

5. ENVIRONMENTAL REPORT

5.1. RSDB AND THE ENVIRONMENT

INTRODUCTION

RSDB values the environment in all its aspects and has a professional Environmental Staff Department. RSDB is not obliged to publish a report, but as a major player in the Netherlands and Europe, the group does feel a moral obligation. The idea is to let people see what we're doing, where we are and where we want to go.

The central emphasis of environmental care at RSDB is the printing works because that is where environmental aspects are most acute. RSDB has five web printing plants in the Netherlands (rotogravure and web-offset plants), with an 85% participation in one plant in Hungary. In 2004 RSDB still had ten PlantijnCasparie sheetfed offset printing plants in the Netherlands. In autumn 2004 it was announced that the PlantijnCasparie plants would be divested in connection with RSDB's strategic reorientation. This situation, coupled with our sympathy for the fact that these plants could not supply all the information in time, led us to decide to omit the data on these plants in this report. The data have been amended where appropriate.

In a web printing plant the paper runs off a roll into the press. The paper web is impressed with ink as it passes over cylinders holding the printing formes. The web plants serve the national and international markets for mail order catalogues, retail printed matter, directories, sponsored and commercial magazines. Roughly one third of all print produced goes abroad, to the UK, USA, Belgium, Sweden, Germany, Denmark, and France. Sheetfed offset plants usually do printing for the regional and national business market. Prepress activities precede the printing: text and images have to be made up into pages and the press formes must be prepared. After printing there is the finishing process: finishing the printed matter by cutting it to size, folding it, gluing, etc., followed by dispatch.

The bulk of the raw materials input to all printing plants is made up of paper, ink and energy. The offset plants also purchase aluminium plates for the preparation of printing formes. The process also

requires a variety of ancillary chemicals, including cleaning materials.

2004

There are some environmental aspects that lead us to state in all honesty that we are not performing adequately, but they form the targets for the future. There is once again good news to relate for 2004. On by far the majority of aspects the web printers as a group have outperformed 2003. What it mainly boils down to is process management. In the past we were virtually exclusively concerned with 'the environment' but now the focus is on the process. It's a double edged sword, even in the environmental area. A perfectly run, efficient printing process saves immensely on costs, while the reduced paper consumption, fewer press cleaning operations, and lower energy consumption result in pure environmental benefit.

IN THE FINGERTIPS

The importance of process management can also be seen when a new technology is introduced. It's seldom a miracle cure that works right from the start, with just a flip of the 'ON' switch. It takes the crew's complete attention to discover how the process can be controlled in the new situation. Initially it can even have an adverse effect on environmental performance. We saw that in 2004 in two plants, which invested in a new, fully automatic ink dosing system which did not result in the desired effect. But with a strong drive to get the process in their fingertips, that was only a temporary investment towards making a giant leap forwards. A plant that had made the investment a year earlier had great results with it in 2004! One of the printing works has gone even further in 2004 in standardising its paper formats, which has greatly increased the company's efficiency. This strengthens our conviction that we are going about improving in the right way.

FUTURE

RSDB is keenly aware of new processes and technologies that can also serve to improve their environmental performance. In recent years it was the digitisation of the prepress operation, 'Computer-to-Plate' (CTP) technology, that was an example of such a major development. A more recent example is

the new GMI ink dosing system, which uses continuous photographic monitoring of the printed web as it passes the press, with continuous feedback to the ink dosing. Advantages: the printed matter achieves the correct colour faster, meaning less paper loss, and optimum dosing, meaning reduced consumption of ink and moistening water additives, plus less waste as less product is rejected. In 2004 one plant reaped the benefits of installing GMI in 2003; two plants introduced it in 2004 and we shall profit from this in the years to come.

Apart from the technological possibilities, which will probably crop up in the future too, improvements can also be achieved by improved process management. The possibilities were clearly illustrated in 2004 by two rotogravure plants. It is expected that the other web printers will improve their performance along the same track in 2005.

5.2. ENVIRONMENTAL POLICY, INSTRUMENTS AND MEASURES

5.2.1. RSDB ENVIRONMENTAL POLICY

ENVIRONMENTAL POLICY STATEMENT

RSDB has set out its environmental policy in the RSDB Environmental Policy Statement (see page 71). The individual RSDB companies subscribe to this statement as being their own environmental policy. The statement marks out a concern for safety, health and welfare as an integral part of the group's business policy. Environmental policy is concerned with the prevention of pollution and the avoidance of nuisance to the surroundings. This concern also extends to the use of raw materials and energy.

RSDB regards an environmental management system, which must comply with the appropriate requirements, both national and international, as an important means by which to manage its environmental policy.

