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**BESS**

**Benchmarking and Energy management Schemes in SMEs**

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## 0 Introduction

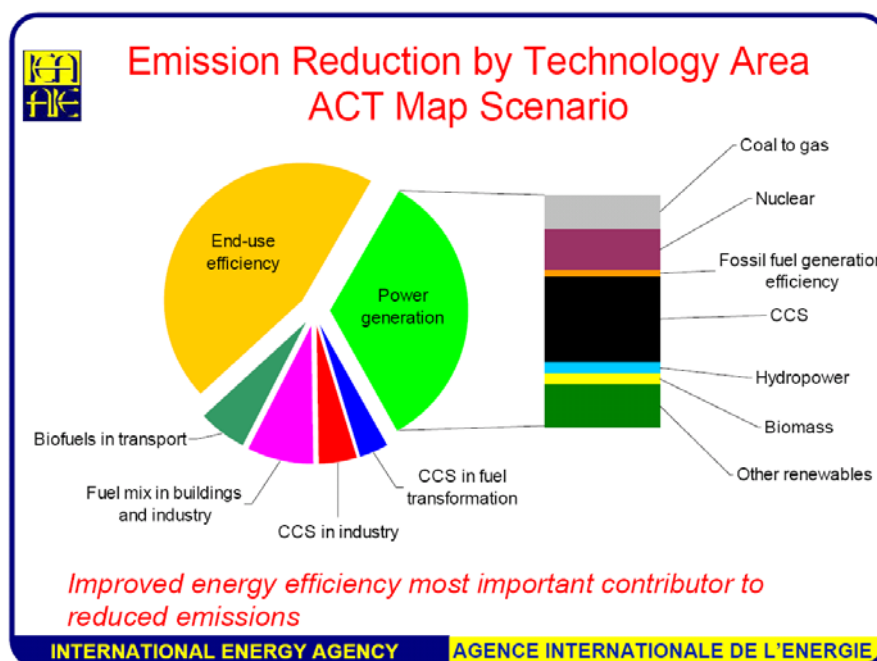
Industry as a whole accounts for nearly one-third of the world's primary energy use and emits approximately 22 % of the world's CO<sub>2</sub>. Carbon dioxide emissions can be reduced in three ways:

- efficiency measures,
- fuel and feedstock substitution and
- CO<sub>2</sub> capture and storage

In the industrial sector a great deal of energy is stored in materials, a fact that allows many possibilities for efficiency and CO<sub>2</sub> reduction improvements that do not exist in other sectors. Biomass feedstocks can be used instead of oil or natural gas, waste materials can be recycled, and products can be designed to require smaller amounts of material.

Improving energy efficiency plays a very important role. The energy intensity of most industrial processes is at least 50 % higher than the theoretical minimum determined by the basic laws of thermodynamics. Many processes have very low energy efficiency, and average energy use is much higher than the best available technology would permit. In cases where the actual efficiency is close to the practical minimum, innovations in materials and processes would enable even further gains<sup>1</sup>.

One of the several key findings for the industrial sector in the "IEA Energy Technology Perspectives 2006" is, that in general, industry offers a significant savings potential at often low or sometimes even no costs which deserves more attention than it has received so far. Another key finding points out, that improvements to steam supply systems and motor systems offer efficiency potentials on the order of 15 to 30 %. Combined heat and power generation can bring 10 to 30 % fuel savings over separate heat and power generation. The potential for energy-efficiency improvements differs among the various industry sectors.



Source: IEA Energy Technology Perspective 2006

<sup>1</sup> IEA Energy Technology Perspective 2006

Energy Efficiency is an issue of top priority according to “IEA scenarios to 2050”, because:

- Improvements in energy efficiency might save about 15000 Mt CO<sub>2</sub> by 2050, an amount equivalent to 60 % of current emissions
- By improvements in energy efficiency the expected growth in electricity demand could be cut by half and the need for generation capacity could be reduced by a third
- In a scenario with less progress in efficiency, CO<sub>2</sub> emissions increase more than 20 %
- Lower efficiency progress increases supply-side investments and costs of reducing CO<sub>2</sub> emissions

Similarly the European Commission gives high priority to energy efficiency. In the EU Action Plan for Energy Efficiency: “Realising the Potential” they claim that the EU can and must lead the way in reducing energy inefficiency, using all available policy tools at all different levels of government and society.

