



# TOMRA INVESTOR PRESENTATION





TOMRA was founded on an innovation in 1972 that began with design, manufacturing and sale of reverse vending machines (RVMs) for automated collection of used beverage containers

Today, TOMRA creates sensor-based solutions for optimal resource productivity



# THE WORLD POPULATION AND STANDARD OF LIVING IS INCREASING DRAMATICALLY











### THE DAWN OF THE RESOURCE REVOLUTION

### THE CHALLENGE:

THE OPPORTUNITY:

3 billion more middle-class

consumers expected to be in the

global economy by 2030

Up to \$1.1 trillion spent annually on resource subsidies

\$2.9 trillion of savings in

2030 from capturing the resource productivity potential

At least \$1 trillion

more investment in the resource system needed each year to meet future resource demands





TOMRA creates sensor-based solutions for optimal resource productivity





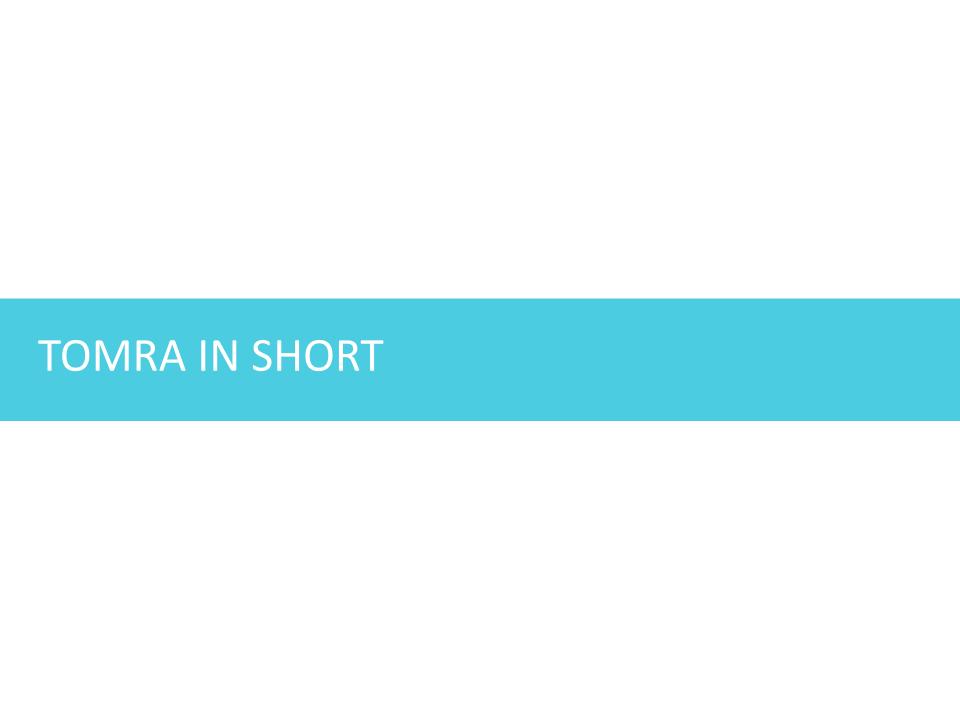
# LEADING THE RESOURCE REVOLUTION



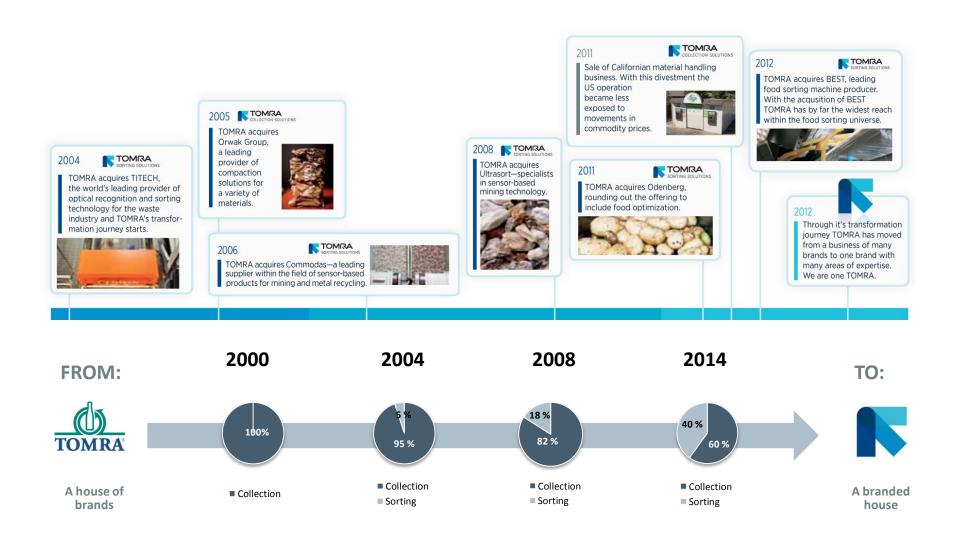
# FROM PURPOSE INTO PROFITS AND PROFITS INTO PROGRESS, TOMRA IS **TRANSFORMING** WHAT IT MEANS TO BE RESOURCEFUL.



- Our solutions, in use around the globe, helped keep up to **24 millions** of tons of CO<sub>2</sub> from being released into the atmosphere in 2014
- 35 bn used beverage containers are captured every year through our reverse vending machines
- Our steam peelers process 15
  million tons of potatoes per year
  with a 1% yield improvement
  over other alternatives
- 715,000 tons of metal are recovered every year by our metalrecycling machines

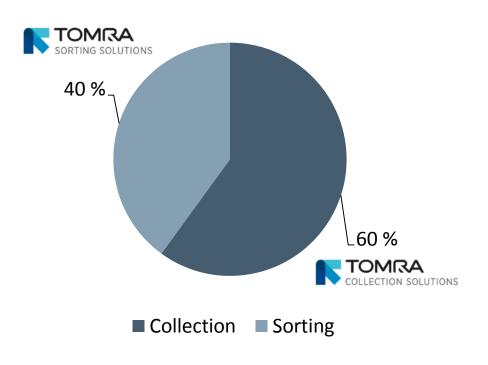


### THE TOMRA TRANSFORMATION JOURNEY





# CREATING VALUE THROUGH TWO STRONG BUSINESS AREAS



#### Two strong areas for value creation







- Stable
- High margins
- Low cyclicality

- High growth
- High margins
- Medium cyclicality

**High technology - sustainable business** 

Source: 2014 Annual sales figures



# TOMRA'S TWO BUSINESS AREAS





#### RECYCLING

Share of '14 sales

~12%

**Employees** 

145

Customers

Material recovery facilities, scrap dealers, metal shredder operators

Market share

~50-60%

#### **REVERSE VENDING**

~45%

1,150

Grocery retailers

~65%

#### MINING

Share of '14 sales

~3%

**Employees** 

50

Customers

Mining companies

Market share

~40-60%

#### **MATERIAL RECOVERY**

~15%

440

Grocery retailers and beverage manufacturers

~60% in USA (markets served)

#### **FOOD**

Share of '14 sales

~25%

**Employees** 

445

Customers

Food growers, packers and processors

Market share

~25%

**Employees** 

Sorting Solutions group functions: 145



# TOMRA INSTALLED BASE









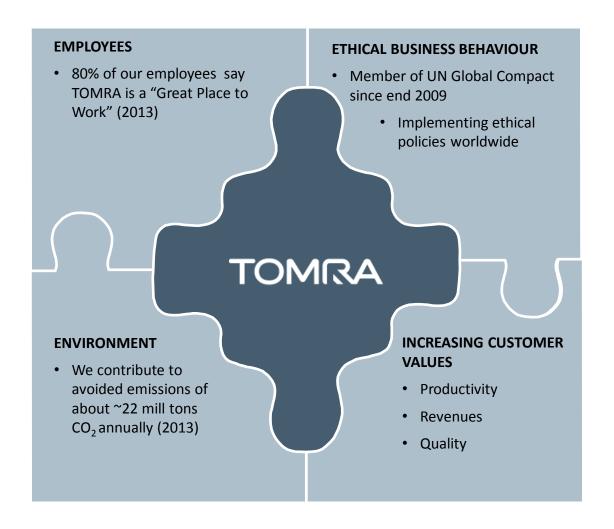
REVERSE VENDING				
Nordic	~15,000			
Germany	~27,000			
Other Europe	~12,800			
North America	~16,600			
Rest of the world	~2,100			
TOTAL	~74,500			

