

RETURN

Summer 2002

RECYCLING NEWS FROM TOMRA

MARKET SPOTLIGHT: **United Arab Emirates**

PAGE 12

Close-up on **TOMRA SERVICE**

PAGE 6

rePLANET opening in Florida

PAGE 16



How are we doing?

In an effort to find out what our readers think about RETURN, we hope that everyone who reads this issue will take a moment to visit TOMRA's website to answer a very short electronic survey about the newsletter. This will help us assess to what degree the newsletter appeals to our readers and at the same time provide you with the opportunity to help shape the future of this publication. And to show our appreciation for your effort, after answering and submitting the survey you will be automatically entered into a drawing in which ten randomly selected respondents will receive a stylish TOMRA corkscrew!



To answer the survey, select "TOMRA newsletter" under "News" on the main menu at www.tomra.com. Here you will find a link that will take you to the survey. The deadline for answering the survey is September 1, 2002.

Thank you for your help and good luck in the drawing!



Just click here, provide your valuable input about RETURN, and have a chance at receiving the TOMRA corkscrew to help you celebrate those extra special occasions!

RETURN is published twice a year, June and December, and is distributed to TOMRA's employees and customers worldwide. An electronic version is also available on TOMRA's website: www.tomra.com.

Publisher: Tomra Systems ASA, Asker, Norway
Editorial team: Andrew Young, Ann Kristin Ytreberg
Layout: Helene Solheim
Printed by: Falch AS



PHOTO ©: B. Busco / Image Bank

Printed copies: 5,500

Questions about RETURN?
Contact: Andrew Young
Tomra Systems ASA, Drengsrudhagen 2,
P.O. Box 278, 1372 Asker, Norway
Telephone: +47 66 79 92 04
E-mail: andrew.young@tomra.no

Management Perspectives

Thirty years ago, on April 1, 1972, TOMRA was founded. An enterprise established by two brothers who were committed to the idea of bringing efficiency and innovation to the process of recovering empty beverage containers for reuse or recycling. This was an idea that was clearly welcomed by retailers who were struggling with the process of manually collecting and sorting various container types returned to their stores, for it was a group of supermarket owners who in fact made it possible for the two brothers to get the business started. TOMRA was born simply on the full faith in the integrity of the company's founders and their business idea by the 15 or so supermarket owners who fronted the money for the first TOMRA machines before the company was even established!

This story of the way in which TOMRA was founded I think tells a lot about the nature of TOMRA's business. A business which is based on our ability to provide progressive solutions for efficient recycling, but which is dependant on a wide collaboration and partnership with retailers, suppliers, recyclers, governmental bodies, and of course, the consumers who participate in the recycling process. It is this spirit of teamwork that makes possible an ecologically efficient and integrated system for returning used beverage containers to active use, and is the premise that supports TOMRA's mission of helping the world recycle.

The collaborative spirit in our operations around the world can be witnessed in most of TOMRA's business development projects throughout the years and exemplified through our recent business initiatives taking place in Japan, the state of Florida, and the United Arab Emirates (all of which are highlighted in this issue of

30
1972-2002

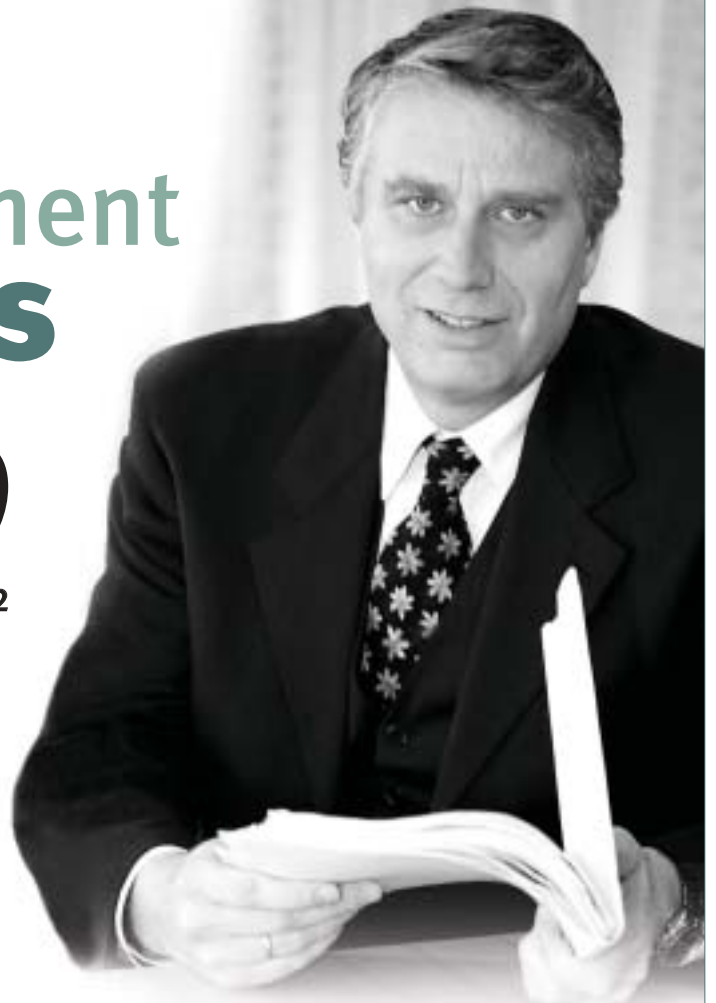
RETURN). These new market initiatives show the way in which TOMRA in collaboration with industry partners is dedicated to finding and developing innovative recycling solutions that are appropriate for each market situation. Solutions that not only will appeal to our customers and industry partners, but that will attract and encourage consumers to regularly participate in the recycling movement. Solutions designed to maximize efficiency in the recycling process in order to bring about the greatest total environmental benefit possible.

These are the ideas and way of business that have brought TOMRA to where it is today. A company which in the past thirty years has experienced tremendous growth, and which today provides the systems that help collect and recycle approximately 25 billion used beverage containers annually around the world. Yet this figure represents just three percent of the number of containers being consumed in the world each year. To help take on the ever-growing challenges of responsibly dealing with used packaging in society in the coming years, TOMRA has

significantly stepped up its research and development and production capabilities. We are now better prepared than ever before in our history to develop and provide the tools and know-how to meet the diverse recycling challenges that exist worldwide.

This is an exciting time to be a part of TOMRA, and I look forward to continuing our great achievements in collaboration with our partners toward making a difference for the environment in the years ahead.

Erik Thorsen
President & CEO



TOMRA core values in practice

Integrity

a first among equals

TOMRA places a great deal of emphasis on the practice of its company core values for the realization of its goals and objectives. For example, the efforts of all employees are reviewed and measured based on criteria relating to the five company core values as part of their annual performance evaluations. An important part of this process is to provide TOMRA leaders with the opportunity to identify and reconcile any gaps that may develop between expectations and actual practice of the company core values. TOMRA leaders are also expected to clearly interpret to their employees what the company core values mean in practical terms for their individual jobs. Further, to recognize extraordinary practice of the core values by its employees, TOMRA presents its VIP (Values In Practice) Award twice a year (see back cover). But while each of the five core values are considered equally important to the success of the organization, you might say that integrity is a first among equals—for it constitutes the foundation upon which we conduct our business.

For TOMRA, integrity means that doing business entails not only providing products and services that contribute positively to the environment, but that this environmental engagement is to be centered in a much broader context of social responsibility. TOMRA

has a clearly outlined policy and program for identifying and improving the organization's impact on society, and has implemented procedures that will allow the company to measure on a year-to-year basis not only its financial performance,

TOMRA 2009 SOCIAL RESPONSIBILITY REPORT 2010

Eco-efficient recycling systems

A wide variety of recycling models have been implemented around the world to reduce the ever-growing quantities of used beverage containers discarded annually. This chapter provides an overview of the various models in use today and the assumptions that should be weighed when evaluating the degree to which they can be considered truly eco-efficient systems.

