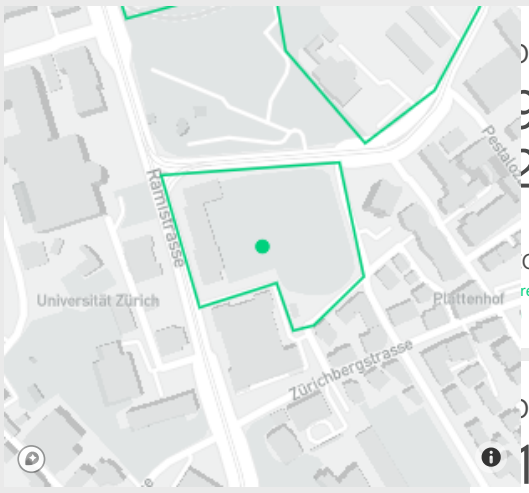
Optimal design and operation of scenario: PBD District_Building Scale Exec



Optimal solution 1

926 k CHF

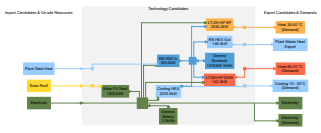
297.0 Tons

CO_2-eq

Green Premiums (GP)

CHF/Ton

This solution represents the energy system with the **minimum Costs** and has a Total Annualized Life-cycle Cost of 926 k CHF and Total Annual Emissions of 297.0 Tons CO_2-eq. The Annualized Green Premiums are 0 CHF/Ton CO_2-eq.



Optimal solution 5

1'003 k CHF

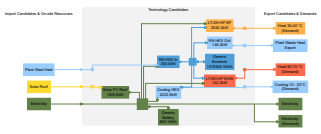
283.6 Tons

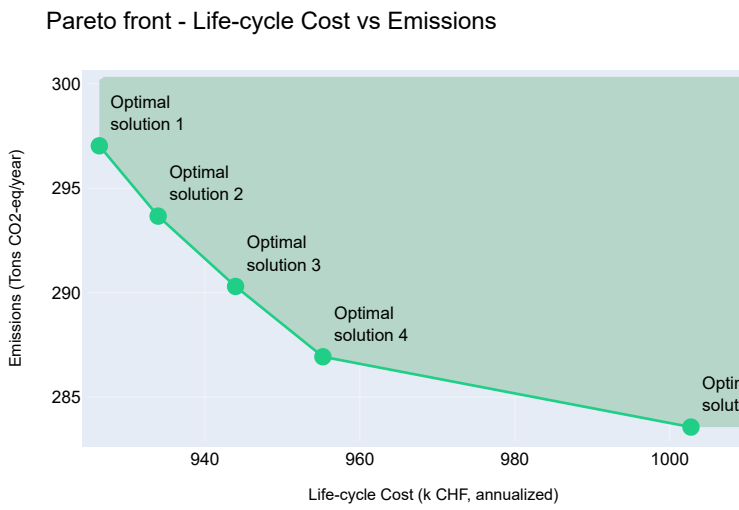
CO_2-eq

Green Premiums (GP)

5'674 CHF/Ton

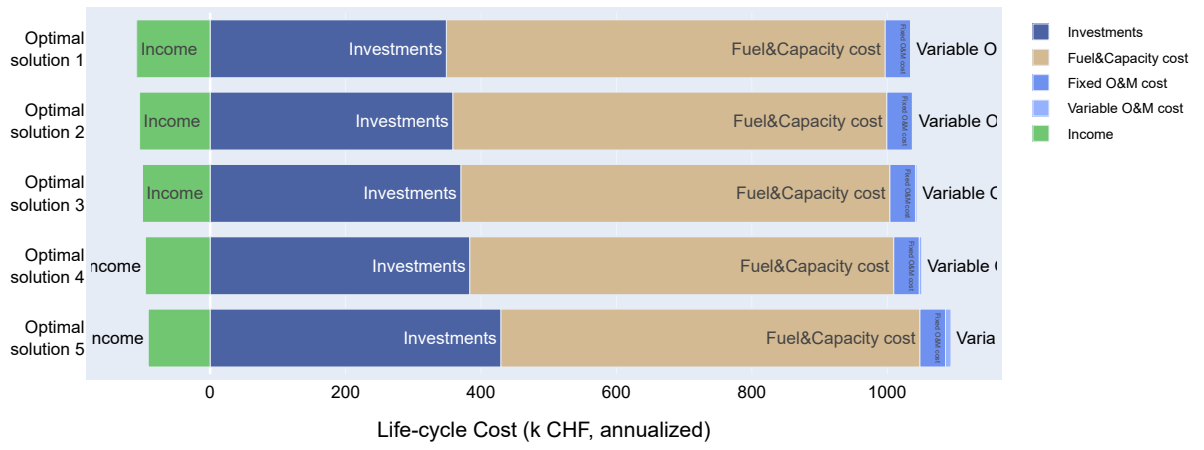
This solution represents the energy system with the **minimum Emissions** and has a Total annualized Life-cycle Cost of 1'003 k CHF and Total Annual Emissions of 283.6 Tons CO_2-eq. The Annualized Green Premiums are 5'674 CHF/Ton CO_2-eq.