RSDB is committed to a continuous effort to improve its environmental performance. The Eco Balance is one way to chart this performance. Where possible, RSDB seeks to do more than is legally demanded, in so far, of course, as voluntary measures bear a healthy relation to useful achievement and fit in with

profit targets. Priority is given to those measures that have a number of effects, not just environmentally but also in other areas, such as safety, welfare, quality and efficiency.

Our striving for improvement also means that RSDB is actively involved in a search for less environmentally harmful processes. RSDB also supports and encourages developments in the paper industry (a major supplier), in order to ensure that the paper purchased has the best possible environmental prior history. Sustainable forestry and a record of the origin of all fibre material are significant aspects in the selection of our paper suppliers. In terms of its own sales, RSDB seeks to severely restrict or exclude any adverse effects from its products, packaging and services.

RSDB makes the necessary information available to all employees, encouraging participation in such training courses as may be needed. Interested parties and others, both inside and outside the company, are kept informed about the degree of environmental burden and relevant developments.

ENVIRONMENTAL POLICY AGREEMENT

The government has formulated the Netherlands' environmental policy in the National Environmental Policy Plan (NEP Plans 1 to 4). These plans set down the general goals for cutting environmental pollution. In its implementation of this policy, the government translates it in terms of groups of companies – a target group policy. In doing so, the general policy goals in the Plans are transformed into concrete targets and measures. A number of target groups signed a covenant (an Environmental Policy Agreement) with the government. This was also the case with the KVGO (The Royal Association of Graphical Industries), of which RSDB is a member. RSDB has contributed to the drafting of this covenant for the graphic industry and participates actively in its further support. RSDB expects that future agreements with the government will contain branch-level objectives.

To give an impression of the range of agreements covered in the present covenant, they include silver recovery (prepress), the use of certain cleansing

materials and other volatile chemicals, reducing the percentage volume of isopropyl alcohol (IPA), measures related to hazardous and industrial waste, regulations for the storage of hazardous materials, and measures to restrict soil pollution. The first period, 1993–2000 gave positive results: the printing plants achieved their targets. The RSDB companies are now concentrating on fulfilling the agreements for the period 2000–2010 to make the second tranche a success.

In regard to the emission of volatile organic compounds (VOC), the government has asked industry for an extra reduction of 35% until 2010. The graphics industry's agreement to achieve this target is still viewed by RSDB as realistic. In regard to toluene, for example, the RSDB companies that work with this compound are already well on their way. In order to achieve the VOC reduction targets, the percentage loss of toluene, for example, must remain at or below 5%. RSDB companies already reached this percentage.

PACKAGING COVENANT III

The Third Packaging Covenant agreed that the companies involved would adopt measures to reduce the amount of packaging waste that is disposed to landfill or incinerated. The industry-wide target is that the quantity of packaging to be disposed of must be at most 850 ktonne in 2005. This target presupposes that 70% of the cardboard and paper put on the market can be reused. The targets are for the industry as a whole, but of each company an individual contribution is expected. Initially, each company is recording how much packaging material is purchased per annum, how much is placed on the Dutch market, and how much is removed as waste for recycling. The quantity of plastics exported annually is also recorded.

After achieving the targets under the Second Packaging Covenant, which ran to 2001, any further reduction will require a proportionally greater effort and creativity, partly because customers are making increasing demands on the packaging of their end products, often including sealing in plastic film so that CD-ROMs, extra supplements or other products can be included. The demands of the postal service

also play a role: products have to be bundled, and thus packaged, according to the route walked by the postal personnel ('e-sorting'). This, however, cannot detract from the fact that RSDB companies adopted a number of packaging measures that went against the flow, selecting their materials, for example, to combat the adverse environmental effects of these developments as far as possible.

5.2.2. GOVERNMENT RELATIONS

LEGISLATION AND LICENCES

Legislation, and the associated licences, means that RSDB companies have a very direct relationship with authorities. Each company must possess a licence under the Environmental Management Act (called a Wm Licence), for which local government is the relevant issuing authority. The Environment Management Act regulates not only all conditions relating to the company and its direct surroundings, but also such matters as the discharge of waste water to the sewer.

All licence requirements are checked annually by means of internal tours of inspection and a general inspection. The licence prescribes such matters as sound measurement, determining the emissions of certain chemicals to the air and sampling of rinse water that is discharged to the sewer from the prepress departments. A number of plants are obliged to measure and monitor the soil quality around storage tanks.

Some RSDB companies possess a license under the Surface Waters Pollution Act (Wvo). They treat their waste water in their own plant, after which the water is discharged to the sewer.

Those plants that extract groundwater are licensed by the Provincial government.

