



# **DNB MARKETS SME CONFERENCE**





THE WORLD POPULATION AND STANDARD OF LIVING IS INCREASING DRAMATICALLY



WORLD RESOURCES ARE UNDER UNPRECEDENTED PRESSURE



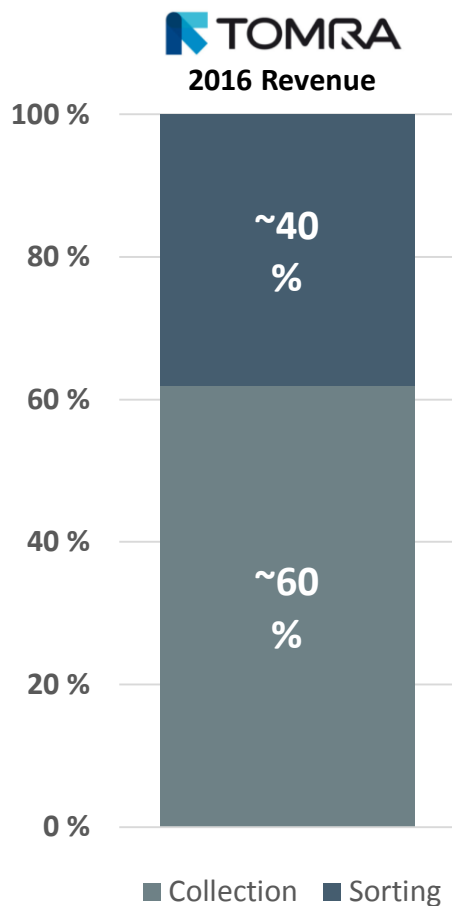
RESOURCE PRODUCTIVITY MUST INCREASE TO ENSURE SUSTAINABLE DEVELOPMENT



**TOMRA creates sensor-based solutions for optimal resource productivity**



# CREATING VALUE THROUGH TWO STRONG BUSINESS AREAS\*



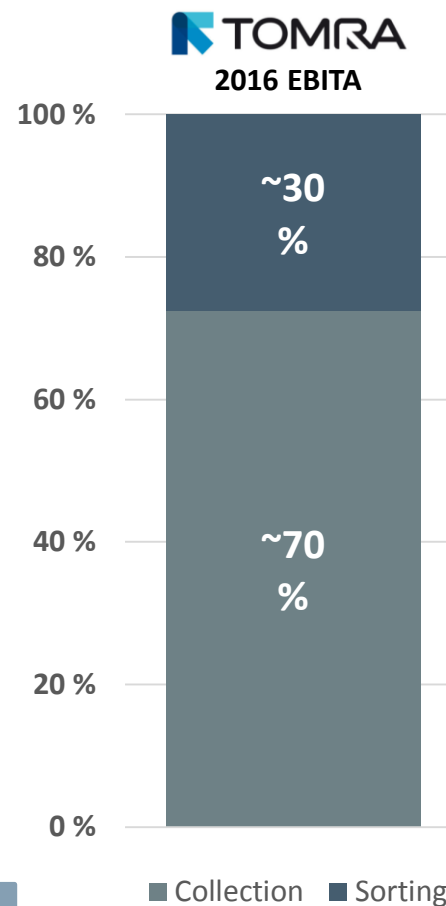
**TOMRA**  
SORTING SOLUTIONS

- High growth
- High margins
- Medium cyclical

**TOMRA**  
COLLECTION SOLUTIONS

- Stable
- High margins
- Low cyclical

High technology - sustainable business





# TOMRA INSTALLED BASE



## REVERSE VENDING

Nordic	~15,300
Germany	~29,500
Other Europe	~14,200
North America	~15,900
Rest of the world	~3,500

**TOTAL ~78,400**



## RECYCLING

EMEA	~3,500
Americas	~700
Asia	~600
Other	~20

**TOTAL ~4,820**

## MINING

Europe	~10
US / Canada	~30
Australia	~5
South Africa	~25
Other	~30

**TOTAL ~100**

## FOOD\*

EMEA	~2,900
Americas	~2,700
Asia	~600

**TOTAL ~6,200**

Not including machines sold on OEM agreements.  
2016 recount of TSS portfolio

# TOMRA Collection Solutions

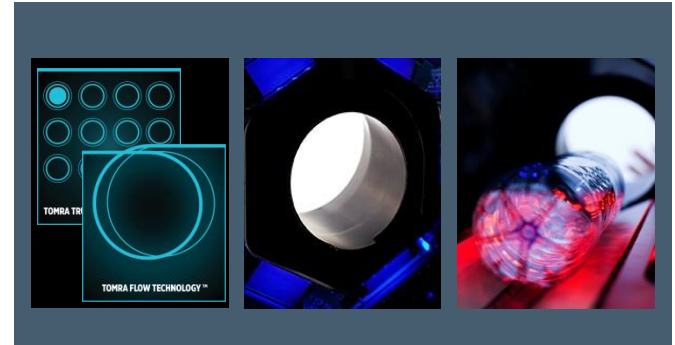
**RETURNS  
INTO  
VALUE**



# ELEMENTS OF A MODERN REVERSE VENDING SYSTEM



**User communication**



**Recognition system**

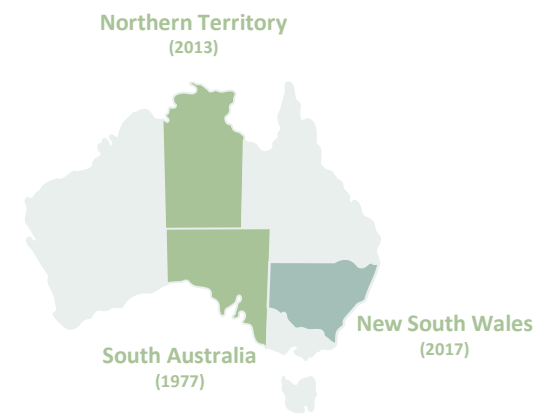
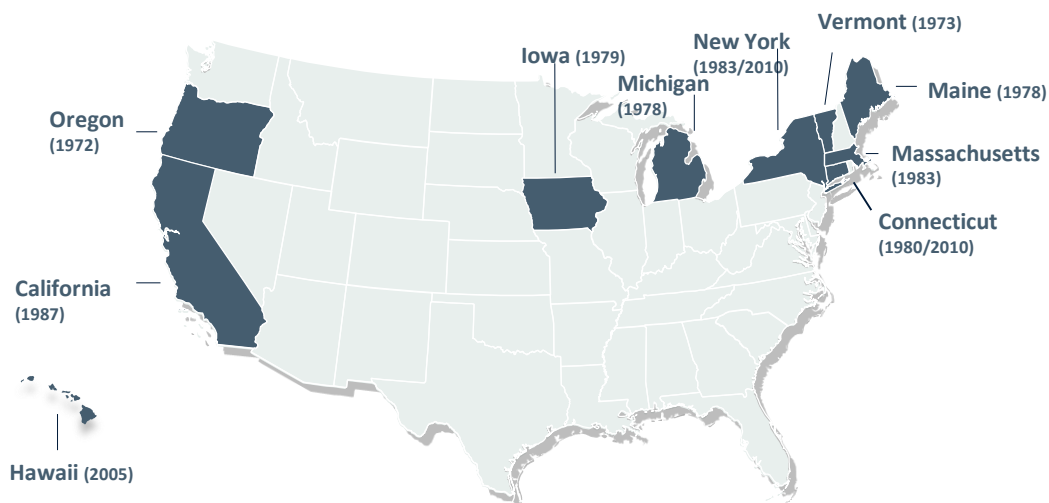
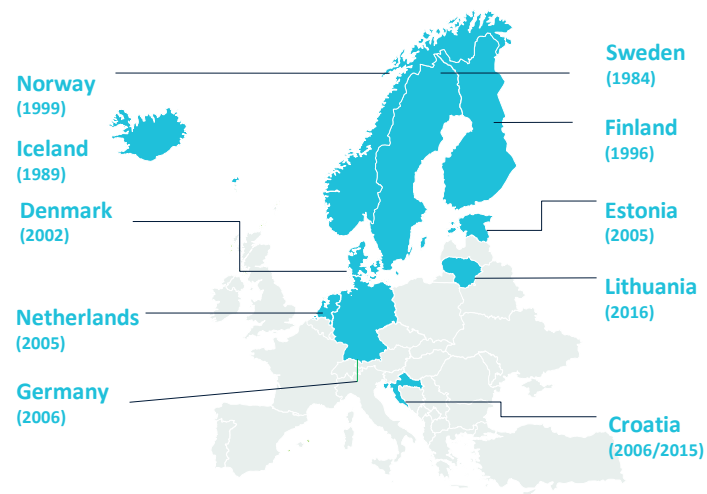
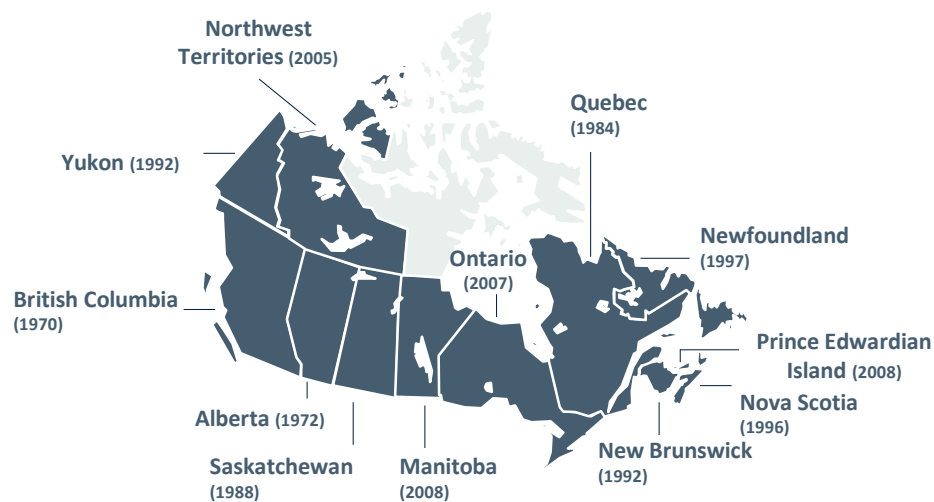


