

Service overview for efficient and environmentally friendly energy consumption



Als Mitglied des Fachverbandes vertreten bei



OMV GAS Engineering: the right service for every customer!

The OMV GAS Engineering Team assists customers with optimizing the natural gas usage in their company. The goal is to offer affordable and individually customized solution packages for the efficient and environmentally friendly use of energy.

To do this, a detailed analysis of the actual state will be conducted, upon which a project concept is created with required measures as well as a description of the expected improvements including cost planning.

Our engineering experts work with you from the planning phase until the commissioning of your energy project.

The following services are included in our service offer:

- ▶ Technical calculations
- ▶ Preparation of assessments
- ▶ Assistance with implementing and optimizing energy accounting and operational energy management
- ▶ Inspections for special facilities (for example solar plants, energy generation)
- ▶ Exhaust measurements, according to legal requirements

Assessment and Analysis

Do you need...

...an assessment of all your gas consumption (gas, heating, and steam systems) with the most important details (make, type, year of manufacture, nominal capacity, exhaust measurement protocol)?

We will provide:

- ▶ A site plan and a schematic diagram with key facility components
- ▶ Detailed information about your supply and consumer networks, where optimization possibilities are outlined in the assessment and documentation

Would you like...

...A precise comparison of your monthly consumption over the past years?

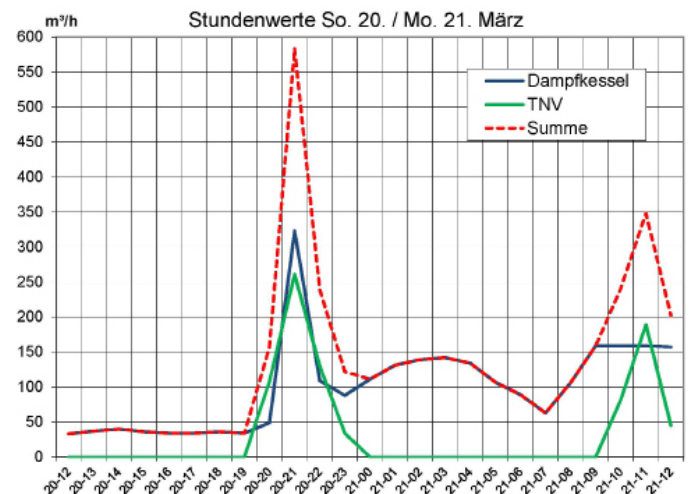
...A detailed description of your power output based on hourly values?

Your advantage:

- ▶ An understandable log of your usage data on a monthly basis
- ▶ An analysis of your load behavior including graphic illustration
- ▶ A list of your peak usage to identify reduction potential and thus possible cost reduction



Steam generator plant with modulating natural gas forced air burner and air preheater



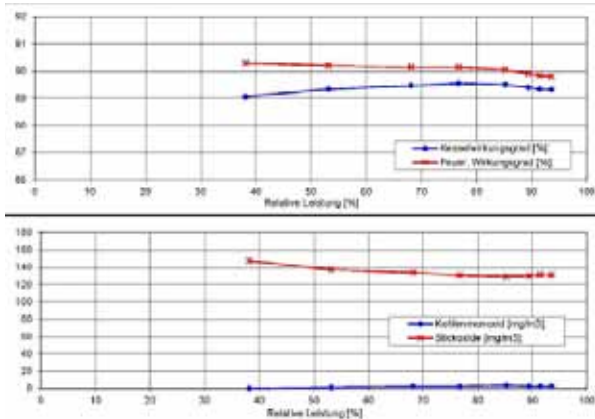
Analysis of power output of gas consumers

Review, Record, and Measure

Do your plants have the optimal settings?

We offer:

- ▶ An evaluation of the energy efficiency of your heat generators and production plants
- ▶ Analysis of the measurement results as well as a description of the efficacy and emissions
- ▶ A report on the measurement conducted
- ▶ Legally required inspections according to Emission Protection Law for Boiler Installations (EG-K) and the Ordinance on Firing Installations (FAV) as an official expert pursuant to § 1 4, par. 4 EG-K.



Graphic analysis of exhaust measurement

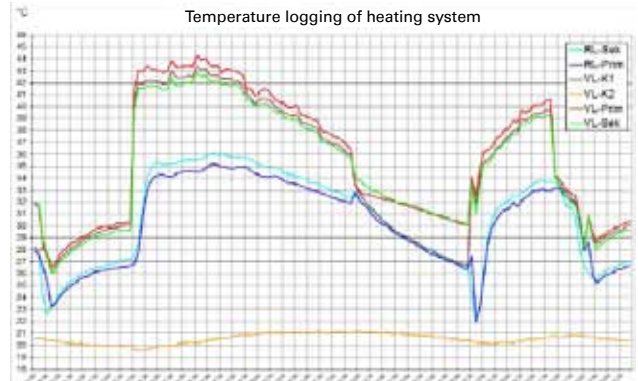
Do you require an exact log of the existing operating conditions of your heating, heat recovery, or process facilities?

