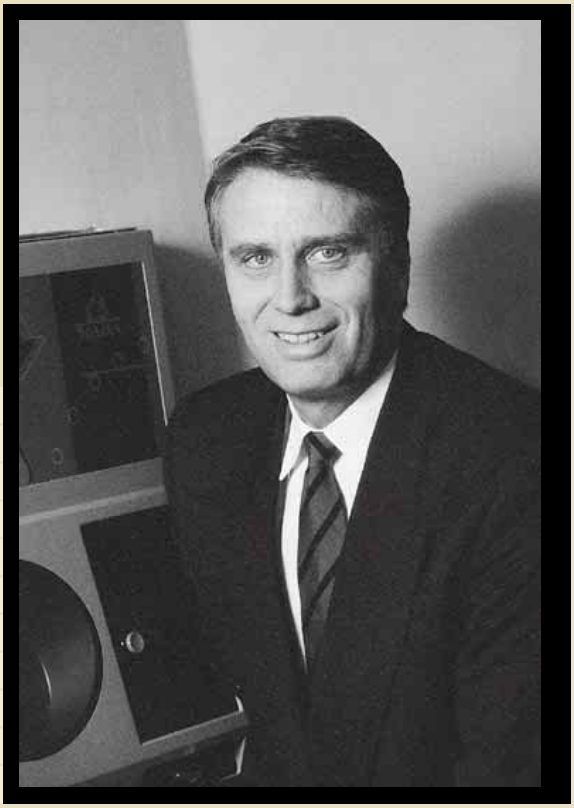
To our Shareholders



Erik Thorsen,
President / CEO
TOMRA Group

We look back at another year marked by strong growth in sales and profit. TOMRA's achievements are owed to its ability to spot and develop local market opportunities and successfully build new business models and activities in new territories. We are proud to be the preferred supplier to retailers and other industry partners throughout the world, and we will do our utmost to keep this status in the years to come.

This annual report will give you an insight into TOMRA's future opportunities. The feature section, called "A World of Opportunities," will give you a broad-brush picture of how and where TOMRA intends to create profitable growth in coming years. When we launched our mission statement, "Helping the World Recycle," two years ago, we communicated our long-term strategic direction: designing and operating beverage container recycling systems throughout the world. Our ambitious goals, combined with vast opportunities in various markets, places TOMRA in a unique position as the new millennium approaches.

The world's population is growing, and beverage consumption is growing with it. The trend towards non-refillable drink packaging leads to huge growth in worldwide waste disposal, and promotes a more intensive public focus on effective waste handling and material recycling systems.

Solid waste handling and curbside collection programs, traditionally seen as public functions, are increasingly costly to operate and do not provide sufficient volumes of clean fractions of recyclable materials. Thus the trend is towards industry responsibility for recycling and recovery initiatives, with government defining overall targets. The EU Packaging Directive illustrates this very well. As beverage containers represent as much as 40% by volume of household waste in the western world, the impetus for establishing well functioning recycling systems is strong - both for the sake of reducing costs and to preserve the environment.

During recent years, TOMRA has grown from a reverse vending machine supplier into a full-service

provider for the industry of handling empty beverage containers. This includes:

- Technology for collection, registration, sorting, and compaction
- Logistics systems for transportation management, and operations
- Materials processing systems for sorting, cleaning, and compaction of high volumes
- Administration services for data collection, cash and inventory controls
- Incentive programs to build consumer participation and loyalty.

Our goal is to create profitable growth. Our ambition is to be the only global service company to offer Integrated Container Recovery Systems, which include technology, logistics, materials processing, data collection and accounting systems.

Today TOMRA operates more than 37,000 reverse vending machines and a large number of recycling centers in more than 25 countries and in 33 states in the US. Yet we collect less than 2% of the 700 billion drink containers in the world, which places us at a very early stage of development. To grow from here, we must build on and strengthen our position within the different service areas that have been developed in Europe and America. We also need to respond to new demands from the industry, which could allow TOMRA to take part in new collection initiatives. This, in turn, could lead TOMRA to further expand our business activities within the recycling value chain.

TOMRA is in many ways unique. No other business entity has ever operated in the business segment that we have identified and built; consequently, there is no one to look to for benchmarking when we take the company forward. Our key benchmarks come from understanding market trends and industry challenges.

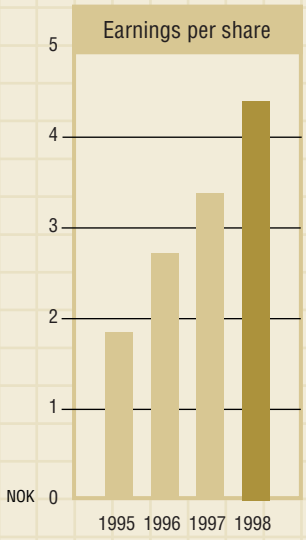
Our ability to succeed is driven by our ability to create innovative solutions and to recruit, develop and keep high quality people at all levels in the organization. More than 1,700 employees in the TOMRA group, the best and brightest in this business today, are the key players in the future development of the company. They embody our Core Values: Integrity, Personal Initiative, Innovation, Enthusiasm, and Fighting Spirit; important ingredients in a corporate culture that will realize the "World of Opportunities" and continue to grow TOMRA successfully into the new millennium.

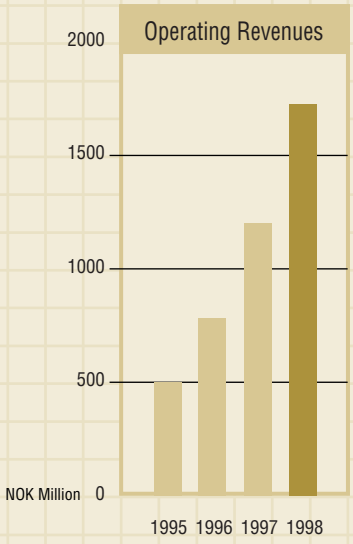
Asker, 18 February 1999

Erik Thorsen
President/CEO

Key Figures

Key Figures		1998	1997	1996	1995
Operating revenues	NOK million	1 728	1 201	784	501
Operating profit	NOK million	291	206	152	84
Profit before taxes	NOK million	265	192	147	80
Net profit	NOK million	180	131	102	63
Total assets	NOK million	1 834	1 409	884	606
Equity	NOK million	1 275	1 027	500	395
Return on equity	%	15.6	17.2	22.8	20.7
Return on total assets	%	19.2	18.9	21.7	17.7
Earnings per share	NOK	4.40	3.38	2.72	1.85
Earnings per share fully diluted	NOK	4.35	3.34	2.70	1.80
Net investments	NOK million	322	328	228	134
Number of employees as of December 31		1 720	915	661	431





1998 Report of the Board of Directors

TOMRA had yet another rewarding year in 1998. Operating revenues increased to NOK 1 728 million, up from NOK 1 201 million in 1997, an increase of 44%. In addition, a profit of NOK 43 million was earned on the sale of company headquarters at Asker. Operating profit increased to NOK 291 million (after writing off NOK 43 million of goodwill), up from NOK 206 million in 1997, an increase of 41%. Pre-tax profit was NOK 265 million, compared with NOK 192 million the previous year, an increase of 38%.

After-tax profit for the TOMRA Group was NOK 180 million, compared with NOK 131 million in 1997, an increase of 38%. This corresponds to earnings per share of NOK 4.40 for 1998, compared with NOK 3.38 in 1997. The effective tax rate for the Group was 32.2% in 1998, compared with 31.6% in 1997. The share price of TOMRA stock at the beginning of 1998 was NOK 165.00. At year-end it traded at NOK 250.00, an increase of 52%.

The balance sheet total for the Group as of 31 December 1998 was NOK 1 834 million (up 30%). The balance sheet increase is attributable acquisitions and more capital being tied up in current assets due to sales growth. Liquidity remains good, and the company's equity ratio at year-end 1998 was 69.5%.

The company's production and office building at Asker was sold for NOK 107 million in December 1998. TOMRA has signed a 10-year lease agreement, with an option to renew and an option to buy back the property at the approximate current market price at the end of the leasing period.

Standing from left: Erik Thorsen, Gregory S. Garvey, Jan Chr. Opsahl, Svein Jacobsen, Christian H. Thomessen.

Seated from left: Jørgen Randers, Klaus Nærø, Andreas Nordbryhn, Tharald Brødvig

Following a full review and partial elimination of Halton's product portfolio and brand name, the Board decided to write off goodwill related to these items. The total write-off of Halton goodwill amounted to NOK 39.5 million. In addition, a smaller write-down of goodwill, described in the notes to the accounts, was made in the USA.

MARKETS

EUROPE

Sales in Europe amounted to NOK 609 million, compared with NOK 515 million in 1997, an increase of 18%, which is in line with expectations expressed in last year's report. Organic growth amounted to 13%.

In September 1998, TOMRA signed an agreement to purchase the assets of Halton's distribution company in Austria, Topercher GmbH, effective for accounting purposes from 1 October 1998. The purchase price was NOK 9.2 million.

In December 1998, TOMRA entered into agreements with the Norwegian supermarket chains Hakon Gruppen and Norgesgruppen to deliver up to 850 new reverse vending machines and rebuild up to 150 machines during 1999. Installation will begin in February, with the majority of the machines scheduled for delivery in the first half of the year.

TOMRA's market share in Europe remained stable, in excess of 95% during 1998. TOMRA expects a higher European growth rate in 1999 than in 1998. A significant part of the projected growth will be generated in the Norwegian market.

AMERICA

Sales in America amounted to NOK 1 119 million, compared with NOK 686 million in 1997, an increase of 63%. Organic growth amounted to 22%. The strongest growth in the American market in 1998 continued to be in materials handling, consumer collection services and administration.

TOMRA purchased the west coast operations of Reynolds Recycling Division - with activities in California as well as four non-deposit states - effective for accounting purposes as of 1 March 1998. TOMRA Pacific Inc. was established to handle these activities and to continue to develop the California market. The USD 8 million purchase price, includes properties, business assets and a goodwill element of USD 2.6 million.

TOMRA Pacific purchased all the assets of Recycling Resources LLC, which operates in Northern California, effective for accounting purposes as of 1 July 1998. The purchase price of USD 5.2 million included goodwill of USD 3.7 million. Combining Recycling Resources' operations, with TOMRA Pacific's established activities has generated positive synergies.

Effective for accounting purposes on the same date, 1 July 1998, TOMRA invested in a 50% ownership stake in Wise Recycling LLC, which has activities in 23 non-deposit states. Wise Recycling LLC, which had 1998 sales of USD 90 million and a pretax profit of USD 2 million, acquired the remaining parts of Reynolds Recycling Division in March 1998. Wise Recycling is consolidated according to the equity method.

TOMRA Pacific also acquired all assets in Mobile Recycling Corp., with operations in California, effective for accounting purposes as of 1 October 1998. The purchase price of USD 7.15 million includes goodwill of USD 5.1 million. The purchase was financed in part through issuing 200 000 shares at NOK 216 each. If California's handling compensation to recycling centers is maintained or increased, the purchase price of USD 7.15 million may be increased by up to USD 2.15 million.

Through these acquisitions, TOMRA Pacific has secured a solid position for itself, operating 425 recycling centers in California. Sales in the state, which amounted to USD 19 million in 1998, are expected to rise significantly in 1999. The rapid growth that the company experienced in 1998 will generate synergistic benefits and boost efficiencies in 1999.

TOMRA's total market share in the US and Canada was 80% at the close of 1998. The Board remains optimistic in its assessment of the opportunities in the American market.

BUSINESS DEVELOPMENT

An analysis of the world's beverage and packaging volumes indicates that so far TOMRA has focused on geographic areas offering the greatest opportunities. Continued volume growth, accompanied by heightened concern for recovery and recycling by local authorities and industry, open major potentials in new markets and business activities for TOMRA.

Business development at TOMRA encompasses designing and implementing new reverse vending machines, integrated service solutions for materials handling, data collection and administration, a variety of marketing concepts for our reverse vending machines, and developing new geographic markets.

In 1998, TOMRA spent a total of NOK 85 million on business development, an increase of 27% from 1997. Expressed as a percent of overall sales, development expenses fell from 5.6% in 1997 to 4.9% in 1998.

TECHNOLOGY

At the takeover of Halton, it was decided that the Halton Group's technological capabilities should be directed toward developing entirely new solutions for small stores with lower reception volumes. MicroLite became the first machine in a new product family called MINIMA. Developed in Finland, MINIMA will contribute to establishing TOMRA as a leading supplier of reverse vending machines in this market segment.

The MicroLite is a combined solution, handling cans and one-way plastic bottles in a single unit. In 1998, 200 of these units were installed in Sweden. In February 1999, the machine will be re-launched in a new version, the TOMRA Duo. The next machine in the MINIMA family, the TOMRA Solo, is a small store's reception solution for plastic bottles, complete with sorting and scrap compaction. The TOMRA Solo will be introduced at the same time as the TOMRA Duo.

In February 1999, at the world's leading trade show for the retail food sector, Euroshop in Düsseldorf, Germany, TOMRA will launch two new machines - the TOMRA 610 and the TOMRA 500 - in the ULTIMA family for the large-volume market segment. The TOMRA 610, the new ULTIMA flagship, is a further development of the TOMRA 600, which has enjoyed great success since its 1997 debut.

The TOMRA 500 is designed for markets dominated by refillable packaging, where functionality is less in demand and price sensitivity is greater. Developed and produced in Finland, the TOMRA 500 handles all types of refillable beverage packaging, including crates. It will be priced somewhat below the TOMRA 610. Both ULTIMA products are expected to strengthen TOMRA's market position and competitiveness.

In 1998, a new generation of software products for data collection, administration, and materials-handling logistics was launched in the USA, Sweden, and Finland. The software products play a central role in securing cost-efficient operations, and they solved Year 2000 problems which earlier systems were not able to handle.

During 1998, TOMRA carried out a full assessment of all potential problem areas related to the change of the millennium. Most remediation has already been completed; the remainder is expected to be completed before the end of June 1999.

GROWTH STRATEGIES

TOMRA has set a goal of at least 30% annual revenue growth. This will be achieved through further development of new technology, new services, and acquisitions within our core business areas. 1999 projections indicate that this growth objective will be met.

TOMRA's goal, to be the leader in its field, requires us to extend our business concepts from primarily focusing on deposit markets to providing alternative solutions that cover non-deposit markets. Working with the beverage industry to establish industry-driven recycling systems is an important aspect of our growth strategy.

If we are to succeed, attractive solutions must be created that motivate a high level of public participation while maintaining excellent cost-efficiency. New incentives, such as rebate coupons, donations to a charity, and bonus points, are being tested in several markets.

In 1998, growth was strongest in TOMRA's new consumer collection area, which now is representing 15% of the Group revenues. Consumer collection is expected to continue to show the greatest growth in 1999. Margins are lower within this segment than in TOMRA's other areas of activities.

SHAREHOLDERS AND EQUITY

During 1998, TOMRA carried out three share issues to employees, totalling 254 700 shares. In acquiring Mobile Recycling Corp., 200 000 shares at a per-share price of NOK 216 were issued in December. Following these transactions, TOMRA has a total of 41.09 million shares outstanding at a par value of NOK 4, which corresponds to a share capital of NOK 164.4 million.

TOMRA had 4 485 shareholders at year-end 1998. Non-Norwegians held 69.3% of shares at the beginning of the year, declining slightly to 68.5% as of 31 December 1998. The shares' liquidity was good; a total of 72.4 million shares traded in 1998, up from 55.9 million the previous year.

ORGANIZATION

The TOMRA Group had 1 720 employees at year-end 1998, of whom 234 worked in Norway. At the beginning of the year, the corresponding figures were 915 and 194, respectively. Of the 805 new employees, 766 were employed in the United States and 39 in Europe.

Effective 1 January 1999, TOMRA carried out an organizational change at its Asker headquarters, separating and organizing production and European administration into independent limited companies. The changes were implemented to further streamline the business focus at all levels of the organization.

To follow up the implementation and practice of TOMRA's core values, which were presented in the 1997 annual report, the company carried out a survey among all Group employees for the second consecutive year. The findings from this study are used for such purposes as developing the Group's human resource strategy, which focuses on developing capable individuals in a global effort. TOMRA has also implemented a program for all employees that reinforces goal- and profit-orientation.

TOMRA's environmental efforts have been established according to the guidelines of the International Chamber of Commerce. The products and processes of the Group have always been consistent with an environmentally-friendly corporate profile. TOMRA does not pollute its external environment more than what is considered the norm for similar businesses.

In 1998, a new Norwegian accounting act was introduced that went into effect 1 January 1999. As a consequence of the new act, a series of changes have been proposed to generally accepted accounting principles which will have an effect on TOMRA's accounts.

The new act calls for charging the compensation element of bonus shares and options against the profit and loss statement, beginning with the 1999 accounting year. TOMRA's Board of Directors views this change in practice as having an outright destructive effect on the company's ability to motivate employees and attract the most competent leaders in an international market. Our competitors do not record these programs in their profit and loss accounts. The new act constitutes part of the increasing pressure for TOMRA to consider its alternatives.

SALARIES AND RENUMERATIONS

The Board of Directors received remunerations totalling NOK 840 000 in 1998. Payments for President and CEO Erik Thorsen amounted to NOK 1 382 070 in salary and NOK 59 972 in other taxable remunerations. The number of shares owned by the company's Board members as well as any severance pay are described in Note 9.

Auditors' fees paid to KPMG AS by TOMRA Systems ASA amounted to NOK 325 000. An additional NOK 406 033 was paid for consulting services. Total auditors' fees for the Group amounted to NOK 3.4 million.

ALLOCATION OF PROFIT

TOMRA Systems ASA showed a net profit for 1998 of NOK 83 485 000. The Board of Directors recommends the following allocation, including a recommendation to pay a dividend of NOK 0.50 per share, an increase of 25% over the 1997 dividend payment.

Dividends	NOK 20 576 930
Free reserves	NOK 62 908 070
Total allocations	NOK 83 485 000

Asker, 18 February 1999

Jan Chr. Oppsahl
Chairman
Sign.

Svein S. Jacobsen
Sign.

Klaus Nærø
Sign.

Tharald Brøvig
Sign.

Andreas Nordbryhn
Sign.

Jørgen Randers
Sign.

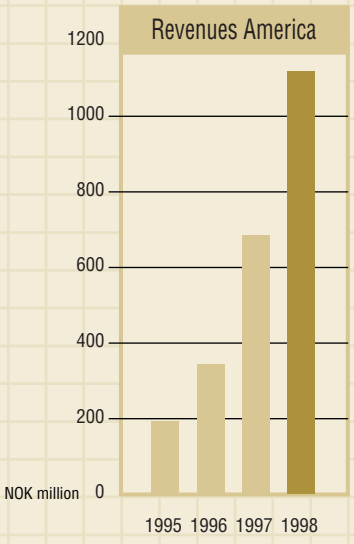
Erik Thorsen
Sign.

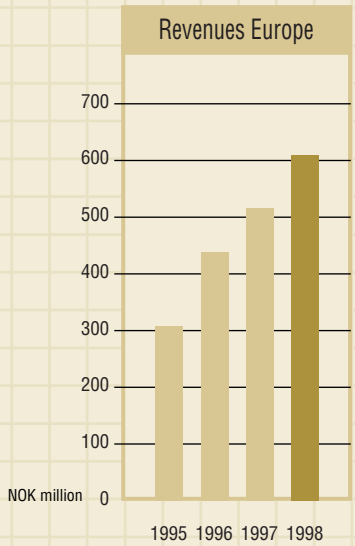
Christian H. Thommessen
Sign.

Gregory S. Garvey
Sign.

