

A close-up photograph of a pair of hands gently holding a cup-shaped nest made of dry twigs. Inside the nest are four small, speckled blue eggs. The background is a soft, out-of-focus white.

update

*"It is our duty to consider the
consequences of our actions
at all times."*

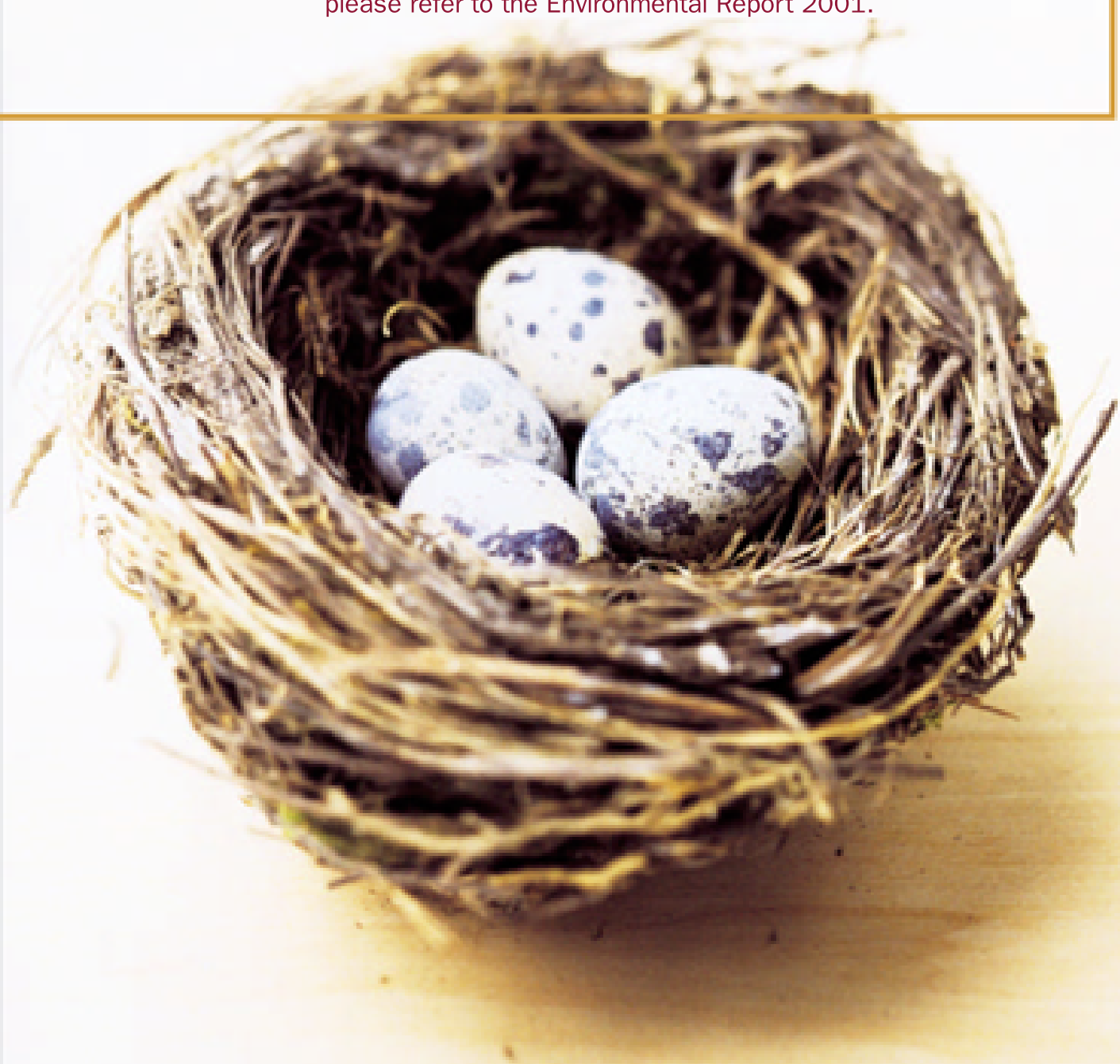
Mahatma Gandhi

Environmental Report 2003 Update / Location Graz

 **MAGNA STEYR**

update '03

This abridged version of the environmental report contains updates on the most important subjects. For details of long-term projects, please refer to the Environmental Report 2001.



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The MAGNA STEYR Fahrzeugtechnik AG & Co KG Board
(from left): Andreas Rudas, Manfred Remmel, Wolf-Dietrich Schulz, Peter Harbig, Wolfgang Sauerzapf, Harald J. Wester

The year 2003 will go down in the history of the Graz MAGNA STEYR plant as a truly special one, having seen three important and highly complex Starts Of Production being staged on schedule and to the complete satisfaction of the respective clients – a feat that has won the highest respect from international industry insiders. Production officially started on the new Mercedes-Benz E-Class in January, closely followed by the SOP for new Saab 9³ Convertible in July, and the first new BMW X3 left the production line in October.

Although the plant has grown rapidly and accomplished three Starts Of Production within a year, an external auditors' certificate testifies to the fact that the company still always gives environmental protection due consideration, even under the most difficult conditions. Indeed, the ongoing improvements in the environmental management system and the systematic implementation of measures for reducing the company's environmental impact can clearly be seen in the Graz plant.

Two exemplary measures also show that environmental protection not only means complying with legal requirements, but also makes economic sense:

- *The installation of a water recirculation system for low wastewater operation and the renewal of the wastewater treatment plant in the BMW X3 paint shop has reduced water consumption and wastewater volume by some 500 liters per vehicle. These measures have resulted in savings of 430,000 euros annually.*
- *A further cutback in the use of ecologically hazardous substances in the paint shop (reduction in pollution) has led to annual savings of around 80,000 euros.*

The Board

*“Living happily and
living close to nature
is one.”*

Lucius Annaeus Seneca

the company

MAGNA STEYR Fahrzeugtechnik AG & Co KG

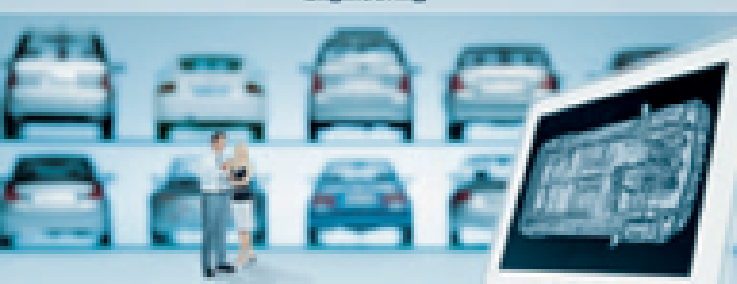
1.1

Company Profile

The automotive world is currently undergoing great changes and we are playing a proactive role in the process. A one-stop supplier, we respond to trends and meet a wide range of demands from engineering to volume production. Focusing on the customer, we aim to inspire confidence with our complete vehicle competence, long-standing experience and innovative power.



