



gtz



Profitable Environmental Management (PREMA[®])

In brief
- method and instruments -

November 2006

The Pilot Programme for the Promotion of Environmental Management in the Private Sector of Developing Countries (P3U) is implemented by the German Agency for Technical Co-operation (GTZ) on behalf of the Federal Ministry for Economic Co-operation and Development (BMZ).



Bundesministerium für
wirtschaftliche Zusammenarbeit
und Entwicklung



Profitable Environmental Management

PREMA® is a programme developed by GTZ-P3U for micro, small and medium-sized companies. It aims at practically identifying, developing and implementing measures designed to substantially

- ⇒ **reduce production costs,**
- ⇒ **improve environmental performance, and**
- ⇒ **enhance organisational capabilities.**

PREMA® is designed for owners and managerial staff of micro, small, medium-sized and even big companies, as well as for enterprises of supply chains or industrial areas.

The full **PREMA® programme** consists of several instruments to introduce an integrated, effective and profitable management system in (groups of) companies.

The programme is **modular** and flexible so that the various tools and methods can be combined or adjusted to suit the specific requirements of each group of companies or type of institutional client. Time requirements range from three days to an engagement for up to eight months.

In order to enhance organisational capabilities, **PREMA®** also trains the **presentation, visualisation, moderation and team-building techniques** which are required to implement measures, to enhance the knowledge and problem-solving capacities existing within the company, as well as for effective networking between companies.

The **PREMA®** training programme is **creative and interactive**: it builds upon the professional and personal experience of participants and aims at transferring in a sustainable way the newly acquired knowledge and skills into the companies.

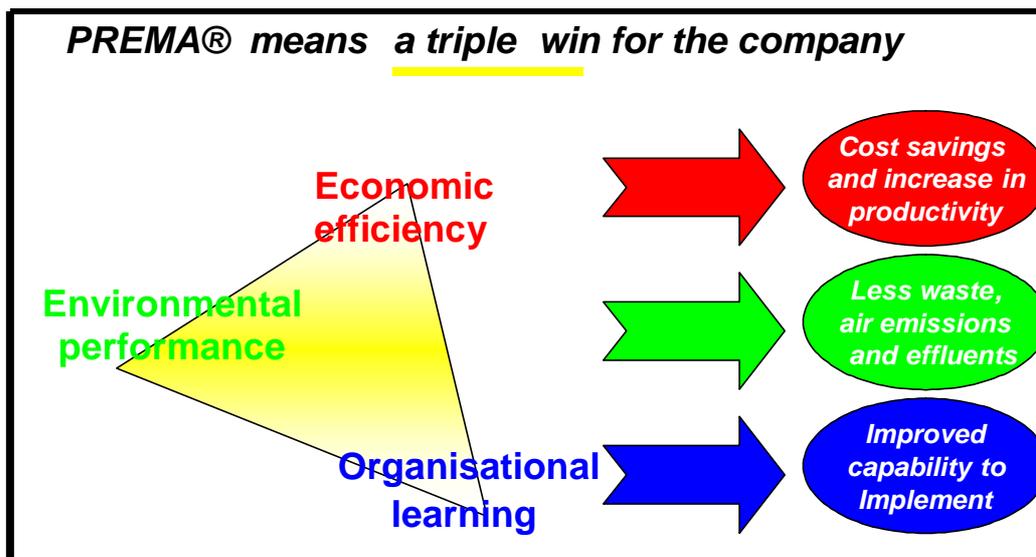
PREMA® mostly allows for **inexpensive implementation** with an indispensable minimum of external input and, consequently, for **wide application** in a great number of companies.

The modular combination of instruments promotes the initiation of a **continuous improvement process**, which reaches from immediate implementation of limited changes to the introduction of complex management systems in the fields of quality, environment, and workplace safety. **PREMA®** can be linked to other management systems and lays a good foundation for achieving certification according international standards, e.g. ISO norms on quality, environment, health, safety / social issues, and substantially decreases the required work, time and cost.