RECYCLING		MINING		FOOD	
Europe US / Canada Asia Other	~2,600 ~700 ~350 ~650	Europe US / Canada Australia South Africa Other	~80 ~40 ~30 ~50 ~40	Europe US/Canada Asia/Oceania South America Middle East/ Africa	~3,000 ~2,600 ~600 ~250 ~550
TOTAL	~4,300	TOTAL	~240	TOTAL	~7,000

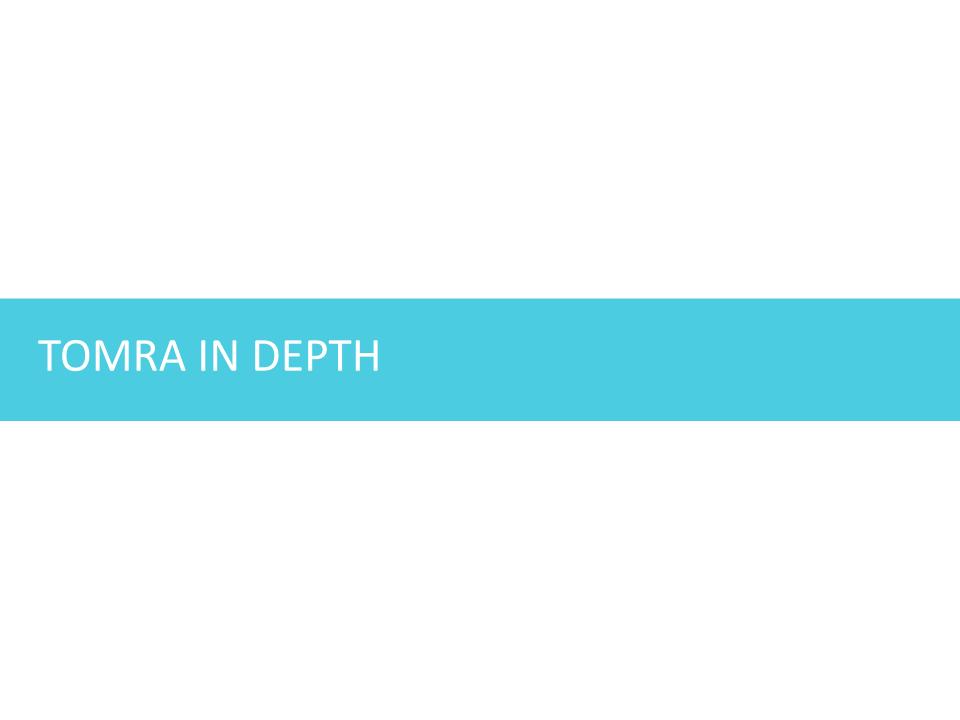
Numbers per year end 2014



# USING THE POWER OF BUSINESS TO DO GOOD







# **TOMRA Collection Solutions**





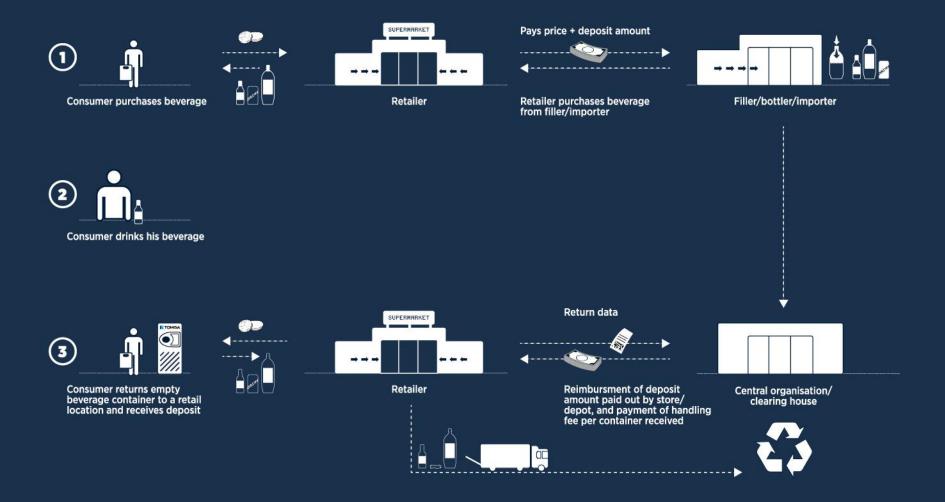








# RECYCLING OF BEVERAGE PACKAGING IN A DEPOSIT SYSTEM

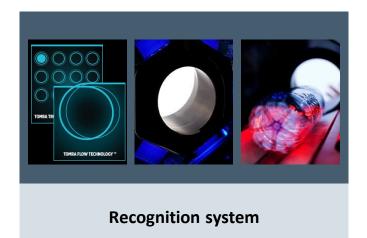


# **ELEMENTS OF A MODERN REVERSE VENDING SYSTEM**











Data administration

# THE USED BEVERAGE CONTAINER RECYCLING VALUE CHAIN

#### Generic used beverage container (UBC) recycling value chain



#### **RVM-based UBC recycling value chain**



# ENSURE SUFFICIENT DIFFERENTIATION BY DELIVERING ON PRODUCT ROADMAP AMBITIONS

#### 



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### 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

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





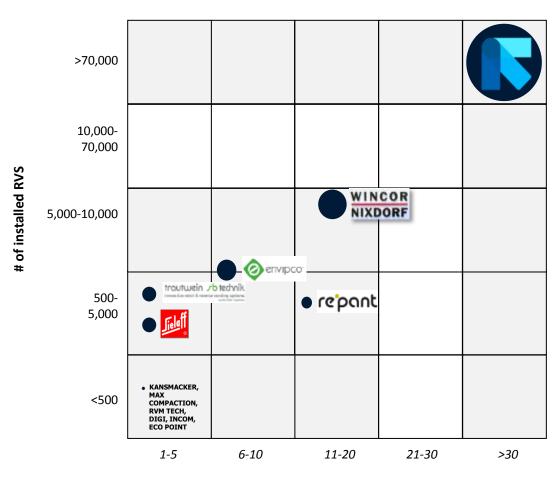


# **REVERSE VENDING ADVANTAGES**





# **COMPETITIVE LANDSCAPE**



**Number of RVS markets** 

Annual revenue from RVS sales

Source: TOMRA estimates and analysis



### RVM: OUR STRATEGY 2013 -2018

- Defend and nurture core deposit market business
- Increase differentiation towards competition
- Further reduce the cost of reverse vending systems

- Ensure continued relevance of deposit systems
- Increase scope of existing deposit markets
- Assist in developing new deposit markets