Region	2008	2009	2010
Europe	128,000	126,000	126,000
Asia Pacific	21.5	18.5	17.2
Latin America	22.5	20.8	16.7
Middle East	23.8	24.8	23.0
North America	124.2	124.4	122.9
Other	52.7	54.8	52.7
World	214.7	197.4	179.1
World % Growth	-8.6%	-8.8%	-8.3%
Total	214.7	197.4	179.1

Source: International Beverage Association

WORLD BEVERAGE CONSUMPTION
Consumption trends
The global consumption of beverages in 2010 is estimated to have been approximately 186 billion liters, which equals about 10 liters per person on average. Consumption in the developed world is high, while consumption in the developing world is low but growing. Over the past four years, which consumption has increased by approximately 20 percent annually, and a similar trend is anticipated in the coming decade. As outlined in Table 1, the greatest increase in consumption since 2006 has occurred within the non-carbonated drinks

Region	Alcohol	Soft	Carbonated	Non-Carbonated	Total
Europe	46.0	89.0	91.7	0.0	226.7
Asia Pacific	4.0	14.4	5.8	1.0	25.2
Latin America	16.2	39.4	2.8	0.3	58.7
Middle East	13.7	44.1	36.0	0.7	94.5
North America	9.4	115.5	0.0	0.0	124.9
Other	30.5	2.0	146.7	0.0	179.2
World % Growth	3.1%	1.1%	0.0%	1.1%	1.1%
Total	109.2	214.3	200.2	14.7	538.4

Source: TOMRA

Annual global beverage consumption:
793,000,000,000 containers
Collected by TOMRA:
25,100,000,000 containers



TOMRA 2009 SOCIAL RESPONSIBILITY REPORT 2010

Environmental performance

TOMRA is a multinational enterprise with operations in 16 countries on three continents. As with any business enterprise, this entails certain unavoidable negative impacts to the environment in terms of energy usage, greenhouse gas emissions, water generation and water usage. In this chapter we will describe the environmental costs associated with TOMRA's operations. Factors that we describe as "direct" environmental impacts. TOMRA's direct environmental impacts should be considered in connection with the representation indirect environmental impacts described in the previous chapter. For example, TOMRA annually collects approximately 25 million used beverage containers and recycles a total of 1.1 million tonnes of aluminium, PET and glass of which is re-used to produce new. This represents significant environmental savings worldwide. This is illustrated by the fact that production of one aluminium can from recycled aluminium requires only approximately five percent of the energy required to produce the same can from mined material.

WATERING TOMRA'S ECOLOGICAL FOOTPRINT
The information presented herein is collected annually through TOMRA's Corporate Social Responsibility Reporting Initiative. This reporting exercise was launched globally in 2008, and includes all major TOMRA subsidiaries worldwide. In practice this includes all our leading development and production units, our operations in Europe, Europe and US markets, as well as our operations in the emerging South American market.

FOCUSING ON THE SIGNIFICANT ISSUES
We realize that our current nature and extent of every single impact on the environment generated by TOMRA throughout the world. Our environmental management system focuses therefore on the most significant factors affecting our environmental performance. These factors include energy consumption, greenhouse gas emissions, water generation and water consumption, as well as the resources used for the production of TOMRA's various packaging systems.

REDUCING ENVIRONMENTAL COST TO MINIMUM
In order to make aware of environmental impacts it is important to make the impact to the value chain is considered. To this end, TOMRA reports both absolute impact figures and efficiency indicators for all the significant impact categories.

Efficiency indicators are obtained by calculating environmental impact per unit of finished financial value created. This enables business to demonstrate improvements in efficiency from year to year, even if the underlying structure of the organization changes or expands.

TOMRA's objective is to ensure that the positive indirect environmental impacts created by its operations are greater than the direct negative impacts.



but environmental and social performance as well. These three performance indices make up what is known as the "triple bottom line," a reporting practice being embraced by a growing league of businesses around the world who recognize the importance of an open and honest review of their performance across a variety of environmental and social criteria.

A review of TOMRA's triple bottom line performance is provided each year as a part of the company's annual report. TOMRA's 2001 annual report, entitled "Recycling in Perspective," reviews the environmental and social aspects of its performance within the following three sections:

• **Eco-efficient recycling systems**

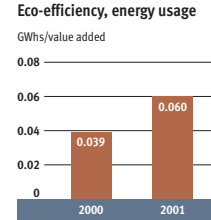
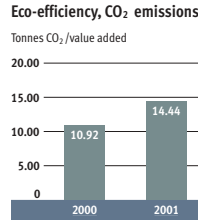
TOMRA's view on what makes up a cost-effective and environmentally efficient recycling system for used beverage packaging, as well as an explanation of worldwide beverage packaging trends.

• **Environmental performance**

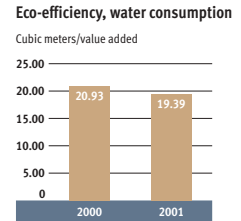
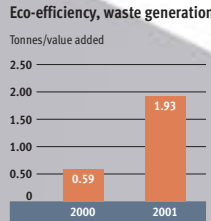
A detailed account of the environmental costs created by TOMRA's operations during the year, including energy consumption, CO₂ emissions, waste generation and water consumption.

• **Living our values**

A look at how TOMRA's core values influence the way in which TOMRA deals with corporate governance, the management process, employee and customer satisfaction and involvement of local communities.



TOMRA measures its eco-efficiency performance in four areas: energy usage, CO₂ emissions, water consumption, and waste generation. These environmental impacts are measured against the financial value created by the company to achieve an eco-efficiency quotient, represented by the equation: Eco-efficiency=Environmental Impact/Value Added. Ideally, these indicators should show a downward progression over time.



In comparing TOMRA's eco-efficiency indicators for 2001 to the previous year, one can see that in all but one area (water consumption), the indicators moved upwards in 2001. This is due to the inclusion in 2001 of the aluminium reclamation activities in Brazil operated by Tomra Latasa. Although energy intensive, these activities manufactured close to 45,000 tonnes of recycled aluminium during the year.

TOMRA's commitment to the triple bottom line philosophy is one of the reasons that the company is a favorite among investment analysts specializing in the "sustainable" stock sector, as well as general investors who are also interested in making a socially responsible investment. It is estimated that between 10 and 15 percent of TOMRA's shareholders have an "ethical" perspective on their financial engagement, showing that making a sound return on investment combined with the knowledge that the investment is helping the world recycle, is highly appealing to many investors around the world.

For more information about sustainable investment and TOMRA's CSR Policy and Program, please visit the Environment section at www.tomra.com.

Living our values

Our world is changing rapidly, and businesses need to respond to this change in order to deliver the social benefits to society. The increasing globalization of business leads to a combination of the traditional role of nations, cities, and states, international cooperation and alignment more important than ever.

In this scenario, companies that want to operate on a global scale need to determine the values that influence the way they do business. TOMRA has traditionally operated in Scandinavia, Western Europe and North America areas that are well regulated in terms of employment and environmental concerns. As TOMRA continues to expand into new markets in South America and Asia, the regulations will be faced with a whole new set of issues in terms of industrial relations and cultural understanding.

HELPING THE WORLD RECYCLE
TOMRA has a clearly defined mission: Helping the world recycle. And through our innovative products and services, we are doing just that. As evidenced in the previous chapter, TOMRA's ability to recycle more than one billion tonnes of packaging materials during 2001, returning these materials to production use rather than in new containers is a clear benefit to the world.