**Sorting & processing**



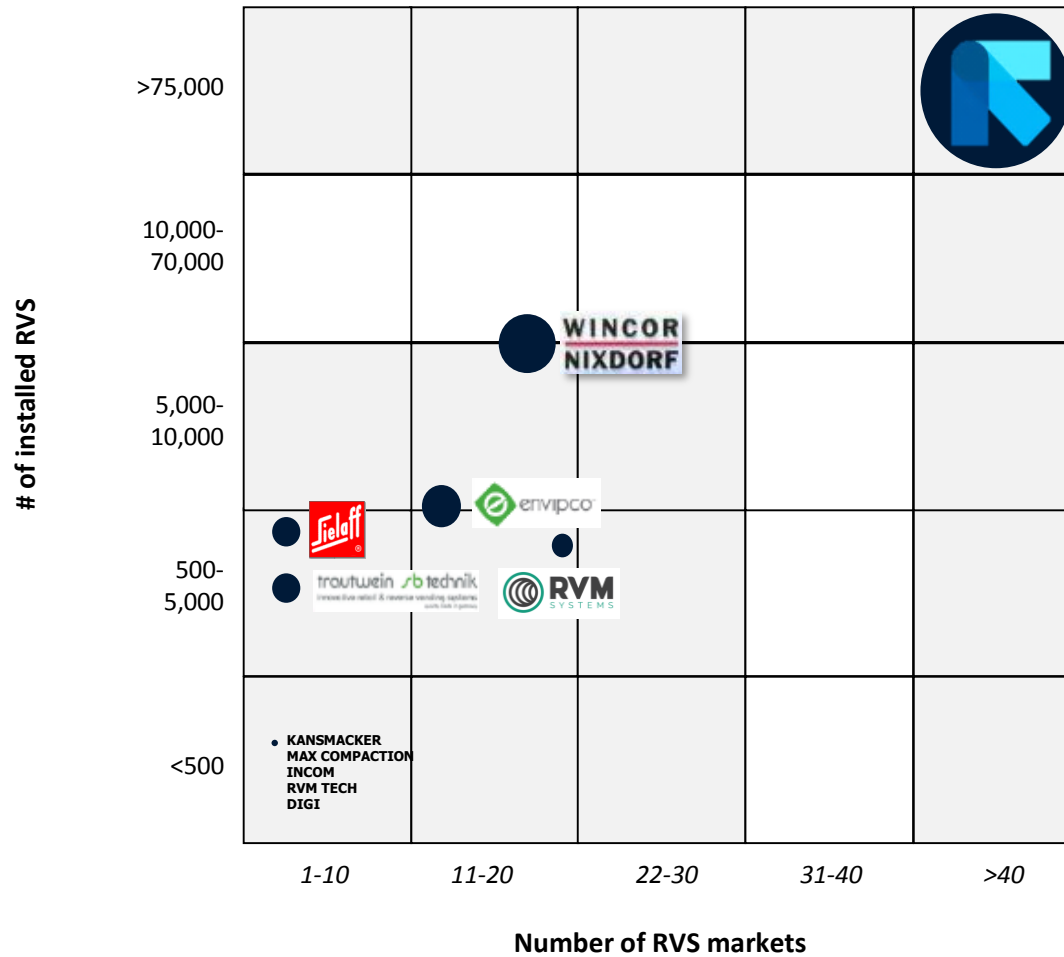
**Data administration**

# CURRENT DEPOSIT MARKETS



In addition, Tomra has some activity in markets with refillable deposit systems like: Austria, Belgium, Chile, Czech Republic, France, Hungary, Poland and South Korea.

# COMPETITIVE LANDSCAPE\*



● Annual revenue  
from RVS sales

Source: TOMRA estimates and analysis \* Estimates



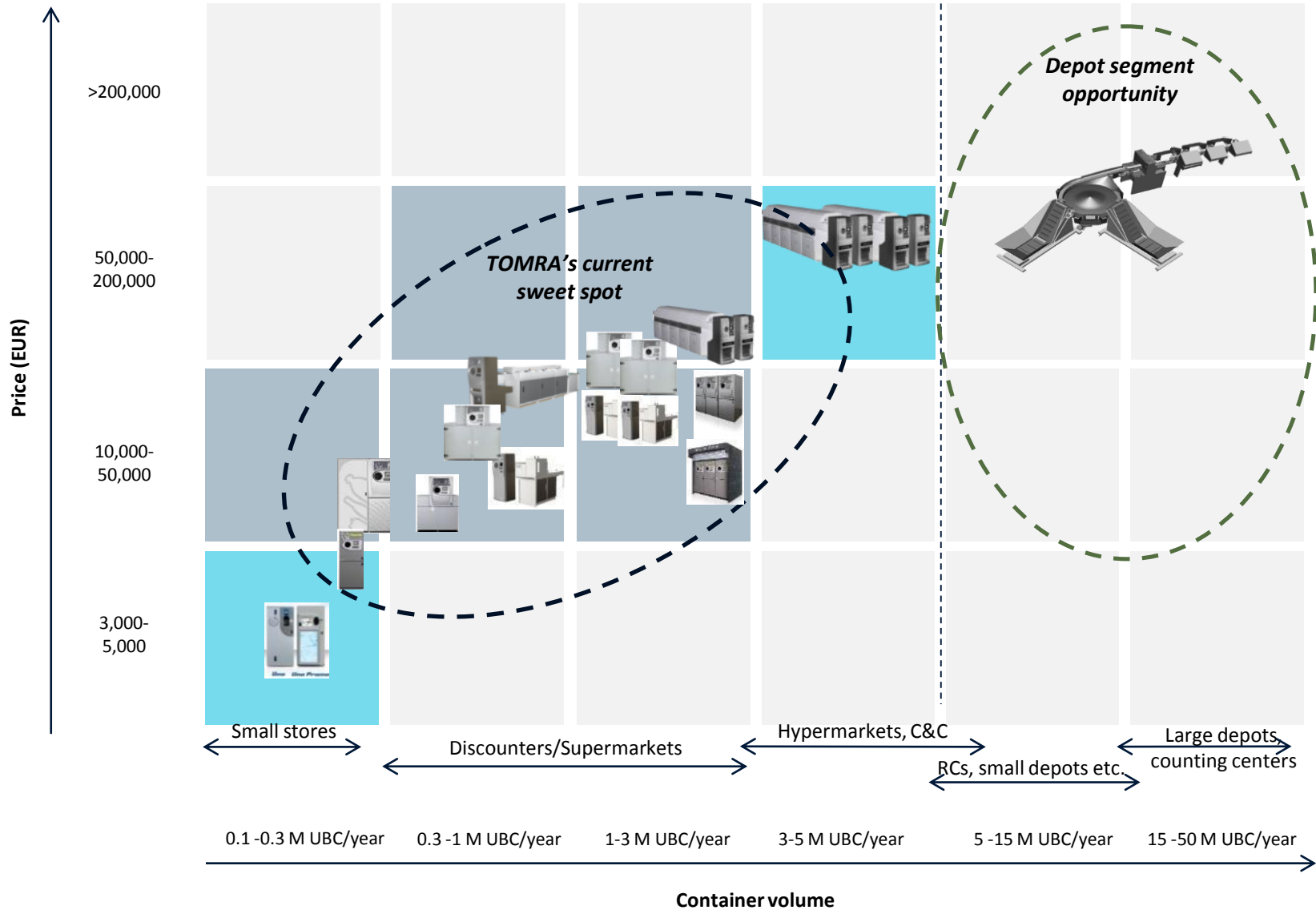
# T-9: THE FIRST OF A NEW GENERATION OF MACHINES

- In fourth quarter 2013, TOMRA presented the first machine of the **new generation** of machines to come
- T-9 features the first **360 degree recognition** system applied in an RVM and a completely new industrial design
- The machine is **faster, cleaner** and **takes all** types of beverage containers
- **The launch has been successful**
  - Several machines already installed in core markets
  - Key product for replacement sale in e.g. Germany
- 2014 installations: ~1,200 machines
- 2015 installations: ~4,000 machines
- 2016 installations: ~4.600 machines

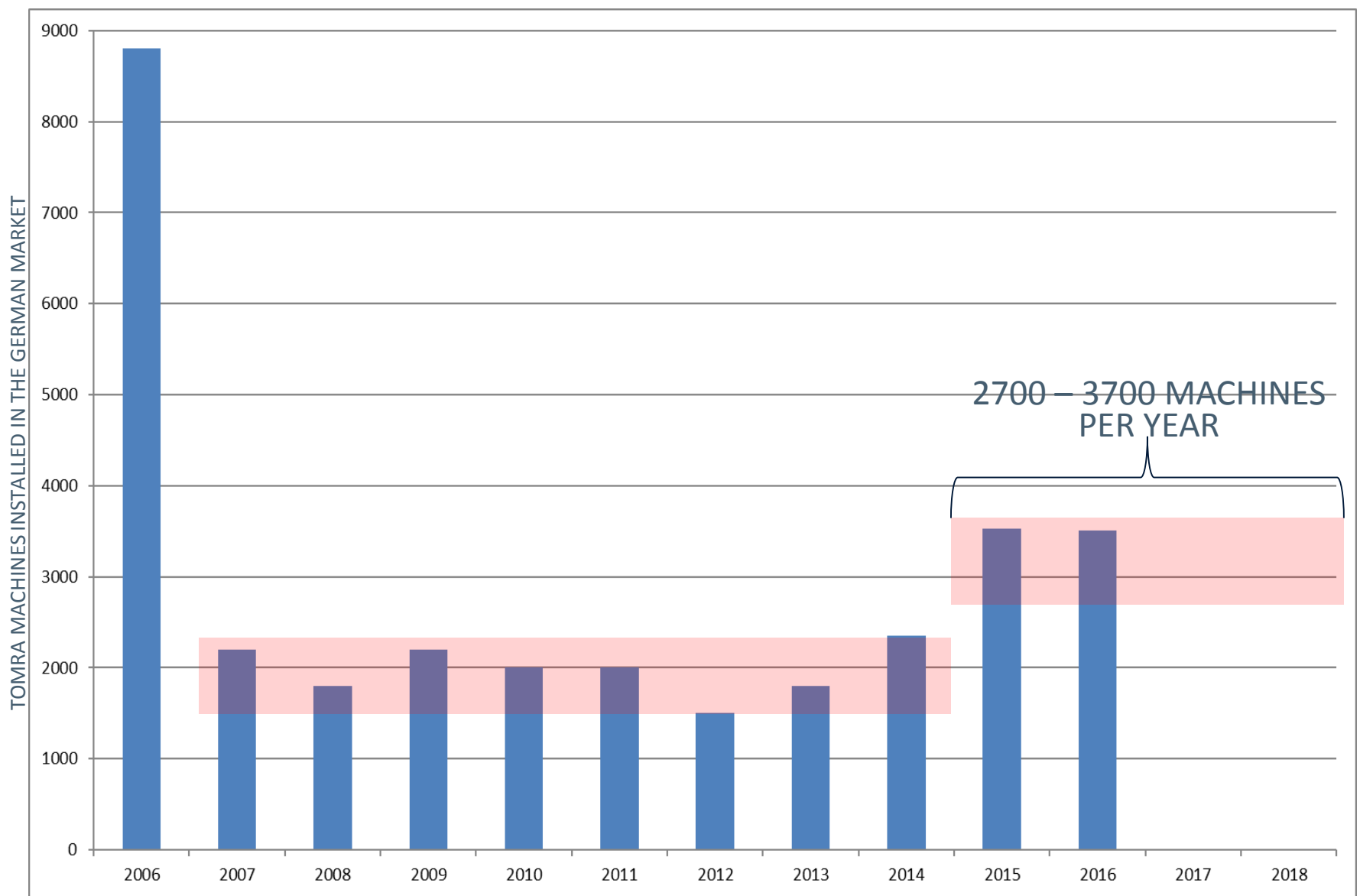
**TOMRA is setting the standard for reverse vending for the next decade**



# ENTER NEW SEGMENTS



# GERMANY REPLACEMENT UPDATE



# POTENTIAL NEW DEPOSIT MARKETS

- Recently approved
- Nearly approved
- In progress

## **North America:**

Possible expansion of deposit system in Quebec

## **Scotland:**

Discussions ongoing

## **Croatia:**

Opportunity for ~1,000 machines from 2016-2019

## **Spain:**

Regional initiatives ongoing

## **Australia**

NSW to introduce deposit from July 2017.  
QLD might follow in 2018.



