



ÖKOPROFIT[®]

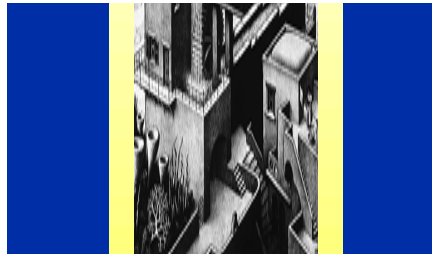
**Dr. Johannes Fresner
Mag. Petra Wolf,
STENUM GmbH,
Graz, Austria**



STENUM Environmental Consulting and Research Company

**Our core competence:
Cleaner Production for
companies**

- **Technical Management**
- **Process optimisation**
- **Energy management and -efficiency**
- **Water consumption**
- **Efficient use of raw materials**



Graz, AUSTRIA
www.stenum.at

- **Organisational consulting - anchoring the Cleaner Production idea in companies**
- **Waste logistics and waste management**
- **From CP to Environmental management systems (ISO 14001, EMAS)**
- **Supply Chain Management**

STENUM-worldwide (Nov. 2004)



Europe: Austria, Czech Republic, Germany, Finland, Hungary, Ireland, Portugal, Slovak Republic, Slovenia, Spain, Ukraine

Asia: China, India, Lebanon, Korea 

Latin America: Brazil, Chile, Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Nicaragua 

Africa: Ethiopia, Uganda, South Africa 

**ECOPROFIT –
a simple, preventive approach to
Environmental Management**

ECOPROFIT[®] is.....

a preventive strategy to minimize the impact of production and products on the environment:

- good housekeeping with materials and energy
- substitution of raw and auxiliary materials
- process modification
- reuse and recycling
- continuous exchange of experiences
= learning model of ECOPROFIT[®]!

ECOPROFIT Graz: since 1991, Club: since 1994



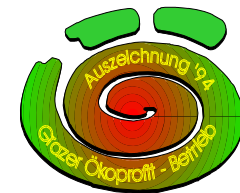
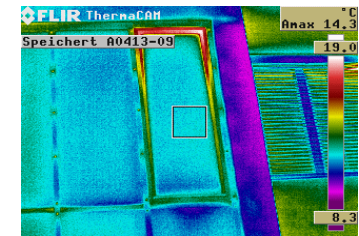
***„ECOPROFIT opened our eyes to things,
which we used to be blind for“***

(managing director of an
ECOPROFIT company)

ECOPROFIT[®] for beginners

3 programme elements


- **COMMON WORKSHOPS**
on environ-mentally issues for
companies' representatives (cross-
sectoral learning)
- **INDIVIDUAL CONSULTING:**
special technical and administrative
support in companies
(4 days per company)
- **ECOPROFIT[®] AWARD**



After the first year: **ECOPROFIT[®] Club**

Structure of the ECOPROFIT[®] program for new companies

Workshops

motivation and information	C o n s u l t i n g b y t h e t e a m	H o m e w o r k
pollution prevention, cleaner production		
setting up an environmental team und program		
material flow analysis		
waste management, hazardous chemicals		
energy analysis		
laws and regulations		
eco controlling		
preparation of final report		
		

Examples for individual consulting

- technology transfer
- new waste management system
- negotiations with suppliers/disposal companies
- material flow analysis
- energy analysis/
peak load measuring
- process optimization options
- data inventory and analysis (input/output)
- eco-controlling indicators
- environmental review for the award

ECOPROFIT® - Award



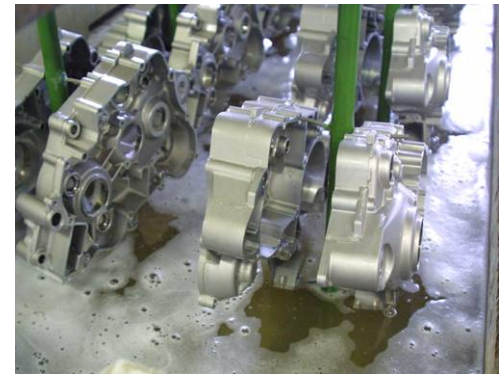
- Environmental policy
- Legal compliance check
- Documentation of the environmental performance
- Environmental program for the next year
- Environmental report

Company example:

Success stories

A. Heuberger eloxal

- reduction of water consumption by 95%
- reduction of gas consumption by 50% (heating of the tanks)
- reduction of chemicals consumption by 30%
- Zero packaging waste
- teamwork, monetary bonus for groups, intensification of the internal communication

