Hessisches Ministerium für Umwelt,
ländlichen Raum und Verbraucherschutz

HESSEN

UMWELTALLIANZ HESSEN

Layman Report on the

EU LIFE Project

for the further development of

Ecostep

2004 – 2007

04
Foreword

06
EcoStep – the alternative to EMAS
The way towards an integrated management system for SMEs

09
EcoStep – the results
The EU EcoStep LIFE Project

10
In focus
EcoStep for SMEs: methodology and identified optimisation potentials

14
In focus
Extension of EcoStep for winemakers

16
In focus
Sustainability of EcoStep guaranteed by the integration of the Sustainable Balanced Scorecard

20
In focus
Management Contracting as a new financing model for EcoStep

27
In focus
Europe-wide empirical study on the acceptance of EcoStep

31
In focus
External certification of EcoStep as a market advantage

36
In focus
Summary of the results of the EU EcoStep LIFE Project

37
In focus
Further steps towards market penetration of EcoStep

39
Annex

54
Imprint

Foreword

Small and medium-sized companies (SMEs) are the engine of the European national economies and make up almost 99 per cent of companies altogether. If we want to reinforce Europe's competitiveness, we must support these companies in particular. Management systems will help us to do this. The current management systems available on the market such as EMAS or DIN EN ISO are not suitable for SMEs because they were designed in the first place for large companies, because SMEs generally do not have the financial and personnel resources to introduce them, and because SMEs are an extremely heterogeneous group.

On the basis of this, in 2001 the Hessen Environmental Alliance, an agency within the Ministry for Environment, Rural Regions and Consumer Protection, took on the task of designing a management system tailor-made to suit the needs of SMEs. EcoStep was developed between then and 2004. This is an integrated management system which takes into account such aspects as environmental protection, quality assurance and labour protection on an equal par with the operational work sequences of a company. By the end of 2004 EcoStep had not only been tried in theory but also in practice.

However, at this time there were still some decisive aspects missing. These were developed with financing through the EU Life Program from 2004 to 2007. In the meantime we have achieved a great deal in collaboration with the Free Hanseatic City of Bremen, the Regione Emilia-Romagna (Italy) and the Departement Aquitaine (France). The integrated management system EcoStep has, one could say, now reached maturity and can be introduced to the European market and establish itself there.

EcoStep is the only Europe-wide, integrated management system tailor-made to suit the needs of SMEs. With the aid of EcoStep SMEs can achieve major benefits quickly and easily using simple tools. This benefits both the environment and the economic efficiency of the companies. EcoStep can be applied to all sectors. It is cost effective and opens up a wide range of savings potentials. But the best news is that at the end of the LIFE project we also managed to have EcoStep certified. This means that we are setting the standards. The highly reputed DQS has been acquired as the certification company.

The present Layman Report contains the most important findings and results of the EU LIFE project in detail. It makes a good read, as it is a great success story of which we can all be proud.

Yours sincerely

Wilhelm Dietzel
Minister for the Environment, Rural Regions
and Consumer Protection of the Land of Hessen

Wiesbaden, March 2007

EcoStep the alternative to EMAS

The way towards an integrated management system for SMEs

Assuming responsibility for the areas labour health and safety, environmental protection and quality assurance is a demand being made on more and more companies – whether by the public, by business partners or by the authorities. Fulfilling these demands requires professionalisation of the structure and of the sequences in the company. Legal security, risk assessment, environmental protection and energy efficiency can then become part of a successful everyday company routine.

The management system EcoStep was designed by experts along with representatives of companies, associations and authorities in order to help small and medium-sized companies (SME[1]) to meet the requirements of the market and the reference groups. EcoStep is aimed specifically at SMEs as these companies in particular often lack the financial and personnel resources necessary to achieve the kind of professionalisation required.

The project EcoStep was initiated in 2001 by the Hessen Environmental Alliance. After a pilot phase in Hessen and in the Free Hanseatic City of Bremen, EcoStep was further developed in 2004 as an EU LIFE Project (term 2004 – 2007) and brought to other European regions – the Departement Aquitaine in France and the Regione Emilia-Romagna in Italy. In all of these four regions EcoStep has since been successfully introduced in small and medium-sized companies in the commercial, industrial, agricultural or services sector.

[1] EU definition of SME (From 1st January 2005): Medium-sized company: <250, small company: <50, micro-company: <10.

Procedure for the conception and introduction of EcoStep

The daily problems faced by SMEs include the following four: corporate management aspects, quality problems in the broadest sense, labour protection and health and safety, and the environmental impact of the company's activities. Management systems can offer problem solution strategies and practical examples as well as tools and aids for their implementation.

Proceeding from this situation the challenge was to design a system that

- covers all of the cited four areas,
- reduces the demands to the operationally relevant aspects,
- takes account of the sequences within the company,
- requires as little external consulting as possible
- can be implemented on a cost-effective basis.

In the course of intensive work and coordination between experts from the environmental and labour protection authorities, chambers of commerce and professional associations, as well as various small and medium-sized companies, the basis for EcoStep was developed and then brought from the theme-oriented to the process-oriented stage within the framework of a pilot project in collaboration with an experienced consulting agency.

This was, so to speak, the birth of EcoStep – the integrated process-oriented management system.

This early form of EcoStep had already achieved the integration of the various areas and the implementation in the company adapted to suit the actual "processes" running in the company.
The cost-efficient implementation was achieved by adopting and adapting the system already used to introduce the environmental management system EMAS in other countries, the so-called convoy method.
Another aspect which made no small contribution to the success of the concept, was that best practice was taken as a learning model. Thus, the exact observation of the various systems, system approaches and requirements used as a model led to the insight that these are, to a great extent, conceptionally and strategically identical in many ways. EcoStep was developed on the basis of this insight.

This procedure led to a streamlined, manageable and flexible system which can quickly and efficiently adapt to any additional special requirements without any major cost or effort. The SME management system EcoStep integrates quality management, environmental management and labour health and safety in a single system. However, EcoStep should not be seen as a mere addition of the three management systems, as the emphasis is on the bundling of resources and the exploitation of synergies. This reduces costs and personnel, and simplifies the introduction of the system.

The SME management system was introduced on the basis of a manual, IT tools, training courses in the form of workshops and by individual on-site company visits by corporate consultants. With the aid of these instruments weak points were identified and concrete improvement options identified, established and actively advanced in the three areas.

EcoStep as a LIFE project

EcoStep was developed further in a project funded from 2004 to 2007 within the framework of the European Union LIFE program. The focus here was on the following areas:

- The various tools, templates and check lists which were already partially developed were completed and made into a manageable system.
- EcoStep had to be able to freely integrate sector-specific options as add-ons.
- The corporate management instrument EcoStep was to be seamlessly extended by a strategic instrument: the Sustainable Balanced Scorecard.
- Indicators over successive time periods were to verify the improvement effects and the introduction costs were to be paid back by the savings made in increasing corporate efficiency.
- It had to be possible to apply the EcoStep concept in other European member states.
- It had to be demonstrated that a subsequent certification in accordance with ISO standards etc. would be possible without any major additional outlays.
- EcoStep was to develop and become established as a system accepted by large companies and associations and recommended to suppliers.

This Layman Report shows that in the meantime it has been possible to successfully implement all aspects, that EcoStep will assert itself throughout Europe in all sectors and that it thus constitutes an alternative to EMAS for SMEs.

EcoStep the results

The EU EcoStep LIFE project

From 2004 to 2007 the further development of the integrated management system for SMEs, EcoStep, was funded within the framework of the EU LIFE program. The findings and results achieved during this period are set out in the following.

In focus

EcoStep for SMEs: methodology and identified optimisation potentials

30 companies from Hessen and the Free Hanseatic City of Bremen took part in the EU project EcoStep. Participants included services companies as well as industrial production and food production companies, so that a wide range of experience could be drawn upon. The companies ranged from a scientific institute to a bakery, right up to companies involved in metal processing. The size of the companies ranged from between 5 and 150 employees (for more details see the Annex).

The aim was the introduction and adaptation of EcoStep as a clear, practice-oriented management system in the participating companies. Two of the participants already had a management system certified in accordance with DIN EN ISO 9001:2000. The focal point here was the integration of environmental and labour protection in the existing QM system.
Another task area of the projects consisted in identifying savings potentials in the companies. Various areas were observed, such as energy, water and waste, but also the organisational and thus the economic efficiency of the corporate processes.

The common basis for all consultations in the companies was the EcoStep checklist which, in contrast to the ISO standards, does not focus on themes but rather on the corporate processes. 90 points were evaluated per company with reference to relevance, implementation and possible improvement potentials.
On average per participant, 25 to 30 measures were established which contribute towards internal improvements in the companies.

The possibilities of optimising corporate processes and reducing costs by the introduction of a management system are enormous and very diverse – here are some concrete examples:

- In one company, for example, it was possible to reduce energy consumption by 30 per cent.
- In various companies it was possible to realise savings of around Euro 10,000 in the IT area.
- In another company throughput times for orders were reduced by 40 per cent.