Engineering



- Advanced development
- Project management
- Styling
- Vehicle development
- Body
- Powertrain
- Engine
- Chassis
- Electronics / Electrodrives
- Prototype- and low-volume production
- Commercial vehicles
- Homologation
- Information management

Vehicle assembly



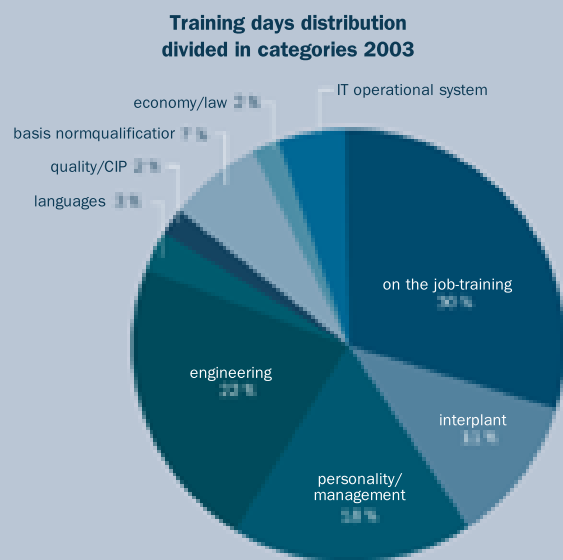
- Mercedes-Benz E-Class
- Mercedes-Benz S-Class
- Jeep Grand Cherokee
- Chrysler Voyager
- Nash 8" Convertible
- BMW X3
- Class 8 Stamping
- Product History

Principal Changes in 2003

- Start Of Production for the new Mercedes-Benz E-Class: A shift change with a difference marked the Start Of Production for the new Mercedes-Benz E-Class in January
- Start Of Production for the Saab 9³ Convertible
Following extensive renovation and conversion work in Buildings 2 and 3, the Saab 9³ Convertible went into production in July
- Start Of Production for the BMW X3
After having acquired the EUROSTAR plant in 2002, we embarked on a highly focused conversion, extension and adaptation program for the entire body shop, vehicle assembly and paint shop enabling production of the BMW X3 to start in the fall
- Body buffer extension

Did You Know That:

- We did **substantially more for the environment** than was originally planned in the environmental program for 2003? We built a trickling filter tank, for example, for secondary treatment and disposal of 27,000 cubic meters of water a year. More details are to be found in Section 3: Environmental Services Provided in 2003.
- Our company employees attended training courses and took part in development programs totaling 34,412 days in 2003 (including on-the-job training and orientation programs)? This corresponds to a statistical average of 5.3 training days per employee. As a whole, the company invested **some 2.35 million euros in employee training and development** (see graph).
- We hold regular employee meetings in all areas (administrative and production departments) to keep our employees informed about general developments in the company? In addition, we have organized a special **sign language translator** for Department X. The employee meetings also provide an opportunity for discussing various topical issues.
- We now produce over **1,000 vehicles per day**?
- We have a **new environmental, health and safety policy** that you will find in Section 2?
- We present the **Johann Puch Award for Excellence in Automotive Engineering** annually to promote young people throughout the field of automotive and vehicle engineering?
- Thanks to our 2003 in-house suggestion scheme, we received 7,287 suggestions for improvement and after vetting put 4,074 of them into practice, **saving no less than 3,203,995 euros**?
- In the interests of work and life balance, we have added a free family service to the voluntary fringe benefits?
- We have included environmental protection and occupational safety as an integral part of our **new MAGNA STEYR PRODUCTION SYSTEM (MSPS)**?
- Our **in-house magazine**, Plattform, comes out at least four times a year with regular reports on environmental achievements within the MAGNA STEYR Group?
- We hold **regular information events** for our neighbors to inform them about the developments in our plant and round off the year with a joint Christmas party?
- We invested in **three defibrillators** for the plant to improve first aid services?



*“Nature doesn’t have
to make an effort to be
important. It already is.”*

Robert Walser

environmental management system (new policy)

Declaration

MAGNA STEYR Fahrzeugtechnik has implemented and maintains an integrated environmental management and occupational safety system (EMOS) for putting the principles rooted in the MAGNA Employee’s Charter and MAGNA health, safety and environmental policy into practice. This means that we have to ensure responsible environmental protection and occupational safety to secure the plant’s existence in the long term.

Good example

Our company executives are fully aware of their responsibilities and undertake to set a good example, inform new employees accordingly and promote a sense of responsibility among all the people working in their areas.

Legal requirements

We are committed to complying with the applicable legislation and regulations by using the best available and economically justifiable technologies and also take a proactive approach in the drafting of laws.

Dialog

We maintain an open and objective dialog with the people involved, which enables our employees to take an active part in implementing the system. In addition, we also integrate the outside contractors that work for MAGNA STEYR Fahrzeugtechnik in the system by providing them with information.

Resource conservation

This means that we use raw materials, power and energy sources sparingly, and keep waste down to a minimum. In our research and development work we endeavor to make all products recyclable and take this into account during the product development process.

Continuous improvement

We undertake to regularly evaluate the environmental impact and occupational safety risks involved in our production processes and services, check them with internal and external audits, and take suitable action to reduce them. This procedure also includes training our employees in these fields and systematically putting preventative measures in place to ensure continuous improvement.

The complete Section 2 is to be found in the MAGNA STEYR Environmental Report 2001

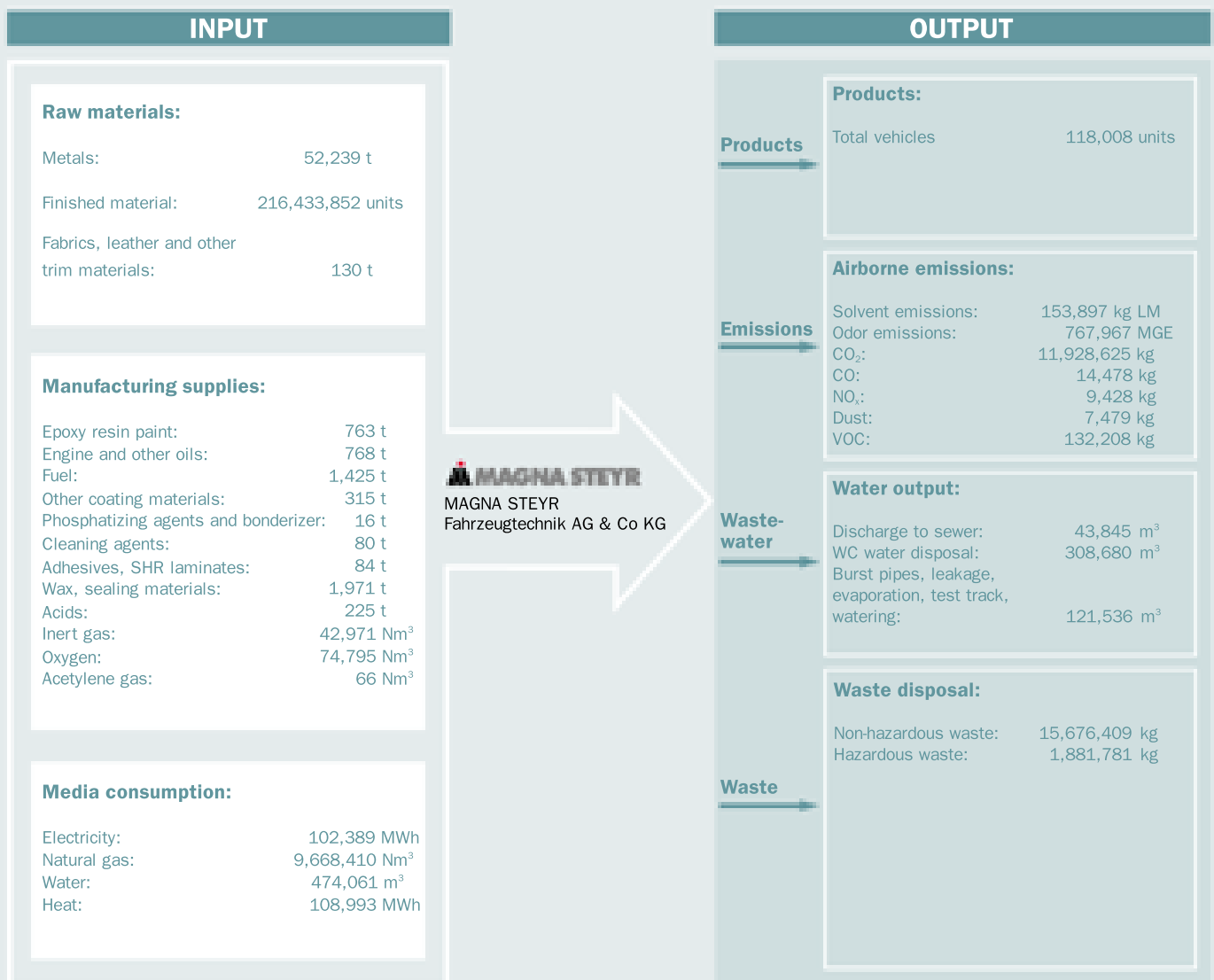
“If we reduce Nature to what we understand, we will not be capable of survival.”