Profit and Loss Statement

TOMRA Systems ASA			Figures in NOK 1 000		TOMRA Group		
1998	1997	1996			1998	1997	1996
328 106	**292 020**	**380 833**	**Operating revenue**	1	**1 727 968**	**1 200 813**	**783 537**
42 656	**-**	**-**	**Other income**	3,6	**42 656**	**-**	**-**
			Operating expenses				
163 755	163 245	247 243	Cost of goods sold	2	969 583	640 724	364 165
54 622	51 299	43 239	Labor cost and social expenses		208 172	152 489	125 191
15 905	17 564	28 999	Other operating expenses	3	143 129	109 038	88 154
7 112	6 576	6 005	Ordinary depreciation	6	116 108	92 496	53 725
36 156	-	-	Write-down of fixed assets	6,10	43 065	-	-
277 550	**238 684**	**325 486**	**Total operating expenses**		**1 480 057**	**994 747**	**631 235**
93 212	**53 336**	**55 347**	**Operating profit**		**290 567**	**206 066**	**152 302**
			Financial items				
30 482	15 082	10 299	Financial income		20 420	11 109	9 708
25 152	11 184	6 677	Financial expenses		37 414	19 202	12 875
14 220	52 575	-	Dividend from subsidiaries		-	-	-
19 550	**56 473**	**3 622**	**Net financial items**	4	**(16 994)**	**(8 093)**	**(3 167)**
-	-	-	Minority interest		(8 560)	(5 979)	(2 067)
112 762	**109 809**	**58 969**	**Profit before tax**		**265 013**	**191 994**	**147 068**
29 277	13 873	14 954	Taxes	7	85 268	60 663	44 892
83 485	**95 936**	**44 015**	**NET PROFIT**		**179 745**	**131 331**	**102 176**
			Allocated as follows				
20 577	16 254	11 295	Dividends				
62 908	79 682	32 720	Free reserves				
83 485	95 936	44 015	Total allocated				
			Earnings per share	16	4.40	3.38	2.72
			Earnings per share, fully diluted	16	4.35	3.32	2.70





Balance Sheet as of 31 December

TOMRA Systems ASA 1998	TOMRA Systems ASA 1997	Figures in NOK 1 000		TOMRA Group 1998	TOMRA Group 1997
Assets		**Current Assets**			
8 927	54 566	Cash and bank equivalents	5	55 992	129 214
4 039	1 904	Accounts receivable	3	369 090	202 952
71 584	316 737	Intra group receivables		-	-
13 249	12 947	Other short-term receivables		140 395	64 219
42 786	40 373	Inventory	2	213 426	176 553
140 585	**426 527**	**Total current assets**		**778 903**	**572 938**
		Fixed Assets			
403 018	438 979	Shares and investments	10,15	70 679	2 200
588 778	3 500	Intra group loans		-	-
-	-	Long-term receivables		48 743	45 965
25 421	16 100	Pension funds	11	25 421	16 100
5 300	1 508	Deferred tax assets	7	22 228	17 003
-	-	Intangibles	6,15	338 931	288 383
-	-	Leased equipment	6	262 940	265 708
16 530	78 944	Real property, fixed assets	3,6	286 094	200 444
1 039 047	**539 031**	**Total fixed assets**		**1 055 036**	**835 803**
1 179 632	**965 558**	**Total assets**		**1 833 939**	**1 408 741**
Liabilities and Equity		**Current Liabilities**			
-	-	Bank overdraft	5	104 850	-
17 191	8 041	Accounts payable, trade		107 401	74 860
84 652	30 209	Intra group short-term debt		-	-
29 802	10 257	Taxes payable	7	40 003	32 540
48 483	37 208	Other current liabilities	8	159 182	136 999
180 128	**85 715**	**Total current liabilities**		**411 436**	**244 399**
		Long-Term Liabilities			
-	42 500	Mortgage	5	-	42 500
37 500	-	Other long-term loans	5	48 494	30 254
7 118	4 508	Deferred taxes	7	77 447	50 448
44 618	**47 008**	**Total long-term liabilities**		**125 941**	**123 202**
-	**-**	**Minority interest**		**21 303**	**14 568**
		Shareholders Equity			
164 359	162 540	Share capital (41 089 700 à NOK 4)		164 359	162 540
156 582	156 582	Legal reserves		156 582	156 582
633 945	513 713	Free reserves		901 959	685 467
-	-	Currency translation difference		52 359	21 983
954 886	**832 835**	**Total shareholders' equity**	14,16	**1 275 259**	**1 026 572**
1 179 632	**965 558**	**Liabilities and equity**		**1 833 939**	**1 408 741**
-	42 500	Mortgages	5	-	52 431
144 609	1 153	Guarantee liabilities	12	62 765	-

Cash Flow Analysis as of 31 December

TOMRA Systems ASA				TOMRA Group		
1998	1997	1996	Figures in NOK 1 000	1998	1997	1996
			Cash Flow from Operating Activities			
112 762	109 809	58 969	Profit before taxes	265 013	191 994	147 068
(10 914)	(15 568)	(6 788)	Taxes paid	(56 030)	(32 574)	(16 571)
(42 656)	14	46	(Gains)/losses from sales of fixed assets	(42 656)	14	46
7 112	6 576	6 005	Ordinary depreciation	116 108	92 496	53 726
36 156	-	-	Write-down fixed assets	43 065	-	1 637
(2 413)	3 765	(6 690)	Net change in inventory	(36 873)	(35 850)	(31 547)
243 018	(168 221)	(51 996)	Net change in receivables	(166 138)	(53 532)	(52 323)
63 593	(35 257)	28 163	Net change in payables	32 541	2 178	29 091
(9 321)	(6 400)	(6 148)	Change in pension funds	(9 321)	(6 400)	(6 148)
-	-	-	Effect from currency changes	2 027	(16 983)	(3 293)
6 682	(4 514)	(1 205)	Change in other accruals	(86 633)	187	1 762
404 019	**(109 796)**	**20 356**	**Net cash flow from operating activities**	**61 103**	**141 530**	**123 448**
			Cash Flow from Investing Activities			
106 084	30	395	Paid in from sales of fixed assets	130 954	31 823	25 129
(8 127)	(7 613)	(13 053)	Paid out from purchase of fixed assets 1)	(240 497)	(231 148)	(173 525)
4	318	909	Paid in from sales of shares	3 162	3 767	-
(200)	(163 239)	(112 113)	Paid out from purchase of shares	(176 963)	(132 834)	(79 172)
97 762	**(170 504)**	**(123 862)**	**Net cash flow from investing activities**	**(283 344)**	**(328 392)**	**(227 568)**
			Cash Flow from Financing			
-	-	47 500	New long-term debt	-	-	56 634
-	-	20 823	New short-term debt	25 573	462	20 823
(5 000)	(5 000)	-	Repayments of long-term debt	(24 261)	(67 743)	-
-	(20 823)	-	Repayments of short-term debt	-	(20 823)	-
(585 277)	-	-	Repayments Intra group debt	-	-	-
-	(9 064)	1 420	Net change of bank overdrafts	104 850	(6 487)	2 746
59 143	377 785	9 035	New equity, share issues	59 143	377 785	9 035
(16 286)	(11 295)	(9 320)	Payments of dividend	(16 286)	(11 295)	(9 320)
-	-	-	Equity adjustments	-	-	8 091
(547 420)	**331 603**	**69 458**	**Net cash flow from financing**	**149 019**	**271 899**	**88 009**
(45 639)	51 303	(34 048)	Net change in cash/cash equivalents	(73 222)	85 037	(16 111)
54 566	3 263	37 311	Liquid assets, January 1	129 214	44 177	60 288
8 927	54 566	3 263	Liquid assets, December 31 2)	55 992	129 214	44 177

1) "Paid out from purchase of fixed assets" includes the opening balance of subsidiaries purchased and consolidated for the first time in the fiscal year.

2) Includes restricted bank deposits totaling NOK 3.1 million.

Consolidation and Accounting Principles

BUSINESS, CUSTOMERS AND UNIQUE BUSINESS RISKS
Tomra Systems ASA and its subsidiaries are primarily engaged in the reverse vending business. TOMRA develops, manufactures, markets, services and operates reverse vending systems for handling returned beverage containers. TOMRA's customers, typically retailers, are located primarily in Europe and North- and South America.

USE OF ESTIMATES
The preparation of financial statements is in conformity with generally accepted Norwegian accounting principles, which requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results may differ from those estimates.

EARNINGS PER SHARE
Earnings per share have been computed based upon the weighted average number of common shares and share equivalents outstanding during each period. Common share equivalent recognizes the potential dilutive effects of future exercises of common share options and employee incentive programs payable in company shares.

CONSOLIDATION PRINCIPLES

CONSOLIDATED COMPANIES
The consolidated accounts include the parent company Tomra Systems ASA and companies in which the parent company directly or indirectly owns more than 50% of the shares and/or has a controlling influence. Subsidiaries acquired or sold during the course of the year are included in the profit and loss statement as of the date of purchase, or up to and including the date of sale.

AFFILIATED COMPANIES
Affiliated companies, in which TOMRA has an ownership interest of 20-50% and significant influence over operation and financial decisions, are included in the consolidated accounts based on the equity method. The Group's share of the profit after taxes and depreciation of goodwill of affiliated companies is shown under financial items in profit and loss statement.

ELIMINATION OF SHARES IN SUBSIDIARIES
Shares in subsidiaries are eliminated on the basis of the past equity method. The difference between the book value of shares in subsidiaries and book value of the subsidiaries' equity at the time such shares were acquired is analyzed and posted to the balance sheet items to which the excess amounts relate. Goodwill represents the excess of the purchase price paid for acquisitions above net assets acquired and is amortized on a straight-line basis. (See Note 6).

CURRENCY TRANSLATION FOR FOREIGN SUBSIDIARIES
The profit and loss statements for foreign subsidiaries prepared in foreign currencies are translated on the basis of average exchange rates for the year. The balance sheet is converted on the basis of the exchange rates on December, 31. Translation differences are shown as a separate item and charged directly to the Group's equity.

INTERNAL TRANSACTIONS/INTRACOMPANY ITEMS
All purchases and sales between Group companies, intra group expenses, as well as receivables and liabilities have been eliminated in the consolidated statements.

Reporting Structure

Revenues from the companies in the TOMRA Group is reported as follows:

TOMRA Systems ASA	BU Europe	BU America
	Tomra Butikksystemer AS (N)	Tomra North America Inc.(CT)
	Tomra Systems AB (S)	Tomra Metro LLC (CT,NY)
	OY Tomra AB (FIN)	Mobile Redemp. Inc. (CT,MA)
	Tomra System A/S (DK)	BICS LLC (60%) (NY)
	Tomra Systems BV (NL)	Tomra NY Recycling Inc. (NY)
	Tomra Systems GmbH (D)	Upstate Tomra LLC (55%)
	Tomra Leergutsysteme GmbH (A)	Tomra Massachusetts (MA)
	Tomra Systems OY (FIN)	Halton System Inc. (ME)
	Halton System SA (F)	Tomra Pacific Inc. (CA)
	B-burken AB (S)	UBCR (51%) (MI)
	Halton System A/S (DK)	Tomra Systems Inc. (CAN)
	Halton System GmbH (D)	

All companies in the list above are owned 100% except Upstate Tomra LLC (55%), BICS LLC (60%) and UBCR LLC (51%).

ACCOUNTING PRINCIPLES

REVENUE RECOGNITION
Revenue on product sales and sales-type leases of the company's products is generally recognized at the time of installation. Revenue on service contracts and operating leases of the company's products is recognized over the terms of the related agreements. Other service revenue is recognized when services are provided.

CASH AND CASH EQUIVALENTS
Cash and cash equivalents include cash on hand, bank deposits, money market funds, and other short-term investments with original maturity of three months or less.

RECEIVABLES AND LIABILITIES IN FOREIGN CURRENCIES
Short-term receivables and liabilities are booked at the exchange rate at the date of the balance sheet. Long-term receivables and liabilities in foreign currencies are translated at the lower/higher of the exchange rate at the date of the transaction and the date of the balance sheet. Receivables and liabilities hedged by forward foreign exchange contracts are converted at the forward contract rate. Net unrealized gains are not booked as income.

INVENTORY VALUATION
Inventories of raw materials are valued at the lower of the cost of acquisition and the actual value. Work in progress and finished products are valued at the lower of the cost to manufacture or net realizable value. Spare parts and parts held by service agents are valued at cost. A deduction is made for obsolescence when necessary.

SHARES AND INVESTMENTS
Shares and investments intended for long-term ownership are recorded in the balance sheet under long-term investments. These are valued at acquisition cost, unless circumstances, which cannot be regarded as of a temporary nature, exist which necessitate a lower valuation. Costs related to write-down of fixed assets are reported separately.

ASSETS AND DEPRECIATION
Long-term operating assets are entered in the balance sheet at acquisition cost adjusted for ordinary depreciation. Ordinary depreciation is carried out on a straight-line basis over the asset's expected economic life.

INTANGIBLES
Intangibles consist of goodwill and non-competition agreements. The amortization rates for goodwill vary and are based on the expected future earnings of the companies acquired at the date of acquisition and are re-evaluated periodically. Other intangibles are amortized over the term of the contract.

START-UP AND DEVELOPMENT COSTS
Start-up and research and development costs are charged to income as they are incurred.

PENSION OBLIGATIONS
Pension obligations related to insured pensions, as well as the pension premium reserve, are included in the balance sheet using the net principle. The Norwegian companies are the only in the Group with a pension scheme or benefit plan. See Note 11 for further details concerning pension obligations.

WARRANTY ALLOCATIONS
A general provision has been made for future warranty costs based on the previous year's turnover is all Group companies.

TAXES
The tax charge in the profit and loss accounts include both taxes payable for the period and the change in deferred taxes. The change in deferred taxes reflects future taxes payable resulting from the year's activities. Deferred taxes are determined based on the accumulated result, which falls due for payment in future periods. Deferred taxes are calculated on net positive timing differences between accounting and tax balance sheet values, after setting off negative timing differences and losses carried forward under the liability method in accordance with the rules set out in the Norwegian Accounting Standard. See Note 7 "Taxes".

NEW NORWEGIAN ACCOUNTING ACT 1999
With effect from January 1, 1999, the Norwegian Accounting act has been changed. This will lead to changes in the reporting structure as from first quarter 1999. The overall effects on TOMRA's consolidated accounts will be limited, apart from a possible change of Norwegian GAAP relating to share compensation and stock options. TOMRA will address this matter as soon as it has been concluded.

The financial report for the parent company, Tomra Systems ASA, will be more affected by the new accounting act but without any major effect on the consolidated group level.

Notes

Note 1 Sales by Market

Figures in NOK million	1998	1997	1996	1998 in %	1997 in %	1996 in %
BU Europe						
Norway	33	27	20	1.9 %	2.2 %	2.5 %
Sweden	107	89	134	6.2 %	7.4 %	17.1 %
Finland	62	48	50	3.6 %	4.0 %	6.4 %
Denmark	57	60	44	3.3 %	5.0 %	5.6 %
The Netherlands	97	81	42	5.6 %	6.8 %	5.4 %
Germany	160	147	115	9.3 %	12.2 %	14.6 %
Austria	62	34	16	3.5 %	2.8 %	2.0 %
Others	31	29	17	1.8 %	2.5 %	2.3 %
BU Europe total	**609**	**515**	**438**	**35.2 %**	**42.9 %**	**55.9 %**
BU America						
New York	488	409	175	28.2 %	34.0 %	22.3 %
Connecticut	117	114	92	6.8 %	9.5 %	11.8 %
Massachusetts	110	44	5	6.4 %	3.7 %	0.6 %
Michigan	115	84	62	6.6 %	7.0 %	7.9 %
California	146	-	-	8.5 %	-	-
Non deposit states	110	-	-	6.4 %	-	-
Others	33	35	12	1.9 %	2.9 %	1.5 %
BU America total	**1 119**	**686**	**346**	**64.8 %**	**57.1 %**	**44.1 %**
Total operating revenues	**1 728**	**1 201**	**784**	**100.0 %**	**100.0 %**	**100.0 %**

Revenues by Activity	1998	1997	1996	1998 in %	1997 in %	1996 in %
BU Europe						
Sales, leasing	414	364	294	24.0 %	30.3 %	37.5 %
Service	180	142	138	10.4 %	11.8 %	17.6 %
Administration	9	8	6	0.5 %	0.7 %	0.8 %
Promotions	6	1	-	0.3 %	0.1 %	-
BU Europe total	**609**	**515**	**438**	**35.2 %**	**42.9 %**	**55.9 %**
BU America						
Sales, leasing	169	179	165	9.8 %	14.9 %	21.0 %
Service	104	100	52	6.0 %	8.3 %	6.6 %
Materials Handling	501	359	110	29.0 %	29.9 %	14.0 %
Consumer Collection	256	-	-	14.8 %	-	-
Administration	86	48	19	5.0 %	4.0 %	2.5 %
Promotions	3	-	-	0.2 %	-	-
BU America total	**1 119**	**686**	**346**	**64.8 %**	**57.1 %**	**44.1 %**
TOMRA Group						
Sales, leasing	583	543	459	33.7 %	45.2 %	58.5 %
Service	284	242	190	16.4 %	20.1 %	24.2 %
Materials Handling	501	359	110	29.0 %	29.9 %	14.0 %
Consumer Collection	256	-	-	14.8 %	-	-
Administration	95	56	25	5.5 %	4.7 %	3.3 %
Promotions	9	1	-	0.6 %	0.1 %	-
Total revenues	**1 728**	**1 201**	**784**	**100.0 %**	**100.0 %**	**100.0 %**

The majority of TOMRA's activities are based around the reverse vending machine concept, and most contracts are priced as full service packages. The allocation of revenues is therefore based on estimates.

Note 2 Cost of Goods Sold/inventory

Parent Company			Cost of Materials	Group		
1998	1997	1996	Figures in NOK 1 000	1998	1997	1996
151 237	142 463	232 399	Cost of raw materials	947 426	611 715	367 099
16 719	17 480	20 320	Direct wages, production	25 361	23 707	20 320
167 956	**159 943**	**252 719**	**Cost of materials gross**	**972 787**	**635 422**	**387 419**
(4 201)	3 302	(5 476)	Change of inventory	(3 204)	5 302	(23 254)
163 755	**163 245**	**247 243**	**Cost of materials**	**969 583**	**640 724**	**364 165**
			Inventory			
14 662	16 502		Raw materials	40 038	23 790	
15 490	13 250		Work in progress	16 652	14 336	
3 889	1 928		Finished products	84 218	67 397	
8 745	8 693		Spare parts	72 518	71 030	
42 786	**40 373**		**Total inventory**	**213 426**	**176 533**	

Note 3 Other Operating Income/Expenses

GROUP

The bad debt reserve as per December 31, 1998, amounted to NOK 4.8 million compared to NOK 3.1 million in 1997, and is included in the balance sheet item Accounts receivable. The loss from accounts receivable was NOK 1.1 million in 1998.

YEAR 2000

The change of millennium effect on EDP equipment and other automated operating systems has been analyzed on a group basis. TOMRA has made the necessary changes in the majority of the systems that need adjustments and plans to be finished with all adjustments by June 30, 1999. Expenses related to upgrades are minor and included in the normal operating cost budget 1999 and not accrued.

PARENT COMPANY

Tomra Systems ASA has not incurred losses on outstanding receivables in 1998. The bad debt reserve at the end of the year was unchanged at NOK 0.1 million, and is included in the balance sheet item Accounts receivable.

Tomra Systems ASA sold its corporate headquarters building in Asker in December 1998 at the price of 107,3 MNOK. At the same time the company signed a 10 year lease contract with the right to renew for another 10 year period. Annual leases were established at 8.3 MNOK with a fixed annual increase of 1.9%. For December 1998 the total lease cost amounted to 0.5 MNOK. The combined agreements also include an option for TOMRA to buy back the building at market price by the end of the initial lease period.

Note 4 Financial Items

Financial items for the Group consists of:

Figures in NOK 1 000	1998	1997	1996
Interest income	9 701	5 613	3 583
Foreign exchange gain	2 751	3 406	3 342
Currency options gain	412	173	-
Affiliated companies	7 556*	1 917	2 783
Total financial income	**20 420**	**11 109**	**9 708**
Interest expenses	17 723	18 953	12 821
Foreign exchange losses	19 691	249	54
Total financial expenses	**37 414**	**19 202**	**12 875**
Net financial items	**(16 994)**	**(8 093)**	**(3 167)**

* The line item "Affiliated companies" reflects TOMRA's share of the net profit before taxes in Wise Recycling LLC. TOMRA invested in the 50% ownership with accounting effect from July 1, 1998.

Note 5 Interest-Bearing Balance Sheet Items

Figures in NOK 1 000	1998	1997
Restricted bank deposits	3 092	2 397
Bank deposits	52 900	96 417
Short-term investments	-	30 400
Total interest bearing placements	**55 992**	**129 214**
Overdraft facility	104 850	-
Mortgage loan	-	42 500
Other long-term loans	39 225	30 254
Total interest bearing debt	**144 075**	**72 754**

Annual installments on long-term loans are:

1999	2000	2001	2002	2003+
5 862	5 862	5 000	5 000	17 500

Installments are based on exchange rates as of December 31, 1998. Mortgage loans have been converted to loans with negative pledge agreements.

Note 6 Fixed Assets

Figures in NOK 1 000	Buildings & Land	Machinery & Fixtures	Vehicles	**Total property & fixed assets**	**Intangibles**	**Leasing equipment**
Group 1)						
Historical cost January 1, 1998 2)	143 101	112 480	36 911	292 492	350 491	409 982
Additions this year	59 961	101 415	22 294	183 670	115 219	56 826
Disposals this year, historical cost	70 206	9 451	3 629	83 286	3 162	8 849
Accumulated depreciation 3,4)	7 213	79 909	19 660	106 782	123 617	195 019
Book value December 31, 1998	**125 643**	**124 535**	**35 916**	**286 094**	**338 931**	**262 940**
Ordinary depreciation	**5 059**	**21 351**	**8 239**	**34 649**	**21 120**	**60 339**
Depreciation rates	2-4 %	10-33%	15-33%		5-20%	14 %
Parent Company						
Historical cost January 1, 1998 2)	69 807	42 698	500	113 005		
Additions this year	5 119	3 008	-	8 127		
Disposals this year, historical cost	70 168	592	-	70 760		
Accumulated depreciation 3)	-	33 664	178	33 842		
Book value December 31, 1998	**4 758**	**11 450**	**322**	**16 530**		
Ordinary depreciation	**1 903**	**5 109**	**100**	**7 112**		
Depreciation rates	2-4%	15-25%	20 %			

1) Exchange rates as of December 31, 1998 are used in calculating fixed assets of foreign subsidiaries.
2) Including land of NOK 4.8 million in parent Company and NOK 10,2 million in Group.
3) Total accumulated depreciation on January 1, 1998 was NOK 260.6 million for the Group and NOK 34.1 million for the parent company.
4) Goodwill has been additionally written down with NOK 43.1 million.