Total Cost/Income Balance, (Annualized)

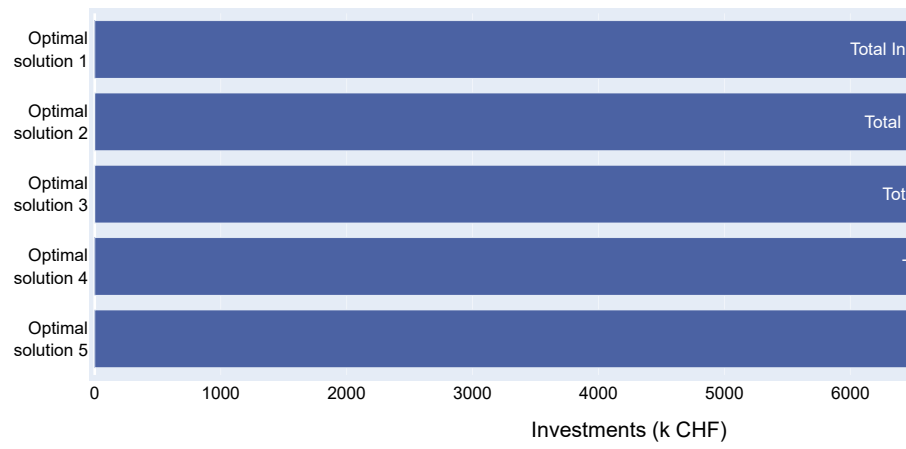
Total Cost/Income Balance, (Annualized) - Breakdown Technologies & Carriers



