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Dear Reader



Have you ever heard of a company that relies solely on circuit processes and has never gone bankrupt during its incredibly long existence? If we quantify that existence at about 4 billion years, the answer is trivial: that company is, of course, our biosphere – otherwise simply referred to as nature.* It

knows neither shortages nor overproduction, and terms such as waste, sweepings, refuse, scrap and rejects are irrelevant – or were until man became part of the plan. The fatuous belief in unlimited growth, inexhaustible resources, the omnipotence of technology and a blinkered view of his own requirements have seen man create a situation in which he is now forced, in bewilderment, to confront the far-reaching effects of global warming and ever increasing natural disasters.

Luckily, man is not only foolish, but responsible and capable of learning – and thanks to nature's example, has the capacity to act! The circuit processes mentioned above are crucial to the task jointly performed by manufacturers, dealers, recycling companies and SWICO: we want to avoid the product life ending on a linear basis (production – sale – consumption – waste). Moreover, at the end of the service life, as many components as possible should be recovered and made available for a new, and different, product life – an open circuit geared toward nature's example.

We see the circuit process as a prerequisite condition for sustainable development, i.e. the survival of generations to come. We have therefore reviewed the term sustainability beyond the limitations of the waste disposal industry. You will find a summary of our thoughts on page 18, which is followed by a report about our meeting dated 7 February 07 on «Sustainability in the Electronics Industry».

Please take a closer look at the front cover of this report. We were fascinated by two aspects of the picture of the Egyptian desert: on the one hand it shows an impressive section of the familiar natural circuit. Its energetic flows also symbolise the focal point of our report – illustrating and analysing material flows in the waste disposal industry. Pages 6 to 9 address

new developments on this topic. The impressive key figures in the middle of the report are testimony to the success of our endeavours. Effective processes, programs and systems are required to reliably put together all such data. A great deal of last year's work was geared towards this, and we are proud to present you with the results on pages 6, 8 to 9, 15 and 20.

We would like to extend our gratitude to all those who were effective and reliable in their support of our efforts geared towards the environment and the coming generations.

** A point of view put forward by Frederic Vester, biologist and cybernetician*

Peter Bornand



Dennis Lackovic, Controller; Sibylle Gaudy, Assistant Controller; Peter Bornand, Chairman of the Environmental Commission; Maria Stumpo, clerk

Our members – the standard bearers of the SWICO Recycling Guarantee

An initiative that started with 36 voluntary members in 1994 has become a well-established sector solution for various areas. The hundredth member joined after four years, the two hundredth following after additional three, the three hundredth two years after that, the fourth hundredth after a further two years, and the fifth hundredth a little more than one year later... This speaks volumes about our sectors, i.e. a voluntary approach is still given preference over government policy.



The major distributors Conforama, Coop/Interdiscount, Distributis, Fust, Manor, Media Markt and Migros play a very important role in our concept. They take back more than 5,000 tonnes of used equipment from consumers annually, and simultaneously ensure that the advance recycling fees are collected.

Mr Marcel Dossenbach, Service Co-ordinator of Media Markt Switzerland, answers a few questions from Büro PULT.

Büro PULT: Mr Dossenbach, in how many countries does Media Markt operate?

M. Dossenbach: At approx. 450 sales outlets in 14 countries, we are Europe's largest consumer electronics specialist store. We will be notching up the 15th country soon with an outlet in Turkey.

P: And how long has Media Markt been operating in Switzerland?

D: We have been operating in Switzerland since 1994 and to date have been able to open 17 sales outlets. We look forward to opening the 18th in Zurich Sihl-City on 18 March 2007.

P: How did you initially solve the disposal problem?

D: Although the disposal of electronic waste was not regulated by law at that time, we aimed from the very outset to create an environmentally friendly solution, and found an experienced and reliable partner in the company Drisa Entsorgungs AG. We supported the financing of the recycling operations via the advanced recycling fee, on new equipment by the SWICO Association from the very beginning.



P: When did you become a member of the SWICO Recycling Guarantee?

D: We signed up to the SWICO Convention due to the introduction of the advance recycling fee on consumer electronics equipment on 01.01.2002.

P: What prompted Media Markt to take such action?

D: It's a convincing concept. First of all, customers are made aware of the recycling costs and that they can arrange the recycling via us. Secondly, we attach importance to the guaranteed and controlled processing in Switzerland. Recycling is part of our customer service, as are the guarantee services for example.

P: May we ask you a personal question? You mentioned the dealers' environmental responsibility. How do you address the issue as a private individual?

D: Quite frankly, I found the 4th IPCC Assessment Report quite shocking. Of course beforehand I wasn't one of those people – just to give you an example – who left the water running while cleaning my teeth. But now I give the issue more thought, and consider together with my wife what we can do individually to leave our descendants an environment that is conducive to living.

P: An appropriate topic on which to conclude the discussion.

Mr Dossenbach, many thanks.

Reason to celebrate – and ensure that we don't remain idle



The **500th** Member of the SWICO Recycling Guarantee is:

YAMAHA MUSIC CENTRAL EUROPE GmbH, Rellingen Branch Switzerland in Zurich

This important milestone was announced at the «Aktuell 2007» meeting dated 7 February 2007 on Sustainability in the Electronics Industry.

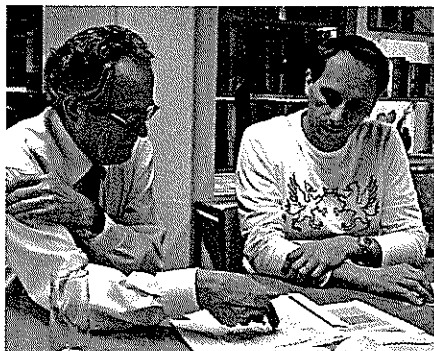
The SWICO Recycling Guarantee awarded a gift voucher in the sum of CHF 500 from the Zurich City Alpenhorn Player's Association to Mr Thomas Glutz, Branch Manager Switzerland. The Association will perform at Yamaha Switzerland at an appropriate event and demonstrate that there are certain instruments that are lacking in Yamaha Switzerland's range.

At the meeting Mr Glutz emphasised how important this step was for the company. All European countries should be providing recycling solutions now, he said. The SWICO concept adequately met Switzerland's requirements. In the meantime, Suissemusic Association, of which Thomas Glutz is also a member of the Board of Directors, has recommended that the members who sell electronic instruments sign up to the Swiss Recycling Guarantee.

Visit to Markus Meier Head of Service + Support, Wilux Print AG in Bubikon

The number of companies signing up for membership in the SWICO Recycling Guarantee is continuing at a gratifying pace. However, each individual case is subject to a thorough analysis of the new partner company's matters of concern, reservations and questions.

Wilux Print AG has been a SWICO Association member for some years, and makes use of its services. Questions have now surfaced in conjunction with an invitation to tender – on the one hand regarding the RoHS Directive (ChemRRV) and on recycling, which customers want to have regulated.



be returned? How can the recycling be incorporated in the offer?

– What about rival companies? Which companies are doing the same thing? What should be done about freeriders?

– What happens when manufacturers also supply goods in Switzerland? Who imposes the advance recycling fee in such cases?

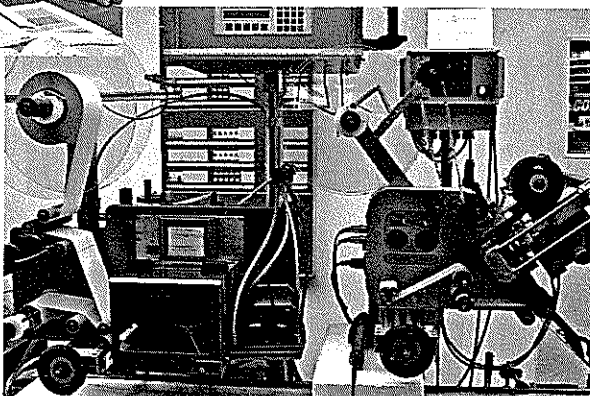
– RoHS in practise? What is required for conformity? Experience in this respect?