ADDITIONS AND DISPOSALS OF FIXED ASSETS OVER THE 5 YEARS

Figures in NOK 1 000		Buildings & Land	Machinery & Fixtures	Vehicles	**Total property & fixed assets**	**Intangibles**	**Leasing equipment**
Group							
1994	Additions	28 345	15 079	5 143	48 567	43 166	32 444
	Disposals	16 954	3 878	2 293	23 125	-	1 578
1995	Additions	26 701	12 711	8 742	48 154	25 905	63 723
	Disposals	-	1 289	1 658	2 947	-	221
1996	Additions	7 488	44 555	10 518	62 561	78 209	130 284
	Disposals	-	5 528	1 686	7 214	16 999	962
1997	Additions	71 225	20 897	14 155	106 277	175 643	130 102
	Disposals	1 374	15 276	7 829	24 479	32 294	12 588
1998	Additions	59 961	101 415	22 294	183 670	115 219	56 826
	Disposals	70 206	9 451	3 629	83 286	3 162	8 849

Figures in NOK 1 000		Buildings & Land	Machinery & Fixtures	Vehicles	**Total property & fixed assets**	**Intangibles**	**Leasing equipment**
Parent Company							
1994	Additions	28 345	2 970	441	31 756		
	Disposals	16 954	48	1 050	18 052		
1995	Additions	26 701	7 136	149	33 986		
	Disposals	-	-	-	-		
1996	Additions	7 488	5 439	-	12 927		
	Disposals	-	-	441	441		
1997	Additions	587	6 661	351	7 599		
	Disposals	46	2 438	442	2 926		
1998	Additions	5 119	3 008	-	8 127		
	Disposals	70 168	592	-	70 760		

Leasing equipment

The companies within the TOMRA Group had 5 038 reverse vending machines for leasing to customers by the end of 1998. The table shows the minimum leasing income from today's lease portfolio. In addition to this income, TOMRA will receive income from materials handling, service contracts etc.

Minimum lease income from the lease portfolio:	1999	2000	2001	2002	2003+
	44 950	36 629	21 012	16 323	12 710

Note 7 Taxes

Parent Company			Figures in NOK 1 000	Group		
1998	**1997**	**1996**		**1998**	**1997**	**1996**
			Tax Basis			
112 762	109 809	58 969	Profit before taxes	265 013	191 994	147 068
(14 220)	(52 575)	-	Dividends from subsidiaries	-	-	-
(141)	(7 240)	149	Permanent differences	(9 987)	(32 062)	1 117
4 238	(13 361)	(5 717)	Change in temporary differences	(56 615)	(43 318)	(47 449)
102 639	**36 633**	**53 401**	**Basis for taxes payable**	**198 411**	**116 614**	**100 736**
29.71 %	24.24 %	25.36 %	Tax rate	32.18 %	31.60 %	30.52 %
			Taxes			
28 739	10 257	14 952	Payable taxes	62 247	38 042	30 062
1 720	616	2	Property taxes, changes previous years	1 247	2 473	1 532
(1 182)	3 000	-	Net change in deferred taxes	21 774	20 148	13 298
29 277	**13 873**	**14 954**	**Tax expenses**	**85 268**	**60 663**	**44 892**
156	616	-	Foreign share of taxes	55 310	46 330	29 579

Deferred tax assets and liabilities are presented net of their respective tax effect using the tax rate of the applicable jurisdiction applied to amounts which represent future tax deductions or taxes payable and consist of the following as of December 31.

Parent Company		Figures in NOK 1 000	Group	
1998	**1997**		**1998**	**1997**
		Deferred Tax Assets		
574	-	Current assets	3 631	3 170
4 145	1 043	Fixed assets	16 398	8 916
581	465	Current liabilities	1 056	2 072
		Loss carried forward	1 143	2 845
5 300	**1 508**	**Total tax advantage**	**22 228**	**17 003**
-	-	**Deferred Tax Liabilities**		
-	-	Fixed assets	65 935	42 706
-	-	Current liabilities	4 394	3 234
7 118	4 508	Pension reserves	7 118	4 508
7 118	**4 508**	**Total deferred tax liabilities**	**77 447**	**50 448**

Negative and positive timing differences, which reverse or may reverse in the same period, are set off. Deferred taxes are calculated on the basis of timing differences and losses carried forward which are set off. Timing differences between different subsidiaries have not been set off. During the period that these differences reverse the companies will have a taxable net income which is sufficient to realize the deferred tax allowance. Losses carried forward relate to the US and some of the acquired companies in Halton System Group and expire through 1999 and 2011.

Note 8 Other Current Liabilities

Parent Company 1998	Parent Company 1997	Figures in NOK 1 000	Group 1998	Group 1997
12 038	19 295	Tax deductions, social security, holiday pay	35 873	39 231
-	-	Advances from customers	7 103	9 479
-	-	Interest-bearing debt	26 035	462
15 900	1 659	Non-interest-bearing debt	69 626	71 573
20 545	16 254	Accrued dividend	20 545	16 254
48 483	**37 208**	**Total**	**159 182**	**136 999**

Note 9 Shares owned by Officers, Severance pay

Shares owned by the company's officers Dec. 31, 1998:	
Jan Chr. Opsahl	65 024
Gregory S. Garvey	532 329
Svein S. Jacobsen	39 423
Klaus Nærø	1 078
Tharald Brøvig	99 811
Andreas Nordbryhn	2 263
Jørgen Randers	10 041
President/CEO Erik Thorsen	42 594
Auditor, KPMG as	-

In the event that the President/CEO is dismissed from his position, he is entitled to receive full compensation for twelve months.

Note 10 Shares and Investments

	Number of shares	Shares owned	Nominal value per share	Book value in NOK 1 000 Group	Parent	Ownership
Group Companies						
Tomra Butikksystemer AS	1 200	1 200	NOK 2 500	-	-	100 %
Tomra Systems AB	1 000	1 000	SEK 1 000	-	1 070	100 %
OY Tomra AB	1 000	1 000	FIM 1 000	-	1 073	100 %
Tomra System AS	2 500	2 500	DKK 1 000	-	1 089	100 %
Tomra Systems GmbH	750	750	DEM 1 000	-	2 200	100 %
Tomra Systems BV	300	300	NLG 1 000	-	-	100 %
Tomra Leergutsysteme GmbH	1 000	1 000	ATS 1 000	-	31 775	100 %
Halton Systems International BV	8 400	8 400	NLG 1 000	-	95 300 1)	100 %
Tomra North America Inc	40 000	40 000	USD 1 000	-	266 995	100 %
Tomra Systems Inc	500	500	CAD 1 000	-	3 316	100 %
Tomra Europe AS	100	100	NOK 1 000	-	100	100 %
Tomra Production AS	100	100	NOK 1 000	-	100	100 %
Total shares in subsidiaries				**-**	**403 018**	
Other Shares and Investments						
Wise Recycling LLC				64 694	-	50 %
DAC				2 368	-	19 %
Mac Casualty				274	-	9 %
Predio 73 KB				2 817	-	3 %
Retourette BV and CV				244	-	21 %
Atlant System NV				100	-	10 %
Tomra s.r.o.				10	-	40 %
Minor items				172	-	
Total investments				**70 679**	**403 018**	

1) The book value of the shares in Halton Systems Int. BV have been written down by NOK 36.2 million.

Note 11 Pension and Pension Obligations

The pension plans have been treated for accounting purposes in accordance with the NAS on pension costs. Only the Norwegian companies have pension plans based on benefit principles. Insured pension plans cover all employees in Norway in permanent positions with at least 50% of full time employment. The retirement age is 67 years for all employees. The pension plan is structured as a retirement net agreement in that it guarantees a supplement to the State benefits of 20% of that part of the pension base which exceeds 1.5 times the base amount (currently NOK 45 370) and 30% of the pension base which exceeds 8 times the base amount.

The parent company's plan, which also covers employees in Tomra Butikksystemer AS, includes 188 employees and 3 retirees by year-end 1998. There are no other compensation agreements for reductions in State benefits. The premium calculation structure remained unchanged in the years 1996-98. The obligations are covered through Gjensidige Liv insurance company.

For demographic and resignation factors normal insurance assumptions have been used. Payment to the pension premium fund amounted to NOK 5.8 million in 1998. Pension funds can be utilized for covering future annual premiums, which amounted to NOK 3.8 million for 1998.

Figures in NOK 1 000	1998	1997	1996
Net present value of this year's pension earnings	2 166	2 084	1 857
Interest cost of pension obligations	1 256	1 240	1 077
Yield on pension fund	(2 804)	(2 191)	(1 258)
Amortization of deferred liabilities	(100)	138	321
Social security costs	1 079	1 061	439
Net pension costs	**1 597**	**2 332**	**2 436**
Financial status on December 31			
Pension obligations	(21 147)	(21 010)	
Pension funds, market value	47 204	33 369	
Deferred liability to be amortized	(1 985)	2 662	
Advanced payment of social security costs	1 349	1 079	
Pension funds	**25 421**	**16 100**	
Basis for Calculation			
Discount rate	7.0 %	7.0 %	
Expected wage increases	3.3 %	3.3 %	
Expected increase of base amount	3.3 %	3.3 %	
Expected yield of funds	8.0 %	8.0 %	

Note 12 Guarantee Liabilities

Parent Company			Group	
1998	1997	Figures in NOK 1 000	1998	1997
		Tomra Systems ASA:		
144 609	1 153	for subsidiaries	-	-
		Tomra North America Inc.		
-	-	for Upstate Tomra LLC	5 683	-
-	-	for Wise Recycling LLC	57 082	-
144 609	**1 153**	**Total guarantees**	**62 765**	**-**

Note 13 Off Balance Sheet Items

Forward foreign exchange contracts are used to hedge future foreign currency income. In cases where the company has firm orders in foreign currencies, the contracts are booked at the forward exchange rate. For forward contracts where the future foreign currency income is not secured by order/contract, a calculation of the gains and losses is made at the year end rate. As per December 31, 1998, a total of USD 65 million was sold forward for 1-12 months. The average contract currency rate was 7.6996.

Note 14 Changes in Group Equity

Figures in NOK 1 000	Share capital	Legal reserve	Free reserves	Translation difference	Total equity	Number of shares
Balance Dec. 31, 1995	**149 121**	**149 022**	**105 577**	**(8 367)**	**395 353**	**37 280 250**
Profit 1996			102 176		102 176	
Business combination			8 091		8 091	
Employee placement, March 1996	400	3 680			4 080	37 380 250
Employee placement, April 1996	400	3 880			4 280	37 480 250
Employee placement, May 1996	475				475	37 599 068
Execution of options, May 1996	200				200	37 649 068
Changes in translation difference				(3 293)	(3 293)	
Dividend accruals 1996			(11 295)		(11 295)	
Balance Dec. 31, 1996	**150 596**	**156 582**	**204 549**	**(11 660)**	**500 067**	**37 649 068**
Profit 1997			131 331		131 331	
Employee placement, April 1997	1 280		17 792		19 072	37 969 068
Employee placement, April 1997	150				150	38 006 500
Employee placement, April 1997	2				2	38 007 000
Private placement, May 1997	1 860		63 240		65 100	38 472 000
Execution of options, July 1997	52		679		731	38 485 000
Private placement, September 1997	7 200		284 130		291 330	40 285 000
Execution of options, December 1997	1 400				1 400	40 635 000
Changes in translation difference				33 643	33 643	
Dividend accruals 1997			(16 254)		(16 254)	
Balance Dec. 31, 1997	**162 540**	**156 582**	**685 467**	**21 983**	**1 026 572**	**40 635 000**
Profit 1998			179 745		179 745	
Employee placement, March 1998	321		5 654		5 975	40 715 200
Execution of options, May 1998	618		8 590		9 208	40 869 700
Execution of options, August 1998	80		1 112		1 192	40 889 700
Private placement, December 1998	800		41 968		42 768	41 089 700
Changes in translation difference				30 377	30 377	
Dividend accruals 1998 1)			(20 577)		(20 577)	
Balance Dec. 31, 1998	**164 359**	**156 582**	**901 959**	**52 360**	**1 275 259**	**41 089 700**

1) Accrued dividend per share is NOK 0.50 for 1998.

The Board has been authorized by the Annual General Meeting to issue up to 4 000 000 shares at market price to finance future acquisitions valid until the Annual General Meeting spring 1999. Of this authorization a total of 200 000 shares has been issued by the end of 1998. The Board is also authorized to issue up to, for plan 1: 512 500 shares and for plan 2: 500 000 shares, to the management of US and European subsidiaries. These option plans are strictly linked to management's performance. As of December 31, 1998, 432 500 of the options in plan 1 and 379 000 of the options in plan 2, have been awarded. Exercise price under plan 1 is NOK 63.10, and under plan 2 ranges NOK 155-200.

Note 15 Acquisitions

The following acquisitions have been made in 1997 and 1998. They have been included in TOMRA's consolidated accounts under the purchase method of accounting, wherein the purchase price is allocated according to their underlying assets and liabilities based upon their relative fair market values. The excess of purchase price over the net assets and liabilities had been assigned to goodwill. Operations of acquired companies have been included in consolidated income from the acquisition dates. The acquired companies primarily operate in the same business as TOMRA.

CARCO INC.
With effect from August 1, 1997, Tomra North America Inc. (TNA) acquired 100% ownership in the company CARCO Inc., in Albany, New York, for USD 2.9 million (NOK 21.1 million). Goodwill of USD 0.1 million (NOK 0.7 million) was recorded.

UPSTATE TOMRA LLC
With effect from August 1, 1997 TNA acquired additional 5% of Upstate Tomra LLC, in Albany, New York, for USD 0.4 million (NOK 2.7 million). Goodwill of USD 0.3 million (NOK 2.0 million) was recorded. After this

transaction TNA owns 55% of Upstate Tomra LLC and the company is fully consolidated in the Group accounts.

TOMRA LEERGUTSYSTEME GMBH
With effect from January 1, 1997 Tomra Systems ASA acquired 100% of the shares in Tomra Leergutsysteme GmbH, Austria for ATS 55 million (NOK 31.8 million). Goodwill of NOK 30.0 million was recorded.

HALTON SYSTEM INTERNATIONAL B.V.
With effect from May 1, 1997 Tomra Systems ASA acquired 100% of the shares in Halton System International B.V. (HSI), The Netherlands, for FIM 91.4 million (NOK 129.5 million). HSI had the following subsidiaries: Halton System OY, Finland (development, manufacturing and marketing of reverse vending machines), Halton System AB, Sweden (sales, service), Halton System A/S, Denmark (sales, service), Halton System GmbH, Germany (sales, service), Halton System SA, France (sales, service) and Halton System B.V., The Netherlands (sales, service). By the end of 1997, the activities in Sweden, Denmark and Germany were fully integrated with TOMRA subsidiaries through assets transactions. The Dutch company was merged with Tomra Systems B.V. Intangible assets of NOK 94.4 million has been recorded divided in the following categories; patents of NOK 35.4 million, covenants not to compete (5 years) of NOK 4.2 million, use of trade name (5 years with the right for renewal) of NOK 2.8 million, technical know-how of NOK 14.2 million and sales/service network know-how of NOK 37.8 million.

HALTON SYSTEM INC.
With effect from July 1, 1997, Tomra North America Inc. acquired 100% of the shares in Halton System Inc., Maine, for USD 1.5 million (NOK 10.6 million). The purchase price equaled the market value of the company's assets.

REYNOLDS RECYCLING DIVISION
With effect from March 1, 1998, Tomra North America Inc. acquired the operating assets of Reynolds Recycling Division's West Coast operations covering California, Washington, Colorado, New Mexico and Hawaii. The purchase price was USD 8 million (NOK 60.9 million) with a goodwill of USD 2.6 million (NOK 19.8 million). Tomra Pacific Inc. was formed on the basis of the acquired assets.

RECYCLING RESOURCE LLC
With effect from July 1, 1998, Tomra Pacific Inc. acquired the operating assets of Recycling Resources LLC in California. The purchase price was USD 5.2 million (NOK 39.6 million) and included goodwill of USD 3.7 million (NOK 28.4 million). The operations were merged into Tomra Pacific Inc. by year-end 1998.

WISE RECYCLING LLC
With effect from July 1, 1998, Tomra North America Inc. invested USD 7.5 million (NOK 57.1 million) in a 50% ownership in Wise Recycling LLC, operating in 23 non-deposit states in the US market. The investment represented no additional goodwill.

RECYCLE CLUB LLC
As an integrated part of the agreement with the retail chain, Ralph's, TOMRA Pacific Inc. acquired the assets of Recycle Club LLC. The purchase price was USD 1.5 million (NOK 11.4 million) and included goodwill of USD 1.1 million (NOK 8.5 million).

MOBILE RECYCLING CORP.
With effect from October 1, 1998, Tomra Pacific Inc. acquired the operating assets of Mobile Recycling Corp. in California. The purchase price was USD 7.15 million (NOK 54.4 million) and included goodwill of USD 5.1 million (NOK 39.1 million). The purchase agreement includes a contingent additional liability of USD 2.15 million (NOK 16.4 million) based on the legislative changes of handling fees to convenience centers.

TOPERCHER GMBH, AUSTRIA
With effect from October 1, 1998, Tomra Leergutsysteme GmbH acquired the operating assets of the former Halton's distributor in Austria, Topercher GmbH. The purchase price was ATS 14.3 million (NOK 9.2 million) and included goodwill of ATS 10 million (NOK 6.5 million).

Note 16 Differences between Norwegian and US Acconting Principles

Figures in NOK 1 000	1998	1997	1996
Reconciliation of Profit			
Profit after taxes, N GAAP	**179 745**	**131 331**	**102 176**
Adjustments for US GAAP			
Capitalized interest, net depreciation 1)	(112)	(112)	50
Unrealized foreign exchange gain	-	(3 168)	3 168
Pensions 2)	(170)	(170)	(170)
Deferred taxes 3)	29 671	966	(853)
Share compensation expenses and options 5)	(82 694)	(68 141)	(12 476)
Sale/Lease back Corporate Headquarters 7)	(42 656)	-	-
Profit after taxes, US GAAP	**83 784**	**60 706**	**91 894**
Earnings per share N GAAP 8)	4.40	3.38	2.72
Earnings per share fully diluted N GAAP 8)	4.35	3.32	2.70
Basic earnings per share US GAAP 8)	2.05	1.56	2.45
Earnings per share diluted US GAAP 8)	2.03	1.54	2.41
Equity Differences			
Equity N GAAP	**1 275 259**	**1 026 572**	**500 067**
Adjustments for US GAAP			
Capitalized interest 1)	3 237	3 349	3 462
Unrealized foreign exchange gain	-	-	3 168
Pensions 2)	1 812	1 982	2 152
Deferred taxes 3)	35 398	(1 491)	(2 457)
Dividends 4)	20 545	16 254	11 295
Share subscription receivable 6)	-	(1 400)	-
Sale/Lease back Corporate Headquarters 7)	(42 656)	-	-
Equity US GAAP	**1 293 595**	**1 045 266**	**517 687**
Equity per weighted average diluted share US GAAP	31.33	26.44	13.57
Equity per outstanding share N GAAP at December 31	31.04	25.26	13.28
Calculated number of Shares			
Average number of shares 8)	**40 886 058**	**38 863 184**	**37 551 250**
Shares according to agreement on options	-	311 129	335 930
Shares according to employees' bonus plans	100 762	27 076	-
Shares according to agreement on options	302 545	327 980	-
Calculated no. of shares, fully diluted N GAAP	**41 289 365**	**39 529 368**	**37 887 180**
Shares according to agreement on options			249 246
Calculated no. of diluted shares US GAAP	**41 289 365**	**39 529 368**	**38 136 426**

GENERAL
TOMRA's compensation plans have been structured in consideration of Norwegian GAAP. The effects from implementing the US GAAP reconciliation have been viewed as secondary.

1) CAPITALIZED INTEREST
TOMRA does not capitalize development or interest expenses. According to US GAAP, capitalized interest relating to building projects in Norway has been calculated at NOK 3.5 million, over the construction period (1992-1995). Depreciation of capitalized interest costs amount to NOK 0.1 million for the period.

2) PENSIONS
TOMRA changed its method for recording pension costs in 1994. The implementation effect was charged directly to equity according to N GAAP. According to US GAAP (SFAS No. 87), the implementation effect is to be amortized over the average remaining employment period.

3) DEFERRED TAXES
Under N GAAP, TOMRA recognizes the benefits of tax deductions related to share compensation for employees in the US in the periode the deduction is received as a reduction of income tax expense. Under US GAAP, a deferred tax benefit is recognized in the same periode as related share compensation expenses for employees in the US. Under US GAAP, equity is credited for tax benefits received to the extent TOMRA's tax deduction exceeds the amount of share compensation expense recognized for financial reporting purposes.

4) DIVIDENDS
According to US GAAP dividends are deducted from equity in the year they are paid, while according to N GAAP dividends reduce equity in the year they are accrued.

5) SHARE COMPENSATION EXPENSES
Share-based compensation has a financial impact on the profit and loss statement under US GAAP that is not accounted for under Norwegian GAAP. The net equity impact may result in a timing difference. TOMRA accounts for stock-based compensation in accordance with APB Opinion 25 for US GAAP. Accordingly, the difference between the cost and the fair value of the shares as of the measurement date, (which is the date both the

cost of the shares to employees and the number of shares employees will receive is known) is charged to the profit and loss account or in the case of share options, recognized as compensation expense over the option period.

6) SHARE SUBSCRIPTION RECEIVABLE
N GAAP permits increasing equity when shares are issued prior to the receipt of related consideration. Under US GAAP, equity is not increased for issuance of shares until consideration is received.

7) SALE/LEASEBACK OF CORPORATE HEADQUARTERS
Under N GAAP, TOMRA's sale and leaseback transaction involving its corporate headquarters qualified for gain recognition. Under US GAAP, this transaction did not qualify for sales and leaseback accounting due to TOMRA's option to buy back the building. As a result, the transaction has been treated as financing and the building is included in the company's balance sheet under US GAAP.

