INVESTOR PRESENTATION

TOMRA

TOMRA SYSTEMS ASA
05.05.2020


We live in an age with the highest level of consumption our planet has ever seen


Using more resources than ever before. More than our planet can continue to sustain.

TOMRA is well-positioned towards megatrends

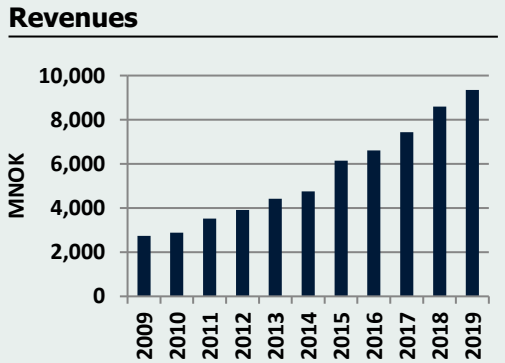
1 Solutions for optimal resource productivity

2 Leading market position – fit for growth

- Collection Solutions **#1**
- Food Sorting **#1**
- Recycling Sorting **#1**
- Mining Sorting **#1**

3 Pioneer in sensor-based and digital technologies

4 Strong financial performance, people & culture

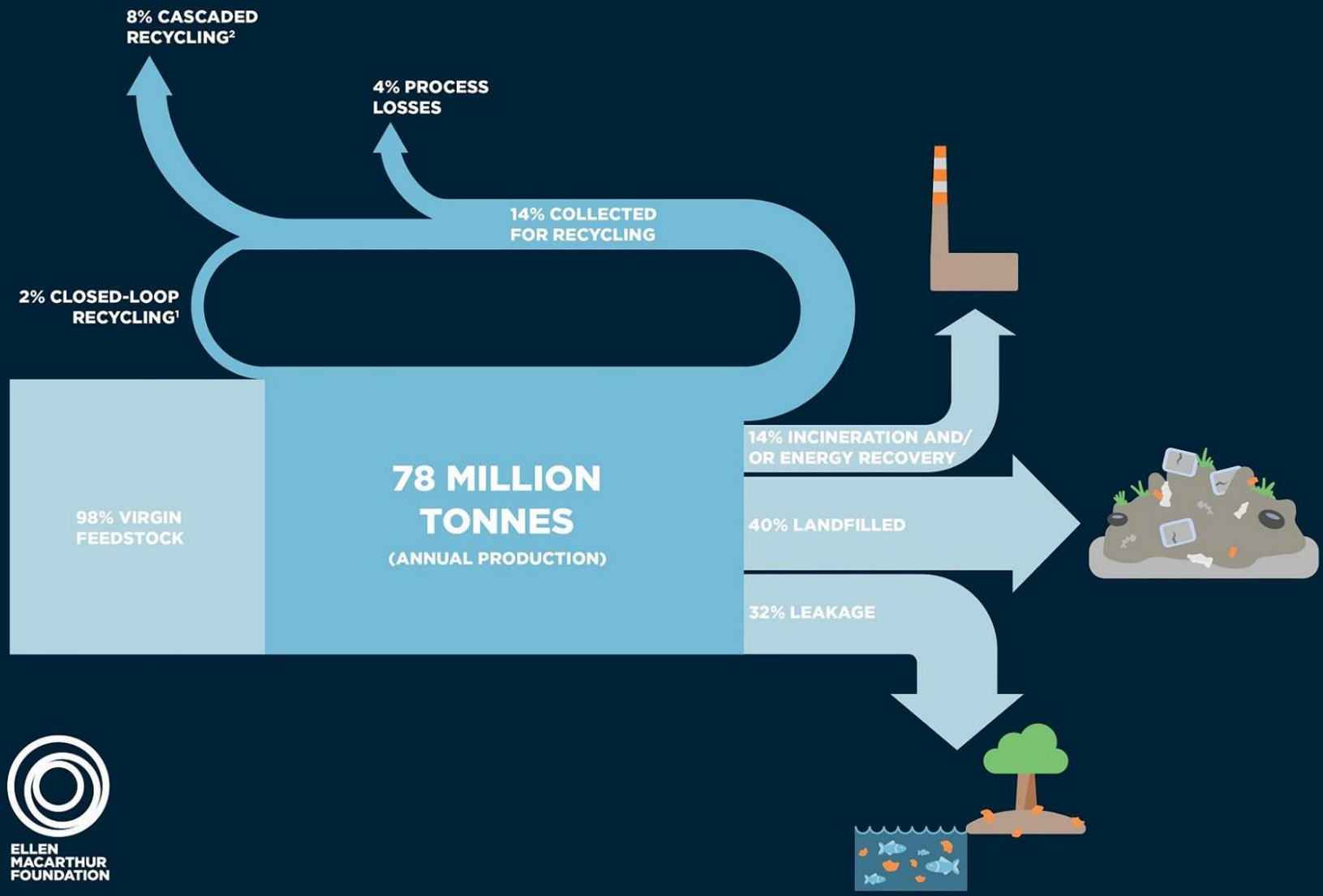


DID YOU KNOW?

- By 2025 **solid waste generation** will **increase by 70%** compared to 2010 levels
- **32%** of all plastic packaging made **ends up in nature** every year
- **20%** of plastic packaging could be **profitably re-used** and **50%** could be **profitably recycled** if designed for after use systems
- Continuing current practices there will be **more plastic than fish** in the ocean by 2050

Sources: Wrap, Ellen McArthur Foundation, World Bank

Only 2% of the planet's annual plastic packaging production is reused for the same/similar products



OUR AMBITION:
40% Collected for Recycling
30% Closed Loop Recycling

ELLEN MACARTHUR FOUNDATION

Significant untapped potential to reuse good materials

PLASTIC PACKAGING

VALUE PROPOSITION*

$ 50–80 BN

Total volume of plastic packaging is 78 mln tonne annually whereof ~14% is currently recycled, meaning ~67 mln tonne lost. With a volume yield of 72% and a weighted average price of 1,100–1,600 USD/t, the total value proposition is in the range of USD 50-80 bn. Please note that this is a conservative estimate based on a narrow definition of total annual plastic packaging volume. Applying a wider definition can increase the value proposition up to USD 170-190 bn.

STEEL

VALUE PROPOSITION*

$ 70–150 BN

Worldwide steel production is currently about 1,600 mln tonne annually. 70-90% recycling means ~1,100-1,450 mln tonne recycled and 160-480 mln tonne lost. Assuming ~90% yield in process with market price of ~500 USD/t equals USD 70-220 bn, so conservative range USD 70-150 bn

PAPER

VALUE PROPOSITION*

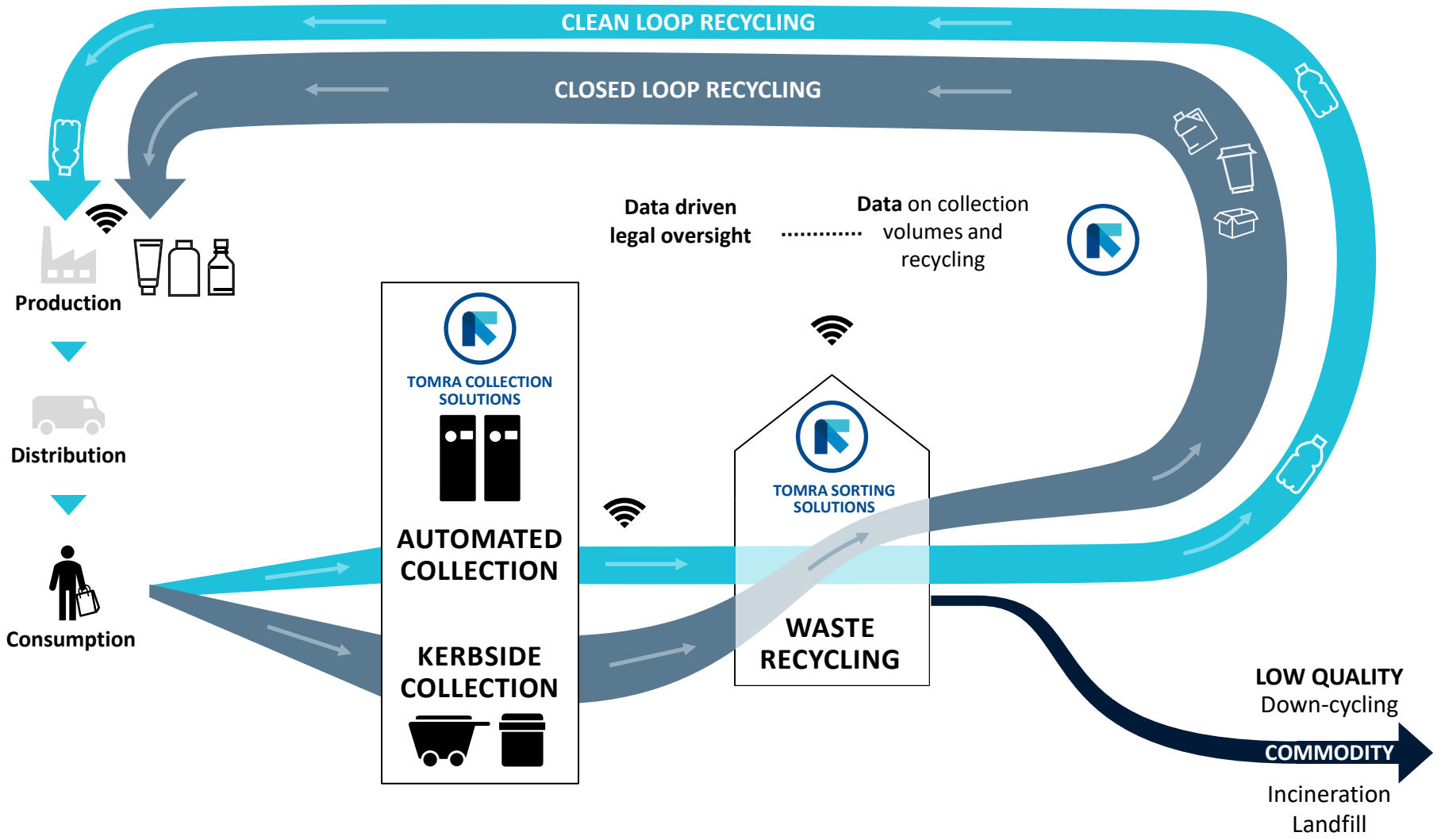
$ 30–40 BN

~80 % of produced paper is potentially recyclable, ~400 mln tonne annually x 80% = 320 mln t/a potentially recyclable paper in the market. Today, ~58 % or 230 mln t/a are recycled, means 90 mln tonnes are lost. If this is recovered and goes into the paper recycling process there will be between 10-30% fibre loss, assuming on average 20%. The value of newsprint paper is ~400-600 USD/t, let´s assume 500 USD/t = ~90 mln t/a x 80% x 500 USD/t = USD36 bn

* TOMRA ESTIMATES

1) THE NEW PLASTICS ECONOMY, Ellen MacArthur foundation, 2017
2) Prices from Statististica.com

Circular economy – redefining value creation



Business case for plastics

Value increase

2.5-7x

€1400 per ton
Clear PP/PE

€1000 per ton
Clear PET

€500 per ton
Mixed PET

€200 per ton
Mixed Plastic

DID YOU KNOW?

- By 2050, a global population of **9.8 billion will require 70%** more food than is consumed today
- We are currently **wasting 33% of global food production**
- **The food industry accounts for around 10% of global GDP**
- **Agriculture** accounts for **20%** of **global greenhouse gas emissions**

Sources: Wrap, WEF, Accenture (Future of Food), McKinsey

New ways of feeding a fast-growing DEMANDING population…

To ensure an efficient food production there is an increased need to…

…AUTOMATE…

- Increase Yield
- Reduce waste
- Meet consumer demands

…MONITOR…

…AND INNOVATE

…throughout the value chain

Protect brand value

Enhance food quality and safety

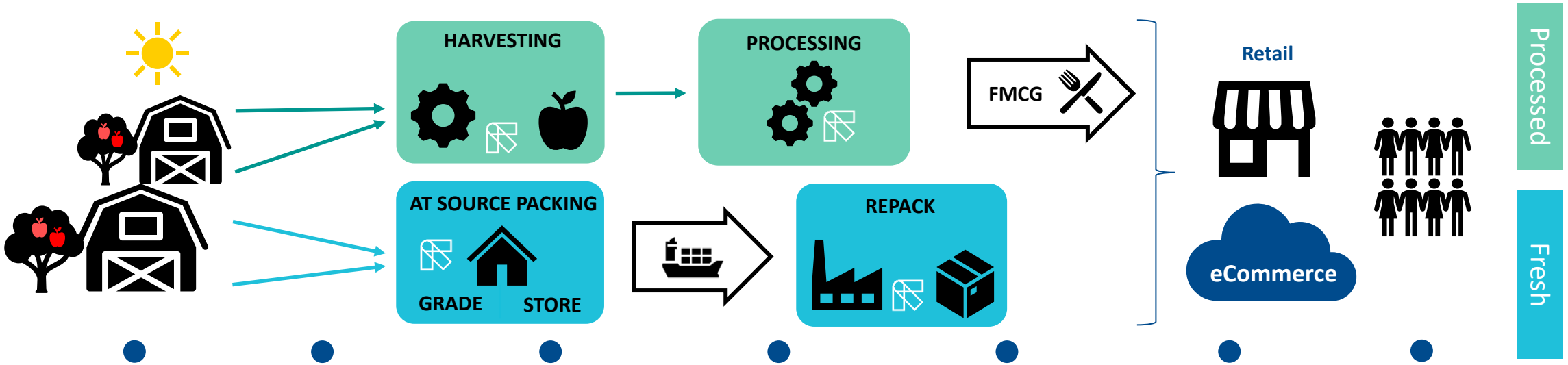
Production

Distribution

Consumption

Sources: Brookings

TOMRA to play a difference in the FUTURE OF FOOD production



DATA GENERATED THROUGH THE VALUE CHAIN SERVE MULTIPLE PURPOSES

Improved Farming	Determine taste, Ripeness & Defects	Reduce food waste	Traceability
Uniform Quality	Increase Yield	Optimise storage	Maximise use

At TOMRA, our company vision is Leading the Resource Revolution

It is our belief that businesses have the power, responsibility, and vested interest to help manage our planet's precious resources—today and tomorrow.