We look forward to the future collaboration!

We addressed many issues during the very interesting discussion:

– How should customers be charged? As part of the sales price by way of mentioning the advance recycling fee, or separately? What does the change mean internally for the IT? What would be better, a percentage rate or flat rate?

– What is the benefit? How should used equipment



Environmental Commission – backbone of the SWICO Recycling Guarantee

Heavy demands were placed on the Environmental Commission in 2006 too. However, thanks to the effective teamwork and the commitment of individual members, sophisticated and practicable solutions were found and key problems solved. This year, as in the past, was characterised by «Providing good and cost-effective services for electronic material sellers, and working on the system's sustainability effects». Above all, this means resource conservation.



The Environmental Commission before the meeting on 8 December 2006, which was not attended by Alexander Bohny (left) and Paul Brändli. Front row, right: Jakob Hildebrand, Honorary Chairman of the Environmental Commission

The six meetings – one of which was a closed-door meeting – addressed the following issues:

1. The EU en route from individual regulations to sustainability: What support does SWICO provide? Is a convention required for sustainability? (pages 18/19)
2. Balancing accounts, short and medium-term quantity and financial planning. Development of the ARF tariffs. Comparisons with other systems. (pages 12 – 15)
3. Logistics services tender for the period 2007 – 2009.
4. System for incoming goods analysis and the material flows. (pages 6 – 9)
5. Field office organisation: Appointment of a managing director. (page 20)
6. New IT solution for the field office. (page 20)
7. Recycling costs in Switzerland compared with other countries.
8. Development of the SWICO Recycling Guarantee. (pages 3, 14)

Sub-Commissions

Both the sub-commissions Telecoms and Consumer Electronics were convened twice. They are tasked with addressing the members' area-specific concerns and, where necessary, filing applications with the Environmental Commission. This method has proven successful, for example in the case of specifying the ARF tariffs. It also ensures that area concerns are discussed at an in-depth level and decisions can be made.



Roland Vannay, Head of the Telecoms Sub-Commission



Paul Langlotz, Head of the Consumer Electronics Sub-Commission

A satisfying challenge



*Eric Hubacher,
ESAG innovative services,
Wädenswil*

*Member of the
Environmental Commission*

You have been a member of the SWICO Environmental Commission since 2000. What prompted you to take up the position?

There were two reasons, one professional, the other personal.

On the professional side, we and our partners put into circulation products which, following the end of their service life, can have lasting detrimental effects on our environment if they are not disposed of properly. As members of the SWICO Recycling Guarantee, we must all honour our obligation to create an ideal system with which used equipment can be disposed of in an environmentally-friendly and proper manner, and in the process valuable raw materials can be reclaimed. As a member of SWICO's Environmental Commission, we can directly influence, on behalf of all the signatories, the way in which the recycling system is organised. That is reason enough to take up a position in the Environmental Commission.

I personally attach great importance to conserving the resources in our environment. Consequently I looked forward to supporting and optimising the system – and look forward to it still.

Is the position more a burden, or does it offer any advantages for you?

I do not consider my position in the Environmental Commission as a burden at all. On the contrary, my Environmental Commission activity gives me the opportunity to repeatedly draw our manufacturers' and our brands' attention to more environmentally efficient, and therefore cost-effective, processes.

What were and are the most difficult decisions?

Actually, all decisions made in the Environmental Commission are difficult and of great importance – whether it be the selection of logistics and disposal partners, organising the entire recycling system and attendant processes, pricing or dealing with exceptional cases and solving problems. However, specifying prices (ARFs) are among the most difficult, because we set these for at least a whole year, and in the process must base the figures on assumptions (How many tonnes of used equipment will be taken back in

the next 2 years? Are changes in the cost of logistics and recycling to be expected? How will the price of raw materials develop? etc.). We aim to operate the disposal services on the consumers' behalf at the lowest possible cost. Our calculations are therefore pared to the bone, and we don't have major reserves to fall back on either. We are also proud of the fact that the entire SWICO recycling system administration costs account for less than 3% of the revenue.

How significant is the fact that effectively all members are rivals?

The Environmental Commission represents the interests of our manufacturers and importers. At the end of a product's lifecycle, all manufacturers pursue the same interests, namely ensuring that the disposal is cost-effective, in line with legal requirements, environmentally-compatible and transparent. In a joint effort we are able to achieve these goals. This is why all parties join forces in this respect. No doubt about it, there are always difficult discussions, but rarely are they the result of a competitive situation – moreover different global views on creating an ideal solution. Such in-depth discussions are needed to develop an ideal recycling process.

You represented the Environmental Commission at the WEEE Conference in Dublin. What were your impressions?

It was a mixture of good and bad impressions. I'd like to cite just a few examples here. Actually, I had assumed I would be provided with detailed knowledge of a European system. Instead, I became aware that there are at least 38 different systems operating in Europe. I was impressed by the fervour of the representatives from new EU countries who represented their projects with enthusiasm, and were eager to learn from the established systems. I was disappointed by the lacking universal cost transparency. Certain systems do not charge collection costs because the district authorities collect used equipment, while others merely state variable costs etc. I was therefore unable to compare costs in the various systems. And as ever, I got to know different systems, lean ones with well managed structures as well as those with excessive administration that could do with a spring clean.

Many thanks and good luck with the next decisions.

2Re:act – a wonderful aid

Last year the Environmental Commission closed an important gap by way of this program. Thanks to 2Re:act, we can now record the used equipment, which is taken back, according to categories and illustrate the material flows that result from the processing. To date, we were merely able to publish material flows from the processing of all electronic equipment via the recycling companies, e.g. an average between PCs and vacuum cleaners.

In the spring of 2006 we were able to secure the services of Mr David Fischer from Université de Franche-Compte, Lens le Saunier, in the capacity of a trainee for three months in our team. He was tasked with establishing the aids that were required to produce data on the processing of used equipment. He wrote the following in his final report:

«It would be interesting if the SWICO Recycling Guarantee were compared with other European systems. Two methods present themselves: on the one hand one can use the processed quantity per resident, or juxtapose the results from the processing with the costs. Consumers want to know how the advance recycling fee is used on new products and what for. After getting to know the system, I analysed the existing program «Reptool» (it was designed by the WEEE Forum) and reviewed the possible applications in respect of the recycling companies. The results were as follows: this version was not viable in respect of being installed at the recycling companies, and key information was lacking for the system operator SWICO, such as the equipment quantity, weight per delivered category etc.»

David Fischer's systematic considerations prompted the SWICO Environmental Commission to design its own program to monitor and control the recycling activities. 2Re:act (Review Recycling Activities) is an internet-based program that is fed with data from the incoming and processing analyses. At the push of a button, the evaluation function produces a clear picture of the cost distribution in respect of the product areas; the respective material flows and the equipment quantity.

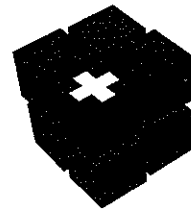
The program is also used to analyse the «outside material» (potential new signatories to the Convention), as well as for determining data for our members, e.g. on the brands and models that are returned in proportion to the overall volume.