8) BASIS FOR EARNINGS PER SHARE
A new standard for determining earnings per share was issued for US GAAP (SFAS No. 128) in 1997 requiring the presentation of both basic and diluted earnings per share. Basic earnings per share is determined using the weighted average number of shares outstanding during the year. Diluted earnings per share also include the effects of potentially issuable securities such as share options and shares issuable under bonus programs. The dilutive effect of potentially issuable securities is determined based upon the treasury stock method using the average share price during the year. The total number of shares for the period is shown in the table.

INTAGIBLE ASSETS
Under US GAAP, TOMRA assesses the recoverability of long-lived assets, including goodwill and other intangibles, by determining whether the assets can be recovered from undiscounted future cash flows. The amount of impairment, if any, is measured based on projected future cash flows using a discount rate reflecting TOMRA's average cost of funds.

DEPRECIATION AND AMORTIZATION
There are no significant differences for TOMRA between N GAAP and US GAAP regarding depreciation and amortization. TOMRA amortizes goodwill for periods up to 20 years.

AUDIT REPORT FOR 1998

TO THE ANNUAL SHAREHOLDERS' MEETING OF

TOMRA SYSTEMS ASA
We have audited the annual report and accounts of Tomra Systems ASA for 1998, showing a profit for the year of NOK 83 485 000 for the parent company and a consolidated profit for the year of NOK 179 745 000. The annual report and accounts, which comprise the annual report proper, profit and loss account, balance sheet, cash flow statement, notes to the accounts and consolidated accounts are presented by the company's Board of Directors and its Managing Director.

Our responsibility is to examine the company's annual report and accounts, its accounting records and other related matter.

We have conducted our audit in accordance with relevant laws, regulations and generally accepted auditing standards. We have performed those audit procedures, which we consider necessary to confirm that the annual report and accounts are free of material misstatements. We have examined selected parts of the evidence supporting the accounts and assessed the accounting principles applied, the estimates made by management, and the content and presentation of the annual report and accounts. To the extent required by generally accepted auditing standards we have reviewed the company's internal control and the management of its financial affairs.

The Board of Directors' proposal for the application of the profit is in accordance with the requirements of the Joint-Stock Companies Act.

In our opinion, the annual report and accounts have been prepared in accordance with the requirements of the Joint-Stock Companies Act and present fairly the financial position of the company and the Group as of December 31, 1998 and the result of its operations for the financial year, in accordance with generally accepted accounting principles.

Oslo, 18 February 1999
KPMG as

Henning Aass
State Authorized Public Accountant (Norway)
Sign.
(Translation from Norwegian)

Shares and Shareholders

TOMRA's shareholders policy has its main goal to maximize the return to shareholders over time. This means that we endeavor to provide our shareholders, and the financial markets in general, with information in as much detail and as frequently as possible. This contributes to raising the level of knowledge about the company so that its share price reflects the underlying values as well as future growth potential.

In its Articles of Association TOMRA has no limitations on the transferability of shares. Each share carries one vote at the company's general meeting. Foreign ownership stood at 68.6% at the end of 1998, down from 69.3% in 1997. The shares in TOMRA are currently traded on the Oslo Stock Exchange and through an ADR (American Depository Receipts. Level 1) program in the US.

The TOMRA share price was NOK 250.00 (+52%) at the end of 1998, up from NOK 165.00 at the beginning of the year. The Oslo Stock Exchange All Share Index decreased by 27% during the same period. The highest price quoted in 1998 was NOK 255.00 in May, while the lowest was NOK 140.00 in October.

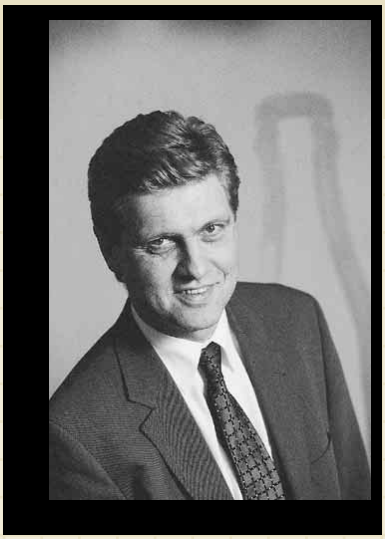
The stock market capitalization of TOMRA at the end of 1998 was NOK 10.3 billion compared with NOK 6.6 billion at the beginning of the year. 72 million TOMRA shares were traded during 1998 compared to 56 million in 1997. Tomra Systems ASA and its subsidiaries do not own any TOMRA shares. The Board of Directors proposes a dividend of NOK 0.50 per share for 1998, up from NOK 0.40 in 1997 (up 25%). The recommended dividend represents a distribution ratio of 11%.

The Company's largest shareholders

	Registered at December 31, 1998	Number of shares	Ownership
1.	State Street Bank - Clients	3 901 075	9.49%
2.	Chase Manhattan Bank - UK Clients	2 080 550	5.06%
3.	Kommunal Landpensjon	1 532 350	3.73%
4.	Chase Manhattan Bank - US Clients	1 459 084	3.55%
5.	Caisse des Depots et Consignations	1 413 500	3.44%
6.	Folketrygdfondet	1 400 000	3.41%
7.	Swedbank Markets	1 320 750	3.21%
8.	Deutsche Bank AG - Clients	1 053 140	2.56%
9.	Goldman Sachs & Co - Clients	955 289	2.32%
10.	Caisse Nationale de Agricole	843 360	2.05%
11.	ABN Amro Global - Clients	783 301	1.91%
12.	Storebrand Livsforsikring	653 750	1.59%
13.	Den Danske Bank - Clients	633 465	1.54%
14.	Morgan Guaranty Trust - Clients	611 028	1.49%
15.	Bankers Trust - US Clients	588 055	1.43%
16.	Gjensidige Livsforsikring	565 217	1.38%
17.	DG Bank, Luxembourg - Clients	516 050	1.26%
18.	Skandinaviska Enskilda Foreign Securities	513 195	1.25%
19.	Morgan Stanley Trust - Clients	502 469	1.22%
20.	Norsk Hydro - Pension fund	497 800	1.21%
	Total	21 823 428	53.10%
	Other shareholders	19 266 272	46.90%
	Total (4 501 shareholders)	41 089 700	100.00%
	Shares owned by Norwegian shareholders	12 919 826	31.44%
	Shares owned by foreign shareholders	28 169 874	68.56%
	TOTAL	41 089 700	100.00%

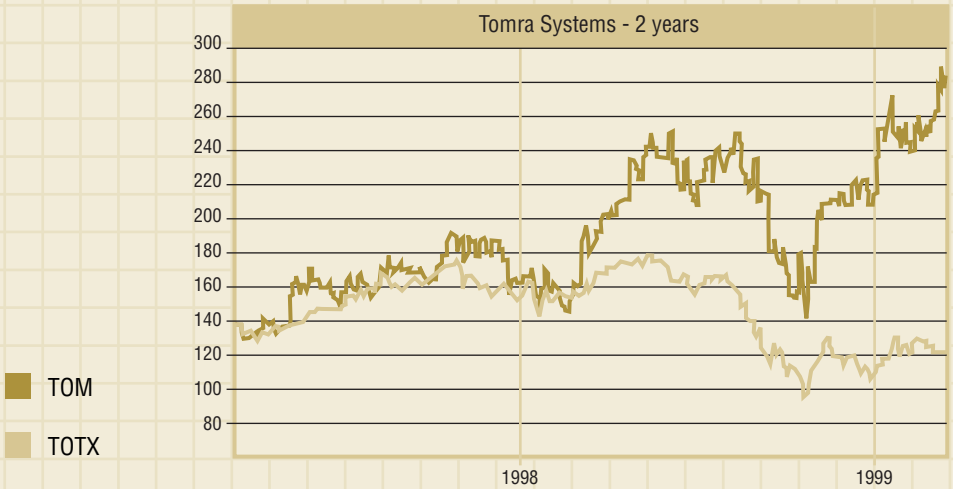
Share price development adjusted

Figures in NOK 1 000			Share capital increases			Share capital increases		
Year	Type of issue		Paid in	Share capital	Total	Par value	Shares	Adj. factor
1985/Jan	Intro. at Oslo Stock Exchange		-	-	36 700	50	734 000	-
Jan	Split	5:1	-	-	36 700	10	3 670 000	0.200
1986/Dec	Rights issue	5:2	51 992	48 933	68 506	4	17 126 655	0.633
1992/Apr	Bonus issue	1:10	-	7 694	84 634	4	21 158 500	0.909
1994/Jan	Rights issue	1:2	45 691	44 107	132 321	4	33 080 250	0.746



TOMRA Home page: www.tomra.no

Helge Nerland
CFO & Investor Relations



Key figures for the Group 1994-1998

Figures in NOK 1 000	1998	1997	1996	1995	1994
Profit and Loss Statement					
Operating revenues	**1 727 968**	**1 200 813**	**783 537**	**501 026**	**386 015**
Other income	42 656	-	-	-	-
Production costs	969 583	640 724	364 165	217 815	188 383
Gross contribution	**801 041**	**560 089**	**419 372**	**283 211**	**197 632**
Operating expenses	266 270	194 762	169 690	136 963	108 317
Development projects 1)	85 031	66 765	43 655	30 236	25 370
Ordinary depreciation	116 108	92 496	53 725	31 706	16 822
Write-down of intangibles	43 065	-	-	-	-
Operating profit	**290 567**	**206 066**	**152 302**	**84 306**	**47 123**
Net financial items	16 994	8 093	3 167	4 256	5 060
Minority interests	8 559	5 979	2 067	-	-
Profit before taxes	**265 013**	**191 994**	**147 068**	**80 050**	**42 063**
Taxes	85 268	60 663	44 892	17 362	8 992
Profit after taxes	**179 745**	**131 331**	**102 176**	**62 688**	**33 071**
Assets					
Current assets					
Liquid assets	55 992	129 214	44 177	60 288	22 618
Accounts receivable	369 090	202 952	149 420	97 097	65 877
Inventory	213 426	176 553	140 704	109 156	85 917
Other current assets	140 395	64 219	36 569	26 134	13 030
Total current assets	**778 903**	**572 938**	**370 869**	**292 675**	**187 442**
Intangibles	338 931	288 383	145 601	90 599	76 343
Lease equipment	262 940	265 708	185 883	95 633	45 303
Other fixed assets 2)	453 165	281 712	181 654	126 987	67 478
Total fixed assets	**1 055 036**	**835 803**	**513 138**	**313 219**	**189 124**
Total assets	**1 833 939**	**1 408 741**	**884 007**	**605 894**	**376 566**
Liabilities and shareholders' equity					
Current liabilities					
Bank overdraft	104 850	-	6 487	3 741	12 556
Accounts payable	107 401	74 860	72 682	43 591	31 428
Other current liabilities	199 185	169 539	133 729	75 722	53 568
Total current liabilities	**411 436**	**244 399**	**212 898**	**123 054**	**97 552**
Long-term liabilities	48 493	72 754	140 497	83 863	65 722
Deferred taxes	77 447	50 448	26 493	3 624	3 916
Minority interests	21 303	14 568	4 052	-	-
Shareholders' equity					
Share capital	164 359	162 540	150 596	149 121	132 321
Reserves	1 110 901	864 032	349 471	246 232	77 055
Total shareholders' equity	**1 275 259**	**1 026 572**	**500 067**	**395 353**	**209 376**
Liabilities and equity	**1 833 939**	**1 408 741**	**884 007**	**605 894**	**376 566**

Figures in NOK 1 000	1998	1997	1996	1995	1994
Profitability					
Operating margin 3)	16.8%	17.2%	19.4%	16.8%	12.2%
Profit ratio 4)	15.3%	16.0%	18.8%	16.0%	10.9%
Return on equity 5)	15.6%	17.2%	22.8%	20.7%	18.5%
Return on total assets 6)	19.2%	18.9%	21.7%	17.7%	17.2%
Capital 31.12.					
Shareholders' equity 7)	1 275 259	1 026 572	500 067	395 353	209 376
Equity ratio 8)	69.5%	72.9%	56.8%	65.3%	55.6%
Bankers ratio 9)	1.9	2.3	1.7	2.4	1.9
Acid test 10)	1.4	1.6	1.1	1.5	1.0
Debt service ratio 11)	1.1	-0.4	1.0	0.7	2.5
Working capital 12)	367 467	328 539	152 971	169 621	89 890
Shares					
Share capital at 31.12.	164 359	162 540	150 596	149 121	132 321
Earnings per share (EPS) 13)	4.40	3.38	2.72	1.85	1.00
EPS, fully diluted 14)	4.35	3.32	2.70	1.80	0.98
Dividend per share	0.50	0.40	0.30	0.25	0.20
Share price 31.12.	250.00	165.00	99.50	50.50	15.30
Market capitalization (NOK mill.)	10 272	6 705	3 746	1 883	506
Price/earnings ratio (P/E) 15)	56.8	48.8	36.6	27.4	15.3
Employees					
Total employees (average)	1 318	788	633	404	295
Sales per employee (NOK mill.)	1 311	1 524	1 238	1 240	1 309

Definition of key figures

1) Development projects include direct product development costs and a share of administrative expenses and depreciation.
2) Other fixed assets include operating assets and long-term financial investments.
3) Operating profit as a % of operating revenues.
4) Profit before taxes as a % of operating revenues.
5) Profit after taxes as a % of average equity.
6) Profit before interest expenses as a % of average total assets.
7) Share capital and reserves.
8) Equity as defined in footnote 7 as a % of total assets.
9) Current assets divided by short-term liabilities.
10) Current assets excluding inventories divided by short-term operations.
11) Interest-bearing debt less liquid assets divided by net cash flow from operations.
12) Current assets less short-term liabilities
13) Profit after tax divided by average number of shares (1998= 40 886 058)
14) Profit after tax divided by average number of shares incl. earned options (1998 = 41 289 365).
15) Stock price at 31.12. divided by earnings per share (see footnote 13).

Chairman

WHAT WE WANT FROM THE BOARD - A PERSONALE VIEW

In the 1997 annual report we discussed the Corporate Governance process, both in general and as it affects TOMRA. Since then, the debate over Corporate Governance both in Norway and abroad has become more heated. Events in the US got the ball rolling on this issue, but it soon took hold in Europe as well.

Tougher demands from institutional investors and globalization of capital markets have led European corporations to examine the role of corporate boards. The key question is: What do we really want from the board? The short answer is that we must make certain that we have a board that can and will develop the company's corporate strategy and that ensures there are resources to execute that strategy.

So what was the upshot of this examination at TOMRA in the past year? First, as Chairman of the Board, I realized that I was serving on too many boards. It is now commonly accepted that an actively participating board member should be a member of no more than five or six boards, assuming that serving as a director is a full-time profession. Someone who holds line organization responsibilities in a company should not, in my view, serve on more than two external boards.

Therefore, from September 1997 to April 1998, I terminated my own board membership in two stock-exchange listed companies and two non-listed companies, having explained my position to my colleagues at these companies and gained their understanding. I retained board chairmanships of four stock-exchange listed companies and two unlisted companies. I later left the board of an additional stock-exchange listed company.

Percy Barnevik, Chairman of the Board of ABB, has participated actively in the debate over Corporate Governance. In his view, a company will achieve better results with a strong, active board that strikes a good balance with the company's day-to-day management. Mr. Barnevik warns against too-rigid rules as to the composition of the board and its way of working, but he also stresses the need for the board to be an efficient and enthusiastic team. We are following these guidelines in preparing for Corporate Governance at TOMRA.

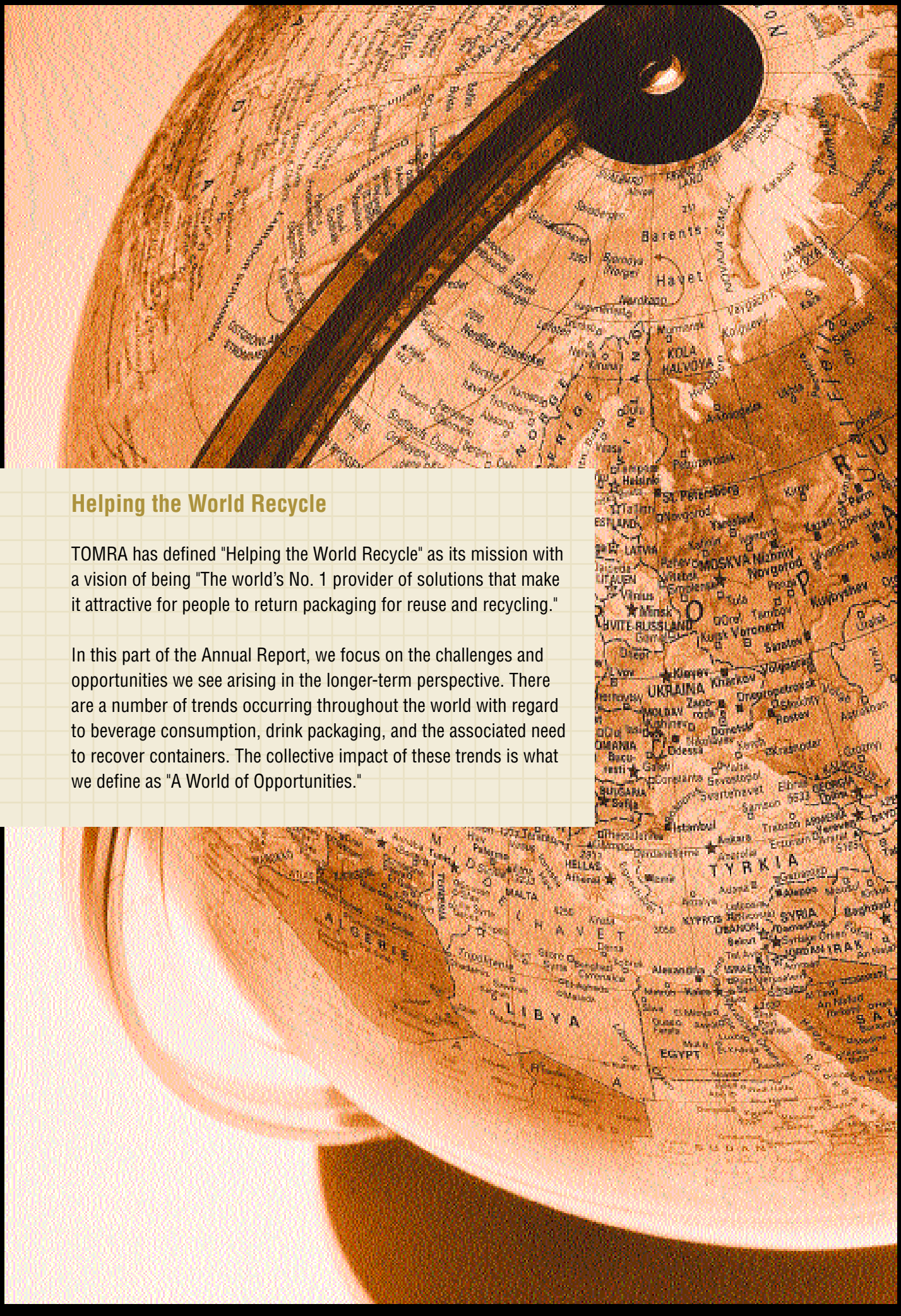
Enthusiasm, one of our four core values, is something we strive for at TOMRA.

We have come up with simple guidelines that we believe to be optimal when it comes to number of board members, number of board meetings, number of board memberships any member should take on, attendance by members, ownership of shares, defined areas of professional responsibilities, and requirements for adding expertise.

Board membership that is focused on fewer companies will allow each board member deeper insight and stronger participation. Further, the board chairman has a better chance of inspiring team spirit and enthusiasm. Consequently, future board efficiency should be based not solely on financial results but also on each board member's involvement in and "fighting spirit" or advocacy on behalf of the company, and on his or her ability to acquire and disseminate new expertise. I have taken these guidelines to the board, and asked them to act as a collegium that will refine and further develop criteria for measuring goal achievement, and manage according to them.

One consequence of the discussion over Corporate Governance and of board members' concentrating their efforts, is that an increase in the remunerations paid to board members will have to be considered, and their stock options and other incentives will have to be looked at. These can be difficult subjects, but they must be broached.

Jan Chr. Opsahl
Chairman of the Board



Helping the World Recycle

TOMRA has defined "Helping the World Recycle" as its mission with a vision of being "The world's No. 1 provider of solutions that make it attractive for people to return packaging for reuse and recycling."

In this part of the Annual Report, we focus on the challenges and opportunities we see arising in the longer-term perspective. There are a number of trends occurring throughout the world with regard to beverage consumption, drink packaging, and the associated need to recover containers. The collective impact of these trends is what we define as "A World of Opportunities."

WHAT ARE THESE TRENDS?

- Beverage consumption is increasing, with the strongest growth in developing markets.
- Increased drink consumption outside the home.
- Preference for non-refillable containers, driven by the industry's desire to consolidate bottling capacity, engineer efficient logistics, and promote consumption.
- Strong consumer preference for bottles made of PET plastic has led to wide-spread conversion from glass to PET by the soft drink industry in the USA. The trend to PET is also impacting aluminum can usage and depress the overall commodity values.
- Deposit systems have demonstrated the highest recovery and recycling rates.
- Curbside collection offers the most credible alternative to deposit systems. While convenient, curbside collection has exceptionally high collection costs. There have been significant reductions of new programs and cancellation of some existing ones.
- The solid waste handling companies, once viewed as the logical providers of recycling services, have reduced their recycling commitments and investments.