OUR CORE VALUES
TOMRA's core values represent key drivers in growing our business. These values were identified and developed through an extensive process in 1996/97, in which both internal and external stakeholders participated. The process identified the inherent values of the organization, the general rules that guide TOMRA employees day to day decisions, and in sum, set our company's trajectory for the long term. The five TOMRA core values are:

Integrity
TOMRA has always been in the forefront of technological innovation, and was the first Norwegian company to utilize the microprocessor in a commercial product in the early 1970s. Innovation allows us to break new ground both in terms of technology and market development, as well as to promote improvements in all our business processes.

Companies that want to operate on a global scale need to determine the values that influence the way they do business.

Member of Dow Jones Sustainability Indexes

FTSE4Good

TOMRA is listed on all major international corporate social responsibility (CSR) and sustainability investment indexes, including Dow Jones Sustainability Index World, and FTSE4Good.

TOMRA Service

Progressive, Proactive, Professional

"These are the concepts," says Halvor Wergeland, Vice President European Services, "that drive TOMRA Service, and characterize the footprint that we consistently strive to leave behind in providing support for our customers. Reverse vend-

ing installations are a complicated mix of technology and mechanics that are subject to a great deal of wear and tear during their operation, and we know that machines, like the people who create them, will never be infallible. We see the task of TOMRA Service not only as being able to respond quickly and effectively when a problem arises, but also to be proactive in providing services that can prevent the majority of problems from ever occurring."



Online RVM support

A large percentage of TOMRA RVMs are now connected online to a TOMRA service unit in the local market in which they are located. This online capability allows TOMRA to provide its customers with a fast and efficient means of updating software and recalibrating container parameters such as refund values, EAN codes, etc. In addition, rather than having to phys-

ically go to the machine itself, TOMRA technicians can carry out a wide range of diagnostic services on the machine from essentially anywhere there is a phone line. In this way TOMRA technicians can quickly identify for a customer the potential causes of a malfunction and in most cases guide them over the phone in how to resolve the situation.



Mobile data interfacing

First implemented by Tomra Systems B.V. in the Netherlands, the TOMRA Mobile System (TMS) has led to a significant improvement in administrative efficiency surrounding the flow of information between TOMRA field technicians and the central service center. When a customer calls the TOMRA service center, the area field technician has immediate access to the information being taken and inputted into the computer by the call

center representative, and therefore can respond more quickly and be fully updated about the situation upon arrival at the customer's store. The mobile handheld unit also affords the technician the ability to access any previous service history at the store, and in the event any replacement parts are required, automatically update TOMRA's spare part register by simply scanning in the barcode number of the part.



Service partners

In an effort to be as close to our customers as possible in all areas of the markets in which we are located, TOMRA Service has in addition to its full-time technicians a network of contracted technicians known as TOMRA Service Partners. This arrangement has been developed as an efficient, cost-effective

way to service areas that are sparsely populated and where TOMRA RVM installations may be few and far between. Although having other sources of livelihood, TOMRA Service Partners are fully trained and certified by TOMRA to professionally provide complete service on all TOMRA RVMs.

Online technical library

TOMRA Service has its own intranet website, ServUs, providing a one-stop resource where service personnel can access the latest service bulletins, manuals and software updates, in short, all the technical information about TOMRA's products that is needed by technicians in support of TOMRA's customers.



Recond: Top condition = top performance and satisfaction

What is the first impression that a consumer has when entering a store to use a TOMRA RVM? Is she met with a dirty and perhaps unpleasant smelling machine, or a clean, fresh, and orderly reverse vending experience?



The difference can often play a large role in influencing the general perception a consumer has about the store. In those instances where cleaning and maintenance of RVMs receive low priority by store personnel, it can lead not only to less satisfied customers for the store, but can also diminish the performance of or ultimately damage the store's reverse vending installation. As an alternative, TOMRA has developed the Recond program to make it easy for a store to ensure that their reverse vending investment is cleaned thoroughly, regularly and kept in top working condition.

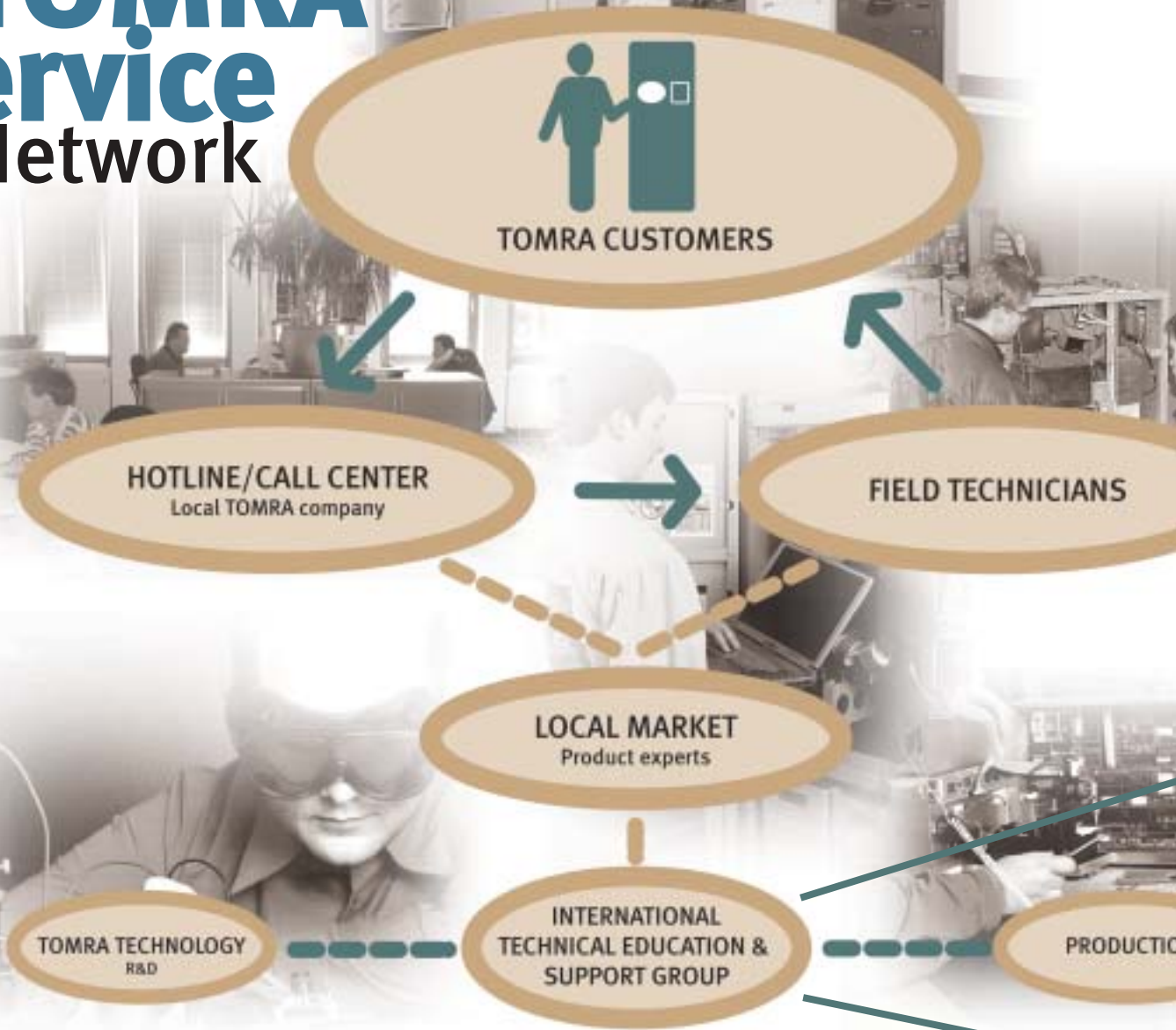
First introduced by Tomra Systems AB in Sweden in 1999, Recond is now planned for rollout in a number of other European markets. With a Recond service contract, a store will receive a certain number of visits per year by Recond personnel according to the frequency level specified in the service contract.