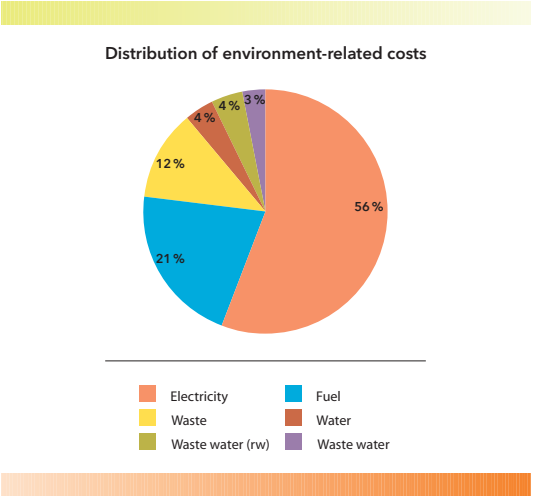
However, it is not possible to generalise in advance regarding these savings potentials, much less to quantify them. The various approaches towards achieving corporate improvements are just as diverse as the companies themselves. The most frequently identified optimisation potentials are:

1. Structuring of data and documents (IT and filing system)
2. Registration and evaluation of consumption-related indicators (energy, consumption of raw materials including the proportion of rejects)
3. Indicators for the evaluation of the performance of processes
4. Target planning, written formulation of (measurable) corporate targets
5. Human resources development and training planning
6. Complaints management as well as correction and prevention measures
7. Project management (deadline planning and budgeting)
8. Efficient implementation of labour law stipulations
9. Transparency of processes and process results
10. Internal company logistics (storage and material flow)

Particularly in companies which have been at the same location for a prolonged period, improvement potentials can be identified in the areas "transparency of processes" (9) and "internal company logistics" (10). The effects achieved here are immense: On closer observation it becomes clear, for example, that distances travelled within the company can be reduced by up to 70 per cent, storage areas can be halved and throughput times significantly reduced. And, of course, all of these factors have an impact on the production costs: With organisational measures alone, savings of 10 to 20 per cent can be achieved in many cases.

Another focal point of the analysis were the "environment-related costs" (2). After the data from three selected participants were intensively observed along with the project partner hessenENERGIE for this purpose, the data on environmental and energy efficiency for ten other participants were subjected to closer scrutiny.

In the companies observed, electricity and fuel represented the lion's share of the environment-related costs at 56 % and 21 % respectively (77 %). The remaining cost shares totalling 23 % were divided over waste material (12 %), fresh water and rain water (4 % respectively) and waste water (3 %).



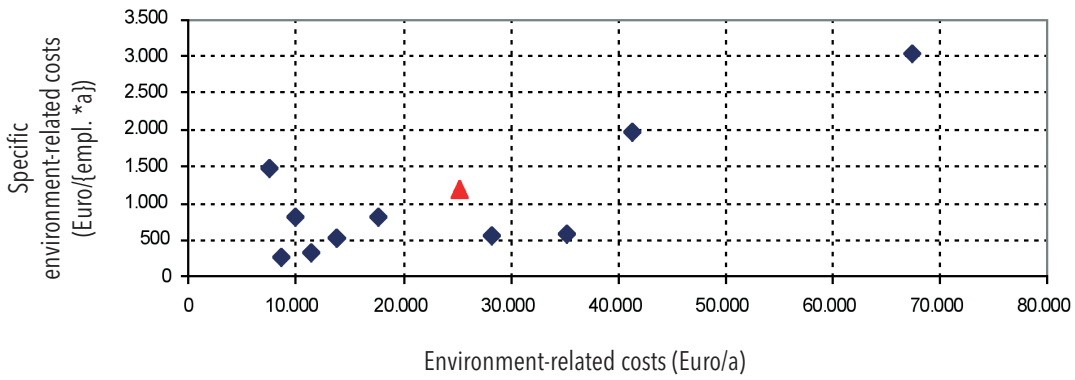
The "average company" had 24 employees and an annual turnover of around Euro 2.5 million, corresponding to a per capita turnover of Euro 104,000. The mean value for the environment-related costs of all participants observed amounted to around Euro 25,000, corresponding to a proportion of one per cent of turnover. The employee-

specific costs were taken as a further characteristic value for the assessment of the environment-related costs. The mean value for the participants observed was around Euro 1,200 per employee. Fig. 2 shows the corresponding results for the participants as well as the mean value for all participants observed.

EcoStep now offers a simple method for answering these questions quickly and easily:

- Total environment-related costs
  < Euro 25,000
  low environmental relevance
- Specific environment-related costs per employee < Euro 1,000
  low environmental relevance

Environment-related costs for fuel, electricity, water, waste water, waste (red triangle = mean value)



Many entrepreneurs are faced with the following basic questions regarding their own environmental and energy efficiency:

- How can I collect and compare data without major outlays?
- How can I assess how efficiently we actually are in terms of energy and the environment?
- How much effort should I put into the collection of detailed data?
- Where can I make the greatest savings with the lowest outlay?

- Total environment-related costs
  < Euro 50,000
  medium environmental relevance
- Specific environment-related costs per employee < Euro 2,500 EUR
  medium environmental relevance

- Total environment-related costs
  > Euro 50,000
  high environmental relevance
- Specific environment-related costs per employee > Euro 2,500
  high environmental relevance

Both values – total environment-related costs and specific environment-related costs – should be looked at together.

The calculation of these consumption-related data is made on the basis of the invoices for one year and takes very little time. In general – provided all invoices are available – the process takes less than one hour.

If the two values are within the range of "low environmental relevance", there is generally little point in breaking down this data into any further detail or registering them on a monthly basis. Usually it is sufficient to take a look at the five main individual consumers (e.g. compressed air, large machinery, lighting). For example, in one participant it was possible to reduce power consumption by more than one third by replacing an old compressor and checking the compressed air system. The new compressor had paid for itself after less than three years. Then the annual savings are around euro 1,800. The time taken to identify this savings potential is only around 1 – 2 working hours.

This is just one example of a wide range of highly efficient approaches and methods which EcoStep makes available to companies. The basic principle here is always: achieving the best possible benefits with simple means. Combined with the exchange of experience in the joint workshops and the analysis of internal company processes by external consultants, improvements can thus be achieved quickly and simply in many different areas of the companies. These in turn contribute towards protection of the environment and to the economic success of the participants.

In focus

Extension of EcoStep for winemakers

Winemakers are already confronted by a wide range of regulations on the basis of European and national legislation and are also subject to intensive inspection, often a number of times a year. This is because wine is categorised as a food and thus subject to very strict regulation.

Alongside the official regulations, for some years now the demands of the retail sector in terms of food safety, in particular the traceability from the supermarket shelf literally back to the vintner's grape vat, have also increased, and are becoming increasingly strict with every new "food scandal".
This means that winemakers who want to sell their products will sooner or later be required to produce the corresponding certificate, whether it is the IFS (International Food Standard) or the BRC (British Retail Consortium).
This special situation, which can be applied equally to almost all equivalent areas of food production, was one of the bigger challenges in the EcoStep project for winemakers.

The aim of the EcoStep project for winemakers was, therefore, the integration in the integrated management system of all the relevant legal and formal requirements and the integration of the requirements to be fulfilled by the winemakers in terms of labour protection, environmental protection and quality assurance as well as the – largely identical – requirements for a food safety system.

EcoStep simultaneously fulfils

- the general requirements for the companies in terms of self-inspection,
- the diverse requirements of the various legal areas (alongside the abovementioned aspects of labour and environmental protection and food safety, the special requirements for agriculture and winemakers) as well as
- the additional requirements of the retail sector (International Food Standard IFS for food companies and EUREPGAP for agricultural suppliers).

EcoStep thus offers a system for an internal audit with which management can identify weak points, optimise processes and instruct employees.

EcoStep can also be used to verify the regular checks and inspections by the various authorities and instances (wine inspection, professional association etc.). It also offers the basis for the certification/validation of the various management systems of the international and European standards and the specific requirements of the retail sector.

These requirements are perceived and evaluated differently by the various participating companies. For medium-sized companies with a large number of employees as suppliers for the large food retailers and a high proportion of exports, the benefits of EcoStep are comparatively greater than for smaller family-run companies who do not export and do most of their own marketing.

This is why it is particularly important to take into account the concrete requirements of the respective sector and company structures and the existing conditions in the organisation of the respective companies before introducing EcoStep.

Apart from the usual IT standards (Word/ Excel), EcoStep requires no special / additional IT programs or systems. At the same time EcoStep also offers the option of integrating database and/or goods management systems.

Within the framework of implementing EcoStep in operational company practice it was particularly important that a wide range of requirements (particularly with regard to the specific rules for wine bookkeeping and the further-going requirements for agriculture) were already fulfilled, so that only the formal requirements within the framework of document steering had to be adapted.
Another important aspect was that the participating companies wanted to use EcoStep as a system in different ways.

On the one hand, all of the participants in the workshops and the accompanying consulting sessions were concerned about the optimisation of a general management system for the organisation of structures and sequences. The priority here was to develop EcoStep in every company – starting on the basis of the accustomed work sequences – in such a way that it was adapted in the optimum manner to the specific company requirements rather than installing an additional system alongside the existing one. In this context all of the relevant basic principles, structures and processes were documented and integrated in an ordering system (document directory).

On the other hand, the preconditions and the possible optimisation potentials were identified in the on-site consulting sessions. This was a matter of identifying the relevant corporate indicators (alongside the purely economic values, hygiene, labour protection and environment-related aspects were given priority here).

All of the planned measures were drawn up in a to-do list, and the concrete processing of the measures up to conclusion was established and documented.

The management system thus developed as well as the relevant basic principles, targets and measures were then evaluated. This means that the system and its main elements were examined and evaluated for each individual case in terms of practical feasibility and further optimisation potential.

In this way, all of the preconditions for the verification of the company's own self-in-

spection system and for the various verifications required for the different authorities and instances were fulfilled.

At the same time, the requirements were fulfilled for the certification or validation of the management system in accordance with DIN EN ISO 9001:2000 (quality management), DIN EN ISO 14001:2004 or EMAS (environmental management), DIN EN ISO 22000: 2005 or the International Food Standard (IFS) (food safety management) or the ILO-guideline for labour protection management.

The participants from the winemaking sector were mainly interested in the verification of fulfilment of requirements for food safety (in particular the retail sector-specific requirements of the IFS). In the future, winemakers supplying large retail chains will have to provide the corresponding verifications by accredited certification bodies. This is why the conditions were created within the framework of the EcoStep LIFE project for a cost-effectiveness certification in accordance with the standards IFS or BRC required by the retail sector.