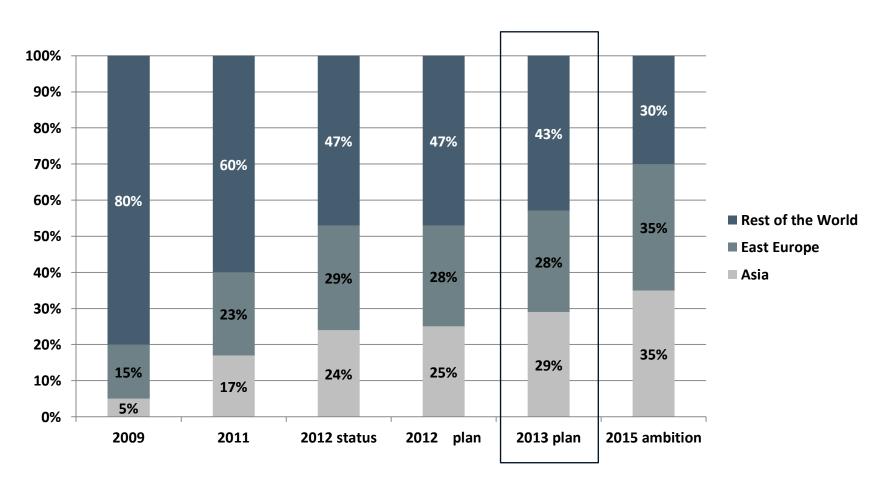
- Embrace new business models
- Capture new volume by entering new segments
- Create new revenue streams from Software/IT

- 4 Expand scope of business
- Target new material streams



# **EXAMPLE: CHANGES IN SOURCING SETUP**

#### **COGS** distribution by region (sourcing)

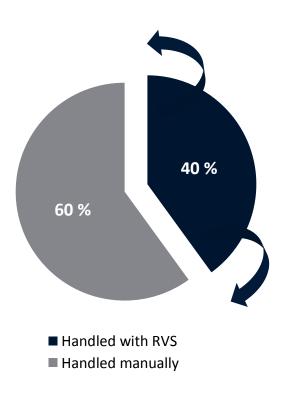


Source: TOMRA analysis

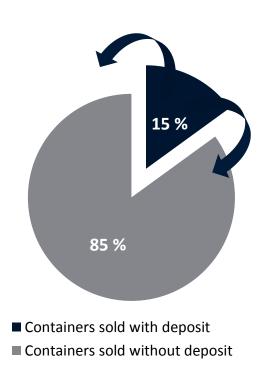


# ENSURE CONTINUED RELEVANCE OF AUTOMATED DEPOSIT SYSTEMS

# Handling method for deposit containers Percent of total



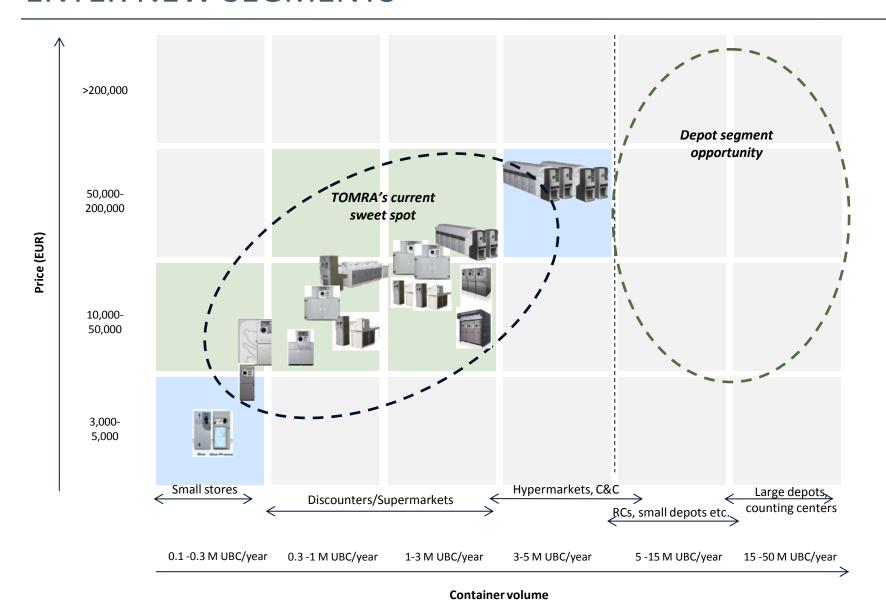
# Share of containers sold with deposit Percent of total



Source: TOMRA analysis



# **ENTER NEW SEGMENTS**





# CREATE NEW REVENUE STREAMS FROM SW/IT

#### **TOMRAPlus**







#### **TOMRA REACT**

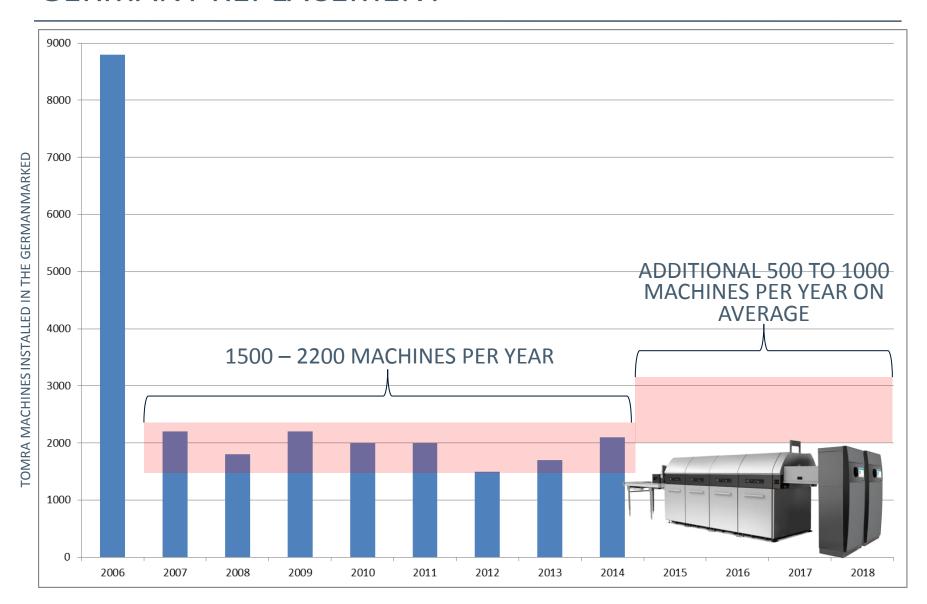




Integrating hardware and software into attractive and engaging combos



# **GERMANY REPLACEMENT**





# **NEW DEPOSIT MARKETS**





# COLLECTION SOLUTIONS – FINANCIAL DASHBOARD

Material Material **RVM RVM** Recovery Recovery **Industry growth Market share** 0-10% 0-3% 75% 60% Geographical diversity Recurring revenue ~75% 90-100% 20-30 markets 10 markets Profitability (ROCE)\* Cyclicality 30-40% ~15% Low Low

#### **TARGETS 2013 -2018**

Yearly growth 4 – 8%

COGS cut program continues: 40% reduced COGS on new RVM machines from 2010 to 2015 EBITA-margin 18%-23%



# **TOMRA Sorting Solutions**



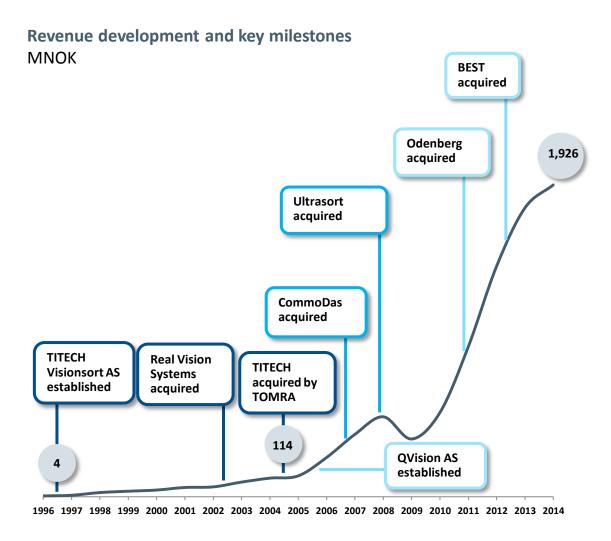








### STRONG REVENUE GROWTH SINCE INCEPTION IN 1996

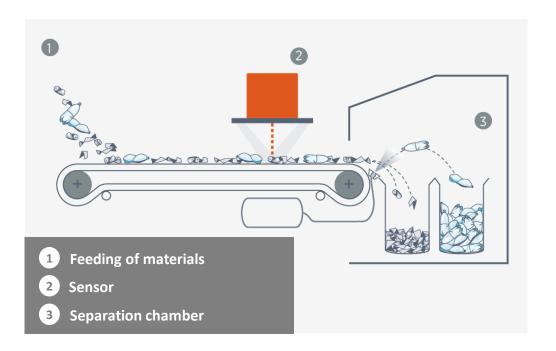


- Total revenue growth (organic plus inorganic) CAGR of ~33% per year from 2004-2014
  - Average annual organic growth for the same period was ~17%
- Technology base and segment/application knowledge expanded both through acquisitions and inhouse ventures