Recond customers can choose among four different types of service: either on customer request, or regularly scheduled visits two, three or four times per year.

The Recond regimen consists of a thorough cleaning of the machine both on the inside and outside, including the backroom equipment, roller conveyors and the floor area around the installation. Also included is a complete machine test to identify whether any parts need to be replaced. And by choosing TOMRA Recond, a store can also be assured that the cleaning of its reverse vending installation will utilize environmentally friendly materials and methods, such as the use of high-pressure steam instead of chemical detergents.

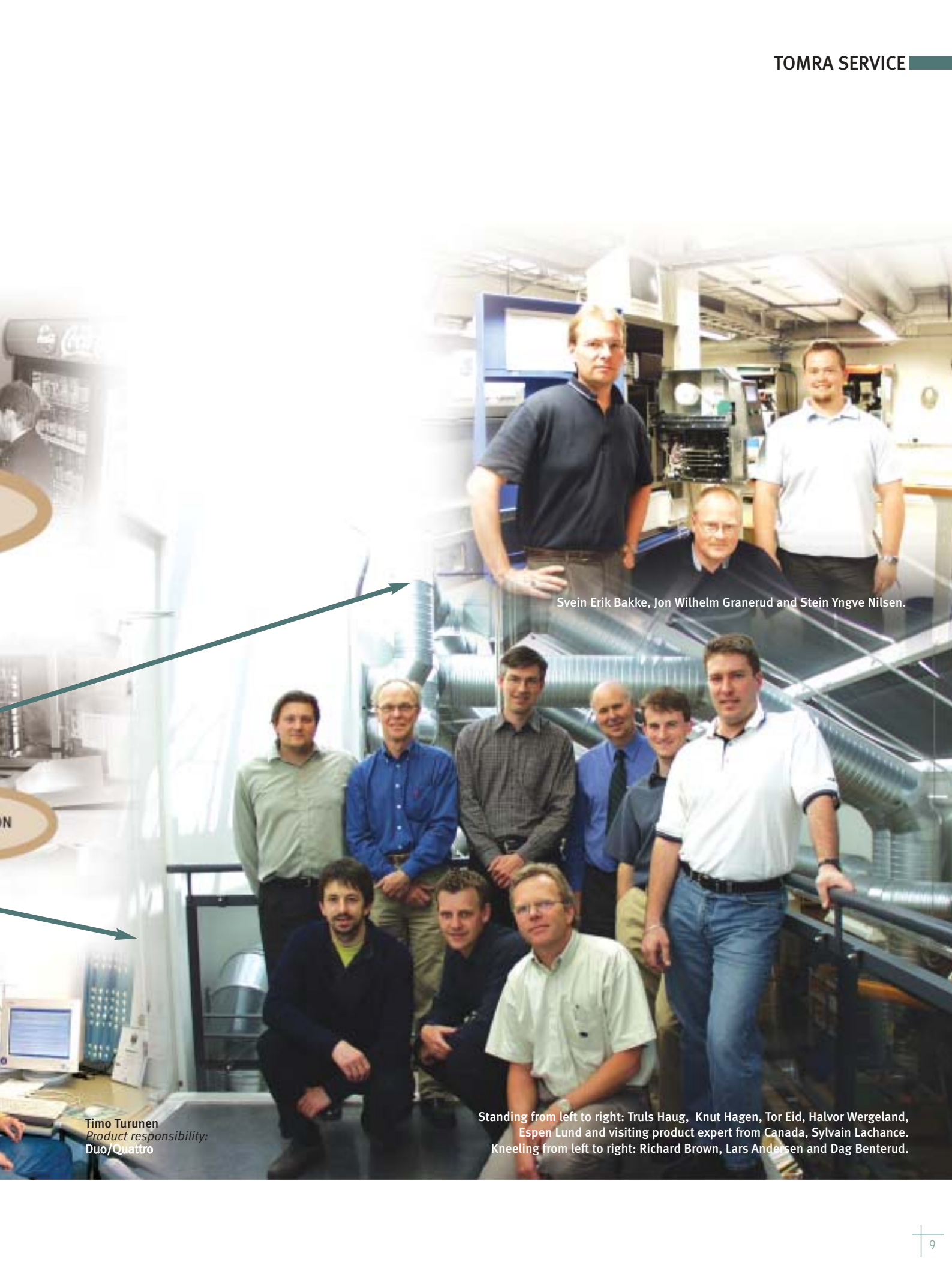
Recond can be the perfect complement to the program of daily cleaning using the materials provided in TOMRA's RVM cleaning kit pictured above.

The TOMRA Service Network



The TOMRA Service Network is built up of four primary tiers: field technicians, local market hotline assistance personnel and product experts, and the corporate level expertise provided by the International Technical Education & Support Group. Pictured here are the members of this group:





Svein Erik Bakke, Jon Wilhelm Granerud and Stein Yngve Nilsen.

Timo Turunen
Product responsibility:
Duo/Quattro

Standing from left to right: Truls Haug, Knut Hagen, Tor Eid, Halvor Wergeland, Espen Lund and visiting product expert from Canada, Sylvain Lachance. Kneeling from left to right: Richard Brown, Lars Andersen and Dag Benterud.



"WELCOME TO REPLANET JAPAN!"

RePLANET

Now open for business in Japan

TOMRA, through its subsidiary Tomra Systems Japan Asia Pacific Ltd., opened its first rePLANET recycling center in Japan on March 12, 2002.

The center, located in front of the Seiyu shopping center in the Tokyo suburb of Mizuho, represents the first step in a series of TOMRA initiatives being developed in this market. These include a further rollout of rePLANET centers in collaboration with Seiyu, the implementation of TOMRA's traditional business model for sales and service of its reverse vending systems, and the development of a large-scale integrated recycling plan for the Tokyo metropolitan area. Look for a more in-depth review of these initiatives in the next issue of RETURN.

Tomra Japan will also soon be launching its

own website, www.tomra.co.jp. This Internet address currently takes you to TOMRA's corporate website, but will be redirected when the site is launched. The website, which will allow users to choose either Japanese or English text, will serve as the most up-to-date source of information about all of TOMRA's recycling activities in Japan. The exact date of the launch will be reported on www.tomra.com.



RePLANET Japan, center no. 1. This rePLANET center consists of two TOMRA 83 HcP reverse vending machines, one being for cans and the other for plastic bottles. Additionally, there are two specially designed receptacles for the collection of used styrofoam trays and paper cartons.



RePLANET attendants inform consumers about the rePLANET concept and what happens to the materials that are returned. RePLANET helps motivate consumers to recycle by offering a rebate on a wide selection of environmentally friendly goods being sold at the Seiyu shopping center. Once a consumer has finished returning his or her used beverage containers, a rebate coupon is automatically printed out by the TOMRA RVM.

TOMRA EuroShop 2002 bike give-away: **And the winner is...**

In February of this year TOMRA participated at EuroShop 2002, the world's largest exhibition for retail investments, in Dusseldorf, Germany. During the five days of the EuroShop exhibition, the approximate 1,500 visitors who came to the TOMRA stand could register to be included in a drawing to win a unique CUBE Elite Team mountain bike. This bike, which is not available in any retail store, is the same bike used by the winner of the 2001 Winter Triathlon World Championship.

Visitors could register for the drawing by testing out TOMRA's unique loyalty card interface installed on two of its RVMs presented at the stand. A drawing from all those who tried out the system was held on the last day of exhibition. The lucky winner of the bike was Mr. Erwin Pritscher, an inde-

pendent shopkeeper from the EDEKA-Group in Germany.

Mr. Pritscher, who owns three Edeka markets in the south of Germany (Südbayern), was presented with the bike in April at the EDEKA regional spring fair. Pictured here presenting Mr. Pritscher (middle) with his new bike are Tomra Germany sales representatives Stephan Golz and Petra Reichlmaier.