Hans-Peter Dürr

facts & figures

3.1

2003 Input/Output Balance



3.2

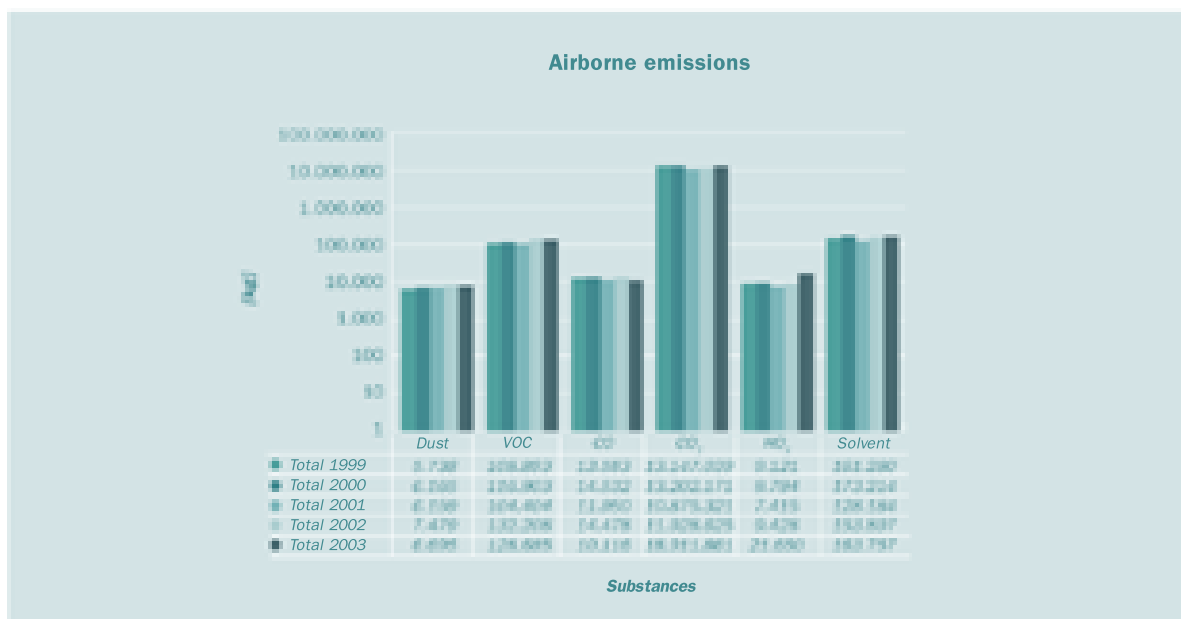
Airborne Emissions

Taking readings from all the facilities throughout the plant that contribute to airborne emissions took over seven months to complete. Combining the two previously separate former EUROSTAR and MAGNA

STEYR Fahrzeugtechnik plants has resulted in a rise in total emissions, but they are still however well below the authorized limits.

Solvent emissions						
	kg [solvent/year]			Odor [MGE/year]		
	2001	2002	2003	2001	2002	2003
Total solvent emissions	128,184	153,897	163,757	639,656	767,967	976,473
Permit as per ruling	272,100	272,100	462,626	1,256,000	1,256,000	2,451,510

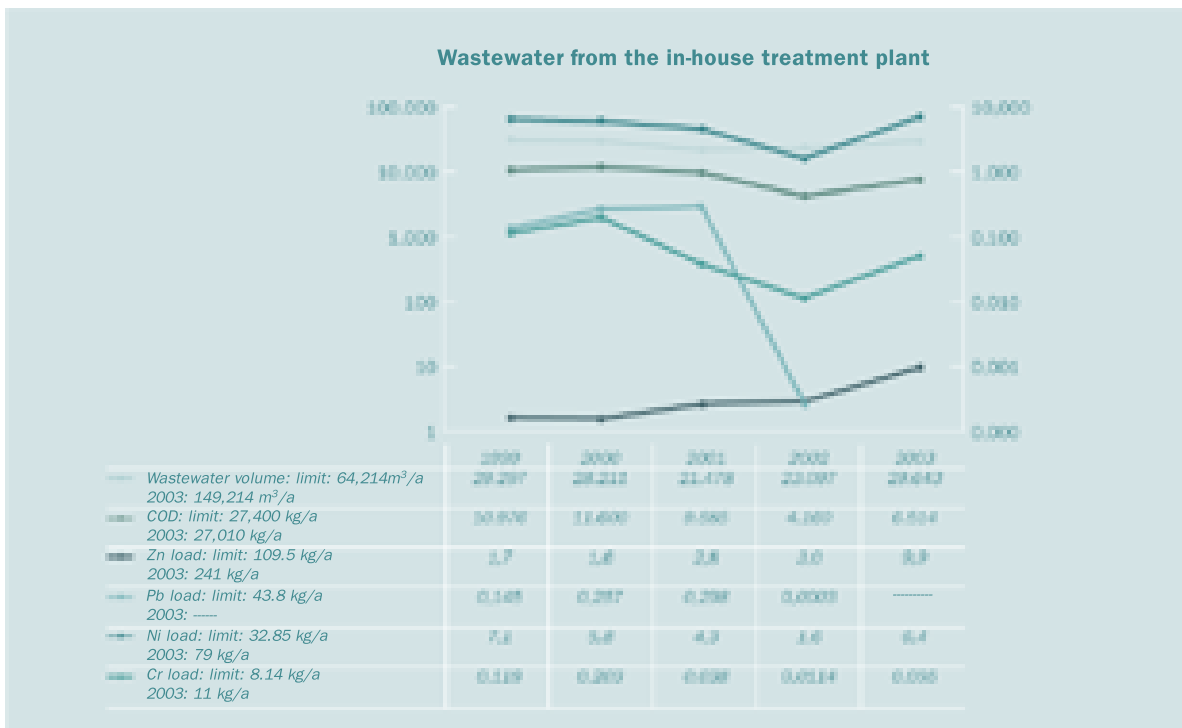
The graph below shows the overall situation at the location.