The Methodological Key Elements of PREMA®

The Triple Win

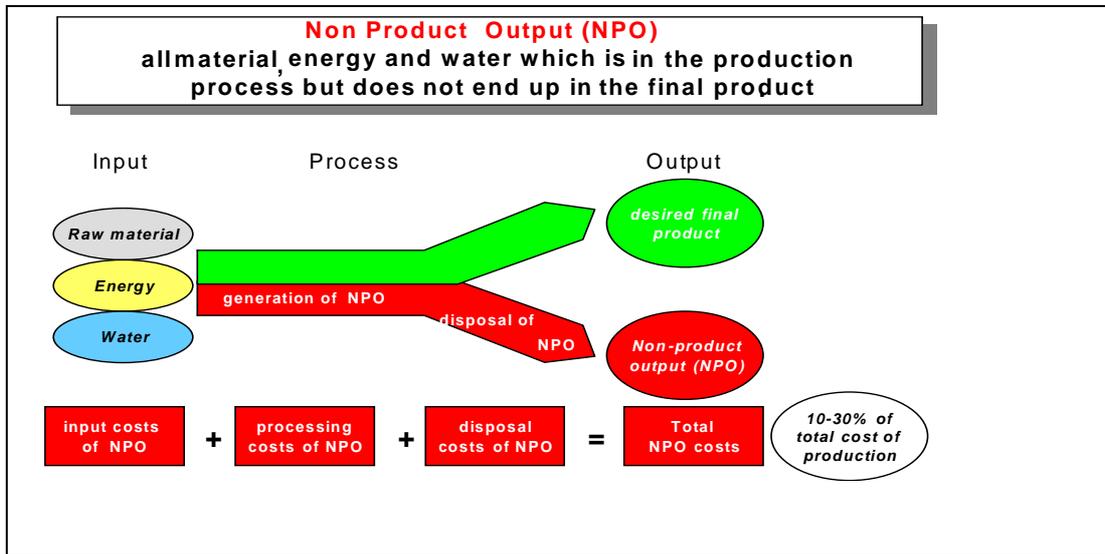
By adequately taking into consideration these three components, i.e. cost management, environmental management and organisational development/learning, a **triple win** can be achieved (**key element 1**):



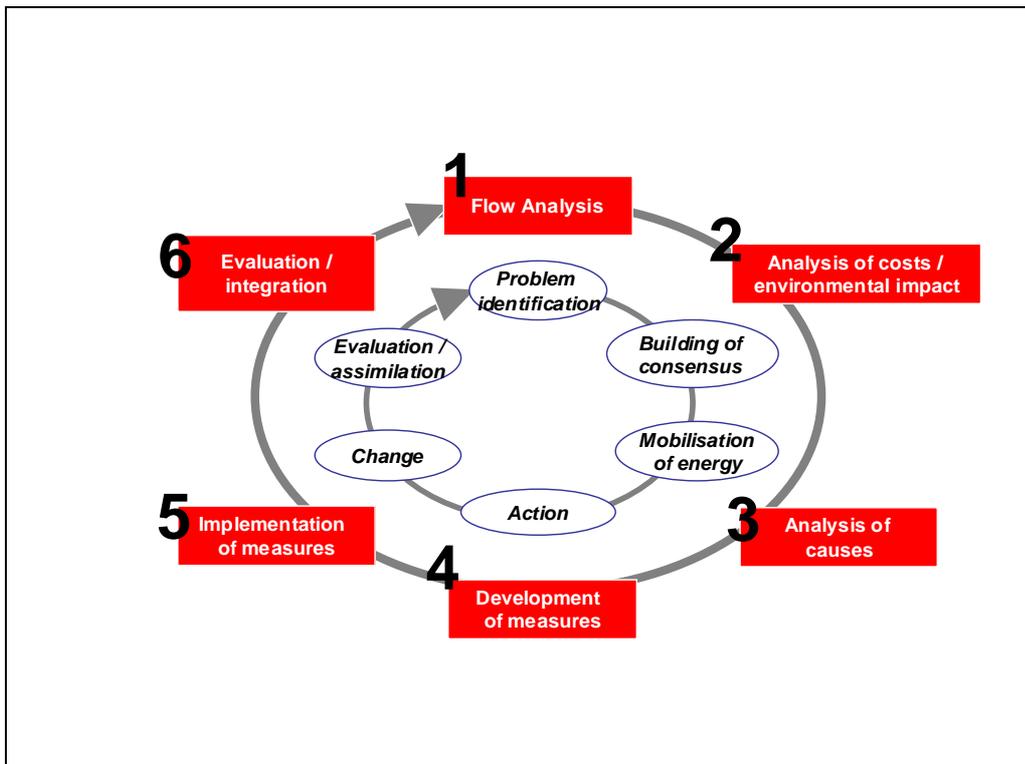
PREMA® offers this *triple win* to companies through

- ⇒ a systemic approach for the quick identification of problems, their impact and causes, as well as easy-to-implement measures in the field of quality, environment and workplace safety/ social issues; and/or
- ⇒ the systematic analysis of improvements potentials through the Non-Product Output approach (**key element 2**).