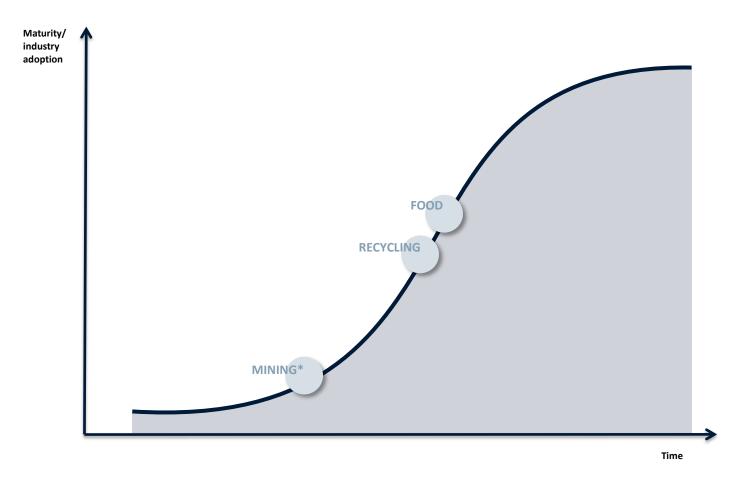
### HOW DOES SENSOR BASED SEPARATION WORK?

- 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



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



# CUTTING-EDGE TECHNOLOGY DRIVEN BY SIGNIFICANT INVESTMENTS IN R&D...

#### **SENSOR PORTFOLIO**

#### **Electromagnetic Sensor (EM)**

Material property detected: electromagnetic properties like conductivity and permeability

#### Radiometry (RM)

Material property detected: Natural Gamma-Radiation

## • In-house R&D department with more than 20% of all employees

#### **CCD Color Camera (COLOR)**

Material property detected: color properties in the color are as red, green and blue

#### IR Camera (IR)

Material property detected: heat conductivity and heat dissipation

### 8% of revenue invested in R&D

### Developing own sensors

#### X-ray Transmission (XRT)

Material property detected: specific atomic density irrespective of size, moisture or pollution level

### X-ray Fluorescence (XRF)

Material Property detected: elemental composition

Using own software and data processing tools

### **Visible Light Spectrometry (VIS)**

Material property detected: visible spectrum for transparent and opaque materials

#### **Near-Infrared Spectrometry (NIR)**

Material property detected: specific and unique spectral properties of reflected light in the near-infrared spectrum

• Ownership of **80 patents** 

#### Laser / Fluo

Material property detected:

- + monochromatic reflection / absorption
- + scattering of laser light Fluo or bio-luminescence, Super K

#### **Infrared Transmission (IRT)**

Material property detected: light absorption

Partnership with leading R&D institutions:
 SINTEF, CTR, Fraunhofer ILT; universities like
 RWTH, Aachen and Brussels



## ...TO DEVELOP PRODUCTS SERVING A WIDE RANGE OF DETECTION PARAMETERS



### Color

Removal of discolorations in monoand mixed-color material



### **Blemishes**

Objects with spots or other (small) blemishes are removed



### **Defects**

Removal of visible and invisible small and substantial defects



### Structure

Removal of soft, molded or rotten food



### Density

Detection of density differences



### Damage

Broken, split and damaged objects are detected and removed



### Shape & Size

Sort on length, width, diameter, area, broken-piece recognition, ...



### **Biometric Characteristics**

Sort based on water content and removal of micotoxyn contaminations



### Foreign Material

Removal of foreign material in a material stream, e.g. insects, worms, snails or plastics in food applications



### Fluo

Based on the chlorophyll level present in produce defects are removed



#### X-RAY

Analysis of objects based on their density and shape



#### Detox

Removal of produce contaminated with aflatoxin



Visible



Invisible



Both



### A COMMON SENSOR BASED TECHNOLOGY PORTFOLIO

	[m]
0	10-12
Gamma- radiation	10-11
radiation	<b>10</b> <sup>-10</sup>
X-ray	<b>10</b> -9
	10-8
Ultraviolett (UV)	<b>10</b> <sup>-7</sup>
\	10 <sup>-6</sup>
Visible light (VIS)	10-5
Near Infrared (NIR)	10-4
Infrarot (IR)	10 <sup>-3</sup>
minarot (iit)	10-2
Microwaves	10 <sup>-1</sup>
	10 <sup>1</sup>
Radio waves	10 <sup>2</sup>
	10 <sup>3</sup>
Alternating current (AC)	<b>10</b> <sup>4</sup>
(/70)	

Sensor/	Material Property	Segment
Technology		
RM (Radiometric)	Natural Gamma Radiation	Mining
XRT (X-ray transmission) Low Energy X-ray	Atomic Density	Recycling, Mining, Food
XRF	X ray fluorescence (Elemental Spectroscopy)	Recycling, Mining
COLOR (CCD Color Camera)	Reflection, Absorption, Transmission	Recycling, Mining, Food
Laser attenuation and PM (Photometric)	Monochromatic Reflection /Absorption of Laser Light Scattering analysis of Laser Light	Mining, Food
NIR / MIR (Near/Medium Infrared Spectrometry)	Reflection, Absorption (Molecular Spectroscopy)	Recycling, Mining, Food
LIBS	Laser induced breakdown spectroscopy	Recycling, Mining
EM (Electro- Magnetic sensor)	Conductivity, permeability	Recycling, Mining, Food



### CROSS UTILIZING OUR PORTFOLIO TECHNOLOGIES



## TITECH NIR + ODENBERG platform

#### **Field Potato Sorter**

- The NIR technology allows efficient removal of rocks, dirt and rotten potatoes before the potatoes are stored
- The solution opens up sorting of unwashed potatoes in a way that previously was not possible



## BEST LASER + TOMRA mining platform

#### **PRO Laser Duo**

- The LASER technology allows detection of quartz of all colors. This opens for sorting of quartz itself, and gold bearing quartz mineralization
- The solution is unique in the market and further underlines our technological leadership



### **TITECH NIR + BEST LASER**

#### **Nimbus BSI**

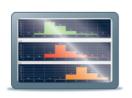
- An NIR sensor has been added to the NIMBUS machine platform
- The new machine increases our competitiveness in the nuts segment

Several more projects on combining technologies into new products in the pipeline

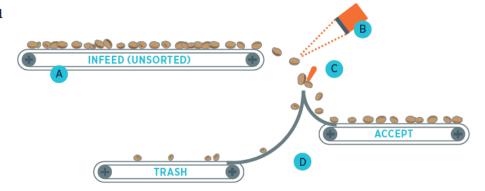


### SORTING UNWASHED POTATOES: WORKING PRINCIPLE

The product is spread uniformly onto the infeed belt and will be scanned by cameras in the different inspection zones. A few milliseconds later one type of material will be rejected by intelligent finger ejectors, positioned at the end of the conveyor belt, while the good products continue their way along the sorting line.