Wastewater

The wastewater situation has totally changed due to integration of the former EUROSTAR plant. In the new combined Thondorf plant there are now two completely separate wastewater treatment plants that have two

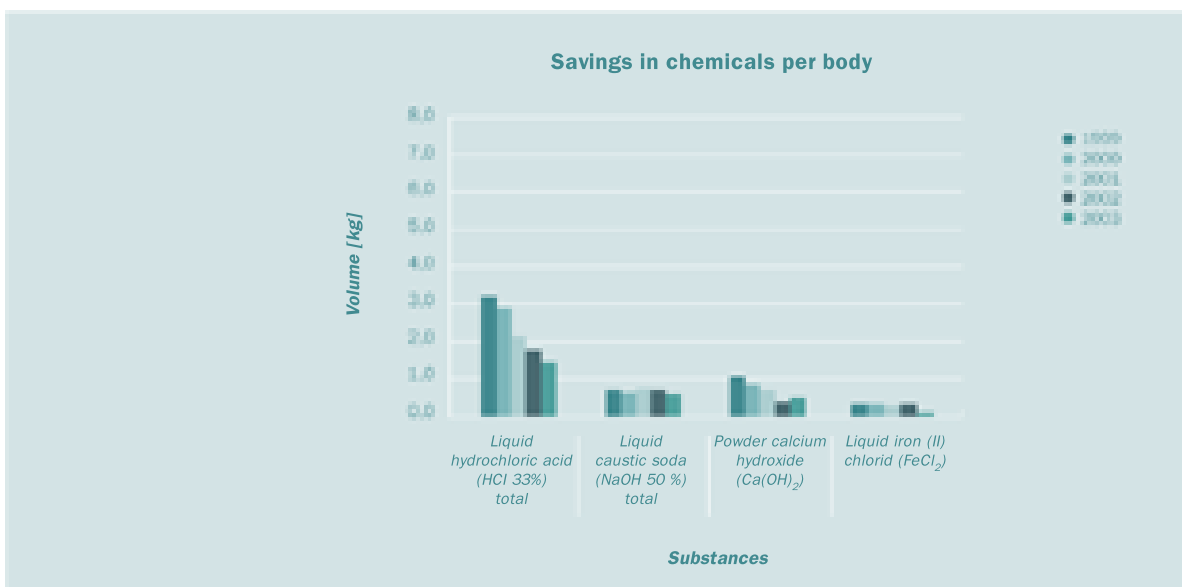
new licenses as a result. The figures listed in the table below for 2003 are the totals for both systems together.



Chemical consumption:

The new and continuously improved situation regarding chemical consumption is reflected in ongoing optimization measures for chemical use and putting

the wastewater treatment plant for BMW assembly back into operation.



3.4

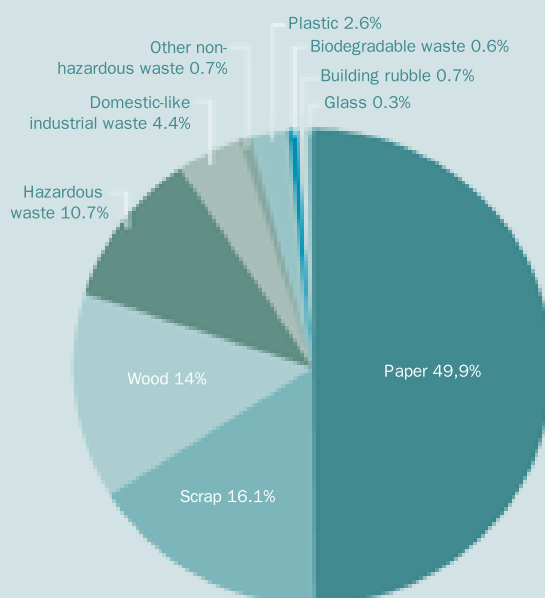
Recycling and Waste Disposal

3.4.1

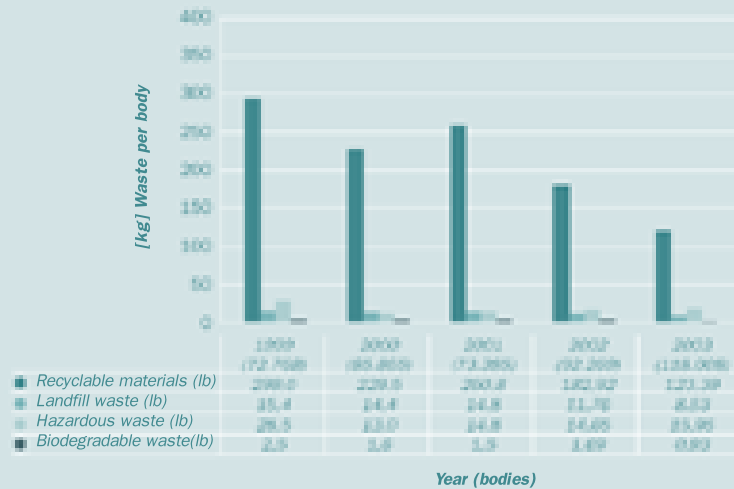
Waste Volumes

Waste category	Waste type	Volume in kg (2003)
Recyclable materials	Cardboard/paper	8,763,442
	Metal	2,821,848
	Wood	2,456,079
	Plastic	464,727
	Glass	54,607
	TOTAL	14,560,703
Landfill waste	Domestic-like industrial waste	765,363
	Other non-hazardous waste	125,225
	Building rubble	117,433
	TOTAL	1,008,021
Hazardous waste		1,881,781,
Biodegradable waste		109,687
Total waste		17,558,190

Waste output in % (2003)



Trends in waste volume per body (1999-2003)

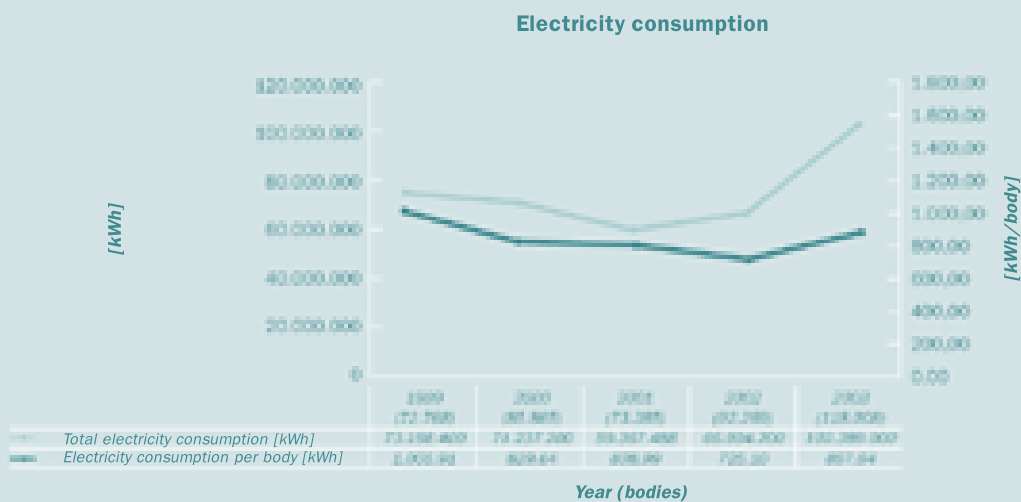


The specific waste volumes per body are primarily affected by the transport packaging for the parts from abroad. Product conversions and additional products using more reusable containers have however decreased the specific share of cardboard packaging.