DISASTER MANAGEMENT

If inspections show that permitted concentrations are being exceeded or under other irregular circumstances, the companies take immediate action to counter the cause. In all cases the licensing authority is also informed of the events and subsequent remedial actions.

All companies have prepared disaster plans in case a serious calamity should occur. The personnel are all instructed in these plans and internal company assistants are trained.

5.2.3. INSTRUMENTS AND ORGANISATION

Certain environmental developments are initiated and facilitated by the RSDB Environmental Staff Department. A number of group-wide ambitions have been formulated and major contracts have been signed, for waste removal among other things, on behalf of the associated companies. The RSDB companies, as associates within a single printing group, can also quite openly compare the solutions they have chosen and their environmental performance. This type of benchmarking helps to improve their performance. Externally, RSDB safeguards its own interests and those of the graphics industry in general. By participating in a variety of national and international discussions, RSDB can react in time on changing legislation and regulation at an early stage.

ECO BALANCE

The Eco Balance was introduced to all companies throughout the group in 1994. This is a mass balance of all ingoing and outgoing material flows, plus energy and water. The data produced by RSDB are co-ordinated and validated by TME – the Institute for Applied Environmental Economics – which specialises in the economics and management of the environmental and natural resources. This is done both for the companies individually as well as the Group as a whole.

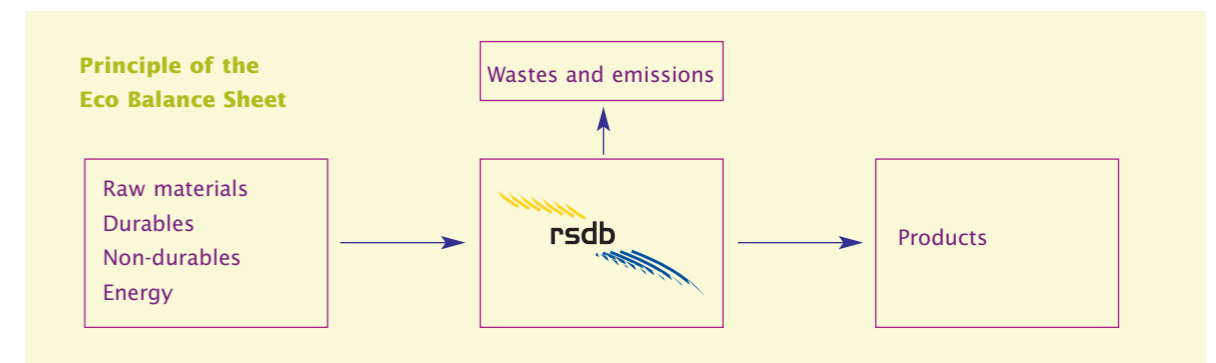
The Eco Balance is not just a record. If performance is accurately captured in terms of numbers, it becomes possible to set precise goals, with plans for action, the results of which can also be precisely measured. Because the Eco Balance reveals the companies' complete material budget, it can be used not only to manage emissions but also to help in the efficient management of raw materials and ancillary chemicals in the production process.

The data for the Eco Balance are collected continuously, so that a very frequent, up-to-date picture of performance can be generated, should that be needed to keep a running check on certain particular development.

This complete mass balance gives the RSDB companies an environmental picture that goes far further than is prescribed under an environmental care system. The basic principles underlying the Eco Balance are shown in the diagram on this page.

ENVIRONMENTAL CARE SYSTEMS

RSDB regards its companies' internal environmental care systems as an important means for implementing its environmental policy. Systems like these form a coherent unity of policy, organisational and administrative regulations by which the companies give form and content to their environmental management structure. It is precisely such systems that allow environmental management to be done systematically according to well-described, fixed procedures. Moreover, the system demands that the companies continuously improve. This follows a cyclic process of goal setting, action, and evaluation, resulting in the setting of new goals.



The environmental care system is concerned with all environmentally-linked business activities. Among other things, it sets down operating procedures related to environmentally-conscious purchasing, the selection of suppliers and processors in the chain, working with minimum stock levels, methods for storing and labelling process materials, good housekeeping (the correct use of materials), and neatness on the shop floor (tidying mess, separating waste according to procedures). Other elements of the environmental care system relate to getting the workers more involved, environmental training, and communicating about the environment, both internally and externally.

Since environmental care extends to activities throughout the supply chain, including waste processors, RSDB companies can call on the results of a thorough, central assessment of all suppliers. These data are incorporated in a single, central RSDB environmental database. This system, which is still under construction, will be the central repository of all environmentally relevant information, such as all environmental licences for all locations, the Eco Balance, all certificates, and all annual environmental reports.