Some of the biggest global challenges are TOMRA's business opportunities

Message from the CEO

«Putting ability into sustainability»

At TOMRA, sustainability is at the core of everything we do. Our collection and sorting technologies have a significant positive impact on the world around us, helping to address major environmental challenges like climate change and plastic waste with innovative solutions for a greener tomorrow.

As a company we are also committed to "walking the talk". That means doing what we can to ensure sustainable business operations and manage relevant social and environmental risks and opportunities along the company value chain.

Our commitment to sustainability is closely linked to our vision of "leading the resource revolution". I believe that in order to be successful we must leverage our sustainability impact to create high value for our customers, to enhance competitiveness, and to attract and retain talent. Furthermore, we must collaborate and use our technology and expertise to influence sustainability impact among partners and beyond our direct market reach.

Stefan Ranstrand
President and CEO Tomra Group

Other SDGs where TOMRA delivers positive impact through our products and services include:

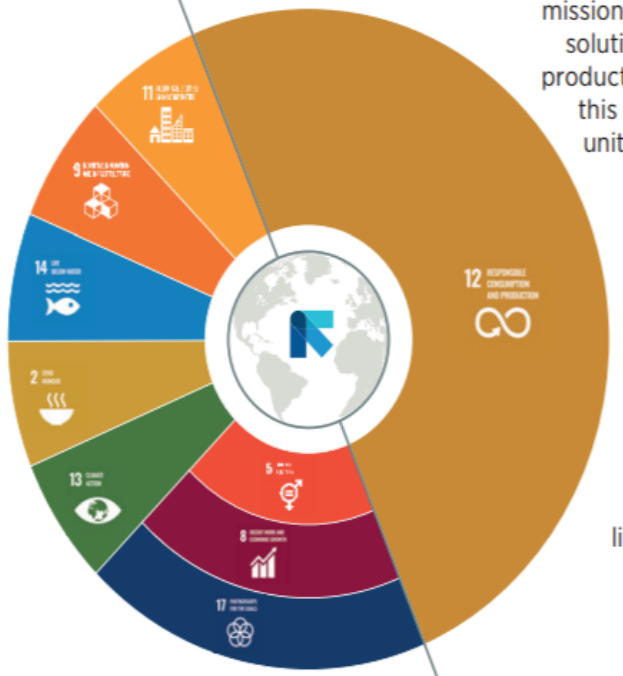
SDG 11:
Sorting solutions for sustainable waste management.

SDG 9:
Technology innovations for resource productivity.

SDG 14:
Closing the tap on land for plastic pollution through collection systems and closed loop recycling.

SDG 2:
Food sorting solutions that increase agricultural yield and reduce food loss along production and supply chains.

SDG 13:
Avoiding carbon emissions from both material production and waste management through collection and sorting solutions for recycling.



SDG 12 – Sustainable consumption and production – aims at "doing more and better with less." TOMRA's vision of "leading the resource revolution" and our mission "to create sensor-based solutions for optimal resource productivity," fit squarely within this agenda. All our business units deliver positive impact on several of the SDG 12 sub-targets, including: Sustainably manage natural resource, reduce food waste and food loss, prevent and reduce waste through recycling and reuse, partnerships and education for sustainable development and lifestyles in harmony with nature.

SDGs 5, **8** and **17** are supporting, cross-cutting goals where we strive to have a positive impact through the way that we work. At TOMRA, we consider delivering on these SDGs as part of our "license to operate."

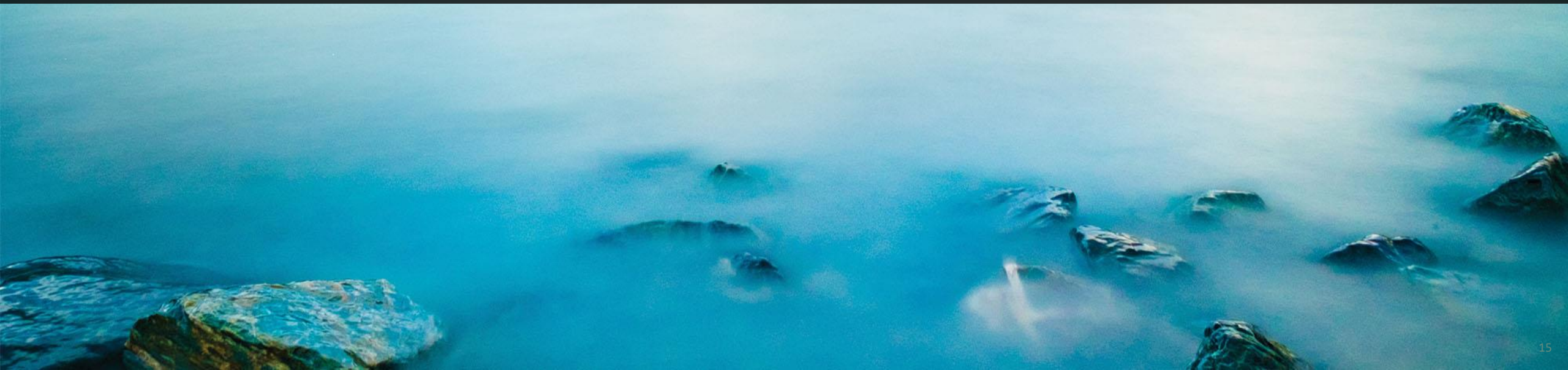
- Our solutions, in use around the globe, helped keep **~17 millions of tons of CO_2** from being released into the atmosphere in 2019

- **More than 40 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 metal-recycling machines

TOMRA AT A GLANCE



4500+
EMPLOYEES GLOBALLY

Publicly listed on Oslo Stock Exchange (OSEBX: TOM)

9.3
BILLION NOK REVENUES IN 2019

TOMRA

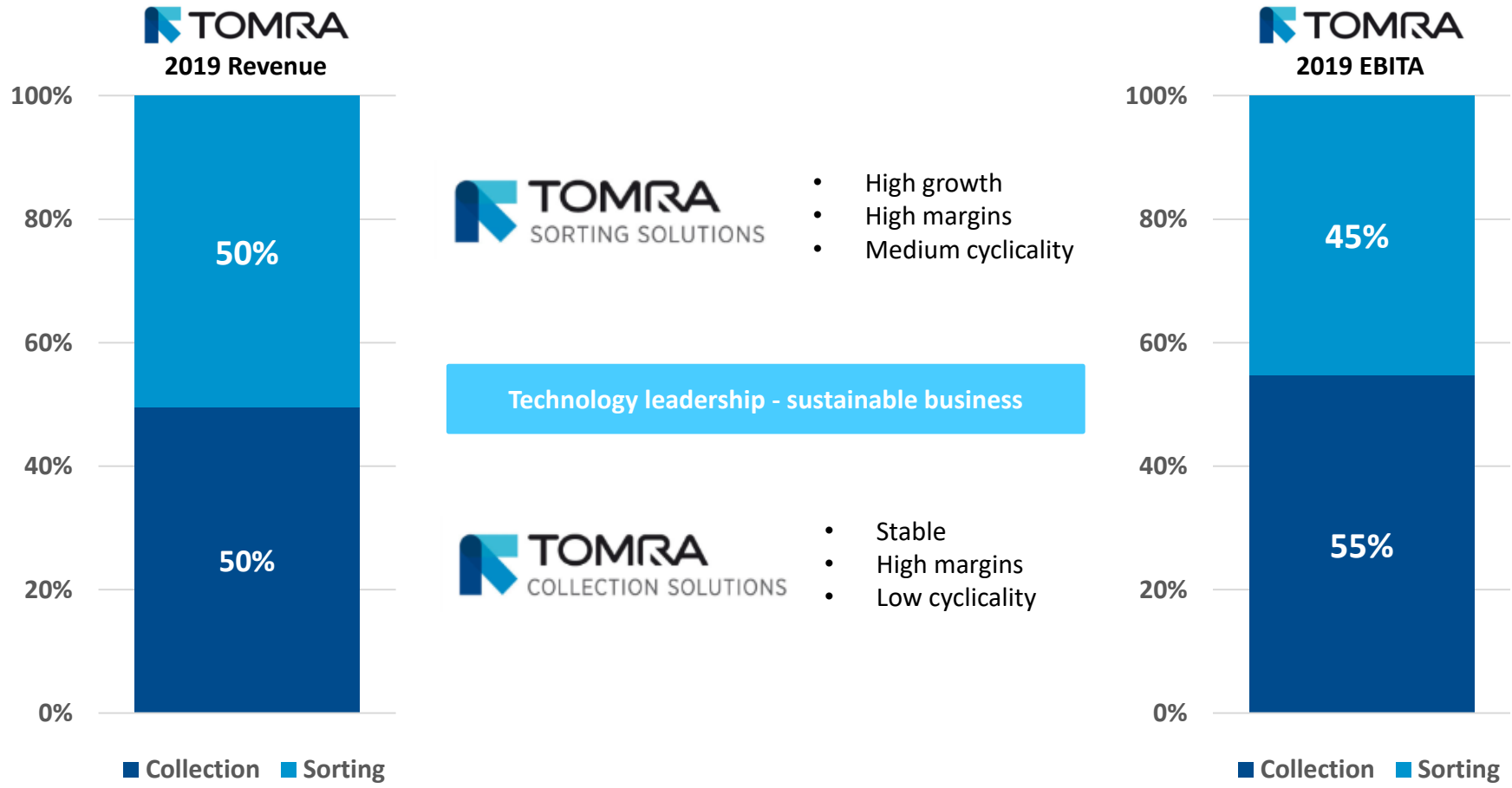
TOMRA SORTING SOLUTIONS

FOOD → **RECYCLING** → **MINING**

TOMRA COLLECTION SOLUTIONS

REVERSE VENDING → **MATERIAL RECOVERY**

Creating value through two strong business areas



The TOMRA transformation journey

2004 TOMRA SORTING SOLUTIONS

TOMRA scquires TITECH, the world's leading provider of optical recognition and sorting technology for the waste industri and TOMRA's transformation journey starts.

2005 TOMRA COLLECTION SOLUTIONS

TOMRA acquires Orwak Group, a leading provider of compaction for a variety of materials.

2006 TOMRA SORTING SOLUTIONS

TOMRA acquires Commodas - a leading supplier within the field of sensor-based products for mining and metal recycling.

2008 TOMRA SORTING SOLUTIONS

TOMRA acquires Ultrasort - specialists in sensor-based mining technology.

2011 TOMRA COLLECTION SOLUTIONS

Sale of Californian material handling business. With the divestment the US operation became less exposed to movements in commodity prices.

2011 TOMRA SORTING SOLUTIONS

TOMRA acquires Odenberg, rounding out the offering to include food optimization.

2012 TOMRA SORTING SOLUTIONS

TOMRA acquires BEST, leading food sorting machine producer. With the acquisition of BEST, TOMRA has by far the widest reach within the food sorting universe.

2014 TOMRA COLLECTION SOLUTIONS

Divestment of Orwak. Further portfolio focus on sensor-based technology.

2016

Through its transformation journey TOMRA has moved from a business of many brands to one brand with many areas of expertise. We are one TOMRA.

2016 TOMRA SORTING SOLUTIONS

TOMRA expands into lane sorting, acquiring New Zealand based Compac, confirming TOMRA's position as the leading provider of sorting technology into the food industry.