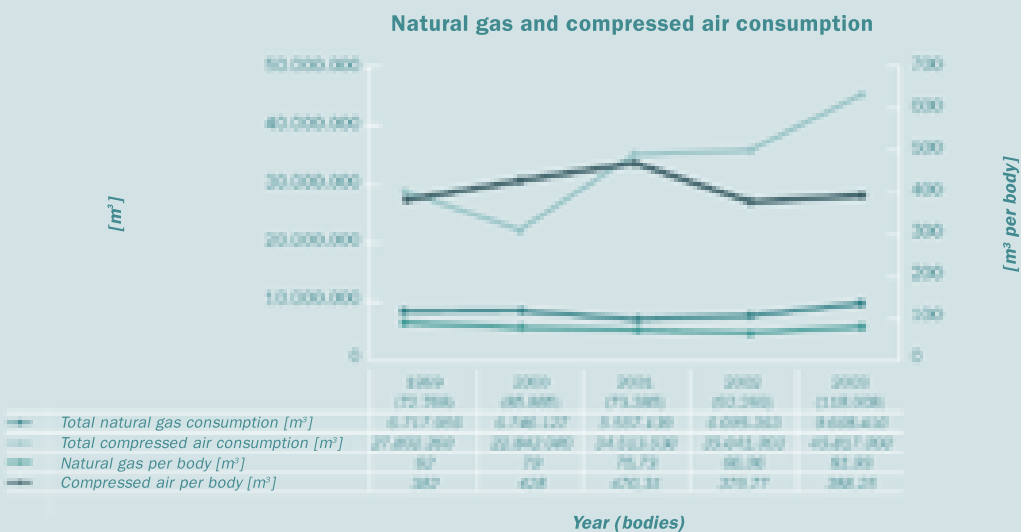
Table of hazardous waste with codes:

Code	Description	Volume in kg	Code	Description	Volume in kg
12501	Contents of grease separators	64,240.00	54408	Oil-water mixtures	590.00
31316	Ash and slag from pyrolytic equipment	16,705.50	54701	Sand trap contents containing oil/cold cleaner	26,050.00
31637	Phosphatizing sludge	43,638.50	54702	Oil separator contents	16,890.00
35201	Oil-soiled underground cables	832.00	54703	Sludge from oil separator	89,510.00
35202	Electronic scrap (computers, monitors)	17,059.50	54707	Erosion sludge	206.00
35203	Car wreck with hazardous materials (wet)	5,000.00	54710	Grinding sludge containing oil	12.00
35205	Refrigerators without vouchers	433.00	54917	Underbody coating waste	593.00
35321	Other dust containing non-ferrous metals	209.00	54930	Solid supplies soiled with grease/oil	52,372.00
35322	Lead storage batteries	44,907.50	55326	Petroleum benzine	1,255.50
35326	Mercury residue	150.00	55357	Cold cleaners	420.00
35335	Zinc-carbon batteries	414.50	55370	Solvent mixtures, halogen-free	6,595.50
35339	Fluorescent tubes	1,338.50	55374	Solvent/water mixtures, halogen-free	196,143.50
39905	Fire extinguisher powder residue	1,396.00	55404	Rags/polishing cloths containing solvent	171,080.00
51310	Other metal hydroxides	126,437.00	55502	Old paint, not solidified	36,123.50
52103	Acidic mixtures	84,875.00	55503	Paint sludge containing solvents	388,156.00
52404	Alkaline mixtures	13,560.00	55903	Resin residue, not solidified	7,640.00
52723	Developer baths	1,217.00	55907	Cement and filling compounds, not solidified	75,963.00
54102	Used oil	24,234.50	57127	Plastic packaging with hazardous residue	429.50
54104	Petrol	4,008.00	57305	PVC waste, paste	25,768.50
54108	Diesel and heating oil	945.00	59305	Laboratory, waste and chemical residue	240.00
54120	Brake fluid	715.00	59405	Cleaning agent and detergent waste, hazardous	160,126.00
54201	Oil sludge	195.00	59803	Aerosol cans, pressurized containers	3,455.00
54207	Waxes	11,992.00	97101	Medical waste	40.00
54402	Drilling and grinding emulsion	157,620.00			
Total hazardous waste					1,881,781.50

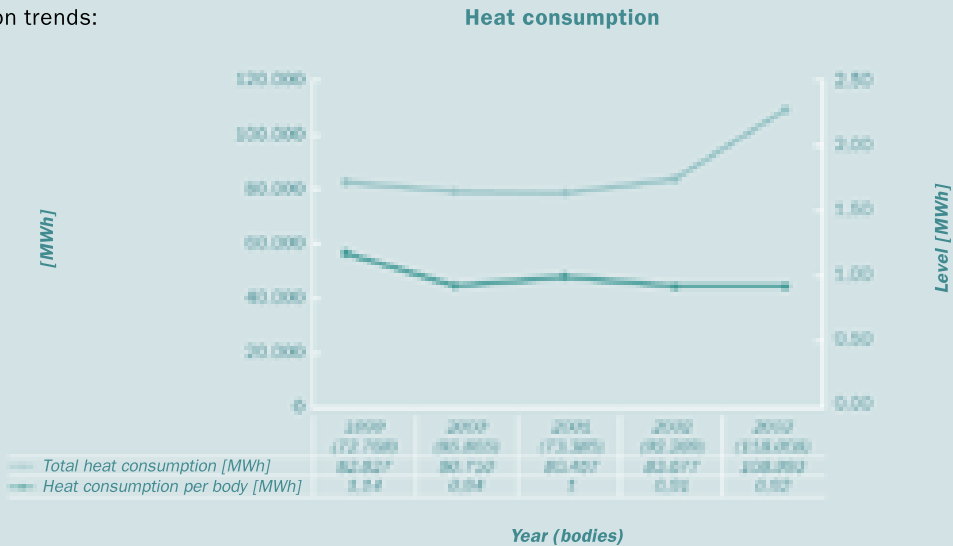
Energy and Resource Consumption



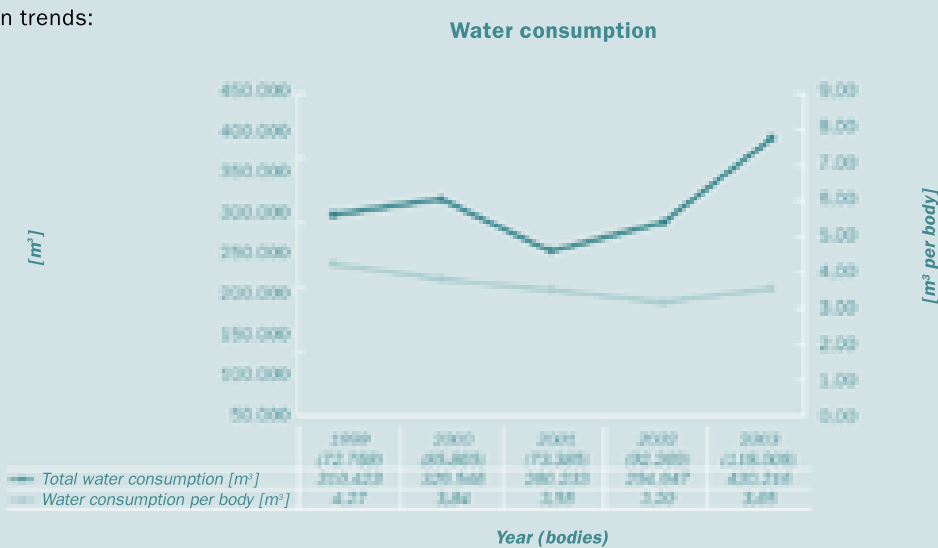
Natural gas and compressed
air consumption trends:



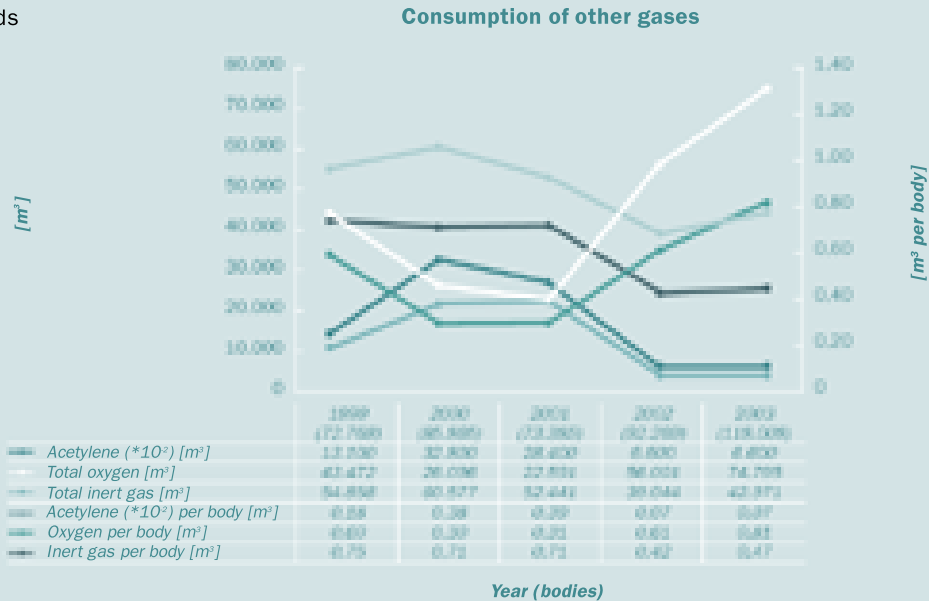
Heat consumption trends:



Water consumption trends:



Consumption trends
for other gases:



3.6

Other emissions

3.6.1

Noise

Noise situation:

The local noise emissions from the plant remained at the same level as in 2002. Ambient noise is still mainly caused by traffic on

the A2 freeway, the eastern access road and Liebenauer Hauptstrasse.

3.6.2

Traffic and Transport

The Starts Of Production for the new SAAB and BMW also gave rise to changes in the transport situation in 2003 over the previous year. This is primarily

reflected in the volumes of truck transport and employee traffic.

Traffic and transport volume	Estimate
Trucks (material transport)	44,000,000 km
Car traffic (staff arriving and leaving)	42,000,000 km

“There is something wonderful about every one of Nature’s creatures.”
Aristotle

environmental services provided in 2003

Environmental Services in 2003				
No.	Goal	Measure	Completion Date	Implementation
Reduction in waste volume				
1	Reduction in packaging material (DEKOSTTRIP-SAAB) (approx. 100 units/day = 200 Lfm)	Checking the necessity of SOP	Mar. 03	OK ¹
2	Reduction in electronic scrap by 30% compared to 2002	Successively replacing old PCs, printers and monitors with leased ones	Mar. 03	was taken out
3	Documents that used to be sent by mail are now made available to interested parties electronically as downloads. Reduction in paper use of around 10% has been achieved as a result.	Use of the latest methods, such as eRFx and e-procurement, to support paperless purchasing; expansion of the supplier homepage into a supplier portal.	Dec. 03	OK ¹
4	Reduction in hazardous waste (paint sludge); paint shop H83	Replacing and separating rinsing for filters, primer and clear coats (to achieve a higher solid content)	Mar. 03	OK
5	Cut down of approx. 30% in clean room waste, chiefly in clean room clothing	Reuse of clean room clothing several times	Jun. 03	OK
6	Reduction in the cut protection gloves to be disposed of in the body shop	Leather gloves for cut protection replaced with Kevlar ones in the body shop in Buildings 2 and 4 (due to their longer life)	Apr. 03	not implemented
Reductions in emissions (air)				
7	Reduction in CO2 by increasingly using lightweight designs	Developing additional aluminium competence	starting in 2003	OK
8	Improvement in knowledge regarding the reduction of HC emissions in the vehicle	Greater material selection from the point of view of HC emissions	ongoing	partly implemented ³
9	Better air conditions in the vehicle assembly area in Building 1 and energy savings with heat recovery	Extraction of the exhaust from rolls test rig and in the reworking area, filter installation and integration in the heat exchanger for preheating fresh air (winter operation)	Dec. 03	partly implemented ⁴

¹ Implemented, but savings target not quite met

² Cheaper alternative solution

³ Decision to purchase testers not yet taken

⁴ Heat recovery not economically viable

⁵ Technical testing not possible in house

Environmental Services in 2003				
No.	Goal	Measure	Completion Date	Implementation
Reduction in emissions (soil)				
10	Preventing oil leaks in aggregate pre-assembly at W 211	Delivering in 1,000 Liter Tank W 210 now: 4-5 l oil left in drum per drum change; (14 drums a week)	May 03	OK
11	Reduction in the repair intervals and avoiding oil by replacing the old impact screwdrivers in G (c. 20)	Purchasing oil-free pulse screwdrivers: maintenance-free and low-noise	Jul. 03	OK
12	Preventive maintenance	Renovation of the manhole and pump shafts for the fuel station in Building 1	Aug. 03	OK
Reduction in emissions (transport)				
13	Avoiding additional pollutant emissions after increasing transport frequency	Modernizing the in-house shuttles with new trucks and jumbo trailers to compensate for rising transport volumes	Mar. 03	OK
14	Reduction in the truck milk runs by changing over from truck to rail transport	Using special reusable containers for rail transport, thus reducing truck transport and combating the rising road traffic volumes	Jun. 03	OK ¹
15	Reduction in transport by improving truck capacity utilization for examples	Using more folding containers eg replacing Euro skeleton boxes with DB 2032 skeleton pallets	depending on project (constant changeover)	partly implemented
16	Reduction in scrap material transport	Installation of a second shredder to minimize the transport volume of scrap material (cured plastic, etc.)	Aug. 03	OK ²
Reduction in resource consumption				
17	Development of modules for alternative drives	Developing and manufacturing a cryo tank for hydrogen engines	Dec. 03	ongoing
18	Saving of at least 360,000 kWh/a in lighting for Buildings 2 and 3 (area 30,000m ²)	Outside light-dependent control, use of low-energy lighting	Dec. 03	OK
19	Reduction in compressed air leaks in Buildings 1, 11 and 12 totaling 5% of compressed air consumption at production stop (200l/sec without prod.)	IH personnel to detect and repair the leaks when production stopped	Dec. 03	OK
20	Reduction in transformer oil changes by up to 90% corresponding to 39,000 kg (62 transformers each with 700 kg oil capacity) for the scheduled change cycle	By implementing status-oriented IH, i.e. the oils are analyzed to see if they can continue to be used	Dec. 03	ongoing
21	Cut water consumption for every reduction in wastewater volume in H83	Installing a closed circuit water plant for low-wastewater pretreatment & CDP shop operation and replacing the wastewater treatment plant	Mar. 03	OK
22	Reduction in water consumption, wastewater volume and the cleaning materials used when cleaning the Ariane 5 fuel lines	Conversion of the cleaning system from a flow through to a circulating process	starting in Jan. 03	OK
23	Reduction in the air conditioning system's energy consumption by cutting out the black out station/ Building 8 in Building 1	Installation of automatic doors in the area of the conveyor return line to contain the area to be cooled in Building 1	Dec. 03	OK