# COLLECTION SOLUTIONS – FINANCIAL DASHBOARD



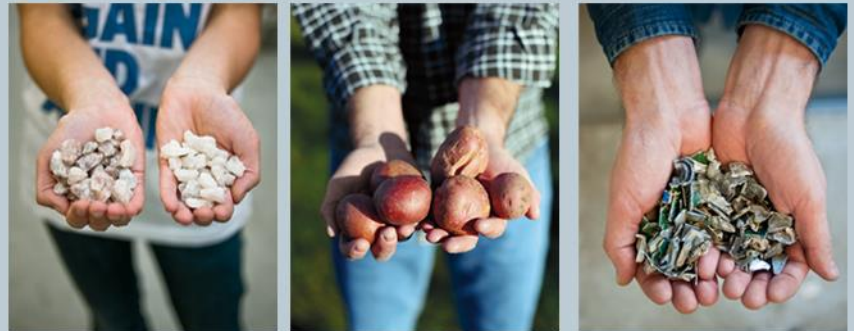
## TARGETS 2013 -2018

Yearly growth 4 – 8%

EBITA-margin 18% – 23%

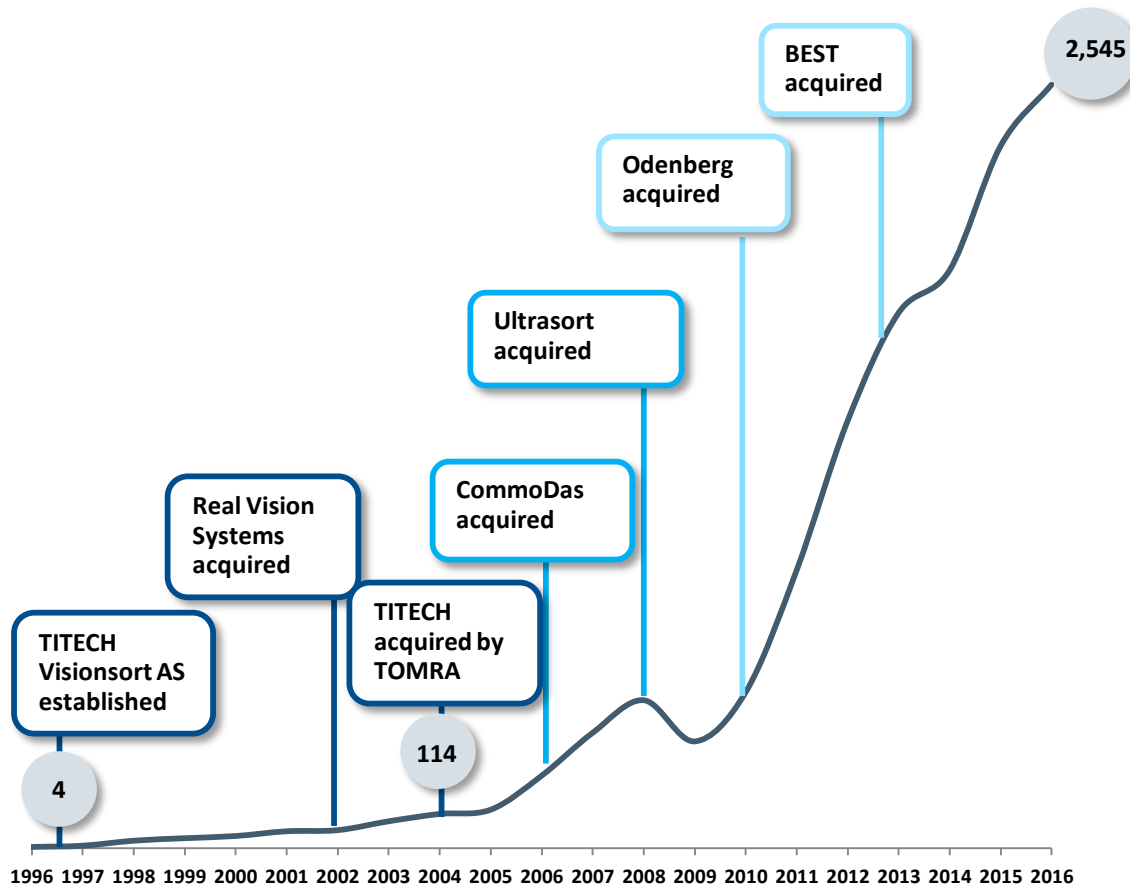
# TOMRA Sorting Solutions

**WASTE  
INTO  
VALUE**



# STRONG REVENUE GROWTH SINCE INCEPTION IN 1996

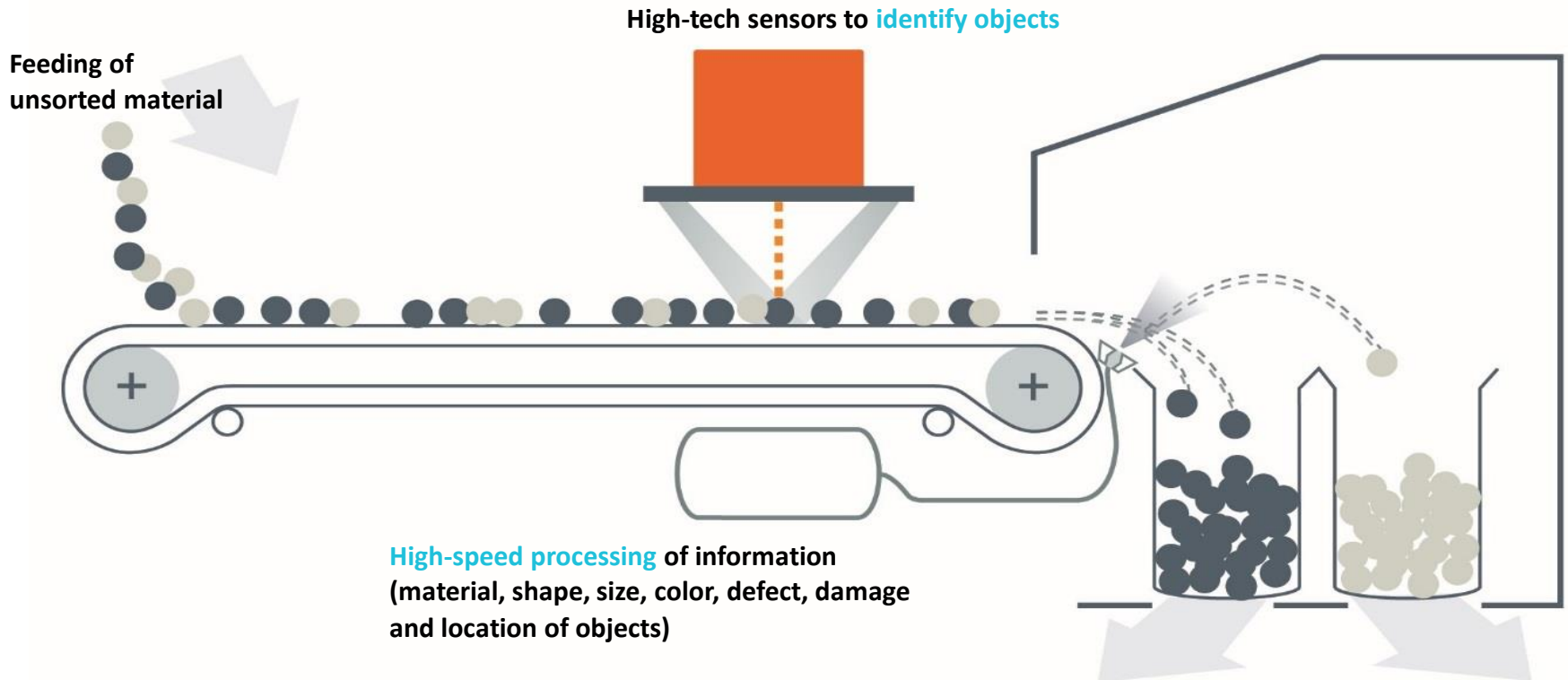
## Revenue development and key milestones MNOK



- Total revenue growth (organic plus inorganic) CAGR of ~30% per year from 2004-2016
  - Average annual organic growth for the same period was ~17%
- Technology base and segment/application knowledge expanded both through acquisitions and in-house ventures

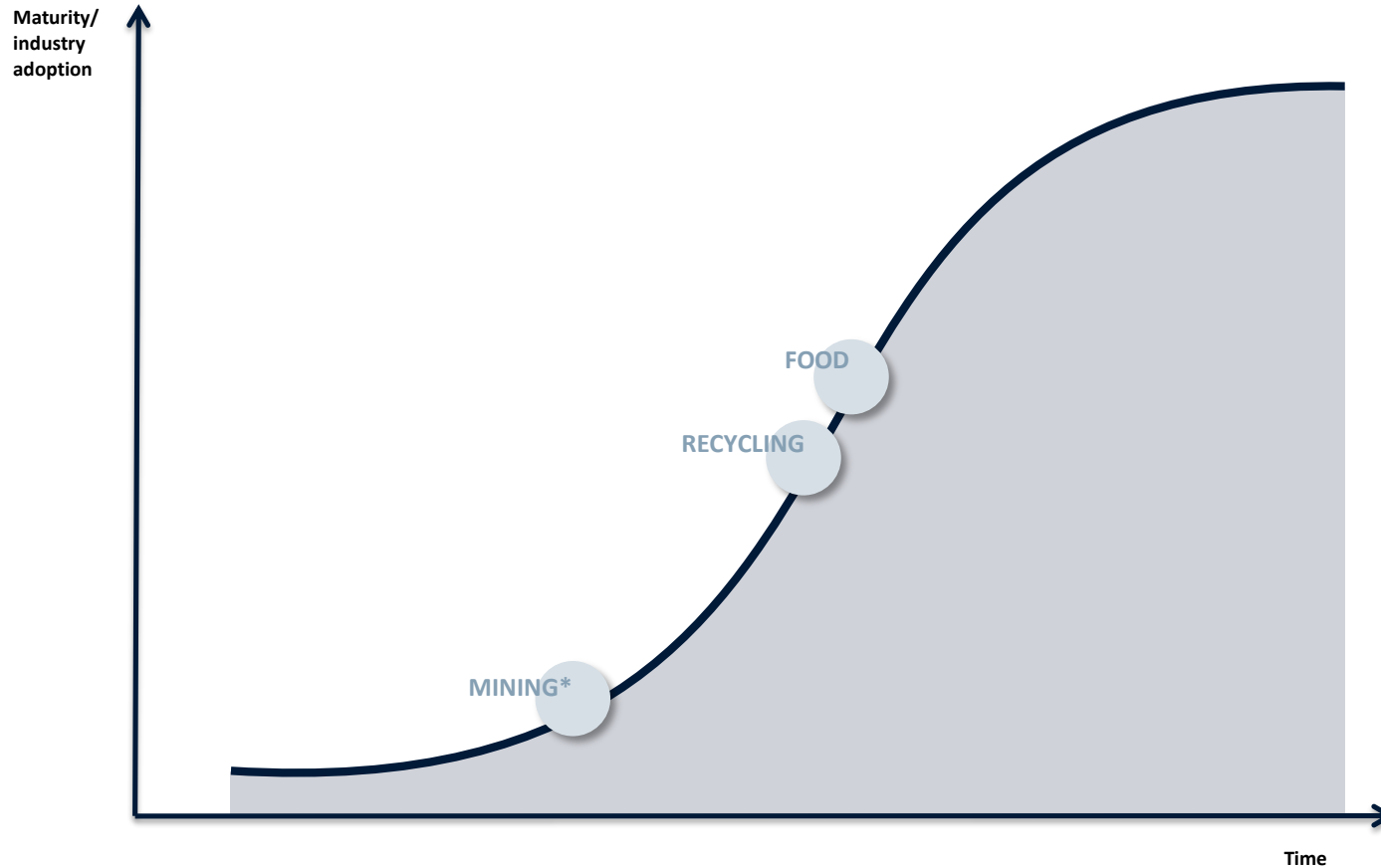
# HOW DOES SENSOR BASED SEPARATION WORK?