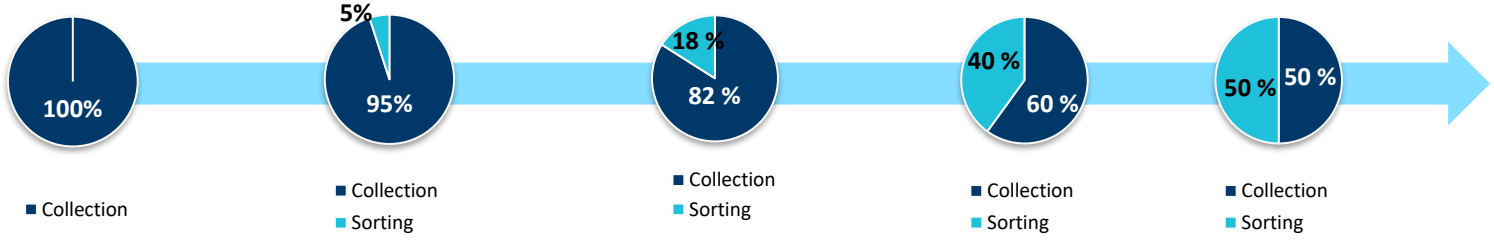
2018 TOMRA SORTING SOLUTIONS

TOMRA compliments its food sorting portfolio with the acquisition of BBC Technologies, a leading provider of precision grading systems for blueberries and other small fruits. BBC TECHNOLOGIES

FROM:

TOMRA

Helping the world recycle



TO:

LEADING THE RESOURCE REVOLUTION

TOMRA's two business areas

TOMRA SORTING SOLUTIONS

	FOOD	RECYCLING	MINING
Share of '19 sales	~32%	~16%	~2%
Employees	1,445	260	80
Customers	Food growers, packers and processors	Material recovery facilities, scrap dealers, metal shredder operators	Mining companies
Market share	**Bulk: ~25%** **Lane: ~25%**	**~55-60%**	**~40-50%**

	TOMRA SORTING GROUP FUNCTIONS & SHARED STAFF
Employees	250

TOMRA COLLECTION SOLUTIONS

	REVERSE VENDING	MATERIAL RECOVERY
Share of '19 sales	~39%	~11%
Employees	1,905	590
Customers	Grocery retailers	Grocery retailers and beverage manufacturers
Market share	**Over 70%**	**~60% in USA (markets served)**

Installed base worldwide

TOMRA COLLECTION SOLUTIONS

REVERSE VENDING	
Nordic	~15,100
Germany	~29,500
Other Europe	~15,000
North America	~16,900
Rest of the world	~7,600
TOTAL	**~84,100**

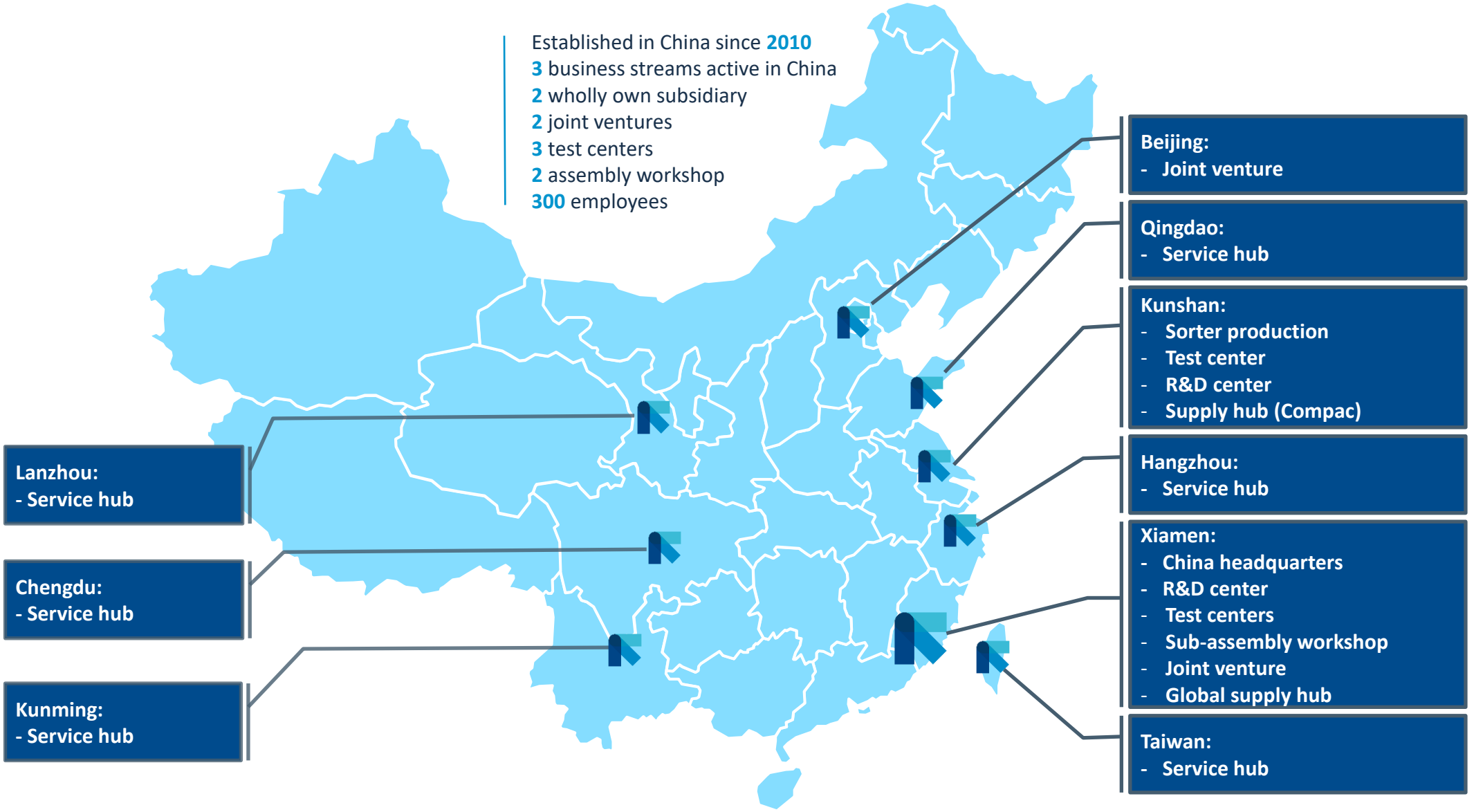
TOMRA SORTING SOLUTIONS

RECYCLING		MINING		FOOD BULK		FOOD LANE	
EMEA	~4,500	Europe	~20	EMEA	~3,400	EMEA	~1,580
Americas	~990	US / Canada	~46	Americas	~3,025	Americas	~1,220
Asia	~940	Australia	~10	APAC	~780	APAC	~950
Other	~30	South Africa	~46				
		Other	~41				
TOTAL	~6,460	**TOTAL**	~163	**TOTAL**	~7,205	**TOTAL**	~3,750

Food Lane includes Compac and BBC

Strengthen presence in China

Established in China since **2010**
3 business streams active in China
2 wholly own subsidiary
2 joint ventures
3 test centers
2 assembly workshop
300 employees



Beijing:
- Joint venture

Qingdao:
- Service hub

Kunshan:
- Sorter production
- Test center
- R&D center
- Supply hub (Compac)

Hangzhou:
- Service hub

Xiamen:
- China headquarters
- R&D center
- Test centers
- Sub-assembly workshop
- Joint venture
- Global supply hub

Taiwan:
- Service hub

Lanzhou:
- Service hub

Chengdu:
- Service hub

Kunming:
- Service hub

TOMRA COLLECTION SOLUTIONS

DID YOU KNOW?

- 1 million plastic bottles are bought around the world every minute
- Less than half of all purchased plastic bottles are collected for recycling
- More than 40bn beverage containers are captured by TOMRA every year…
- …representing only less than 3% of all beverage containers sold in 2018

Source: Euromonitor, GlobalData

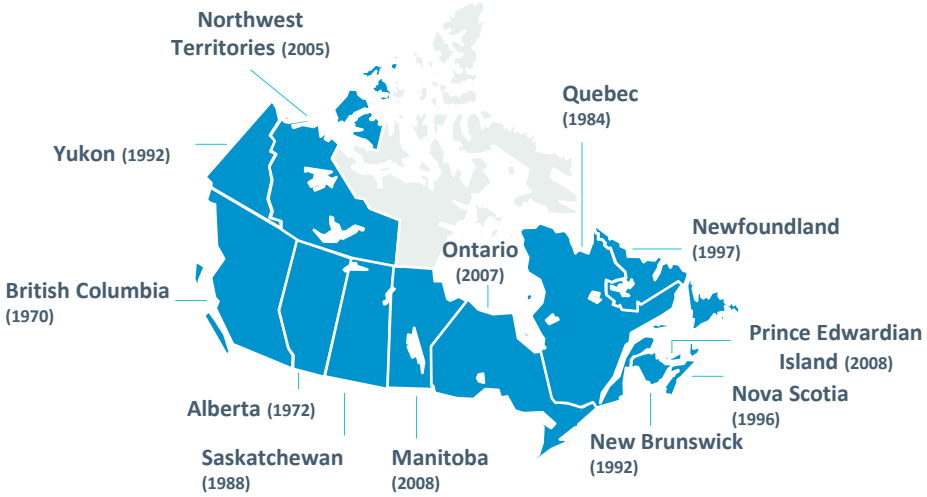
But the tides are shifting. There's a desire for change…

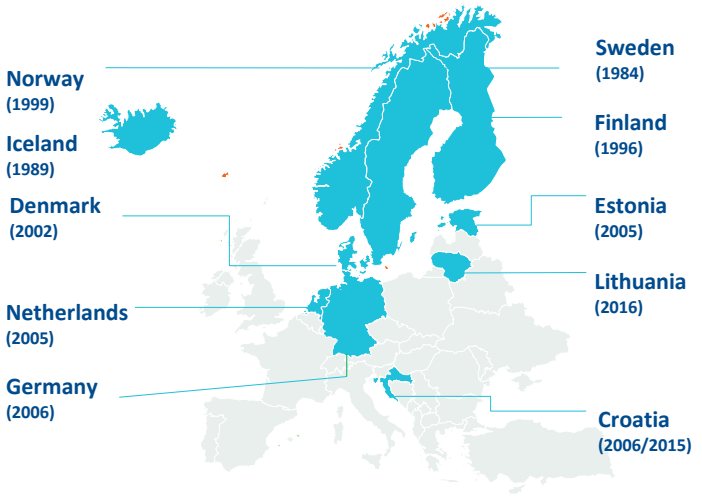
Consumer demand for responsible plastic use options

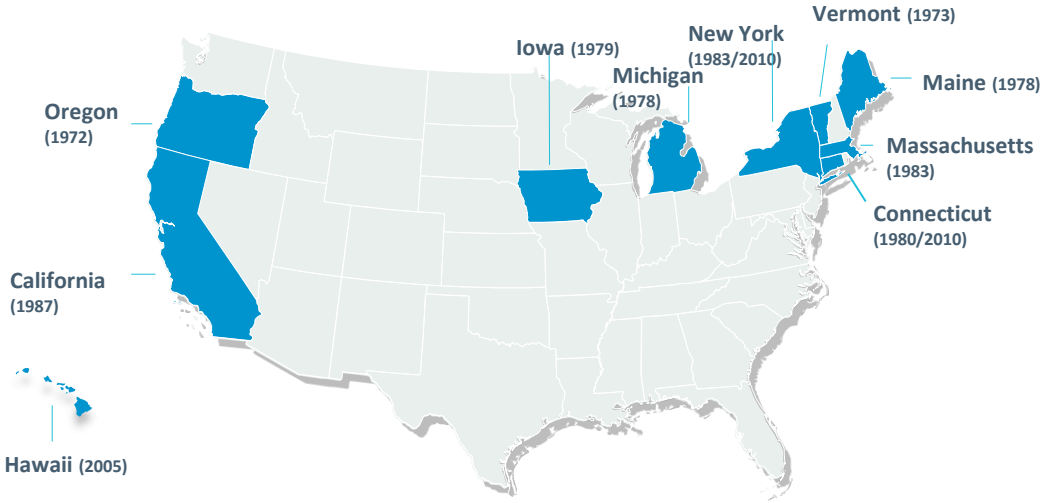
Legislative push for new plastic waste strategies

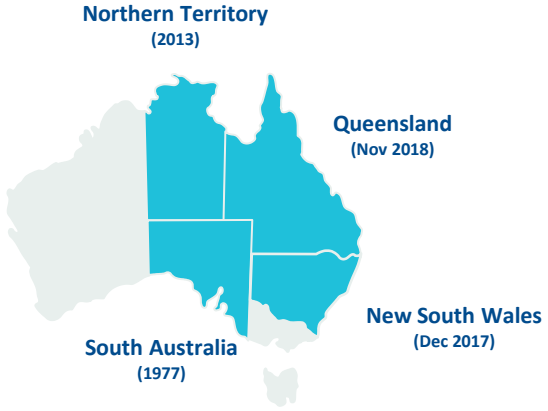
Market pull from large brand owners and beverage companies

An overview of current deposit markets*









* In addition, some markets have refillable deposit systems such as: Austria, Belgium, Chile, Czech Republic, France, Hungary, Poland and South Korea

Upcoming deposit markets on the move

North America:
Possible expansion of existing deposit systems

Scotland:
Commitment to a Container Deposit Scheme announced in party program

England:
Announced plans for a deposit scheme to reduce plastic pollution. Ongoing consultation

EU Single-Use Plastic Directive:
Targets on recycled content and collection target for plastic bottles. Deposit scheme mentioned as a mean to reach those targets.

