

Submodels for Sustainability

Communication and data structures on the shop floor are not standardised. Available information can therefore not be used effectively to represent energy requirements. Since only proprietary asset information is available, the implementation of a qualified asset management for energy demand recording is currently not feasible. Likewise, the potentials from this information cannot be exploited.

In addition, there are high costs associated with the commissioning of measurement systems on the shop floor, which is caused by the insufficient quality of the existing data. A very large number of devices in the brownfield cannot be digitised, or only to a very limited extent.

Energy efficiency through standards

The Asset Administration Shell serves as the information basis for Digital Twins and reduces costs on the shop floor with regard to planning, commissioning and operation within the scope of energy demand measurement.

The digitisation of the measuring devices in the brownfield by means of an Asset Administration Shell enables a technology- and manufacturer-independent vertical and horizontal integration. The Asset Administration Shell is the information provider for the digital twin of the energy demand measurement.