- High-tech sensors to **identify objects**
- **High speed processing** of information (material, shape, size, color, defect, damage and location of objects)
- **Precise sorting** by air jets or mechanical fingers
- Product **specific equipment design** often including multiple technologies to maximize sorting efficiency





# ADOPTION OF SENSOR-BASED SORTING AT DIFFERENT MATURITY LEVELS

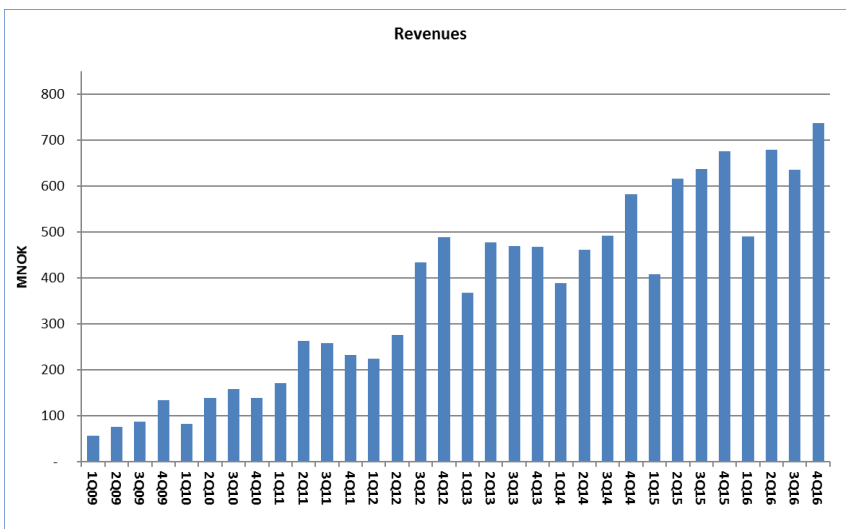
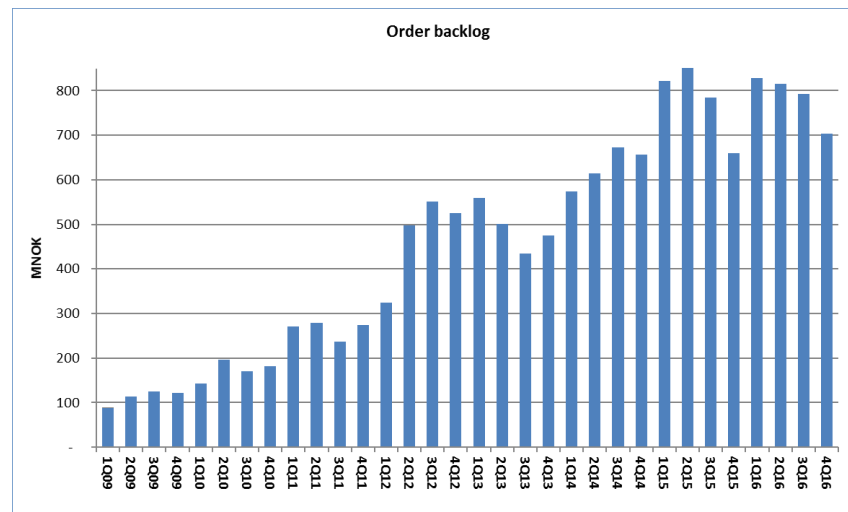
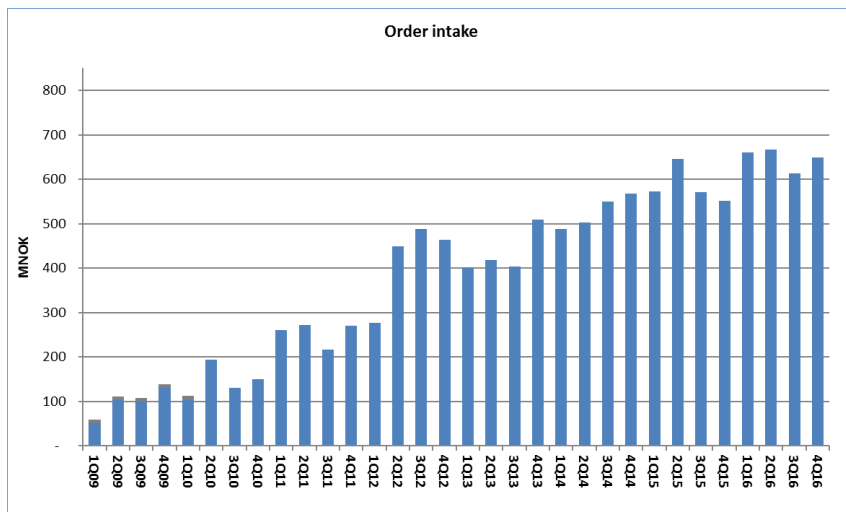


\* In certain mining sub-segments, such as industrial minerals and diamonds, sensor-based sorting is a more mature technology.

# A COMMON SENSOR BASED TECHNOLOGY PORTFOLIO

	[m]	Sensor/ Technology	Material Property	Segment
Gamma-radiation	$10^{-12}$	RM (Radiometric)	Natural Gamma Radiation	Mining
	$10^{-11}$			
X-ray	$10^{-10}$	XRT (X-ray transmission)	Atomic Density	Recycling, Mining, Food
	$10^{-9}$	Low Energy X-ray		
Ultraviolet (UV)	$10^{-8}$	XRF	X ray fluorescence (Elemental Spectroscopy)	Recycling, Mining
	$10^{-7}$			
Visible light (VIS)	$10^{-6}$	COLOR (CCD Color Camera)	Reflection, Absorption, Transmission	Recycling, Mining, Food
	$10^{-5}$			
Near Infrared (NIR)	$10^{-4}$			
	$10^{-3}$	Laser attenuation and PM (Photometric)	Monochromatic Reflection / Absorption of Laser Light	Mining, Food
Infrared (IR)	$10^{-2}$		Scattering analysis of Laser Light	
	$10^{-1}$			
Microwaves	$10^1$	NIR / MIR (Near/Medium Infrared Spectrometry)	Reflection, Absorption (Molecular Spectroscopy)	Recycling, Mining, Food
	$10^2$			
Radio waves	$10^3$	LIBS	Laser induced breakdown spectroscopy	Recycling, Mining
	$10^4$			
Alternating current (AC)		EM (Electro-Magnetic sensor)	Conductivity, permeability	Recycling, Mining, Food

# BACKLOG DEVELOPMENT AND MOMENTUM



- Order intake of 649 MNOK in the quarter (up from 551 MNOK same quarter last year)
- Revenues were 738 MNOK (compared to 677 MNOK in 4Q16)
- Order backlog of 704 MNOK, up from 659 MNOK at the end of fourth quarter 2015
- Estimated backlog conversion ratio in 1Q17: 70-75%\*
- NOTE: Figures do not include Compac, which will be consolidated starting 1 February 2017

\* Based upon current production and delivery plans, the revenues in 1Q17 (ex Compac) are estimated to be approximately 70-75% of order backlog at the end of 4Q16

# FINANCIAL DASHBOARD – SORTING SOLUTIONS

Industry  
Growth



Recurring  
revenue



Profitability  
(ROCE)\*



Food

Recycling

Mining

Market share



Geographical  
diversity



Cyclicality



## TARGETS 2013 -2018

Yearly organic growth 10-15%

Geographical expansion

EBITA-margin 18-23%

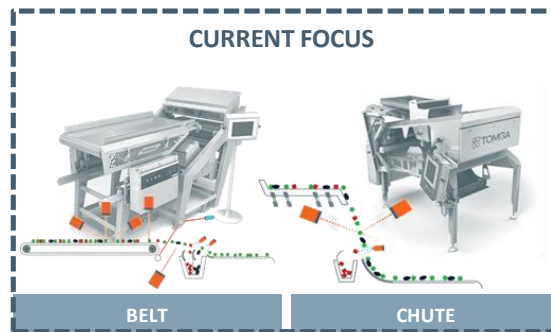
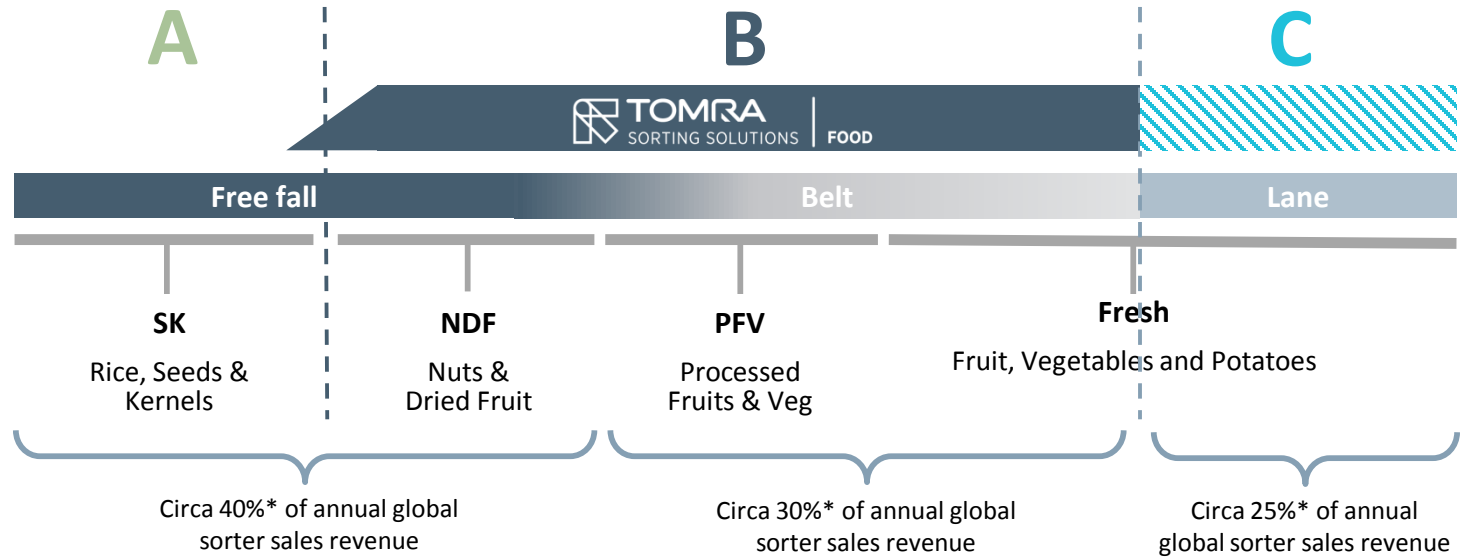
(i) In markets served. Total food sorting (incl. rice and lane sorting\*) 12-15%