United Arab Emirates

In just the past 40 years, the United Arab Emirates (UAE) has been transformed from an indigenous society based primarily on fishing, pearling, and limited agriculture, to an oil-based, highly developed economy with the most diverse, fastest growing population in the Middle East.

Gaining its independence from the United Kingdom on December 2, 1971, UAE was formed as a federation of the seven emirates in the region: Abu Dhabi, Dubai, Sharjah, Ajman, Umm al-Oaiwain, Ra's al-Khaimah and Fujairah. The country is situated in the Persian Gulf between Qatar, Saudi Arabia and Oman, and has some 650 km of coastline along the Arabian Gulf and the Gulf of Oman.

UAE's population has increased approximately 25-fold since the oil boom began in the country in 1962. About three quarters of its close to three million inhabitants are made up of non-nationals, including large groups of Indians, Pakistanis, Iranians and Southeast Asians. It is however a religiously homogeneous society with 96 percent of the population being Muslim. The official language is Arabic, but English is also widely spoken as are Urdu, Malayalam and from the Philippines, Tagalog.

The two largest emirates, Abu Dhabi and Dubai, account for over 80 percent of the country's gross domestic product (GDP). The UAE per capita income on the basis of GDP amounted to USD 16,700 in 1998 and is considered relatively high compared to the per capita income of developing countries.



Population: 2.94 million (current estimate) | Languages: Arabic (official), Persian, English, Hindi, Urdu | Religions: Muslim 96% (Shi'a 16%), Christian, Hindu, and other 4% | Area: 82,880 sq km | Major cities: Abu Dhabi (capital), Dubai, Sharjah, al-Ain | UAE time: +4 GMT





With slightly less than 10 percent of the world's proven oil reserves and the world's fifth largest natural gas reserves, the UAE economy is based heavily on the export of these resources. In recent years however, the UAE has undertaken significant efforts to diversify its economy and to reduce its dependence on oil and natural gas revenues. The non-oil sectors of the UAE's economy presently contribute more than two-thirds of the UAE's total GDP, and about 30 percent of its total exports. The federal government has invested significantly in sectors such as aluminum production, tourism, aviation, re-export commerce, and telecommunications. As part of its strategy to further expand its tourism industry, the UAE is building new hotels, restaurants and shopping centers, and expanding airports and duty-free zones. Dubai has also become a central Middle East hub for trade and finance, accounting for about 70 percent of the Emirates' non-oil trade, due in large part to the area's commercial free zones in which neither taxes nor duties on imports and exports are levied on the businesses operating there.

The UAE beverage industry

Although domestic beverage production and bottling only got underway in the late 1960's in the UAE, beverage production in the country has risen dramatically as a result of rapid population growth and increasing domestic demand, as well as a concentrated effort to expand exports throughout the Gulf region. According to a new study by the Emirates Industrial Bank (EIB) Journal, the UAE is now in fact a net exporter of soft drinks (exports are almost twice the net imports), with exports having doubled between 1995 and 2000.

Demand has risen at about eight percent per year in the last five years for carbonated drinks, and roughly by the same amount for non-carbonated fruit juices. Carbonated drinks dominate the soft drinks industry, and within that, a very small number of firms and brands control most of the market. Non-carbonated drinks, mostly fruit juices, have only about 20 percent of the market share, but have the larger number of factories with relatively small capacities. The larger part of the demand is met

through domestic production of international brands, as well as some domestic brands within the non-carbonated drinks segment.

Beverage container mix

The aluminum can is by far the most prevalent beverage container type in the UAE, with approximately 600 million cans being consumed in the country each year. Of this amount, about two-thirds are used for soft drinks and the remainder for beer. Other container types account for another 600 million units each year, according to the following breakdown: PET, 200 million (mineral water and soft drinks); glass, 200 million (mineral water, wine and soft drinks); and aseptic paper cartons or other container types, 200 million (primarily milk and juices). There are no refillable containers in use in the UAE.

Container recovery

The UAE has one of the world's highest levels of domestic waste. In an effort to reverse this trend, the Municipality of Dubai started in 1996 its "Target 555," an initiative that sought to reduce the annual amount of waste going to landfills from the then 725 kilos per person to 555 kilos per person by the end of 2001 (for comparison, the average at that time in the US per person was 710 kilos, in Australia it was 690 kilos and in the UK 300 kilos). However, according to Hussein Lootah, Assistant Director General for Environment

and Public Health Affairs of the Dubai Municipality, this figure has in fact nearly doubled since 1996, with the amount of waste going to landfills in Dubai now totaling 1250 kilos per person.

Although used beverage containers do not constitute a large percentage of the weight going to landfills, they do take up a large proportion of the volume of this waste. This makes recycling of containers particularly important with regard to minimiz-

ing the use of space at landfills. It is estimated that less than five percent of the approximate one billion containers being consumed each year in the UAE are currently being recycled, but efforts to improve the container recovery and recycling rate in the UAE are gaining momentum. Country officials have expressed a commitment to an aggressive environmental protection strategy, and TOMRA is now actively working to develop an attractive and eco-efficient system for handling the recovery of used beverage containers in this market (see accompanying profile on TOMRA's UAE distributor, Nordic House).

RETURN would like to acknowledge the following sources as references for the preparation of this article:

Office of Environmental Affairs, Dubai Municipality, UAE Ministry of Information and Culture, UAE Ministry of Finance and Industry, Emirates Industrial Bank Journal.



February 10, 2002: Mr. Hussain Nasser Lootah, Dubai Municipality's Assistant Director General for Environment and Public Health Affairs, demonstrates the use of a TOMRA RVM at a press conference where the Municipality announced its initiative to encourage the use of reverse vending machines as a part of its effort to improve the municipality's recycling rate of used beverage containers.

TOMRA's distribution partner in the UAE:

Nordic



Lars Radberg, president of TOMRA's distribution firm in the UAE.

In an interview with RETURN, Lars Radberg, president of TOMRA's distribution firm in the UAE, discusses his company and its partnership with TOMRA.

RETURN: Lars, what is the background for your company's involvement with TOMRA?

LR: Nordic House has for a number of years been working to develop business opportunities in the United Arab Emirates which respond to the challenges the country faces in dealing with one of the consequences of its rapid development, waste management. The UAE has one of the highest levels of consumption in the world, and the country has recognized that it needs to implement more comprehensive measures to help divert waste materials from ending up in its landfills. With approximately one billion aluminum cans, glass and plastic bottles being consumed in the country each year, this is clearly one of the most significant sources of waste. Although some recycling initiatives are in place, they are very limited in scope and do not provide sufficient motivation for consumers to participate. With our background from Scandinavia, we knew there was a better way to approach recycling, and when it comes to bottles and cans, no one does it better than TOMRA. Nordic House is only interested in representing the very best products and solutions, and of course we are very happy and proud to be TOMRA's distributor in this region.

RETURN: What other companies do you represent?

LR: The business idea of Nordic House Limited is to provide a "corporate workshop" so to speak for

House Limited



Tomra Europe president André Løvestam officially welcomes Lars Radberg to the Tomra Group (pictured here in January of this year on the day the distribution agreement with Nordic House was signed).

Scandinavian companies in the Middle East. Even though we are a small and relatively young company we have been able to establish a unique platform from which we can identify business niches from the Scandinavian infrastructure and implement the same into the United Arab Emirates and its neighbors. The management team behind Nordic House has over 20 years experience in the Gulf and currently represent the business interests of several Scandinavian companies across the region. Together with Ragnsells AB of Sweden, Nordic House is also assisting the Dubai Municipality in finding a solution to another waste problem-used tires. We are currently looking at the possibility of implementing a tire recycling model similar to that which has suc-

cessfully led to the fact that almost all tires in Sweden are recovered and recycled. Another of our business areas is security systems for the retail industry, and we are the exclusive distributor in the UAE for Checkpoint METO (Checkpoint Systems, Inc.), a multinational manufacturer and marketer of retail asset tracking and protection products.