The diagram below provides a summary of the program's functional mode:

2Re:act (Review Recycling Activities)

Analysis at recycling company	Incoming analyses by a SWICO specialist (sampling method)	Processing analyses for product categories under control of Empa
Result	18 product categories (quantity / weight / %)	Processing fragments for each product category
Projection of annual quantity	Quantity of equipment per product category Tonnes per product category Average weight Material flow per product category Material flow of the processed annual quantity	
Evaluation	Costs incurred in respect of the areas Analysis of outside material establishing contact with producers Comparison of recycling companies' target situation with actual material flow Comparison of recycling quantity (item/t) with imports >> recycling quota Projection of recycling quantity for the following year Budgeting/calculation of the required revenue (ARF)	

Material flows – a module in Empa's control activities



Roland Hischer,
Empa St. Gallen

A control module, which Empa performs on behalf of SWICO, consists of annually collecting and evaluating the materials flows. The data on the processed

equipment and the resulting quantities of each recycling company are recorded and analysed by using a specific form. A raft of evaluations and comparisons of these figures provide Empa with details of the quality and depth of the work performed at a respective recycling company. Controlling the material flows in this manner is therefore a key module of the SWICO Recycling Guarantee control concept.

However, in Switzerland almost all recycling companies process equipment that is subject to the SWICO Recycling Guarantee in conjunction with the electronic equipment from the SENS system. Even in their entirety, the obtained figures therefore merely reflect the insignificant mix of all types of equipment that can include a simple kitchen mixer, a fridge and even a plasma television set.

This situation has now changed thanks to the new aid 2Re:act (see opposite page) developed by SWICO. In the capacity of a technical control office, data can now be collected for each equipment category.

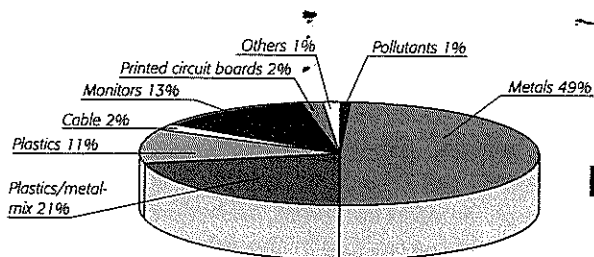
This is conditional on the processing analyses monitored by Empa – trials in which equipment of a single

Empa St. Gallen's control activities

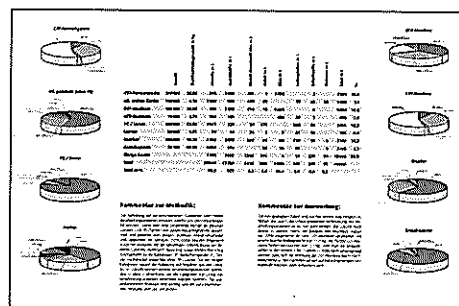
In addition to controlling the material flows, Empa's six control officers reviewed every SWICO Recycling Guarantee recycler at least once in respect of adherence to all requirements and directives. In total some 45 individual control visits to recycling companies (18 visits with prior announcement and one spontaneous review), dismantling companies (23 visits) and secondary companies at home and abroad (3 visits) ensured that the equipment handed in by the consumers is disposed of and recycled in line with the valid SWICO provisions. The reviews were carried out in collaboration with the SENS technical control office, a disposal organisation for domestic and cooling equipment.

type (e.g. a laptop computer) is separately dismantled and recorded by a single recycling company. The results of these trials can be used, by way of projections in 2Re:act, to provide details on the quantities of individual equipment types as well as on the overall material flow. These can still be determined via the annual recording of material flow data at a recycling company, which allows for cross comparisons of the two differing calculations of the overall flow – a key control instrument that Empa has at its disposal.

2005



2006

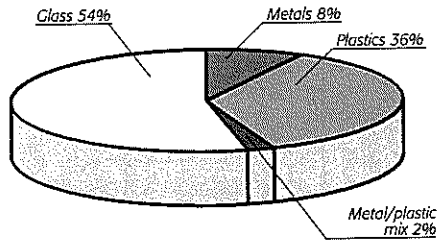


Total mix of processed SWICO, SENS and other equipment

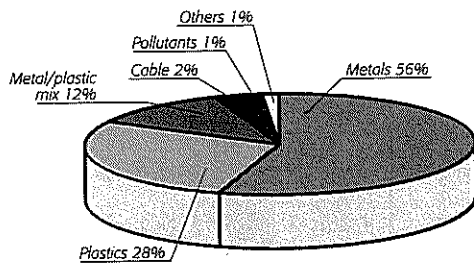
Specific equipment mix (SWICO equipment only)

What happens to the used equipment?

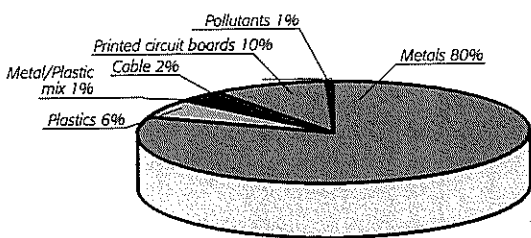
CRT television sets



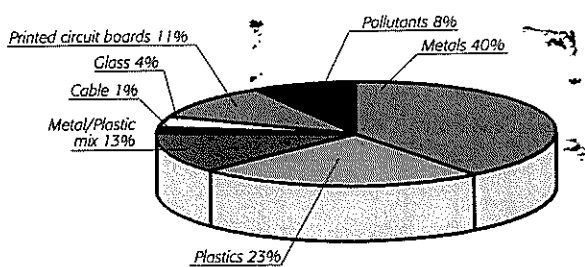
Consumer Electronics, mixed (without TVs)



PC / Servers



Laptops



	Quantity	Average weight in kg	Metals in t	Plastics in t
CRT television sets	247 000	29,86	592	2 690
CE, other equipment	798 000	4,34	1 909	989
CRT Monitors	581 000	15,87	726	3 292
LCD Monitors	79 000	5,72	160	151
PC / servers	419 000	13,39	4 517	325
Laptops	54 000	3,51	77	44
Printers	615 000	11,70	4 355	2 078
Large-scale copiers	23 700	90,96	1 888	154
Other equipments			5 785	3 007
Total			20 009	12 730
Total in %			43,5	27,7

How the method works

The division into various recovered segments is implemented by way of processing analyses, which are supported by Empa. In this respect a certain quantity of the same equipment (e.g. PCs/servers) is collected at the recycling company, then dismantled/processed and recorded separate from the other material flow. During the period 2005/2006, 4 such analyses were carried out, with the effective support of the companies Cablofer, Bühlmann Recycling and Elektro-Recycling, for the following categories: CRT Monitor Equipment; PCs/Servers; Table Printers and Mix without CRT Equipment. In respect of the other categories, the division is based on figures stated in the respective literature. In the future, further processing analyses shall be carried out so that in the foreseeable future, all categories can be calculated on the basis of processing analyses. The recurring analyses are important because the equipment that is handed in changes over time.

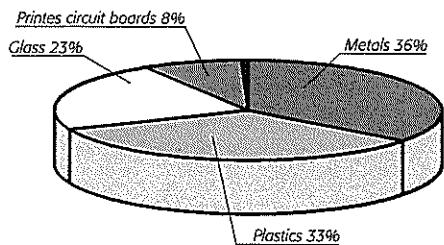


Metal-plastic mix in t	Cable in t	Glass in t	Printed circuit boards in t	Pollutants in t	Others in t	Total in t	%
161	8	3925	7	7		7383	16,0
408	80		17	42	23	3468	7,5
194	10	4804		8		9034	19,6
		102	38	2		453	1,0
29	179		530	31		5611	12,2
24	3	7	21	15		191	0,4
380	49	86	230	15	5	7198	15,7
	35	19	51		9	2156	4,7
232	241	6	54	127	54	10506	22,9
428	605	8949	941	247	91	46000	
5,5	1,3	19,4	2,0	0,6	0,2		

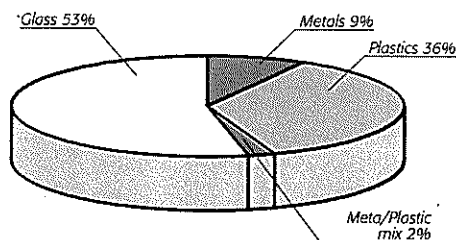
How the evaluation works

The data stated here are merely part of what is possible. In addition to the refining of processing analyses mentioned by Empa, it is now easier to plan ahead for the future. For example, as the figures show, in total we processed 581,000 CRT monitors in 2006, with an average weight of 15.8 kg. The 79,000 LCD monitors had an average weight of 5.7 kg. If one also incorporates into the equation the sales figures over the last 8 to 9 years, it can be predicted that the replacement of CRT monitors by flat-screen monitors will have a considerable impact on recycling quantities and recovered material segments over the next few years.