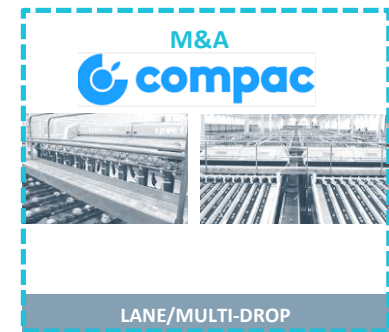


# YIELD INTO USAGE

# TOMRA HAS THE BROADEST FOOTPRINT WITHIN THE FOOD SORTING UNIVERSE

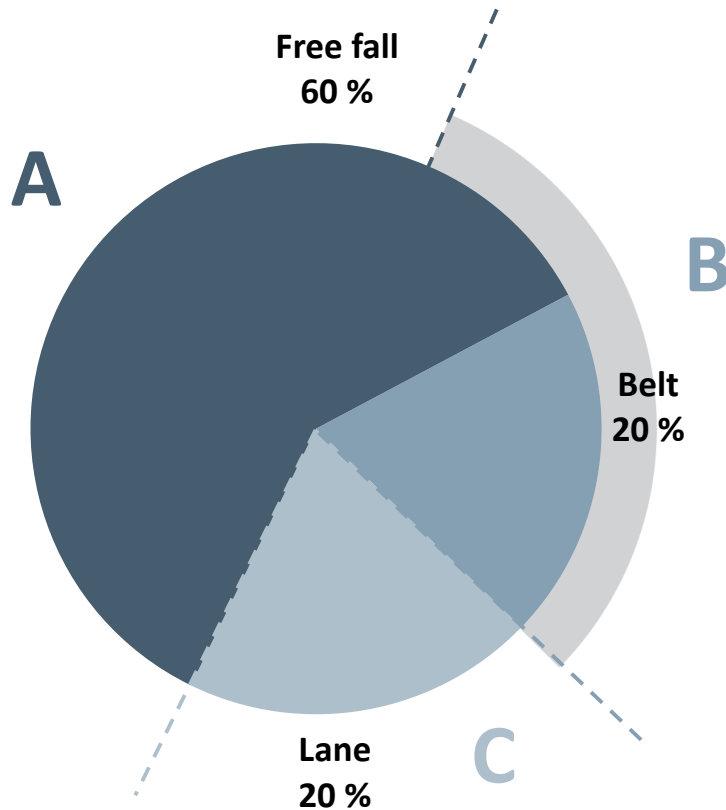


**BULK SORTING**



**SINGULATED SORTING**

# THREE WAYS OF SORTING WITHIN THE FOOD SEGMENT



## Free fall (Channel / Chute)

Application	Seeds, rice, grains
Companies	Buhler, Key, <b>Best</b> , Satake, Daewon, Hefei, Orange
Sensor tech.	Camera (simple)

## Belt

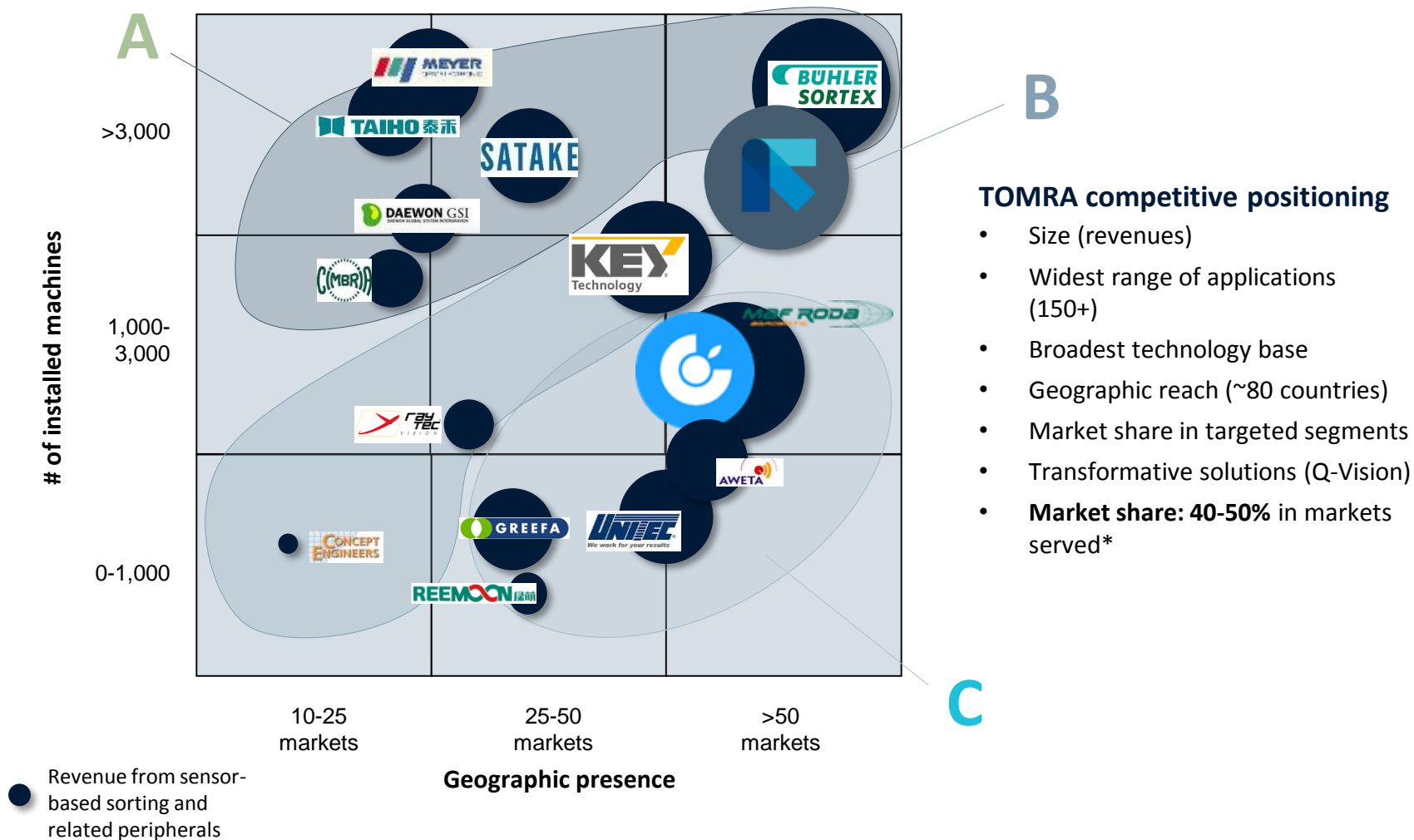
Application	Prepared /preserved veg. and fruit
Companies	<b>Best</b> , Key, <b>Odenberg</b> , Raytec
Sensor tech.	Several (complex)

## Lane

Application	Fresh produce
Companies	MAF, Aweta, Greefa, Compac
Sensor tech.	Several (medium)

Note: Piechart showing estimated total revenue within the food sorting segment

# FOOD COMPETITIVE LANDSCAPE



Source: TOMRA estimates and analysis

\* Total Food sorting (also including rice and lane sorting): 12-15%



# OUR BROAD COVERAGE AND TECHNOLOGY BASE IS SETTING US APART IN BULK SORTING

	DRIED FRUIT	NUTS	FRESH CUT	FRUIT	VEGETABLES	MEAT	POTATOES	SEAFOOD
<b>FOOD</b>	<ul style="list-style-type: none"> <li>• Apricots</li> <li>• Craisins</li> <li>• Figs</li> <li>• Prunes</li> <li>• Raisins</li> </ul>	<ul style="list-style-type: none"> <li>• Almonds</li> <li>• Cashews</li> <li>• Hazelnuts</li> <li>• Macadamias</li> <li>• Peanuts</li> <li>• Pecans</li> <li>• Pistachios</li> <li>• Seeds</li> <li>• Walnuts</li> </ul>	<ul style="list-style-type: none"> <li>• Baby leaves</li> <li>• Iceberg lettuce</li> <li>• Spinach</li> <li>• Spring mix</li> </ul>	<ul style="list-style-type: none"> <li>• Apples</li> <li>• Blackberries</li> <li>• Blueberries</li> <li>• Cherries</li> <li>• Citrus</li> <li>• Cranberries</li> <li>• Peaches &amp; pears</li> <li>• Raspberries</li> <li>• Strawberries</li> <li>• Tomatoes</li> </ul>	<ul style="list-style-type: none"> <li>• Beans</li> <li>• Beet</li> <li>• Broccoli</li> <li>• Carrots</li> <li>• Corn</li> <li>• Cucumbers</li> <li>• IQF vegetables</li> <li>• Jalapenos/Peppers</li> <li>• Onions</li> <li>• Peas</li> <li>• Pickles</li> </ul>	<ul style="list-style-type: none"> <li>• Bacon bits</li> <li>• Beef</li> <li>• IQF meat</li> <li>• Pork</li> <li>• Pork rind</li> </ul>	<ul style="list-style-type: none"> <li>• Washed</li> <li>• French fries</li> <li>• Unpeeled</li> <li>• Peeled</li> <li>• Potato chips</li> <li>• Specialty products</li> <li>• Sweet</li> </ul>	<ul style="list-style-type: none"> <li>• Mussels</li> <li>• Scallops</li> <li>• Shrimps</li> </ul>
<b>SENSOR TECHNOLOGY</b>	LASER NIR VIS X-RAY	LASER CAMERA X-RAY	LASER CAMERA	LASER CAMERA NIR VIS	LASER CAMERA NIR VIS	LASER CAMERA NIR	LASER CAMERA NIR VIS	LASER CAMERA NIR VIS X-RAY



# OUR CUSTOMERS



We are active in five continents and 80 markets

- 6 of the 10 largest, global food companies are our customers
- We have ~2,000 customers globally

TSS Food provides sorting solutions for:

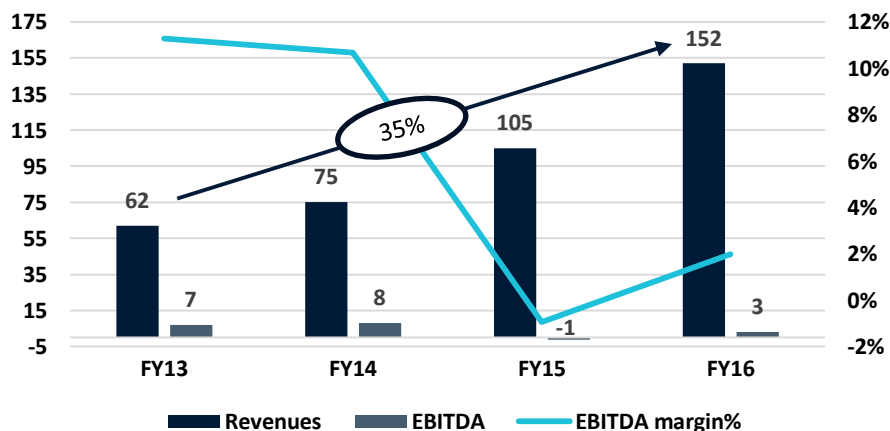
- **Growers:** Harvester mounted tomato, onion and garlic sorters
  - ~5% of our customers
- **Packers:** Sorting of many different types of fruit and vegetables by color, size, shape, defect, blemish, damage or foreign objects
  - ~30% of our customers
- **Processors:** Sorting of processed potatoes (French fries, chips), fruits and vegetables
  - ~65% of our customers

