

## Solution package 1:

Digital infrastructures and  
ICT solutions

### Data mapping for energy KPI calculation

#### Session Summary

During the second session of the SP1 Community of Practice, ASCEND partners had an online workshop focused on data sources for KPI energy calculation in their PCEDs. With the facilitation of Laura Dieguez from DKSR and Sebastián Oviedo from Energy Cities, cities exchanged experiences on their data sources and availability to feed ASCEND's KPI engine. The discussion centered on two dimensions, each relative to Integrated Energy Solutions at the Building and District scales.

#### Common Challenges

- **Establishing a shared terminology** emerged again as a necessity for KPI monitoring. For instance, ASCEND partners settled the distinction between 'energy consumption' (real-use measurement) and 'energy demand' (projected loads). Depending on the availability and accuracy of existing data, cities will use one or the other type for monitoring on a case-by-case basis.
- **Data accessibility and (dis)aggregation** remains a challenge for all cities. Besides privacy questions, in the case of Munich, for example, electricity can only be measured at the district level in an aggregated way that merges public lighting, chargers and building use in a single metric. Estimation based on data triangulation and citizen-engagement processes of data donation are possible approaches.

#### Main Takeaways

- **Replication and scalability** will require innovative approaches. The thoroughness of ASCEND's PCED monitoring system, involving 38 core KPIs, each with several sub parameters, is more costly and time-consuming than what cities or the market can do now.
- **Tailored approaches** to monitoring will be needed. Cities have already identified that data calculations will require a building-by-building approach, as data availability and sources change at this scale. As a next step, each ASCEND city will work on a comprehensive mapping of data, focusing on the monitoring interests and possibilities of each local consortium.

#### Quote

*The understanding of both central terminology - such as "what is a building?" as a monitored unit - and chains of effects underlying the KPI framework is crucial for effective monitoring across cities. Adjustments to the methodology might be necessary to account for local differences in data availability and overall circumstances across districts and cities. Sharing information on local challenges and effects was very valuable in validating the next steps to be taken!*

**-Julia König, Munich**