- A Infeed (unsorted)
- B Full width NIR and Color Vision sensors
- Intelligent finger ejectors
- D Gentle handling convey chutes (optional)



### DEFECTS & BLEMISHES REPORTING

#### REPURTING



Dirt Clod





Stones



Golf Ball

### Reports can be generated with the following data:

#### Product Data

- + Average Length & Width mm(ins)
- + Length and Width distribution (size bins) mm(ins)
- + Total potato count #
- + Total reject count #
- + Stone, soil clod, rot, other %

### Sorter Operation Data

- + Belt speed, average belt fill %
- + Object counts/second
- + Program running

- The Field Potato Sorter is ODENBERG's first venture into the unwashed potato market
- The machine uses unique near infra-red technology to remove soil clods, stones and rotten potatoes, in addition to the foreign material commonly found in fields such as golf balls, plastics, wood etc
- The FPS sorter should be used after a soil remover and is designed to fit existing grading equipment or be used as a standalone unit and can operate on harvested potato crop before and after storage
- The system also provides online potato size data for logging, plus sorter operating information



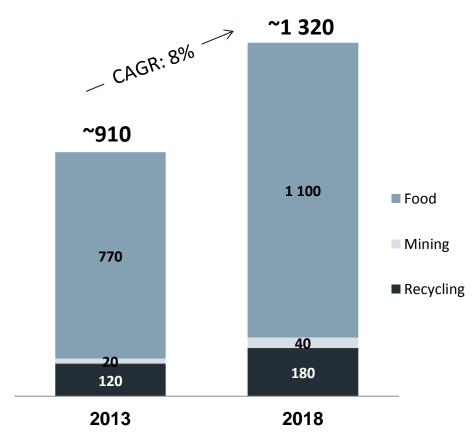
### SORTING VALUE PROPOSITION



### MARKET SIZE AND POTENTIAL

### Total annual market size

#### **EUR** million

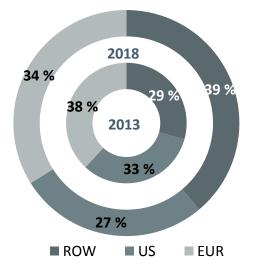


Source: TOMRA estimates and analysis

### Market growth

- Market expected to grow at rate of around 7-9% per year
- A large part of growth from unlocking of dormant potential – only possible by developing new applications and technologies
- Some growth in "old world", but faster growth in "new world"

## **Expected development in geographical revenue contribution**





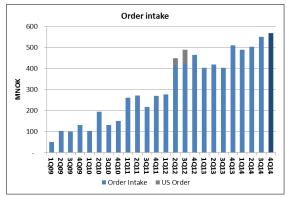
<sup>\*</sup> Market size for food includes peeling, meat/process analytics, virgin materials and tobacco.

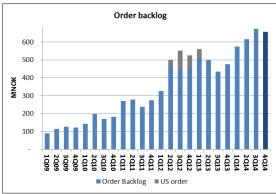
### SORTING SOLUTIONS: OUR STRATEGY

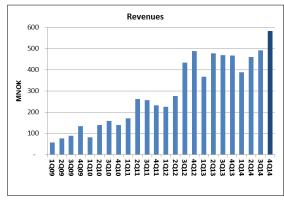
Recycling Food Mining More than doubling of emerging markets revenue (but North America and Europe still 60% of business in 2018) New applications representing Significant expansion of sales Revenue growth 15 M€ growth in new segments 25% of revenue in 2018 network of 10-15% over **New segments** representing Succeed in high volume 50% growth in service revenue the period 10% of revenue in 2018 segments Grow with existing customers and double service revenue **Common sorting platform** for all new product developments **Extend** Cross-utilization of sensor portfolio, e.g. NIR/BSI in food and laser in mining technology **leadership** Extend current leadership in core NIR and laser technologies, and develop new cutting edge sensors Design changes, economies of scale and purchasing power to lower COGS **Improve** Consolidation of manufacturing and sourcing; increased sourcing from low cost countries operational Streamlining of organization and processes to take out synergies across business units efficiency Target to **grow profits** at several percentage points faster than revenue



### BACKLOG DEVELOPMENT AND MOMENTUM







### **Comments**

- The order backlog declined in the period 1Q13-3Q13, explained by
  - Large US order signed in 2012 and delivered in 2013
  - Generally lower order intake in the first three quarters of 2013
- Resulting in a low order backlog end 3Q13
- Good order intake the last five quarters combined fewer orders taken to P/L during the first 9 months of 2014, lead to
  - all time high order backlog at the end of 3Q14
  - Strong financial performance in 4Q14
- Continued high order order intake in 4Q14 leads to good momentum into 2015
- Seasonality in Food will lead to somewhat fewer order taken to P/L in 1Q15. Estimated backlog conversion ratio in 1Q15: 55-60%\*



# FINANCIAL DASHBOARD – SORTING SOLUTIONS





Recurring revenue



Profitability (ROCE)\*



#### **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%













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## GROWTH IN GLOBAL FOOD DEMAND WILL SPUR INVESTMENTS IN AUTOMATION



#### **Drivers and trends**

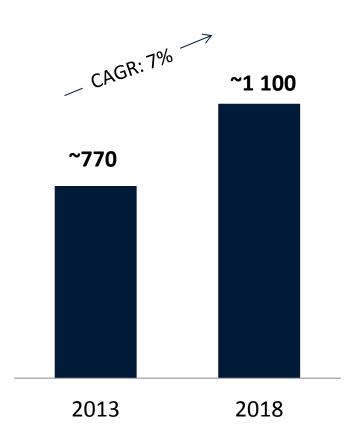
- Increasing food consumption in emerging markets, more mid-class consumers
- Industry focus on increased productivity and reducing costs through automation & quality control
- Higher quality demands from the consumers
- Stricter regulations from governments concerning food safety, health & traceability
- Shift towards packaged convenience food and fast food
- Risk of claims & recalls
  - Social media snowball effect (Twitter, Facebook, etc.)
- Globalization of brands and sourcing set up
- Scarcity & expense of (seasonal) manual labor
- Consolidation in the retail and processing sectors
- Adoption of technology in emerging markets



### MARKET SIZE FOOD SORTING\*

### Total annual market size

**EUR** million

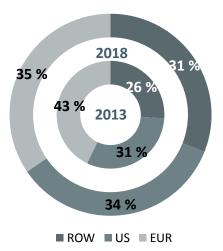


<sup>\*</sup> Market sizes shown include peeling, meat/process analytics, virgin materials and tobacco.

### Market growth

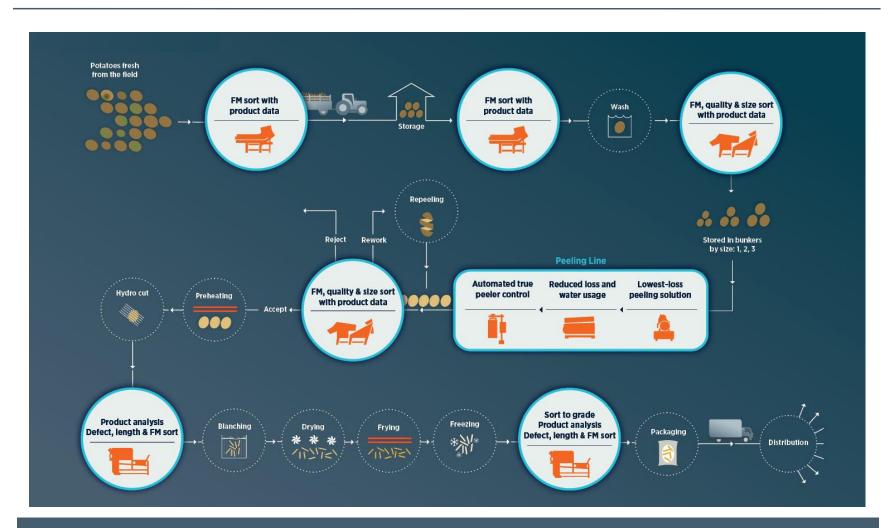
- Total market for food sorting growing around 6-8% per year
- Approximately a third of total growth is dormant potential
  - only unlocked by development of new applications and technologies
- New world share grows but the two old world champions (Europe & Americas) remain strong