RSDB companies set up their environmental care systems according to the international NEN-EN-ISO 14001 environmental standard and have them certified by BSI Management Systems BV. Once ISO 14001 certification has been achieved, the care system is regularly audited to determine whether it still merits the certificate. Internal audit teams made up of the companies' own staff are also active, partly in view of the recurrent external audits, using an audit programme that checks all environmentally-related procedures and working documents at least once every three years. In RSDB companies that also have an operational quality assurance system, the two audits are combined. Quality and the environment are in fact two sides of the same coin: perfect process management is the route to both excellent products and environmental benefit.

COMPANY ENVIRONMENTAL PLANS AND ANNUAL ENVIRONMENTAL PLANS

At the RSDB company level, environmental policy is developed in concrete terms in company environmental plans and annual environmental plans. These plans are based on the Environmental Policy Agreement (see p. 59). The company environmental plans, which contain measures for a period of four years, are drafted in part for and after discussion with government. The plan gives the company an insight into its business processes and possible environmental burden; expected business developments and environmental effects; environmental burden standards that they have to observe; and the division of tasks and goals in its environmental policy.

The annual environmental plans lie under the company environmental plans, allowing the companies to set down their activities for the year in question. Several web plants have a digital system for monitoring the execution of the annual environmental plan.

ENVIRONMENTAL CO-ORDINATOR

Each web plant has its own environmental co-ordinator, who has an important internal advisory function which includes the drafting and establishment of procedures. Other functions include compliance with environmental legislation – and checking whether it is being complied with – and maintaining the environmental care system. The co-ordinator also functions as a checkpoint for the assessment of the environmental safety of incoming materials. Another task is the assessment of the environmental aspects of suppliers of products and services. Besides that, time is devoted to conducting the checks and inspections of the various departments and guiding the (internal) audit teams. Checks and inspections are concerned with safety, neatness and orderliness, conducting improvement campaigns and recording their results. The co-ordinator also monitors the progress of projects conducted under the annual environmental plan.

Within the companies there is a periodic, department-level consultation, attended by the environmental co-ordinator. This departmental

consultation is an important opportunity to communicate with fellow employees about environmental concerns. Within RSDB as a whole there is a general, wide-ranging environmental co-ordinator meeting, held once every quarter, at which all environmental co-ordinators from the various RSDB printers discuss developments, problems and their solutions in their own areas, exchanging knowledge and experience.

COMPLAINTS MANAGEMENT

Complaints are an indicator of the relations between a business and its surroundings. They are also valuable signposts to the improvement of company operations. The companies take pains to treat complaints seriously, the keywords being: recording, personal resolution and active follow-up. The procedure whereby environmental complaints arrive or are collected at a single point has been set down in writing.

TRAINING

Companies with a certified environmental plan, or that are undergoing the certification process, train their staff as internal auditors. In some cases, according to the specific situation in a given company, environmental training courses are purchased from external suppliers to make all personnel aware of environmental aspects, so that they too will be able to indicate points for improvement. 'The Environment' is thus steadily losing its status as 'something extra' as it becomes part of the regular training given, for example, to new printers when they enter employment with RSDB.

5.2.4. TARGETS, MEASURES AND PROGRESS

RSDB-WIDE

For RSDB as a whole, attention to the environment in 2004 can be summed up as a striving for good process management. Apart from improving product performance, this has a positive, across-the-board effect on the environmental burden imposed by the production process. Optimum ink dosing, for instance, has a favourable effect in the consumption of volatile isopropyl alcohol, added to the moistening water to improve the interplay of water, ink and

printing plate. It also improves paper wastage, i.e. the amount of extra paper consumed on the press, as at the start of a production run.

It has been RSDB policy for years that all printing plants have a certified environmental care system. If they are to retain their certification, they regularly have to undergo a successful environmental audit. Internal and external audits were thus a major topic in RSDB companies.

OTHER

Besides the group-wide ambition, more company-specific targets and measures held at local level, as described in the companies' annual environmental plans for the reporting year. These include improvements to water treatment; air housekeeping around the presses (less emission of volatiles); underground tank flooding prevention; chemical storage; and the quantity of hazardous waste. Such matters as underground tank inspection, further standardisation of paper formats (paper efficiency), energy measures, drafting a traffic management plan, and the acquisition and employment of new technology (GMI) were also included in the 2004 company ambitions.

WASTE FILM RECYCLED

One of the web-offset plant's ambitions included the collection of more waste plastic film for recycling. They already collected the waste film released during magazine packaging, but there was also a waste film stream from incoming materials. These relatively thick types of film had hitherto been rejected for recycling because large stickers were attached to it, which were not easy to remove. The web plant contacted another waster processor and, after some discussion, this company admitted there might be a way to recycle it. This opened the road to tripling the amount of film offered for recycling, keeping it out of the company waste stream.