Australia:
NSW introduced deposit from December 2017
QLD introduced deposit from November 2018

Western Australia plans to introduce in 2020

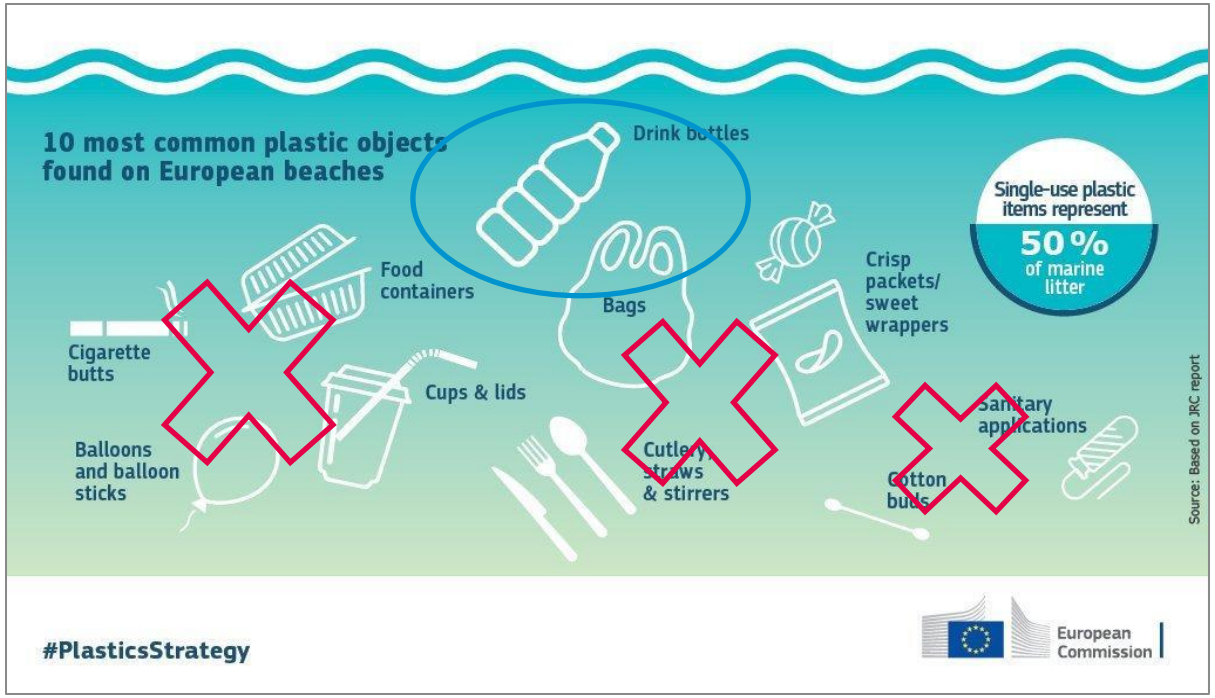
Recently approved
In progress

EU enforcing its leadership role on environment

Targeting the most littered plastic items

Some products to be banned, others less used

Separate measures for plastic drinks bottles



Collection target for plastic bottles**:**
- 77% by 2025
- 90% by 2029

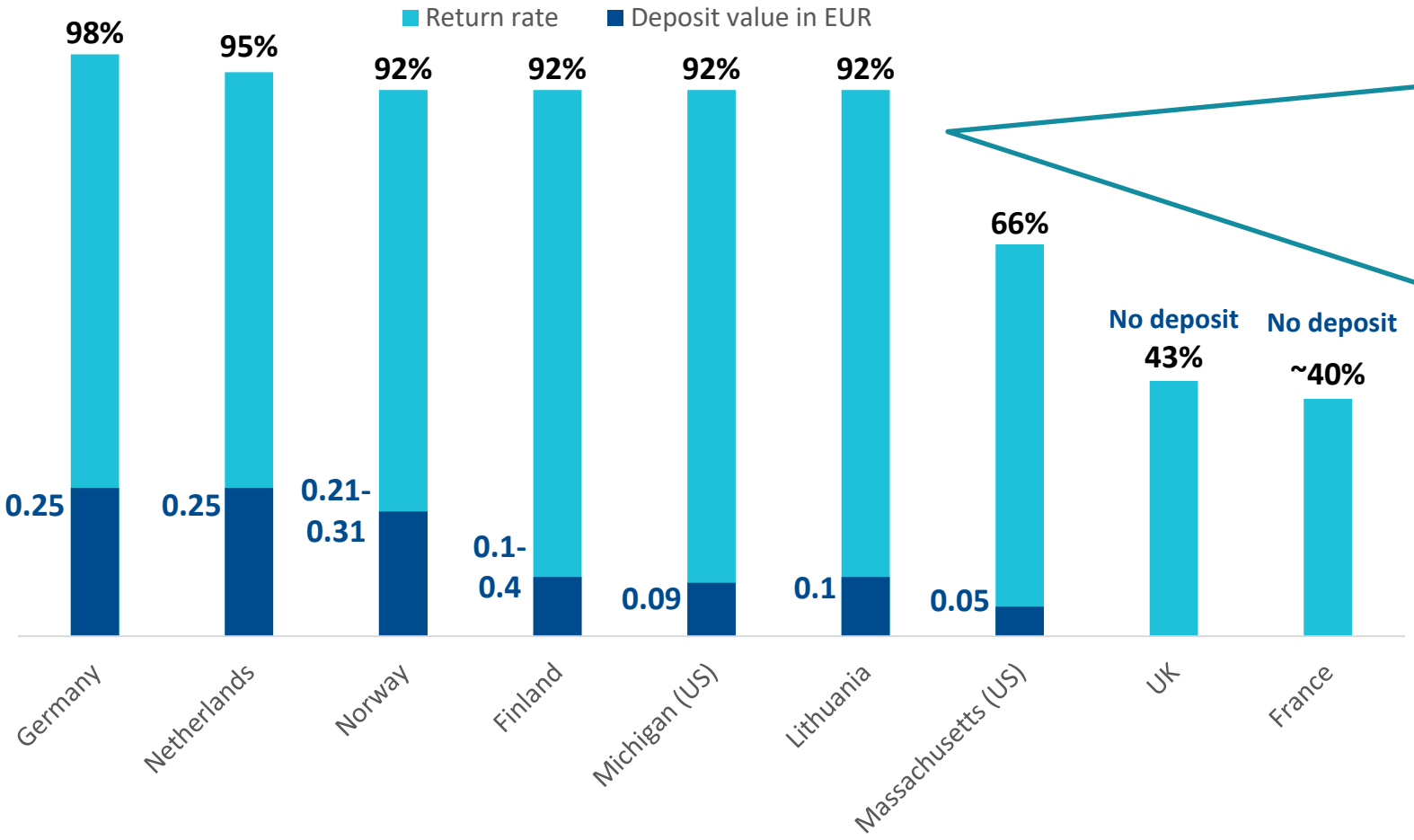
Recycled content in product design:
- 25% by 2025 in PET bottles
- 30% by 2030 in all plastic bottles

Extended producer responsibility

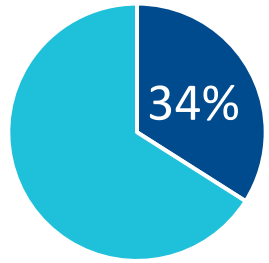
Collaboration across plastics value chain

A proven solution to achieve high return rates

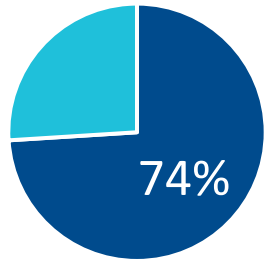
- Return rate and deposit value* for various container deposit schemes



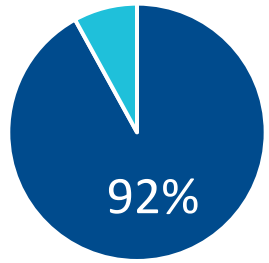
Return rates in Lithuania



Prior to container deposit scheme



End of year 1



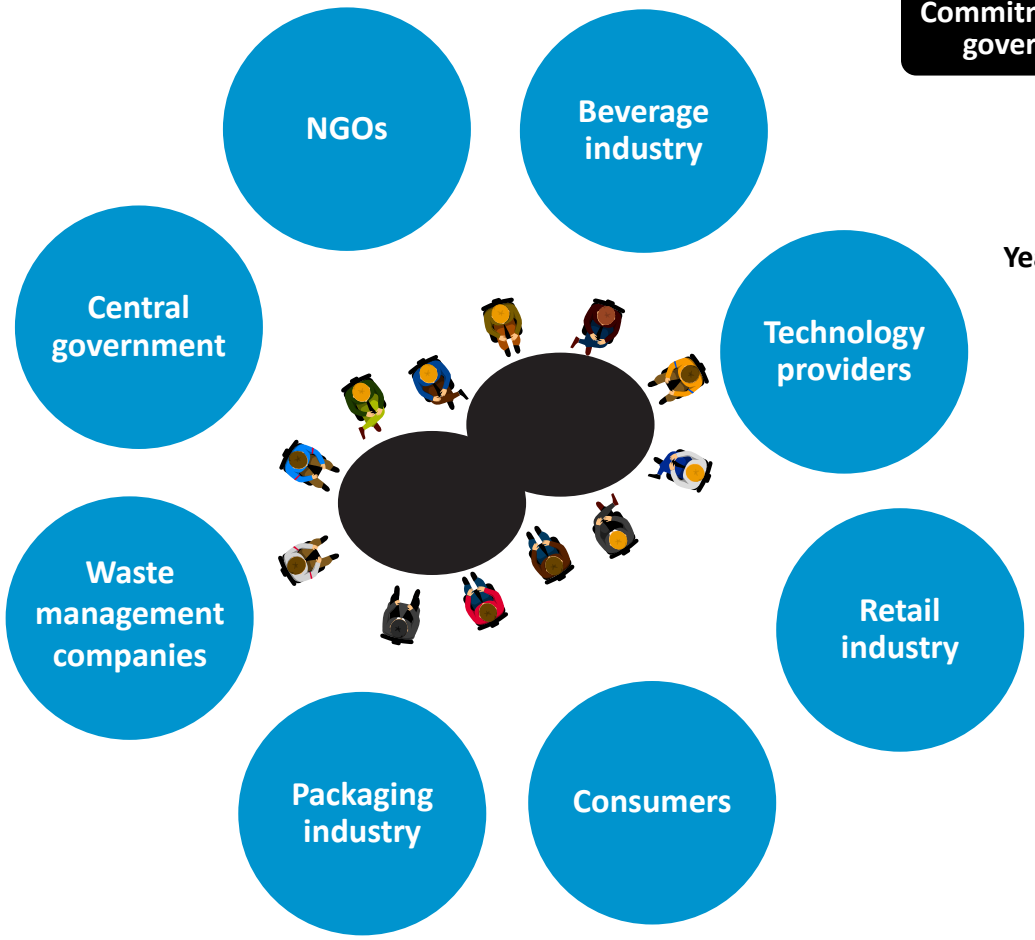
End of year 2

*Deposit values converted to EUR for comparison purpose

Source: Reloop, The Guardian, LeParisien, USAD

Designing a deposit scheme – lengthy process from idea to law

Many stakeholders around the table

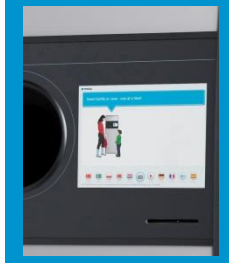


Illustrative legislation process

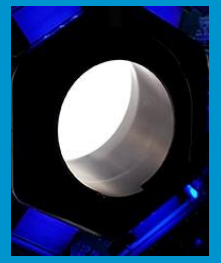
Many questions to address:

- Types of material and product included
- Measurement of success and effectiveness
- Deposit value
- Participants and their role
- Financing of the scheme
- Deployment of infrastructure and logistics
- Fraud prevention
- System regulation and monitoring

Elements of a modern reverse vending system



User communication




Recognition system



Sorting & processing



Data administration

Key market and consumer trends drive structural changes…

CONSUMER TRENDS

amazon

Kolonial.no

Alibaba.com

Bag drop solutions, reverse logistics from e-commerce

RETAILER TRENDS

Bigger chains but smaller stores, self-service

MATERIAL TRENDS

Biodegradable bottles

STAKEHOLDER TRENDS

Nestlé

pepsi

EFBW
EUROPEAN FEDERATION OF BOTTLED WATERS

Coca-Cola

Beverage producers more proactive to set the scene

Source: Company websites, LZ Retailytics, EcoXpac

…reflected in shifting business models and stakeholders

Financing

Retail

Location

Other

Sales & Service model

Retailer purchases and takes the ownership of the RVM and TOMRA provides services