## **Expected development in geographical revenue** contribution





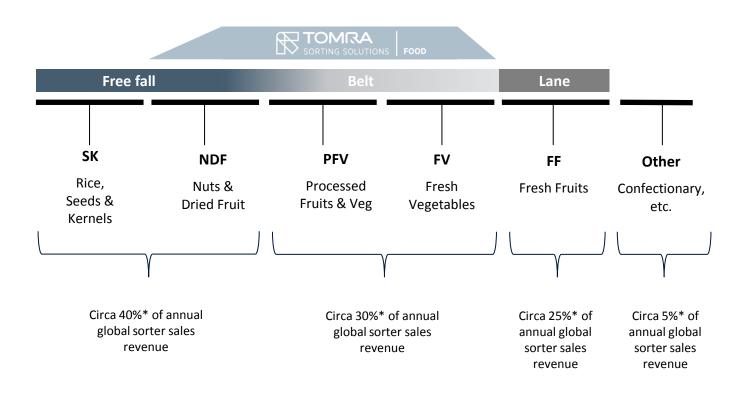
# WE ARE UNIQUELY POSITIONED TO SERVE THE ENTIRE VALUE CHAIN WITH OUR PRODUCT PLATFORM



Sales of potato-related products account for about 25% of the sales in the food division



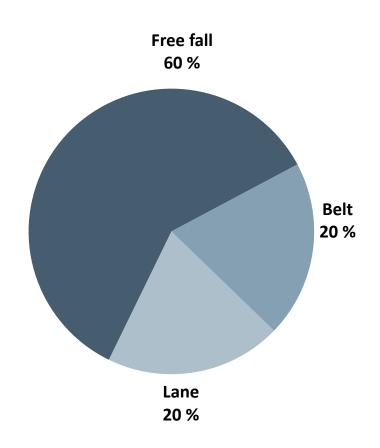
# TOMRA HAS THE BROADEST FOOTPRINT WITHIN THE FOOD SORTING UNIVERSE



\* TOMRA estimates



### 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	Best, Key, Odenberg, 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  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 



### FOOD COMPETITIVE LANDSCAPE

BUHLER SORTEX >3,000 DAEWON GSI 1,000-3,000 GREEFA Mar Roda 0-1,000 10-25 25-50 >50 markets markets markets

### **TOMRA** competitive positioning

- Size (revenues)
- Widest range of applications (150+)
- Broadest technology base
- Geographic reach (~80 countries)
- Market share in targeted segments
- Transformative solutions (Q-Vision)
- Market share: 40-50% in markets served\*

Revenue from sensorbased sorting

### Geographic presence

Source: TOMRA estimates and analysis

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



# of installed machines

# OUR BROAD COVERAGE AND TECHNOLOGY BASE IS SETTING US APART

	DRIED FRUIT	NUTS	FRESH CUT	FRUIT	VEGETABLES	MEAT	POTATOES	SEAFOOD
FOOD	<ul> <li>Apricots</li> <li>Craisins</li> <li>Figs</li> <li>Prunes</li> <li>Raisins</li> </ul>	<ul> <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> <li>Baby leaves</li> <li>Iceberg lettuce</li> <li>Spinach</li> <li>Spring mix</li> </ul>	<ul> <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> <li>Beans</li> <li>Beet</li> <li>Broccoli</li> <li>Carrots</li> <li>Corn</li> <li>Cucumbers</li> <li>IQF</li> <li>vegetables</li> <li>Jalapenos/ Peppers</li> <li>Onions</li> <li>Peas</li> <li>Pickles</li> </ul>	<ul> <li>Bacon bits</li> <li>Beef</li> <li>IQF meat</li> <li>Pork</li> <li>Pork rind</li> </ul>	<ul> <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><li>Mussels</li><li>Scallops</li><li>Shrimps</li></ul>
SENSOR TECHNOLOGY	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



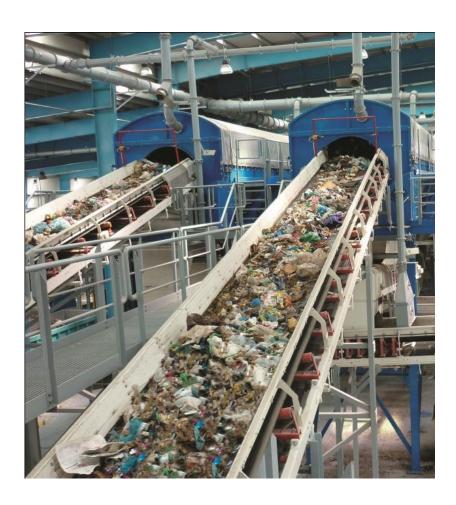
### SPECIALTY PRODUCTS APPLICATIONS

	RAW MATERIALS	ТОВАССО
APPLICATIONS	<ul><li>Virgin plastics</li><li>Synthetic rubber</li></ul>	• Threshing lamina • Threshing stems
	<ul><li>Virgin wood</li><li>Specialty chemicals</li></ul>	<ul><li>Oriental leaf</li><li>Primary lamina</li><li>Primary stems</li></ul>
:NSOR CHNOLOGY	LASER/FLUO CAMERA	LASER/FLUO
	HYPERSPECTRAL	CAIVIERA
	A de la	





### GLOBAL DRIVERS FOR THE RECYCLING SEGMENT



#### **Drivers and trends**

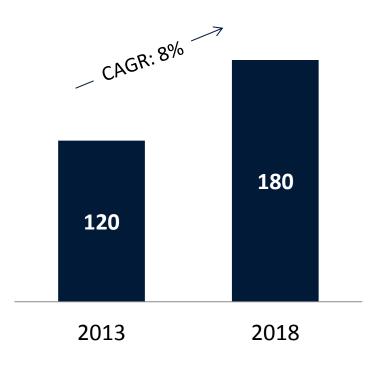
- Consumption and industry production level increase
- Favorable changes in regulatory framework (DSD, WEEE, ELV, etc)
- Commodity price levels and fluctuation
- Access to financing
- Demand for recycled raw materials
- Increasing labor costs in emerging world drive adoption of automatic sorting technologies
- Some countries in Western Europe partly saturated
- Pre-sorted (plastics) still door opener in new markets
- Municipal Solid Waste (MSW) important in emerging countries
- More aggressive pricing from competitors affect market



### MARKET SIZE RECYCLING

### Total annual market size

**EUR** million



### Market growth

- Market expected to grow at around 7-9% per year, lower than previous expectations due to economic slowdown
- Demand in old world flattening, while new markets expected to drive growth
- Existing segments will serve as a base, whilst the majority of growth will come from:
  - New geographies
  - New applications
  - New products



### RECYCLING: APPLICATIONS AND SENSOR TECHNOLOGY



	HOUSEHOLD WASTE	PACKAGING	C & D	AUTOMOBILE SHREDDER	ELECTRONIC SCRAP
MATERIAL	<ul> <li>Hard plastics</li> <li>Plastic film</li> <li>Mixed paper</li> <li>RDF</li> <li>Metals</li> <li>Organics/ Biomass</li> </ul>	<ul> <li>Plastics</li> <li>Plastic film</li> <li>Cardboard</li> <li>Mixed paper</li> <li>Deinking paper</li> <li>Metal</li> </ul>	<ul> <li>Inert material</li> <li>Plastic film</li> <li>Metals</li> <li>Wood</li> <li>Paper &amp; Cardboard</li> <li>Plastics</li> </ul>	<ul> <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> <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>
SENSOR TECHNOLOGY	NIR VIS XRT	NIR VIS EM	NIR VIS XRT EM	NIR VIS XRT EM COLOR XRF	XRT EM NIR COLOR XRF
		Service Control of the Control of th		ARP	