In focus

Sustainability of EcoStep guaranteed by the integration of the Sustainable Balanced Scorecard

The Balanced Scorecard (BSC) is a comprehensive planning and control instrument to ensure long-term corporate success. It helps companies to implement their strategic targets systematically. Target achievement is constantly monitored, allowing, for example, an early and rapid response to new market conditions. The balanced scorecard puts an end to the widespread "tunnel vision" focusing solely on financial indicators. It is directed uncompromisingly at the overall corporate philosophy and takes into consid-

eration in a "balanced" manner central aspects such as customer, process and employee-orientation.

The aim here was to examine whether the requirements for sustainable company management in small and medium-sized companies can be feasibly integrated in this control instrument. In this way ecological and social aspects are to be anchored in the corporate strategy. The introduction of the Sustainable Balanced Scorecard (SBS) includes the aspect of sustainability. Taking account of social and ecological aspects is, namely, more than just a moral obligation. It can also have real economic advantages.

Five companies that had introduced EcoStep had the opportunity of participating in a further project. This was aimed at the question as to what extent a sustainability strategy can also be developed for smaller companies. After selecting five companies which were as different as possible, the basic theoretical principles were worked out in five joint workshops. The individual adaptation took place in the companies themselves. The starting point for any scorecard – not only the sustainable variety – is the long-term vision and the measurable strategic targets derived from this which a company has set for itself. Its function is to implement, control and monitor these targets. The companies concentrate on a maximum of ten to fifteen corporate targets. Only the truly important strategic targets are observed. The whole process also had to be practicable for smaller companies and their limited resources.

Sustainable development demands a departure from short-term profit-thinking in favour of longer term development paths which take account of aspects of justice in the various pillars of sustainability. This aspect underlines the necessary precondition for the compilation of a Sustainable Balanced Scorecard: the presence of a clearly formulated strategy based on aspects of economic, ecological and social sustainability. A decisive factor here is that the general values of the owners of the company and the corporate philosophy are openly integrated in the strategy process.

In the development of the strategy a starting position is determined for the whole company and – where relevant – for the individual strategic business divisions. Then the **corporate and business division strategies** are formulated. Corporate strategies include decisions of basic principle. They provide a picture of what is to be different in the future on the corporate level.

The Sustainable Balanced Scorecard is an **instrument** used by companies to

- realise strategies on a step-by-step basis
- communicate corporate strategies and targets
- link strategies with the concrete annual planning and budgeting and to measure and monitor target achievement.

The companies participating in the project expected that strategies based on aspects of sustainability would be made more concrete and that management indicators for the measurement of ecological and social targets could be easily integrated in the

reporting system. A balance of the targets is generated for the main levels of action or perspectives of a company.

The usual four perspectives are sufficient to anchor the sustainability consciousness for most medium-sized companies.

In the **financial perspective** the focus is usually on the classical financial indicators such as capital to assets ratio, EBIT, profitability etc. The economic reference is very clear here and is at most relativised by the targets of the other perspectives in terms of the value attributed to it.

In the **customer perspective** targets are set with reference to target customers, market positioning and market appearance of the company. Ecological and social sustainability aspects are anchored in the customer perspective when it comes to the establishment of a particular product range (products with "organic" label, "fair trade" etc.) or to addressing new target groups whose purchasing behaviour is influenced by the political debate regarding sustainability.

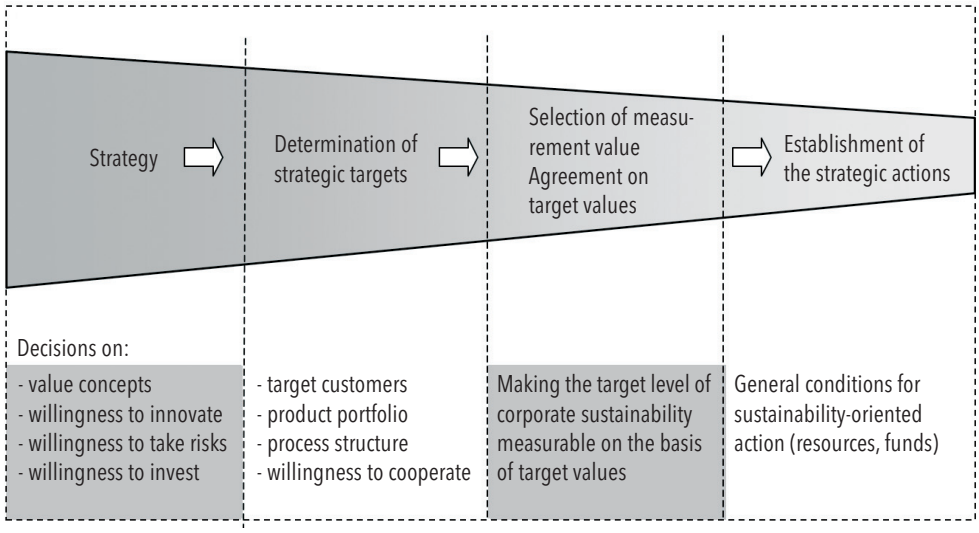
In the **process perspective** it is established which processes have prime importance in the realisation of the strategy and which processes have to be developed completely from scratch in the company. The reference to ecological sustainability is usually generated here in relation to production on the basis of process efficiency and rejection rates.

The **employee/potential perspective** indicates the future challenges for which the company has to adjust itself. This concerns, for example, the development of new products in which conventional materials are substituted by environmentally friendly alternatives, technological innovations aimed at reducing the burden on the environment and which usually demand investment, and the issue of "empowerment" of employees and their willingness to accept responsibility.

Like the BSC, the Sustainable Balanced Scorecard is an ideal instrument for strategy implementation and communication which can be realised with a manageable number of steps. The methodology is understandable and offers not only the possibility of facilitating and securing strategic management in medium-sized companies but also the opportunity of integrating aspects of sustainable management. Sustainability consciousness is undoubtedly promoted by repeatedly questioning and integrating ecological and social aspects during the SBS process.

Sustainability is a long-term concept. Anchoring this concept on the corporate level confronts owners and managers with two serious challenges: On the one hand, the decision makers are supposed to make a constructive contribution towards the definition and social manifestation of what are often confusingly formulated political claims to sustainability. On the other hand, the increasing dynamism of environmental conditions and the increasing complexity of the action which needs to be taken make the pursuit of long-term sustainability targets very difficult.

Step-by-step realisation of the sustainability targets in the SBS process:



The strategy is realised on a step by step basis by reducing strategic options to three stages which come together to form a concrete project management system. Strategically important aspects of sustainability can be anchored here.

Determining strategic targets

The individual claims formulated in the model and strategy for corporate sustainability are anchored by the formulation of concrete individual strategic targets in the company.

Selecting measurement values

Once the strategic targets are established and the main cause/effect connections identified it is then a matter of finding indicators to provide information on the achievement of the targets.

Establishing strategic actions

The strategic targets are implemented in the form of strategic actions. In terms of content these are nothing more than projects with strategic relevance. The degree of seriousness with which the individual targets are being advanced can be recognised here.

However, the more stable and clear the general conditions for action are, the easier it is to pursue medium and long-term developments. As such political general conditions only exist in some few areas, the value structure of the entrepreneurs is the yardstick for how much sustainability can be anchored in the strategy. As smaller companies, however, are strongly bound to the region, there are many different links with the theme of sustainability. This becomes clear, for example, with the question: where am I going to get the right, qualified employees I need in the future? In many cases, the foundations have to be laid today when the strategy is established and the owner of the company knows when he will need which qualifications in the company. Often it can already be predicted that the labour market will no longer be able to provide these employees in the future. In-house training and selective qualification is often the only way forward.

What could be more sustainable than that?

In focus

Management contracting as a new financing model for EcoStep

Within the framework of the EcoStep LIFE project, experience gained in the field of energy contracting was used to draft a management contracting system for EcoStep and its applicability for the introduction of the EcoStep management system in small companies was examined. The main question here was whether, and for which participant group, a practicable contract model can be designed which allows the payment of the consulting costs from the savings achieved with the aid of the EcoStep management system.

The transferability of elements from energy contracting

Contracting solutions in which the investments made by an energy services provider are assumed by the energy users have established themselves as a typical feature on the energy economy and energy policy landscape over the last twenty years. However, these models are less interesting when it comes to the introduction of EcoStep in SMEs. Although the introduction of a managements system initially requires an implementation outlay in terms of costs for external consultants and for the necessary internal work to establish the system, these are not "classical" investments in technical equipment. However, an initial implementation outlay can also be balanced here in the subsequent period by "yields" in the form of cost savings in the corporate departments and processes newly organised by the management system.

In the area of energy contracting there are analogue concepts which are used mainly for the introduction of energy controlling systems in the field of public properties (community energy management). For example, for some time now energy agencies in Baden-Württemberg, Saarland and Hessen have been offering smaller communities the implementation of an energy controlling system within the framework of a three-year contract on the basis of profit sharing. The community can generally recover the costs incurred through the work of the external consultant over the introduction period of the energy management system of three years from the savings achieved in energy and water costs in this period. Such models can serve as a basis for the development of similar approaches for the introduction of EcoStep in SMEs. Contrary to the widespread misconception, a management system for the structuring of the corporate organisation and sequences in the areas of environment, labour protection and quality assurance does not by any means only cause extra costs. Nor are the benefits restricted to the generation of legal compliance in the corporate structures and / or the use of a certificate or label acquired on the basis of the management system as a verification of competence or quality on the market. A good management system can and will in many cases induce corporate rationalisation effects which can result in a substantial net costs saving for a company even when set against the costs of introduction and maintenance of the system.

Even a cursory look at the areas covered by EcoStep reveals a wide range of promising savings potentials:

- In the field of the environment, for example, avoidance of waste and the recycling of materials is a good way of reducing disposal costs. Another issue here is the reduction of energy costs by avoidance of unnecessary consumption and the efficient use of electricity, heat, cold and compressed air. In the case of water, a reduction in the amount of fresh water used usually also leads to a reduction in the waste water disposal costs.
- In the field of labour health and safety, success is reflected in improved organisation of labour protection, and parti-

cularly in reduced illness-related costs (including missed work days). In addition to this, the employers' liability insurance companies generally offer a discount for companies which have lower accident rates than the average in the respective sector.