# INTRODUCTION TO COMPAC (ANNOUNCED 12.10.16)

## Introduction

- Compac is a New Zealand-based provider of post-harvest solutions and services to the global fresh produce industry
- Founded in 1984 by Hamish Kennedy with HQ in Auckland NZ and has around 700 employees
- Compac has a leading position within sorting of apples, kiwifruit, cherries, citrus, stonefruit, avocados and tomatoes
- The company designs, manufactures, sells and services packhouse automation systems that sort produce based on their weight, size, shape, colour, surface blemishes and internal quality
- Fruit handling equipment singulates fruits into lanes, in-feeds (wash and wax), inspects, sorts/grades and partly packages
- About 6,000 Compac sorting lanes have been sold worldwide in over 40 markets

## Key Financials (NZDm)<sup>1</sup>



## Spectrim: Compac's latest sorter

- The sorter was launched in 2015
- Represents an unmatched capability of external defect detection and an advanced 3D imaging and modelling
- For sorting of apples, citrus, stone fruit and kiwi fruit
- Uniform lighting that minimizes shadows and reflections
- Sensors and cameras generate up to 500 images of every piece of produce, creating an accurate 3D model of each fruit
- Three different wavelengths that can be configured to target specific defects: color, blemishes, bruising



# TRANSACTION RATIONALE ELABORATED

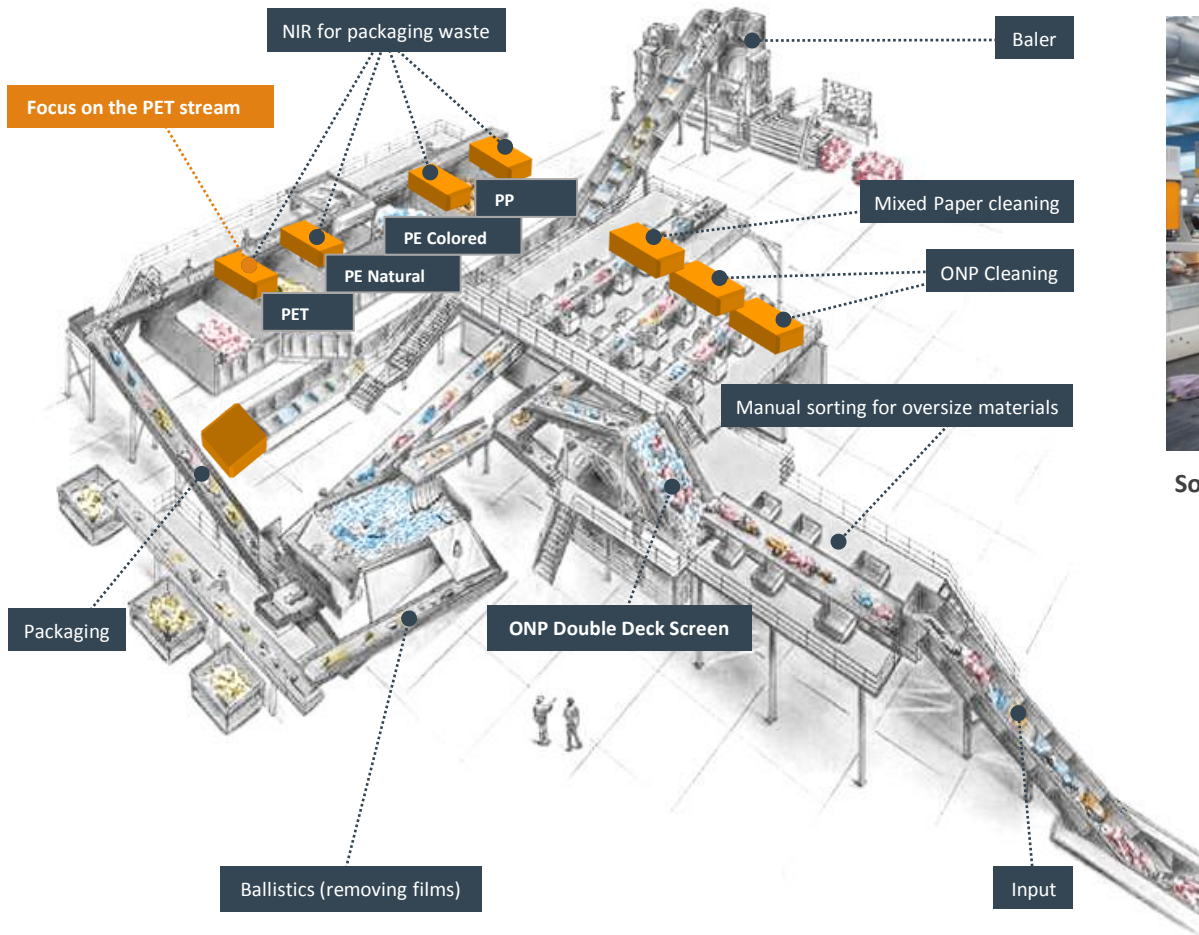
Attractive Market	<ul style="list-style-type: none"><li>• Lane sorting is a <b>fast-growing adjacent segment</b> with a ~8% historical CAGR and strong future outlook</li><li>• <b>Key market trends drive further growth</b>, especially in the developing markets as a substitute for manual labor as we see wages increase</li><li>• The industry is <b>yet to mature</b> and fully industrialize</li></ul>
Complimentary geographical footprint	<ul style="list-style-type: none"><li>• <b>Geographic expansion:</b> Utilizing the different footprint and strengths in certain markets</li><li>• Stronger in <b>China</b> together</li></ul>
Application fit expansion	<ul style="list-style-type: none"><li>• TOMRA is currently present in processed fruit and vegetables, Compac serves as a “natural” <b>expansion also into fresh fruit</b></li></ul>
Confirming our leading position in food	<ul style="list-style-type: none"><li>• Lane and Bulk Sorting <b>cater to same client needs</b>, but offers complimentary functionality</li><li>• Possibility to create a comprehensive <b>Food Sorting solution provider</b></li><li>• <b>First mover advantage in combining Lane and Belt sorting:</b> TOMRA to be the first company, which is active in all technology platforms used for sensor-based sorting of Food</li></ul>
Mutual benefits	<ul style="list-style-type: none"><li>• Potential in <b>data capability, IoT and solution development</b></li><li>• Combine current offering: <b>Bulk presorter in front of lanes</b></li><li>• Potato business: Utilizing TSS strength in potatoes and the <b>upcoming demand for sizing</b></li><li>• Complimentary fit within <b>food traceability and food safety</b> (emerging demand)</li></ul>
Why Compac	<ul style="list-style-type: none"><li>• Strong <b>potential</b>. Ongoing and planned business improvement initiatives and funding to get in shape</li><li>• Strong <b>brand</b> name, recognized as the technology leader (Spectrim)</li><li>• <b>Established complimentary footprint</b> in the US, NZ, Australia and Latin America</li><li>• Good platform for growth</li></ul>





**ONCE  
INTO   
AGAIN  
AND AGAIN**

# AUTOMATED WITH TOMRA SORTING UNITS



Sorting of Municipal Solid Waste, Cyprus



# RECYCLING: APPLICATIONS AND SENSOR TECHNOLOGY

	HOUSEHOLD WASTE	PACKAGING	C & D	AUTOMOBILE SHREDDER	ELECTRONIC SCRAP
<b>MATERIAL</b>	<ul style="list-style-type: none"> <li>• Hard plastics</li> <li>• Plastic film</li> <li>• Mixed paper</li> <li>• RDF</li> <li>• Metals</li> <li>• Organics/ Biomass</li> </ul>	<ul style="list-style-type: none"> <li>• Plastics</li> <li>• Plastic film</li> <li>• Cardboard</li> <li>• Mixed paper</li> <li>• Deinking paper</li> <li>• Metal</li> </ul>	<ul style="list-style-type: none"> <li>• Inert material</li> <li>• Plastic film</li> <li>• Metals</li> <li>• Wood</li> <li>• Paper &amp; Cardboard</li> <li>• Plastics</li> </ul>	<ul style="list-style-type: none"> <li>• NF metal</li> <li>• Stainless steel</li> <li>• Copper cables</li> <li>• Copper</li> <li>• Brass</li> <li>• Aluminum</li> <li>• Meatball sorting</li> </ul>	<ul style="list-style-type: none"> <li>• Printed circuit boards</li> <li>• Non-ferrous metal concentrates</li> <li>• Cables</li> <li>• Copper</li> <li>• Brass</li> <li>• Stainless steel</li> <li>• Meatball sorting</li> </ul>
<b>SENSOR TECHNOLOGY</b>	NIR EM VIS XRT	NIR VIS EM	NIR VIS XRT EM	NIR VIS XRT EM COLOR XRF	XRT EM NIR COLOR XRF



Mixed paper



PE/PP flakes



Cleaned wood

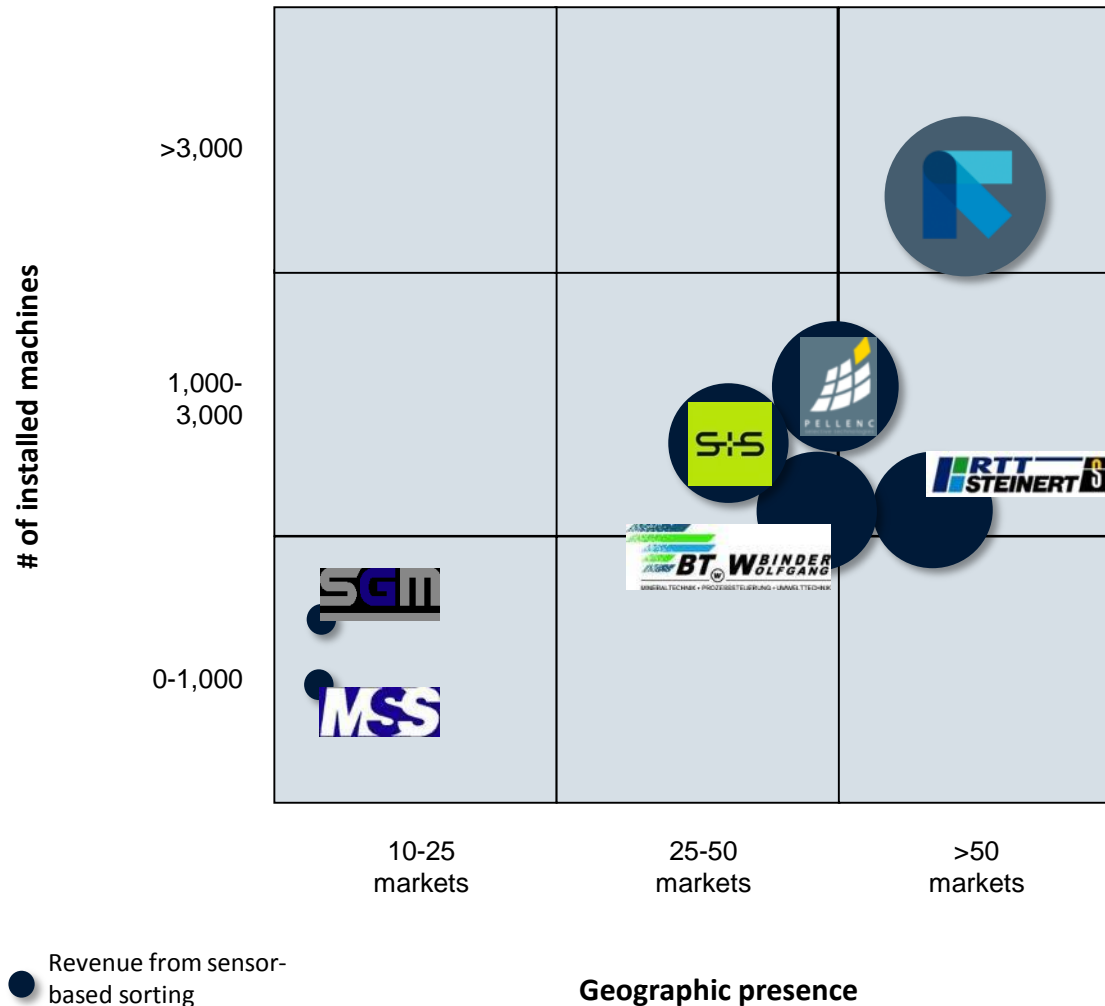


Copper Wire



Brass

# RECYCLING COMPETITIVE LANDSCAPE



## TOMRA competitive positioning

- Largest installed base
- Highest revenues
- Broadest technology platform
- Highest number of applications and markets served
- Leading brand
- **Market share: 55-65%**