**Cleaned wood** 

**Copper Wire** 

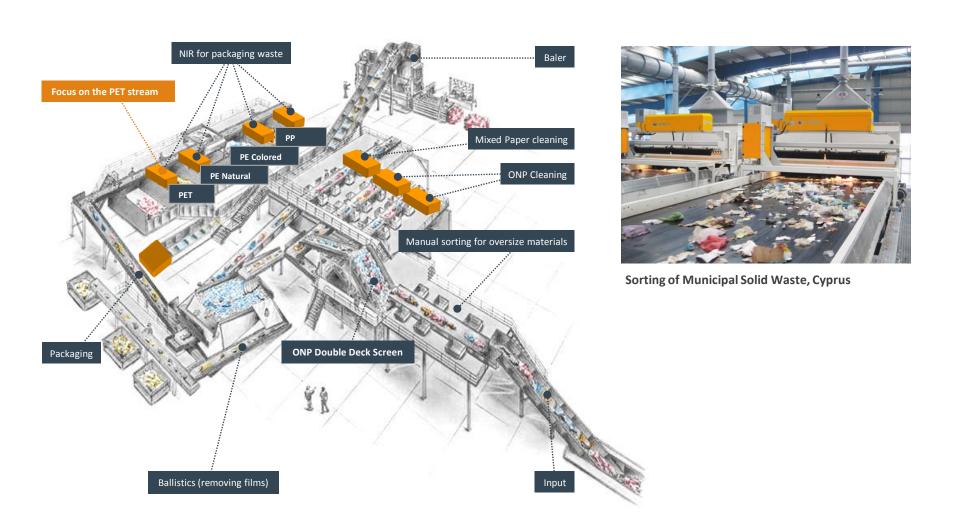
**Brass** 

PE/PP flakes



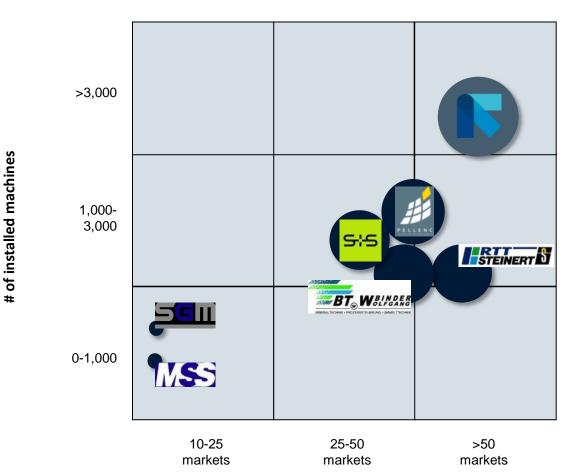
Mixed paper

### **AUTOMATED WITH TOMRA SORTING UNITS**





### 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%

Revenue from sensorbased sorting

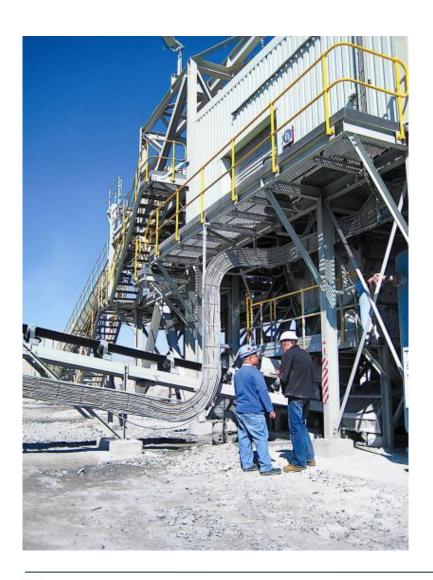
**Geographic presence** 

Source: TOMRA estimates and analysis





### GLOBAL DRIVERS FOR THE MINING SEGMENT



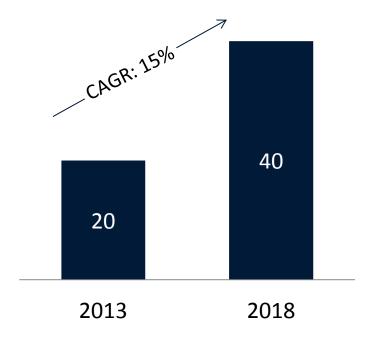
- Energy costs and water stress are major drivers
- Demand of all commodities is expected to grow with increased population and urbanization in the drivers seat
- Increasing labor costs in emerging world drive adoption of automatic sorting technologies
- Mining companies capex impact the investment sentiment
- Sensor based sorting is considered to be a future solution
  - Hardest competition comes from alternative well proven technologies



### MARKET SIZE MINING

### Total annual market size

**EUR** million



### **Market growth**

- Capex is has declined 2013 and 2014
- Sensor based machines sales expected to grow at around 15% per year
  - Growth is however conditional on new applications and technologies being developed
- Sensor based sorting is still a technology to be accepted and growth in this niche has been limited in recent years



### MINING: APPLICATIONS AND SENSOR TECHNOLOGY

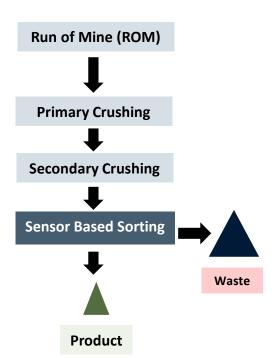


	INDUSTRIAL MINERALS	BASE & Fe METALS	FUEL/ ENERGY	PRECIOUS METALS	DIAMONDS & GEMS	METAL SLAG
COMMADDITY	• Calcite	•Copper	• Coal	• Gold	• Diamonds	• Stainless steel
COMMODITY	• Quarts	• Zinc	Uranium	• Platinum	• Tanzanite	• Copper
	• Feldspar	• Nickel			• Colored	• Chrome
	Magnesite	• Tungsten			gemstones	
	• Talcum	• Iron				
	• Dolomite	Manganese				
	• Salt	Chromite				
SENSOR TECHNOLOGY	COLOR XRT	XRT COLOR	XRT RM	XRT COLOR	COLOR XRT	XRT XRF
	NIR	EM		XRF	XRF	EM
	XRF	NIR		NIR	NIR	
	Calcite	Copper	Coal	Gold	Diamonds	Ferro Silica Slag