¹ Implemented, but savings target not quite met

² Cheaper alternative solution

³ Decision to purchase testers not yet taken

⁴ Heat recovery not economically viable

⁵ Technical testing not possible in house

Environmental Services in 2003				
No.	Goal	Measure	Completion Date	Implementation
Improvement in working conditions				
24	Reduction in use of critical substances in ecological terms	Cr-free passivation in pre-treatment for lead-free CDP	Feb. 03	OK
25	Shortening of the transport routes by defining the production areas more clearly	Improved layout planning with determination of the production flow	starting in Apr. 03	OK
26	Improvement in working conditions and the environmental impact	MLT workshops in production (preventing scrap, improving awareness, safety at the workplace, etc.)	ongoing	OK
Improvement in environmental awareness among employees				
27	Reduction in volumes in the oil stores	Disposing of resources no longer required	ongoing	Ok
28	Products designed for recycling	Sensitizing the designers with regular training	ongoing	OK
29	Increase in environmental awareness when handling hazardous substances and chemicals - in all divisions	Staff training	ongoing	OK
30	Assistance in implementation of HC emission limits in complete vehicle projects	Ongoing process optimization	ongoing	partly implemented
31	Teaching apprentices about environmentally relevant subjects during their training in a simple and easily understandable form	Including the subject "The environment at MAGNA STEYR" in apprentice training	ongoing	OK
32	Development of greater environmental awareness in Dep. B with training	In-house training with seminars listed in the training and development catalog	Apr. 03	OK
33	Employee information	Orientation courses for new employees	ongoing	OK
Improvement in the environmental management system				
34	Improvement in the existing supplier evaluation according to environment-related points of view	Revising the existing questionnaire and developing a generally applicable system.	Feb. 03	Ok
35	Determination of the environmental protection status and its potential for improvement	Drawing up a plant-wide standardized evaluation checklist for regular section inspection.	Apr. 03	transferred to EP 2004
Not classifiable				
36	Minimizing the paper used when checking freight invoices	Changing over to electronic billing and archiving. Introduction of e-invoicing together with TMM	Aug. 03	OK
	Division Q to support MAGNA STEYR Fahrzeugtechnik's environmental goals in introducing eco-friendly systems and with ongoing process optimization - and observing legal requirements on the part of QWL with its staff and tools.	Obtaining product approval from our partners (DaimlerChrysler and Saab)	ongoing	OK
38	Return of approx. 25,000 cu m of clean surface water annually to the groundwater	Installing a trickling filter tank for disposal of pure rainwater off the roofs to take some of the burden off the combined sewer system	Aug. 03	OK

1 Implemented, but savings target not quite met

2 Cheaper alternative solution

3 Decision to purchase testers not yet taken

4 Heat recovery not economically viable

5 Technical testing not possible in house

S

*"It is not the
flowers and trees,
but just the garden
that belongs to us."*

Chinese saying

our environmental impact

When examining environmental impact, we differentiate between direct and indirect effects.

The direct ecological aspects are obviously easier to evaluate, and are assessed and compared at MAGNA STEYR Fahrzeugtechnik using the environmental scarcity method (environmental impact points model). It involves gauging the environmental impact of a product, process or company by calculating the eco-factors, which are a measure of the environmental relevance of one gram of a substance and are multiplied by the actual amount used. This method is easy to use and can be adapted and developed as required.

In addition, the environmental impact points for all the ecological aspects can be added and therefore compared.

The method also enables national, regional and local factors to be included in the assessment, and the environmental impact on the various media to be compared direct.

Indirect environmental impact may be directly related to the company's activities, but only becomes apparent after some time or at a distance. It cannot therefore be completely controlled, thus representing a much greater challenge. Only measures that extend beyond the premises themselves, such as external audits, environmental regulations or contract provisions enable the indirect environmental impact to be kept in check to any great extent.

**The complete Section 5 is to be found in the
MAGNA STEYR Environmental Report 2001**

2004

*“If you respect Nature
it will not harm you.”*

Henry Miller

environmental program

Environmental Program for 2004						
No.	Goal	Measure	Funds (EUR)	Savings (EUR)	Completion date	Responsible for completion
Reduction in waste volume						
1	Reduction in PVC waste	In-process recycling; reduction in PVC to be wiped away;	2,500.–	10,000.–	Jul. 04	OP
2	Inclusion of environment-related issues at group meetings	Pointing out improved waste sorting and waste prevention at the fortnightly group meetings in production	–	–	ongoing	JPU
3	Reduction in E-Class disposable packaging	Signing load carrier agreement	Load carrier costs E-class basic project	–	Jun. 04	DMP
4	Reduction in filling media on assembly line	Requesting the media as required on the line	–	–	Mar. 04	DPS
5	Reduction in packaging materials	Increasing use of reusable packaging	–	100/a	starting in Jan. 04	W
6	Reduction in residual waste volumes by improving waste sorting by approx. 10%	Representing the mis-sorting by extending the existing volume recording system to include the category “degree of soiling”	0	12,000.–	Dec. 04	TU
Reduction in emissions (air)						
7	Reduction in the emissions from the dryer in the special paint booth	Connecting the dryer extract air from the special paint booth to the industrial air-cleaning filler dryer	60,000.–	–	Jul. 04	OP
8	Reduction in vehicle exhaust and heat loss when transferring vehicles out of the building	Replacing the old folding door with a high-speed one southwest of Building 1	approx. 10,000.– EUR/a	–	Aug. 04	JM
9	Reduction in emissions in the area of the axle test rig and Assembly Pits 1 & 2 after the dynamometer test, and at Stations 47 and 50	Assembling an automatic exhaust extractor in the area of the axle test rig for Pits 1 & 2 incl. Extract hoods above the vehicles and at Stations 47 & 50 for removing the exhaust fumes after the first start.	approx. 120,000.–	Reduction in the assembly times at the axle test rig by approx. 0.5 min/vehicle; reduced employee sickness	Apr. 04	SM
10	Plant-wide recording of the airborne pollutants based on the facility register and VOC for evaluating the emission and prevention potential	Taking readings to determine the emitters of volatile organic compounds (VOC), CO, NOx, and dust	25,000.–	–	Apr. 04	TU
11	Verification of the impact of odor emissions in the neighborhood calculated from the odor spreading model with inspection by test subjects	Determining the odor impact of solvent emissions in the neighborhood by means of an objective procedure involving neighbors	–	–	Dec. 04	Styrian provincial government

Environmental Program for 2004						
No.	Goal	Measure	Funds (EUR)	Savings (EUR)	Completion date	Responsible for completion
Reduction in emissions (air)						
12	CO ₂ strategy: establishment of risks and opportunities in the run-up to emission trading	Identifying the direct and indirect impact of CO ₂ -related factors. Step 1: plant-wide screening and examination of upstream and downstream operations	4,000.-	—	Mar. 04	TU
Reduction in emissions (soil)						
13	Reduction in soil emissions in the area of the glycol tank outside Building 11	Checking the volumes required against tank capacity; providing a suitable collecting basin for residual glycol	ca. 500.-	Fire service operations	Jan. 04	DMI
14	Reduction in pollutants (soil)	Removal of the filling station in the outdoor area	5,000.-	Repair/ maintenance costs (200/month)	Jan. 04	DM
15	Safety devices for underground storage tanks; prevention of soil contamination when filling the underground storage tanks	Manhole shaft seal for the filling sockets on underground storage tanks in Departments T, J, E, D and X with a GRP lining	57,000.-	—	Jun. 04	TAE
16	Demand analysis for all oil separator systems installed in the plant and creation of an electronic register	Checking and modifying the oil separators to the state of the art in the course of electronic registering	11,000.-	—	Apr. 03	TU
Reduction in emissions (transport)						
17	Reduction in container transport by 10% for deliveries of manufacturing parts	Containers can be loaded more efficiently by combining various unloading points in the system -> higher degree of filling on the basis of a study carried out by Chrysler IS & C with MSF/LJ.	—	—	Nov. 04	LJ
18	Minimization of the special shipments required by MSF by 90% from an average of 100 special loads/month (May to October)	Optimizing supply of empties to suppliers; raising inventory accuracy; reducing parts damage; optimizing inventories	9,000.- for IT (to link-to receive)	approx. 94,000.-/ month	Dec. 04	SL
19	Increase in rail transport use	Changing over from truck to rail freight; intermodal transport	—	100,000.-	ongoing	LZ
Reduction in resource consumption						
20	Reduction in compressed air consumption in Building 8	Creating a compressed air register (leaks, consumers, optimization)	3,000.-	15,000.-	Sep. 04	OP
21	Reduction in wax volume for cavity rust proofing	Optimizing the quantities of wax (CIP -> use of mobile application unit and window body)	48,000.-	70,000.-	Jul. 04	OP
22	Reduction in CDP material consumption	Compensating for the next generation of CDP material; (CG 500 -> lower solvent content, less consumption)	15,000.-	100,000.-	Dec. 04	O
23	Improvement in recyclable product development by using a suitable computer program (recycling software)	Evaluating existing programs, procurement, implementation and use of the most suitable program in current projects	23,000.-	—	Mar. 04	EGE
24	Greater use of light metals in vehicle assembly	Drawing up recycling concepts for components made of aluminum;	—	—	ongoing	EGE
		Developing existing recycling processes for aluminum and other light metals in vehicle assembly as part of a dissertation	3,600.-	—	May 04	EGE