Total Investments

Total Investments - Breakdown Technologies

Total Investments - Breakdown Hubs



Import & Export Costs

Per Energy Carrier

Per Price Category & Energy Carrier

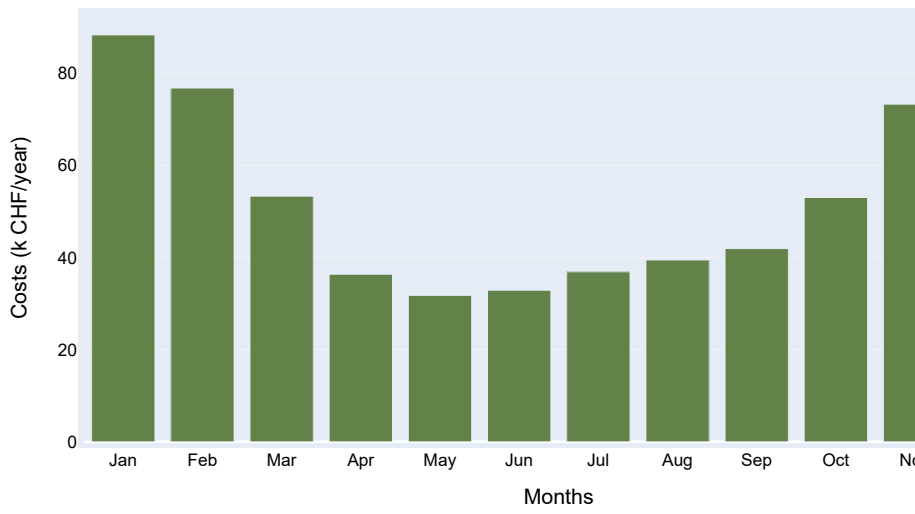