We offer:

- ▶ A detailed log of up to six temperatures using a data logger, analysis and graphic diagram, as well as an evaluation of the measurement results



Exhaust analysis equipment to determine emissions and effectiveness



Temperature logging of heating system

Support and Planning

Do you need support with surveying, presenting, and introducing...

- ...energy accounting?
- ...energy flow charts?
- ...energy management systems EN ISO 50001?

Your benefits:

Support in planning and implementation based on the PDCA cycle:

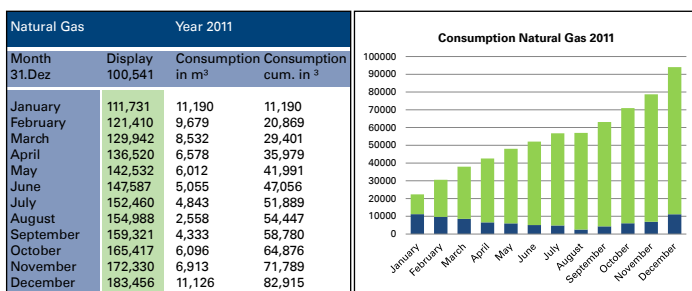
- ▶ Plan: definition of goals and processes
- ▶ Do: implement measures
- ▶ Check: monitor and measure implemented processes
- ▶ Act: initiate improvement measures

Do you want to know...

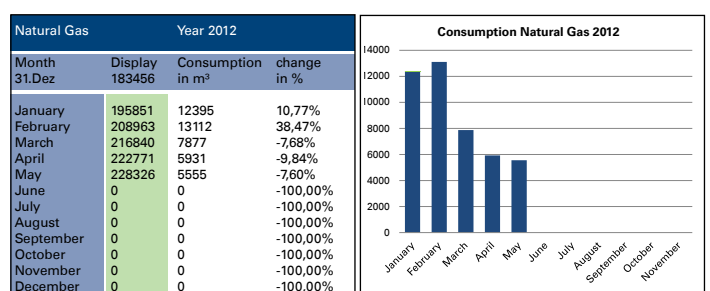
- ...the percentage your energy consumers make up of the total demand?
- ...what the energy flows look like in detail?
- ...if there is any usable exhaust heat potential?
- ...if your energy consumption can be reduced?

We offer:

- ▶ Individual Excel energy accounting based on a monthly reading
- ▶ A prepared energy flow chart with process and material flows
- ▶ Assistance with planning and implementing energy efficiency measures



Evaluation of energy accounting



Planning and Pipe Network Analyses

Are you planning...

...to renovate or build your heating system, water heating?

...expand heating, steam lines, production plants?

...office or hall heating/cooling?

...heat recovery plants, exhaust heat recovery?

Our technical office offers calculation and planning with subsequent essential services:

- ▶ Data collection portfolio
- ▶ Support in Planning
- ▶ Calculations as basis for scheduling
- ▶ Submission documents including plant description
- ▶ "As built" documents with plans, commissioning data, and settings
- ▶ Assistance with commissioning
- ▶ Organizing required reports for authorities

Natural gas lines:

- ▶ Dimensioning of gas lines and gas fittings for new consumers
- ▶ Calculating whether additional customers can be hooked up to existing gas lines

Heating pipe network including hydraulic adjustment: Guaranteeing adjusted heating network:

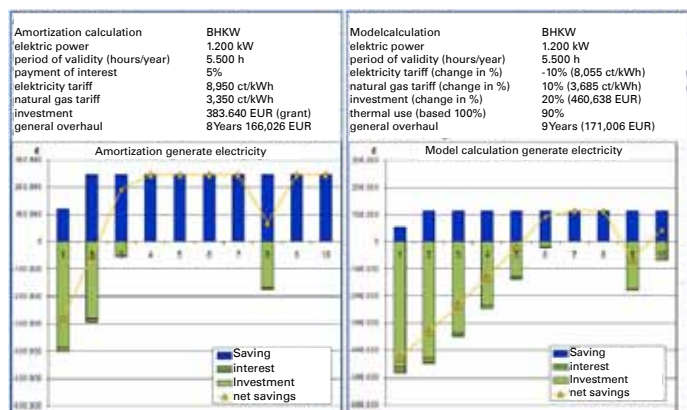
- ▶ Correct amount of water/heat to each customer
- ▶ Lowest possible power consumption by circulation pump
- ▶ Optimal heating water temperatures

Power Generation and Legal Foundations

Is it profitable for you to generate electricity?

To assess this, you receive:

- ▶ A profitability analysis with graphic illustration
- ▶ A detailed amortization calculation including estimated investment costs as a basis for the decision



Calculation Amortization of generate electricity

LEGAL FOUNDATIONS

You receive a list of relevant laws, regulations, and guidelines for your gas facilities and the inspections associated with them.

FINANCIAL SUPPORT

When you plan energy efficiency measures, we check for possible financial support and help you apply for it by providing calculations, facility descriptions, etc.

INFORMATION ON

- ▶ Gas fired heat pumps
- ▶ Absorption cooling plants
- ▶ Thermal oil boilers
- ▶ Profitability analysis for:
 - ▶ Energy optimization measures
 - ▶ Heat recovery
 - ▶ Solar plants, etc