The Non Product Output Approach (NPO)



The PREMA® Cycle of Change

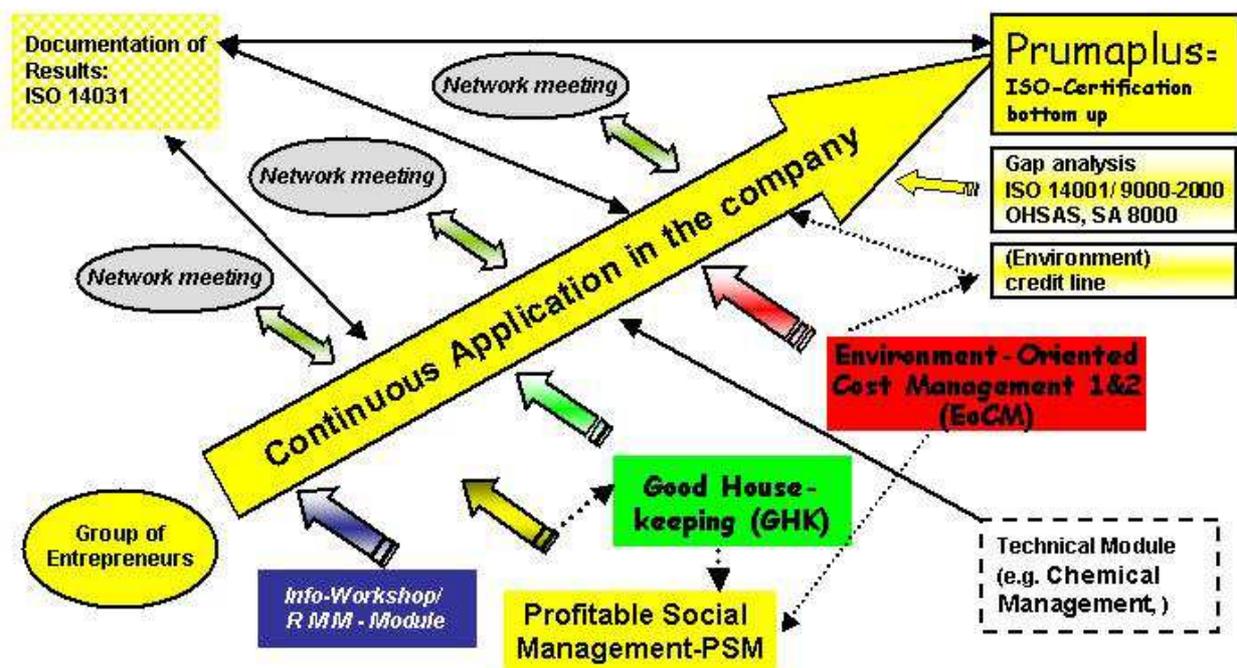


This cycle is based on the assumption that change processes, in order to be successful and sustainable, have to **go through a determined sequence of phases**. If this sequence is not adhered to, or is blocked at a certain stage, the process will run into conflicts, **resistance**, or will even peter out or fail

completely. The consequences of “incomplete cycles” are "project torsos" or "project fragments" who increase resistance to change.

In the application of **PREMA®**, the **external cycle** reflect the technical steps followed by the different modules. The **inner cycle** serves as a ‘map’ for the change to be implemented by company staff involved in PREMA®, in order to achieve effective implementation of measures thus reducing NPO and creating a triple win for the company.

Elements of a PREMA®-programme



PREMA® comprises short training sessions or a complete programme of up to six or eight months for owners and managerial staff of micro, small, medium-sized or big companies, including from supply chains or industrial zones.

It is structured in **interactive training workshops** conducted by qualified and authorised trainers and consultants, and **networking meetings** of the entrepreneurs, which may be maintained beyond the duration of the programme.

As additional options the modules Chemical Management (ChM) and Profitable Social Management (PSM) haven been developed with other GTZ projects.

The Modalities for PREMA® Training

PREMA® training courses are offered by authorised and registered trainers and consultants in cooperation with local partner institutions which are qualified through workshops and/or on the job.

Since **PREMA®** is intended to be a market-oriented service, participation is subject to the payment of a cost-recovering fee; during the introduction phase at least local costs have to be covered.

Participants will receive a certificate issued by GTZ / PREMAnet and may become members of the PREMA-network, which ensures the diffusion of information on new developments in the field of Profitable Environmental Management, the quality control concerning methods and trainers, and offers training-of-trainers', coaching, upgrading, and support to institutional clients for the introduction of **PREMA®**.