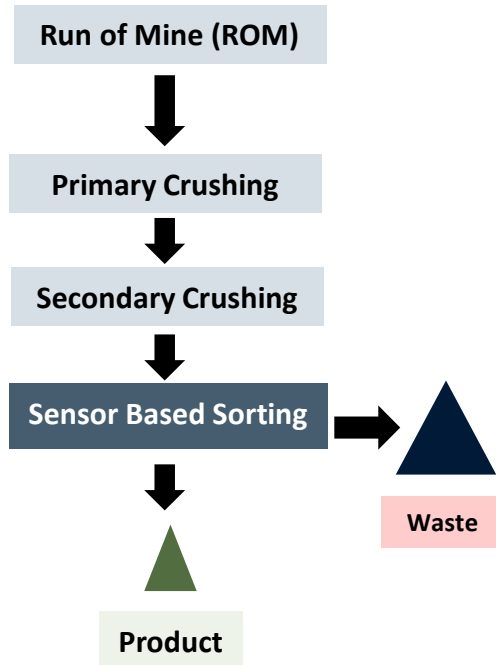
Source: TOMRA estimates and analysis

A close-up photograph of two hands held palm-up, displaying two different types of mineral samples. The left hand holds a pile of dark, reddish-brown, irregularly shaped mineral fragments. The right hand holds a pile of lighter, yellowish-white, more crystalline mineral fragments. The background is blurred, showing a person in a blue and white uniform.

**SOURCE  
INTO    
RESOURCE**

# THE CONCEPT OF SENSOR-BASED SORTING IN MINING

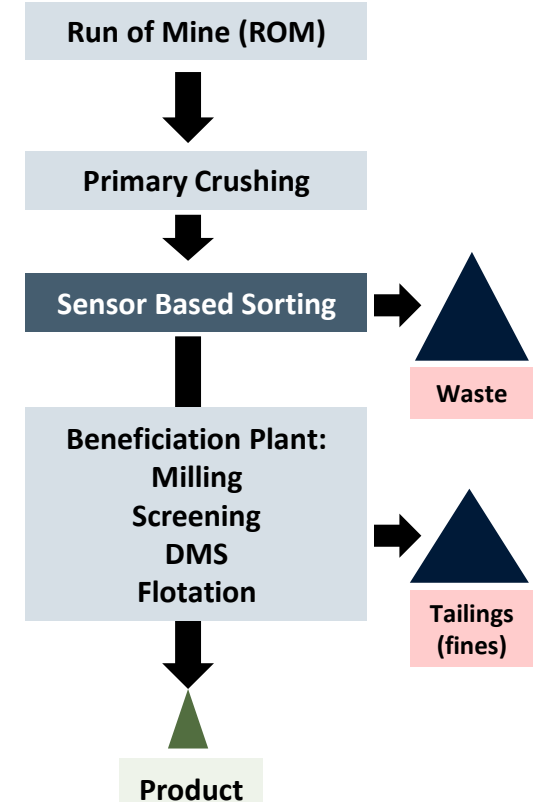
## Mining process: Industrial minerals



- 15% to 50% of the ROM can be rejected in an early stage of the process (application dependent)
- These low grade waste rocks don't need to be transported, crushed, grinded or further treated

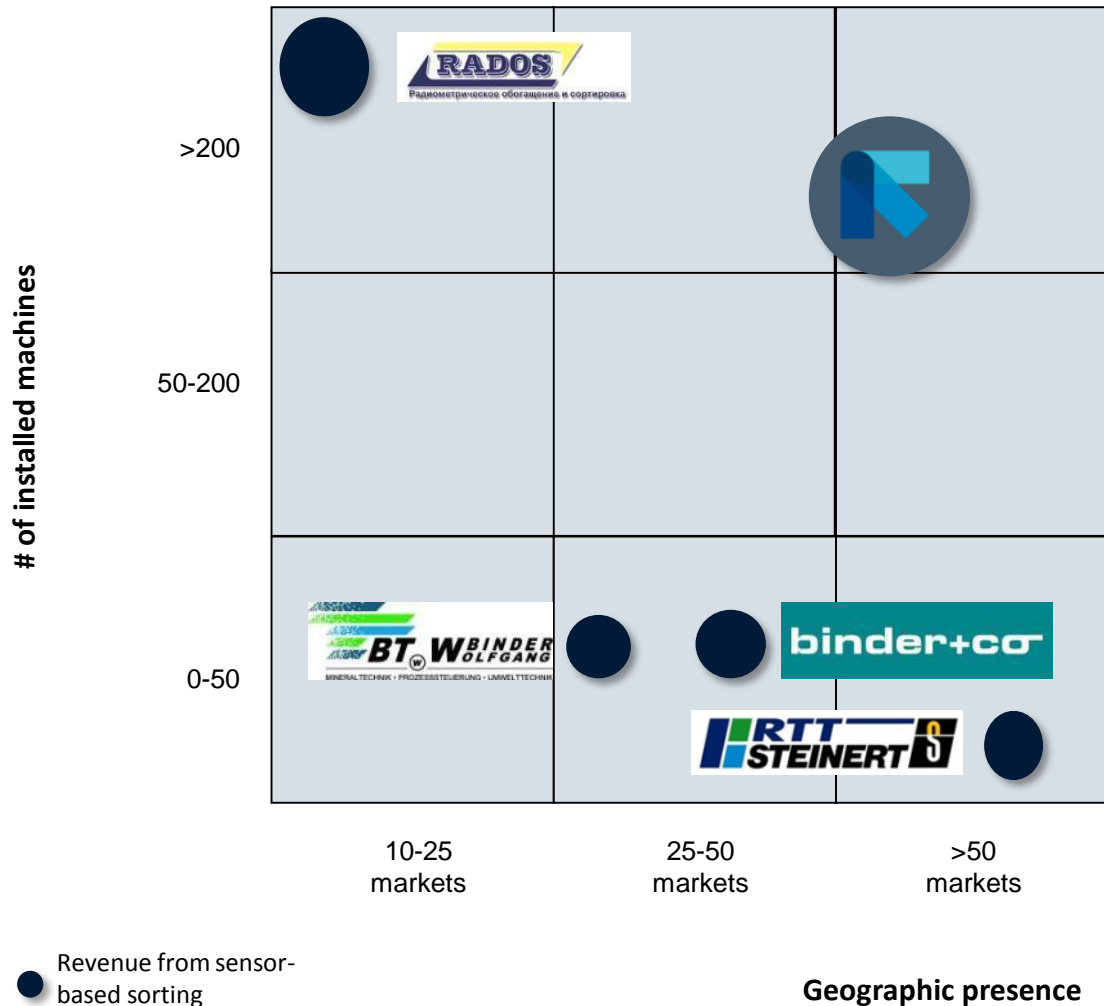
Current segment

## Mining process: Metal mining



Potential new segment

# MINING COMPETITIVE LANDSCAPE



## TOMRA competitive positioning

- Wide geographical coverage
- Broadest technology platform
- Leading brand
- Pioneering in developing high volume sorter in corporation with Rio Tinto
- **Market share: 40-50%**