RETURN: What is your outlook on the business potential for TOMRA in the UAE and elsewhere in the region?

LR: We are really beginning at the ground level here, and to ensure that we implement a successful system that is supported by all affected stakeholders, we have taken a good deal of time to present, discuss, and develop our concept with all concerned parties. We are now at the stage where we

feel all the major issues have been worked out, and are currently in the process of rolling out our first project. We are very excited about this project because it represents a unique collaboration between three corporate sponsors from the soft drinks industry (Pepsi, Nestlé, Energizer) and a retail partner (Emirate Petroleum). The project involves the placement of recycling "kiosks" with two TOMRA RVMs at 15 of Emirate Petroleum's gas/retail markets in Dubai. Funding of the project is divided between Emirate Petroleum and the corporate sponsors, who will be given the opportunity to advertise their products at the recycling kiosks. Looking beyond this project, our objective is to reach a nation-wide return rate in the UAE of more than 50 percent of all cans, glass and plastic bottles in the country within the next three to four years. To achieve this objective, we feel that we will need to place between 400 to 500 TOMRA RVMs at gas/retail markets and supermarkets throughout the country and provide a suitable incentive for consumers to use our system. The incentive system we are now developing involves issuing a lottery ticket to the consumer for each container returned in our RVMs so that the chance of winning a variety of cash and other attractive prizes increases as more containers are recycled. We are confident that once our initial project is underway and showing good results both in terms of container return rates and the added value created for retailers, sponsors, and the UAE in general, that we will be successful in reaching this objective.



RePLANET on the move:

Testing of **rePLANET** begins at **Wal-Mart supercenters** in Florida



TOMRA's rePLANET recycling center concept, which was initiated in California two and a half years ago, continues to evolve and move into new markets. In addition to the sites that have been introduced in California, Brazil, and Japan, the concept is now being tested at three Wal-Mart supercenters in the US state of Florida. Based on the results of this six-month test period, TOMRA and its partners in the project will evaluate the future possibilities for the concept in the state.

The rePLANET system has been developed somewhat differently in each of the markets in which it has been introduced, and the system being tested in Florida also has its unique elements. Due to the fact that there is not a container deposit system in the state to provide a monetary incentive for consumers to recycle their empty beverage containers, the rePLANET centers will themselves offer a financial incentive: one cent for each container returned. To help offset the costs associated with this, Tomra North America has signed a sponsorship agreement with Coca-Cola that will provide the beverage manufacturer with the container materials collected at the centers to use as raw materials for making new containers. Coca-Cola will also be given the opportunity as a rePLANET sponsor to advertise their products at the centers.

Another difference about the centers in Florida is that they will be fully automated, in contrast to the staffed system that is used throughout California. Personal assistance however will be provided in the form of greeters, whose job will be to inform consumers about rePLANET and help generate interest in the concept. "We are confident that consumers in Florida are going to appreciate the



rePLANET concept and the opportunity to gain more value out of recycling their empty bottles and cans. We are also very excited about this project because it represents a new direction for Tomra North America that has the potential of opening up significant business opportunities both for our company and our industry partners as well," says Robert Lincoln, Executive VP Sales and Marketing, Tomra North America.

For more information about rePLANET in Florida, contact Amy Esposito, Marketing Manager, Tomra North America, telephone +1 203 455-5043, e-mail: aesposito@tomrana.com.



What's in a name:

SUPERCENTER

A supercenter (sometimes referred to as superstore) involves the combination of a full discount store and a full supermarket under one roof, and on average has a total area of about 150,000 sq. feet (13,900 sq. meters). This segment of the retail grocery trade has shown the highest growth in the past five years, increasing by 62 percent to approximately 5,000 units worldwide. The greatest degree of growth has occurred in Latin America and North America, and in North America this growth is dominated by Wal-Mart. Wal-Mart has approximately 1,100 supercenters now in operation in the United States.



Is there a "Lord of the Rings?"

RETURN would like to thank Patricia Lattavo, Communications Coordinator at Tomra Latasa in Brazil, for helping to shed some light on the mysterious allure of the pull-tab ring on aluminum cans.

It all starts in a dark and gloomy grove. I face dragons and serpents, fight savages, jump over cliffs, and swim against the rapids. Finally, after countless adventures, I reach a cave, where I dodge spiders to get to the desired and difficult treasure. There it is, a huge trunk, like the ones in the movies. I run to it. Inside I could find the solution to all of my troubles (at least my financial troubles). I open the trunk, and there they are: the rings of pop-top cans! Thousands, millions of them! "I'm rich! I'm rich!"

The alarm clock rings. I wake up with the feeling that this is an issue that haunts me. Yes, a dream—the first symptom of paranoia in

someone who receives hundreds of e-mails from people who have collected "a full bottle of pull-tabs" and want 250 Brazilian reals for it. In my job as Communications Coordinator, I answer e-mails as informatively as possible: "Dear so-and-so, the rings are manufactured using the same aluminum material that is used in the rest of the

can. Therefore, they are not worth more."

I keep on writing knowing that the person who reads the letter will think, very suspiciously: "Yeah, right!"

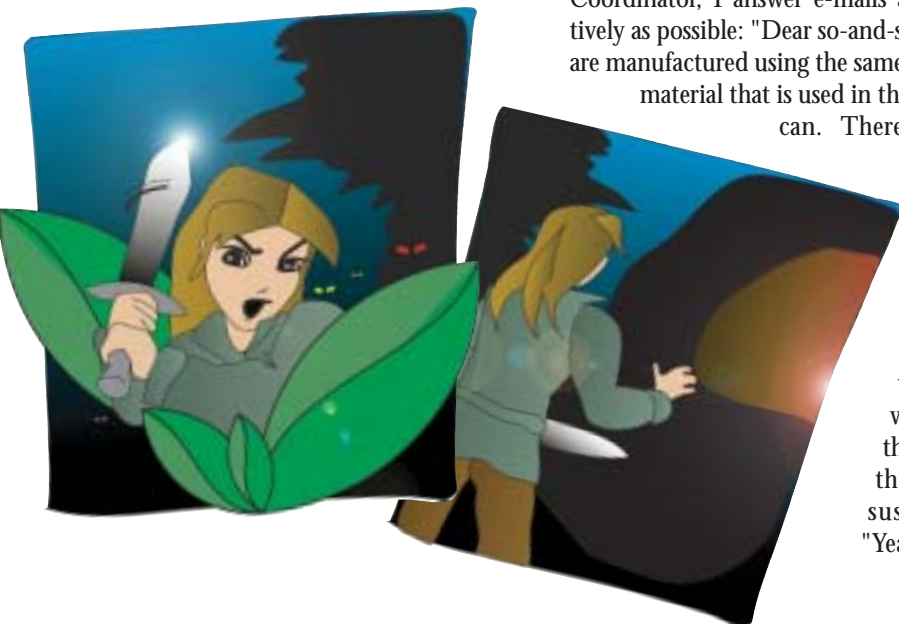
Curious, however, I'm starting to wonder about the fascination these little aluminum rings exert.

After a quick search on the Internet, I discover this "epidemic" is global in scope. On all corners of the planet there are people who think these rings are worth a lot of money! As I proceed with my Internet search, I find the problem is far worse than I thought. I see before me a veritable network of international intrigue and conspiracy. "Rich" Myers, from Kansas City, complains: the kids at the school where he works have gathered millions of tabs to pay for dialysis sessions for the needy, and all of their effort was in vain. Outraged, Caroline "Kramer" responds: "What do you mean in vain?" And she assures him that her entire family, friends and a few neighbors received free dialysis sessions thanks to the rings!