The EU’s tool for funding actions to improve energy efficiency and encourage the use of renewable energy sources in Europe is the “Intelligent Energy – Europe” (IEE) programme.

According to a Commission staff working document in non-energy-intensive industries as a whole, as well as in SMEs and in the public sector there is a saving potential of over 30% in cross-cutting technologies such as lighting, motor systems, boilers, etc. Improved energy management practices are a cost-effective way of realising this potential<sup>2</sup>.

The IEE project “Benchmarking and Energy Management Schemes in SMEs” (BESS) which has been started in January 2005 and finalised in May 2007, dealt with improving energy management practices. A consortium of twelve organisations from eleven European countries developed a package of instruments and tools for increasing the energy efficiency of small and medium industrial enterprises, with particular focus on the food and drink manufacturing sector. Because of the great success of the project a follow-up project where the BESS instruments and tools are expanded to new countries and new sectors (ExBESS) has been granted already and will start in autumn 2007.

This guideline points out how the BESS results can be exploited for national energy policies and lead to improved energy efficiency in European industrial SMEs.

Chapters one and two of this guideline give a short overview on instruments on EU level and on instruments that reach the industry, chapter three an overview of the BESS package of tools and instruments. Chapter four describes the main existing barriers for energy efficiency measures in industry and how they can be mitigated by BESS tools. Chapter five offers proposals for policy making to increase energy efficiency in industry by exploiting the results of the BESS project.

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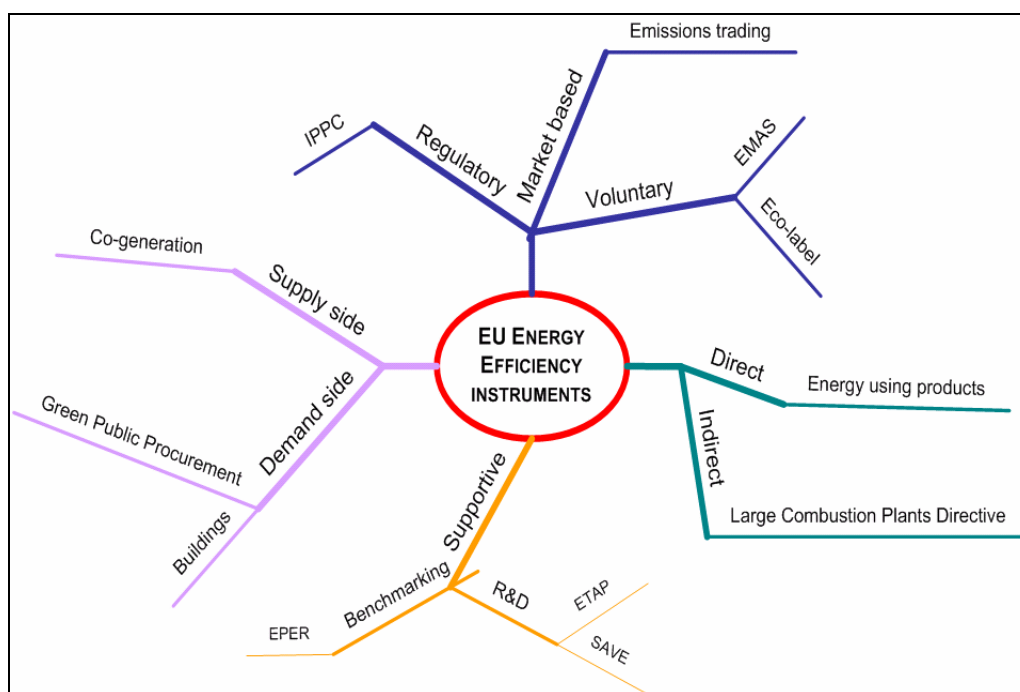
<sup>2</sup> Analysis of the Action Plan for Energy Efficiency: Realising the Potential, Commission Staff Working Document, [COM(2006) 545 final]

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# 1 EU instruments for increasing energy efficiency

There are several instruments that are able to increase the energy efficiency. Depending on the angle you look at the instruments you can divide them into market based, direct or indirect, supportive, demand side or supply side instruments. Depending on the target group, different instruments will work.