For **further information**, please contact:

PREMAnet e.V.

or

kuerzingeredith@aol.com

Tulpenfeld 2

Guntram.Glasbrenner@gtz.de

53113 Bonn

Tel: +49-228-60 47 124

Mob.:+(0)171-404 95 18

Fax: +49-228-98 57 018

info@PREMAnet.de

The comprehensive PREMA® programme - overview

Activities & Duration	Results
<p>Resource Management Module (RMM®) 3-day training workshop</p> 	<p>Entrepreneurs (micro and small)</p> <ul style="list-style-type: none"> ▪ understand the relevance of an efficient use of raw materials and energy, and the basic interrelations between product design, work planning and organisation, as well as costing, ▪ know how to use flow-charts for the identification of weaknesses in the production process ▪ are able to transfer ideas into practical changes in their own company, ▪ become members of a network to assist each other in improving resource use in their companies
<p>Networking Meetings e.g. 1 day per month facilitated by an external moderator; 2 meetings if RMM is stand alone</p>	<ul style="list-style-type: none"> ▪ elaborate profitable, environmentally sound solutions and action strategies for problems which have occurred in the company's routine operations with counselling technique Action Learning Set (ALS)
<p>Good Housekeeping Module (GHK®) 3-day training workshop 0,5 day company visit</p> 	<p>Entrepreneurs (micro, small, medium or big, supply chains or industrial areas)</p> <ul style="list-style-type: none"> ▪ know how to use flow-charts, mind-maps, checklists, and action plans etc. for the identification of improvement potentials (inefficient resource use), assessment of its economic, environmental, organisational, workplace safety effects, for the analysis its causes and development and assessment of measures ▪ are able to transfer ideas into practical changes in their own company through realistic action plans, ▪ achieve cost reductions, environmental, organisational, and workplace safety benefits in a short time period, ▪ use GHK as entry into process of continuous improvement
<p>Networking Meetings</p>	<ul style="list-style-type: none"> ▪ as above

<p>Environment-Oriented Cost Management Module (EoCM®)</p> <p>4 trainings of 2 – 3 days each, 2-4 company visits 4 networking meetings</p> <p>for bigger companies a separate 6-8 months programme</p> <p>EoCM</p> 	<p>Entrepreneurs (small, medium or big, supply chains or industrial areas)</p> <ul style="list-style-type: none"> ▪ engage in systematically and continuously reducing the costs of Non-product Output, NPO, i.e. any output which does not form part of the final product ▪ thus reducing production costs, decreasing the company's negative environmental impact, and initiating a process of internal organisational learning by increasing transparency and motivating staff to actively contribute to further improvements
<p>Networking Meetings</p>	<ul style="list-style-type: none"> ▪ as above
<p>PREMAplus Module</p> <p>PREMAplus</p> 	<p>Entrepreneurs (small, medium or big)</p> <ul style="list-style-type: none"> ▪ analyse the gap with regard to management systems according to ISO 19001-2000, 14001 and OHSAS 18001 ▪ decide about (type of) certification

Networking Meetings	<ul style="list-style-type: none"> ▪ as above
Profitable Social Management (PSM) 4 ½ day training workshop, followed by 1-2 network meetings and a company visit after 1 – 2 months 	Entrepreneurs(micro, small, medium or big) <ul style="list-style-type: none"> ▪ realise the link between working conditions and the creation of Non-Product Output (NPO) (= company’s self interest in reducing production costs and increasing productivity and competitiveness) ▪ know how to identify and implement first measures towards PSM to improve labour and resource productivity ▪ are motivated to engage in further action towards PSM (e.g. SEAL training¹, certification under SA8000²)
Networking Meetings	<ul style="list-style-type: none"> ▪ as above
Chemical Management (ChM) 2 training workshops of 3 days each, a multiplication event and at least three network meetings; 2 company visits	Entrepreneurs (any type who uses substantive amounts of chemicals) <ul style="list-style-type: none"> ▪ know the problems and risks of chemicals used in their company and have identified “hot spots” of risky management ▪ learn how to take an inventory of the hazardous chemicals they use ▪ lower production costs, improve workplace security and reduce environmental impact ▪ are able to apply the tools of the Chemical Management Guide without external help
Training Costs	<ul style="list-style-type: none"> • The rates for certified international trainers range from 400 to 600 Euro/day. The rates for certified local trainers depend on the local price level and rates (from 100 – 300 Euro). • PREMA trainings are normally offered by a team of 2 trainers. Exceptions have to be justified. • Training-of-trainers are usually held upfront and combined with a coached application with local companies. The

¹ Social Standards Exchange of Experience in South East Asia and Practical Learning (SEAL) is a 7-month training and mentoring programme (developed by InWent) with the aim of building the capacity of entrepreneurs and trainers to develop, implement, and maintain a Social Management System (SMS).

² Social Accountability 8000 (SA8000) is an international standard that can be certified by authorized bodies based on the ILO Core Labour Standards which have been described as “basic human rights” (*against* child labour, forced labour, discrimination; *for* freedom of association and the right to collective bargaining. It goes beyond these to include health and safety issues, disciplinary practices, working hours, compensation, and the establishment of a management system.