Import & Export Costs per Time

Optimal solution 1

Monthly

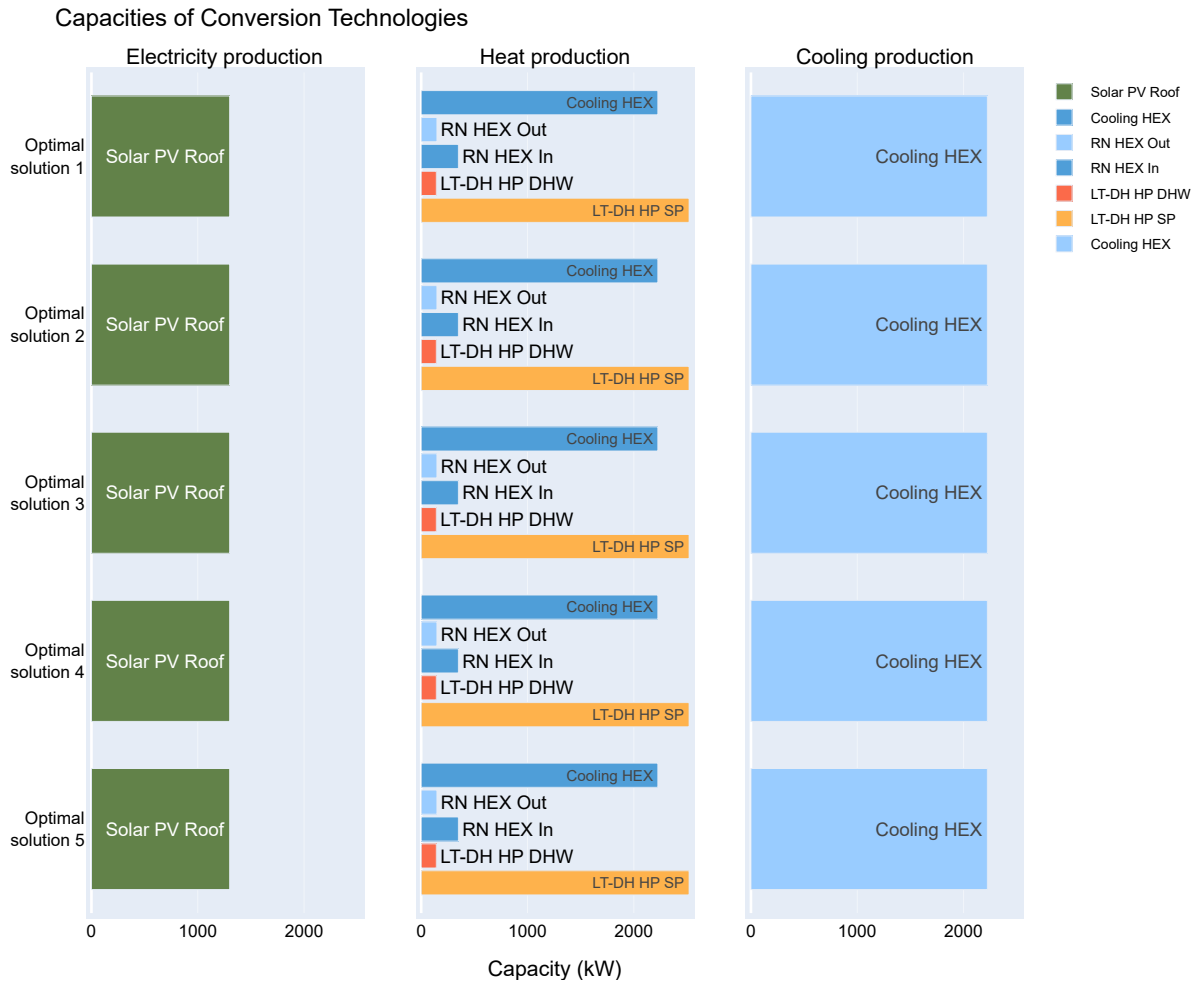
Quarterly

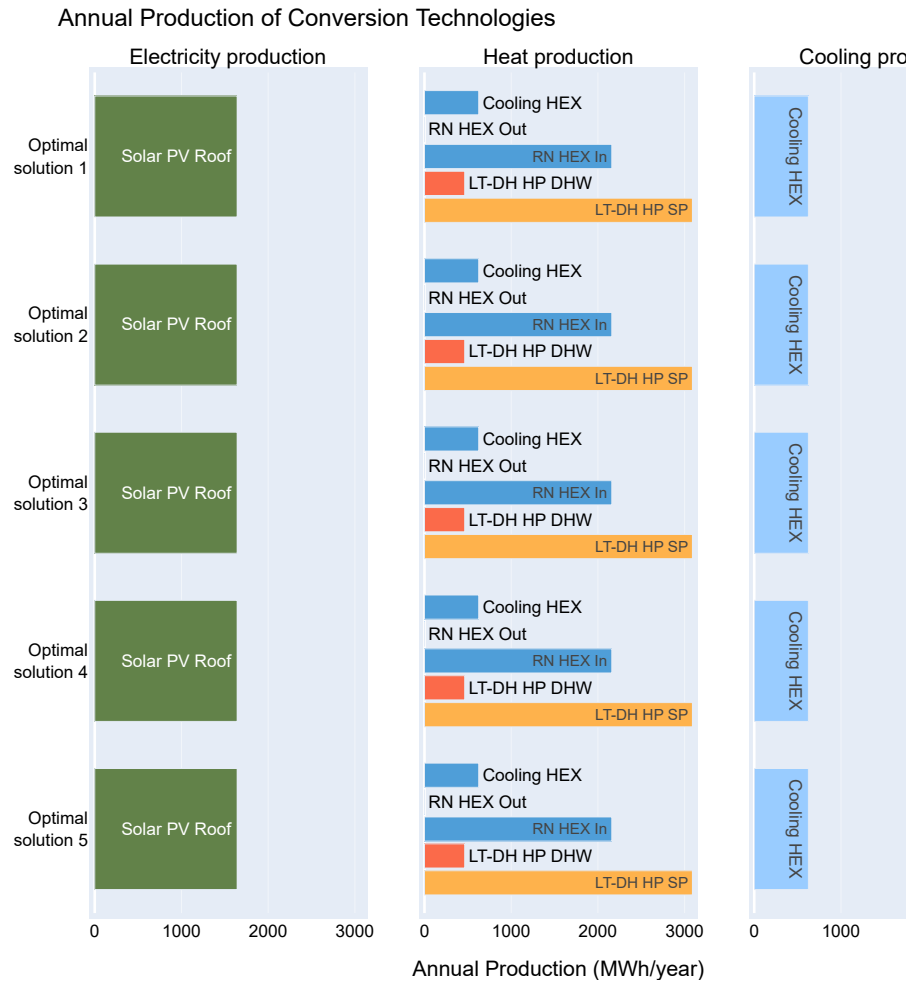
Half year



Optimal Design

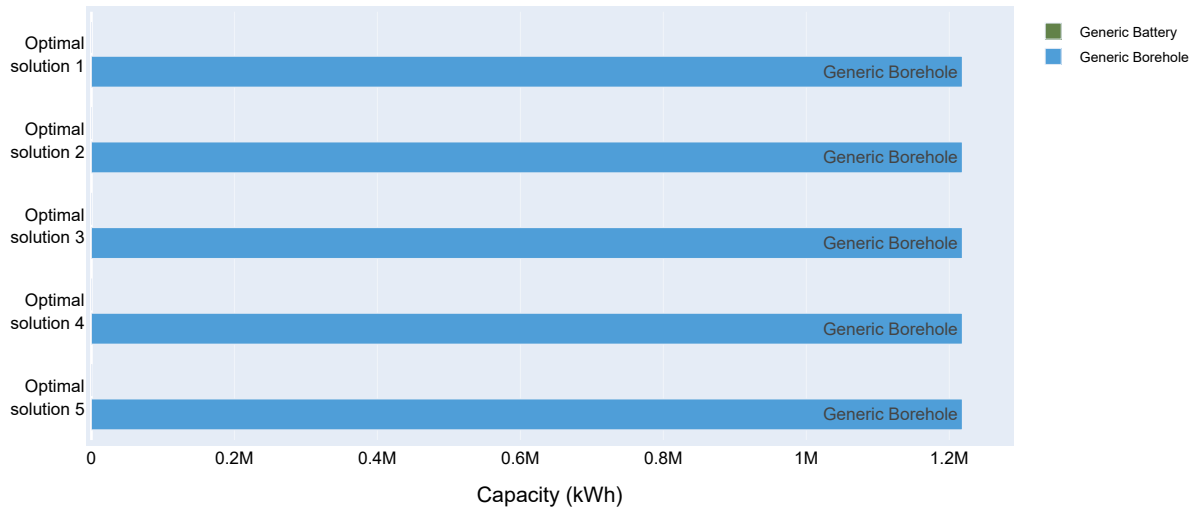