EU instruments for energy efficiency from different angles (source: European Commission, DG Environment Directorate G, Sustainable development and Integration Unit Industry)

## 1.1 When is a tool or instrument suitable on EU level?

In general activities are defined as suitable on EU level if they apply to the principle of subsidiarity and offer reasonable added value. In the following we will try to answer the initial question. These answers might serve as criteria for checking the suitability. So, a tool or instrument will be suitable on EU level because

- it guarantees a multiplier effect (it reaches more customers than on national/ regional level),
- it sets examples for imitation,
- it provides a common framework within a competitive environment (avoid market distortions),
- it is able to link energy matters to other EU programmes/activities more relevant for industry,
- it is cost-effective (costs less than if it is applied by all member states/regions).

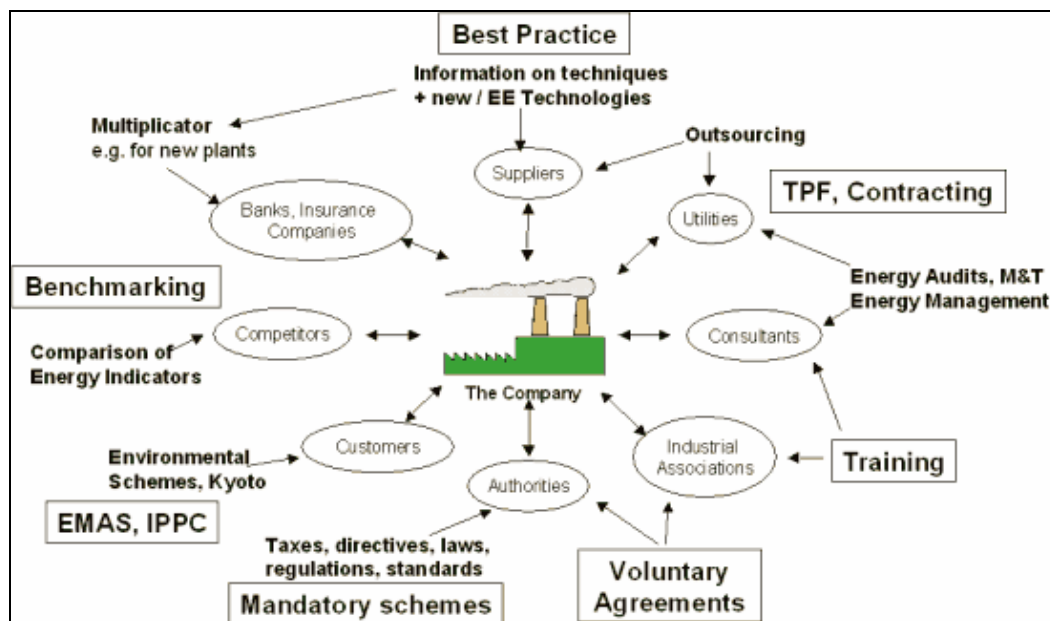
On the other hand a tool or instrument is not suitable on EU level, if the "geographical" diversity (behavior, industrial structure, climate etc.) forms too big a barrier for central implementation. By taking into account the above criteria the groups of tools and instruments can be checked on their suitability on EU level.

## 2 Instruments to reach the industry

From an energy policy maker's perspective, industry - as every other target group - has to be considered as a customer. If industry does not realise energy savings, a tool or instrument has to be considered as failure. Effective tools and instruments have to be customer-focused and tailored and therefore can be defined by the following characteristics:

- It reaches the customer,
- it draws the attention of the customer,
- it convinces the customer to act (decide to realise energy savings)
- and it makes the customer to repeat action (continued energy savings).