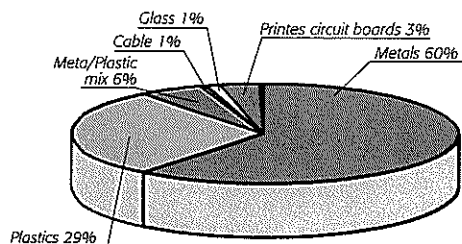
LCD Monitors



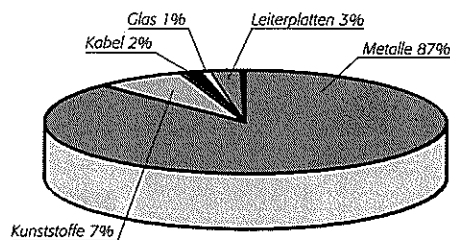
CRT Monitors



Printers



Large-scale copiers



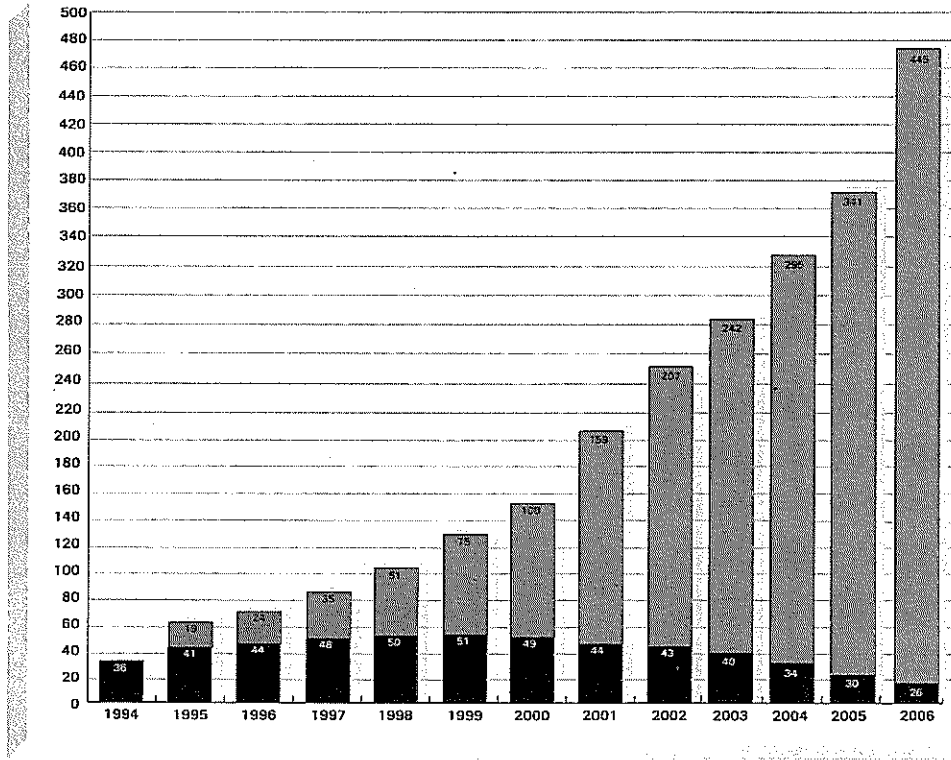
Members

Quantities

Busine

Convention participants

■ B participants (joint account) ■ A-participants (own account)

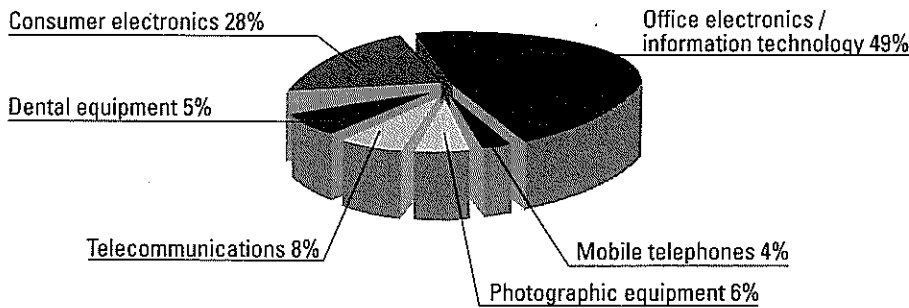


Manufacturers Importers 12%

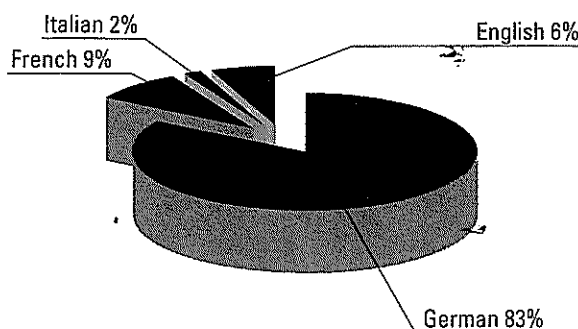
Quantities according to divisions (in t)

- Consumer Electronics
- Office Electronics / Informatics / S technology / Measuring and Medi
- Telecommunications
- Photography Equipment
- Mobile Telephones
- The Dental Trade
- Total**

Convention participants according to sectors



Convention participants according to languages



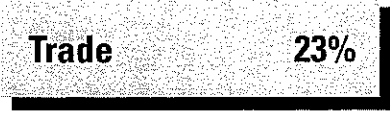
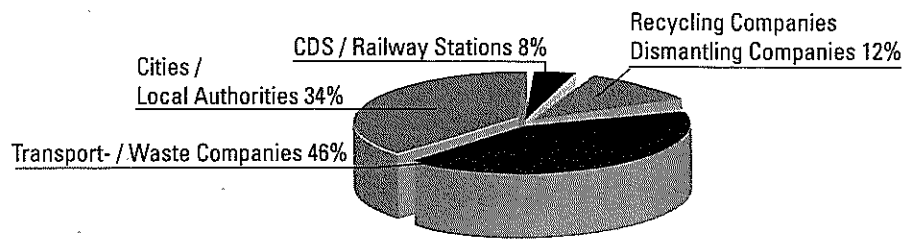
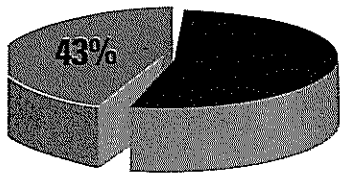
Financing

B-Members Costs in % of total cost

- Recycling Hardware
- Logistics
- Collection Points
- Packaging disposal
- ADF on Batteries
- Audits
- PR Work
- Administration

