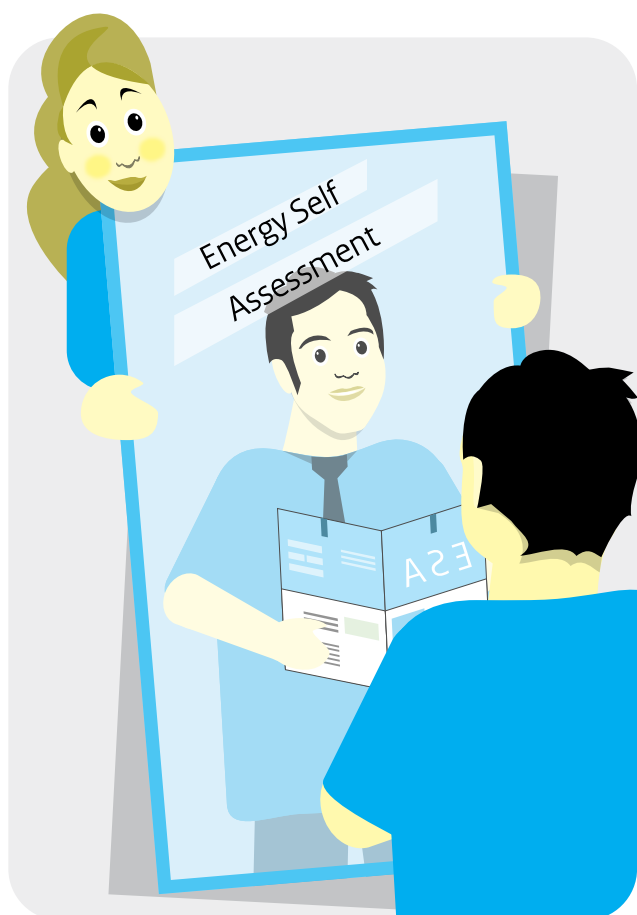




Energy Self Assessment



Do you want to know more about how you can reduce energy costs in a structural way?

Then the Energy Self Assessment (ESA) is a powerful and cost-effective tool for you. It leads you through the analysis of your company's energy performance and helps you to determine your energy points for further improvement related to: policy, organization, performance management, communicating, investment and training.

The self-diagnostics ESA tool addresses the organizational aspects of your Energy Management system. Furthermore, ESA helps you to identify energy saving measures that could be implemented including costs and return on investment. An external facilitator normally provides substantial added value, especially when your company executes the ESA for the first time, as he streamlines the assessment process and brings in insights from other assessments.

For both SMEs and large companies ESA results in improved insight in their organization of energy management and realisation of more energy saving measures and projects. There is money to be made and these assessments show where in line with strategic business needs and requirements.

From the CARE+ and Operational Eco-Efficiency ESA pilots at ten Dutch chemical companies lessons learnt have been derived. Both on how to achieve energy benefits in a time and cost-effective way by increased self motivation and how to facilitate the first actions and checks. These lessons learnt on how to execute energy self assessments are summarized below.

Why consider Energy Self Assessment?

Findings: The benefits of energy self assessments

Substantial time is spent by company staff on these assessments. Including preparation: 24-200 hours. Nevertheless, all company coordinators would do it again in view of the results. Important benefits are:

- Increased awareness of the use and the cost of energy;
- Appreciated structured, thorough method for idea generation;
- Generated overview and prioritization provide a fundament for follow-up;
- Emerged new technical opportunities and cost savings;
- Easy to implement advice on organizational improvements;
- Impact on energy saving monitoring and supervision, budget and investment behaviour;
- Providing data for comparison with peers.

Findings: Success factors of energy self assessments

Six factors have been determined that contribute to the success of performing an energy self assessment. Paying attention to these six success factors will guarantee identification of sufficient technical and organizational improvement measures.

- Company and management commitment:
 - Inform management regularly;
 - Share financial results;
 - Show possibilities.

- Understanding the company context:
 - Define energy use loosely if exact definition takes too much time;
 - Know what companies' management systems are in place;
 - Know the investment thresholds.
- Focus on delivering added value:
 - Discuss the aims at the intake;
 - Use limited key areas in case of quick wins;
 - Go through all steps in case of a strict economic goal.
- Use of appropriate tools:
 - Lists with improvement measures can inspire;
 - Benchmarks provide insight;
 - Balance technical and organizational measures.
- Human Factors:
 - Involve different positions and function levels;
 - Set up clear communication;
 - Indicate specific contributions to be expected from each ESA team member.
- Follow-up:
 - Implement successful measures;
 - Track and monitor improvement measures in a dashboard;
 - Appoint participants to ensure the introduction of measures.



How to execute Energy Self Assessments successfully

Findings: Key lessons learnt on how to execute ESAs

The benefits from periodic ESAs will be increased by taking into account the following lessons learnt on substance and procedure.

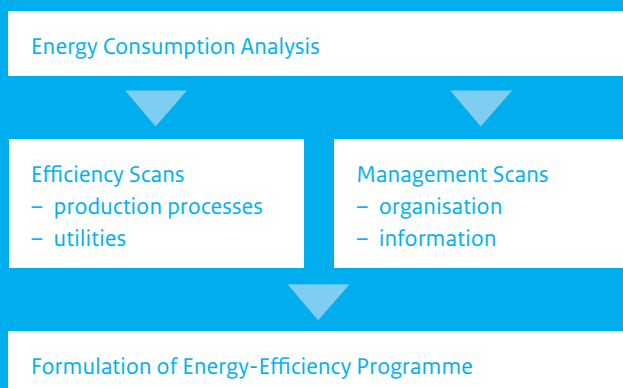
- Before starting, discuss and establish:
 - The scope (full plant or parts; technical, organizational; quick wins, full potential);
 - Company's drivers for performing the energy assessment;
 - Company's investment threshold;
 - Data availability and available knowledge in company;
 - How follow-up of the assessments findings is arranged;
 - The trade-off between time spent in the assessment and level of detail;
 - Company's existing management systems and work flows;
- Secure management commitment and participation, for scope and follow-up, stressing that energy assessments save money;
- Use an appropriate tool to structure the approach, for inspiration and for comparison with other companies;
- Structured and comprehensive communication with all who can contribute to the successful implementation is required, following the AC-DC cycle (Awareness, Commitment, Do, Communicate);
- Secure that the company takes a conscious decision concerning all identified measures: Management should arrange how findings will be taken up after the assessment, and arrange checks to ensure this actually happens;
- An external facilitator adds value.

More information

The European Chemical Industry Council (CEFIC) initiated CARE+ and SPICE3 to support chemical SMEs and large companies in improving their energy efficiency. Both CARE+ and SPICE3 have been funded by the European Commission. The SPICE3 website (www.spice3.eu) contains a wide range of case studies, best practices and other tools that can further help your company to improve its energy-efficiency.

AkzoNobel has developed tools as part of their Operational Eco Efficiency (OEE) program. AkzoNobel has executed OEE scans for their business units all over the world. Netherlands Enterprise Agency (RVO.nl) facilitates Long-Term Agreements on energy-efficiency for Dutch industrial and service sectors and has facilitated CARE+ and OEE energy self assessment pilots for ten chemical companies in close cooperation with VNCI and CEFIC.





In conclusion:
Carrying out Energy Self Assessment is always worth it because of multiple benefits.

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