- With regard to quality management it is obvious that every reduction of the rejection rate will have a positive impact on the costs for labour, energy, raw materials and on waste disposal costs. Equally, targeted quality management can also reduce the quite cost-intensive processing of complaints.

This opens up the opportunity of using a model of success-related remuneration for the consultancy services necessary for the introduction of EcoStep. There are, however, two conditions necessary for the feasibility of such a remuneration system: the savings potential must be a sufficiently large relative to the incurred consultancy costs, and these savings must be verifiable, plausibly and at a reasonable outlay, so that a contract can be designed which is attractive for both sides.

Possible models for the remuneration of consultancy services

A decisive factor for a success-related remuneration model will be that it increases the acceptance on the part of SMEs as the potential users of EcoStep. It can be asumed that most SMEs will not believe the savings they can make by the introduction of a management system. Although it will not convince all of the sceptics, the interest of many SMEs could be more easily aroused if the promise of cost reductions can be backed up by a consultancy offer with success-related remuneration. For this reason a remuneration model measured exclusively in terms of cost reduction success would be ideal. However, there are considerable difficulties and uncertainties in estimating the possible positive impact on costs. The level of the achievable cost reduction depends above all on the degree of (undesired, but not fully identifiable) inefficiency in the starting situation of the respective company. A consultant will hardly be able to estimate this without a detailed knowledge of the company. For this reason the assumption of risk by the consultant is only possible to a limited extent. In some cases it may not be absolutely necessary for the consultant to accept the full risk of non-achievement of sufficient cost savings to change the motivation of sceptical SMEs. As experience in the energy sector has shown, it can be motivation enough if the remuneration for the consultancy is clearly linked to the success of the project without dispensing entirely with success-independent elements.

Against this background six different concept proposals were compared and discussed with experienced consultants with regard to their suitability:

- **Concept 1:** Low flat rate and otherwise exclusively success-related remuneration model depending on the actually achieved cost reductions with co-responsibility of the consultant for the successful introduction
- **Concept 2:** Basic flat rate plus success-related remuneration depending on the identified savings potential

- **Concept 3:** Basic flat rate plus success-related remuneration depending on the identified savings potential plus 'clients acquire clients' discount
- **Concept 4:** Basic flat rate plus success-related remuneration depending on the savings potential estimated as achievable in agreement between the consultant and the client
- **Concept 5:** Basic flat rate plus success-related remuneration depending on the savings potential estimated as achievable in agreement between the consultant and the client plus certificates – ranging from a pure participation certificate up to bronze/silver/gold
- **Concept 6:** Pure flat rate for defined part-services and according to the time outlay of the consultant for services going beyond this.

In the assessment of the advantages and disadvantages of the various remuneration models it has been shown that it is difficult for the consultant to agree entirely to concept 1. Conventional remuneration in accordance with concept 6 would be more favourable for him. For this reason at least, concept 4 should be taken into consideration as an alternative for both sides. Other elements such as 'clients acquire clients' discounts and participation certificates can be built into the different models.

Identification of economic benchmarks

On the basis of experience up to now, EcoStep can reduce costs by between 10 and 20 per cent of turnover, whereby there are substantial differences depending on the sector and the typical production processes, as well as considerable deviations from company to company. The outlay of the consultant for the introduction of EcoStep including accompanying the implementation in the two years following implementation can be estimated at around 20 working days. Including overheads and the imputed interest of the consulting company, per diem rates are currently around Euro 600 to Euro 800 resulting in total costs for external consulting of Euro 12,000 to Euro 18,000.

If we assume, on the basis of experience with similar controlling projects in the energy sector, achievable savings in the 10 per cent range, then the costs which can be reduced by the management system must be at least Euro 200,000 to Euro 300,000 per year if the consulting costs are to be paid from the cost savings while leaving a certain financial incentive for the company to introduce the EcoStep system. If the assumptions derived from the statistics on turnover and costs are correct – whereby they cannot supply any more than an initial estimate in individual cases – then companies or SMEs in which the integrated management system developed within the framework of EcoStep can be introduced on a success-related basis, need a turnover volume of at least 2, preferably 3 million euro per year. If we assume that there are around 120,000 companies with turnovers of between 2 and 10 million euro, then the potential addressees for the introduction of EcoStep on the basis of a success-related remuneration model can be roughly estimated as being more than 100,000 companies in Germany.

Examples for success-related remuneration of the consultancy services

Taking as an example a company with revenues between 2 and 3 million euro and costs of 200,000 to 300,000 euro per year which can be positively influenced by the management system, a success-related remuneration system for external consulting could be as follows:

Assuming a time outlay on the part of the consultant of 20 days (d) divided over a period of three years (implementation year 10 d, first and second accompanying year 5 d each) the consultant incurs costs of Euro 16,000. These are covered by a fixed rate of Euro 8,000 which is paid on a pro rata basis of the distribution of work over time (implementation year Euro 4,000, first and second accompanying year Euro 2,000 each) and by the payment of a success-related portion whose target value is Euro 8,000 and which, once covered, cannot exceed a certain maximum value, for example Euro 12,000. If an improvement of 10 percentage points is to be achieved and maintained in the year after implementation of the management system, the success-related payment in each of the accompanying years amounts to Euro 400 per percentage point achieved. If greater savings are achieved, the consultant participates in these with a further Euro 400 per percentage point up to the achievement of the ceiling at Euro 6,000 for one year and Euro 12,000 for two accompanying years. Thus, in this example the consultant can achieve a fee of between Euro 16,000 and Euro 20,000. If no improvements are achieved, the consultant receives only the flat rate, which would constitute a cost coverage for him of a maximum of Euro 8,000. The indicator according to which the desired improvements are to be measured must be precisely defined. A direct link with the level of costs which can be influenced by EcoStep would make the success-related part of the consultant's remuneration dependent on economy-related and structural capacity fluctuations, which neither the consultant nor the company want. This is why a specific value must be selected. This could be the quotient of the revenue of the company and the costs of the input which, because of the relation of EcoStep to ecologically relevant cost groups, could be termed 'eco-efficiency'.

If a company, for example, has a turnover of Euro 3 million and associated costs of Euro 300,000, this quotient would have a value of 10. If the consultant succeeds in reducing costs by 10 % at constant turnover, the improvement in the quotient would amount to 11 percentage points so that the consultant would be due a success-related fee of Euro 4,400. Alterations in the relevant costs resulting from fluctuations in the turnover would thus not have any influence on the calculation of the success-related remuneration of the consultant.
From the point of view of the company receiving the consulting services this example can be used as follows to illustrate the success-related remuneration model: At Euro 300,000 in relevant annual costs in the starting situation, a 10-per-cent saving would mean a reduction in costs of Euro 30,000 per year. Even if no cost reductions are achieved in the year of implementation, the cost reduction of the two accompanying years amounts

to Euro 60,000. This compares with a payment of Euro 16,800 to the consultant. Thus, in this – optimistic – example, the savings could be used to pay off any investments which may be required to improve the eco-efficiency in the course of the introduction of EcoStep.

In principle, the various considerations set out here can also be transferred to a variation in which the consultant's share in the savings achieved does not depend on the cost reductions actually achieved by the management system, but is measured in terms of a savings potential calculated on the basis of a consensus between the two sides. A decisive factor here is that there is agreement regarding the cost groups which can be influenced by the introduction of EcoStep. Alongside the flat rate, the consultant and the company agree on a success-related share which falls due for payment when the consultant in the course of implementation of the system can show the company verifiably and convincingly which cost savings can be expected in which areas in comparison to the starting situation.
The scaling of the success-related payment in such a system can take place analogously to the model cited above. The reference to the quotient "eco-efficiency" (if not to its actual development) is still a good idea, but could be dispensed with if the procedure for the calculation of the savings potentials to be established on the basis of consensus is defined differently.

And here lies the actual problem: the contractual establishment of clearly defined procedures for the calculation of savings potentials is not easy, but absolutely essential. And even if there is a clear definition of the premises and of the steps for the mathematical verification, the practical realisability remains a question of trust. This is why this version can only be recommended if the general relationship between the consultant and the company can support such a procedure.

For both remuneration models, consideration was given to the possibility of forming regional clusters of largely similar companies to examine the chances of offering the introduction of EcoStep to such a relatively homogenous group of micro-companies against success-related remuneration despite the low cost values and savings involved here. However, this is subject to strict limitations: On the one hand, the formation of a cluster only reduces the costs of the consultant to a limited extent; alongside information events, extensive individual attention to the individual companies is also necessary.

On the other hand, at Euro 20,000 to Euro 30,000 per year, the savings which can be achieved by the management system are often so low that that the costs of the consulting services cannot be covered by the savings.

Sample consultancy agreement ready

On the basis of these preliminary investigations, the basic structures of a draft contract for the introduction of the integrated management system with success-related remuneration was drawn up using examples from the energy contracting sector. The contract version using an indicator for 'eco-efficiency' has been formulated. Benchmarks have

been drawn up for the contract version using a consensually determined savings potential which allow a modification of the first contract version. Special contractual provisions for the formation of clusters of micro-companies were not drawn up as the preliminary investigations indicate that there is little likelihood of this being realised.