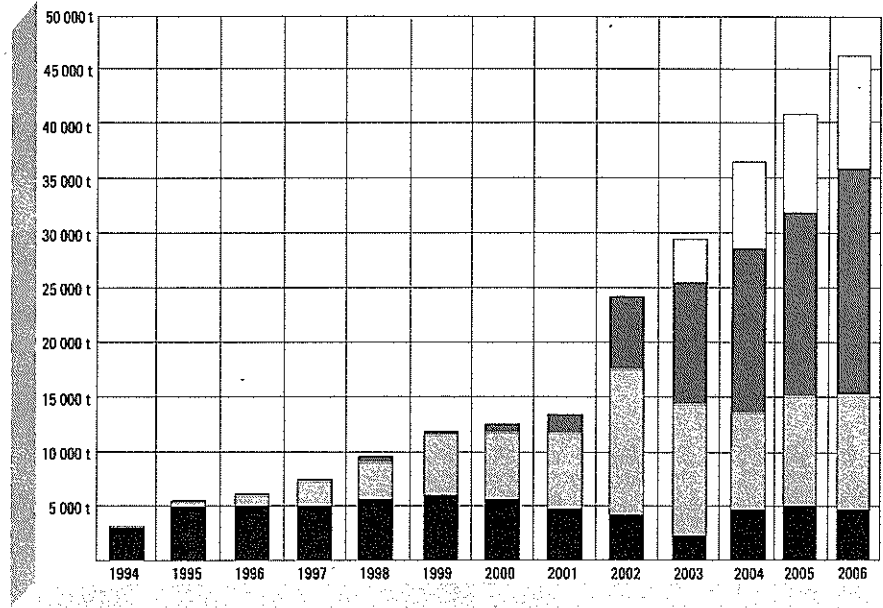
Types of collection points

Private



Quantities taken back

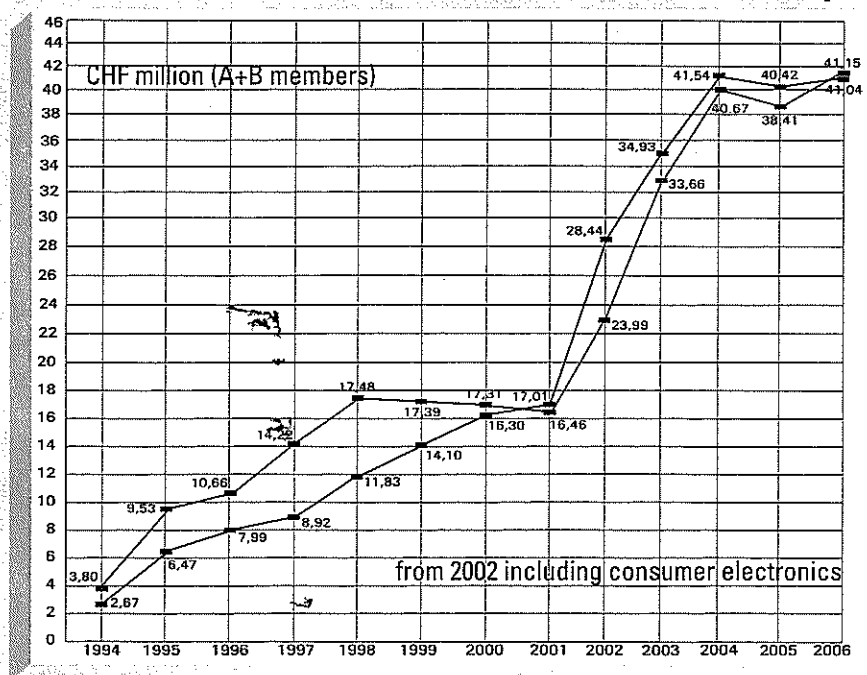
	2005	2006
	15996	17835
nology	25081	26831
	846	1201
	69	77
	68	74
	56	64
	42 116	46 082



Manufacturers Trade Collection points Companies

Costs and yield

	2005	2006
	64,4	60,6
	17,4	18,6
	6,6	7,3
	6,2	7,9
	1,6	1,6
	0,8	0,9
	0,3	0,5
	2,7	2,6



ARF Yield Costs

Balance sheet as per 31.12.2006 (in CHF million)

Assets	2006	2005	Liabilities	2006	2005
Liquid funds	3,626	7,549	Accounts payable	5,547	5,884
Accounts receivable	4,509	4,557	Deferred liabilities	3,610	3,575
Deferred assets	0,265	0,220	Balance brought forward and operating result	6,837	3,014
Securities	19,472	11,939	Operating reserves	7,305	7,254
			Security funds	4,573	4,538
Total assets	27,872	24,265	Total liabilities	27,872	24,265

2006 profit and loss account (in CHF million)

Revenue	2006	2005	Expenses	2006	2005
Advance recycling fees			Personnel expenses	0,579	0,592
B-participants	25,159	20,625	Recycling	22,274	22,865
A-participants	15,809	15,592	Transport	6,831	6,205
Revenue from securities	0,152	0,318	Collection points	2,667	2,361
			Disposal of packaging	2,937	2,196
			Disposal of batteries	0,576	0,564
			Del credere on accounts receivable	0,329	0,070
			Audits / PR / operating expenses	0,903	0,811
			Allocation to safety funds	0,079	0,043
			Operating result	3,945	0,828
Total revenue	41,120	36,535	Total expenses	41,120	36,535

The figures above contain the accounts managed by the SWICO Environmental Commission

The accounts of our A members (own account management) gave rise to the following consolidated result (provisional figures):

Consolidated accounts of the A participants (in CHF million)

<i>Balance sheet as per 01.01.2006</i>	7,589
+ ARF revenue	14,656
+ Change from A to B	2,560
- Own recycling expenses	2,686
- Amount of SWICO recycling expenses	15,809
<i>Balance as 31.12.2006</i>	6,310

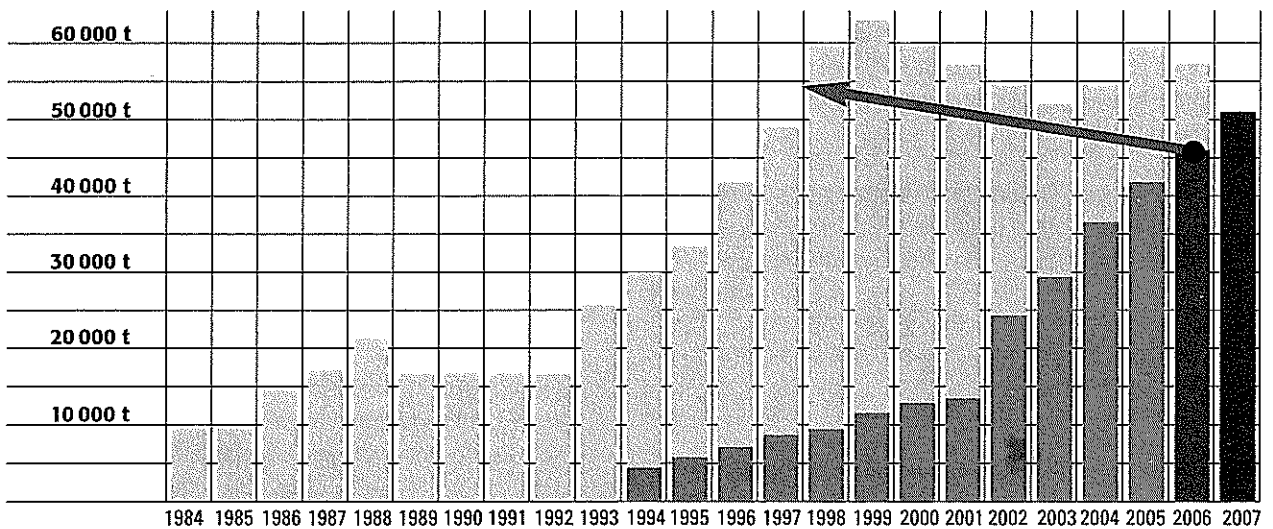
European comparison of quantities taken back in kilograms per resident in 2005

	IT equipment	CRT monitors	Consumer electronics	Television sets	Total
Lowest value	0,6	0,4	0,4	0,8	2,2
Medium value	1,5	0,9	0,6	1,3	4,3
Highest value	2,1	1,4	0,7	1,6	5,8
SWICO Recycling Guarantee	2,1	1,4	0,7	1,5	5,7

