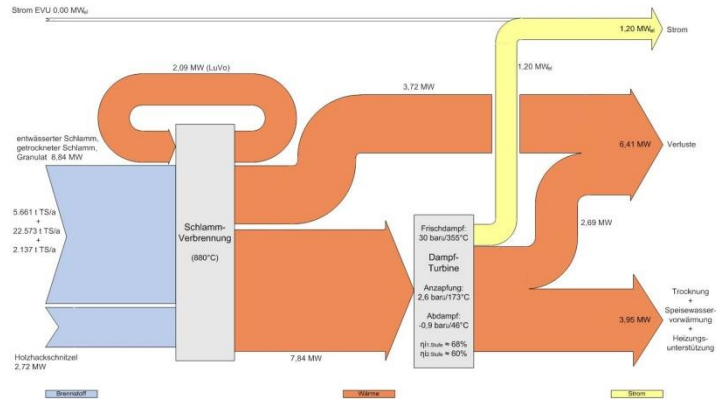


# Wastewater treatment plant Buchenhofen – Energetical optimization of sludge incineration plant

## Characteristics:

- Thermal firing capacity: 12 MW
- Amount of steam: 10 t/h
- Turbine power: 1.2 MW



Energy flow of sludge incineration

## Scope of Work:

- Baseline survey
- Study with alternative considerations

## Description:

Increasing costs for energy (electricity) had been the reason to evaluate the energy situation regarding consumption as well as generation of energy.

After a baseline survey the study has been aligned to the following two extension phases:

1. Energetic optimization by operational adjustments with minor investment
2. Extended optimization by higher investments

With help of smaller interventions to the process (i.e. change of steam pressure, retraction of bypass) the turbine power could have been doubled.

These measures had been realized in parallel by the operators.

Future measures like modification of fuel preparation, changed degree of dryness of sludge as well as retrofit of the turbine will allow the complete coverage of the necessary demand of electricity.