My Internet search however yielded more doubts than enlightenment, so I decided to give a call to Galdeano (Tomra Latasa's reclamation plant manager), a real ace on the topic. Maybe he could provide some precious technical information about the infamous little ring. Graciously, Galdeano quickly gives me the information I need:

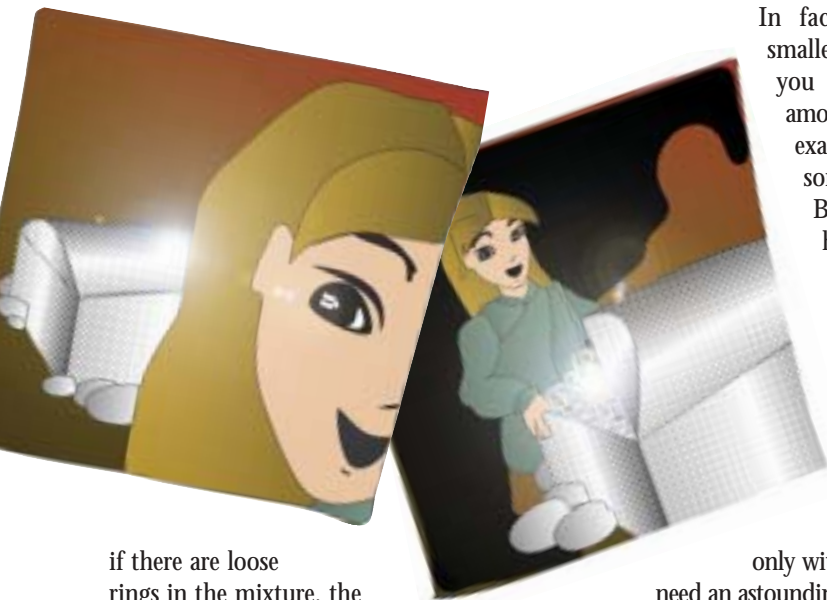
"When you separate the ring from the can, you make recycling more difficult because:

- ☞ Due to the small size of the rings, many of them might get lost before reaching the recycling plant.
- ☞ Before the cans are recycled at our plant, they go through a preliminary cleaning process in which any sand and dirt accompanying the cans are removed, and



//

**I face dragons and serpents, fight savages,
jump over cliffs, and swim against the rapids.**



if there are loose rings in the mixture, the chance that the rings will be discarded along with the dirt and sand is very high.

- ⊗ The alloy used to make the rings is different from that used to make the can bodies. It is very important that there is an equal proportion of can bodies and rings in the smelting process in order to maintain the required alloy specifications for the recycled aluminum. If there are too many loose rings that end up in the mixture it will raise the magnesium content of the alloy, meaning that the recycled aluminum will not meet specifications.
- ⊗ Because of the reasons presented, aluminum rings, when sold separately, have less commercial value than whole cans, which effectively makes them worthless by themselves!
- ⊗ Even worse than the reasons presented here is the frustration of collecting each can, extracting the ring, keeping it, only to discover that it is not worth more than the can after all.



//

In fact, with a much smaller number of cans you can get the same amount of money. For example, let's say someone here in Brazil wants to trade his or her collected aluminum for a product such as a wheelchair. One would need 6,020 cans with the rings attached, but to buy the same wheelchair only with rings, one would need an astounding 286,667!"

I feel better now, for these are the words of an expert! After this lesson, my response to the aforementioned type of e-mails will definitely gain in credibility. And it feels like I have exorcised the little rings from my mind and accepted the fact that urban legends are a part of any society in which people need to believe in something that somehow will improve their lives—even if it is just a dream. Our duty is to inform, clarify, let people dream, yes, but dream of something they can achieve. Therefore, I ask all of you (now that we have all the necessary information) to help publicize "the truth" about the rings.

Night falls, and my dream recurs. I face the same dragons and serpents, everything is just like in the other dream, only this time I know the treasure is real. Again I see the trunk and run towards it: happy, light, free! I open the trunk and... nothing, just a note on the bottom. I pick it up and read it: "Go to work, Patricia! Signed, your appreciative boss, Giosa."



Tomra Latasa and THE SCHOOL PROJECT

Tomra Latasa's School Project, which includes thousands of schools and other institutions, has been responsible for the collection of millions of aluminum cans over the last ten years. These institutions receive recycling credits that can be exchanged for a number of products, such as ceiling fans (24,000 in 10 years), air conditioners, computers, wheel chairs, etc. In its first year of operation, 1991, the project had 1,000 institutions enrolled. Today, there are more than 16,000.

As each institution enrolled in the project returns collected cans and PET bottles, Tomra Latasa keeps an account of the recycling credits for each institution. Organizations can then determine themselves what products they would like to receive according to the number of credits they have accumulated.

The project is very popular, and due to the fact that many of the schools and institutions enrolled are from poor areas, it offers many the chance to improve their facilities with items that they otherwise might not be able to afford. And since the project encourages increased recycling efforts, society also benefits.

THE RIO REPORT CARD:

rePLANETA

getting high marks from recyclers



In June of 2001, TOMRA introduced its rePLANET recycling center concept in Rio de Janeiro under the name rePLANETA.

There are now eight rePLANETA centers in operation in Rio de Janeiro, and recently employees of Tomra Latasa dropped by one of the centers one morning with a video camera to get some footage showing how the rePLANETA system works. While there, they decided why not interview some of the consumers who were returning their empty containers to find out what they thought about the rePLANETA recycling center concept.

According to Patricia Lattavo of Tomra Latasa, "The first person we interviewed was a guy in his 30's. When he told us that his motivation for recycling at rePLANETA was purely for environmental reasons, we thought, OK, this is probably what everyone more or less is going to say. But as the morning went on, we were surprised to hear all the reasons people had for recycling at rePLANETA and the effect that this is having on the community. We went back to the office with a very good feeling that the work we are doing is really worthwhile."

Judging from the consumer feedback received by the TOMRA employees that morning, rePLANETA has become a vital part of the community in Rio de Janeiro and is making a real difference in the lives of the people there. Here is what some of the consumers using rePLANETA had to say:



The rePLANETA attendant explained that kids from a school near the Replaneta center were coming to the center everyday and sometimes, the

whole class at the same time! The kids were participating in a project that the school was running called the "Recycling Games," in which one of the tasks was to take as many containers as possible to rePLANETA. The coupons received for the returned containers would be used to buy some equipment for the school, and the class that gathered the most coupons would win a prize.

This woman, who came to the center with her car full of bottles, then left and came back again with more containers, told the TOMRA staff that she "was a volunteer in a program for the recovery of young drug addicts from the slums (favelas). I collect bottles all around my neighborhood, going from one home to another, and then to restaurants and also to the beach. I bring them to rePLANETA and then donate the coupons I get to the institution running the program for the young addicts. For me, the happiness I see in those young faces everytime I get there with the coupons which they use to buy food for the institution, means much more than any salary could give me."



When asked what her main reason was for recycling, this woman said: "Well, my boy wants a bicycle. I told him that he has to help me buy it with the coupons he gets at rePLANETA. I think that by doing this, I'm teaching him a good habit and that he will also know that he has made a positive contribution to the environment in order to buy something he wanted."



"We wanted to recycle the plastic bottles that we use at home, but never really knew what we could do with them. When we found out there was a rePLANETA center at this supermarket (which was not their usual supermarket), we thought the trip to this new supermarket would be worthwhile. Now, once a week, we come to this supermarket just because of the rePLANETA recycling center."

TOMRA doubles its container processing capacity in Canada

TOMRA subsidiary Camco Recycling Inc., which operates a materials processing facility in Quebec, has recently expanded its processing capacity in order to handle a nearly three-fold increase in container volumes coming to the facility as a result of an agreement signed with the Quebec Soft Drink Association in April.