Steps for the trial of the developed contract models

In order to examine the cost structures and savings potentials of typical SMEs with regard to the chances of reducing costs by the introduction of EcoStep, energy checks were carried out at four companies from the current EcoStep convoy in Hessen. These consisted of an inspection of the energy invoices for a calendar year, a visit to the company along with the company's EcoStep consultant and an analysis of the energy consumption. The results of the energy check were drawn up in a brief consultant's report in which the structure of the energy consumption in the company was set out as well as recommendations for optimisation.
These investigations confirmed that the energy costs – as well as the other environment-related cost groups – vary widely depending on the respective sector and the concrete products of the company, and for this reason the chances of using a success-related remuneration system beyond the abovementioned rough delineation criteria can only be determined by an initial data analysis for the company. As the energy costs vary between a few thousand euro and hundreds of thousands of euro per year, EcoStep can only make a relevant contribution towards covering the costs of introducing EcoStep in companies which are not too small or in energy-intensive companies. In all of the investigated companies it was possible to identify possibilities of reducing energy consumption and energy costs by short term optimisation measures and in the context of modernisation investments which were going to be made anyway.

The results for energy can probably be transferred to the other environment-related cost types. To this extent these sample checks have confirmed the thesis that the introduction of EcoStep allows significant cost-savings potentials to be harnessed.
The task is now to carry out practical trials with a success-related remuneration for the introduction of the integrated management system developed in EcoStep on the basis of the draft contract which has been drawn up.

In focus

Europe-wide empirical study for the acceptance of EcoStep

Management systems such as EMAS and ISO, which were originally designed for large companies, have received relatively little acceptance on the part of SMEs. In order to make such standards more attractive for SME's, they have to be adapted to the actual situation of such companies. This means that a more cost-effective and simple procedure must be found which can be used by SMEs in the widest possible range of areas. EcoStep has succeeded convincingly in achieving this.

Alongside EcoStep there is a whole range of further low-threshold[2] management systems or management approaches which claim to offer the SME a cost-effective alternative to standard management systems. These include, for example: Ökoprofit, diverse environmental seals of approval, QuH (Qualitätsverbund umweltbewusster Handwerksbetriebe – Quality Association of Environmentally Conscious Crafts Companies), QuB[3], Ecomapping and PIUS.

In the event that further theme-centred management systems are required, it can be assumed that the ability to introduce parallel systems in small companies soon reaches its limits.

An integrated approach offers the SME flexibility in fulfilling the requirements of various guidelines. Important synergy effects can thus be exploited. It is also a good idea to include aspects of labour health and safety and environmental protection in an integrated form in the company's everyday routine as this is the only way that the integration of environmental aspects becomes a matter of course and requires no special treatment.

It also has to be mentioned that the dissemination of low-threshold management systems or management approaches has not been very successful so far. Even the reduced efforts and the reduced costs associated with the introduction of such a management system do not appear for many to be justified by the benefits.

But what are the obstacles to wider dissemination? In order to answer this question the Research Centre for Sustainability at the University of Bremen initiated an empirical study on EcoStep. Written questionnaires of the participating companies in three countries, expert interviews, evaluations of workshops and written industrial partner interviews were used to find out how the

[2] Systems or approaches below the standard management systems such as ISO or EMAS

[3] QuB: Qualitätsverbund umweltbewusster Betriebe (Quality Association of Environmentally Conscious Crafts Companies)

individual parties concerned assess the EU project and the EcoStep method and which obstacles and advantages have arisen for the participants.

The evaluation of the data and information illustrates the difficulties which the individual parties encounter and where potential for an improvement of the dissemination can be found. In the participating companies it was particularly interesting to observe obstacles which are independent of the company size, its location or organisational structure and which represent difficulties which are typical for SMEs in general. The lack of resources (financial, time and personnel) and the lack of know-how are just some of the obstacles frequently cited by SMEs.

It is obvious that the introduction of a voluntary management system such as EcoStep must be made more attractive to companies, for example by creating incentives or reducing the costs. While the costs for the introduction and the operation of EcoStep add up on the one side, on the other side they must be surpassed or at least be equalled by the incentives, for example in the form of cost reductions. Alongside subsidisation, incentives can also be generated by market advantages or by deregulation.

Dissemination problems can also arise from the implausible communication of the management systems. Incorrect positioning may also lead to acceptance problems with the target group. One example of this is the dissemination on the basis of the eco-efficiency strategy. The statement that the implementation of EcoStep will lead to long-term eco-efficiency effects, i.e. that the business results will be improved by environmental protection, social responsibility and sustainability contains a contradiction. An integrated management system has only a limited capacity to achieve these positive effects on a long-term basis. It must therefore be accepted that the introduction and operation of an integrated management system will result in a certain self-restriction regarding the efficiency of the company. This the only way that the targets set for environmental protection, labour health and safety and quality can be achieved.

It must also be examined to what extent existing dissemination strategies have had any effect. The dissemination on the basis of best-practice examples has so far not proven successful. SMEs are characterised by the fact that they are very diverse in character and require sector-specific and company-specific solutions. This is why the transfer of solutions from other companies, especially from large companies, is not appropriate. Nonetheless, the grapevine also plays an important role in the dissemination of EcoStep – albeit only to a certain extent. EcoStep companies can serve very well as examples but one should not be under any illusion that this will lead directly to a wider dissemination.

The following section briefly sets out some of the results of the written questionnaire and the expert interviews.

In the written questionnaire 52 companies in Germany, France and Italy were asked

about motivation, advantages and difficulties with the introduction of EcoStep and about the initial changes since the introduction. The responses and opinions of the parties questioned are important because they reveal, for example, which advantages are particularly attractive for the companies. New dissemination strategies can then be developed on the basis of this.

In response to the question "Why did you take part in the project?" most companies cited the search for improvement potential. 75 per cent of the companies expected the introduction of EcoStep to have this effect. For more than half of the companies environmental protection also played an important role. Just as many companies stated that they wanted to improve their image by introducing EcoStep. Many cited the reduction in operating costs as their motivation.

Most of the changes since the introduction of EcoStep took place in the area of general management competence. The fact that the first priority of the companies is to make changes in the area of general management competence makes sense to the extent that better organisation opens up greater capacities. The savings in terms of resources can, for example, be used in environmental protection.

The expert interviews showed that there is not just one, but rather a variety of dissemination strategies which have been applied for EcoStep:

- Eco-efficiency strategy:
  "reducing costs and protecting the environment"
- Quality management strategy:
  "ensuring the quality of the product / service"
- Risk strategy:
  "ensuring legal conformity" (including labour health and safety)
- Sectoral strategy:
  "EcoStep as a solution for a specific sectoral problem"
- General problem solution strategy:
  "the company has a particular problem, EcoStep solves it."
- Management competence strategy:
  "EcoStep allows the entrepreneur to organise his company in the medium to long term."
- Marketing strategy:
  "improvement of the company / product image"
- Next-step strategy:
  "EcoStep is a training method which prepares the company for certification / validation in accordance with ISO/EMAS"

In many cases the transfer barriers cited are connected with the dissemination strategies. These include the following:

- The lack of European and national recognition
- The pressure to act is insufficient or absent
- Companies must first recognise their problems before they seek a solution
- Environmental protection and labour health and safety are regarded as secondary issues
- In many SMEs there is no self-motivation

As already described in the theoretical section, it is important that the communication

content of EcoStep is plausible and target group-oriented. It is also essential that the SMEs are shown the personal corporate advantages and not only the general social benefits. The satisfaction of the EcoStep participants reflected in the interviews and the results of the questionnaire represents a good opportunity for the dissemination of EcoStep. The integrative character of EcoStep is a distinguishing feature of the system and gives SMEs a competitive advantage.

The state can also play an important role in the dissemination of EcoStep. Pressure can be put on companies to take action by framework legislation and procurement guidelines of the state. The government can also promote the dissemination of EcoStep by promising deregulation or advantages in the case of granting an order.

Large companies could also play a central role in the dissemination of EcoStep if they demanded EcoStep from their smaller suppliers as an alternative to standard management systems in accordance with ISO and EMAS. A decisive factor for the dissemination strategy through industrial companies or the industrial associations is the plausible EcoStep certification of the SME supplier companies. Such an EcoStep certification has been drawn up and implemented.

The environmental partnerships which are developing and expanding nationwide could also serve as helpful multiplicator networks for the dissemination of EcoStep.

A further valuable contribution could also be made in the form of trustworthy testimonials which plausibly recommend EcoStep for SMEs and thus promote its dissemination.

In focus

External certification of EcoStep as a market advantage

The tried and tested ecological management instruments such as EMAS and DIN EN ISO 14001 are only widely used by large companies. Small companies only very rarely take advantage of these instruments. The obstacles include the relatively high introduction and maintenance costs as well as the outlay in terms of human resources.

On the basis of these findings the RKW Bremen has been involved intensively with the management system EcoStep – which was originally conceived in Hessen – and has participated in its further development within the framework of an EU LIFE project.

Following introduction at the RKW and on the basis of a survey of the participating companies, EcoStep has proven the high level of advantages it offers. Nonetheless, it has become clear over time that without the corresponding certification of the system it will have hardly any longer-term perspective on the market. This is linked to the perspective of the market players. These include the participating companies, clients (e.g. industry) and the public administration authorities.

Perspective of the participating companies

In the course of its daily business routine, a company has hardly any time for strategic considerations and a systematic analysis of the company's own processes rarely takes place. This is also the experience gained in the EcoStep workshops. When EcoStep is introduced, a wide range of change processes is initiated and the companies examine their own structures. This process of change is constantly advanced by the workshops, "homework" and visits by the EcoStep consultants. After the successful introduction of EcoStep there is a danger that this continuous process gets lost again in the course of daily business. For this reason the participants welcome an external certification. The external certification has the effect of driving the process on. In addition to this, the companies want to document their efforts and achievements plausibly to the outside world.

Perspective of the clients

Industry demands from its suppliers a wide range of different management systems. These include DIN EN ISO 9001, DIN EN ISO 14000, EMAS, OHSAS, SCC IFS, etc. These requirements differ in type and in intensity depending on the sector. The suppliers themselves are generally large companies who can fulfil these requirements. However, on the grounds of the industrial companies there are often a series of smaller companies working to ensure smooth operation of the company (cleaning, waste disposal, electrical maintenance, construction,

mechanical engineering etc.). As many of these companies are very small, the demand for a number of management systems (DIN EN ISO 9001 combined with DIN EN ISO 14001 or OHSAS) can constitute an unbearable financial and human resources burden.

