



Energy management and technical consulting

MegaWATT is an independent engineering company which handles energy management issues for private, industrial and public contractors and developers. We develop customer-specific system solutions appropriate to the challenges of today's open market.

We create low-cost, ecological energy solutions for real estate and buildings. We consider it a high priority to provide thorough guidance during both the planning and the realisation phase. We handle specific tasks in co-operation with experts in the legal, economic and technical fields.

MegaWATT also initiates competitions to obtain the most cost-effective supply of electricity, gas, heat, cooling and emergency power.

The energy supply and its use by our clients is supported by electronic data processing and continually monitored. To this end, we employ powerful database operations; only with the use of real-time "energy accounting" is it possible to optimise costs and regulate use.

The following are the main **topics** covered by our consulting:

- ▶ Energy management business planning, economic analysis and predictions and calculations of success, determination of basic data
- ▶ Local, regional and industrial energy supply concepts
- ▶ Energy planning and assessment for the generation, distribution and use of heat, cooling, electricity and emergency power with thorough consideration of the environmental issues involved
- ▶ Determination and analysis of measures for the rational application of power in buildings and technical systems, which also serves as a control during the planning and building phase
- ▶ Assessment of legal aspects in co-operation with respected energy lawyers
- ▶ Assistance in the goal-oriented application of energy supply models and the verification of these during the construction and operation phase
- ▶ Initiation of city planning and architecture competitions, particularly from the point of view of energy management
- ▶ Obtaining optimal supply of electricity, gas, heat, cooling, emergency power
- ▶ Establishing and exploiting synergistic effects when founding energy supply associations
- ▶ Applications for approval according to energy management law

Energy concepts
Expertise
Power supply competitions
Gas supply competitions
Energy monitoring



Energy contracting and placement of orders

MegaWATT negotiates optimal supply contracts for electricity, long-distance heating and gas for its clients through the use of competition procedures. We are able to obtain reasonably priced, safe and environmentally friendly energy supply conditions. Legal questions which arise during this procedure are answered by a qualified lawyer specialised in the field of energy law.

Our energy-saving contracting gives our clients the opportunity to realise measures for efficient and price-effective energy use without the necessity of spending their own resources. This refinancing comes from the energy costs which have been saved. An energy-saving guarantee contract is drawn up between our client and an external supplier of contracting services. The most economical conditions available are obtained through a competition procedure.

MegaWATT assists its clients throughout the entire procedure, serving as consultant and technical planner.

MegaWATT develops solutions for the operation of systems supplying electricity, heat, cooling and emergency power. These solutions can be opened to the market in a competition procedure. By comparing our own measures with others available on the market, it can be determined which is in fact the more cost-effective option.

The following **services** are at the forefront of our firm's activities:

- ▶ Inviting energy service bids and contracting
- ▶ Negotiations of supply and subscription contracts for the supply of electricity, gas and long-distance heat
- ▶ Processing general and detailed energy management analyses and ascertaining basic energy management data
- ▶ Creation of customer-specific catalogues for the application of energy-saving measures
- ▶ Development of individual finance plans in co-operation with finance experts
- ▶ Creation of individual operating models tailored to the structure of the client's organisation
- ▶ Placement of (limited) orders for supply of electricity, emergency power, heat, cooling and natural gas
- ▶ Complete handling of negotiations under the advisement of experienced lawyers specialised in energy law
- ▶ Documentation of the entire contracting procedure
- ▶ Determination of benchmarks for energy use and energy expenses on the basis of database systems

Energy supply negotiation
Energy-saving contracting
Operation models



Technical planning

MegaWATT is an expert planner in the area of power generation, distribution and application. Our areas of expertise are long-distance heating networks and interconnecting stations, cooling generation and distribution, gas networks, electricity networks, heating and power coupling systems, heating plants and technical equipment systems.

Using our extensive practical experience, we advise our clients regarding the optimal use of heating and power coupling systems and develop contracting models appropriate to the requirements of our clients.

MegaWATT creates integrated energy and technology concepts and effectively realises them in the planning and construction phases. In the process, we always take care to balance the sometimes conflicting aims of low investment levels and minimal operating expenses. We inform our clients regarding up-to-date economic and technical innovations and select appropriate application strategies.

We take care of the following **planning tasks** for our clients:

- ▶ Realisation of general planning tasks for heating plants and heating power plants as well as long-distance heating pipes and interconnecting stations
- ▶ Integrated planning for combined heating, electricity, and cooling generation systems and their distribution systems
- ▶ General planning for cooling generation systems
- ▶ Project supervision and guidance for all heating and power supply systems
- ▶ Creation or revision of efficient servicing and maintenance plans
- ▶ Documentation of energy management and technical planning data, including alternative energy supply solutions, taking into consideration both ecological and economic factors
- ▶ General planning of technical building supply in accordance with the Remuneration Decree for Architects and Engineers (design, permission, and realisation planning, project management and documentation)
- ▶ Facility management systems, especially for technical and infrastructure facility management
- ▶ Integrated energy and technical concepts in connection with building simulation for accounting buildings, hospitals, hotels, research buildings, industrial buildings, etc.
- ▶ Environmentally safe, energy-efficient planning and project development of energy distribution systems for buildings
- ▶ Measurement and process control technique for all of the above systems

Cogeneration plants
Heating plants
Distance heating
Technical building supply



Project management

MegaWATT represents the building sponsor and assumes responsibility for the planning, operation and management of the energy project up to completion. We assume neutral and independent responsibility for the technical, economic and if necessary also the legal issues involved, which we handle in consultation with a specialist lawyer.

As the client's representative, we prepare proposed solutions, adaptive measures and decisions, provide encouragement and advice, explain, take care of records and documentation, analyse risks and guarantee security for the building sponsor.

When conflicts arise, we negotiate with those involved and are often able to introduce situation-specific problem-solving alternatives which satisfy both parties. If necessary, we work together with experts in the field of mediation. Mediation is an effective method for obtaining a solution satisfactory to both of the parties in conflict. The decisive factor in the process is the constant participation of the mediator, who functions exclusively as a go-between for the parties.

The following **tasks** occupy a central role in our activities:

- ▶ Project development, analysis of potential, efficiency analysis
- ▶ Structuring of (objective) individual requirements and (subjective) interests for the benefit of the project
- ▶ Assistance in drawing up a structured definition of goals
- ▶ Analysis of realisation strategies
- ▶ Co-ordination of all technicians participating in the project taking into consideration the existing structures and defined goals
- ▶ Advising and representing the client in all technical matters
- ▶ Providing constant feedback to the client and its representatives
- ▶ Assistance in drawing up contracts, accounting and financing energy systems
- ▶ Negotiation with public offices, banks, sub-contractors and others involved in the project
- ▶ Assistance in drawing up contracts as well as contract and cost supervision and interdisciplinary co-operation with other participants
- ▶ Assistance in conflict resolution, analysis of technical and economic solution strategies and participation in their realisation
- ▶ Conducting (confidential) negotiations to find solutions when conflicts arise

Project supervision
Project direction
Conflict management