Date: WEEE Forum

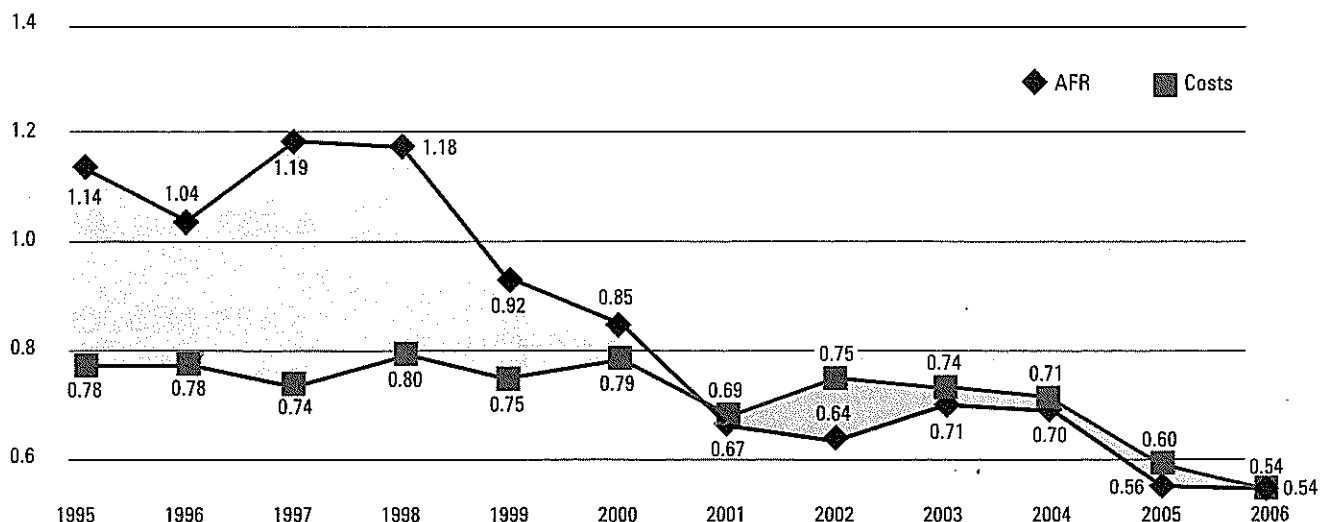
Comparison of imports with recycled quantity

Comparison: **Import of Office, IT and Consumer Electronics equipment into Switzerland** **Quantities processed by SRG**



Recycling quota above 80%

Advance recycling fees versus total costs per kilogram of recycled equipment in €



Assessment of results in 2006

Recycling quantities

Two factors largely determine the result of the SWICO Recycling Guarantee: the recycling quantities and the cost of recycling.

In planning for 2006, the Environmental Commission had projected a 10% growth in quantities. This figure was based on the import quantities into Switzerland in 1997/1998 of 55,000 tonnes. At 46,082 tonnes the forecast was accurate (9.4%). The recycling quota therefore amounts to 84% with an average age of the recycled equipment of 8.5 years (in this respect see the comparison on page 14).

If one extends the project to include 2007, the amount of returned equipment would be approx. 50,000 tonnes. Our planning is therefore based on this goal.

In the European Union, the measurement category kg per resident is part of the Directive (4 kg per resident). Last year the SWICO Recycling Guarantee figure was 6.2 kg per resident. Together with the quantities from SENS (Foundation Disposal Switzerland), the figure in Switzerland for domestic equipment is probably 13 kilograms per resident.

Costs

The direct cost of recycling, transport, collection points and the disposal of packaging increased last year by 3% with a growth in quantities of 9.4%. The falling recycling costs are juxtaposed with an increase, above all, in the disposal of packaging.

A new two-year contract has been negotiated with CDS Cargo Domizil for the transport operations. The contract came into force on 01.01.2007. The two-

yearly tender for recycling services will be issued in the spring of 2007 with new contracts as from 1 June 2007.

Yield / reserves

The ARF revenues increased in the year under review by 11.3%. This is attributable to the new members and the upward economic trend. In addition, the change in the Office/Informatics division from a purchase price dependent tariff to a product dependent tariff has had a favourable effect because falling prices do not automatically result in falling ARF revenues.

The reserves have increased thanks to the higher ARF revenues and the controlled increase in costs. As the diagram shows, they amount to CHF 18.71 million at the end of 2006 in relation to the SWICO Environmental Commission. If one adds the reserves to the accounts of the A participants at CHF 6.3 million (page 12), CHF 25 million are currently available.

According to our rules, sufficient reserves must be in place to finance the costs over six months (at present CHF 18.5 million). We could finance about 8 months by way of the CHF 25 million that are available. The Environmental Commission has therefore decided to review tariff reductions as per 1 January 2008, and to disclose these before the middle of the year.

Revenue development and costs 1995 – 2006

The overview on the following page shows that the necessary reserves were created in the first six years of the SWICO Recycling Guarantee. Since 2001 yields have been mirrored by costs, or there was a slight cover shortage at times.

Reserves

Result and amount carried forward Available	6,837 Mio. CHF
Operational reserves Cover for ongoing obligations for six months, invested in bond funds	7,305 Mio. CHF
Security funds Cover for major risks (equity capital), invested in Swiss federal bonds	4,573 Mio. CHF
Total	18,715 Mio. CHF

The perfect recycling system?

How does the SWICO Recycling Guarantee differ from systems in other countries? How can the costs be compared? Who finances the system? These and other questions are matters that concern our members. We have therefore created «Perfect», a tool for comparing various recycling solutions for electronic waste, on the one hand in relation to the services and on the other regarding costs.

«Perfect» stands for «Performance Evaluation and Comparison Tool». It helps companies record their total cost of recycling electronic waste, and compare it with solutions in other countries. This is a legitimate tool and important for the suppliers: Recycling has become an obligation due to the European WEEE Directive. Consequently, people want to know what it will cost. The race to provide the lowest recycling costs is now on! But what exactly is cost-effective, and how should recycling costs be understood?

The WEEE Forum – of which the SWICO Recycling Guarantee is also a member – has been comparing its members' data for years (an example is listed on page 14). Above all, it addresses the issue of quantities taken back per resident – the different cover of a market exerts an influence on costs – and the various cost types for each recycled kilogram, such as logistics, recycling and controls etc.

Qualitative features were lacking to date. These include services for parties handing in products (what does the solution entail?), the recycling quality (what is permitted, and what not?), and the controls (does the equipment stay in the country, is it exported?).

Perfect is based on 19 questions that can be answered by way of the actual costs or an assessment. The total cost is then to be specified in relation to a quantity (recycling quantity or that brought into the market). The SWICO example consists of equipment of the WEEE categories 3, 4, 8 and 9.

And this is what the evaluation document looks like:

Perfect

(Performance Evaluation and Comparison Tool)

Example
SWICO 2006
(€/kg)

1.	Collection of used equipment (collection points)	0.04
2.	Logistics costs (transport to recycling company)	0.10
3.	Recycling (difference between cost and material proceeds)	0.32
4.	Recycling company information about products	Included in 3.
5.	Controls (collection, receipt at recycling company, processing)	0.01
6.	PR (consumer information)	0.01
7.	Solution administration costs	0.01
8.	Manufacturers' organisational costs	None
9.	Registration costs in national registers	No registration
10.	System membership fee	None
11.	Financial guarantees	None
12.	Cost of the B2B business	Included
13.	Cost of accessory business	Included
14.	Battery recycling (batteries in equipment)	0.01
15.	Recycling the packaging material	0.04
16.	Is the sale of equipment and parts permitted?	No
17.	Do national regulations apply to the processing?	Yes*
18.	Who finances the system?	Consumers (ARF)
19.	Are social institutions involved?	Yes
20.	Total	0.54

* Example of plastic incineration in Switzerland

WEEE Forum: 38 members from 23 European countries



«Collaborating beyond borders without the loss of individual identities...»

