**Highlights**

1. Proposal of an OC KPI landscape mapping the context and aggregation level.
2. Development and evaluation of OC KPIs in a multi-story residential building, 5 apartments, 16 rooms.
3. Increased understanding of building performance through OC KPIs calculations.
4. OC KPIs can be used to identify savings opportunities, system faults, and demand-response opportunities.
5. Four months open access dataset of heating, electricity, water use, IEQ, and occupancy.