However, the implementation of the labour and environmental protection measures in the small companies is extremely important for industrial clients, as most works accidents are caused by outside companies and lead to interruptions in the smooth running of the company.

This is why a number of industrial companies are interested in EcoStep. With the introduction of the integrated system, the clients can be sure that that the requirements for "their" small companies are fulfilled.

Of course, the industrial client must be certain that the integrated system is also being applied uncompromisingly in the smaller companies. This could be achieved by industrial audits (which is normal practice for large suppliers). However, from the point of view of the industrial client, an external certification (assessment) by an accredited certifying body is the best solution. This means that certification is an essential condition if industry is to accept EcoStep as an integrated management system.

Perspective of the public sector

The public sector has a double function. On the one hand it is a client and similar to industry in terms of its motivation in demanding management systems. On the other hand it also has the task of ascertaining whether a company is in compliance with the legal regulations (factory supervision, enforcement authorities from the environmental agencies). Companies which voluntarily introduce an integrated management system can be assumed to be in greater legal compliance than others.

The credibility of such a system is of decisive importance here. It has to be ensured that the introduction of the system in the company was successful and that continuous, practical implementation is taking place in the company's every day business routine. An independent examination by a third party, i.e. certification can make a major contribution here towards the credibility of the system.

Development of the EcoStep certification system

As a logical conclusion, the development of a credible certification system, i.e. implementation in practice was then prepared step by step in the course of a prolonged, intensive discussion process between the consultants involved in the project, the project partners from Hessen and Bremen, certification organisations and business associations.

A number of different targets were pursued:

- There should be a scaled system of participation "confirmations" for EcoStep companies,
- Quality assurance should cover the whole EcoStep system, i.e. system creators, consultants, participating companies and suppliers,
- The external examination (certification)

should apply to EcoStep but should also offer the chance of acquiring any necessary further "external" certificates, e.g. IFS or ISO 9000,
- Certification should come from a single body, not just in Germany, but throughout Europe.

All of the participating parties can be satisfied with the results achieved. The requirements posed have all been or are being fulfilled.

The certification system provides for a three-stage evaluation and certification of EcoStep participants:
In the **first stage** all companies who have fulfilled the basic conditions receive a participation certificate which confirms that they have advanced their company in the main areas of environmental protection, labour health and safety and quality assurance, and thus reached a higher standard than companies who have not adopted these targeted measures.

In the **second stage** an external certification takes place on the basis of specified checklists. Successful certification confirms that the company has fulfilled the requirements of EcoStep. This is no small achievement as it means that the company has fulfilled a wide range of requirements in all of the three areas cited (in the winemaking sector also with regard to food safety). Especially important: compliance with the relevant legal stipulations is part of the obligatory program here just as the self-obligation of the company to comply with all of the requirements. In most cases this certificate is sufficient to verify that the company, for example as a supplier company or a third party company on the grounds of a larger company, fulfils all of the necessary quality requirements.

In the **third stage** this EcoStep certification is supplemented by an examination for the granting of certification in accordance with DIN EN ISO or similar standards.

The quality assurance system for EcoStep is complemented by two further measures:
1. The consultants used to provide consultancy have to fulfil special requirements to qualify, must all have the same materials, checklists, templates and Excel sheets and are obliged to take part in regular supervision meetings. This ensures constant quality of all convoys.
2. The EcoStep system is subject to a system assessment by the certification organisation once a year to verify the continuation of an independent, internal, continuous improvement process.

The fact that the certification itself is contractually agreed exclusively between the participating company and the certification organisation, corresponding to the usual standards, is a further contribution towards the desired credibility and seriousness of the whole quality system.

These flanking measures do not merely attach a simple certification to the EcoStep system. Rather, they give rise to a complex system of comprehensive quality assurance which fulfils all of the requirements and is second to none in terms of the existing standards.

Costs and general conditions of the certification procedure

At least eight locations are participating in the certification procedure. The assessment of the location in accordance with the specified criteria generally requires no more than 0.5 working days on-site including one hour of preparation. If further audits are required on the basis of the initial audit these shall be remunerated separately. The reporting system for the individual location is restricted to a standard checklist which sets out the main information on the audit results.

The travel expenses of the assessor are charged separately. As far as possible the DQS will use locally based assessors to keep travel expenses at a minimum.

The assessment is carried out every three years. From every ten participating locations a random inspection is carried out on two locations during the three-year period. These will receive an intermediate inspection at short notice. Companies which participate in a combined audit are not taken into account here.

Costs for EcoStep certification

The fees cited for EcoStep including a certificate in accordance with DIN ISO or IFS/BRC only apply in the case of maintenance of the EcoStep system.

a) System analysis by the system creator[4]:

- In the first year of assessment Euro 2,250.00 (corresponds to 2 working days),
- In the subsequent years these costs shall be calculated into the system assessment at the location.
- Issuing of the main certificate for EcoStep Euro 480.00 /year
- Reporting for all locations in the subsequent years, flat rate Euro 1,430.00

[4] System analysis: examination of the effectiveness with the system creator, in this case HMULV, which has defined as standard and released this system. The main criterion is the implementation of the continuous improvement process for EcoStep itself.

b) System assessment on site (certification), only EcoStep[5] depending on the size of the company:

- Locations with up to 25 full-time employees Euro 700.00
- Locations with more than 25 and up to 50 full-time employees Euro 1,300.00
- Locations with more than 50 and up to 100 full-time employees Euro 1,900.00
- Locations with more than 100 and up to 200 full-time employees Euro 2,500.00 (including issue of certificate in each case)
- Locations with more than 200 and up to 500 full-time employees Euro 3,100.00

Example:

Location with 30 full-time employees, EcoStep	
EcoStep fee	€ 1,300.00
Fee in the subsequent 2 years	€ 0.00
Total fee for three years	**€ 1,300.00**

c) System assessments on site (certification), in conjunction with a certificate in accordance with DIN EN ISO 9000:2000, DIN EN ISO 14001:2004 or IFS/BRC:

If EcoStep is combined with one of the cited DIN EN-ISO- or HDE certificates, a discount of 33 % is granted on the fees for the EcoStep certificate. For each additional (external) certificate (ISO, DIN) fees amounting to € 1,500.00 Euro, and for IFS € 1,550.00 (incl. registration) .

Example:

Location with 30 full-time employees, EcoStep including DIN EN ISO 9001:2000;	
EcoStep fee	€ 1,300.00
Minus 33%	€ - 430.00
Inspection fee for DIN EN ISO 9001:2000	€ 1,500.00
Total fee in the first year	**€ 2,370.00**
Fees in the subsequent 2 years[6], only DIN EN ISO9001:2000	
recertification, each	€1,500.00
Total fee for three years	**€ 5,370.00**
Fees in the fourth year, EcoStep repeat inspection plus DIN EN ISO 9001:2000	**€ 2,370.00**

[5] System assessment: the actual certification examination in the participating companies

[6] While the EcoStep fees are only paid every three years, this does not apply to the ISO series, IFS etc., as these prescribe shorter intervals between the audits.

In focus

Summary of the results of the EU EcoStep LIFE Project

What was achieved within the framework of the EU EcoStep LIFE Project (2004 to 2007)?

- For all company-relevant processes there are current check lists, templates and tools which can be used by any company immediately or after slight adaptation or extension.
- An indicator and benchmark system on the basis of simple Excel spreadsheets was developed and provides for the first time information on the status and development of the company in some, hitherto unregistered or unregisterable areas.
- With the integration of all of the food hygiene requirements from EU law to HACCP and right up to IFS and BRC in a single convoy with winemakers, the contradiction-free integration and functionality of sector-specific supplements has been verified.
- For the first time, solid data and analyses can be submitted for the assessment of the amortisation of improvement proposals with the aid of which every company can represent the amortisation chances immediately and with little outlay.
- Acceptance on the part of associations and large companies has largely been achieved. A decisive step in this direction was the external certification by a reputed institute on the basis of a framework agreement with the best terms and conditions for the participants and maximum system credibility for potential or existing business partners.
- A number of companies have already received a DIN EN ISO 9001certificate and these will be followed by others with DIN EN ISO 14001 and IFS.
- The extension of an operational instrument by a modern strategic company management instrument (Balanced Scorecard) has been successfully verified for five companies in the special version of the Sustainable Balanced Scorecard.
- In future, participating and certified companies will be listed in an internet-based register in a transparent manner for the public.
- The basic applicability in other member states of the EU was verified despite varying conditions on the basis of decisive system flexibility of the introduction concept.
- Appropriately qualified consultants can work as EcoStep consultants. All of the terms and conditions are transparent and fully disclosed. This also applies to the basic conditions for certification.

The EU EcoStep LIFE Project could thus be successfully concluded with all of the targets having been achieved. Accompanying studies also examined the success potential for EcoStep on the European market. With the possibility of certification, there should be no more obstacles to successful placement on the market.

In focus

Further steps for market penetration of EcoStep

The EU EcoStep LIFE project was concluded successfully in March 2007. Now an integrated process-oriented management system is available which is unique in Europe and based on international standards such as DIN EN ISO, EMAS, the ILO guideline or IFS.

It is suitable for SMEs with up to 250 employees and, as well as environmental protection, also covers labour health and safety in all corporate work sequences. EcoStep offers cost-effective introduction, sectoral independence, plannability of costs and personal on-site consultancy including a simultaneous convoy procedure in which each participant profits from the experiences of the others.

But EcoStep can do a lot more: As well as a flat-rate, transparent cost calculation, it also offers a simple, practical handling by the participants. EcoStep has a modular structure which can be extended at any time by important practical additional blocks such as the Sustainable Balanced Scorecard (SBS) as well as indicator systems, management contracting as a financial model and a success-related consultancy in the area of energy efficiency. And all of this on a sector-independent and Europe-wide basis.