	<p>ToT days are normally</p> <ul style="list-style-type: none"> - RMM: 5 days - GHK: 4-5 days - EoCM: 3+2+2+(1or 2) days (for PREMA, different for stand alone) - PREMAplus (depending on qualification of local trainers: min. 1+ 3 + 5 days) - ChM: twice the duration of the 2 modules - PSM: 5 days <ul style="list-style-type: none"> • If ToT cannot be held in German, English, French, Spanish or Portuguese the duration of ToT has to be multiplied by 1,5 (Croatia) or 2 (e.g. China, Vietnam)
<p>Coaching</p>	<p>All ToT are followed by a coached co-moderation of a group of companies. The coaching may be done by either 1 or 2 certified international trainers, depending on the number of participants, language, qualification of local trainers etc.</p>



Resource Management (RMM®)

Objectives

- Entrepreneurs (micro and small)
- understand the relevance of an efficient use of raw materials and energy, and the basic interrelations between product design, work planning and organisation, as well as costing,
 - know how to use flow-charts for the identification of weaknesses in the production process
 - are able to transfer ideas into practical changes in their own company,
 - become members of a network to assist each other in improving resource use in their companies.

Target Groups

- **small and medium-sized enterprises**, including those which have participated in a CEFE Programme (Competency-based Economies through Formation of Enterprise);
- local **trainers and consultants** working in the fields of quality, environmental, social, and resource management as well as economic development and CEFE

Main Features of the Instrument

- **Practice-related exercises** regarding material flows (e.g. preparation of a typical national dish – this everyday activity serves to illustrate phases and problems of a production process in the form of a flow chart; production of greeting cards to demonstrate costs and environmental problems of remaining materials (Non-Product Output-NPO), and to analyse weak points and measures for improvement)
- **Elaboration**, by way of role plays, **of co-operation strategies** to implement measures in the entrepreneur's own company
- Promotion of the formation of coached self-learning groups („Action Learning Groups“ or similar titles) based on an **Action-Learning Set** (i.e. in regular meetings, members support each other in elaborating concrete solutions and strategies for action for problems which have occurred in the company's routine operations and in thus producing in a more environmentally sound and at the same time more economic way).

Methodology

- **3-day workshop for entrepreneurs**, which can also be realised in seven to eight evenings
- **5-day training-of-trainers-workshop (ToT)** for trainers and management consultants as well as subsequent practical application by moderating a workshop for entrepreneurs under the supervision of external trainers

**Learning
Objective and
Input Required
from
Participants**

- Having participated in the 3-day workshop, **entrepreneurs** are able to review production processes in their own company with a view to improved resource use; participation in an entrepreneurs' self-learning group enhances the solution of concrete problems (between 2 hours and a day/month) and encourages entrepreneurs to implement further-reaching improvements
- **consultants** who have participated in a ToT and have co-moderated a workshop for entrepreneurs under the supervision of external trainers are able to transmit the instrument on their own (3 or 5 plus 3 days); additional coaching if required, e.g. via the CEFE Distance Learning Centre or the P3U discussion forum; or co-moderation of further trainings

**Implemen-
tation
Examples**

- Workshop for entrepreneurs in cooperation with the business association CANACINTRA in Mexico (July 98 and February 99), the workshop is now being offered by CANACINTRA;
- workshops and cooperation with Fundação Empreender, Santa Catarina, Brazil
- training for hotel owners and staff in Chiangmai, Thailand
- various trainings in the Middle East (e.g. Syria, Palestine/autumn 99, spring 2000)
- ToT for CEFE-Trainer from various Asian countries in Vietnam (March 99)
- training for entrepreneurs in Hanoi and Bac Giang, Vietnam (99/00)
- ToT for German trainers (December 99)
- various workshops for entrepreneurs in the framework of the DEG Programme "Environmental Co-operations Philippines", combined RMM-GHK Programme ("circle of excellence") in food processing companies in cooperation with TaT/Rheine and the Philippine Trade Training Centre (PTTC) (June to December 99)
- integral part of long-term training programmes offered by the Carl-Duisberg-Gesellschaft (CDG) / InWEnt in Germany and Costa Rica since November 98
- regular trainings within PREMA programmes in Mexico (3 modules) and Bolivia (2 modules) until today



Good Housekeeping (GHK®)

Objectives

Entrepreneurs (micro, small, medium or big, supply chains or industrial zones)

- know how to use flow-charts, mind-maps, checklists, and action plans etc. for the identification of improvement potentials (inefficient resource use), assessment of its economic, environmental, organisational, workplace safety effects, for the analysis its causes and development and assessment of measures
- are able to transfer ideas into practical changes in their own company through realistic action plans,
- achieve cost reductions, environmental, organisational, and workplace safety benefits in a short time period,
- use GHK as entry into process of continuous improvement.

Target Groups

- **local and international trainers and consultants** who contribute to disseminating GHK;
- **small, medium-sized or big enterprises**, both in **producing sectors** and in the **service sector**;
- companies from a **supply chain** or **industrial zone**
- **local institutions** that ensure **dissemination** and **quality assurance** of both the instrument and trainers/consultants.