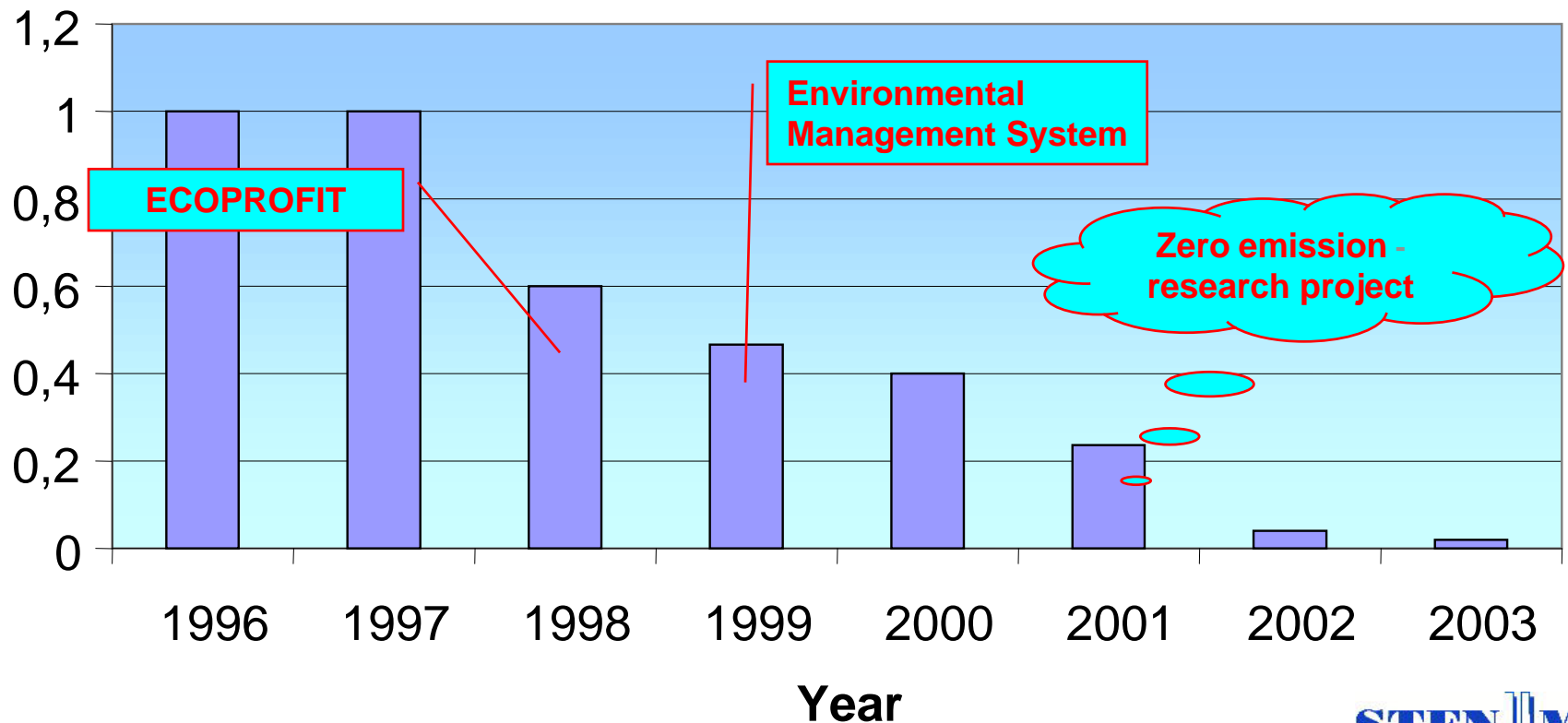


Company example:

A.Heuberger eloxal, Austria

aluminium anodizer, 20 employees

Specific water consumption per treated surface [m^3/m^2]



Company example:

Partmo, Colombia

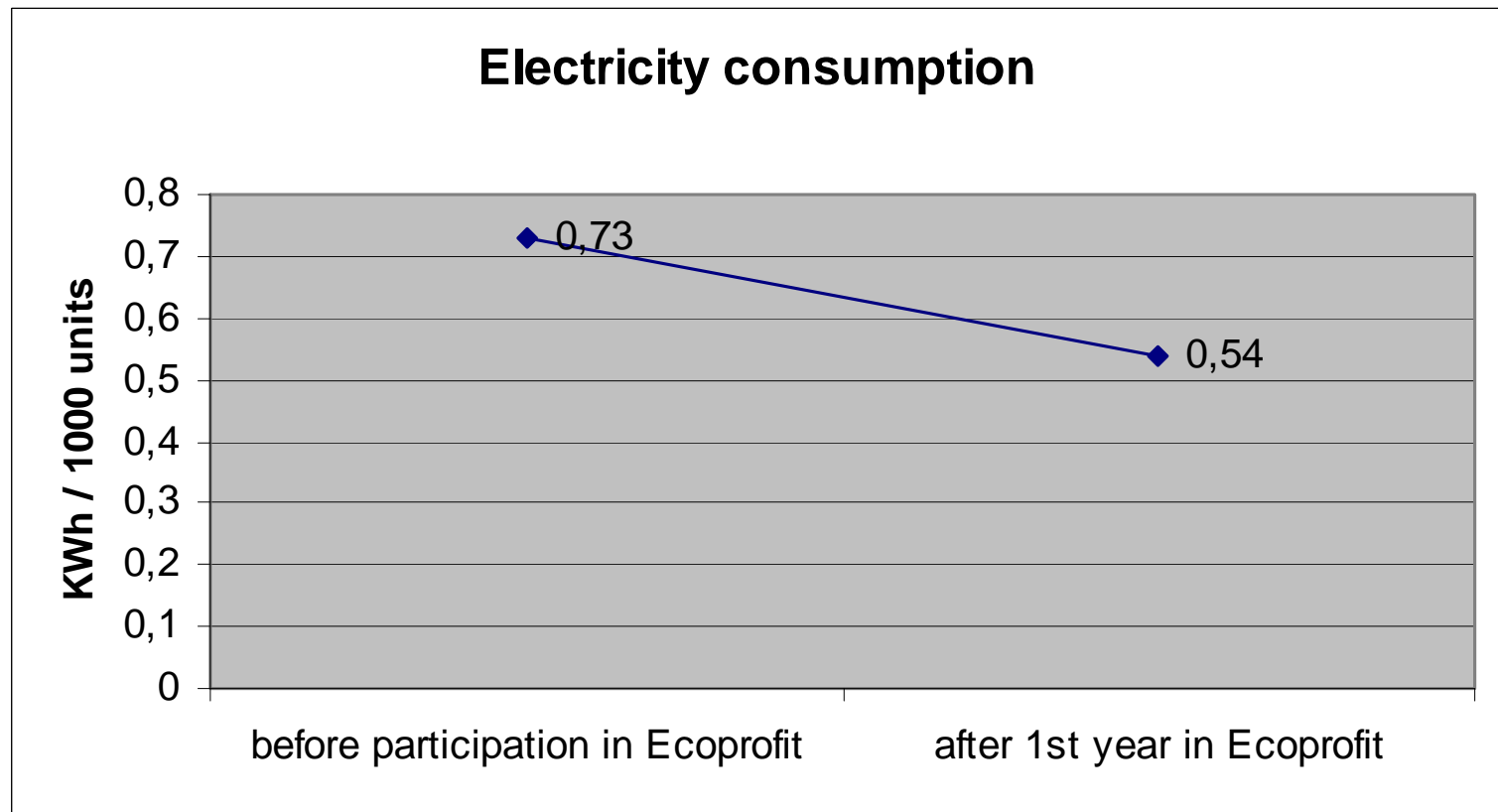
metal parts manufacturing, 200 employees

- reconstruction of wiring, switches
- more switches for lights
- improved maintenance
- lower air compressor pressure
- frequency controlled motors



Company example:

Partmo, Colombia



Reduction of 33% after the first year!

Other results:

- **25% less electricity consumption at a restaurant by optimisation of cold storage**
- **20% less electricity consumption by optimising the use of electric devices in the kitchen of a restaurant**
- **2 GWh/a less heating at a gardener by optimising insulation and the programme of computer control for shades**
- **...**

***„It was a project and it is
a permanent task!“***

(managing director of an
ECOPROFIT company)

ECOPROFIT[®] Club

an active Grazer eco-network with more than 50 companies participating actively

- workshops, workgroups (3 to 4 meetings), learning from the best-in-class
- individual consulting and ECOPROFIT[®] - award
- new topics on environmental issues, cleaner production, sustainability and management trends
- platform for cooperation, education, service and discussions for ECOPROFIT[®] companies
- active network of companies based on trust and shared values

ECOPROFIT cities

- **100 cities in Germany**
(among them Berlin, Hamburg, Munich, Dortmund)
- **Slovenia, Czech Republic, Hungary, Italy**
- **Colombia (Bucaramanga, Medellin, Cali)**
- **Nicaragua (Masaya)**
- **India (Gurgaon, Ludhiana)**
- **Phillippines (Clarks airforce base)**
- **China (Panzihua)**
- **Korea (Incheon, Daego, Busan)**

Barriers

- **time constraints**
- **level of technical expertise of environmental managers**
- **position of environmental managers within their own organisation**
- **benefits in service sector**

Benefits of ECOPROFIT

- Perfect model for simple, basic, but effective environmental management system
- Continuous education of adults
- Modular
- Group orientated
- Creates network of people with shared values
- Standardized and flexible model at the same time

What does ECOPROFIT mean for the region of Graz?

ECOPROFIT[®] Graz 1994-2005

Accumulated first year savings

Electricity	114.317 MWh	€7,2 Mio
Water	7,2 Mio m ³	€7,3 Mio
Sewage	6,6 Mio m ³	€5,1 Mio
Residual waste	14.897 t	€0,2 Mio
Hazardous waste	4.210 t	€1,3 Mio

Documented cost savings 1994-2004: 21,1 Mio €



14,5 Mio. Liter Benzin und Diesel
entsprechen
der Ladung von 346 Tankwagen



64,6 Mio. m³ Erdgas
brauchen
alle in Österreich jährlich gebauten Häuser zum Heizen



222.600 MWh Strom
bringen
1057 mal das Eggenberger Sportbecken zum Kochen



9,28 Mio. m³ Wasser
füllen
31 Hochsee-Tanker



21.000 t Restmüll
produzieren
die Bezirke Graz-Umgebung und Mürzzuschlag pro Jahr



403.150 t CO₂
verursachen
61.500 PKW, wenn sie den Erdball umrunden

Thank you for your attention!

Johannes Fresner

STENUM GmbH

www.stenum.at

Additional information:

www.sankeeditor.net

www.ecoprofit.org