- Upfront revenue
- Profitable service concept
- Proven track record
- Low risk

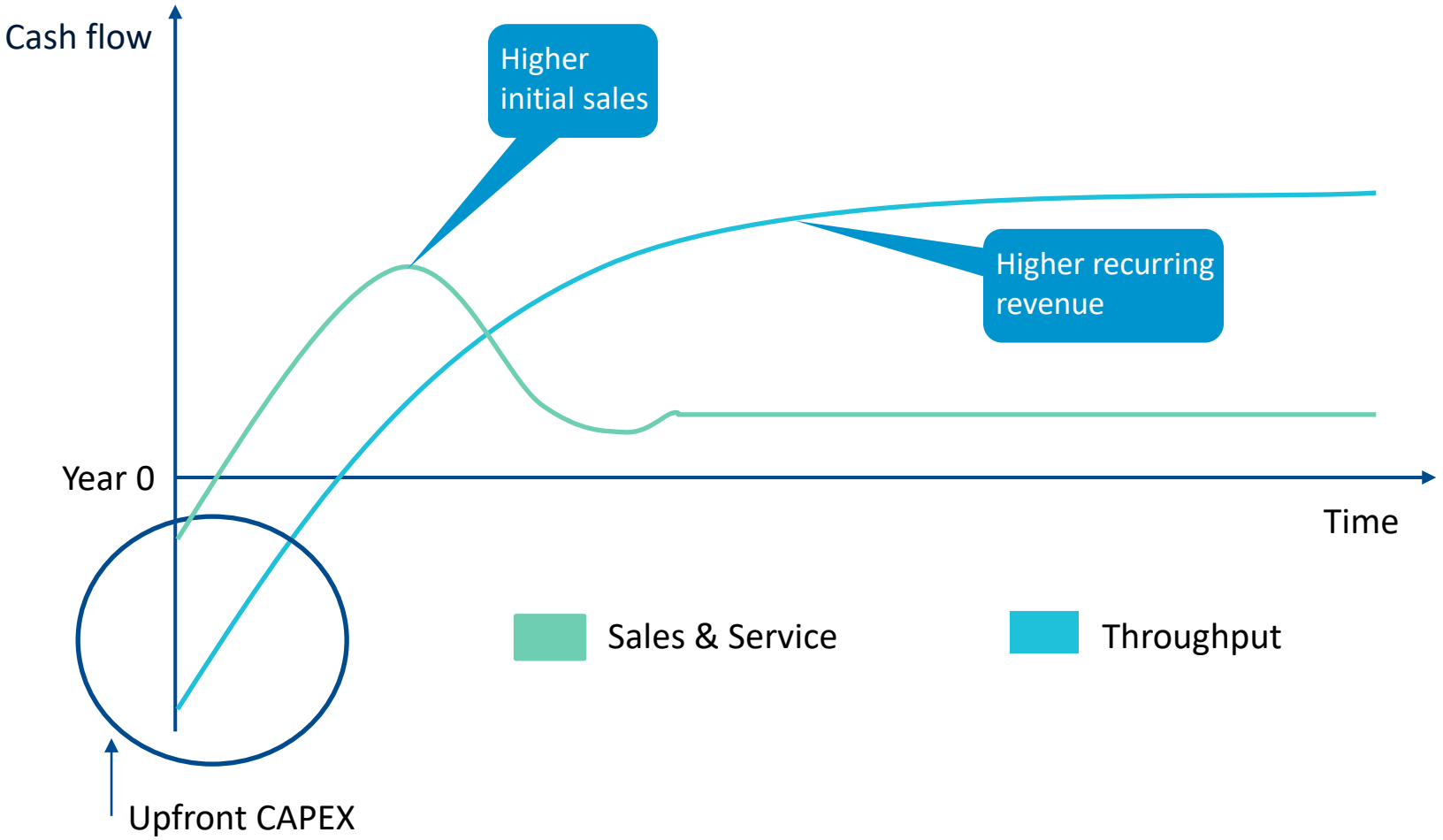
Throughput model

TOMRA owns and operates the RVM and receives a fee per container handled by the RVM

- High recurring Revenue
- Swift roll-out
- Aligned interests
- Utilize financial strength

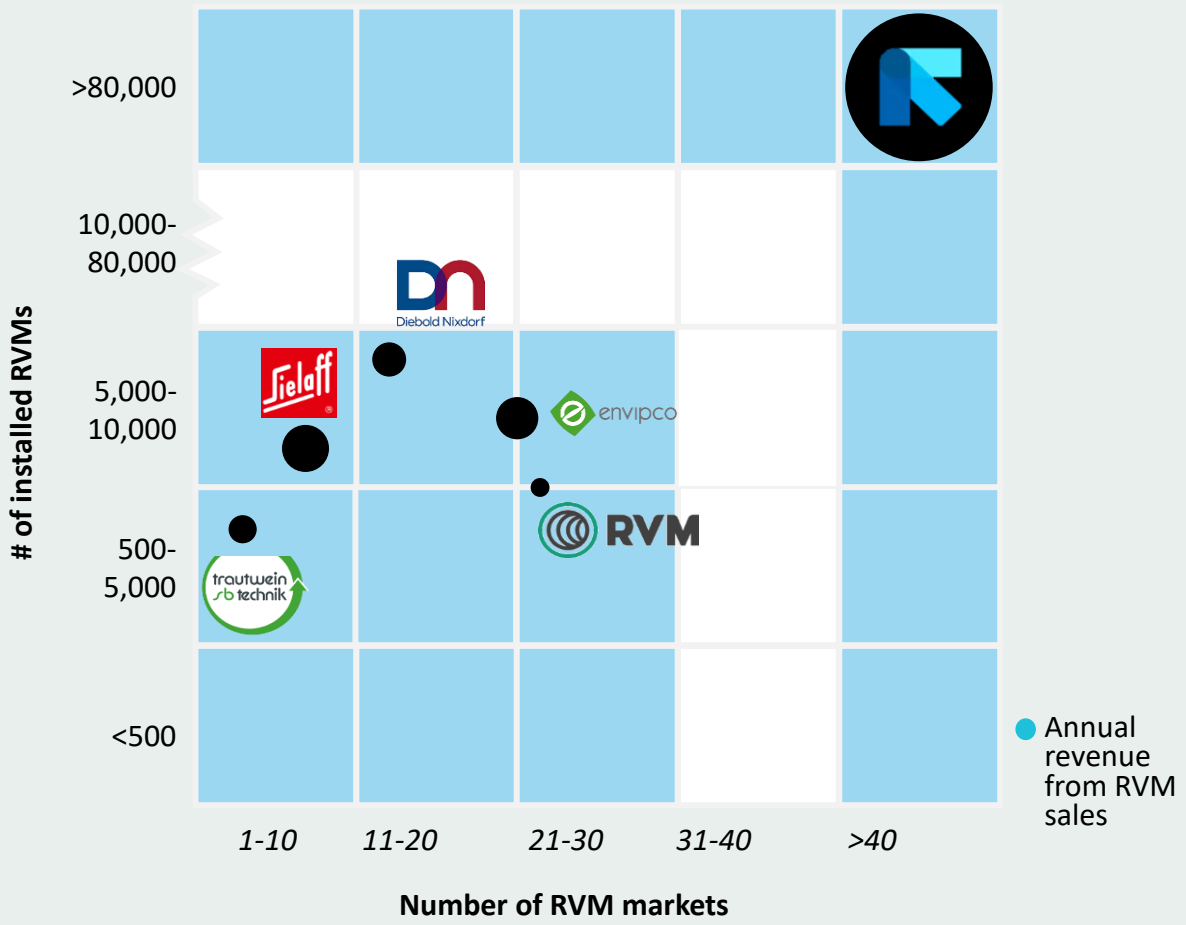
Main differences between the two business models

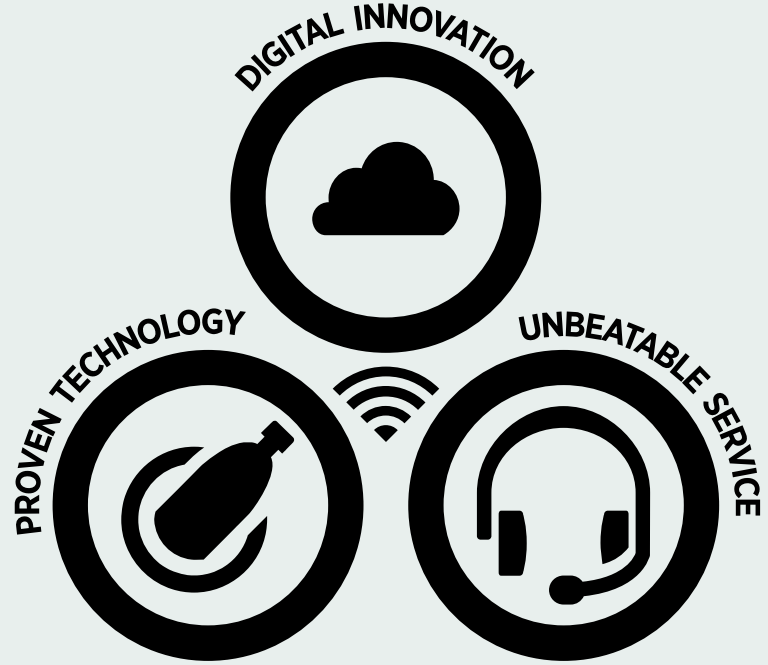
Illustrative cash flow profiles per machine



- Typically fewer machines per capita in throughput markets
- Higher CAPEX needs in a throughput model but normally also higher NPV
- **Uncertainties around timing and design of each new container deposit scheme can have significant impact on the cash flow profile**

Undisputed market leader within reverse vending technology





The smarter TOMRA system.

Source: TOMRA estimates and analysis

Moving from a reverse vending machine provider to a global frontrunner within clean loop recycling

Today

Reverse Vending Machine and service supplier

Technology innovator and leader

Niche leader

Knowledge growth

Market / Industry knowledge growth

Profitable clean loop recycling

Future

Business partner supporting customers' core processes

Market driven thought leader

Circular economy shaper

Strong competitive advantages and growth focus

KEY STRENGHTS

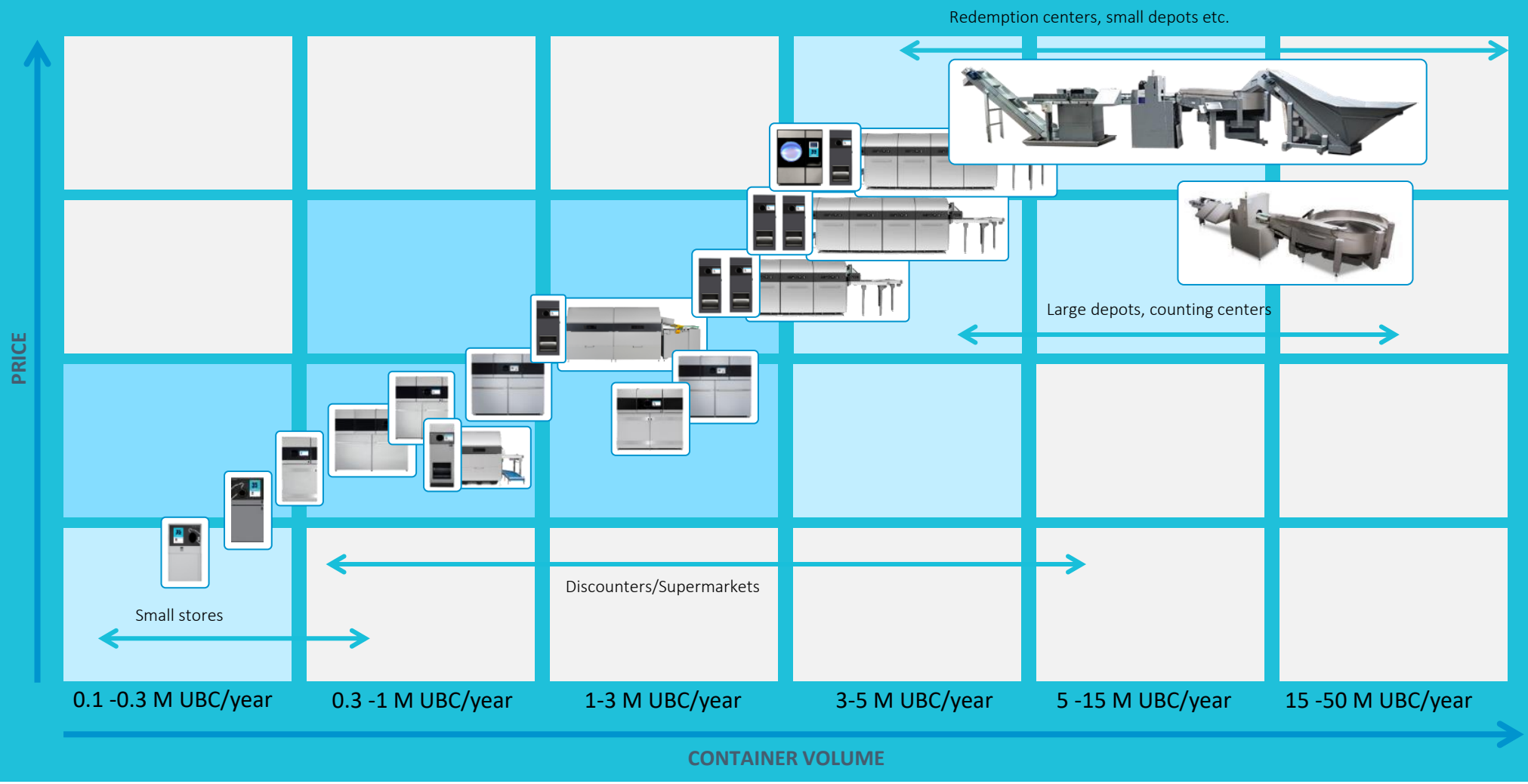
- Product and service leadership
- People to support the growth
- Production capacity and supply chain
- Strong brand awareness
- Efficient new market entry
- Financial strength to support throughput business models

PLAYING FIELD

BASE MARKETS

GEOGRAPHICAL EXPANSION

Flexibility and scalability to enable new business models and new market entry



Strengthen our customers' competitive edge with our superior digital platform

Engage consumers to drive volume in throughput markets

Deliver a convenient and engaging recycling experience for consumers that increase the participation and drive volume through our installations.