There also turned out to be a collection problem. This thick type of film takes up such a volume and is so 'unruly' to store that there is a reasonable chance that it would 'escape', taking up a life as indigent waste. After talks with the waste processor, a non-standard collection method was found. A different collection system and larger receiving capacity means that the employees can now collect the waste film simply, without making a mess of the entire department. The solutions have been set down in a formal agreement with the processor. An example of chain management, where all parties look jointly for an appropriate solution. The printing plant has been collecting waste plastic film using the new method since November 2004.

5.3. RSDB ENVIRONMENTAL INFORMATION

5.3.1. INPUT-OUTPUT

The environmental data presented here relate to consumption of energy and water, usage of process materials, wastes (solid wastes, waste water, emissions), and possible nuisance to the surroundings. All in so far as they are directly related to the activities of RSDB companies. Indirect environmental aspects also play a role, of course, such as the production of the chemicals that RSDB purchases or the further treatment of company waste. The environmental burden produced elsewhere in the chain forms no part of the Eco Balance (see p 61) and has not been incorporated in the data presented here. This does not mean, however, that RSDB's concern starts only upon purchase and stops after the waste leaves the plant. RSDB is actively concerned with other parts of the chain, making its requirements clear both to suppliers and waste processors.

Following we present first RSDB's 'output' data, in terms of waste water, atmospheric emissions and waste, as well as on nuisance and environmental incidents. These are followed by data on the consumption of energy, water and other materials on the 'input' side.

The figures come from the RSDB Eco Balance, which is derived from a careful record of all inflows and outflows. It should be noted, however, that not all flows are easy to weigh. The release of volatile compounds from certain formulations, for instance, has to be assessed from a given percentage evaporation. In such cases we have to rely on theoretical and empirical knowledge, verified as far as possible by experiments and measurements made on the shop floor.

The data relate to the five web-printing companies established in the Netherlands. The performance of the printing plant in Hungary (85% owned by RSDB) – a company that has completely fulfilled all Hungarian environmental standards since new construction in 2002 – will be incorporated in the Eco Balance as soon as it becomes wholly owned by RSDB.

The presentation shows the 2004 data in every case accompanied by data from previous years. The graphs display annual figures from 2000 on. Data for different years, however, cannot be simply compared. Changes of production volume and the number of plants incorporated in the Eco Balance naturally influence both input and output. In order to facilitate comparison, all data have been recalculated in terms of quantities per tonne of product.

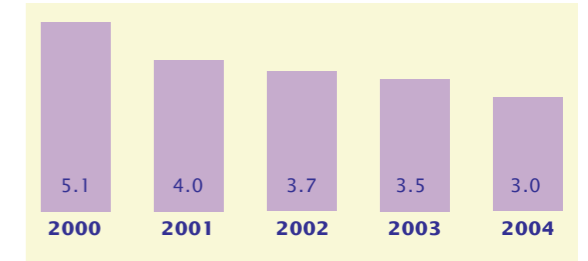
Account has also been taken of the possible consequences of the fact that a specific group – the ten sheet offset plants – are no longer in the picture. It may be that these plants contributed disproportionately to certain environmental aspects of RSDB's total performance in previous years. The absence in the balance of figures for these plants could also still work through, even in the 2004 figures, as corrected for production volume. The text accompanying the data therefore reflects the environmental performance achieved in 2003 solely by the RSDB web plants.

5.3.2. EMISSIONS TO WATER

All plants have equipment that secures that the permitted standard for waste water quality is more than adequately achieved. This high-quality treatment means that one of the gravure plants could use a completely different cylinder processing technique which releases more silver (in a concentrated albeit, in absolute terms, minor quantity). This process modification is ultimately environmentally neutral. The quantity of treated waste water discharged has also declined sharply.

5.3.3. EMISSIONS TO AIR

RSDB's emissions of VOC to air (kg/tonne product), 2000–2004



Roughly 20% of the total amount of VOC (in 2004) consists of isopropyl alcohol (IPA). Other VOC emissions relate to volatiles from other moistening water additives, cleansers, and toluene from printing ink, together making up approximately 72% (2004) of the total mass of VOC. VOC emissions per tonne of product declined in 2004. The key figure for 2004, reflecting the VOC emissions of the web plants only in comparison to 2003, shows that emissions per tonne of product declined by more than 13%.