Dr. Helmut Kolba, UFH Vienna (Umweltforum Haushalt) is the new head of the WEEE forum committee «System Manager». His impression of his new position:

«Am I proud to have been appointed by the System Managers? More amazed I'd say! I am quite new in the committee. But I quickly saw the huge opportunity to act as a catalyst or a primus inter parus, and be one of the agents of change. When the head of the ministry congratulated me on the task, I also became aware of the value of our work in Austria. Our employees take

pride in our contribution, and in the meantime I have acquired a sense of motivation and satisfaction.

I have internal and external goals for the forum. At an internal level, I intend to provide support, in a manner characterised by partnership and democracy, so that all the 38 systems that work together in the forum can be placed on an equally high level. This must become a matter of course because generally speaking we all have the same customers (manufacturers), and pursue the goal of being able to finance recycling services by way of reclaimed raw materials. Of course this is not conditional on raw material prices on the world market, but it must remain a goal. I would like to make the WEEE Forum a European Competence Centre in respect of electronic waste.

How can this be put into practice? The industry operates worldwide, including the recycling companies. We can even work together in partial areas without the loss of individual identities. One only needs to think of the large quantities that we jointly reconvert into raw materials. Other areas include quality standards for the recycling process or significant comparative data.»

The SWICO Recycling Guarantee congratulates Helmut Kolba on his important, additional, task and wishes him every success in the interest of all joint, non-profit systems, that operate on behalf of the industry.



The WEEE Forum is an association headquartered in Brussels. Founded in 2002/2003 by 8 systems from 6 countries, it has set itself the goal of becoming a European centre of knowledge in all practical electronic recycling matters on the basis of its comprehensive interchange of know-how and joint projects. It is also envisaged that such knowledge be passed on at a political level, and to the associations, so that appropriate decisions can be taken in the future. At the end of 2006 the association boasts 38 systems from 23 countries.

Regional-style electronic recycling

Last year the SWICO Recycling Guarantee further maintained its well-established worldwide contacts, and was able to welcome many delegations from other countries, which in turn gave rise to the opportunity to visit foreign countries. The report contains examples of two trips: A Taiwanese delegation visit to SWICO and a trip to South Africa by order of the SECO Project.

Experience exchange
Taiwan / Switzerland WEEE recycling
Zurich, September 7, 2006

We entered into a constructive dialogue with the delegation from Taiwan on all the key systems aspects: responsibility, collection, financing and controls. Electronic waste has been recycled in Taiwan for some time now. The dialogue therefore focussed on how to achieve larger quantities of returned used equipment

and how such operations can be financed.

The first picture shows the satisfied delegation with Maria Stumpo from the Environmental Commission Field Office and Jürg W. Stutz, SWICO President, with a gift. The second is a closer image of the beautiful figure, made of used monitor glass. Our guests work in the Environmental Protection Administration and at the Chung-Hua Institution for Economic Research.



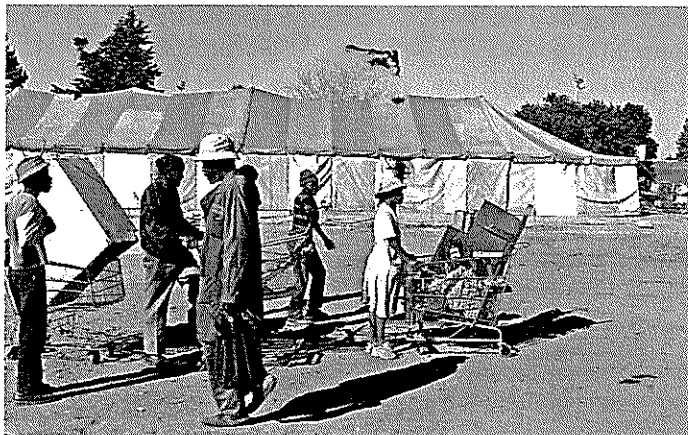
Empa St. Gallen is staging the «Swiss Knowledge Partnerships in e-waste Recycling» project on behalf of SECO. On the one hand it aims to establish knowledge in China, India and South Africa, where the assistance consists of setting up permanent e-waste management systems. On the other it is envisaged that the countries and their knowledge bases be linked to specialists in Switzerland, and that international programs be staged.

SAEEC/ITA Symposium on E-Waste
Axxiz Auditorium, Johannesburg
21 June 2006

It is important that the South African electronics industry shoulders its responsibility, and assumes a key role in establishing lasting and economically-efficient e-waste management systems. SWICO Environmental Commission's contribution

This picture is a snap shot of a recycling facility in Johannesburg (Soweto), where one can marvel at the imaginative organisation of handing back used equipment. A seemingly endless chain of people brings recyclable materials to the yard, where they receive a small consideration.

therefore focussed on outlining the opportunities and benefits for the ITA (Information Technology Association), an organisation similar to SWICO. Furthermore, our task consisted of providing information and training in respect of the RoHS.



There is still room for improvement in respect of how the recovered fractions are subsequently processed, and it could be more profitable. This is also one of the issues that is being addressed in the SECO Project.

Sustainability – entitlement or an empty phrase?

Generally it can be said that terms that are modern and frequently used lose their impact. We should therefore give them some thought, and ask ourselves how significant they are for our private endeavours. Below are some thoughts on sustainability. On the following page we demonstrate how this guiding principle is implemented in the electronics industry.

Two planets meet in space:

*« Hello Earth, how are you? »
Oh, everything was going well until I was
beset by humans.
« Don't worry, dear Earth, that will pass. »*

This witty remark always turns up when the conversation turns to humans plundering the earth. Packed inside a joke, the danger that human life can be destroyed in a few hundred years is easily covered up.

Nevertheless, strategies have been sought for some time to keep our planet in good health. Evidently, it is human nature that man initially focuses on his own well-being, and is not willing to part company with deep-rooted mores, a little comfort and presumed luxury, not to mention the money. Therefore a long-term train of thought would show that by way of an environmentally-compatible change of conduct, man would have nothing to lose, and could in fact gain a great deal, and pass it on to his descendants too.

A strategy that doesn't hurt anyone and costs relatively little is based on the term sustainability. In 1713, Carl von Carlowitz stated in respect of forestry, «That there is an ongoing and permanent benefit, because it is indispensable, and without it the country will be robbed of the food to live.» In other words, the amount of trees removed from the wood should equal that which regrows.

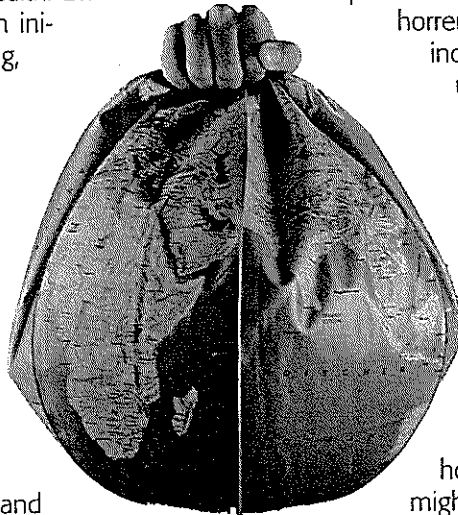
To sustain, sustainable and the noun sustainability have, in the meantime, acquired their very own status in the language in respect of environmental protection. In 1987 a report by the Brundtland Commission, which addresses environmental problems as a consequence of our consumption and production, used the term sustainable development. The widely-used definition for it is the development that satisfies current needs without running the risk that future generations will not be able to satisfy their own needs.