Given that these trends represent an opportunity, how is TOMRA positioned to participate and benefit?

First, industry awareness of TOMRA has increased dramatically over the past years. This is largely a result of TOMRA's sustained growth, demonstrated innovation, and commitment to its mission. TOMRA has successfully moved its business model from being a machine manufacturer to a "Total Systems Provider."

During this corporate evolution, TOMRA has consolidated a fragmented US collection and processing industry in the markets where we are active. We have re-engineered processes, generated efficiencies, and reduced system costs. Our real opportunity, however, lies in the ability to take the successful attributes of the deposit system and implement them in non-deposit environments in close cooperation with major industry players.

We believe that the key challenge is to get the consumer to participate in the recovery and separation process. Convenience through retail locations can make recycling an integral part of the consumer's normal shopping pattern.

If TOMRA succeeds in these efforts we will clearly be placed in the forefront of realizing "A World of Opportunities."

Waste Handling and Recycling

Waste handling has historically been viewed as a public responsibility. Increasing solid waste volumes due to beverage packaging have led governmental agencies and politicians to conclude that beverage industry participants should increasingly shoulder the burden of recovery and recycling.

Drinks packaging constitutes a substantial part of local and national solid waste streams, about 10% by weight and about 40% by volume of household waste, according to surveys in the USA.

Some major studies of waste management have shown that recycling attempts can be a waste of time and resources. The common denominator of these studies is that consumer participation was limited or non-existing. TOMRA believes that recycling has to be initiated at the consumer level and that effective consumer participation is vital to the overall economic success and efficiency of any recycling system.

LIFE CYCLE ASSESSMENTS

In the early days of environmental studies, many opinions were based on impressions and perceptions that were not necessarily substantiated. Research has given us terms such as eco-efficiency to illustrate the impact of products on society and environment. Life Cycle Assessments (LCAs) are the tools used to calculate the eco-efficiency of various container types from virgin material, through production, then use, possible reuse, and ultimate disposal. In recent years, a number of new directives and regulations around the world have required industry documentation of the eco-efficiency of packaging solutions using LCAs. Extraction of virgin materials is the single most important consideration. Recent Nordic research concludes that recovery is by far the most eco-efficient solution when it displaces virgin raw materials in the production process.

RECYCLING ALTERNATIVES

There are four main alternatives for recycling household packaging waste.

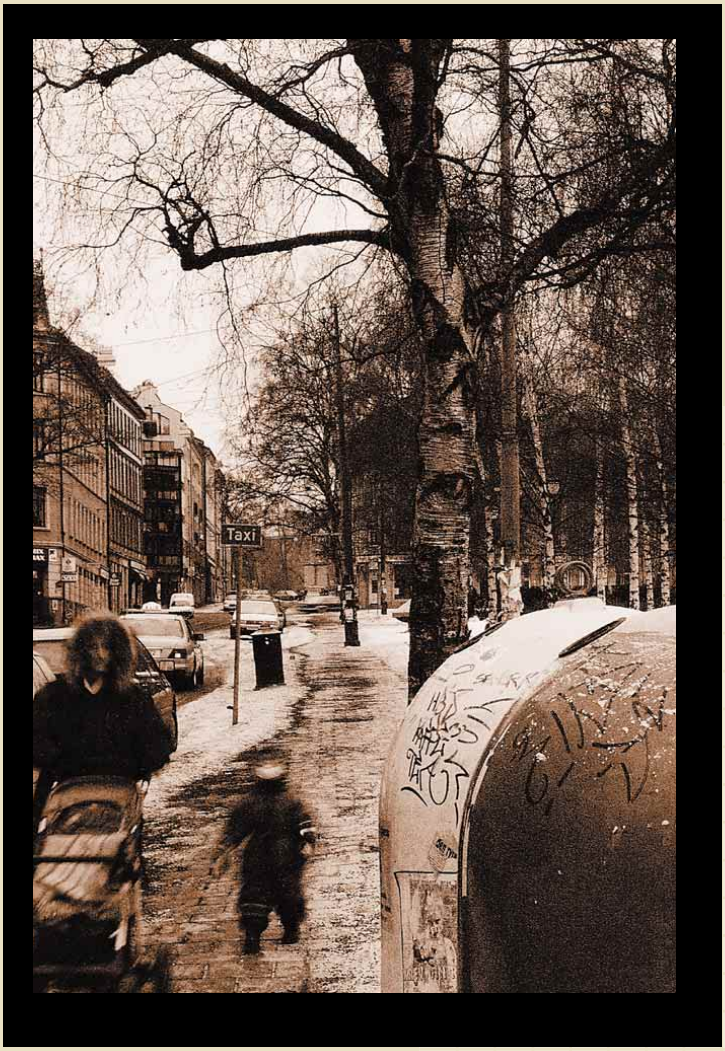
Waste Stream Recycling has been tested in several markets without establishing cost-effectiveness other than energy recovery from the materials themselves. Sorting waste into clean material fractions has so far proven very difficult. Rigorous back-end sorting provides consumer convenience and low transportation costs, assuming that the waste collection is organized efficiently.

Curbside Collection is widely used in all parts of the world and works well in residential areas and markets with low recycling targets. Under favourable conditions recycling rates in the range of 20-50% can be achieved. In curbside collection systems, packaging waste is sorted at home and placed outdoors in separate bins or boxes for collection. The main weakness of curbside programs is inadequate materials-control systems that leads to high back-end sorting costs and low yields of high quality materials. In addition the systems suffer from high transportation costs, particularly in programs organized with separate pick-up by material fractions.

The **Igloo System,** named for the domed containers that are placed in neighborhood recycling drop-off areas, offers lower transportation costs. Lack of materials-sorting control mechanisms results in high back-end sorting costs. The location and neighborhood density of igloos are consumer convenience factors that can limit participation.

Automated or attended **Recycling Centers** take care of some critical challenges in the collection part of the value chain. Consumers participate by bringing the recyclable materials to a central collection point, in most cases a food retail location, where machines or operators do the sorting. By selecting sites that consumers regularly visit, participation is made easier, and the transportation infrastructure is utilized efficiently.

The key challenge in operating these centers is to encourage consumers to bring their recyclable materials to the centers. TOMRA machine installations in food retail stores are one example of how to organize an efficient recovery system with high participation from the consumer. Recovery rates can be as high as 98% in today's deposit markets in the US and Europe.



TOMRA'S ROLE

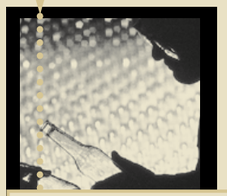
TOMRA's goal is to develop solutions that make it attractive for consumers to participate in recycling activities. During our first 25 years, we focused largely on deposit markets. Now we are increasingly targeting a broader range of recycling services and markets.

TOMRA pioneered reverse vending machines for beverage bottles, cans, and take-home crates. Now TOMRA is evolving into a total-system supplier to the world's beverage and retail industries for handling post-consumer packaging. We are a dynamic, profitable, and adaptable company using sophisticated packaging identification, materials handling, accounting, and logistics techniques to meet real market needs. From this position, we will continue to develop industry-driven solutions to future recycling needs.

TOMRA has no ambition to lead or influence policy makers on how to organize recycling activities. That is beyond the mandate of a commercial enterprise, and it would be an inappropriate way to spend our shareholders' money. We are, however, frequently contacted by government authorities and policy-makers from around the world with requests for information about specific systems and solutions. This is an important element in further developing our business opportunities.

TOMRA believes that the most cost-effective recycling system is based on an intelligent interaction with consumers to ensure front-end separation of clean material fractions.

Tomra's role in the recycling loop...



Cans
PET
Glass

Container producer

Brewery

Transport to brewery

Refillable containers returned to brewery for reuse

Textiles

Plastic

Building insulation material

Glass

Car parts

Aluminium

Other products

Recycler

Administration service

- On-line reporting and maintenance
- Logistics Management
- Management of pick-up fleet
- Inventory and cash control
- Deposit accounting and billing

Tomra Processing plant

Sorting, cleaning, compacting, baling and marketing of materials

Tomra pick-up service

Transport of non-refillable containers to processing plant for sorting and purification

Shop

Container collection/Recycling stations

- Design and operations of collection centers
- Sales, lease and service of machines
- Consumer-targeted promotions

Consumer

Choice of container disposal

Trash

Igloo

Curbside

Worldwide Drink Consumption

The world's drink consumption is characterized by strong growth in emerging markets, particularly for non-alcoholic beverages other than milk. The overall growth of total consumption was 4% annually between 1992 and 1996. Consumption in 1996 of 474.4 billion liters corresponds to 83 liters per capita, worldwide, though there were great variations among markets and regions. The world's packaged drink consumption by category is outlined in the table below.

(in billion liters)	Market Share	1996	1992	Growth 1992-96
Soft drinks	28.5%	135.2	103.8	30.2%
Bottled water	13.0%	61.7	45.3	36.1%
Juice & fruit drinks	6.9%	32.9	27.4	20.2%
Milk & other	22.7%	107.7	101.5	6.1%
Total, non-alcoholic	71.1%	337.5	278.0	21.4%
Beer	23.4%	111.4	101.9	9.3%
Wine & spirits	5.4%	25.5	24.4	4.5%
Total, alcoholic	28.9%	136.9	126.3	8.3%
Total consumption	100%	474.4	404.3	17.3%

BEVERAGE CONTAINER TRENDS

There are four major groups of drink containers: cans, plastic bottles, glass bottles, and drink cartons. Data for some geographical areas are based on estimates due to a lack of reliable sources; these estimates have a negligible impact on total, worldwide figures.

	Europe	North America	South America	Rest of World	Total
Population (millions)	727	293	482	4 214	5 716
Containers (billions of units)	248.6	188.7	119.2	142.9	699.4
Cans	31.6	103.9	15.0	67.6	218.1
Plastic	41.8	47.2	27.6	5.9	122.5
Glass	112.5	25.3	63.9	36.1	237.8
Carton	62.7	12.3	12.7	33.3	121.0
Annual per capita container usage	342	644	247	34	122
Liters consumed per capita	260	417	161	20	83
Annual growth rate	2-12%	2-7%	6-15%	4-15%	2-15%

DRINK CONTAINERS BY CATEGORY

Today's deposit systems for beverage containers focus on the content of the container rather than on the material of which it is constructed. Most deposit systems only cover what the industry calls "carbonated drinks," which includes beer and soft drinks. Of the ten deposit states in the USA, only Maine has introduced deposits on beverage containers irrespective of content. Global drinks consumption by category is shown in the table below.

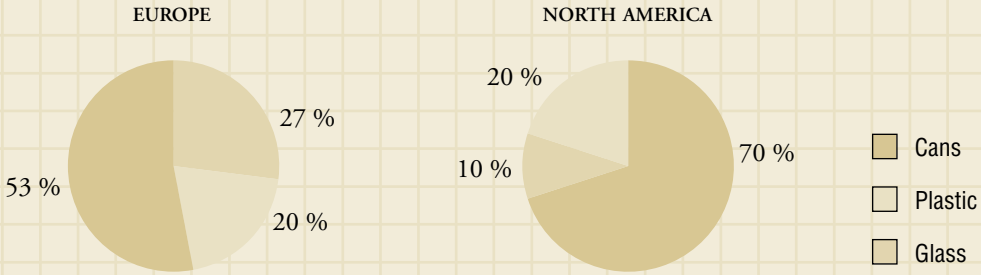
The World (billion units)	Non alcoholic		Alcoholic		Total
	Carbonated	Non carbonated	Carbonated	Non carbonated	
Cans	104.1	19.4	94.6		218.1
Plastic	78.2	43.0	0.1	1.2	122.5
Glass	53.5	59.2	91.9	33.2	237.8
Carton	1.0	119.3		0.7	121.0
Total	236.8	240.9	186.6	35.1	699.4

MAIN CHARACTERISTICS AND TRENDS

- Cans and plastic dominate the small-size container markets
- Plastic and cartons dominate the large size container markets
- There is a worldwide shift toward PET bottles. Today, PET is used for 45% of non-alcoholic drinks but only 18% of the containers due to larger size
- Glass bottles continue to dominate emerging markets, PET has the highest growth
- Non-refillable containers are preferred in markets with long transportation distances
- Large investments by bottlers for new production lines delays packaging changes
- Packaging trends are influenced by raw material prices

Key to understanding the major differences between packaging preferences in the USA and Europe (see pie chart) is the fact that the US market has been more open than the European, allowing longer transportation distances between producer and ultimate consumer. An opening of Europe's beverage market could generate packaging shifts toward the North American structure.
Market complexity in terms of materials, sizes, and shapes benefits TOMRA through the need for accurate identification, sorting, and separate handling of used beverage containers.

CARBONATED DRINK CONTAINER VOLUMES



Industry Challenges

The packaging industry experiences increasing pressure from both the public and government sectors to take responsibility for the waste generated by their products. The main political arguments have been based on:

- Vast increase in total waste volumes
- Trends away from refillable containers
- Increased waste handling cost to society
- Increased pressure on landfills
- Saving resources and recycling pay
- Waste stream, and other municipal recycling programs are expensive and yield recycled materials of low value
- Desire to reduce litter

TOMRA believes in industry-led solutions to recycling. The industry itself knows best how to handle collection, reuse, and recycling challenges. As a niche specialist with a well-established record of performance, TOMRA can prove to be an increasingly valuable resource for beverage producers, packaging manufacturers and the retail sector. Members of the European Union as well as countries such as Norway that have a cooperation agreement with the EU have turned the growing challenge of handling packaging waste into legislative and regulatory demands on the packaging industry.

The European Packaging and Waste Directive, adopted by the European Parliament and the EU Council in December 1994, was the first legislative act primarily focusing on raw materials categories and setting minimum recovery and recycling targets for industry. This directive (94/62/EC) established the following priorities for the packaging industry, in order of preference:

1 Reduce the amount of packaging
2 Reuse packaging
3 Recycle packaging materials
4 Recover energy through incineration
5 Minimize materials disposal.

REDUCE PACKAGING

Reducing packaging is done mainly through reducing or eliminating secondary packaging, such as crates, boxes and other multipacks. The packaging industry is also focusing on using less material per container, which has led to lightweight alternatives in all categories.

REUSE PACKAGING

Refillable beverage containers were dominant in world markets as recently as 20 years ago. The trend toward more non-refillable containers has accelerated, despite that they are more expensive, mainly due to the effects of consolidation of bottling plants and increased consumer preference. The growing importance of non-refillable containers is expected to substantially change the future container mix outside North America.

RECYCLE PACKAGING

The primary challenge in recycling is to develop systems that have sufficiently high recycling rates at the lowest possible cost. The cost of recycling is heavily influenced by the scrap value of the packaging materials.

The aluminum can is currently the only beverage container with sufficient scrap value to cover its own recycling cost in an efficiently organized recycling system. The AluCan represents 84% of the total volume of beverage cans worldwide, with the worldwide recycling rate for cans estimated at 55%. This means 1.2 million tons of aluminum, with a scrap value of NOK 10 billion, are dumped in landfills each year. Manufacturing AluCans from scrap cans saves 95% of the energy used in their production from raw materials.

Recycled PET plastic has experienced dramatic price fluctuations; dropping from 35 US cents/lb. in 1995 to 2 cents/lb. only a year later. The beverage industry has initiated several recycling projects for PET around the world that apply a state-of-the-art "bottle-to-bottle" PET technology which maximizes the value of the recovered PET by ensuring high quality. Through the ability to use up to 100% recycled PET material in production of new bottles, the recycled PET will compete with virgin PET, which is priced at 51 cents/lb. TOMRA is participating in several of these projects.

Glass bottles are the most costly containers to recycle. Low material value combined with high weight make it impossible to foresee any economic collection system for glass operating without reflecting the alternative cost of landfills and littering through subsidies.

INCINERATION OF RECOVERED MATERIALS

Several lifecycle analyses indicate that plastic bottles and cartons should, under certain conditions, be burned to recover energy rather than be recycled. These arguments are based on the assumption that the net energy balance of the recycling process is negative, compared with incineration. In areas where volumes are low and transportation distances long, burning seems reasonable. However, these studies have been questioned on the grounds of inadequate documentation. As mentioned, recent Nordic studies conclude that recycling is by far the most eco-efficient solution, particularly for plastic containers.

DIRECT DISPOSAL

Dumping is regarded by the EU's Packaging and Waste Directive as the least desirable alternative as it literally buries an environmental problem that future generations will have to fix.

TOMRA Services

There are huge differences in drinks consumption and container mix around the world. These variances together with differences in demographics and distribution characteristics indicate the need for flexible recycling capabilities and make it necessary for TOMRA to develop expertise within all the different collection and handling systems.
In addition, TOMRA needs to develop alternative incentive programs that ensure sufficient consumer participation. Additional funds to finance recycling programs can be derived from marketing and promotional activities tied to the collection infrastructure. Understanding market conditions creates the basis for our utilization of business opportunities.

Additional services such as materials handling, data accounting, and administration represent substantial additional potential for revenues in markets utilizing non-refillable containers. Value added services like the promotional programs represent a potential source of income that can help finance future recycling programs. TOMRA offers customers adaptable solutions and total supplier capabilities in the following areas.

SALES, LEASE AND SERVICE

TOMRA was founded on the idea of offering automated reception of empty beverage containers to supermarkets in traditional deposit markets. TOMRA has approximately 37 000 machines installed worldwide, representing 88% of total revenues in 1995. Since 1995, TOMRA has enjoyed average annual growth of 25% in this segment, but the segment's relative size now represents only 50% of total revenues. TOMRA machine technology will, however, continue to make up the core of our activities in the recycling business.

MATERIALS HANDLING

In order to further integrate our reverse vending machine business in the US into the recycling chain and thereby create new business opportunities, TOMRA acquired in 1992 its first materials handling company, NEROC Inc., which operates in Connecticut and New York. Materials handling services include pick-up of containers from supermarkets, sorting, crushing, cleaning, bailing, and finally marketing of the materials to recyclers. All services are offered to and performed on behalf of the beverage industry.

The entire process is integrated with the front-end machine database, utilizing the information to increase the efficiency of the reverse logistics system. By 1995, this business segment represented 9% of total revenues increasing to 29% in 1998.

TOMRA REVENUES BY ACTIVITY

Figures in NOK million	1998	1997	1996	1995
Sales, lease, service	867	785	649	442
Materials handling	501	359	110	47
Administration	95	56	25	12
Consumer collection	256	-	-	-
Promotions	9	1	-	-
Total revenues	1 728	1 201	784	501

ADMINISTRATION

Administration services include accounting for deposit charges and handling fees to supermarkets along with control of the cash and material flow in the deposit system. Through recent technological developments, this area has now become highly automated due to online communication between the machines and the central data processing systems.

The administration system serves as the main link between physical container volumes and cash in deposit systems for non-refillable containers. In 1995, this activity represented 2% of total revenues; the figure had increased to 6% in 1998.

Pål Bråthen
Senior Vice President
Business Development

CONSUMER COLLECTION

Consumer Collection was a new activity area for TOMRA in 1998. Through the acquisitions in California during 1998, TOMRA has taken full responsibility for all handling of recyclable containers between consumers and recyclers in 425 retail food store located recycling centers.

Our first goal is to automate the centers in order to make them available 24 hours a day and thereby increase convenience and container volumes. Our second goal is to focus on further improvements in efficiency at all levels including transportation and processing. Consumer Collection services represented 15% of total revenues in 1998 and are expected to be the fastest growing segment of the company during 1999.

PROMOTIONS

Based on the fact that the reverse vending machine captures consumers' attention when they are using it, TOMRA has developed various promotional services. These are made possible by technological developments in online communication with machines in the field. Although both charity and coupon programs were tested in the mid-80s, they were not successful, mainly due to high reprogramming costs and lack of flexibility.

Since 1996, several pilot programs have been initiated to gain updated experience in this field. In the first test project, consumers could choose to donate their deposit to a charity organization in Norway. The concept operates in Finland, Sweden, and Denmark and is expected to be introduced to other markets in the coming few years. In 1997, TOMRA tested a couponing program in the state of Michigan, USA. Customers received discount coupons, printed on their deposit receipts, which were valid for selected brands in the store. The test results were very promising at the start of the program in 1998. During 1999, TOMRA will introduce the concept in New York and later on also in the European market. The program will be further extended as TOMRA enters new markets with different needs for consumer incentive programs.

Projects focusing on alternative incentives such as bonus points on loyalty cards, lotteries, and discounts on supermarket products have also been carried out over the past years. Some minor programs have been implemented in the European market. Promotional services had no share of total revenues in 1995 and represented only 1% in 1998.

Terje Hanserud
Senior Vice President
Technology

Deposit Systems

Deposit means that consumers pay a little extra (the deposit) when buying the product and then receive it back when returning the empty package. This is the only known system that ensures high recovery rates and reduces outdoor litter. Deposit systems were originally used as an incentive to buy back refillable bottles.