Main Features of the Instrument

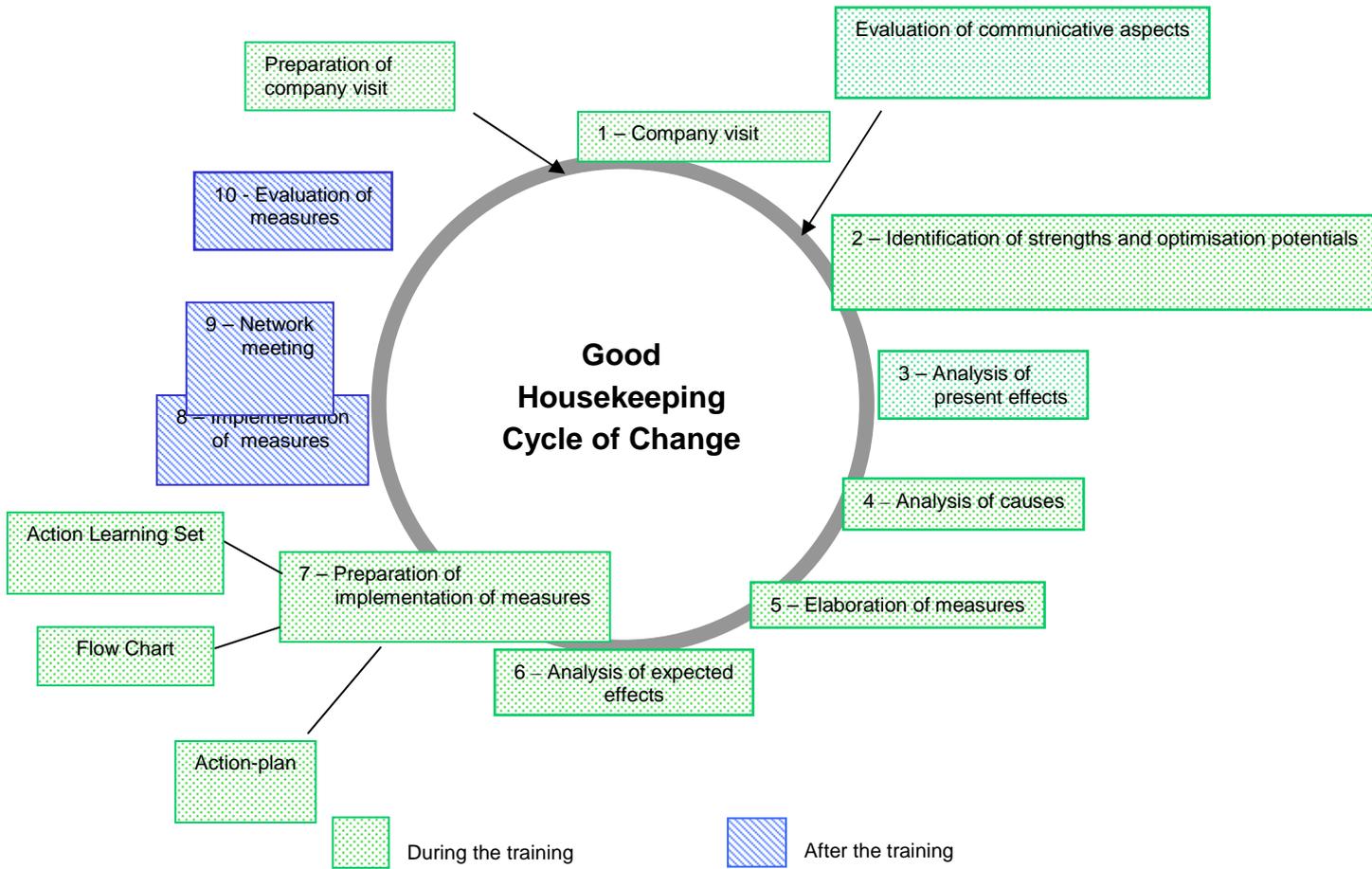
The **Good Housekeeping Manuals** contain

- **checklists** regarding e.g. the efficient use, storage and handling of input materials, water and energy, the reduction and treatment of waste, as well as workplace safety and occupational health.
- information on how to calculate costs related to the analysis of NPO and implementation of measures and how to establish flowcharts. (available in German, English, French, Spanish, Portuguese, Arabic, Croatian, Hungarian, Turkish, Singhalese, Chinese, Thai and Vietnamese etc.)
- **sector-specific checklists** which have been elaborated in selected languages and/or for specific sectors, such as hotels, schools, bakeries, car garages, furniture manufacturers, food processing companies, footwear industry, rubber industry, printing houses, industry of construction materials, tanneries, as well as for agricultural production.