To attract attention it is important to take into account that a company is not a black box. It has an owner, is lead by a management and has staff doing different kind of work. If we reach the company we might have to deal with financial managers as well as site managers, with technical as well as with marketing people. Thus, depending on their respective professional background and education, very different drivers will attract their attention. These drivers can come from inside the company as well as from outside<sup>3</sup>.



Different tools and instruments and their channels (source: AEA)

<sup>3</sup> InterSEE 1998)

## **2.1 BESS instruments do reach the industry**

In more than 60 pilot companies in eleven European countries the BESS package has proven to be able to reach the industry.

- The international benchmarking scheme draws the attention of the industry.
- The e-learning offers easy access to information on increasing energy efficiency.
- Case studies show how industrial SMEs realised energy savings.
- The energy management specification and implementation model are in line with ISO 9000 and 14001 standards as well as with EMAS which are well known in many industrial SMEs. They follow the plan-do-check-act circle which guarantees continuous actions to increase energy efficiency.

## **3 The BESS package of instruments and tools**

The e-learning and benchmarking systems developed within the BESS project are customised for increasing the energy efficiency of small and medium industrial enterprises. The aim of the interrelated package is to support the SMEs in implementing energy management and benchmarking. Basically, the BESS package contains all necessary tools for improving the energy efficiency of an industrial company. To facilitate the process for SMEs which usually do not have enough personnel resources for energy matters, an easy-to-follow learning process on energy management is offered within the PDCA-part of the dartboard models inner ring.

The user is able to start at the beginning of the scheme and follow a click-to-learn process in order to better understand the general principles of energy management. A second tool for facilitating the implementation process is the energy management handbook which is available in the download section of the project website.

SMEs have different possibilities to use the BESS package. The less experienced companies with little knowledge of energy management systems may first enter the e-learning system to follow the click-to-learn process in order to better understand the general principles of energy management. Companies which have already gained knowledge on energy management and intend to implement energy management system will directly access the interactive tools and other informative text on the middle ring of the e-learning system.

The interrelated package contains an energy management specification, energy management implementation model, benchmarking scheme, energy management handbook, web based e-learning system and numerous different supportive tools like templates for energy audits, measure lists and checklists.

The BESS package can be downloaded from the project website [www.bess-project.info](http://www.bess-project.info) where also the access to the benchmarking scheme is offered.

### **3.1 BESS Energy Management Specification**

When energy is explicitly identified by a company as an important aspect of an environmental system, the application of ISO 14001 standard will automatically lead to implementation of an energy management system. Therefore in the BESS project the requirements from the ISO 14001 standard, which is already applied in a number of industrial SMEs, are translated to a BESS energy management specification. This offers companies the possibility to implement a high quality energy management system. However, companies which have not implemented ISO 14001 or which are not planning to implement a full energy management system can benefit from complying with (the main parts of) the requirements of the specification.

The BESS energy management specification will meet the requirements of the projected European energy management standard.

### **3.2 BESS Energy Management Implementation Model**

The BESS energy management implementation model (EMIM) is a tool which shows the logic of the implementation process within the PDCA cycle and suggests suitable tools for supporting the implementation actions.

The implementation of energy management guarantees that the top management is involved and that energy efficiency improvements are carried out on a regular basis.. When energy management is implemented it becomes part of the organisation's culture and structure, thus gradually reducing the time resources needed for energy management while at the same time ensuring continuous action to increase energy efficiency.

### **3.3 BESS Benchmarking Scheme**

The BESS benchmarking scheme is a web-based tool for international benchmarking of key indicators for selected sectors within the European food and drink industry. The tool is based upon the Norwegian benchmarking system and has strong links to the e-learning module. The BESS benchmarking scheme offers the possibility to benchmark specific energy consumptions, the change in energy efficiency and the quality of the energy management system in a company of the chosen food & drink industry sectors on an international level.

Confidentiality and validation of company data are cornerstones of the BESS benchmarking system. In order to improve the comparability of different benchmarking figures various correction categories have been introduced. There are options to correct differences in product mix, capacity utilization and climate.