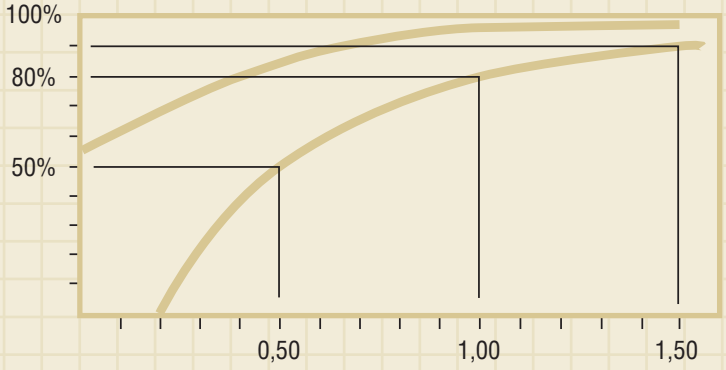
Even today, the majority of European deposit systems are private, industry-driven systems for refillable bottles. So far, only Sweden, Finland, and Iceland have introduced deposit systems for non-refillable containers. Norway will follow in May 1999. In the USA, all existing deposit systems are mandatory and regulated by law.

Unclaimed deposits, or the deposit value of non-returned containers, represent a cost-covering element in the system, and consumers who do not recycle thereby financially sponsor the programs.

The deposit value influences recovery rates to a very high degree. Statistics indicate that voluntary recovery systems without any financial incentives at the very best can obtain recovery rates ranging from 50 to 65% while deposit systems with a per-unit deposit value above NOK 1.00 (15 cents) normally secure recovery rates above 90%.

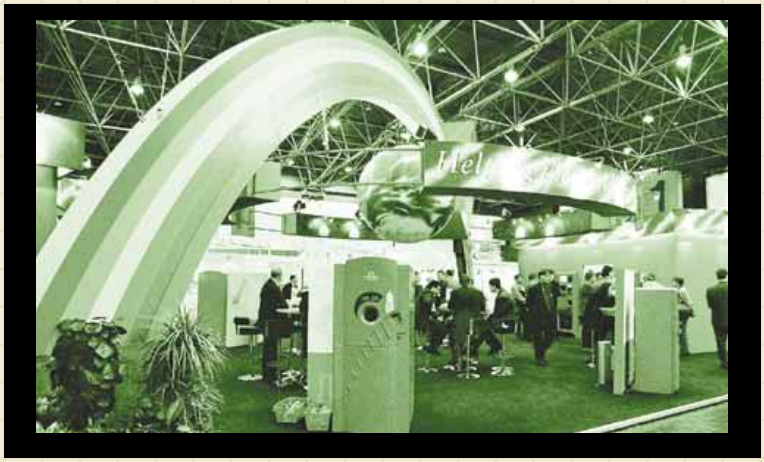
Supermarkets receive a handling fee to cover the cost for RVM (Reverse Vending Machine) equipment or manual handling in many deposit systems.

DEPOSIT VALUES AND RECOVERY RATES



The graph indicates the relationship between deposit values and recovery rates with upper and lower limits based on existing deposit systems.

Markets



However TOMRA becomes active in a city, state, or country – whether by establishing convenient recycling centers through a chain of retail stores, or by speeding up bottle returns to local beverage producers – the results should be the same: enhanced efficiency and greater satisfaction for individual consumers. Let's look at the "World of Opportunities" opening up to TOMRA on a regional basis, starting in Europe.

Europe:

Population: 727 million Consumption per capita/year: 342 containers

There are huge differences in packaging and beverage consumption between Western and Eastern Europe. In this section, we will focus on typical features for Europe and three specific markets —Sweden, Germany, and the UK, — where the consumption patterns, legislation, and recycling systems also differ.

RECYCLING

Packaging legislation has gradually increased its influence on consumption patterns, and drink packaging has been focused on because of its substantial share of total waste. The EU Packaging and Waste Directive (92/62/EC) was adopted in December 1994 and implemented in national laws during 1996/97. The directive encourages waste reductions with specific recovery and recycling targets to be reached by June 2001.

In addition to establishing standards in Europe's leading economies, the EU directive coordinates efforts to reduce waste and prevents the introduction of new barriers to trade. Negative effects on free trade from local legislation, like Denmark's ban on non-refillable containers, have so far been the main topics brought before the EU court.

European Parliament and Council Directive on Packaging and Packaging Waste (94/62/EC)

Preferences:
Reduce - Reuse - Recycle – Incinerate - Dispose

- Recovery by weight > 50% , < 65%, before 30 June 2001
  - Greece, Ireland, Portugal > 25% before 31Dec. 2005
- Material Recycling > 25%, < 45%, each material > 15%
- Substantially increased targets for the succeeding 5 years
- Reuse and recycling equally important
- Life Cycle Assessments to be documented by industry
- National measures restricting free trade not accepted

Billion units	Non alcoholic		Alcoholic		Total
	Carbonated	Non carbonated	Carbonated	Non carbonated	
Cans	18.1	0.8	12.7		31.6
Plastic	23.5	17.0	0.1	1.2	41.8
Glass	19.7	28.2	41.9	22.7	112.5
Carton	0.1	62.0		0.6	62.7
Total	61.4	108.0	54.7	24.5	248.6

The environmental focus in Europe has produced results. Recycling rates have increased to the point where recycling figures for 1996 were: aluminum cans 37%, steel cans 45%, glass 54%, plastics 10%, and cartons 37%. A majority of European countries have a deposit system for refillable bottles. 80% of all glass bottles and 35% of the plastic bottles are refillable.

PACKAGING TRENDS

Beverage cans account for 13% of total packaging measured in number of containers. About 60% of all cans for the European market are made of steel although the number of aluminum cans is rising. There is a potential for increased can usage compared to market shares in North America, but cans as well as glass bottles are losing market shares to PET bottles in Europe.

PET is the material with the highest volume growth, followed by HDPE (high density polyethylene). HDPE is mainly used for milk and juice bottles, while the PVC (polyvinyl chloride) bottle still has a high share of the mineral water market. PET (polyethylene terephthalate) bottles are also taking market shares in mineral water from both PVC and glass.

Europe has about 50% of the world consumption of drink cartons, most of which are used for milk. Growth rates are declining due to the success of plastic bottles.

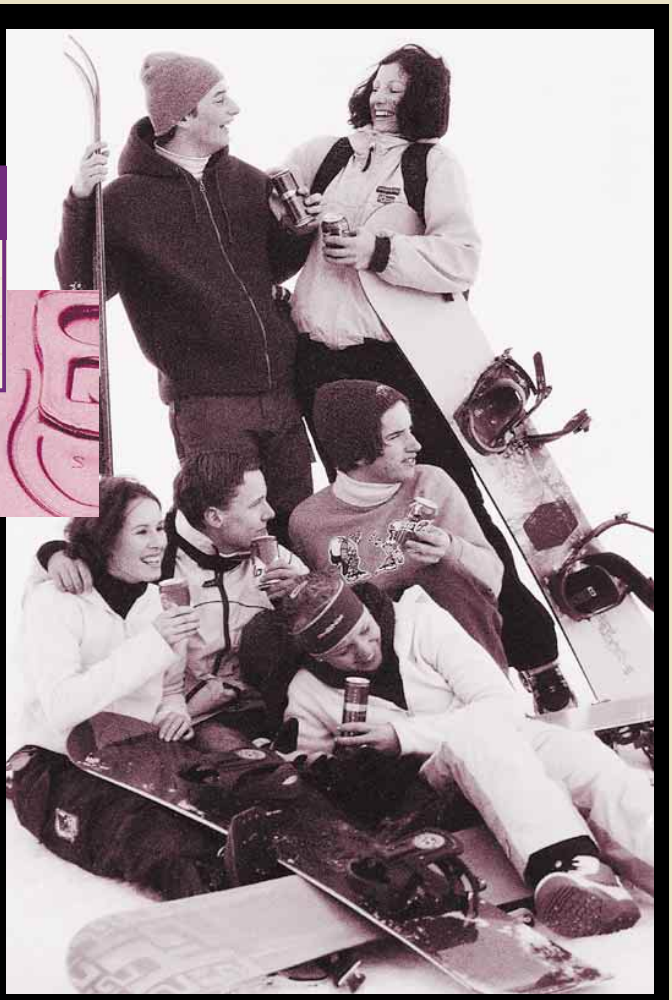
Total consumption of packaged drinks amounted to 188.7 billion liters in 1996, averaging 260 liters per capita. Per capita consumption is substantially lower in Eastern Europe (population of 307 million) than in Western Europe (420 million). Consumption of soft drinks and mineral water is 125 liters per capita in Western Europe compared with 37 in Eastern Europe. The consumption of soft drinks, mineral water and juice is expected to increase in all parts of Europe.

Per capita beer consumption is declining in Western Europe while it is rising in Eastern Europe. Western Europe is the largest market for wine in the world, but consumption is leveling off. Spirits consumption is decreasing in Western Europe while Eastern Europe has the world's highest consumption of spirits per capita — over 1 billion liters is consumed annually.

Sweden

Population: 8.8 million Consumption per capita/year: 466 containers

	Billion containers	Recycling rate
Cans	0.8	90%
Plastic	0.5	76%
Glass	1.0	72%
Cartons	1.8	30%



RECYCLING

Sweden has deposit on both refillable and non-refillable containers. The main characteristic of refillables in the Swedish market is high standardization of container shapes and sizes. This reduces transportation and distribution expenses for bottle handling.

The first deposit system for refillable glass bottles in Sweden was implemented in 1885. In 1984, Sweden became the first country in Europe to introduce deposits on beer and soft drink aluminum cans. Initially, the target was to recycle 75% of all cans; the target was increased to 90% in 1991.

RefPET bottles were introduced in Sweden in 1991 and had a market share of 31% in 1996. Deposit for non-refillable PET was introduced three years later. The recovery rate for PET bottles is 98%.

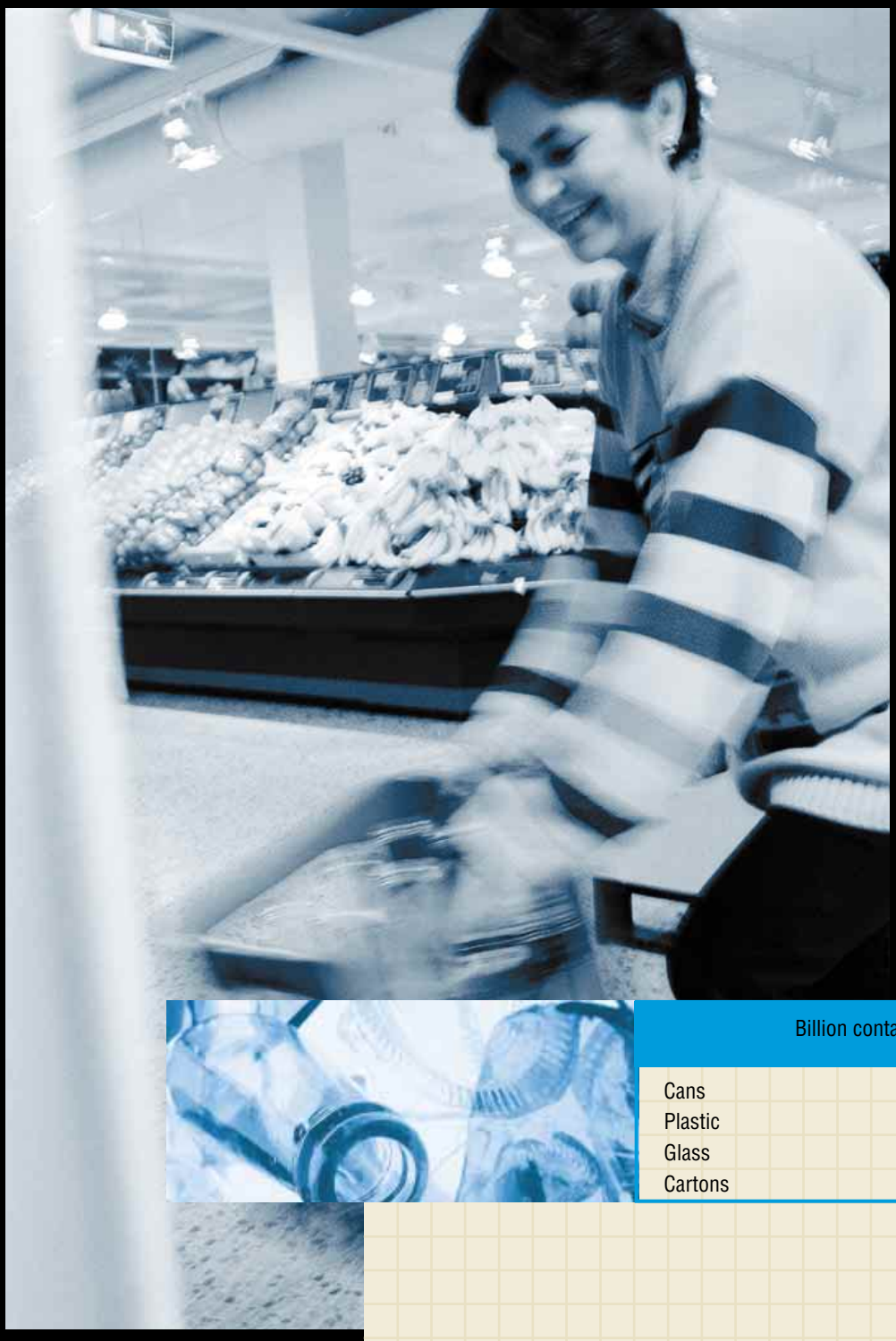
PACKAGING TRENDS

As opposed to the other Nordic countries, the share of PET used for soft drinks in Sweden is low, only 41% in 1996 though it is expected to increase. Sweden has a higher percentage of cans used for soft drinks and beer than other Nordic countries.

Total beverage consumption was 2.8 billion liters in 1996. Soft drinks are the largest single beverage sector, followed by beer. Soft drink consumption is rising while beer consumption is decreasing per capita. Sweden has low consumption of mineral water and juice, the lowest per capita consumption of juice in the EU – only 3 liters in 1996. Sweden records low alcohol consumption overall, but shows increasing consumption of wine.

Germany

Population: 81.4 million Consumption per capita/year: 595 containers



	Billion containers	Recycling rate
Cans	6.3	81%
Plastic	4.5	-
Glass	28.9	79%
Cartons	8.7	66%

RECYCLING

Germany is one of the most environmentally-focused countries in the world and was the first in Europe to adopt packaging legislation, the National Packaging Ordinance of 1991. The law seeks to eliminate any packaging that cannot be re-used, recycled or incinerated for energy recovery, with the aim of making producers and distributors responsible for their own packaging recovery. If the recycling targets are not met, the manufacturers and distributors are required to implement more effective recovery systems. The recycling targets are 64% for plastics, 72% for glass, aluminum and tinplate, and 85% for cartons.

Duales System Deutschland (DSD), an association of retailers and manufacturers responsible for disposal and recycling of waste, was established to reduce the financial effects of the new legislation. A green dot label is put on products to indicate that they can be disposed in DSD containers.

Since the implementation of the Packaging Ordinance, there has been an estimated 30-40% reduction in packaging waste. The major challenge in the system is the huge amounts of recovered materials that have no viable end use.

German law also requires a minimum market share for refillable bottles at 72% of total beverage containers. This quota will be increased to 81% by 2001. The minimum target was not met in 1997, with no immediate effects in the market. The minimum quota for milk packaging is set at 17%.

PACKAGING TRENDS

Germany is the largest beverage market in Europe, and glass bottles have a dominant market position. PET bottles are capturing market shares and had 41% of the soft drinks market in 1996. The introduction of the RefPET bottle in the early 1990s speeded up this development. Beverage can use is expected to rise over the next few years with a majority of the increase coming from the beer market. Steel cans are dominating, but losing market share to aluminum.

Total beverage consumption amounted to 37.4 billion liters in 1996; about 65% of this was non-alcoholic beverages. Per capita consumption of non-alcoholic drinks is expected to rise. Mineral water is the largest single non-alcoholic drink segment.

Germany is the largest beer consumer in Europe and the third largest in the world, with 132 liters per capita in 1996. Beer, wine, and spirits consumption have declined in the 1990s.

United Kingdom

Population: 58.3 million Consumption per capita/year: 518 containers

	Billion containers	Recycling rate
Cans	7.8	28%
Plastic	10.1	2%
Glass	9.9	22%
Cartons	2.4	0%

RECYCLING

The UK implemented local legislation in accordance with the EU Directive in March 1997. The packaging recovery target was set at 52% by 2001, with 16% recycling of each material type. Industry performance is monitored through a system of Packaging Recovery Notes (PRNs) issued by reprocessors as a proof that the targeted amount of packaging waste has been recycled.

The regulations define the packaging industry as manufacturers of packaging raw materials, packaging fillers, importers, and retailers/distributors. Different obligations are imposed on different members of the packaging industry depending on turnover and handling by weight.

The UK does not have deposit on beverage containers. The collection system is based on recycling centers (bottle banks). For glass containers, there are over 20 000 bottles banks – one for every 2 800 people. One-third of local communities operate plastic bottle collection programs. At the beginning of 1998, there were more than 3 000 bottle banks for plastics, and 1.9 million homes were covered by curbside collection programs. Despite these programs, the recycling rate for plastic was only 2% in 1997.

PACKAGING TRENDS

The UK is the largest consumer of cans in Europe. Nearly 50% of all soft drink beverages are packaged in cans, and the rest mainly in PET bottles. Can consumption is stagnant, and aluminum has a 75% market share. Use of glass bottles is also expected to stagnate over the coming years. The popularity of alcopops and premium beers has led to minor growth in the past years.

HDPE is the most frequently used plastic material, but usage of PET is rapidly growing, making the UK one of Europe's leading PET consumers. Mineral water and juice are primarily filled in plastic bottles. The UK is unique regarding milk packaging; 50% glass bottles, 32% plastic (HDPE), and only 18% carton.

Total drink consumption was 17 billion liters in 1996. Soft drinks had the highest growth. The UK is the biggest market for dilutables with an annual consumption of 2.8 million liters. Bottled water has a low market share, but is expected to rise. Juice and fruit drinks have stable growth. Beer consumption is declining rapidly as is the consumption of spirits. Draft beer is dominating the beer market in the UK with 65% of the total market. Wine consumption has increased in the 1990s.

North America:

Population: 293 million Consumption per capita/year: 644 containers

RECYCLING

The regulation of waste management in the US generally falls to individual states and local governments, with no consistent national policy on waste reduction. Ten states have introduced mandatory deposit legislation for beverage containers: California, Connecticut, Delaware, Iowa, Maine, Massachusetts, Michigan, New York, Oregon and Vermont. In addition, Colombia, Missouri, implemented a municipal bottle bill in 1982.

While a majority of states have implemented curbside collection programs, in recent years there have been more cancellations of such programs than newly started ones. According to the US Environmental Protection Agency, the overall recycling rate for beer and soft drink containers was around 40% in 1995. Recycling rates in deposit states were in excess of 85%. Curbside programs continue to be uneconomical, with high collection and transportation costs that account for up to 75% of expenses. Consequently, most programs require direct or indirect municipal subsidies.

PACKAGING TRENDS

Non-refillable containers dominate the majority of North American beverage container markets with only isolated pockets of refillables. Over the past five years, the most dramatic shift has occurred within the soft drinks industry with plastic PET replacing virtually all glass containers. With increasing emphasis on beverages in so-called convenience packs, which are consumed away from home, PET containers have begun to take market shares from cans as well as glass. This growth in convenience consumption, combined with consumer preference for PET, has led to an overall leveling off of growth in cans while PET containers are experiencing significant growth.

Beer is predominantly consumed in can and glass containers. Consumption levels remain relatively flat with modest growth in container volumes. The glass container is only showing real growth in premium beer products which consumers associate with the glass package. At least one US bottler has introduced a PET bottle for specialty larger packages. It is not yet clear whether this package will gain wide acceptance, foretelling a major shift in packaging for the beer industry.

Billion units	Non alcoholic		Alcoholic		Total
	Carbonated	Non carbonated	Carbonated	Non carbonated	
Cans	66.6	2.8	34.5		103.9
Plastic	29.8	17.5			47.3
Glass	1.5	6.5	13.6	3.6	25.2
Carton	0.2	12.1			12.3
Total	98.1	38.9	48.1	3.6	188.7

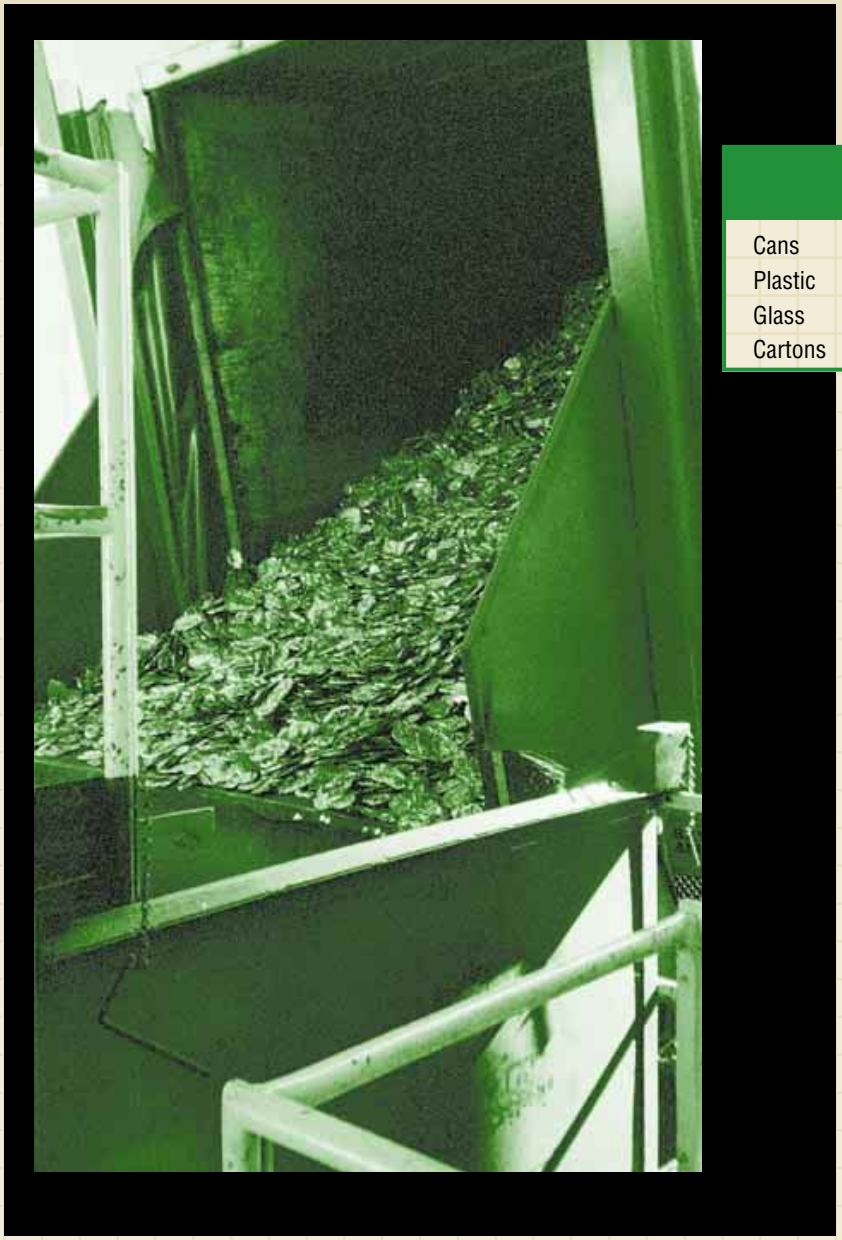
Michigan

Population: 9.0 million Consumption per capita/year: 625 containers

The current bottle bill that established deposits, the Michigan Beverage Container Act, was enacted in 1978 to reduce roadside litter, clean up the environment, and conserve energy and natural resources. The bill covers beer, soft drinks, carbonated and mineral water, wine coolers, and canned cocktails.