A unique feature which must be emphasised is the possibility of external certification of EcoStep. The reputed DQA was acquired as the certification organisation. The DQS carries out the system assessment at the participating companies and the system analysis with the standard creator, the HMULV. This system analysis with the system creator takes place annually and includes the examination and the updating of the applicable documents. This certification also prepares the companies for the external certification in accordance with EMAS.

In dialogue with large companies and industrial associations an attempt is being made to establish the acceptance of EcoStep as an alternative which is at least qualitatively equivalent to conventional systems. The good response to EcoStep and the value-added generated for the participating companies has caused the government of Hessen to include integrated management systems in the funding within the EU structural fund EFRD (European Fund for Regional Development) in the new EU funding period. In addition to this, in its 2008 budget Hessen will provide further funding to intensively promote the market introduction of EcoStep. In this process the HMULV is supported, for example, by the Chambers of Industry and Commerce. This is why EcoStep has already been integrated as a constituent part of the consulting programs of the chambers.

Another important step towards increasing the acceptance of EcoStep is the identification of new markets for the system. These could include, for example, local authorities and their local operations. Modern management instruments are now commonplace in local authorities. This is manifested in many towns, communities and districts in a wide range of authority-run companies, limited companies etc. These companies, which are run on the basis of economic factors, offer a great potential to provide community services in an efficient and cost-effective manner. On the other hand, in order to fulfil their new function and structure they have to do a lot of things in a relatively short time which have for a long time been a matter of course for companies operating on the market.
This is exactly where EcoStep comes in. It is a flexible system which can adapt to the specific requirements in the respective community which includes the employees and thus promotes acceptance. In addition to this, in financial terms EcoStep is ideally suited for limited local authority budgets. A first project of this kind is currently running with the Free Hanseatic City of Bremen which is presently involved in a convoy with local authority companies.

But the state can also play an important role in the dissemination and implementation of EcoStep. It could, for example, put pressure on companies to act through the corresponding framework legislation and procurement guidelines. Further promotion options for the dissemination of EcoStep include the promise of advantages for granting orders or of possible deregulation.

Annex

I. EcoStep check list

No.	Reason/ causes	Category	Starting point	Onsite consulting	Required status	Certification
1	EcoStep actual analysis	Structural organisation	Structural organisation (organisation chart, officers, responsibility and authority)	Inspection and regulation	Realisation required for certification	On-site inspection
2	EcoStep actual analysis	Documentation check	Organisation chart	Elaborate	Realisation required for certification	Inspection of the documentation in advance
3	EcoStep actual analysis	Documentation check	Order letter safety expert/safety officer	Inspection and regulation	Realisation required for certification	Inspection of the documentation in advance
4	EcoStep actual analysis	Documentation check	Order letter EM officer	Inspection and regulation	Realisation required for certification	Inspection of the documentation in advance
5	EcoStep actual analysis	Documentation check	Order letter QM officer	Inspection and regulation	Realisation required for certification	Inspection of the documentation in advance
6	EcoStep actual analysis	Structural organisation	Sequence organisation (process overview, processes established, evaluation of the processes)	Inspection and regulation	Realisation required for certification	Random sample on-site
7	EcoStep actual analysis	Documentation check	Process overview	Elaborate	Realisation required for certification	Inspection of the documentation in advance
8	EcoStep actual analysis	Documentation check	Management control loop	Elaborate	Realisation required for certification	Inspection of the documentation in advance
9	EcoStep actual analysis	Documentation check	Process documented	Examine	Realisation required for certification	Inspection of the documentation in advance
10	EcoStep actual analysis	Structural organisation	Integration of officers	Inspection and regulation	Realisation required for certification	Random sample on-site
11	EcoStep actual analysis	Structural organisation	Internal communication	Examine	Measure established if relevant	Random sample on-site, only if relevant
12	EcoStep actual analysis	Structural organisation	Basis for information	Examine	Measure established if relevant	Random sample on-site, only if relevant
13	EcoStep actual analysis	Structural organisation	Resources planning	Examine	Measure established if relevant	Random sample on-site, only if relevant

No.	Reason/ causes	Category	Starting point	Onsite consulting	Required status	Certification
14	EcoStep actual analysis	Structural organisation	Risk management	Examine	Measure established if relevant	Random sample on-site, only if relevant
15	EcoStep actual analysis	Documentation check	Assessment of threat to jobs (see BetrSichV – industrial safety directive)	Examine	Realisation required for certification	Inspection of the documentation in advance
16	EcoStep actual analysis	Documentation check	Explosion protection document (if necessary, see BetrSichV – industrial safety directive)	Examine	Realisation required for certification	Random sample on-site, only if relevant
17	EcoStep actual analysis	Structural organisation	Compliant with regulations (guidelines, laws, directives, standards, TA regulations)	Examine	Realisation required for certification	Random sample on-site
18	EcoStep actual analysis	Documentation check	Applicable regulations registered and current (guidelines, laws, directives, standards, TA regulations)	Examine	Realisation required for certification	Inspection of the documentation in advance
19	EcoStep actual analysis	Core/value-added processes	Registration of customer requirements	Examine	Measure established if relevant	Random sample on-site, only if relevant
20	EcoStep actual analysis	Core/value-added processes	Feasibility assessment	Examine	Measure established if relevant	Random sample on-site, only if relevant
21	EcoStep actual analysis	Core/value-added processes	Compilation of offer	Examine	Measure established if relevant	Random sample on-site, only if relevant
22	EcoStep actual analysis	Core/value-added processes	Pursuit of offer	Examine	Measure established if relevant	Random sample on-site, only if relevant
23	EcoStep actual analysis	Core/value-added processes	Acceptance of order	Examine	Measure established if relevant	Random sample on-site, only if relevant
24	EcoStep actual analysis	Core/value-added processes	Invoicing	Examine	Measure established if relevant	Random sample on-site, only if relevant
25	EcoStep actual analysis	Core/value-added processes	Development targets and project planning	Examine	Measure established if relevant	Random sample on-site, only if relevant
26	EcoStep actual analysis	Core/value-added processes	Learning from previous developments	Examine	Measure established if relevant	Random sample on-site, only if relevant
27	EcoStep actual analysis	Core/value-added processes	Development results	Examine	Measure established if relevant	Random sample on-site, only if relevant

No.	Reason/ causes	Category	Starting point	Onsite consulting	Required status	Certification
28	EcoStep actual analysis	Core/value-added processes	Examination of the results	Examine	Measure established if relevant	Random sample on-site, only if relevant
29	EcoStep actual analysis	Core/value-added processes	Selection of suppliers	Examine	Measure established if relevant	Random sample on-site, only if relevant
30	EcoStep actual analysis	Core/value-added processes	Requirements for the services or goods	Examine	Measure established if relevant	Random sample on-site, only if relevant
31	EcoStep actual analysis	Core/value-added processes	Acceptance of the supplied goods	Examine	Measure established if relevant	Random sample on-site, only if relevant
32	EcoStep actual analysis	Core/value-added processes	Evaluation of suppliers	Examine	Measure established if relevant	Random sample on-site, only if relevant
33	EcoStep actual analysis	Core/value-added processes	Planning and preparation of production	Examine	Measure established if relevant	Random sample on-site, only if relevant
34	EcoStep actual analysis	Core/value-added processes	Production of the products or rendering of services	Examine	Measure established if relevant	Random sample on-site, only if relevant
35	EcoStep actual analysis	Core/value-added processes	Examinations	Examine	Measure established if relevant	Random sample on-site, only if relevant
36	EcoStep actual analysis	Core/value-added processes	Dealing with faulty products	Examine and regulate	Realisation required for certification	Random sample on-site
37	EcoStep actual analysis	Core/value-added processes	Labelling	Examine	Measure established if relevant	Random sample on-site, only if relevant
38	EcoStep actual analysis	Core/value-added processes	Suitable warehousing	Examine	Measure established if relevant	Random sample on-site, only if relevant
39	EcoStep actual analysis	Core/value-added processes	Optimisation of transport routes	Examine	Measure established if relevant	Random sample on-site, only if relevant
40	EcoStep actual analysis	Core/value-added processes	Packaging, dispatch and external transport	Examine	Measure established if relevant	Random sample on-site, only if relevant
41	EcoStep actual analysis	Supporting processes	Planning of maintenance measures	Examine	Measure established if relevant	Random sample on-site, only if relevant

No.	Reason/ causes	Category	Starting point	Onsite consulting	Required status	Certification
41	EcoStep actual analysis	Supporting processes	Plannig of maintenance measures	Examine	Measure established if relevant	Random sample on-site, only if relevant
42	EcoStep actual analysis	Supporting processes	Execution of maintenance work	Examine	Measure established if relevant	Random sample on-site, only if relevant
43	EcoStep actual analysis	Supporting processes	Adaptation of the maintenance work	Examine	Measure established if relevant	Random sample on-site, only if relevant
44	EcoStep actual analysis	Documentation check	Maintenance and repair verifications for systems subject to obligatory inspection	Examine	Realisation required for certification	Random sample on-site
45	EcoStep actual analysis	Supporting processes	Inspection planning	Examine	Measure established if relevant	Random sample on-site, only if relevant
46	EcoStep actual analysis	Supporting processes	Selection of test instruments	Examine	Measure established if relevant	Random sample on-site, only if relevant
47	EcoStep actual analysis	Supporting processes	Use of MP resources	Examine	Measure established if relevant	Random sample on-site, only if relevant
48	EcoStep actual analysis	Supporting processes	Calibration	Examine	Measure established if relevant	Random sample on-site, only if relevant
49	EcoStep actual analysis	Supporting processes	Directory of records and documents	Examine	Measure established if relevant	Random sample on-site, only if relevant
50	EcoStep actual analysis	Supporting processes	IT structure and paper tray	Examine	Measure established if relevant	Random sample on-site, only if relevant
51	EcoStep actual analysis	Supporting processes	Defining targets and planning resources	Inspection and regulation	Realisation required for certification	On-site inspection
52	EcoStep actual analysis	Documentation check	Basic principles/corporate policy (quality, environment, labour protection)	Elaborate	Realisation required for certification	Inspection of the documentation in advance
53	EcoStep actual analysis	Documentation check	Obligation of the management	Elaborate	Realisation required for certification	Inspection of the documentation in advance
54	EcoStep actual analysis	Documentation check	Targets (quantity and quality) (quality, environment, labour protection)	Elaborate	Realisation required for certification	Inspection of the documentation in advance