Profitable Environmental Management (PREMA®)

- Methodology**
- **3,5 - day workshop (including 0,5 day company visit)** for multipliers, GHK is trained in a cross-sectoral or sector-specific
 - The first 1,5 days introduce participants to the Non-Product Output concept, the GHK-cycle of change, the benefit of flow-charts and the GHK manual; a role play may be used to improve question techniques and reflect the consultant's role.
 - The **Good Housekeeping Guide** is practically applied in participants' companies in order to identify improvement potentials and NPO (0,5 day in parallel).
 - The 1,5 day evaluation of the company visits follows the steps of the cycle of change and leads to an action plan for each enterprises. (see below)
 - In the end, the companies are introduced into the network method Action Learning for the follow-up
 - GHK can be combined in a PREMA®-approach either with the RMM module (micro and small companies) or with "Environment-oriented Cost Management" and PREMAplus (small, medium, bigger companies).
 - The application and implementation of "Good-Housekeeping" follows the GHK version of the PREMA® cycle of change:
- Learning Objective and Input Required from Participants**
- Having participated in the trainign, **entrepreneurs** are in a position to implement and apply GHK in their own company.
 - **Consultants and trainers** are enabled in the training to disseminate the GHK approach in enterprises, to generally take GHK elements into consideration in management consultancies, and – depending on previous moderation experience – implement trainings.
- Implementation Examples**
- GHK has so far been implemented in Germany, Bulgaria, Croatia, Hungary, Macedonia, Romania; Brazil, Chile, Ecuador, Central America (El Salvador, Guatemala, Costa Rica, Nicaragua), Mexico, Paraguay, Peru, Uruguay, and Venezuela; in the Philippines, Sri Lanka, Thailand, Indonesia, India, China and Vietnam; Egypt, Turkey, in the Middle East (Palestine, Jordania, Syria, Lebanon), in the Maghreb region (Algeria, Morocco, Tunisia), Republic of South Africa, Zambia and Zimbabwe.

Profitable Environmental Management (PREMA®)





Environment-Oriented Cost Management (EoCM®)

Objectives

Entrepreneurs (small, medium or big, supply chains or industrial zones)

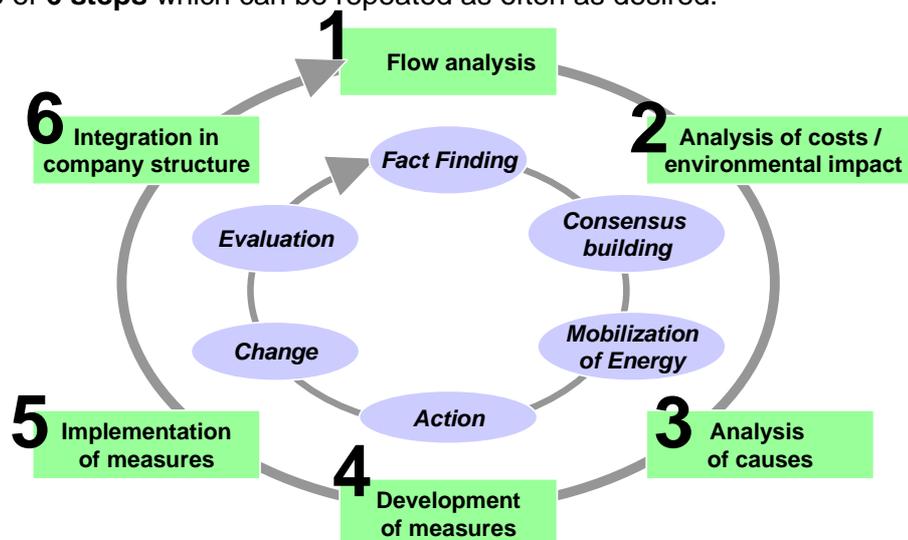
- engage in systematically and continuously reducing the costs of Non-product Output, NPO, i.e. any output which does not form part of the final product
thus reducing production costs, decreasing the company's negative environmental impact, and
 - initiating a process of **internal organisational learning** by applying the EoCM-cycle of change, thus increasing transparency and motivating staff to actively contribute to further improvements, overall organisational efficiency and workplace safety and occupational health

Target Groups

- **small, medium and large enterprises in the producing sector**,
- companies from **supply chains** and **industrial areas**
- **local and international consultants** who contribute to disseminating EoCM,
- **local associations and economic and environmental promotion institutions** that ensure **documentation** of results, **dissemination** and **quality assurance** of both the instrument and the consultants.

Main Features of the Instrument

EoCM is introduced in a company (i.e. usually in a group of companies) in a cycle of **6 steps** which can be repeated as often as desired.