Benchmarking of specific energy consumption is a powerful instrument to raise the interest of companies in energy matters. A possible moderate or low ranking in the benchmarking shows the company that improvements of energy performance are feasible and that saving potentials exist.

The BESS benchmarking system covers the sectors dairy, meat and bakery, which are comparably homogeneous sectors, although notable differences in products and production processes exist also within these sectors. While the BESS benchmarking systems contains a series of important correction factors, benchmarking results should be interpreted with some caution as the correction factors will not guarantee full comparability of different sites. This is even more important when applying benchmarking in more heterogeneous food and drink sub-sectors, e.g. canning or frozen food.

Caution is also required when using the BESS benchmarking results to draw conclusions for national or EU policy making (e.g. energy efficiency targets). In order to guarantee representativeness of the data, it is important to cross-check the BESS benchmarking results against other reliable, validated and aggregated sources of information.

### **3.4 BESS E-learning Scheme**

The BESS e-learning scheme offers easy access to information on how to increase energy efficiency. To present the package to the SMEs the project website ([www.bess-project.info](http://www.bess-project.info)) and especially the BESS e-learning scheme have been developed. The e-learning is accessible via the project website and has a structure based on a PDCA dartboard model. It offers access to all checklists, templates, supporting tools and the benchmarking scheme to the pilot companies.

Basically, the BESS package contains all necessary tools and instruments for improving the energy efficiency of industrial companies. But as the aim of BESS is to facilitate this process for SMEs which usually do not have enough personnel resources for energy matters, it is essential to offer a logical and easy to go way through the whole implementation process. Therefore the inner ring of the dartboard model contains an easy-to-follow learning process on energy management. The user is able to start at the beginning of the scheme and follow a click-to-learn process in order to better understand the general principles of energy management.

### **3.5 BESS Energy Management Handbook**

The BESS energy management handbook is a supportive tool within the BESS project which leads the SME in logical steps through the implementation process of energy management. Most tools which are available within the e-learning scheme are included in the handbook and references to the e-learning scheme are given consequently.

Basically the handbook can be used by industrial SMEs of all branches and sectors. It contains horizontal measure lists that are useful for all branches. Sector specific information is offered as a separate attached document. Within the BESS project sector specific information for bakeries, meat processing industries and dairies has been developed.

## 4 Suitable BESS tools to overcome barriers to energy efficiency measures

As explained in the previous chapters, energy efficiency in industrial SMEs can be improved by establishing the BESS package of instruments and tools. In order to increase energy efficiency on a national level, the implementation of the BESS instruments and tools should be used to support and complement existing national initiatives in accordance with the country-specific situation and policy framework.

The following table shows the main barriers to energy efficiency measures in industry and the way to overcome these barriers with the BESS tools.

Existing Barriers	Suitable BESS tools
<ul style="list-style-type: none"> <li>Missing awareness of possibilities to improve energy performance.</li> </ul>	The BESS case studies show successfully implemented energy management and energy saving measures. The BESS benchmarking shows that in most cases saving potentials exist.
<ul style="list-style-type: none"> <li>Often energy costs are very small compared to the total production costs.</li> </ul>	Benchmarking and case studies raise the interest in decreasing energy costs.
<ul style="list-style-type: none"> <li>Saving potential is estimated as too low.</li> </ul>	Benchmarking and case studies proof that there is a substantial saving potential.
<ul style="list-style-type: none"> <li>Energy consumption is not a topic on top management level.</li> </ul>	When implementing BESS energy management system the top management signs a company commitment. This assures that energy management becomes a topic on highest management level.
<ul style="list-style-type: none"> <li>Missing know-how in companies</li> </ul>	The BESS e-learning scheme provides information on improving energy efficiency.
<ul style="list-style-type: none"> <li>Core business takes all the time</li> </ul>	Basically, the BESS package contains all necessary tools for improving energy efficiency of an industrial company. This facilitates the process for SMEs and saves time.
<ul style="list-style-type: none"> <li>Investment costs are a barrier when pay-back time is higher than 3 years</li> </ul>	BESS measure lists contain no-cost and low-cost measures which have very short pay-back periods.
<ul style="list-style-type: none"> <li>Investment costs are considered as more important than operational costs</li> </ul>	An implemented energy management system assures that the company takes energy consumption of equipment into account.