Under the terms of the agreement, the Camco facility will now process used beverage containers on behalf of Coca-Cola, Pepsi-Cola and Alex Couombe Ltd. in the province of Quebec. Total annual revenues resulting from the contract is estimated to be in the range of 25 million Norwegian kroner over the 68-month term of the contract.

The agreement, which took effect on April 25, will require a significant upgrade to the Camco facility in order to be able to handle going from 375 million containers a year to almost one billion. It has also required a very fast turnaround in hiring and training additional personnel to operate the processing machinery at the Montreal facility. "The last two months have been a very hectic period for us, but I am very pleased with the way everyone has doubled their efforts to ensure that the rapid transition in our processing volume went as smoothly as it did. We are naturally very happy to have the opportunity to grow our business, and at the same time to contribute to the process of developing a more efficient means of recycling used beverage containers in Canada," says Anne-Marie Chronas, President of Tomra Canada.



NORTH AMERICA



**Gregory Knoll, President,
Tomra North America Inc.**

Greg joined TOMRA in January of this year to take over the direction of the company's largest business unit in terms of turnover, Tomra North America.

Greg brings to TOMRA a strong international background within sales and marketing developed over the course of his nearly thirty-year career with Unilever, a company that produces some of the world's most well-known brands within the foods, household and personal care product categories. While with Unilever, Greg held a number of senior management positions in the USA, Germany and Japan, with his last position being Vice President, Foods Business, Unilever USA.

Born and raised in the state of Pennsylvania, Greg attended the Pennsylvania State University where he received a B.S. degree in Business Administration and Marketing in 1970. Now living in New Jersey along with his wife and three children, his personal interests include travel, the Big Apple, American football, golf, and outdoor activities in general.

Says Greg, "while there were a number of reasons I was drawn to TOMRA, I was particularly impressed with the spirit of the organization and the energy and commitment of its people. This is a company with best-in-class products, services and technology, all backed by an inspiring mission and a solid set of core values. I felt that my background and international experience really fit well the company, and could contribute positively to the further development of its North American activities. I really feel that the market opportunities for TOMRA are endless, and look forward to helping Tomra North America play a significant role in the corporation's goals for continued growth and expansion worldwide."

TOMRA GROUP

As part of an organizational restructuring at TOMRA's corporate headquarters in March, the following senior management transitions have occurred:

Morthen Johannessen, Executive Vice President and COO, Tomra Systems ASA (previously President, Tomra Europe)

Morthen has responsibility for all TOMRA business development activities worldwide, and serves as a board member of Tomra Europe and Tomra North America.

Svånaug Bergland, Senior VP Organizational Development & Corporate Communications, Tomra Systems ASA (previously Vice President Human Resource Development)

Svånaug has responsibility for all matters related to organizational development and human resources for the Tomra Group, as well as overseeing the direction of TOMRA's new Corporate Communications Department led by Ann Kristin Ytreberg, Vice President, Corporate Communications.

Espen Gundersen, Senior VP Controller, Tomra Systems ASA (previously VP Finance, Tomra Systems ASA)

Espen will add a portion of the duties previously held by departing TOMRA CFO Helge Nerland to his list of responsibilities, which will now include budgeting, accounting, reporting, internal control/audit and tax review for the Tomra Group. He will report directly to the Tomra Group CEO.

EUROPE

André Løvestam, President, Tomra Europe (previously Senior Vice President, Operations, Tomra Europe)

André has responsibility for all of TOMRA's activities in Business Unit Europe.

When the saints go marching home...

A farewell to TOMRA CFO, "Saint" **Helge Nerland**

After 16 years with TOMRA, Helge, whose name is derived from the Norwegian word for saint, "helgen," will be leaving the company as of July 31, 2002 in order to spend some time at home with his family and evaluate possible new directions. TOMRA CEO Erik Thorsen would like to use this opportunity to wish him well.

Helge and I both joined TOMRA at approximately the same time some sixteen years ago, and throughout this period we have worked very closely and shared many common experiences. And while I have a great understanding and respect for Helge's decision to take some time to step back and refocus, his departure will be felt deeply by me both as a friend and TOMRA CEO.

Much of the credit for the fact that TOMRA has built a solid international investor base and has consistently been ranked among the top companies in Norway for its investor relations, can be attributed to Helge. His contribution to TOMRA has been marked by his expansive professional knowledge and skills, as well as an incredible commitment to his work. He has stood as a central figure behind TOMRA's strategic development, helping to drive many of the successful acquisitions and new initiatives that have shaped the way TOMRA is today.

Those of us who work with Helge know him as a quiet-mannered individual with an ability to create a positive atmosphere both at work and socially. For me, he has always been a great pillar of support, and someone which could always be relied on for sound advice and uncompromising integrity. Yet the fact that TOMRA has always come as Helge's first priority has meant that he has sacrificed a great deal with respect to his family and free time, not to mention any chance of becoming a respectable golfer.

So Helge, after sixteen years of hard work and devotion to TOMRA, I want to wish you well on behalf of all of your colleagues in your new life of leisure. Perhaps now you will be able to whip your yard into shape, spend some time on your boat, and make a last ditch effort at improving your golf game.

Thanks Helge for the many exciting years we've spent as colleagues and friends, and best of luck with your future pursuits.

Sincerely,
Erik Thorsen



Living our Values



Stephan Hinrichs
 Manager Technical Support Germany, Tomra Systems GmbH, BU Europe

As part of its ongoing efforts to recognize the commitment of its employees to the company's core values, Tomra Systems ASA has initiated the TOMRA Values In Practice (VIP) Award. The VIP Award is presented twice a year in the spring and fall, and is open to all employees within the Tomra Group. After each business unit conducts its own nomination process, a winner is selected from the group of finalists by TOMRA's Executive Committee, EXECOM.

The winner of the Spring 2002 TOMRA VIP Award for Fighting Spirit is:

Stephan Hinrichs
Manager Technical Support Germany, Tomra Systems GmbH, BU Europe

In recognition of their achievements, TOMRA VIP Award winners receive:

- Warrants to buy 600 shares of TOMRA stock according to the same terms included in the TOMRA Share Bonus Plan of the same year.
- Inclusion on the VIP Award winners' plaque displayed at the Tomra Group headquarters in Asker, Norway.
- A handmade Norwegian pewter mug, engraved with the winner's name and distinction.
- An article highlighting the employee's achievement in RETURN.
- A framed copy of the RETURN article and the VIP Award certificate.

Personal Initiative

Innovation

Enthusiasm

FIGHTING SPIRIT

Integrity

Stephan joined TOMRA in September 2001 to lead the product expert group within the Tomra Germany technical support team. During the short time he has been with TOMRA, Stephan has demonstrated outstanding resolve and fighting spirit, particularly with respect to overcoming the challenges in the German market for adapting TOMRA RVM software to handle the conversion to the Euro.

Stephan's highly motivational character, enthusiasm and integrity have been an inspiration to his colleagues, and instilled a level of team spirit that is an outstanding example of TOMRA's core values.

Congratulations Stephan!



TOMRA Core Values

VIP RUNNER-UP:	Sylvain Lachance, Service Supervisor, Tomra Canada, BU North America
HONORABLE MENTION:	Jessie Cochran, Senior Developer, Tomra Pacific, BU North America
	Berit Dahl, Sales Secretary, Tomra Butikkssystemer, BU Europe
	Hassan Kataf, Network Administrator, Tomra Pacific, BU North America
	Britt Liotta, Director of Operations, Tomra East, BU North America
	Dan Parker, Assistant Service Manager, Tomra East, BU North America
	Lawrence R. Pellegrino, Jr., Plant Manager, Tomra East, BU North America
	Michael J. Shutter, Plant Supervisor, Tomra East, BU North America

This TOMRA publication is printed with paper and inks satisfying the environmental requirements of the Nordic Swan Label (www.ecolabel.no) by an ISO14001-certified printer (www.iso.ch).