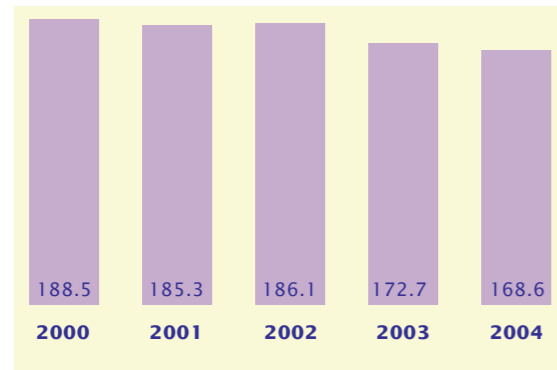
In the offset plants, IPA and other moistening water additives account for approximately 90% of all VOC emissions. The measures taken to reduce IPA consumption have led to roughly a halving of the emission of this compound per tonne of product between the late nineties and 2000. Some presses are now printing alcohol-free. Where this is not possible (both the press and the product type must be suitable), in recent years we have been exploring the lower dosage limit. Further improvements are increasingly difficult, but the topic still engages RSDB's attention. In 2004, emissions of this compound in the web offset plants declined by about 13% under 2003 the level.

In 2004 the rotogravure plants emitted approximately 10% less toluene per tonne of product than in 2003, thanks to a number of measures, such as alterations to the air management round the press (allowing more toluene to be caught for recycling) optimisation of the toluene retention system and modified ink formulas.

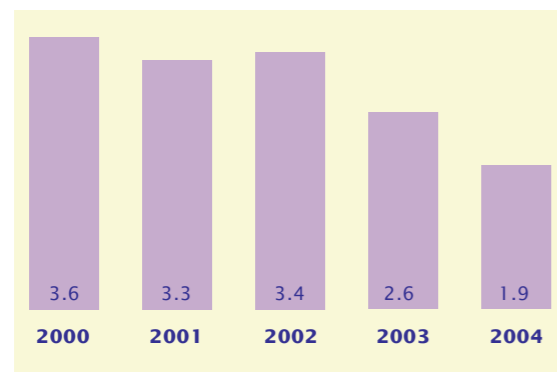
5.3.4. WASTES

RSDB wastes (kg/tonne product) 2000–2004

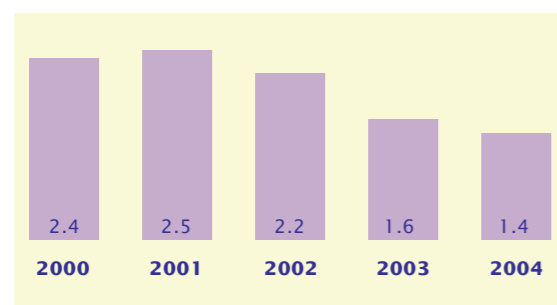
Recyclable waste



General waste



Hazardous waste



Recyclable waste consists for the most part of paper and cardboard. The quantity of waste per tonne of product produced from the web printers was more than 2% less than in 2003 (measured against both the 2003 key figure for the entire group and that for the web group alone). This cannot excuse the fact that some individual plants saw an increase in the

amount of recyclable waste per tonne of product. This was caused by press problems, start-up troubles with the introduction of a new technology, or the removal of old machine parts (iron and steel). This was compensated, however, by sufficient positive developments in other plants, where, for example, the benefits accrued of the new GMI technique, an automated ink dosing system (see p. 59) introduced in 2003, further standardisation of paper formats (fewer remainders) and improved process management.

The energy invested in 2004 in the introduction of GMI in two web plants is expected to lead to improved performance in 2005.

The quantity of general waste per tonne of product is declining. If we look at the results of the web plants only, with 2003 as reference, then there is a decline of nearly 8%. This entry, however, will always be subject to swings that are unrelated to any measure taken for its reduction. The picture would have been completely different if 2004 had been a year with relatively many 'unusual' activities, such as demolition, reconstruction, and tidying campaigns.

Just like general wastes, the quantity of hazardous waste can change measurably due to unusual activities (or the lack thereof). In 2004 the web plants jointly produced relatively more hazardous waste per tonne of product than in 2003. In comparison to the group as a whole, this group of plants achieved more favourable key value of 1.2 kg / tonne of product. Among the causes were the large scale removal of old ink or removal of bathfluids used in cylinder processing. Press problems at one plant released fairly large quantities of an oil-water emulsion. The presence of a minor amount of IPA meant that this had to be disposed of as hazardous waste.

Environmental burden?

The data on RSDB's waste streams and emissions do not in every case represent the actual burden to the environment. 'Hazardous waste', for example, is obviously not introduced into the environment but is carried away for processing. The waste water, too, that the plants discharge to the environment also undergoes final treatment in the sewage operator's plants. Nevertheless, RSDB's self-assessment, however, takes full account of the quantities of these wastes produced in its output streams. The Eco Balance does include a separate category for 'recyclable wastes' since these do not actually enter the waste stream but are re-used as raw materials.