This secured sustainability's career. The expression appeared with changing backgrounds in trials, reports, newspaper articles, rulings and laws. On occasion it was accompanied by a severe, scientific, definition or simply explained as don't harvest more than the amounts that regrow. However, it was always associated with the request to assume responsibility for the future and gear one's conduct towards accordingly.

In many respects, a great deal has been achieved. We and our readers seriously aim to avoid subsequent generations being desperately confronted with huge mountains of electronic waste. We are not alone in this. Eager discussions are being held, campaigns planned and suggestions made in view of the horrendous images of melting icebergs, increasing sea levels and extreme natural disasters – usually at the highest level and with impressive prospects. We aim to and must secure our descendant's entitlement to quality of life.

In the light of such discussions and calculations, the politicians or environmental managers sit back with satisfaction in their limousines and drive home to their detached one-family country homes. Following a long shower they might open a few windows in the adequately heated house. After the evening meal they might drive a little in the country with their wives – naturally in the new Landrover.

Because we are worth it, work hard and want to «enjoy» life, we forget that we share this world with an additional 7 billion people, and that others will follow us. If we were to grant everybody the same conduct that we grant ourselves, the world that we shall leave to our descendants would be a pile of rubble, and sustainability merely an empty phrase.



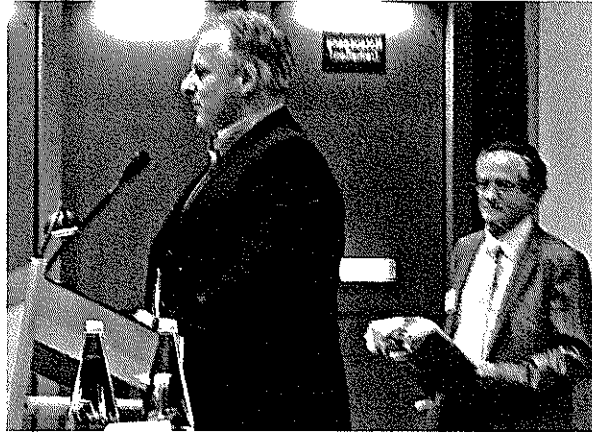
Sustainability in the electronics industry

A SWICO Association and SWICO Recycling Guarantee Conference

On 7 February 2007, about one hundred participants came to the Technopark venue to listen, discuss and take in suggestions for their own projects on this subject.

The diagram below provides a summary of all the environmental measures in this innovative sector. Participants gave short talks on employee-related subjects such as BGF (occupational health promotion), interesting ideas on the planned laws in respect of products and materials, as well as practical contributions, for example on controlling the RoHS regulations (ChemRRV).

If one follows the overview, it becomes clear that SWICO has been very active for some time in all areas. For example, in respect of recycling used equip-



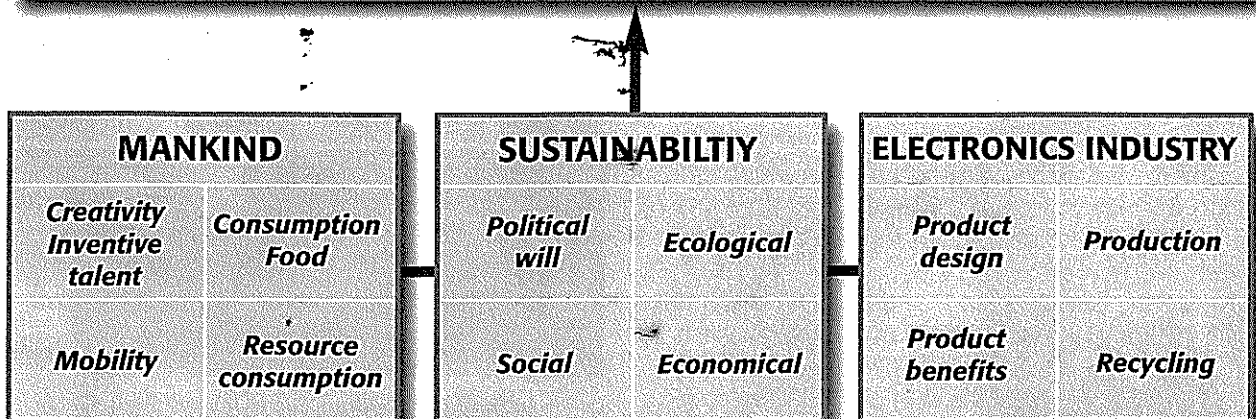
Thomas Glutz, the 500th member of SWICO Recycling Guarantee



ment or the equipment energy consumption levels, where it collaborates closely with the associations electrosuisse, kf, FEA and SLG in eae (energy agency for electronic equipment). Thanks to SWICO's membership in Eicta (European Association) and Economie Suisse our members have access to a wealth of knowledge in relation to products and materials.

It was gratifying to hear from Empa St. Gallen how Switzerland is gaining a worldwide reputation in recycling electronic waste, and learn that Switzerland's ideas are being implemented by other countries. It is not surprising that many participants positively support the development of a SWICO convention for sustainability.

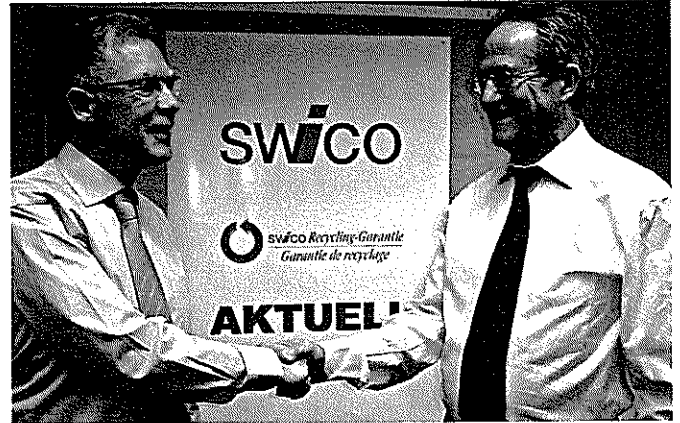
CLIMATE DEVELOPMENT



Change in the Head of the SWICO Recycling Guarantee

On 1 March 2007, Paul Brändli took on the operational responsibility for the SWICO Recycling Guarantee from Peter Bornand, who shall remain Chairman of the Environmental Commission and therefore responsible for the strategic alignment of the recycling solution.

Paul Brändli was a Member of the Board of Management of HP Switzerland, and has been a HP representative in the Environmental Commission for years.



Residential waste: more recycled than incinerated

Report from the Swiss Federal Office for the Environment (BAFU): 2005 was the first year in which residential waste from domestic and trade sources saw larger quantities being recycled than incinerated.

The ratio stands at 51% to 49% in favour of recycling! Switzerland can therefore hold its own in an international comparison – and it is still in the leading group.

ORIS
Overall Recycling Info System



Dennis Lackovic: *«Now that we need the system on a productive basis, I can confirm that we made the right decision and that the supplier Soreco AG has played its part in implementing this goal.»*

The rapid growth gave rise to a situation in which our IT system was no longer capable of meeting the requirements and wishes in respect of internal administration operations. In May 2006, the Environmental Commission therefore decided to introduce a comprehensive, new system.

Following the evaluation and the decision in favour of using the Xpert.Line from Soreco AG, Schwerzenbach, the project was implemented with effect from July 2006 and was ready for the start of productive operations on 1 January 2007.

Thanks to the great commitment of the entire team in transferring data, under the leadership of Dennis Lackovic, Controller, we have been using a modern, web-based «ORIS» system since 1 January 2007. It provides effective support for all administrative tasks, such as registering members, recording the ARF revenues and invoicing, dealing with accounts payable invoices, marketing support and evaluating data.



Dennis Lackovic, Flavio Sadeghi, Soreco AG, and Sibylle Gaudy during the intensive trial of ORIS.

Masthead

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