### THE CONCEPT OF SENSOR-BASED SORTING IN MINING

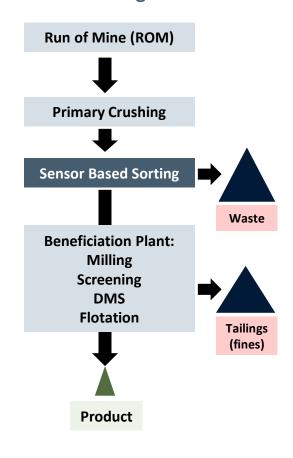
## Mining process: Industrial minerals





- 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

## Mining process: Metal mining

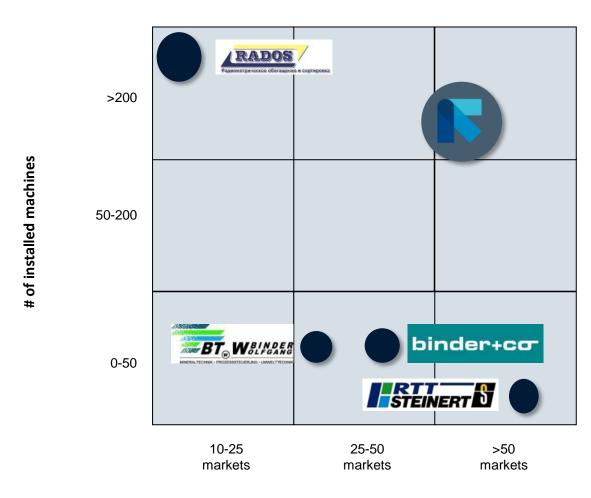


**Current segment** 

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%

Revenue from sensorbased sorting

**Geographic presence** 

Source: TOMRA estimates and analysis



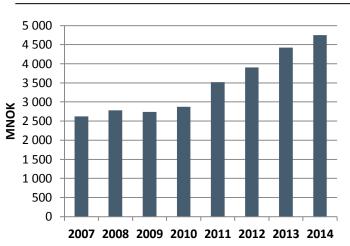
## Historical financial performance



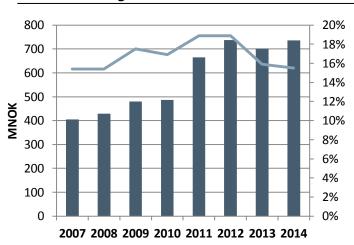


### KEY FINANCIALS DEVELOPMENT

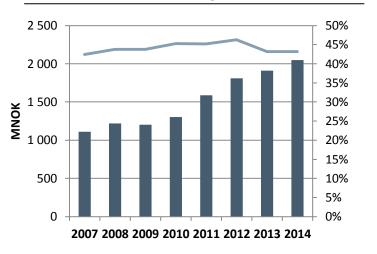
#### **Revenues**



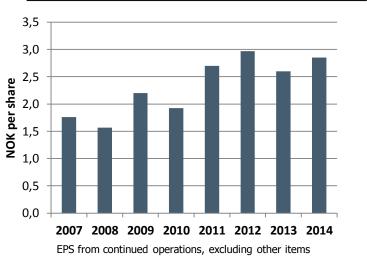
### **EBITA** and margin



### **Gross Contribution and margin**



### **Earnings per share**

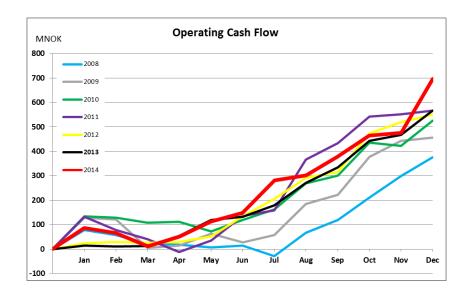






# FINANCIAL HIGHLIGHTS BALANCE SHEET, CASH FLOW AND CAPITAL STRUCTURE

Amounts in NOK million	31 Dec 2014	31 Dec 2013
ASSETS	6,625	5,623
Intangible non-current assets	2,623	2,487
• Tangible non-current assets	683	608
• Financial non-current assets	307	267
• Inventory	913	874
• Receivables	1,537	1,224
• Cash and cash equivalents	436	164
<ul> <li>Assets held for sale</li> </ul>	126	-
LIABILITIES AND EQUITY	6,625	5,623
• Equity	3,244	2,741
<ul> <li>Minority interest</li> </ul>	115	83
• Interest bearing liabilities	1,649	1,557
<ul> <li>Non-interest bearing liabilities</li> </ul>	1,593	1,242
<ul> <li>Liabilities held for sale</li> </ul>	24	-



### Ordinary cashflow from operations in 4Q

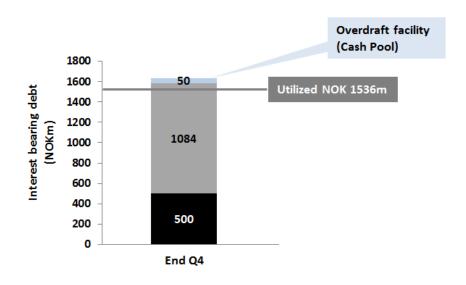
• 312 MNOK (234 MNOK in 4Q 2013)

### **Solidity**

- 49% equity
- NIBD/EBITDA = 1.4 (Rolling 12 months)
- Board propose dividend of NOK 1.45 (NOK 1.35 last year)



### STATUS FINANCING



	DNB	DNB/SEB
Туре	5 year revolving	3 year /5 year revolving
	credit facility	credit facility
Established	January 2011	April 2014
Expire	January 2016	April 2017/ April 2019
Amount	NOK 500 milion	EUR 120 million
	(or EUR	(NOK 1084
	equivalent)	million)
Repayment	Bullet	Bullet
Interest	Floating, 1-12 m	Floating, 1-9 m
Margin	60-90 bps above	45-60 bps above
	NIBOR/EUIBOR	EURIBOR/NIBOR
Pledge	Negative	Negative
Covenants	30% Equity	30% Equity



### **CURRENCY EXPOSURE**

### Revenues and expenses per currency;

	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 %

<sup>\*</sup> EUR includes DKK

### 10% change in NOK towards other currencies will impact;

	Revenues	Expenses	EBITA
EUR*	4.5%	4.5%	4.5%
USD	3.0%	2.5%	5.0%
SEK	1.0%	1.0%	1.0%
OTHER	1.0%	1.0%	1.0%
ALL	9.5%	9.0%	11.5%

<sup>\*</sup> EUR includes DKK

### **HEDGING POLICY**

 TOMRA hedges B/S items that will have P/L impact on currency fluctuations

**NOTE: Rounded figures** 

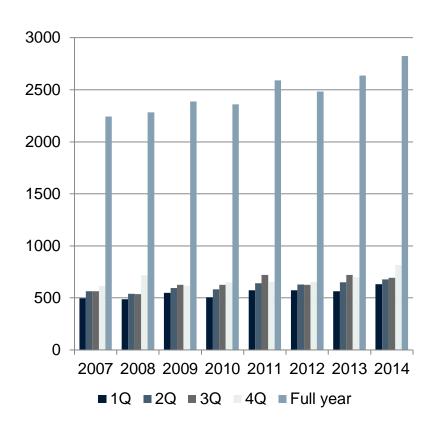
 TOMRA can hedge up to one year of future predicted cash flows. Gains and losses on these hedges are recorded in the finance line, not influencing EBITA



# COLLECTION SOLUTIONS – SEGMENT FINANCIALS

### Revenue development

**NOK** million



### **Gross and EBITA margin development**

Percent

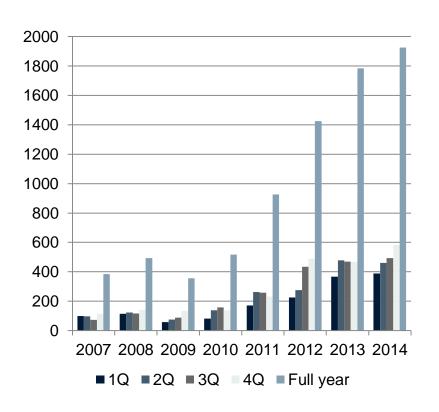




# SORTING SOLUTIONS – SEGMENT FINANCIALS

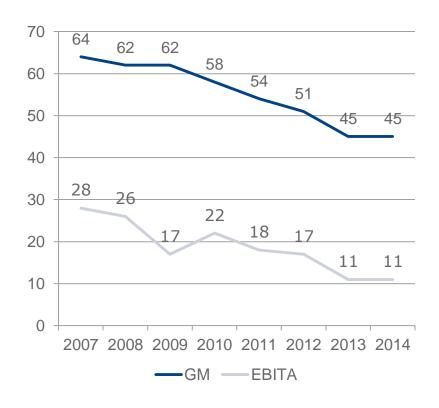
### Revenue development

**NOK** million



### **Gross and EBITA margin development**

Percent





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