



A safe grip on energy  
Boosting efficiency, slashing costs:  
ABB solutions for the process industry



# Well planned production, clever optimization: Our program for your energy efficiency

Rising energy costs have become a decisive factor in the economic efficiency of production processes. As a result, energy management carries increasing weight when it comes to company business operations and increased efficiency.

To this end, ABB has designed a program specifically geared to the process industry and its continuous need for sustainable energy savings and cost reductions in its production plants.

## **Energy efficiency for the process industry**

ABB's energy efficiency program is designed to identify and put into practice any feasible way in which your production processes can save energy.

## **Well equipped for the future**

You can count on ABB for an efficient energy management program to make your production processes more cost-effective and to leave you well equipped for any demands or legal requirements to corporate energy management that may be headed your way.

## **We focus on all types of energy**

ABB solutions for energy management and energy efficiency are designed to incorporate all energy types applied in the process industry, such as:

Electric energy  
Thermal energy  
Fuels – gas, oil, coal  
Process steam  
Compressed air

## **Increased possibilities – increased benefits**

Reductions are possible in almost any area and, given today's energy prices, they're well worth the effort – both in the short and long term. Boosting the energy efficiency of your production not only benefits the cost-effectiveness of your business but also the preservation of the environment.



# Do you have a safe grip on your energy management?

As experts in the fields of industry processes and automation technology, we offer you the kind of consulting service that only comes from longstanding experience. It's the kind of service our industrial customers have relied on for more than ten years when it comes to energy efficiency – worldwide. Our ABB team of international specialists acts global.

Our service to you comprises consulting and technical support, concept designs and solution packages based on our ABB Energy Management software modules in the following primary fields: Energy controlling, energy savings, energy efficiency and long-term energy management as a corporate function.

## **Energy controlling – capturing, controlling and analyzing energy data**

The real-time capture of measured values coupled with analyses of energy consumption rates add transparency to the everyday use of energy while revealing significant ways to reduce the consumption of energy. An energy-reporting program based on consumption rates helps promote cost awareness and serves as the basis for continuous improvement processes. Alarm systems that detect any deviation from target values ensure sustainable success for all your energy-saving programs.

## **Energy savings – minimizing losses, optimizing efficiency**

Wasted energy can take many forms. These can include such widely different causes as inadequate scheduling and planning, suboptimal set points in control loops or inappropriate or incorrectly used equipment. It is often accentuated by leaks, lack of frequency converters, insufficiently maintained heat exchangers, insufficient piping systems or inadequate load management.

## **Energy management – optimizing the purchase and use of energy**

The reliable projection, planning and management of energy use, including the purchase or sale of energy, are just some of the key elements that make up company-wide energy management. You can make optimal use of both external energy sources and your own generated energy by concentrating on production planning, current operating conditions and current situations on the energy market. This area offers a great cost saving potential.

## **Sustainable energy management as a corporate process**

Starting in 2009, energy-intensive companies will be required to provide proof of certification confirming the evaluation and rating of their use of energy as well as their potential for reducing their consumption rates. For 2011, there are plans for the introduction of an energy management system to form the basis for energy tax reductions.



# Our services – your asset

## Our approach

ABB's universal approach to its energy efficiency program is to make maximum use of all available opportunities to reduce energy costs. Our perfected techniques and tried-and-tested approaches consistently produce wide-ranging results.

Based on the individual conditions at your company, we analyze and evaluate the current situation of your plant. In the process, we identify any weaknesses and potential for savings and develop an energy master plan with concrete recommendations for optimization projects that pave the way for you to satisfy your corporate goals concerning energy efficiency.

## Our solution package

As part of our energy master plan, we define the use of suitable technologies, the implementation of engineering measures, the use of particular systems and the employment of specific support services.

Furthermore, we assess the amount of required investments, amortization time and resulting reductions. We also designate teams for the subsequent implementation of the individual related projects, who plan all measures in detail and execute them in an expert manner.

## Our services – your asset

The energy efficiency program of ABB comprises a wide range of services. Whether your company is looking for the right strategy to launch a new form of energy management or whether it wants to optimize its current energy management, ABB, with its range of products, systems, services and solutions, professional consulting and training services, leasing and performance-contracting programs, has the right solution for you.

## Your results

When it comes to energy efficiency, there's just no golden path. Its possibilities are manifold and work best if applied on an individual basis. Over and above, however, optimized energy efficiency always involves a combination of energy transparency, energy savings, energy planning and control, energy generation and energy procurement. Count on the energy efficiency program of ABB to help you determine what's right for your company.

## Your advantages

Energy efficiency can be measured in numbers. Likewise, the advantages of ABB's energy efficiency program can be calculated and analyzed in advance, as well as subsequently verified. The program is geared to the following aims:

- Reduced energy consumption
- Optimal energy prices
- Continuous savings via sustainable process improvements
- Dependable tax credit



# Slashing costs – boosting efficiency

In line with its energy efficiency program, ABB offers systems and solutions for the overall energy management system of your company – from individual plants to entire corporation involving numerous sites. From personal consulting and identifying your individual system solution across engineering and implementing a turnkey system, all the way to user training, we're your partner in all matters relating to energy management and cost efficiency.

**Come talk to us.**

**ABB – your partner in energy efficiency**

## **Implementing an energy management system in the paper industry**

A leading paper manufacturer with an overall energy need of 20 TWh a year decided to launch a comprehensive and company-wide energy management system. It involves two central server systems and 19 client systems handling as many as 600 users at a time via 50 different data collection interfaces. The result is the optimized use of more than 100 energy sources (fossil, nuclear, water sources, etc.) The system comes with a direct link to government institutions, trade partners, energy suppliers and energy markets. It took less than a few months for its investment in the new system to pay off when that paper manufacturer cut its energy procurement costs by 35%.

## **Increased efficiency in burning off residual gases**

Modifying and adding new components to the way natural gas is used to burn off residual gases can shave 20,000 Euros off the costs required for a single flare every year.



# Contact us

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