If you want to overcome these barriers in your country then the implementation of an energy management system and benchmarking has to be facilitated.

## **4.1 Country specific frame conditions**

Energy management and benchmarking are proven instruments to increase the energy efficiency in industry. The BESS package facilitates the implementation of energy management and offers the basis for an international energy benchmarking scheme.

Which parts of the BESS package are suitable for improving the energy efficiency of industrial SMEs in your country, depends on the prevailing frame conditions in your country:

- Do national energy efficiency support programs exist?
- Are the industrial SMEs organised in sector associations?
- Are ISO standards usually implemented in SMEs?
- Do you have energy management standards and have SME implemented them?
- Do you have a network of energy consultants e.g. within the chamber of commerce who can be trained to use the BESS instruments?
- What is the average state of the technical equipment in your industrial SMEs?
- Can the implementation of the BESS package be used to prove compliance with the requirements of national energy efficiency support schemes?

## **5 Key proposals for energy policy making**

The following key proposals present different actions to improve the energy efficiency of industrial SMEs. It is explained how those actions can be facilitated by BESS instruments and tools.

### **5.1 Set up training and education programmes**

- Training and education programmes for energy efficiency in companies are often organised by energy agencies, energy suppliers, energy consultants as well as by chambers of commerce and sector associations.
- To promote the implementation and usage of the BESS instruments and tools in industrial SMEs, the BESS package has to be introduced to the organisers of those training and education programmes (for an example see chapter 7.1).

### **5.2 Launch awareness raising campaigns and information programmes**

- To make energy efficiency programmes well known in industry, awareness raising and information campaigns play an important role. Particular attention has to be paid to identifying the most effective communication tools to reach SMEs, which often have no specialised staff for energy management issues.
- In addition to the actual energy management tools, the BESS package also contains promotion materials like case studies, the website, a poster, or a short report on the energy management implementation approach. This project package can be used to launch an efficiency programme and the accompanying awareness campaign (see also chapter 7.2).

### **5.3 Contact national sector associations**

- In support of the previous two points, national sector associations should be involved.
- Sector associations are appropriate institutions to disseminate the results of BESS among their members and inform them about the possibilities to increase energy efficiency.

### **5.4 Link BESS to national programmes**

- Use the BESS package to support and complement already existing national programmes for energy efficiency (see e.g. UK Carbon Trust (<http://www.carbontrust.co.uk/default.ct>) or the Austrian Klima:Aktiv Programm [www.eebetriebe.klimaaktiv.at](http://www.eebetriebe.klimaaktiv.at) ).
- Depending on the structure and content of existing national energy efficiency programmes, you may use the whole BESS package or parts of it.
- Explain to sectoral SMEs how the BESS project fits into existing national schemes.

### **5.6 Set up economic support schemes**

- Financial support can provide crucial incentives for implementing energy efficiency measures, in particular in industrial SMEs with often limited financial and human resources. Different actions may be supported e.g. conducting energy audits or energy consultancy, investments for energy efficiency measures, training courses etc.
- The basis for such support activities can be an energy efficiency fund which could be financed by national energy efficiency programmes. A good combination of the BESS package would be to conduct an extensive energy audit and implement the results of this audit into the energy action plan.

## **5.7 Provide investment subsidies**

- Investments in energy efficiency measures and technologies are in many cases too high to reach a payback period of less than three years, as demanded by the industry .
- In order to increase the uptake of energy-efficient and low carbon technologies in SMEs, investment subsidies can be used to overcome this barrier (for an example see chapter 7.3).

## **5.8. Bind reimbursement of energy taxes to specific actions**

- To persuade SMEs to improve their energy efficiency on a regular basis reimbursement of energy taxes could be bound to the implementation of energy management or the conduction of energy audits.
- Those actions are often connected with long term agreements.