Michigan State statistics reported an 80% drop in beverage container litter in the years after implementation. Michigan offers the highest deposit value per container in the USA with 10 cents per container, leading to the highest recovery rate in the USA – 98% overall.

Due to the high recovery rate, the regulated 25% of unclaimed deposits being paid to retailers as handling fees, have a very limited effect on retailers net recycling costs.



	Billion containers	Recycling rate
Cans	2.9	92%
Plastic	1.9	80%
Glass	0.8	72%
Cartons	0.05	40%

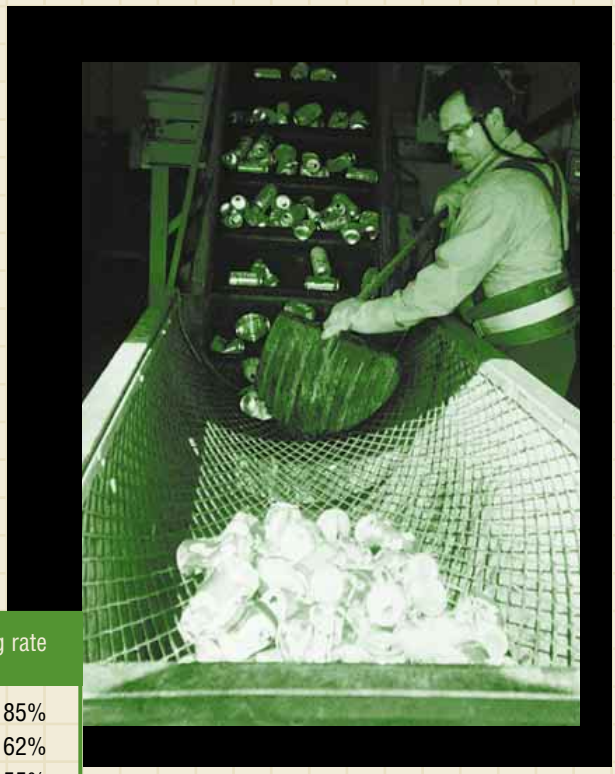
California

Population: 33.0 million Consumption per capita/year: 650 containers

The current bottle bill, the California Beverage Container Recycling and Litter Reduction Act (AB 2020), was implemented in 1986 to encourage recycling and reduce litter. The Bill covers containers for beer and other malt beverages, soft drinks, wine and spirit coolers, carbonated mineral water, and soda water.

Instead of returning containers to retailers, the California system is based on return to redemption centers. A total of 2 800 redemption centers are available to the public for recycling. A total of 1 700 of them are operated by traditional scrap dealers and 1 100 are convenience centers operated by various recyclers. TOMRA operates 425 centers today.

The deposit value is 2.5 cents for containers that are smaller than 24 oz and 5 cents for larger containers. Of 14 billion deposit containers, 80% were recovered in 1996. Unclaimed deposits represent about US$50 million annually, which is collected by the state to finance the program's administration, provide grants to nonprofit organizations, recycling and education programs, and give reimbursements to industry and recyclers. California State statistics reported a 75% drop in beverage container litter since the introduction of its bottle bill.



	Billion containers	Recycling rate
Cans	8.8	85%
Plastic	7.5	62%
Glass	3.2	55%
Cartons	1.9	45%

South America:

Population: 482 million Consumption per capita/year: 247 containers

South America has enjoyed good economic growth and improved standards of living over the past years, despite a few periods of dramatic economic turbulence. With this greater prosperity have come structural changes in food retailing. Originally dominated by family stores and smaller supermarkets, parts of the market are now being taken over by international supermarket chains. The big "hypermarkets," using advanced technology and concepts, are becoming increasingly common.

The South American population is large, but average consumption of packaging materials per capita is low compared with Europe and North America. A smaller part of the population is classified as consumers of packaging. With continued growth, opportunities for higher consumption are tremendous.

RECYCLING

There is no deposit system for non-refillable containers in South America. Recycling in many countries is done by scavengers who collect the packaging and bring it to recyclers for small amounts of money. In Argentina and Brazil, the authorities have started discussions on how to deal with non-refillable containers. A deposit system may be the solution for the future.

PACKAGING TRENDS

The region has provided relief for the glass and metal packaging suppliers in the US, who have been under increasing pressure in their home markets with the shifts toward plastic containers. Due to exposure to US packaging trends — and sometimes substantial investments by North American bottlers — the region has quickly adopted new packaging formats. PET bottles are rapidly taking market shares from the traditionally dominant refillable glass bottles in the soft drinks market.

Refillable bottles with deposits dominated South American markets until a few years ago. There are huge variations in market mix in the region, both in material and size. Trends indicate that the container mix will continue its change toward more non-refillable containers as wealth increases. The main markets in the region are Brazil, Argentina and Mexico, followed by Chile, Columbia and Venezuela.

Billion units	Non alcoholic		Alcoholic		Total
	Carbonated	Non carbonated	Carbonated	Non carbonated	
Cans	9.6	0.7	4.7		15.0
Plastic	22.6	5.0			27.6
Glass	28.2	19.9	13.0	2.8	63.9
Carton	0.3	12.3		0.1	12.7
Total	60.7	37.9	17.7	2.9	119.2

Brazil

Population: 155.8 million Consumption per capita/year: 155 containers

Brazil is the fifth largest and one of the most diverse countries in the world. The Brazilian economy has undergone a revival in recent years, and the packaging industry has benefited. However, packaging material use per capita remains low, and the packaging sector is fragmented. Only about 20% of the population can be counted as consumers of packaged products. Drink packaging is one of the more developed sectors, with all the major US soft drink and beer companies present. Brazil is the world's third largest soft drink market.

RECYCLING

Brazil has no deposit system for beverage containers. For refillable glass and plastic bottles, there is an exchange system in place which has all the major characteristics of a deposit system. Consumers receive a discount on purchased drinks in refillable bottles if they return used bottles of the same category.

High volumes of non-refillable containers and other packaging waste combined with low recycling rates have led to discussions about introducing legislation.

PACKAGING TRENDS

The packaging industry has seen growth rates in the range of 5-10%, with some sectors, such as plastics packaging, growing at a faster rate.

Cans are the dominant container type in Brazil measured in number of containers. Plastic bottles for non-alcoholic beverages now dominate drink consumption, measured in liters, while glass still dominates the beer market.

	Billion containers	Recycling rate
Cans	10.7	65%
Plastic	4.5	20%
Glass	7.9	28%
Cartons	1.1	39%

Rest of World:

Population: 4 214 million Consumption per capita/year: 34 containers

TOMRA is well positioned to take advantage of the "World of Opportunities" around the globe. In our analyses, we have placed Asia, Australia and Africa into one region, both due to a lack of official industry information and to these regions' relative importance to TOMRA's business so far.

Japan is the region's largest beverage packaging user and its most proficient reuser and recycler of drink packaging. India, which over the last decade has been a veritable "tiger economy," exhibits many of the hallmarks of potential major markets in less economically advanced countries.

Across Asia, opportunities for beverage packaging reuse and recycling are great in both developed and emerging economies.

PACKAGING TRENDS

Bottled beer is the traditional market leader in this vast region. The soft drink sector is undeveloped with a huge market potential.

The Asia-Pacific region is the world's fastest growing market for glass containers. In China, bottle manufacturing grew 60% from 1990 to 1996. Thailand, Indonesia, and India are growth markets, whereas Japan and Taiwan have seen the effects of the shifts toward PET bottles and metal cans.

Beverage cans have also had growth, and 3-piece steel cans are preferred for juices and hot-fill teas and coffee. Estimated annual volumes of aluminum and steel cans are 68 billion units.

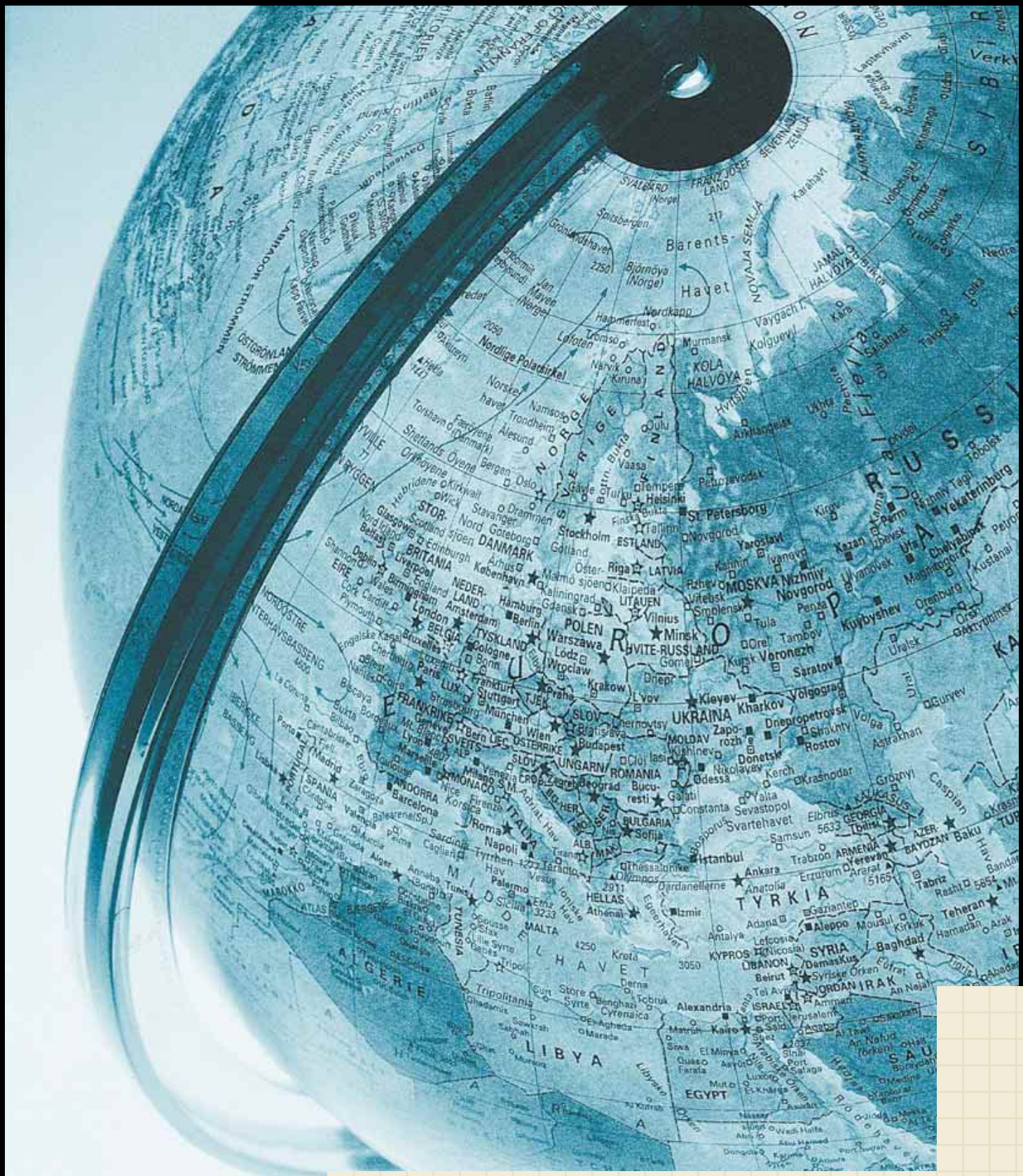
Demand for PET bottles is booming in the region, surpassing units produced in Europe and second only to North America. While Japan is currently the region's largest PET consumer, China is expected to become the leader over the next five years.

The economic turbulence rocking Asia's markets since July 1997 has dramatically reversed growth rates in the region. In 1996, packaged beverage sales grew by 4-10 percent in the Asia-Pacific region.

PACKAGING RECYCLING FRAMEWORK, EXAMPLES

There is great diversity in regulatory framework and generally limited use of deposit legislation:

- Koreco Act, Korea (1994): Recycling facilities operated by governmental body. Deposit for beer and sojoo glass bottles ensures high recycling rates via distribution centers.
- Taiwan: Deposit schemes by individual fillers. EPA recovery target set at 70% for all fractions.
  Law passed in March 1998 requires retailers to provide recycling bins for UBCs.
- Most markets: Municipalities obligated to collect curbside.



Billion units	Non alcoholic		Alcoholic		Total
	Carbonated	Non carbonated	Carbonated	Non carbonated	
Cans	9.7	15.2	42.7		67.6
Plastic	2.4	3.5			5.9
Glass	4.1	4.5	23.4	4.1	36.1
Carton	0.4	32.9			33.3
Total	16.6	56.1	66.1	4.1	142.9

Japan

Population: 125.2 million Consumption per capita/year: 435 containers

	Billion containers	Recycling rate
Cans	37.1	76%
Plastic	5.5	8%
Glass	7.6	65%
Cartons	4.2	18%

According to 1998 estimates, Japan was responsible for slightly more than half of the total beverage units sold throughout the Asia-Pacific region. Market preferences for bottled beer and sake along with national and local legislation have led to recycling rates of 90% for glass bottles and 76% for cans.

RECYCLING

The Japan Container and Package Recycling Association plays a key role in the three recycling routes (designated organizations and municipalities, independent recycling businesses, and self-collectors) specified in the Packaging Waste Recycling Law that went into effect in April 1997.

Residents in those municipalities that conduct sorted collection are required in principle to sort their disposed items into transparent glass bottles, amber glass bottles, other glass bottles and PET-bottles. In certain municipalities, however, they are collected together and sorted later at the disposal station. As long as they are sorted out at the storage facility, the Japan Container and Package Recycling Association accepts them as items meeting the sorting criteria, and, therefore, leaves the disposal method to be determined by each individual municipality's standards.

Each municipality will draw up a five-year plan for sorted colletion and store collected items meeting sorting criteria (based on an ordinance of the Ministry of Health an Welfare). If a municipality has concluded a contract under which the Japan Container and Package Recycling Association agrees to receive those items, a recycling agent entrusted by the Association will come to collect them. During the 1997 fiscal year, about one third of all the municipalities entrusted the Association to transfer their sorted waste.

PACKAGING RECYCLING LAW FRAMEWORK: JAPAN

- Waste Management Law (1970)
- Law for Promotion of Utilization of Recyclable Resources (1991)
- Packaging Waste Recycling Law (1 April 1997)

-Glass and PET bottles subject to recycling
-UBCs and packages made of non-PET and paper subject to recycling by 1 April 2000
-Consumers obligated to sort for disposal
-Municipalities to implement sorted collection
-Business entities obligated to recycle packaging materials

India

Population: 935.7 million Consumption per capita/year: 7 containers

India is the world's second most populated nation, but it has a very low per capita consumption of packaged drinks. Recycling is not covered by national legislation, and Indian recycling rates are hard to establish. The environmental focus is primarily directed toward solid waste management and major air and water emissions.

Economic growth and higher purchasing power have led to increased beverage sales in recent years. Changes in legislation have also influenced this development. After lifting the 15-year ban on brewing licenses in 1991, ninety new beer licenses have been issued. The potential for beer sales is huge as official statistics indicate per capita consumption of only half a liter.

PACKAGING TRENDS

India's packaging industry is expected to grow steadily during the next few years. The country's 300-million-strong middle class, characterized by relatively high per capita income and rising purchasing power, will drive growth. The industry benefits from the population's increased exposure to western culture, mainly through satellite television.

Soft drinks, estimated at 850 million liters annually, translate into less than one liter per capita. About 65% of soft drinks are cola drinks. Family-owned stores, smaller supermarket, and kiosks dominate the market distribution channels.

	Billion containers	Recycling rate
Cans	0.04	Unknown
Plastic	0.3	Unknown
Glass	3.5	Unknown
Cartons	2.3	Unknown

Australia

Population: 18.1 million Consumption per capita/year: 641 containers

RECYCLING

Curbside collection is the most widely used recycling system in Australia. South Australia has the only deposit system, regulated by the Container Deposit Legislation, in force since 1977 as an extension of a voluntary deposit system dating from 1912. Its primary focus is reuse of containers as well as litter and solid waste reductions similar to the regulatory regimes in force in several systems in Europe and North America.

PET recycling rates have now reached 30%, with recovery rates for soft drink bottles reaching 53% in Sydney. Each year, 200 million HDPE milk containers are recycled. The success of HDPE recycling stems largely from its inclusion in curb-side collection programs. According to the Australian recycler Full Cycle Plastics, curbside HDPE collections recycle up to 85% of HDPE milk bottles.

Aluminum cans are Australia's most recycled container; still, more than 1 billion aluminum cans end up as landfill every year. A total of 53% of Australian households now have access to steel can recycling.

Drink cartons have achieved a waste reduction rate of 21% and an estimated recycling rate of 11%. Around 50% of Australian households are now covered by curb-side carton recycling programs.

More than 40% of all glass containers produced in Australia are recycled or refilled. Recovery rates vary from 64% for beer bottles and 69% for soft drink/juice bottles to 81% for wine and spirits bottles.

PACKAGING TRENDS

The Australian packaging industry is forecasted to grow at a rate of just 2-3% over the coming years, which is lower than GDP growth. Food and drinks packaging growth is linked to population growth, which is projected to increase by just over 1% until the year 2000.

The Australian beverage industry produced an estimated 4.6 billion liters in 1996. Non-alcoholic beverages accounted for only 48% of this volume. Beer is the largest single drink category, accounting for 39% (1.78 billion liters) of the total market. Wine is also a sizable sector with 13% of total beverage production. The Australasian Soft Drink Association does not break down soft drinks production statistics into categories, but carbonated soft drinks account for well over half of soft drink production, with fruit juices accounting for about 15-20%.

	Billion containers	Recycling rate
Cans	4.4	37%
Plastic	1.7	30%
Glass	3.2	43%
Cartons	2.3	11%

BU Europe

Morthen Johannessen
President
TOMRA Europe AS

1998 was a year of continued growth and very positive development for Business Unit Europe. All major markets generated healthy growth, and BU Europe further improved both its customer services and relationships. The continued success of the T-600 and the synergies generated by integrating the former Halton sales & service organization contributed greatly to the year's advances.

The first full year of operation following the acquisition of Halton System Group, demonstrated the strengths and benefits of the integrated business. Our customers are benefiting from extended service offers, our product range is being broadened in order to meet demand from all market segments, and synergy effects have allowed us to maintain pricing at 1997 levels. We will continue to seek new ways of improving our operations, products and customer service, and feel that we have a better platform than ever on which to build.

SALES

Operating revenues from Europe amounted to NOK 609 million in 1998, an increase of 18% compared with 1997. Among our major markets, Austria grew the most with a 50% increase on 1997 figures, followed by Finland (up 28%), and Norway (up 24%). The overall growth rate was in line with projections for the year, and reflects strong momentum both in machine sales and services.

MACHINE INSTALLATIONS

Installation of new TOMRA machines continued at a brisk pace in 1998, and a total of 2 337 machines were put in place. A majority of these new machines were T-600s. The user-friendliness and new technological platform of this machine have been extremely well received by consumers and retailers alike. Customers consider it the ultimate way of providing consumer service in handling returned beverage containers. The success of the T-600 also signals a market shift towards greater functionality and improved communications technology, primarily influenced by the inclusion of non-refillable containers in the deposit systems.

MicroLite was launched in Sweden during the third quarter of 1998 as the first machine in a new product family targeted to establish TOMRA as the leading supplier in the "small store" segment across Europe. MicroLite is a combi-machine handling both cans and non-refillable PET bottles. Following the Halton acquisition, the Finnish product organization has focused on building a new technology platform in order to broaden TOMRA's product portfolio and meet future demands and needs in this segment.