Despite this caveat, as well as the accents laid on us by government (concern for VOC emissions), the entire mass balance is important for RSDB, in terms of its significance for our active concern for the environment and an efficient usage of materials and energy throughout all segments of the company.

5.3.5. ENVIRONMENTAL INCIDENTS, NUISANCE

Minor incidents were recorded in a number of plants in 2004, such as an oil leak due to a burst hose on a fork lift truck, leakage of detergent from a barrel that fell from a defective lorry tailgate, ink leakage, acid released from a dropped battery, a fire alarm and internal reports of unsafe situations (order and neatness). The problems were resolved without noticeable environmental damage.

There were a total of four complaints in 2004, relating to two web plants. One plant received three noise complaints from its neighbours. In one case, a local authority investigation showed that the plant was not responsible for the noise. In two other cases it was: a shred of paper shredder got stuck, keeping the press container working continuously. In 2004 it was decided to install extra measures to blow shreds of paper away from the sensors.

Another web plant received a complaint about polluting substances in a timber container. Agreements with employees were made arising from a complaint about the collection of timber and greater supervision was instituted. The other plants did not receive any complaints.

5.3.6. CONSUMPTION DATA

ENERGY

RSDB's energy consumption (Gigajoule/tonne product) 2000–2004



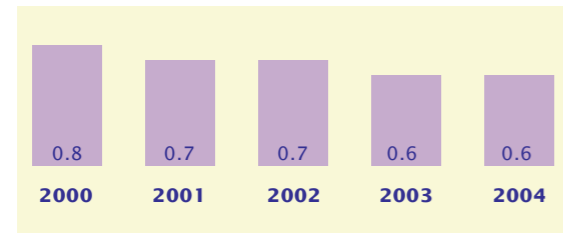
The energy consumption figure includes all energy consumed: electricity, gas and district heating. Consumption per tonne of product has been nearly constant for years. Consumption continues to command RSDB's attention (consumption analysis, attention during investment decisions, reconstruction, etc.).

A slight reduction can be seen in 2004. In comparison with the web plants in 2003, there was a roughly 5% reduction in energy consumed per tonne of product. A number of special measures have been taken, such as the installation of low-energy equipment, better regulation of the building management system, or improved draught doors. To a great extent the improvement is also related to good process management and the favourable effect of the higher productivity in the reporting year. More production implies that the equipment can function more efficiently. When calculating the key figure, the non-print-related energy consumption (e.g. energy for space heating) remains almost constant.

New activities were undertaken in 2004 that should improve matters in the future. These include the creation of a new lighting plan, coupled with a pilot scheme in which consumption monitoring is coupled to a digital information system. This can be accessed at any time to get up-to-date consumption figures.

WATER

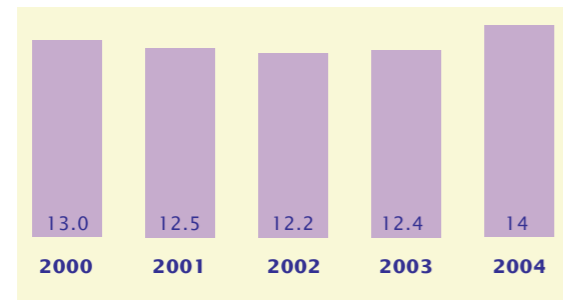
RSDB's water consumption (m3/tonne product) 2000-2004



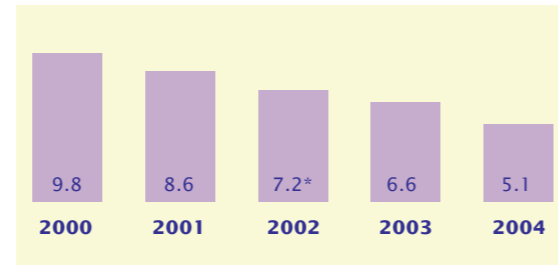
Further improvement must come from relatively minor water-saving measures in the various plants. If the consumption of the five web plants in 2004 is compared with the key figure for the same group in 2003 (and not with the figure for the larger collection of plants in the balance) there is a reduction of more than 9%. Decent gains were made by, for instance, a switch to air-cooled pumps and tightening up on preventive maintenance, which prevented losses.

AUXILIARY AND PROCESS MATERIALS

RSDB's consumption of auxiliary materials (kg/tonne product) 2000-2004



RSDB's consumption of process materials (kg/tonne product) 2000-2004



* Additional data that have become available have led to a correction of the 2002 figure (earlier reported as 8.2 kg / tonne).