Optimal Operation





Capacities of Storage Technologies

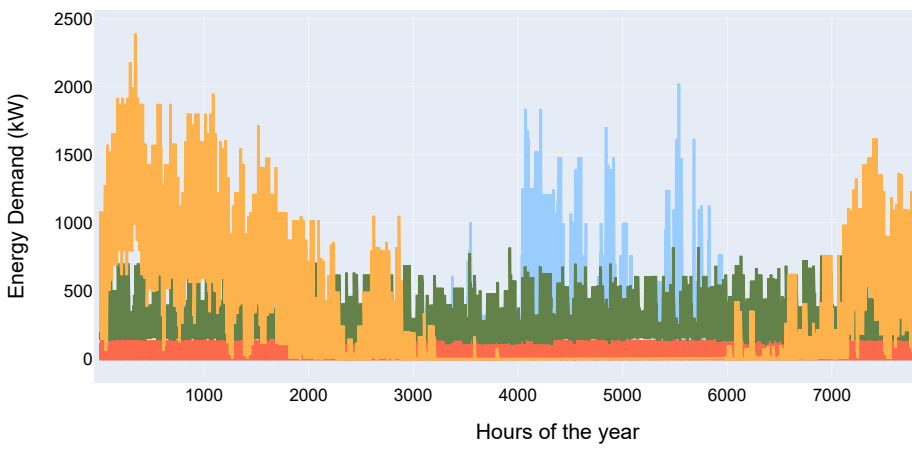
Capacities of EV Batteries

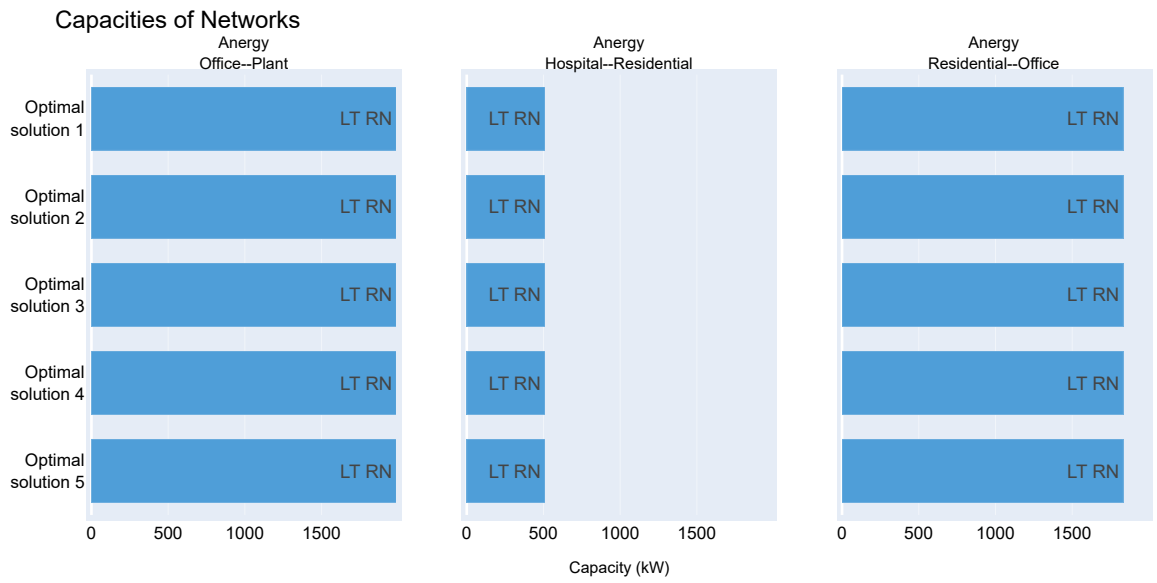


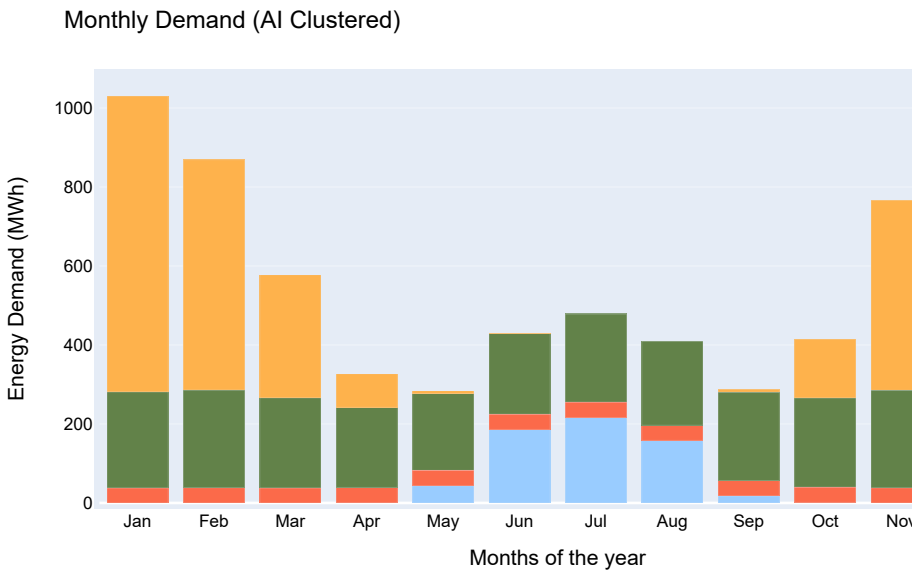
Hourly demand (AI Clustered)