The population of TOMRA machines in Europe is 29 000. Approximately 8 000 of these units are connected via modems to TOMRA's national service centers. These "online" installations enable us to offer value-added services such as remote control operations and innovative ways of offering in-store consumer communications and promotions.

MARKETS

Although the Nordic markets are considered fairly mature in terms of machine penetration, we continue to see solid growth in sales of TOMRA products and services in the region. Total revenues across Norway, Sweden, Denmark, and Finland increased by 16% in 1998. This growth indicates a further strengthening of TOMRA's leading position in the industry. The Nordic retail industry has welcomed the T-600 with great enthusiasm. TOMRA's innovative charity donation program is being tested and used by customers in all four markets. In addition, Sweden has prepared the ground for testing a coupon program.

In Norway, beverage industry players and retailers are gearing up for a launch of deposits on cans and non-refillable PET bottles in May 1999. In December 1998, TOMRA received large orders from two leading key accounts, Hakon and Norges-Gruppen. Each supermarket chain entered into an agreement with TOMRA Butikksystemer AS for delivery and upgrade of 500 machines. Start-up is scheduled for May; most installations will be T-600s followed by T-62s. More orders are expected to come from other chains and private stores.

Revenue growth of 9% in Germany is lower than our expectations, but we remain optimistic about the short- and long-term prospects in this very important market. A refocused local TOMRA organization, lead by a recently appointed managing director, showed very promising signals in the last few months of the year. The number of installations in Germany during November reached an all time high.
We have aggressive growth targets in place for 1999, supported by a complete range of sales and marketing initiatives that will be executed throughout the year.

Operations in the Netherlands reported a 19% increase in revenues in 1998. The T-600 has enjoyed a very positive and enthusiastic welcome also in the Dutch market. We were both pleased and encouraged when Albert Heijn placed an order for delivery of 200 T-600 combi-machines in October. The machines will be delivered over the next two years. Albert Heijn is one of Europe's leading retailers with 665 stores in the Netherlands,

In the Czech Republic, TOMRA entered into a 40% joint venture agreement with a local distributor in October. There are currently 150 machines installed in the Czech Republic, and we estimate that this market has a potential for annual sales of 100-150 machines.

In October 1998, we entered the Polish market by signing a distributor agreement with Inter Commerce. We expect this market to represent excellent growth opportunities for TOMRA in the coming years.

OUTLOOK

In Norway, the introduction of deposits on non-refillable containers (cans and PET) in the first week of May 1999, represents significant business opportunities for TOMRA. Our objective is to maintain our position as the food retailers' preferred supplier of reverse vending solutions, and our organization is fully committed to support and service all our customers in the best possible way when the new packaging is launched. The Norwegian retail industry's own estimates indicate that investments in the range of NOK 300 million are needed to handle the new container volumes.

There are processes under way to evaluate alternatives to current packaging and handling systems in other European markets such as the Netherlands, Denmark, Germany, and Austria. The trend is clearly towards more proactive industry initiatives through joint efforts to identify the most cost-effective systems for handling used beverage containers. Leading European entities consider TOMRA well suited and positioned to actively contribute in these processes.

TOMRA is dedicated to continuing and increasing our focus and resources on the significant opportunities for aggressive growth in the European market. Leveraging "A World of Opportunities" in a European context means that we will seek opportunities to expand beyond traditional reverse vending machine sales and services. We believe that the best way to do so is through partnering with key entities in the beverage and retail industries and through utilizing the experience TOMRA has gained from European and American markets.

Effective as of 1 January 1999, TOMRA Europe AS became a separate legal entity under TOMRA Systems ASA. The separation will enable us to increase our focus on providing first-class customer service to our existing customers, while aggressively targeting new business opportunities across the region. We will combine the resources of an industry leader with the approach and mentality of a challenger to ensure that we capture every opportunity that can be turned into a healthy future growth scenario for our business.

BU America

1998 was a year of sustained impressive growth for Business Unit America, with important new demonstrations of the validity of our business concept. TOMRA's strength lies notably in the ability to creatively apply new business solutions to each specific market situation. This proven capability has consistently led to attractive business opportunities where others have failed or underperformed.

Gregory S. Garvey
President
TOMRA North America

As we moved into 1998, BU America had identified several key measures that would define success for the year. These measures included implementation of the Michigan Statewide Pickup and Processing Program, penetration of the California market, and developments toward future non-deposit expansion. In each of these areas, 1998 was a resounding success. BU America's operating revenues amounted to NOK 1,119 million, compared with NOK 686 million in 1997 (up 63%).

MICHIGAN PICKUP AND PROCESSING

The first half of 1998 involved extensive negotiations with the Michigan Beer and Wine Wholesalers Association (MBWWA). While a long-term contract had been secured with the Michigan Soft Drink Association (MSDA) in 1997, a decision was initially made not to implement the program until beer cooperation had been fully secured. Negotiations were finally completed with MBWWA late in the second quarter.

While some beer distributors agreed to participate immediately, others were challenged by union labor contract concerns. Nevertheless, the Michigan retailers and the MSDA committed to launch the statewide program, with full soft drink and where feasibles beer participation. This approach represented 75% of the total volume, but did not affect operating proforma, as the overall system volume has continued to build. The remaining locations will be incorporated during the first quarter of 1999.

The results to date have validated the operating assumptions in our original projections.

CALIFORNIA STRATEGY

California represents the largest single deposit market in the US, larger than all the other nine deposit markets combined. It was critical for TOMRA to succeed with its entry into the California market.

California presented a number of unique challenges with regard to how the deposit legislation works. Our primary emphasis was on the convenience center structure which exists as a result of retailer obligations to handle deposit containers. There were six major operators of convenience centers in California. The nature of state legislation prevented TOMRA from establishing centers competing with existing operations.

We had clear plans on how to re-engineer and develop the California market, but these could only be executed from a meaningful market position. In February 1998, TOMRA committed to an aggressive market penetration strategy that by year-end had resulted in TOMRA being the largest convenience center operator in the state.

In March 1998, TOMRA acquired the west coast operations of Reynolds Recycling Division, covering California and four non-deposit states. This established a California presence with 90 convenience centers and a larger commercial collection and processing infrastructure.

In July 1998, TOMRA acquired the operating assets of Recycling Resource LLC. The company operated 22 convenience centers in Northern California and had a commercial network that complemented our Reynolds Northern California operations.

In August 1998, TOMRA successfully negotiated an exclusive long-term contract with California's largest retailer to provide convenience center services. The agreement is for a 5-year period and covers over 170 locations.

Finally in December 1998, TOMRA completed the acquisition of Mobile Recycling Inc. which provided for 140 additional convenience centers. The Mobile acquisition fulfilled our market presence objective by making TOMRA the largest convenience center operator in the state with more than 425 centers.

A number of initiatives are under way to merge the acquisitions, identify synergies, and improve operating margins. Results to date have been positive.

A major development project has now been launched in California to re-engineer the existing convenience center structure. This project provides for expansion of operating hours, incorporation of reverse vending technology and extensive marketing and promotion to build consumer volume. The project will culminate in a pilot test of the new concept in the San Diego area during the latter part of the second quarter 1999. Based on the success of the pilot project, the new automated convenience centers will be rolled out in year 2000.

The California expansion has occurred during a time of legislative uncertainty. Convenience centers receive monthly payments of up to US$2 000 from the California Deposit Fund. New legislation has been proposed to increase the fees and extend the legislation for two years as current legislation was due to expire by the end of 1998. The outgoing governor vetoed the legislation which resulted in handling fees being withheld as of 31 December 1998. The legislature and the new governor approved a one-year extension of the old legislation in February 1999, retroactive to 1 January 1999. We expect new legislation to be introduced during 1999 and are optimistic as to its long-term impact on our California operations.

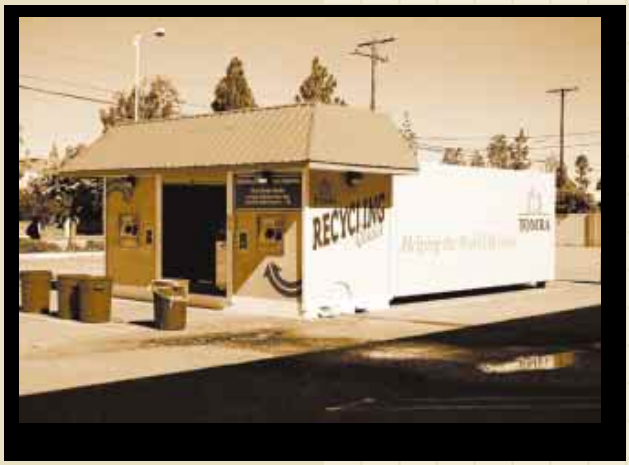
NORTHEAST MARKETS

Existing markets in the Northeast have continued to develop in a positive manner with increased machine installations, increased container volumes and additional processing services provided to the beverage distributor industry. In Michigan, we

successfully launched a coupon program during the second quarter of 1998. The effectiveness of the coupon program has been impressive in its impact on participating manufacturers' sales. Even with a proven concept, we have found it takes considerable sales effort to maintain manufacturer participation throughout the year.

Full subscription to the coupon program requires the support of a minimum of 40 manufacturers. We have built a base of ten manufacturers and continue to develop relations with each new manufacturer as they join the program. 1999 will be a year of continuing coupon program development in Michigan. Interest in the program has been high with both retailers and manufacturers. A launch in New York is planned during the second quarter of 1999.

TOMRA Metro successfully extended all major retailer reverse vending leases in the New York market for minimum 5-year terms. The early extension was largely tied to the planned introduction of the coupon program in 1999.



NON-DEPOSIT MARKETS

As part of the Reynolds Recycling acquisition, TOMRA obtained direct control of operations in the four non-deposit states of Washington, Colorado, New Mexico, and Hawaii.

In July 1998, TOMRA invested in 50% of Wise Recycling LLC, which had acquired the remaining 23 non-deposit operations from Reynolds Recycling. The strategy behind this investment is primarily to secure, maintain, and further build the national collection and processing infrastructure that existed under Reynolds.

From today's primary focus on aluminum cans, TOMRA sees an opportunity to expand this established infrastructure to handle all beverage container types. Based on assumptions of a positive outcome of the California convenience center test in 1999, we see significant long-term growth potential arising in non-deposit states.

OUTLOOK

1999 will be another year of strong growth in Business Unit America. Growth will largely be driven by our California expansion combined with continued growth in our Northeast markets. We also see new business opportunities in focusing on value added processing services related to plastic containers. The latter may prove an important economic element of a future non-deposit market strategy. We see significant opportunities in working more closely with the beverage industry in addressing their container recovery challenges outside mandatory deposit markets.

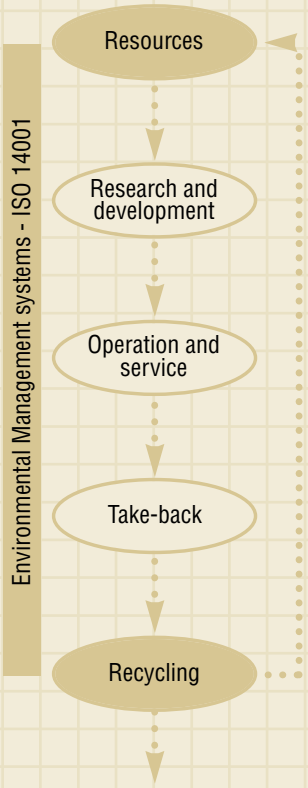
TOMRA's business opportunities in the American market remain very positive. We are confident in our continued ability to creatively apply our business concepts to each new market challenge.

Environmental Report

As a manufacturer and operator of automated systems for recovery and recycling of beverage containers, TOMRA effectively contributes to closing the materials cycle and thereby improves general eco-efficiency. On the other hand, TOMRA has a responsibility for the negative environmental impacts that are generated in our own value-chain. To improve control and further reduce any negative environmental effects, TOMRA is implementing a formal environmental management system designed in compliance with the requirements of the international ISO14001 standard for environmental management systems.

ENVIRONMENTAL MANAGEMENT

TOMRA's environmental management system is developed around our products' lifecycles. This model ensures a holistic environmental approach focusing primarily on continuous improvement of the areas with greatest improvement potential



R&D AND PRODUCTION

- Development of products with a low environmental impact and improved eco-efficiency.
- Development of easily recyclable products with reduced toxic content.
- Development of energy-efficient products that incorporate energy-saving devices.
- Development of cleaner production processes.

OPERATION AND SERVICE

- Products shall have low operating energy consumption.
- Products shall have high operational quality which reduces the need for on-site service.
- Our reverse vending machines shall use online technology for effective service planning.
- Products shall be intuitive and effective in operation and contribute to added value and customer satisfaction.

DECOMMISSIONING

- TOMRA shall survey and analyze existing systems for recycling of electronics waste in its present markets in order to ensure that our subsidiaries comply with national and international legislation.
- TOMRA shall take extended producer responsibility for machines and accessories when removed from service. All equipment shall be safely treated and recycled wherever practical systems for product recovery exist. TOMRA shall actively seek to influence the enabling authority to establish such systems in markets where they have not yet been established.

TOMRA'S ENVIRONMENTAL POLICY

TOMRA's environmental policy is approved by the Group management, which placed the responsibility for its implementation and fulfillment on managers at all levels. TOMRA will contribute toward the increasing efforts to protect the environment and prevent pollution in society at large. This is to be achieved through fulfillment of our environmental policy and environmental programs. TOMRA will consider environmental issues in development and production, and will, through a process

of continuous improvement, seek to minimize the negative environmental effects generated by our operations.

- We shall periodically evaluate and audit our environmental management system and improve it when needed. Such evaluations are to be based on environmental performance monitoring and measurement of the effects of our environmental efforts.
- We commit to comply with all relevant environmental legislation and statutory obligations as well as to seek to exceed the expectations of our stakeholders.
- We shall endeavor to prevent pollution, reduce waste levels and energy consumption as well as prevent other negative environmental impacts throughout our value-chain.
- TOMRA managers shall lead by example in environmental as in other issues, and motivate their employees through proactive initiatives and activities.
- We shall encourage continuous improvement of environmental performance through personal initiative and corrective and preventative action on all levels of our organization.
- We shall encourage and place requirements on our suppliers and expect that they focus on environmental issues in their operations.

ENVIRONMENTAL AUDITS

Integrated quality and environmental audits are carried out in the certified parts of TOMRA Systems ASA regularly. During 1998, seven internal audits and one external audit (by Grøner Certification AS) were completed and reports were issued. Internal auditing is undertaken to ensure that our quality and environmental systems are appropriate and adequate in fulfilling TOMRA's aims and meet the requirements of ISO9001 and ISO14001.

ENVIRONMENTAL PROGRAM

TOMRA's environmental program, which was adopted in 1998, is the result of extensive internal survey and analysis efforts. The program focuses on the most significant environmental aspects identified during the initial environmental review of TOMRA. The program is focusing on the following issues:

- Reduction of incoming packaging.
- Safe disposal and recycling of machines and accessories.
- A change of attitude and culture to reduce energy consumption and make more efficient use of existing recycling technology.
- Surveying and influencing our supply-chain to improve its environmental performance.
- Development of guidelines for systematic research and development in compliance with the principles of "design for the environment."
- Development of systems and criteria for environmental data gathering and reporting from subsidiaries.

Several work groups responsible for the development of methods and procedures within each of the above areas have been established. The environmental program sets out responsibilities, schedules, and follow-up activities.

SUMMARY OF 1998

- The environmental management project has been working towards certification of TOMRA Systems ASA to the ISO14001 standard.
- A project manager for environmental control was hired.
- TOMRA participated in the EPF (Electronics Industry Production Technical Forum) group on environmental management.
- TOMRA has been focused in the NTNU/SINTEF project Productivity 2005 (P2005), program for Industrial Ecology and Life Cycle Assessment.
- A Life Cycle Assessment of different container collection models was initiated.
- An eco-analyst was hired.

ADDITIONAL WASTE TREATMENT

- TOMRA sends incoming expanded polyester to Rockwool for reprocessing and to Moss Jern og Stanseindustri for reuse, using suppliers return-transport capasity.
- Approx. 200 kilograms of circuit boards and electronic components are collected and recycled annually.
- Non-standard pallets are chopped up for firewood and distributed to our employees.
- IT equipment is donated to the Asker Lions, who distribute it to local schools.

ACTIVITIES PLANNED FOR 1999

- Certification to the ISO14001 standard.
- Environmental education for designated managers and employees.
- Start-up of systems for comprehensive environmental reporting.
- Continuation of our cooperation with external research groups and partners.
- Start-up of systems for recycling of decommissioned machines. This initiative is linked to our efforts to develop recyclable and easily disassembled products.

ENVIRONMENTAL DATA, TOMRA ASKER 1998

Consumption of Water		2000	[m3]
Consumption of energy		1.716.900	[KwH]
Waste	Paper	2,4	[Tons]
	Cardboard	12,04	
	Metals	9,2	
	General	24,51	
	Total	48,15	

Figures apply to headquarters in Asker, Norway, with 220 employees in production and administrative functions. TOMRA produced a total of 3,434 RVMs at Asker in 1998. Office employees are also servicing TOMRA's national and international network.

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Annual Report 1998

TOMRA®

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Contents: A World of Opportunities

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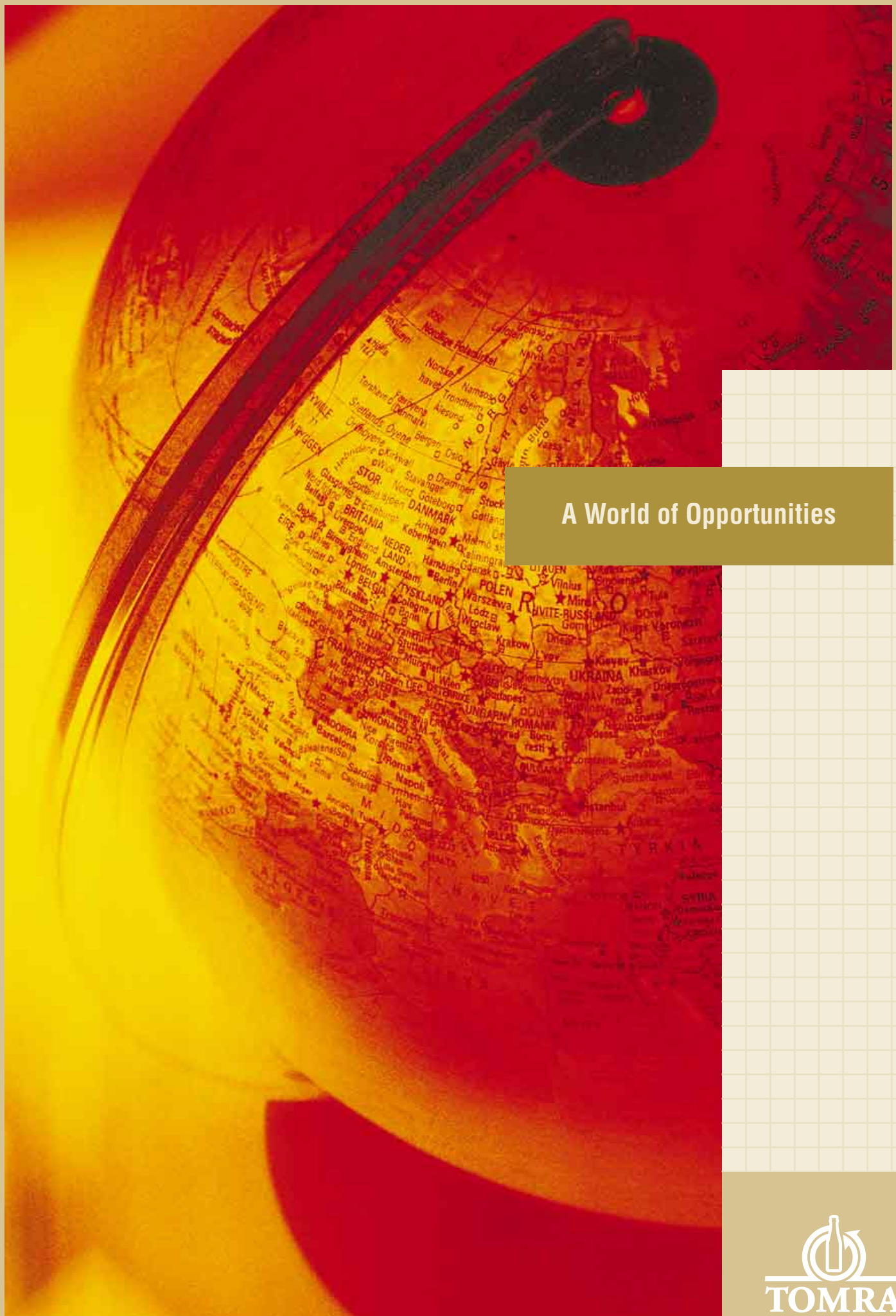
A World of Opportunities



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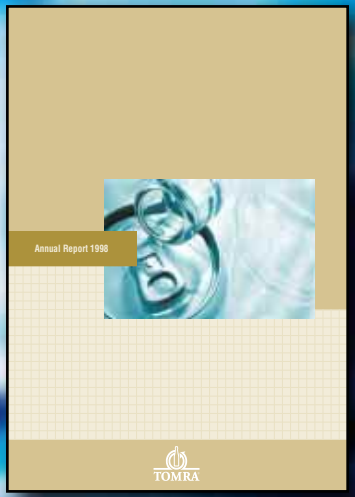

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