Source: TOMRA estimates and analysis

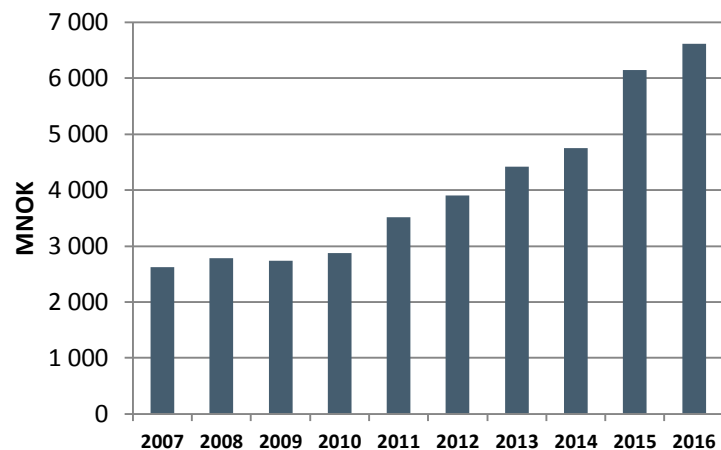
# Historical financial performance



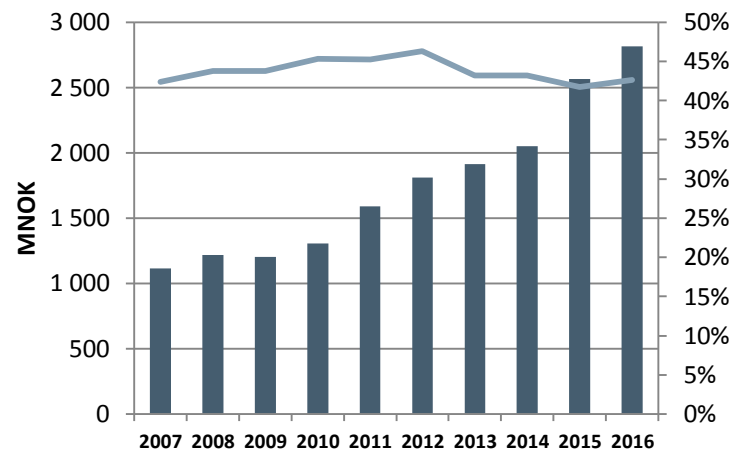


# KEY FINANCIALS DEVELOPMENT

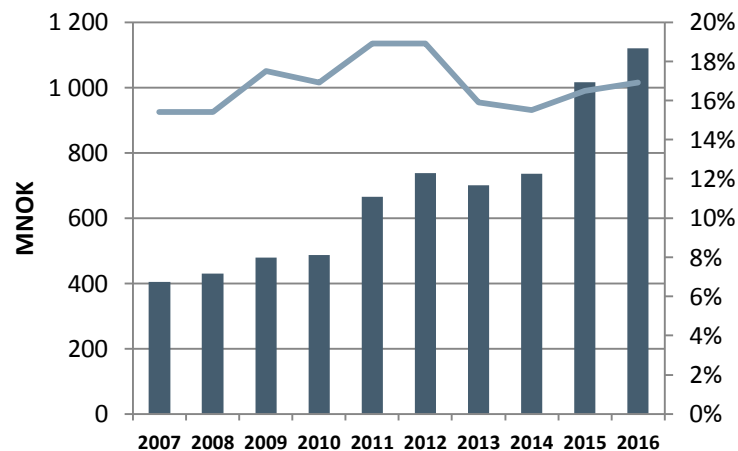
## Revenues



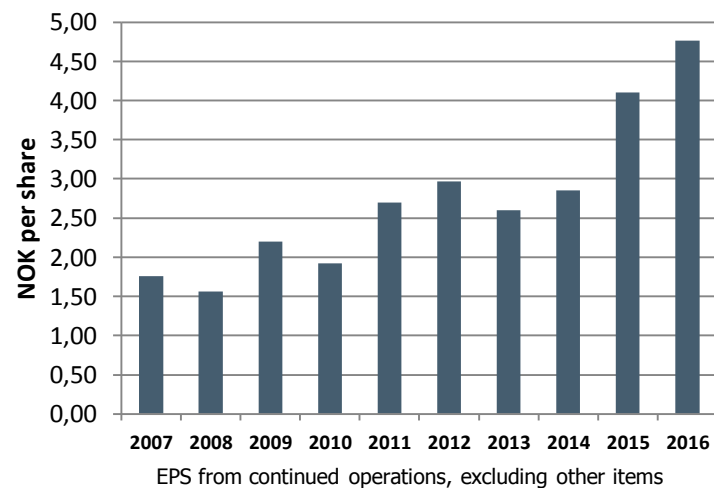
## Gross Contribution and margin



## EBITA and margin



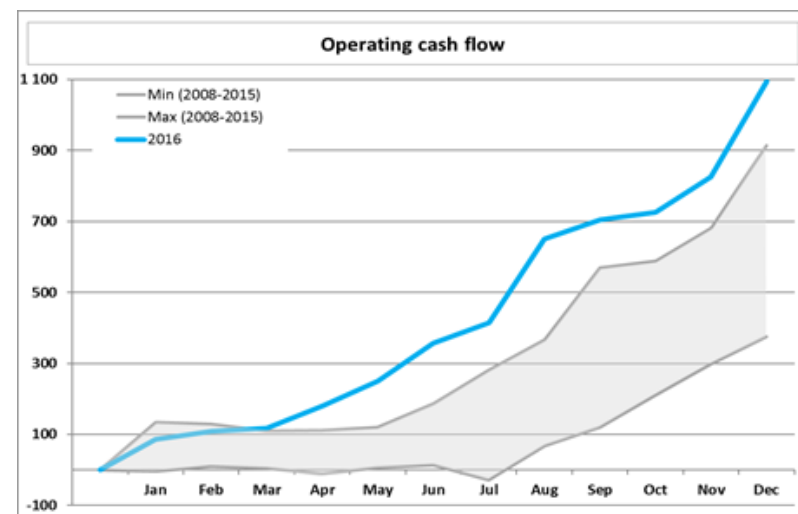
## Earnings per share



# FINANCIAL HIGHLIGHTS

## BALANCE SHEET, CASH FLOW AND CAPITAL STRUCTURE

<i>Amounts in NOK million</i>	<b>31 Dec 2016</b>	<b>31 Dec 2015</b>
<b>ASSETS</b>	<b>7,115</b>	<b>7,318</b>
• Intangible non-current assets	2,750	2,816
• Tangible non-current assets	801	721
• Financial non-current assets	342	309
• Inventory	1,127	1,158
• Receivables	1,696	1,918
• Cash and cash equivalents	399	396
<b>LIABILITIES AND EQUITY</b>	<b>7,115</b>	<b>7,318</b>
• Equity	4,192	3,648
• Minority interest	178	136
• Interest bearing liabilities	760	1,439
• Non-interest bearing liabilities	1,985	2,095



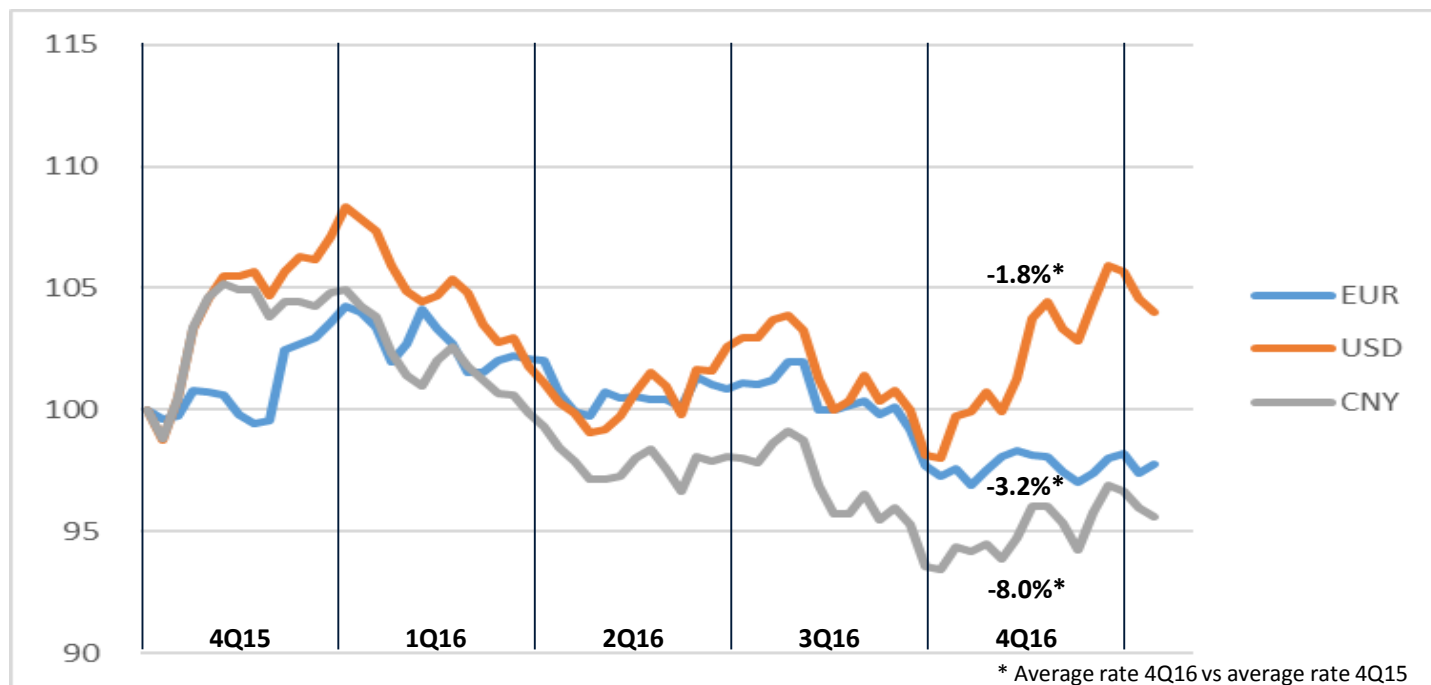
### Ordinary cashflow from operations

- 390 MNOK (343 MNOK in 4Q 2015)

### Solidity

- 59% equity
- NIBD/EBITDA = 0.3x (Rolling 12 months)

# CURRENCY



Some negative impact from currencies in 4Q16 vs 4Q15

## Revenues and expenses per currency;

NOTE: Rounded figures

	EUR**	USD	NOK	SEK	OTHER	TOTAL
Revenues	45 %	30 %	5 %	10 %	10 %	100 %
Expenses	45 %	25 %	10 %	10 %	10 %	100 %
EBITA	45%	50 %	- 15 %	10 %	10 %	100 %

\*\* EUR includes DKK

Including CNY

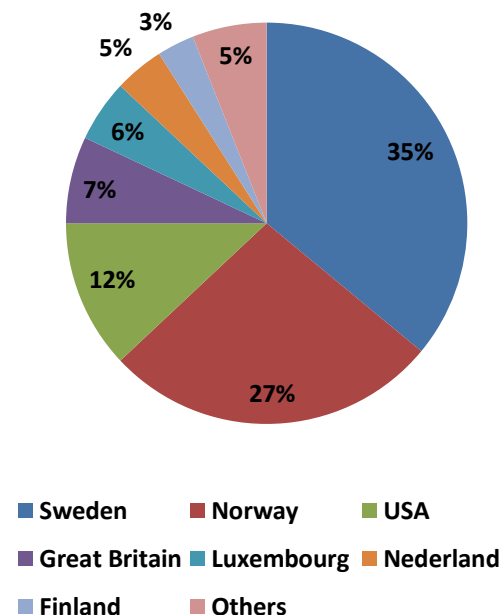
# TOMRA SHAREHOLDER STRUCTURE

## Top 10 shareholders as of 31<sup>st</sup> of December 2016

1	Investment AB Latour	38 130 000	25.8%
2	Folketrygdfondet	9 529 819	6.4%
3	The Bank of New York BNYM, Stitching Dep	7 845 000	5.3% (NOM)
4	Skandinaviska Enskilda A/C Clients account	4 055 568	2.7% (NOM)
5	Goldman Sachs & Co	3 395 592	2.3% (NOM)
6	Clearstream Banking	2 751 495	1.9% (NOM)
7	The Bank of New York BNYM	2 612 603	1.8% (NOM)
8	Nordea Nordic Small	2 349 276	1.6%
9	Odin Norge	2 280 188	1.5%
10	Danske invest Norske C/O Danske Capital A	2 219 530	1.5%
<b>Sum Top 10</b>		<b>75 169 071</b>	<b>50.8%</b>
<b>Other shareholders</b>		<b>72 851 007</b>	<b>49.2%</b>
<b>TOTAL (5,595 shareholders)</b>		<b>148 020 078</b>	<b>100.0%</b>

Source: VPS

## Shareholders by country



# DISCLAIMER

## Copyright

The material in this Document (which may be a presentation, video, brochure or other material), hereafter called Document, including copy, photographs, drawings and other images, remains the property of TOMRA Systems ASA or third party contributors where appropriate. No part of this Document may be reproduced or used in any form without express written prior permission from TOMRA Systems ASA and applicable acknowledgements. No trademark, copyright or other notice shall be altered or removed from any reproduction

## Disclaimer

This Document (which may be a presentation, video, brochure or other material), hereafter called Document, may include and be based on, inter alia, forward-looking information and statements that are subject to risks and uncertainties that could cause actual results to differ. The content of this Document may be based on current expectations, estimates and projections about global economic conditions, including the economic conditions of the regions and industries that are major markets for TOMRA Systems ASA and its subsidiaries and affiliates. These expectations, estimates and projections are generally identifiable by statements containing words such as "expects", "believes", "estimates" or similar expressions, if not part of what could be clearly characterized as a demonstration case. Important factors that could cause actual results to differ materially from those expectations include, among others, changes in economic and market conditions in the geographic areas and industries that are or will be major markets for TOMRA Systems ASA. Although TOMRA Systems ASA believes that its expectations and the Document are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved or that the actual results will be as set out in the Document. TOMRA Systems ASA does not guarantee the accuracy, reliability or completeness of the Document, and TOMRA Systems ASA (including its directors, officers and employees) accepts no liability whatsoever for any direct or consequential loss arising from the use of this Document or its contents. TOMRA Systems ASA consists of many legally independent entities, constituting their own separate identities. TOMRA is used as the common brand or trade mark for most of these entities. In this Document we may sometimes use "TOMRA", "TOMRA Systems", "we" or "us" when we refer to TOMRA Systems ASA companies in general or where no useful purpose is served by identifying any particular TOMRA Company