0	2	7		0		0
bottom bracket	5	0	0		0		0		0		5		0		0	0	0		0		0		0		0		0		0
pedal arm	2	3	5	2	4		0		0		0		0	1	2	2	4	1	2	1	2		0		0		0		0
pedal 1	1	3	3	1	1		0		0		0		0	2	2	2	2		0	1	1		0	1	1		0		0