Following the first three steps, the elaboration of measures can initially be limited to selected NPO or individual production areas.

Profitable Environmental Management (PREMA®)

This EoCM cycle, however, is only successful if the enterprise, at the same time, goes through a complete **internal process of change**, which in the graph is symbolised by the inner circle and involves all concerned staff members, as well as top management(. It is already during the analysis of material flows that low-cost, easy-to-implement Good Housekeeping (GHK) measures are being identified, in case EoCM is applied as stand-alone instrument.

Further EoCM measures are systematically developed in the course of the cycle; these are not only related to the production process as such, but also to purchase, product design, packaging, storage, sale and waste treatment. EoCM can be combined with other instruments of environmental management (e.g. management systems according to ISO) or applied as second step after Good Housekeeping in a modular PREMA programme.

Methodology

- An **EoCM team** composed of 2-3 members (depending on the type of programme and size of company) from various areas within the enterprise (production + accounting + quality/environmental management/maintenance) analyses material flows and their respective costs and environmental impact, in a **process of several months** (2 to 8, depending on type of programme and company size), analyses their causes and develops measures designed to reduce them and analyses expected economic, environmental and organisational effects.
- **Local consultants** are either trained in advance and/or together with the EoCM teams which they will support with their external view and professional knowledge.
- **Networking** among the EoCM teams of the various enterprises, and also among the consultants serves to facilitate the implementation process.
- In the **stand-alone version** of EoCM, the programme comprises 4 trainings with appr. 12 training days and 4 in-house trainings per company.
- As part of a **modular PREMA programme** there will be a 5 day EoCM-ToT plus 2-3 TOTs of 2 days for **consultants** always prior to a sequence of 3 company Workshops of 2 days. In addition, consultants will receive each 2-3 in-house training days per company and coaching of their co-facilitation of the company workshops.
- Depending on the need there will be between 3 and 5 **networking meetings** for the companies and half-day **coaching workshops** for the consultants in both versions of EoCM.
- A **training manual for EoCM** is available in English, French, Spanish and Chinese.

Apart from the mere technical contents of the method both programmes also include training in team-building, moderation, presentation techniques, and visualisation, as well as coaching.

Learning Objective and

- **Enterprises** are in a position to successfully establish EoCM in the company in a sustainable way; possibly even at other company sites.

Profitable Environmental Management (PREMA[®])

Input Required from Participants

- Apart from a financial contribution (ranging up to US \$ 10.000 as in Zimbabwe, see below), enterprises have to allocate personnel to the EoCM team during the entire process and provide the necessary support by top management.
- Following the training course and the training-on-the-job of the EoCM stand alone version, **consultants** are able to introduce the instrument at the company level on their own within a group application. During the first implementation, some 10 consultancy days are remunerated at reduced rates. In addition, an input of some 20 days of unpaid work is required, eventually a basic fee for the training.
- The time requirements are less in EoCM as part of modular PREMA programme, however, experience with GHK is essential.
- Further training, moderation under coaching and the submission of case studies and company reports are required to advance from a junior to a senior EoCM consultant or an EoCM trainer. Each step is followed by an evaluation (self-and group-evaluation, evaluation by the company and the external trainers and advisors).
- A **local partner institution** ensures quality assurance of the instrument EoCM, the documentation of success stories and company or consultants' networks, and the consultants and trainers, eventually combined with other tools of Profitable Environmental Management, and promotes and disseminates EoCM in cooperation with the company champions, consultants and trainers.

Implementation Examples

EoCM as **stand-alone** instrument has so far been successfully implemented in a pilot company and in two group applications with eight enterprises in Zimbabwe in cooperation with the local association Confederation of Zimbabwean Industries (CZI). Up to now the companies saved between 0,2 and 4,7% of their total production costs and reduced their negative environmental impact considerably. The programmes are run by the CZI, 3 authorised local EoCM trainers, 1 authorised Senior EoCM Consultant and 2 Junior EoCM Consultants at present. CZI is able to offer and sell the service at a fee of US \$ 30.000 for a group of max. 5 companies.

In addition, one EoCM stand alone programme was completed in Nigeria with the Lagos Chamber of Commerce (LCCI) and some examples from a less systematic application in Kenya (Swisscontact) are available. New group applications are under preparation in Nigeria and Zimbabwe.

EoCM as part of a modular PREMA programme was applied in the Philippines, and, partly, in Mexico with CANACINTRA, in El Salvador with GESTA and in Algeria with the Ministry for Environment. Furthermore, several short-term workshops have been realised both in developing countries and in cooperation with CDG programmes in Germany. EoCM-PREMA applications were implemented in Algeria, Tunisia, Morocco, Tunisia, China, Uruguay, Mexico.

In China (Hangzhou) EoCM as stand alone was implemented in 2 groups of big companies since 2003/2004.