No.	Reason/ causes	Category	Starting point	Onsite consulting	Required status	Certification
55	EcoStep actual analysis	Documentation check	Process of target definition and resources planning, management evaluation documented	Inspection and regulation	Realisation required for certification	Inspection of the documentation in advance
56	EcoStep actual analysis	Management processes	Entries in the management evaluation established	Inspection and regulation	Realisation required for certification	On-site inspection
57	EcoStep actual analysis	Documentation check	Management evaluation	Inspection and regulation	Realisation required for certification	Inspection of the documentation in advance
58	EcoStep actual analysis	Documentation check	Applicable management documents and records cited	Examine	Realisation required for certification	Inspection of the documentation in advance
59	EcoStep actual analysis	Management processes	Correction and protection	Inspection and regulation	Realisation required for certification	On-site inspection
60	EcoStep actual analysis	Documentation check	Process of correction and prevention measures documented	Inspection and regulation	Realisation required for certification	On-site inspection
61	EcoStep actual analysis	Management processes	Training planning and implementation	Inspection and regulation	Realisation required for certification	On-site inspection
62	EcoStep actual analysis	Management processes	Training of new employees	Examine	Realisation required for certification	Random sample on-site
63	EcoStep actual analysis	Management processes	Evaluation of the effectiveness of the training measures	Examine	Realisation required for certification	Random sample on-site
64	EcoStep actual analysis	Documentation check	Training certification at least in accordance with § 20 GefStoffV (Hazardous Substances Directive), annual instruction, BGVA1	Examine	Realisation required for certification	Random sample on-site
65	EcoStep actual analysis	Management processes	Audit planning	Inspection and regulation	Realisation required for certification	On-site inspection
66	EcoStep actual analysis	Management processes	Audit implementation and establish measures	Inspection and regulation	Realisation required for certification	On-site inspection
67	EcoStep actual analysis	Documentation check	Process of internal audits, inspection of the management system documented	Inspection and regulation	Realisation required for certification	On-site inspection

No.	Reason/ causes	Category	Starting point	Onsite consulting	Required status	Certification
68	EcoStep actual analysis	Documentation check	To-Do list for planning of measures on the basis of the EcoStep check lists	Elaborate	Realisation required for certification	Inspection of the documentation in advance
69	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Operational environment of the company (industrial estate, mixed commercial/ residential, water, wildlife protection / local amenity area	Examine	Realisation required for certification	Random sample on-site
70	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Are environment-relevant data registered and the information used?	Examine	Realisation required for certification	Random sample on-site
71	EcoStep actual analysis	Starting points for labour and environmental	Environmental impact of the corporate processes registered and evaluated	Examine	Realisation required for certification	Random sample on-site
72	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Savings potentials in water consumption (process water, industrial water)	Examine	Realisation required for certification	Random sample on-site
73	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Waste water relevance of the company (indirect disposal, direct disposal of waste water, process waste water, water treatment)	Examine	Realisation required for certification	Random sample on-site
74	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Energy relevance of the company (light, heat, machines and systems, vehicle fleet)	Examine	Realisation required for certification	Random sample on-site
75	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Noise (area category, noise protection measures)	Examine	Realisation required for certification	Random sample on-site
76	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Other emissions (e.g. vapours, gases, dust)	Examine	Realisation required for certification	Random sample on-site
77	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Waste (avoidance, collection and separation, treatment, storage, collection and transport, recycling and disposal)	Examine	Realisation required for certification	Random sample on-site
78	EcoStep actual analysis	Starting points for labour and environmental protection – internal audit	Handling of hazardous substances and other auxiliaries process materials (chemicals, oils, cleaning agents)	Examine	Realisation required for certification	Random sample on-site

No.	Reason/ causes	Category	Starting point	Onsite consulting	Required status	Certification
79	EcoStep actual analysis	Documentation check	Consumption overview (power, gas, water, auxiliaries etc.)	Elaborate	Realisation required for certification	Inspection of the documentation in advance
80	EcoStep actual analysis	Documentation check	Fire protection and alarm plans, fire protection regulations	Examine	Realisation required for certification	Random sample on-site
81	EcoStep actual analysis	Documentation check	Emergency exit route plan	Examine	Realisation required for certification	Random sample on-site
82	EcoStep actual analysis	Documentation check	Permit applications, notices present	Examine	Realisation required for certification	Random sample on-site
83	EcoStep actual analysis	Documentation check	Official conditions fulfilled, measures documented	Examine	Realisation required for certification	Random sample on-site
84	EcoStep actual analysis	Documentation check	Hazardous substance directory	Inspection and regulation	Realisation required for certification	Random sample on-site
85	EcoStep actual analysis	Documentation check	EU safety data sheets (hazardous substances, other auxiliaries)	Examine	Realisation required for certification	Random sample on-site
86	EcoStep actual analysis	Documentation check	Operating instructions (§ 20 GefStoffV (Hazardous Substances Directive), VAwS (directive on systems for handling water-polluting substances), machines)	Examine	Realisation required for certification	Random sample on-site
87	EcoStep actual analysis	Documentation check	Waste balance sheet (if obligatory, otherwise consumption overview, see below)	Examine		Random sample on-site, only if relevant
88	EcoStep actual analysis	Documentation check	Waste disposal verification record (disposal verifications, accompanying documents, acceptance confirmations)	Examine	Realisation required for certification	Random sample on-site
89	EcoStep actual analysis	Documentation check	Hazardous substances overview, hazardous substances check list	Examine	Realisation required for certification	Random sample on-site
90	EcoStep actual analysis	Documentation check	Accident report sheets, bandage log	Examine	Realisation required for certification	Random sample on-site
91	EcoStep actual analysis	Documentation check	Third party company regulations present (only if services are provided on third party company premises)	Examine	Realisation required for certification	Random sample on-site, only if relevant

II. What is examined for certification?

Management reference	Examination point (13 points) documented	Corresponding examination elements – documented
Structural organisation	Regulation and implementation of the structural organisation (organigraph, officers, responsibility and authority)	Organigraph, including officers, initial helpers
Structural organisation	Regulation and implementation of the structural organisation (organigraph, officers, responsibility and authority)	Safety expert/safety officer **entrepreneur model**
Structural organisation	Regulation and implementation of the structural organisation (organigraph, officers, responsibility and authority)	Environmental management officer
Structural organisation	Regulation and implementation of the structural organisation (organigraph, officers, responsibility and authority)	QM officer
Structural organisation	Regulation and implementation of the structural organisation (organigraph, officers, responsibility and authority)	Other officers
Structural organisation	Regulation and implementation of the structural organisation (organigraph, officers, responsibility and authority)	Integration of the officers
Structural organisation	Obligations of the management and scope of application of the management system established	Management manual compiled
Sequence organisation is being planned and is controlled	Process overview	Process overview
Sequence organisation is being planned and is controlled	Management control circuit installed	Completed to-do list – actual situation analysis
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, trade associations regulations)	Assessments of risks to jobs (see BetrSichV – Industrial Safety Directive)
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Fire protection and alarm plans, fire protection regulations
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Emergency escape route plan

Management reference	Examination point (13 points) documented	Corresponding examination elements – documented
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Permit applications, notices present
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Official conditions fulfilled, measures documented
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Hazardous substance inventory
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	EU safety data sheets (hazardous substances, other operating resources)
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Operation instructions (§ 20 GefStoffV (Hazardous Substances Directive), VAwS, machines)
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Waste disposal verification (disposal verifications, accompanying documents, acceptance certificates)
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Overview of hazardous substances, hazardous substances check lists
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Accident report sheets, bandage log
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	VAWS
Legal requirements	Applicable regulations on quality, environment, labour health and safety known and observed in the current form (e.g. guidelines, laws, directives, standards, TA regulations)	Third company regulations are observed

Management reference	Examination point (13 points) documented	Corresponding examination elements – documented
Core / value-added processes	At least 1 core / value-added process is documented	Process sequence
Supporting examination of processes	Repair and maintenance	Planning of maintenance work
Supporting examination of processes	Repair and maintenance	Execution of maintenance work
Supporting examination of processes	Repair and maintenance	Observation of the systems subject to mandatory inspection
Supporting examination of processes	Handling of measurement and test instruments	Calibration of measurement and test instruments
Supporting examination of processes	Directory of logs and documents	Directory of logs and documents
Supporting examination of processes	Operational environmental protection	Registration of environmentally relevant data (consumptions)
Supporting examination of processes	Operational environmental protection	Evaluation of the data
Management processes	Operational environmental protection	Derivation of concrete measures
Management processes	Management responsibility	Basic principles/ corporate policy (quality, environment, labour health and safety, # food safety)
Management processes	Management responsibility	Targets (quantitative and qualitative) (quality, environment, labour health and safety, # food safety)
Management processes	Management responsibility	Process of targeting and resources planning, management evaluation documented
Management processes	Management responsibility	Management evaluation executed
Management processes	Process of correction and prevention implemented	Process of correction and prevention measures documented
Management processes	Audits	Execution of audit and e3staablishment of measures
Management processes	Audits	Process of internal audits implemented
Management processes	Training planning	Process of training planning implemented (training planning)
Management processes	Training planning	Instruction of new employees
Management processes	Training planning	Evaluation of the effectiveness of the training courses
Management processes	Training planning	Training verifications

III. Participating companies

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