

Züblin handling with energy efficiency

How will the reduction in environmental impact be measured and evaluated?

Züblin is currently monitoring energy consumption in four buildings, calculating the share of renewable energy, differentiating between primary and secondary energy and measuring water consumption and CO₂ emissions. The consumption figures are continuously recorded, analysed and acted upon.

How are the objectives implemented in practice?

Züblin only invests in sustainable buildings. As a result we set extremely high environmental standards when renovating buildings. Moreover, a dedicated team at Züblin works to continuously maintain and raise the efficiency of all properties.

How can energy efficiency be maintained in practice throughout the lifetime of a property?

There is only one way, which is to monitor energy consumption. By constantly measuring all relevant consumption figures the potential to optimise consumption can be identified. With energy monitoring, for example, leaking water pipes, faulty cooling units or inefficient light controls can be identified rapidly.

Further information, including measurement methods, references and partner organizations is available on our website.

www.zueblin.ch/energieeffizienz

How does Züblin handle the label issue?

There are two aspects to the drive to create more energy-efficient buildings. Firstly the emphasis on energy efficiency in building renovations and secondly maintaining efficiency during the operating phase.

When renovating buildings Züblin works with recognized certification labels, which are popular in the rental market, where possible. These include Minergie in Switzerland, DGNB in Germany and BREAM, HQE and BBC in France.

However, Züblin's experience in the operating phase is that building management systems that may be well adjusted at the beginning lose a considerable amount of precision and efficiency in the first few years. The result is increased energy consumption with a corresponding impact on energy bills and environmental costs. Züblin is committed to tackling this widespread problem. Building labels currently take too little account of this issue.

Which fact makes the Züblin way of monitoring unique?

One important factor is the measurement of tenants' electricity consumption. This often accounts for the majority of overall electricity consumption and therefore has a corresponding potential for energy savings. In the properties it was measured that the total electricity consumption is roughly equal to the energy requirement for heating. Failing to measure and analyse tenants' effective electricity consumption is therefore missing a trick!

Current energy efficiency projects

- 7 Renovation projects
- Systematic introduction of energy monitoring in 22 properties

Primary and Secondary energy requirement

Secondary energy requirement: This comprises the energy supplied to the building and used there. For example the quantity of oil supplied or the electrical energy consumption → the lower the requirement, the more efficient the building.

Primary energy requirement: This comprises the secondary energy requirement plus energy-related inputs required for extraction, conversion and transport of the energy. → the lower the factor between primary and secondary energy, the more efficient the energy source.

Energy consumption breakdown of Züblin EMS properties

