

ABB MOTION SERVICES

Energy Appraisal

Do more with less by improving energy efficiency



An ABB Energy Appraisal gives a detailed insight into how motor-driven applications perform, helping to make better decisions on ways to save energy, lower CO₂ emissions and boost a company's overall sustainability. Now, based on your preferences, you can choose from two different appraisal approaches.

Whatever your motor-driven application – whether pumps and fans or compressors and mixers – it is highly likely that the installation is using more energy than it needs. There can be many reasons including:

- over-dimensioned motors
- low-efficiency motors
- variable load processes running at full speed
- · poorly maintained assets

Energy Appraisal

An ABB Energy Appraisal identifies the most energy wasteful motor-driven applications and recommends ways to boost efficiency and improve a facility's sustainability. You can now select from two types of Energy Appraisals or a combination of both. They can also be included in an ABB Motion OneCare agreement.

- Application-specific aimed at motor-driven fan, pump and compressor applications without smart sensor technology. A site visit is usually required to manually collect individual asset data.
- Digital Powertrain aimed at motors fitted with ABB Ability™ Smart Sensors. Data is collected remotely and regularly from an entire fleet of digitally connected motors, allowing for regular energy use updates. A site visit can still be arranged, if preferred.

Key benefits



Cut energy waste and costs

Identify energy intensive applications in your plant, find ways to cut energy waste and obtain an estimate of potential cost savings



Reduce CO, emissions

Discover potential CO₂ emission reductions, the benefit towards meeting local environmental regulations and how it can help to meet your company's sustainability goals



Lower total cost of ownership

See the rapid payback from investing in high-efficiency motors and drives and the significant impact on the total cost of ownership of reducing energy consumption



Minimal disruption to operations

An appraisal is carried out without any impact on a facility's operations. New equipment recommended by the appraisal can be installed during routine maintenance shutdowns, thereby minimizing any disruption to production.

Energy Appraisal

Two efficient approaches - one energy saving goal

Which appraisal is right for you?

Deciding on the right ABB Energy
Appraisal starts by meeting an ABB
expert who will learn about your
processes and help identify those
applications which may be wasting
most energy. Based on your inventory
of motors and drives, the outcome
determines which Energy Appraisal
works best for you: the standard
appraisal or the digital appraisal
aimed at users embracing Smart
Sensor technology.



Digital appraisal

Digital Powertrain data collection

Data automatically collected from Smart Sensors connected to assets. Smart Sensors monitor assets regularly, allowing for more frequent energy assessments which may reveal hidden opportunities.



Standard appraisal

Application-specific data collection

Data from motor and application, including load profile, site conditions, etc. is manually collected through either a site visit or by customers forwarding the information to ABB.



Easy wins

... identified using calculation and expertise based on data collected



Detailed analysis

... identifies significant energy savings by switching to high-efficiency motors or adding variable speed drives



Recommendations

 \dots a report features an action plan, projected annual energy and ${\rm CO_2}$ savings, payback time for the proposed investment and correct motors and drives replacements



Implementation (optional)

...ABB offers help with the installation and startup or commissioning of the motor and drive including correct parameters to ensure the application operates at its optimum energy efficiency



Verification (optional)

... ABB tracks the actual savings against the original predictions