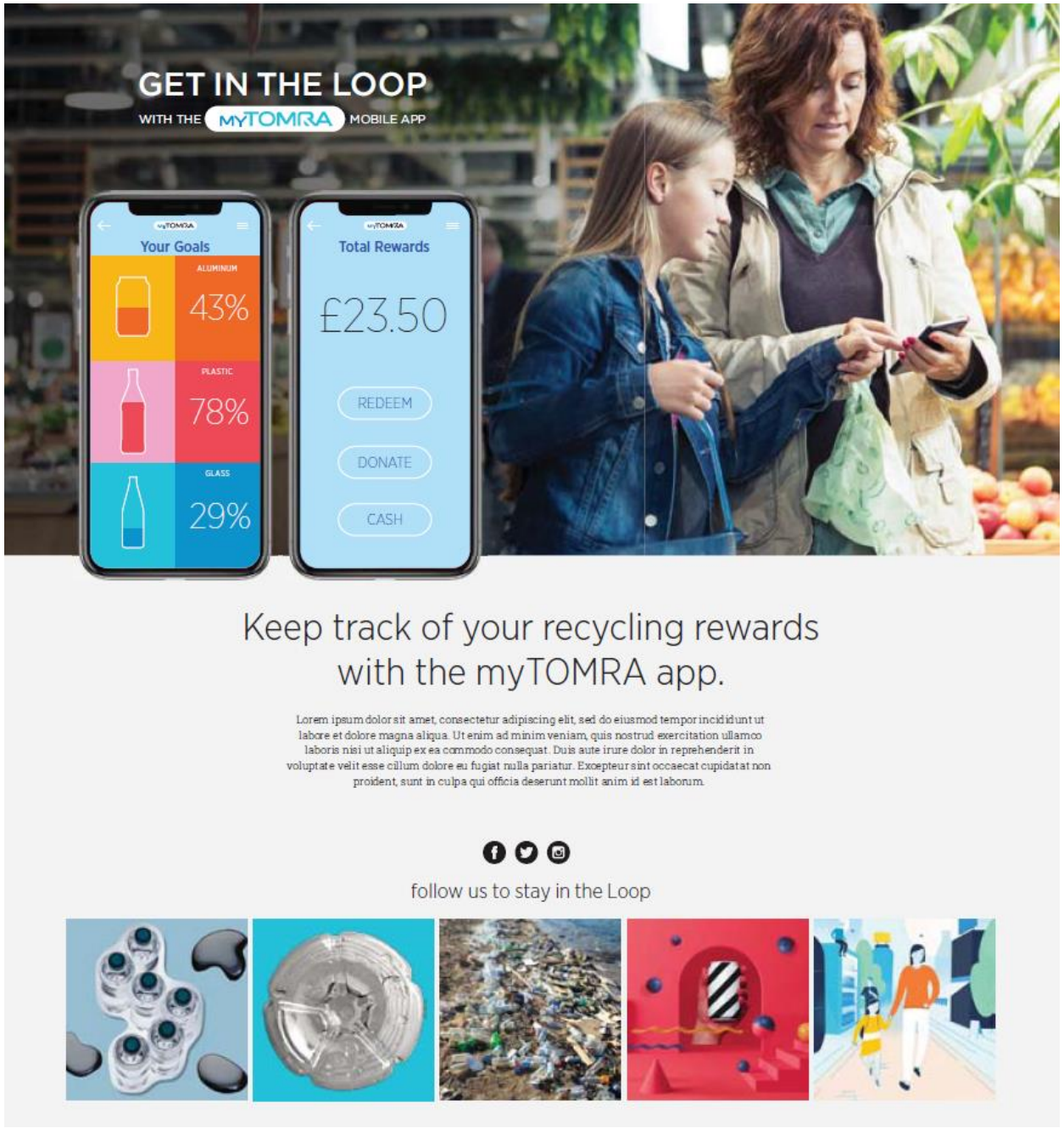
Partner with relevant players

Facilitate and educate

Modernize and enhance the consumer journey

Share stories and inspire change

Drive community engangement



A dynamic organization catered for growth

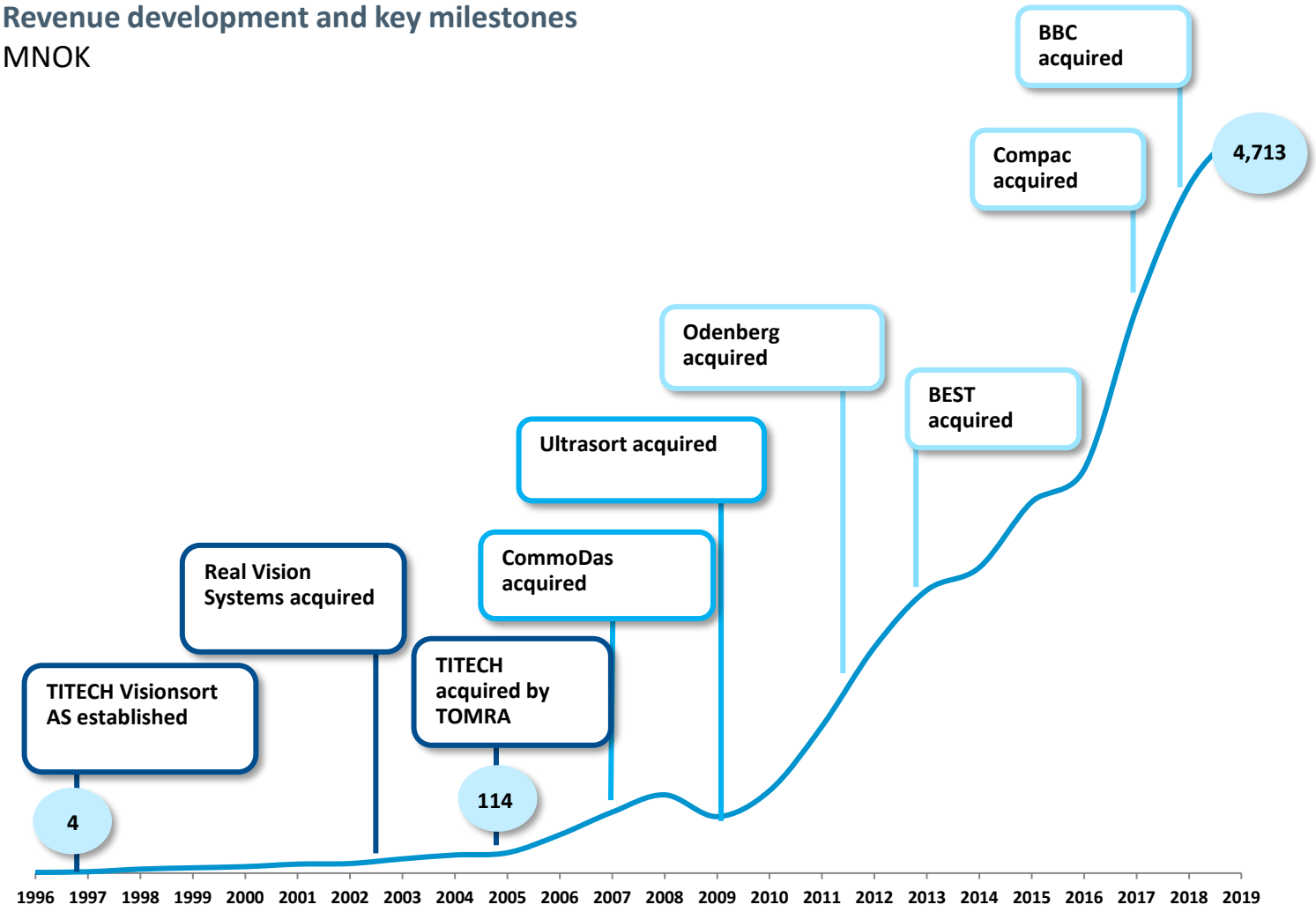
Products and services	FROM	Machine centric	TO	BIG DATA IOT	Holistic solution partner
People	FROM	Basic activities	TO		People development
Production and supply chain	FROM	Supplemented by third parties	TO		Scalable with third parties
TOMRA Brand	FROM	B2B RVM Supplier	TO	CLEAN LOOP RECYCLING	B2H Thought leader Business Partner
Process and New market entry	FROM	HQ Regions	TO	HQ Global processes Regions	New Markets
Financials	FROM	S&S Sales & Services	TO	S&S + TP	Recurring revenues

RVM – Reverse Vending Machine B2H – Business to Human B2B – Business to Business

TOMRA SORTING SOLUTIONS

Strong revenue growth since inception in 1996

Revenue development and key milestones
MNOK

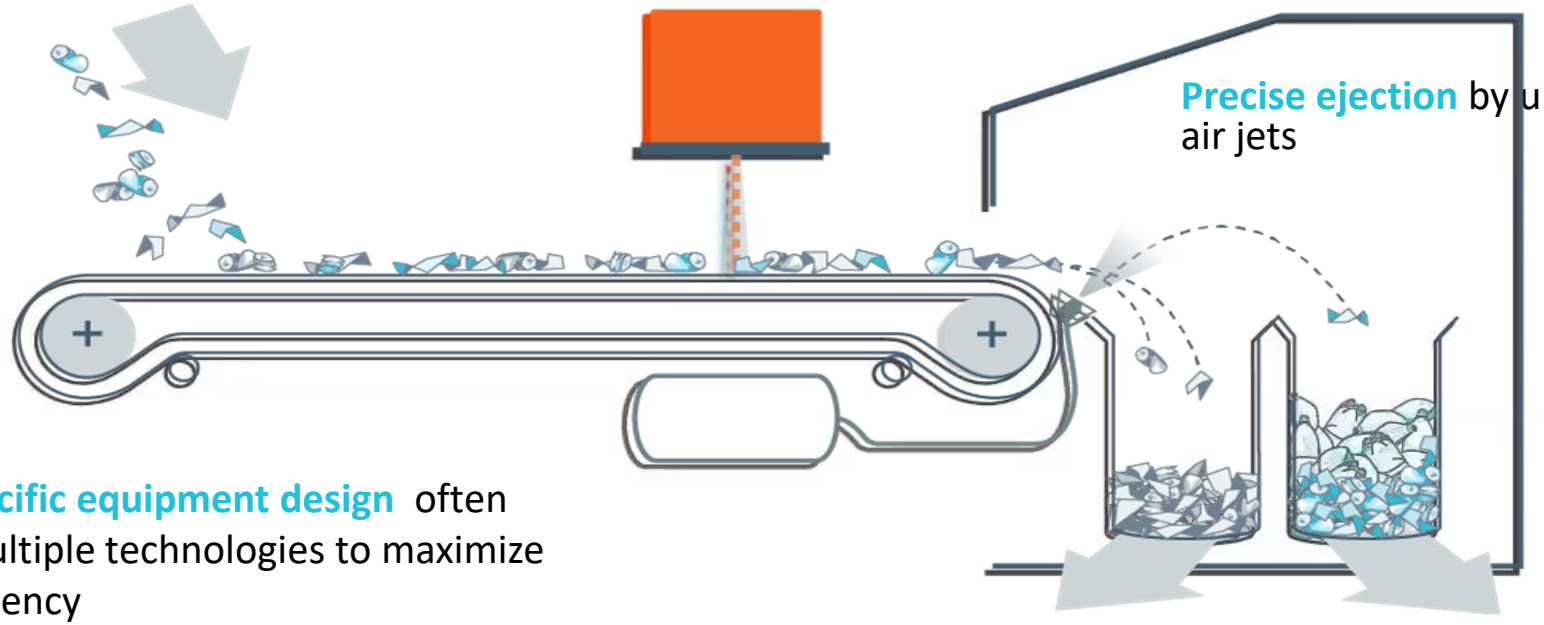


- Total revenue growth (organic plus inorganic) CAGR of ~28% per year from 2004-2019
  - Average annual organic growth for the same period was ~16%
- Technology base and segment/application knowledge expanded both through acquisitions and in-house ventures

How does sensor-based separation work?