Load Duration Curve (AI Clustered)

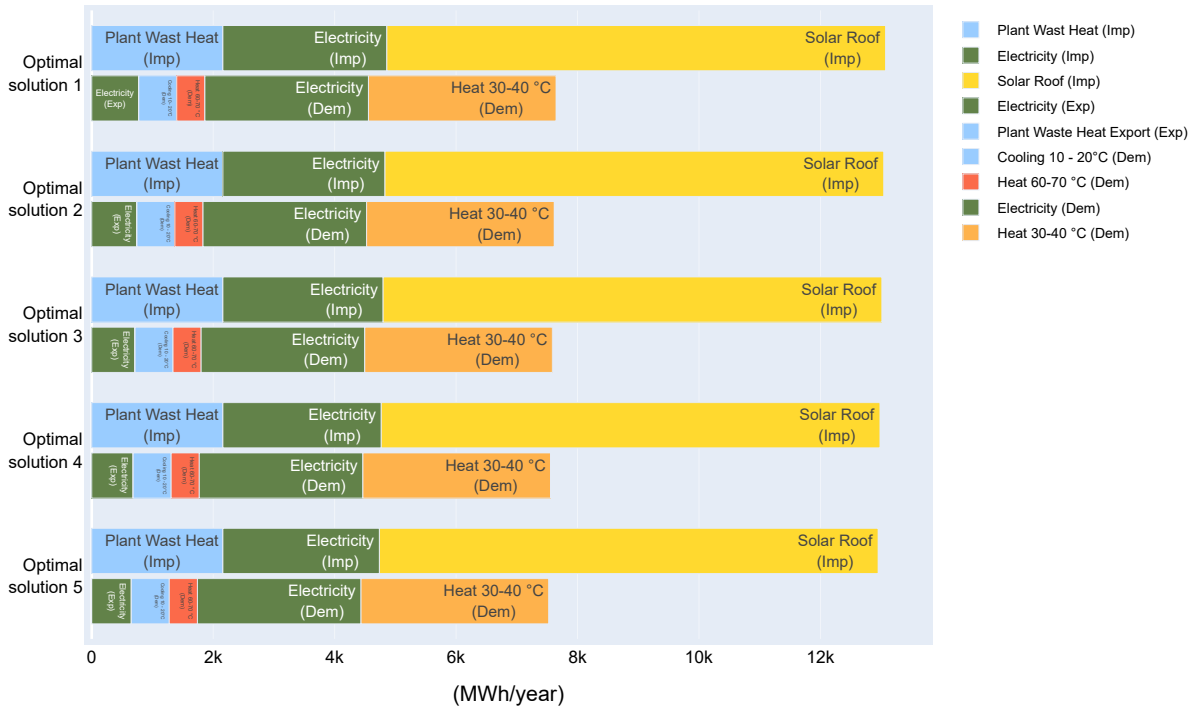
Load Duration Curve (Original vs AI Clustered)







Annual Imports vs Exports & Demand



Annual Energy Imports (CO2 based vs CO2 free)