Environmental Program for 2004

No.	Goal	Measure	Funds (EUR)	Savings (EUR)	Completion date	Responsible for completion
Reduction in resource consumption						
25	Savings in cloths for cleaning bodies that used to be bought in	Using cloths for cleaning bodies made from a waste product supplied by Brolli	—	approx. 10,000.– EUR/a	Mar. 04	JR
26	Savings of approx. 15% in sealer for the body-in-white	Replacing the sealer currently in use with a new one displaying a higher degree of expansion. Lower sealer and cleaning agent consumption as a result	approx. 10,000 for test runs plus body for material testing	approx. 0.1 EUR/ vehicle material cost savings	Jan. 04	SR
27	Reduction in resource consumption	Fuel filling according to bill of materials, linking to Prosus	5,500.–	approx. 2/ vehicle	May 04	DP
28	Optimization of workplace lighting use	Installing several switching circuits for the lighting to ensure that only the areas required are lit	1,000.–	100/a	starting in Jan. 04	W
29	Raw water savings of approx. 8,000 cu m/a when cooling the engine test beds in Buildings 3 and 19	Purchasing a new cooler for converting the open cooling circuit to a closed system	150,000.–	10,000.–	Mar. 04	TAE
30	Improvement in laser cutting efficiency; savings of 5% in annual material consumption corresponding to 13t metal plates	Optimal use of the new 2-axis laser cutter's technical capabilities	740,000.–	10,000.–	Mar. 04	TS
31	Identification of potential savings in the building envelopes and air balance using thermography	Thermographic scans done during the Ecoprofit project in 2003-2004	1,000.–	—	Mar. 04	TU
Improvement in working conditions						
32	Good ventilation balance in H1 (uniform room climate for employees, and energy saving)	Replacing the inadequate fan heaters in H1 with ceiling-mounted radiant panels (see Building 4).	approx. 600,000.–	—	Oct. 04	JPM
33	Optimization of waste disposal in Buildings 1, 2 & 4.	Determining the waste container demand, improving the waste disposal process in the buildings, optimizing the disposal vehicles' routes	—	—	ongoing	JPU
34	Reduction in the dust emissions at Station PCO 020 (BIW - Finish Line Station 1) by reducing the grinding operations	Minimizing the necessary reworking processes (polishing) by adding an upstream milling operation with automatic extraction	93,000.–	Reduction in assembly times approx. 0.75 min/ vehicle	Mar. 04	SR
35	Better use of natural daylight	Installing additional skylights and painting the workshop walls a lighter color	2,000.–	100 pa	starting in Jan. 04	W
Improvement in environmental awareness among employees						
36	Improvement in environmental awareness	Ongoing environment-related training (e.g. flammable liquids directive, poisons, explosion protection, relevance of a paint shop to the environment)	—	—	Dec. 04	PE
37	Employees with training in the subject of environmental protection (who joined the company before January 2001)	Drawing up a training plan for the department by HR development (HRD)	—	—	Apr. 04	PES
		Holding basic environmental training courses	—	—	Dec. 04	EGE
38	Employees with training in the subject of recycling in the current projects	Modifying the general recycling training documentation for current projects	—	—	Jan. 04	EGE
		Training employees in the current projects	—	—	ongoing	EGE

Environmental Program for 2004						
No.	Goal	Measure	Funds (EUR)	Savings (EUR)	Completion date	Responsible for completion
Improvement in environmental awareness among employees						
39	Provision of information on recycling, HC emissions and environmental management in the department over the Intranet	Creating a site on the Intranet	—	—	Jun. 04	EGE
40	Employee information	Orientation course for new employees, and in-depth training for select employees	—	—	ongoing	JPU
41	Fast information in the event of environment-related problems	Including the environment as a separate category in the electronic problem database with automatic forwarding to the EM in Dep. J	—	—	ongoing	JPU
42	Comprehensive awareness of the subject of environmental management	Planning in specific issues on a regular basis at the group meetings	—	—	Dec. 04	SLM
43	Improvement in environmental awareness among employees	Including environmental training at the group meetings	—	—	May 04	DMI
44	Annual information on the MSF environmental management system	EM refreshing for assembly employees once a year (10 min. – at the same time as the annual safety instructions given by the environmental management of division T)	—	—	Jun. 04	W
45	Greater acceptance for environmental issues	Training the employees	—	—	ongoing	LZ
46	Improvement in environment awareness in the company – focusing on employees who joined the company before 2000	Drawing up the department-specific training program together with the department's HRD and the relevant training coordinator. Rolling out the program as a cascading process.	—	—	Dec. 04	PE
Improvement in environmental management system						
47	Emission effect forecast; installing an in-house planning tool to show the emission situation for airborne pollutants and noise in the event of machine and process changes	Purchasing an emission dispersion forecasting model and modeling the emission situations for the noise and pollutant emitters on the buildings	7,500.–	35,000.–	Jun. 04	TU
Not classifiable						
48	Transparency in consumption figures for both paint shops	Developing a material flow analysis for OX similar to OS (input/output)	—	—	Dec. 04	O
49	Review of the official rulings for the paint shop in Building 8	Consolidating the rulings	—	—	Oct. 04	OPA
50	Constructive media presence	Drawing up curriculums on the subject of recycling in conjunction with schools (secondary and further education); sitting on the Austrian Recycling Committee; giving environmental talks to various bodies	—	—	ongoing	EGE
51	Storage of additionally required supplies in the department in accordance with the statutory provisions	Extending the existing or building a new additional supplies store in accordance with the legal requirements	—	—	Jun. 04	E
52	Free access to the emergency exits (audit point)	Regular checking by the person responsible for the zone; following up the action taken at the group meetings	—	—	Jan. 04	GP
53	Partial flow treatment: increasing the cost efficiency by pre-treating defined biologically contaminated wastewater from body pretreatment to meet the sewage authorities' discharge criteria (COD concentration)	Checking suitable membrane filtration methods as a mobile unit right beside the place of occurrence or using smaller scale prototypes.	5,000.–	—	Jun. 04	TU

7+8

The complete Sections 7 and 8 are to be found in the MAGNA STEYR Environmental Report 2001

environmental
auditors &
certificate

abbreviations



This environmental report is updated annually. The next complete environmental report is scheduled for November 2004.

contacts



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more
ideas



more
drive



more
commitment



more value ■ more car

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