Besides raw materials – chiefly paper and ink, which RSDB has for years consumed at a rate of about 1.2 tonne/tonne product – the company distinguishes between auxiliary and process materials.

Auxiliary materials include such things as binders, such as wire and glue, stickers and packaging, which make up more than 90% of the total weight of auxiliary materials used within RSDB. The increasing demand for printed matter to be packaged, especially in plastic film, in particular dominates the consumption of auxiliary materials. This trend cannot be entirely countered by technical means in the printing works, such as the use of thinner film or improvements to the packaging line (such as control automation and still more custom packaging per order).

If the figure for auxiliary material consumption in 2004 is compared with the consumption by the same group of RSDB web plants in 2003, then there has been an increase of more than 10% per tonne of product.

Process materials are chemicals (about 35% of the total mass) and such other things as plates, developer and fixer, cleansers and disposable packaging round products supplied to us. The consumption of process materials is governed to a large extent by external factors due to the order package and profile (use of colour, colour changes, print runs, paper types, etc.), since these determine the demand for plates and cleaning material. In 2004 our customers, due in part to the economic situation, often had their printing done in shorter runs, which

led, among other things, to a higher usage of printing plates per tonne of product. On the other hand, gains have been booked, too, as companies used less developer and fixer, cleansing materials, and fewer polishing cloths. An example of a measure that had a beneficial effect in 2004 is the installation of a platedeveloper storage tanks at one of the web plants. In comparison with the use of smaller packages of developer, this saves storage and developer loss, since a small amount always remained in the packages.

If the figure for process material consumption in 2004 is compared with the consumption by the same group of RSDB web plants in 2003, there is a reduction of about 7%.

5.4. ENVIRONMENTAL POLICY STATEMENT

Roto Smeets De Boer (RSDB) views environmental policy as an integral component of sound business policy, on a par with a concern for safety, health and welfare. The group is also involved with society and has a responsibility to its employees, clients and the general public.

The group's environmental policy is concerned to prevent pollution of the air, water and soil and to limit nuisance from noise and other causes. The environmental effects of the use of raw materials and energy form a central theme within this policy.

The actual, effective implementation of this policy involves the use of an internal Environmental Care system that fulfils the following criteria:

- The system satisfies the requirements set down in the ISO 14001 standard, including the related certification, to guarantee a satisfactory, responsible place for the environmental care system within the entire company's operation
- The system is suited to the nature, size and environmental consequences of RSDB's activities.

This internal Environmental Care system has been set up to achieve the following objectives:

- Compliance with the provisions set down in environmental legislation and in anticipation of new legislation, both national and European.

- Building an adequate set of instruments at plant level to allow the total environmental burden to be controlled and limited.
- Suffusing the entire organisation with the need to limit as far as possible the adverse effects of business operations on the environment, especially in regard to emissions and waste streams. A major part of this endeavour is the optimisation of the effective utilisation of raw materials and energy.
- Adequately informing those involved, both inside and outside the company, about the degree of environmental burden and the improvements achieved.

RSDB actively seeks less environmentally harmful business processes.

RSDB is committed to a continuous effort to improve its environmental performance.

RSDB actively supports and encourages those developments in the paper industry that lead to the use of environmentally friendly raw materials and the re-use of waste paper.

The environmental 'track record' of purchased paper is monitored. Ecological forest management and a record of the origin of the fibre material are important considerations that affect our choice of paper suppliers. This guarantees that the timber used originates from sustainably managed forests.

RSDB actively seeks to eliminate or restrict as far as possible any adverse side-effects – whether related to the environment, health, or welfare – of its products, packaging or services.

Insofar as it lies within its ability, RSDB shall take pains to identify, limit and remediate such environmental damage (soil pollution) as may have been caused in the past on its premises.

Where possible RSDB shall do more than the law demands, but all voluntary measures must show a healthy balance between the effort made and the result achieved. Priority in this regard shall be given

to those environmental measures that also impact other areas, such as safety, health and welfare, quality, and efficiency.

Internally, RSDB shall ensure that the necessary information is provided to all employees. The group shall also participate in, support and encourage the necessary training courses.

Our employees support the objectives set out above and are completely aware of their own responsibilities in this regard.

RSDB has operationalised an Eco Balance for the entire group. This instrument uses a mass balance to provide an insight into the environmental effects of all processes in the company. This annual balance provides a sound management basis to:

- establish and reveal the potential for improvement, and
- determine and implement improvement activities.

It therefore serves as an excellent aid, revealing our continuous efforts to improve our environmental performance.