## **5.8 Consider long term agreements with industry: voluntary or binding**

- Voluntary agreements can play an important role in improving energy efficiency and reducing CO<sub>2</sub>-emissions, although they are not without controversy. On the one hand they are more flexible than e.g. minimum efficiency standards, but on the other hand the agreed aims may sometimes be too weak to improve energy efficiency more than it would have been improved without the voluntary agreement as well.
- Legal binding long term agreements or covenants on energy efficiency are usually connected with exemptions from energy taxes or CO<sub>2</sub> fees. Companies sign the long term agreements and commit to participate on the offered energy efficiency programme. The results have to be monitored regularly.
- The BESS management tools can support companies in fulfilling both voluntary and binding long term agreements. The results of the BESS benchmarking system, if interpreted adequately, can support companies in monitoring the energy savings achieved through the implementation of energy management (for an example see chapter 7.4).

## **5.9 Develop a benchmarking scheme**

- Provision of benchmark information has shown to be environmentally effective and appropriate to stimulate energy efficiency measures. Benchmarking of specific energy consumption is a powerful instrument to raise the interest of companies in energy matters.
- To expand the BESS benchmarking scheme to other sectors, branches and countries, national benchmark programmes are required. The possibility to join an already existing international benchmarking scheme should be taken into consideration. Set up a national benchmarking scheme and connect it with the international BESS benchmarking scheme.
- In case of BESS countries, provide additional support to expand the benchmarking system to more companies (establish a national system) and also to new sectors. Lay sustainable foundations for the benchmarking system by providing support to maintain the system and add benchmarking data for participating companies in future years (for an example see chapter 7.5).

## 6 Summary

One of the key findings for the industrial sector in the “IEA Energy Technology Perspectives 2006” is that in general industry offers a significant savings potential at low or sometimes even no costs. This situation deserves more attention than it has received so far. The potential for energy-efficiency improvement differs among the various industry sectors.

By implementing energy management in industrial SMEs low and no cost measures for improving the energy performance continually are being realised in the first place. As the BESS package of instruments and tools facilitates the implementation of energy management in industrial SMEs it is beneficial to exploit it for national energy efficiency programmes and campaigns.

The BESS package contains an energy management specification which will meet the requirements of the projected European energy management standard, an energy management implementation model, an e-learning scheme with several supportive tools for implementing energy management, an international benchmarking scheme and an energy management handbook which provides a step-by-step implementation procedure.

It has been proven in more than 60 pilot companies in eleven European countries that the BESS package is designed to reach the industry.

The BESS tools are suitable to mitigate the main barriers for energy efficiency measures in industry. They should be used to support and complement existing national initiatives in accordance with the country-specific situation and policy framework.

The BESS tools can be applied for training and education programmes and awareness raising campaigns. They can be combined with economic support schemes and could support industry in reaching targeted aims in long term agreements.

Finally, the benchmarking scheme is an important stimulus for SMEs to implement an energy management system and can support companies in monitoring the energy savings achieved through the implementation of efficiency measures.

## 7 Annex

### 7.1 Example: Training and Education Programmes

- Consultants appreciate useful tools which support their activities, e.g. the handbook, the energy management checklist, sector specific and horizontal measure lists, case studies and the benchmarking scheme.
- Any company's decision to implement an energy management should be carried out in accordance with the projected "European Energy Management Standard". Therefore the "energy consulting community" should be well informed about the BESS energy management specification which is in accordance with the projected European standard as it builds upon the ISO standards and other existing energy management standards.
- Students could be employed for starting the energy management implementation actions in companies as a practical training. In this way companies would get support at low costs and students get the experience with the tools. Setting up an energy action plan could be the minimum requirement students have to fulfil. With this action plan the companies would have already a good basis for energy efficiency measures and motivation to continue the implementation process.

#### **Example: Workshops for energy consultants in Austria**

In Austria the BESS project is linked to the national climate protection programme "Klima:aktiv" ([www.eebetriebe.klimaaktiv.at](http://www.eebetriebe.klimaaktiv.at)). The energy consultants within this national programme who have learned about the BESS tools in several workshops, use the tools for their consultancies. Also the participants of the EUREM courses get the information on the BESS package.

