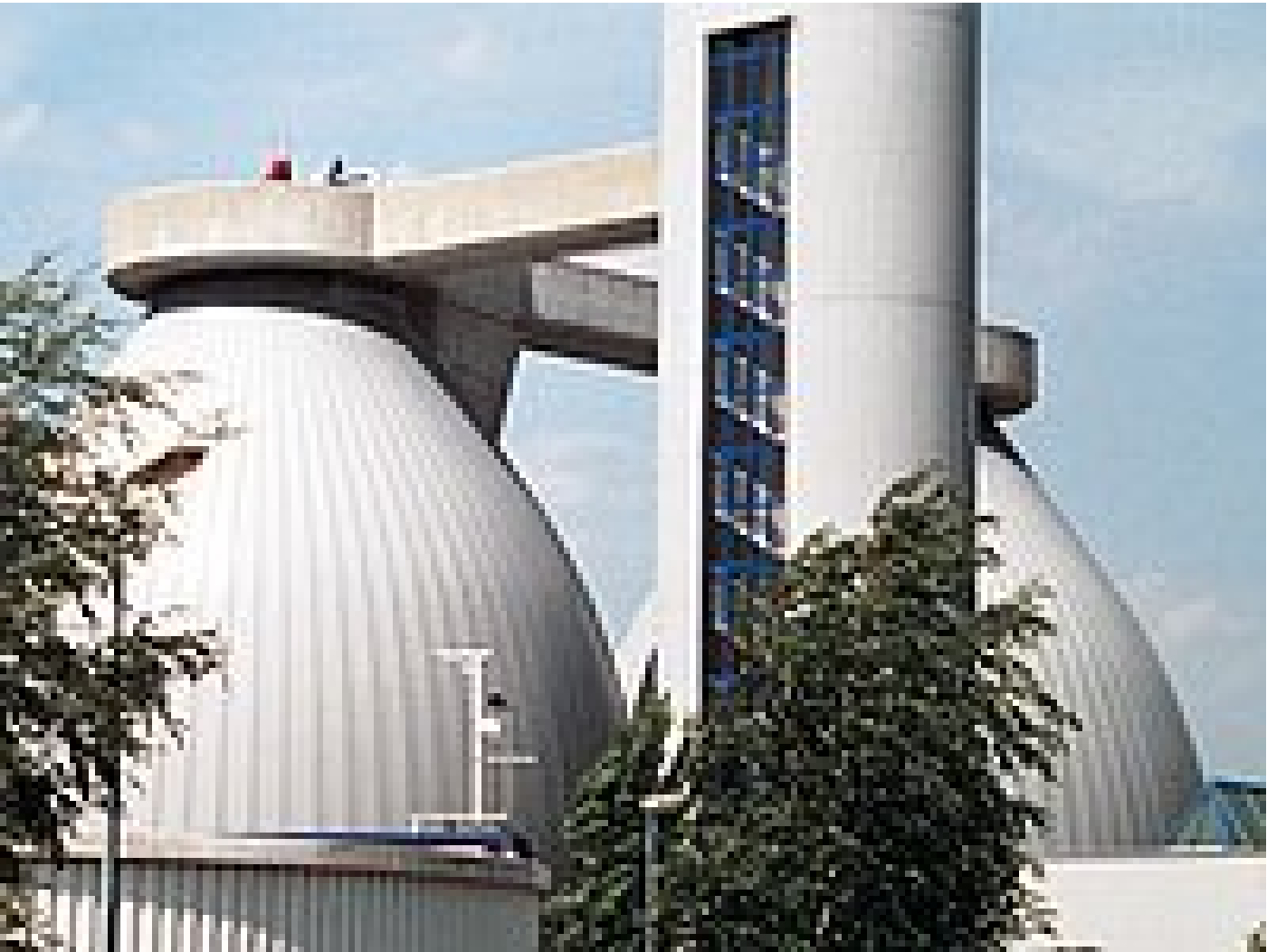


Strategy for Energy Efficiency Improvement





Step 1: Basic Design

- Reducing wastewater flows, e.g. by separation of rain water or by avoiding of sewer infiltration;
- Correct plant dimensioning, particularly avoidance of over-sizing;
- Selection of energy-efficient treatment processes.

Step 2: Detailed Design

- Selection of energy-efficient equipment;
- Use of correctly sized and energy-efficient drives and motors;
- Implementation of [control systems](#) matching supply and demand;
- Good thermal insulation where [heating energy](#) is externally supplied.

Step 3: Integral Energy Management

- Use of the entire [digester gas](#) for power-heat-cogeneration (PHC);
- Use of surplus anaerobic digester capacity for additional gas generation from imported organic waste;
- Efficient use of heat, e.g. [recovery](#) from processes or wastewater effluent;
- On-site [sludge drying](#) and incineration with energy recovery and reuse;
- Use of natural gas in PHC systems where heat is in short supply;
- Use of [renewable energy](#), e.g. wastewater heat, wind or solar energy.