Feeding of
unsorted material

High-tech sensors to **identify objects**

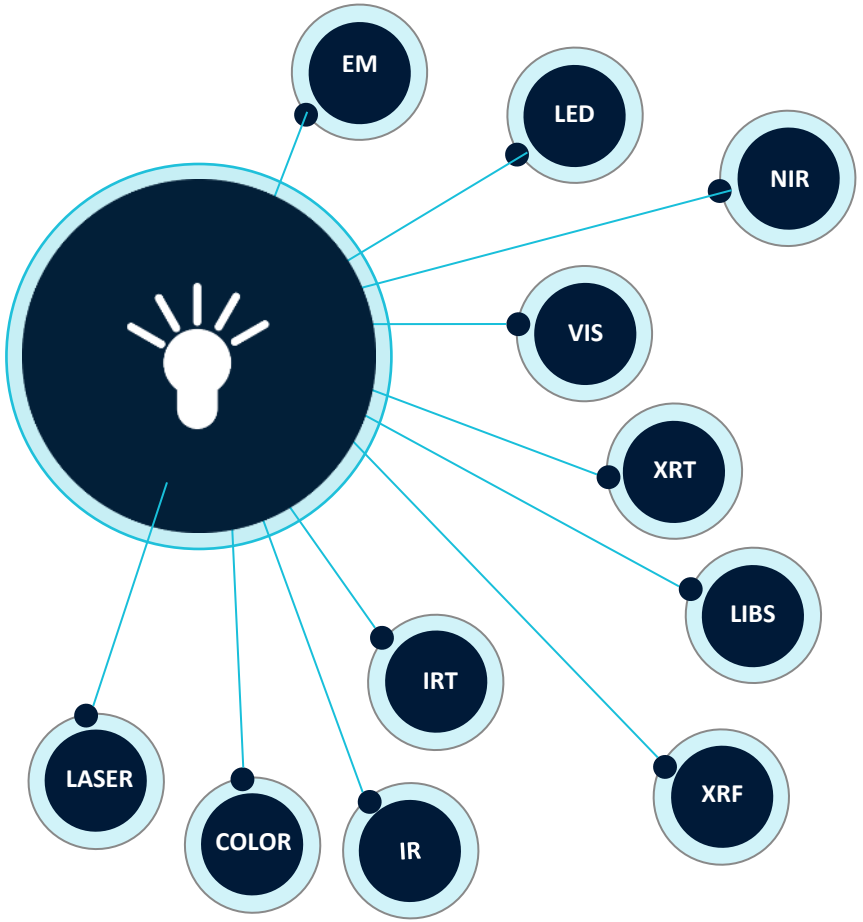


Precise ejection by ultra fast
air jets

Product specific equipment design often including multiple technologies to maximize sorting efficiency

High-speed processing of information (material, shape, size, color, defect, damage and location of objects)

A common sensor-based technology portfolio



	RECYCLING	MINING	FOOD
ELECTROMAGNETIC SENSOR (EM) Electro-magnetic properties like conductivity and permeability	X	X	X
LED SPECTOMETRY (LED) Color and spectral properties based on multiple LED light sources in very high optical resolution	X	X	X
NEAR-INFRARED SPECTROSCOPY (NIR) Specific and unique spectral properties of reflected light in the near-infrared spectrum	X	X	X
VISIBLE LIGHT SPECTROMETRY (VIS) Specific and unique spectral propertiesof reflected light in the visible spectrum	X	X	X
X-RAY TRANSMISSION (XRT) Atomic density irrespective of surface properties and thickness	X	X	X
LASER INDUCED BREAKDOWN SPECTROSCOPY (LIBS) Elemental composition	X		
X-RAY FLUORESCENCE (XRF) Elemental composition	X	X	
INFRARED TRANSMISSION (IRT) Density and shape properties by light absorption			X
IR CAMERA (IR) Heat conductivity and heat dissipation			X
COLOR CAMERA (COLOR) Color properties measured in very high optical resolution	X	X	X
LASER REFLECTION/FLUORESCENCE (LASER) Structural, elemental and biological properties by reflection, absorption and fluorescence of laser light	X	X	X

Our products are detecting a wide range of parameters

Color
Removal of discolorations in mono- and 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

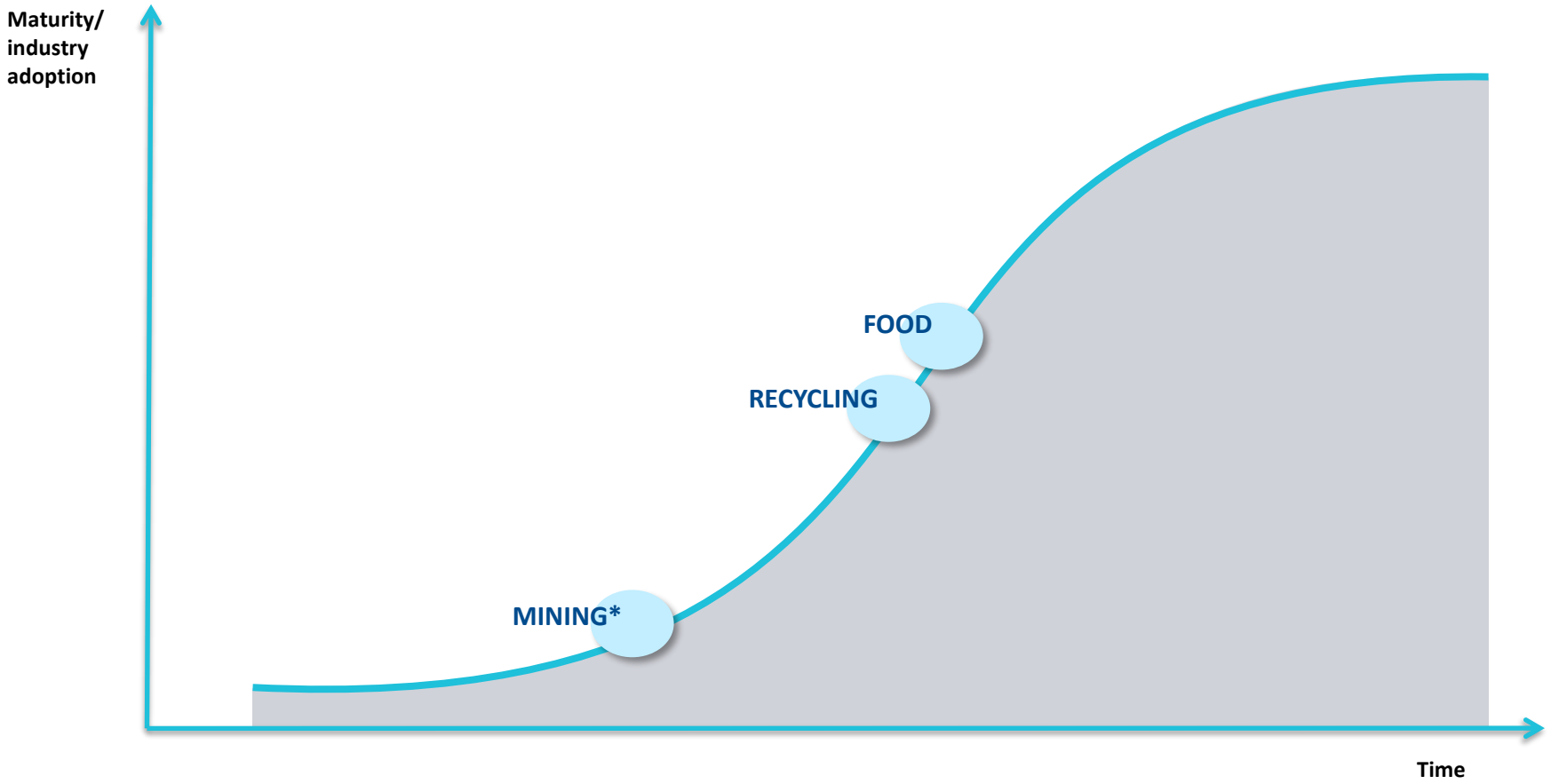
Fluo
Based on the chlorophyll level present in produce defects are removed

X-RAY
Analysis of objects based on their density and shape

Detox
Removal of produce contaminated with aflatoxin

Visible **Invisible** **Both**

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

Examples of cross utilization of our sensor 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

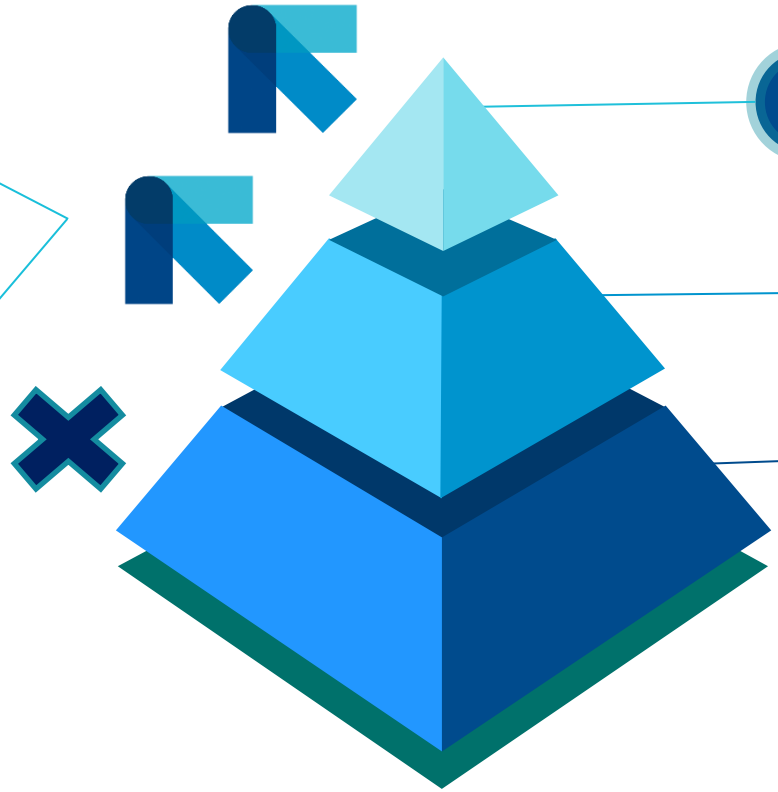
Several more projects on combining technologies into new products in the pipeline

Entering new markets through Mid-market strategy

Creating competitive offering to fast growing mid-market

Food channel sorter

Recycling Flake Sorter



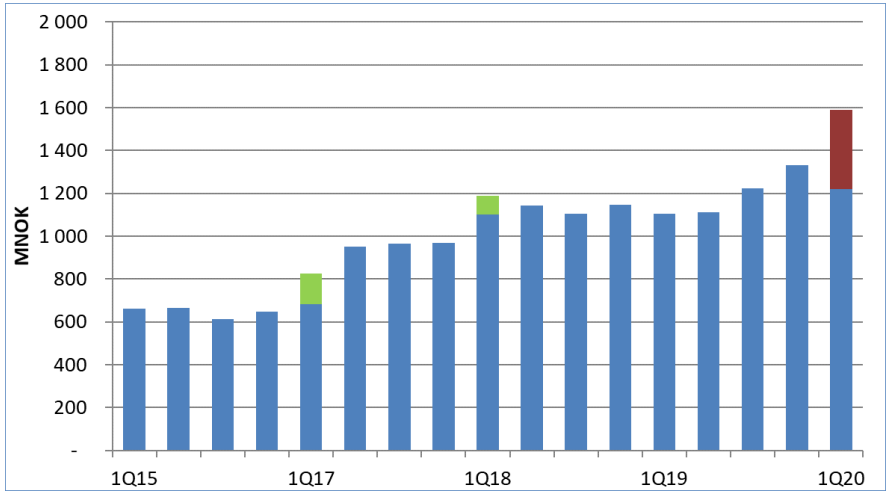
1 **High End Market**
TOMRA firm positioning