### 7.2 BESS tools for Awareness Raising Campaigns

- Benchmark results may indicate the necessity to improve the energy efficiency.
- Case studies show some practical examples how SMEs already improved their energy performance.
- The start activities of the e-learning scheme lead the companies to the decision to implement energy management and get the commitment of the top management.
- After conducting an energy audit and composing the energy action plan the company can make concrete plans for saving measurements in the following years.

Existing national energy efficiency programmes could be extended by suitable BESS tools. Contact national sector associations in order to disseminate the results of BESS and inform their members about the possibilities to increase energy efficiency. They could print e.g. the handbook and sector specific measure lists and send it to them or disseminate it at workshops and meetings.

Sector association are interested in sector specific benchmarks and maybe they are able to connect already existing benchmark activities to the international benchmarking scheme.

Contacts to the European sector association should be used to facilitate the international benchmarking and to get case studies.

### **7.3 Example: Environmental Support Schemes in Austria**

Since 1993 Kommunalkredit Public Consulting (KPC) is in charge of the management of the federal environmental support schemes on behalf of the Federal Ministry of Agriculture and Forestry, Environment and Water Management.

KPC manages different support schemes on national and regional level which also serve for fulfilling European or international environmental, climate or energy policy guidelines.

The two main support instruments are the federal environmental support programme and the support scheme within the green electricity act.

Investments of companies in renewable energies, energy efficiencies and mobility measures are getting support. In 2005 the main part of the supported projects was about climate protection. The implementation of these 1.368 climate relevant projects had an environmental impact of 10.2 Mio tonnes of CO<sub>2</sub> reduction.

More information about this programme can be found on the website:

<http://www.public-consulting.at/en/portal/environmentalsupportschemes/>

### **7.4 Example: Long Term Agreements on Energy Efficiency in the Netherlands**

The Netherlands have made commitments in the Kyoto agreement to reduce its emissions of greenhouse gases by 6 % in 2008 – 2012 in comparison to 1990. Energy efficiency improvement will make an important contribution in reaching this objective.

Since the early 1990's, the Ministry of Economic Affairs has been making long-term agreements (or covenants) with various energy-intensive sectors as part of Dutch energy policy. The voluntary agreements, or LTA's, are aimed at promoting energy savings in the Netherlands.

The initial agreements with industry ended in 2000. However, due to the success of these so called first-generation LTA's, the government and industry decided to sign new agreements, known as LTA2. This covenant spans 2001 to 2012. The larger energy-intensive companies have not signed LTA2 but are instead participating in the Benchmark Covenant. Medium-sized (and sometimes smaller) enterprises are taking part in LTA2.

SenterNovem supports LTA participants in putting their covenant agreements into practice. For instance, companies can benefit from the expertise and experience of advisers in the form of help to companies and trade associations in drawing up energy conservation plans, and monitoring the energy savings that have been realized. Another example is the advice SenterNovem, as independent expert, provides to provinces and local authorities (Competent Authorities) on the quality of the energy saving plans.

In 2005 all 908 LTA2 participants have jointly improved their energy efficiency by an average of 2.2 %. The number of LTA2 companies is increasing on a yearly basis.

More information about this programme can be found on the website:

<http://www.senternovem.nl/LTA/>

## **7.5 Example: Norwegian Benchmarking Scheme**

Benchmarking has been an essential part of the Norwegian Energy Efficiency Network since it was launched in 1989. The network today has approximately 900 member companies, representing 63% of energy use in industry. The benchmarking scheme is based on annual voluntary reporting, but companies which are funded are committed to report into the system for a period of five years.

The industrial energy efficiency network was established already in 1989 as an initiative from the Ministry of Petroleum and Energy (MPE) to stimulate efficiency measures, but started to play a more important role for identifying and realising the industrial energy savings potential in the mid 1990ies. Network members can obtain grants to analyse the potential for energy savings and benchmark their performance against other companies.

Approximately 900 companies are members and about 600 of mainly small and medium size enterprises (SMEs) have since 1996 got information and financial support for lowering their energy consumption by a variety of measures.