

OF=Min (Total Energy Costs)
= SUM [Pgrid(t) * Ecost(t)]

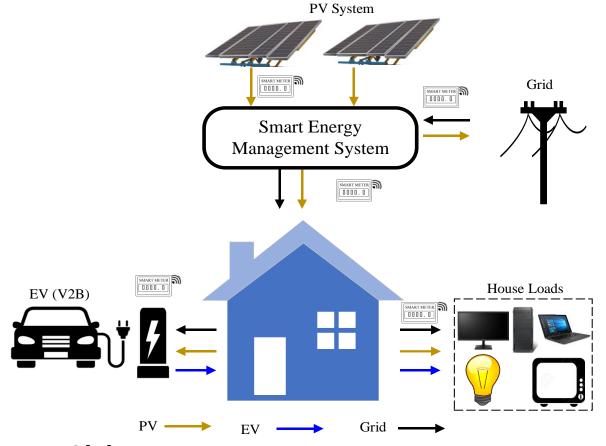
Pgrid(t) = PgridtoHouse(t) + PgridtoEV(t)

Max Power for the User	Energy Price Zone	Max PV Production	Daily PV Production	BESS Capacity	BESS CH & DIS	EV Battery Capacity	EV Battery SoC (M & E)	Total Daily Energy from Grid	New Daily Energy from Grid	Daily Energy Cost
7	SE4	NE	NE	NE	NE	45	75.5 <i>,</i> 33.3	93,73	83,23	79,7
Battery Management Service Course (BMS)									2024-02-08	1

PROJECT CASE STUDY







Pgrid(t) = PgridtoHouse(t) + PgridtoEV(t)

Max Power for the User	Energy Price Zone	Max PV Production	Daily PV Production	BESS Capacity	BESS CH & DIS	EV Battery Capacity	EV Battery SoC (M & E)	Total Daily Energy from Grid	New Daily Energy from Grid	Daily Energy Cost
7	SE4	2,28	10,05	NE	NE	45	75.48, 33.3	93,73	73.17	68,64
Battery Management Service Course (BMS)									2024-02-08	2

PROJECT CASE STUDY PV System **BESS** Grid Smart Energy Management System House Loads EV (V2B)

OF=Min (Total Energy Costs) = Pgrid(t) * Ecost(t) Pgrid(t) = PgridtoHouse(t) + PgridtoEV(t)

Grid

Max Power for the User	Energy Price Zone	Max PV Production	Daily PV Production	BESS Capacity	BESS CH & DIS	EV Battery Capacity	EV Battery SoC (M & E)	Total Daily Energy from Grid	New Daily Energy from Grid	Daily Energy Cost
7	SE4	7,99	35	18	5.04, 6.29	45	77.78 <i>,</i> 33.33	90,26	68,56	64,86
Battery Management Service Course (BMS)								-	2024-02-08	3