Evaluation of Industrial Energy Audits in SMEs

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Back ground - case Sweden -

- Higher energy prices
- High use of electricity compared in other European countries
- Higher awareness of the ongoing climate situation



How to change Swedish energy use towards less electricity dependency?



Example of some concrete measures

- More efficient use of electricity
- Converting from electricity to district heating or other fuel
- Use of surplus heat
- Reducing use of electricity when no production is ongoing





Results

Municipality where the industries are situated	Possibility for reduction of industrial electricity use
Oskarshamn	48%
Borås	20%
Ulricehamn	58%
Vingåker	20%
Örnsköldvik	50%



Many good examples, but how do we make it happen?

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Methods

Interviews and questionnaire



Energy management – in figures

- 58% of the respondents state that energy costs are not allocated.
- Over 60% of the industries lack a long-term energy strategy.
- 75% of the industries agree that there are energy efficiency measures which can be economically profitable to implement.
- In nearly 70% of all studied industries the pay-off time for implementation of energy efficiency measures is not allowed to exceed three years.



Driving forces – top 5

- Cost reduction from lower energy use
- Driving spirits
- Threat of rising energy prices
- Full support from top management
- Investment subsides for energy efficient technologies



Barriers – top 5

- Lack of time or other priorities
- Other priorities for captial investments
- Long decision chain
- Energy objectives not integrated
- Technical risk such as production disruptions



Implementation of energy efficiency measures



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Conclusions

- Management is as important as technology.
- A long-term energy strategy is important for the realization of energy efficiency measures. Yet over 60% of the industries lack a long-term energy strategy.
- Lack of sub-metering and weak or absent allocation of energy costs are strong barriers to improved energy efficiency.
- Colleagues within the industry are one of the most valuable sources for information regarding energy efficiency. This implies the importance of sharing good examples.

