

# PEV Charging/Discharging Optimize

## **DISCHARGING MODE ACTIVATED**

..... Vehicles Discharging

Total Discharging Rate

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93

994.34 kWh

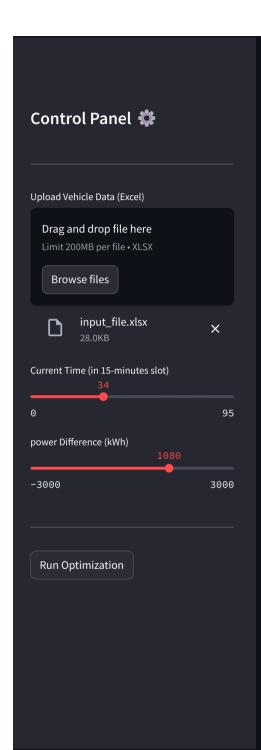
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### **Optimized Vehicle Schedule**

	PEV_N.O	Vehicle_number_plate	Vehicle_brand	Battry_Capacity_kWh	Present_SOC	Plug_in_
180	180	PB47WN5608	Ather Energy - Ather 450X	3.7	17%	
93	93	PB85SM4195	Ola Electric - Ola S1	4.0	40%	
296	296	PB67LI5296	Ola Electric - Ola S1	4.0	68%	
288	288	PB19JS6352	Ola Electric - Ola S1	4.0	58%	
280	280	PB14LD5378	Ola Electric - Ola S1	4.0	21%	
205	205	PB28JI2996	Ather Energy - Ather 450X	3.7	13%	
153	153	PB56WT5392	Mahindra - eVerito	21.5	22%	
131	131	PB98ML0544	Tata Motors - Tigor EV	26.0	80%	
196	196	PB52EU3685	Citroen - eC3	29.2	70%	
146	146	PB23TY8248	Tata Motors - Tigor EV	26.0	38%	
274	274	PB08LM7246	Mahindra - eVerito	21.5	56%	
253	253	PB27EL1343	Mahindra - XUV400	39.4	19%	
130	130	PB92SX4308	Citroen - eC3	29.2	55%	
58	58	PB43AY5012	Mahindra - XUV400	39.4	66%	
286	286	PB48CG3517	Ather Energy - Ather 450X	3.7	65%	
119	119	PB13YA1762	MG Motor - Comet EV	17.3	28%	

Download Results as CSV

ii How This System Works







**Optimized Vehicle Schedule** 

	PEV_N.O	Vehicle_number_plate	Vehicle_brand	Battry_Capacity_kWh	Present_SOC	Plug_in_Time	Estimated_plug_out_Time	SCORE_OUT_OF_
11	11	PB06WI9430	Mercedes-Benz - EQC	80.0	17%	29	38	g
96	96	PB47IT7887	Volkswagen - ID.4	77.0	22%	8	37	ç
292	292	PB75RY7487	Kia - EV6	77.4	84%	28	37	ç
251	251	PB84GC9321	Volkswagen - ID.4	77.0	43%	27	43	ç
34	34	PB89FA4195	Mercedes-Benz - EQC	80.0	47%	14	48	8
138	138	PB64RQ3713	Volkswagen - ID.4	77.0	27%	31	48	8
217	217	PB73WH5069	Kia - EV6	77.4	12%	28	49	8
31	31	PB73NL8864	Hyundai - IONIQ 5	72.6	19%	10	45	8
234	234	PB14VZ3105	BYD - Atto 3	60.4	39%	20	35	8
177	177	PB62YH2797	Mercedes-Benz - EQC	80.0	24%	8	55	8
77	77	PB92JC0505	BYD - Atto 3	60.4	66%	30	39	8
90	90	PB70JW8403	Tesla - Model 3	57.5	79%	22	40	8
247	247	PB56VB3709	Kia - EV6	77.4	24%	13	64	7
178	178	PB76RU1579	BYD - Atto 3	60.4	32%	9	47	7
193	193	PB10PS8293	BMW - i4	83.9	15%	23	72	7
223	223	PB44PX7324	Mercedes-Benz - EQC	80.0	57%	26	70	7

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i How This System Works

#### **Optimization Logic:**

- Vehicles are selected based on current time window
- Priority score calculated using:
  - 30% Battery Capacity
  - 40% State of Charge (SOC)
  - o 30% Remaining Plugged-in Time

#### Charging Mode:

• Prioritizes vehicles with lower SOC and more remaining time

- Charging rates:
  - <30% SOC: 0.5C rate</p>
  - o 30-70% SOC: 1.1C rate
  - o 70% SOC: 0.5C rate

#### Discharging Mode:

- Prioritizes vehicles with higher SOC and less remaining time
- Discharging rates:
  - <30% SOC: 0.1C rate</p>
  - o 30-70% SOC: 0.2C rate
  - 70% SOC: 0.5C rate