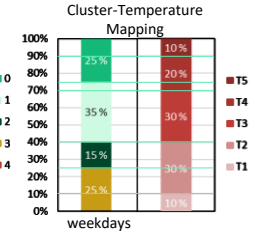
INPUTS

Cluster Blend

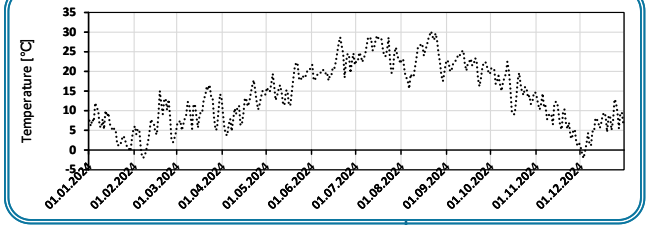
Cluster	weekday-share	weekend-share
0	23 %	0 %
1	**38 %**	**50 %**
2	15 %	13 %
3	**25 %**	**25 %**
4	-	13 %

shift-based profile
1-shift
1-shift base
2-shift
3-shift
3-shift



temperature level	temperature-share
5	10 %
4	**20 %**
3	30 %
2	**30 %**
1	10 %

Temperature Blend

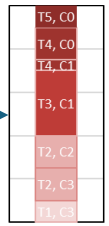


Outdoor Temperature Profile

The user-defined cluster-blend and temperature-blend is processed to a correlation between temperature levels and demand cluster

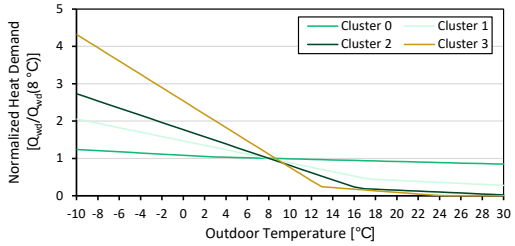
Outdoor Temperature as Input for Cluster regressions

Total Heat Demand



Cluster-Temperature Correlation

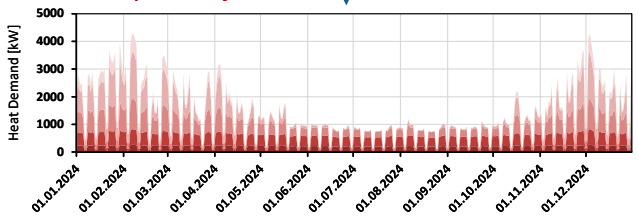
The daily outdoor temperature in combination with the linear cluster regressions leads to a normalized daily heat demand for each cluster



Linear Cluster Regressions

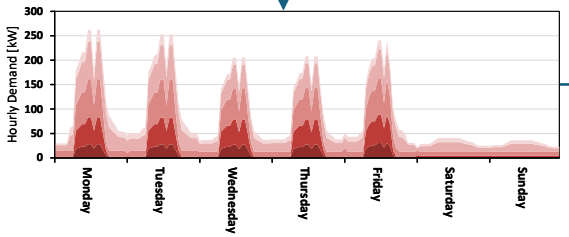
The daily normalized heat demand for each cluster is distributed over the temperature levels according to the cluster-temperature correlation and scaled to the total heat demand

Daily Load Profiles



Each cluster is assigned to a shift-based hourly profile, increasing the daily resolution to hourly resolution

Hourly Load Profiles



Yearly Multi-Temperature Heat Load Profile with hourly resolution