2 **Mid Market**
Enter with new products

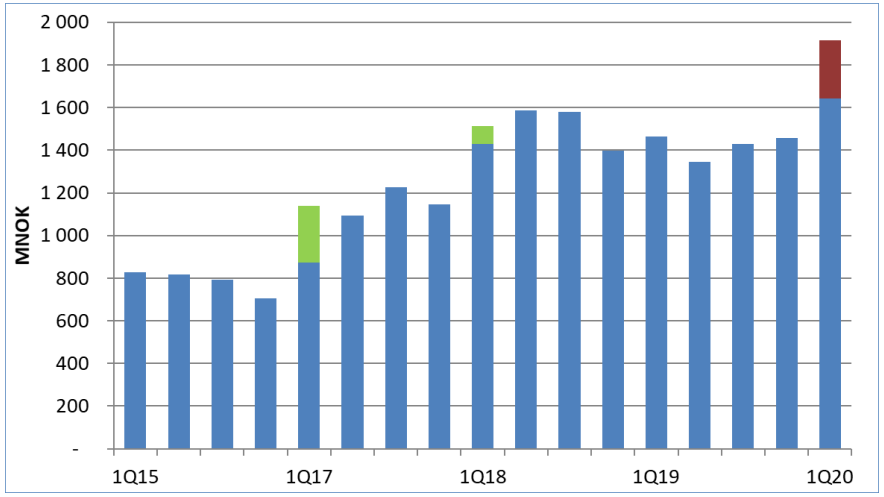
3 **Low End Market**
Not to play

Development in order intake and order backlog

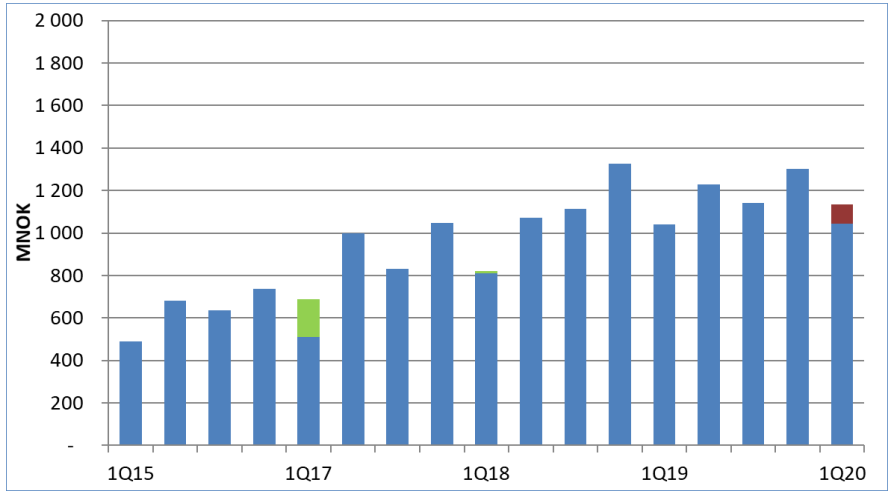
Order intake



Order backlog



Revenues



- **TOMRA Sorting Solutions:**
  - Revenues of 1,134 MNOK, up from 1,039 MNOK last year
  - Order intake of 1,591 MNOK in the quarter, compared to 1,104 MNOK same quarter last year, up 11% currency adjusted
  - All time high order backlog of 1,915 MNOK at the end of 1Q20, up from 1,458 MNOK at the end of 4Q19 – up 13% currency adjusted
- **Estimated backlog conversion ratio in 2Q20: 60-65%**

TOMRA

* Based upon current production and delivery plans, the revenues in 2Q20 are estimated to be approximately 60-65% of order backlog at the end of 1Q20

FOOD FOR THOUGHT

- By 2050 we will be close to **10bn** people
- We will need more food in the next 40 years than **all the harvests in history combined**
- But **farmland is constant –** at best
- The food you eat will have **travelled more than you have**

TOMRA SORTING SOLUTIONS | FOOD

Sources: WEF

Automation continues on a strong growth trajectory

From…

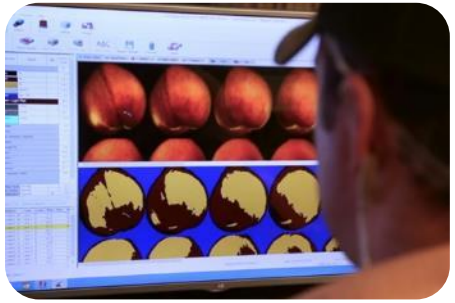
To…

Robotics become cheaper, more advanced and user-friendly

Higher labor cost and labor shortages

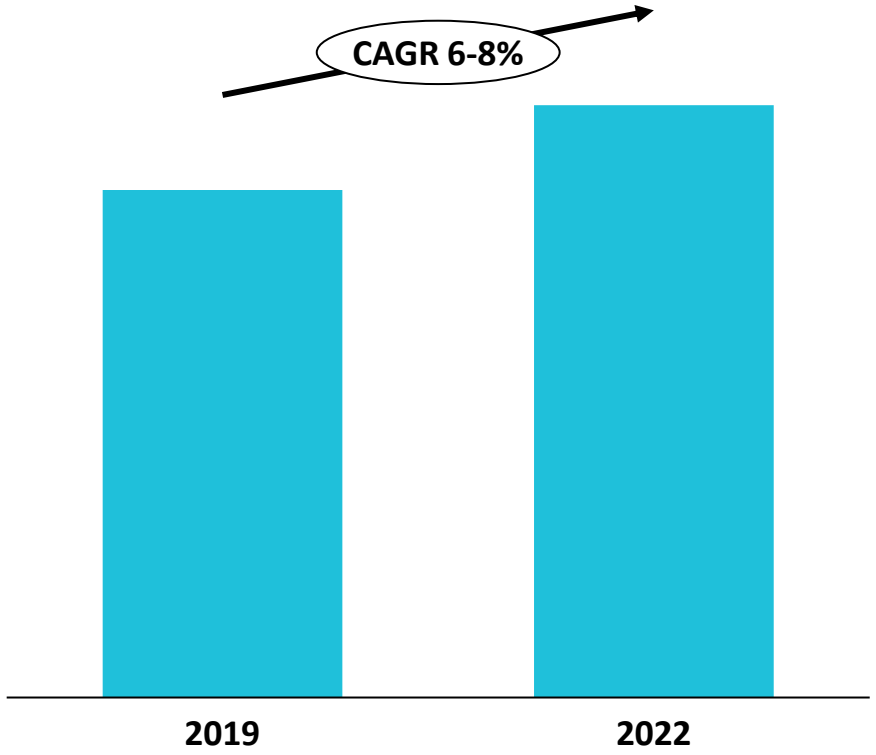
Ensure quality and safety

Improve efficiency



Leverage data insight

Market growth expectations – food



MARKET DEFINITION FOOD

Sensor-based sorting and grading equipment

- Including color sorting
- Excluding peripheral equipment and turn-key solutions

Fresh and processed segment

AFFECTING FACTORS

Weather conditions	Raw material pricing
Manual labor availability and cost	Urbanization and living standards
Global trade agreements and tariffs	Geopolitical and other global events

Source: TOMRA estimates and analysis

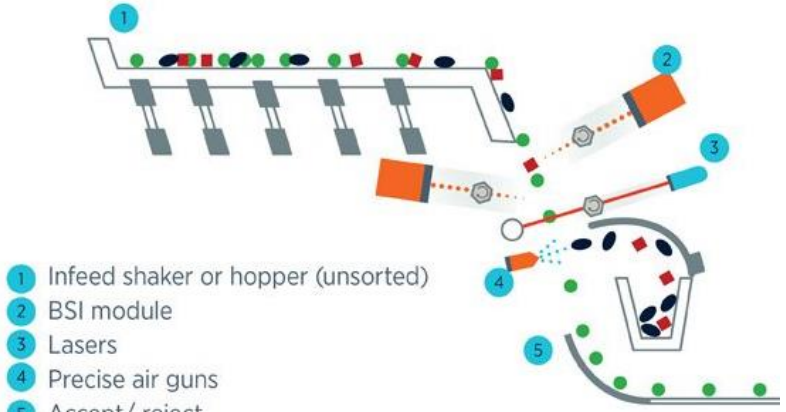
Three ways of sorting within the Food segment

Free fall (Channel / Chute)	
Application	Seeds, rice, grains
Sensor tech.	Camera (simple)
Revenue share*	Approx. 60%

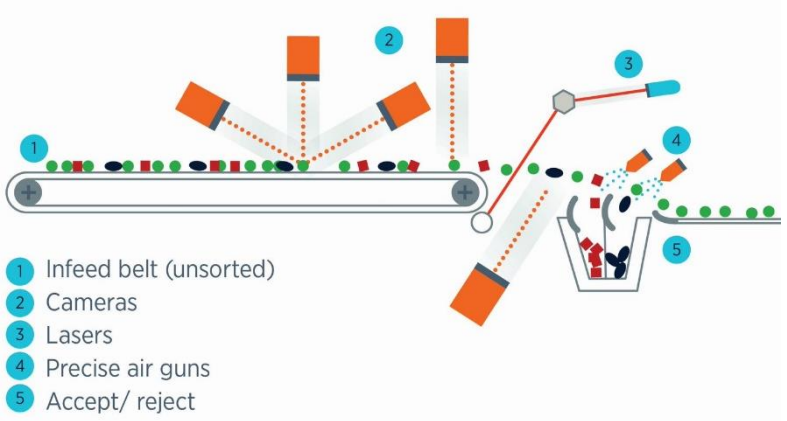
Belt	
Application	Prepared /preserved veg. and fruit
Sensor tech.	Several (complex)
Revenue share	Approx. 20%

Lane	
Application	Fresh produce
Sensor tech.	Several (medium)
Revenue share	Approx. 20%

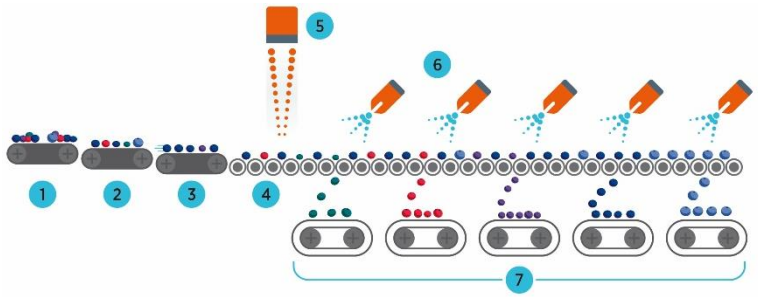
Chute or Channel sorter



On belt inspection

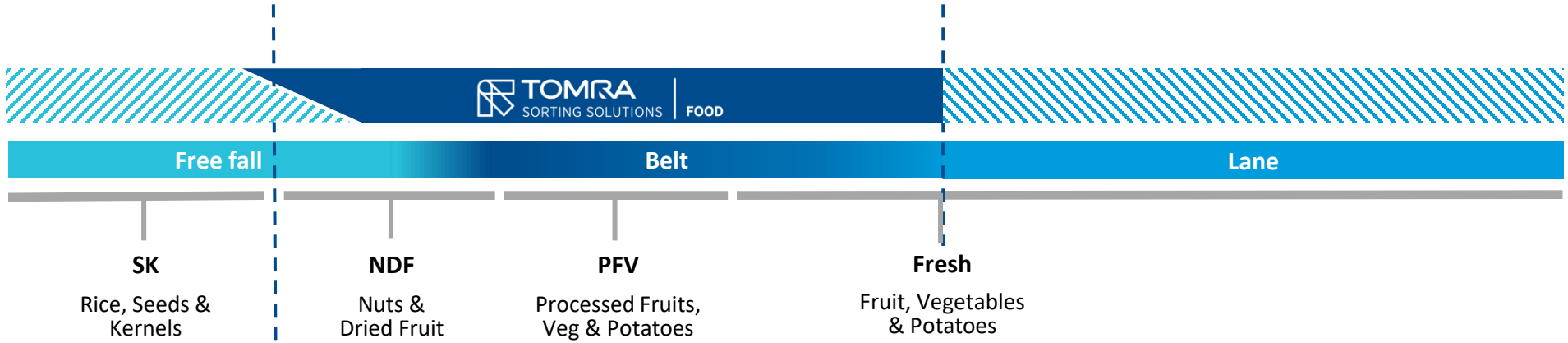


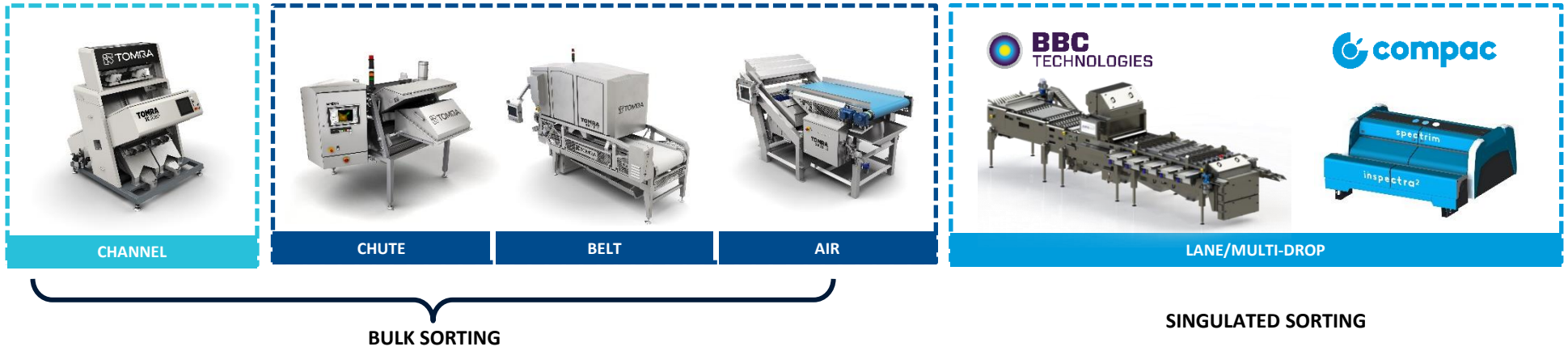
Lane grading



*Estimated total revenue within the food sorting segment

TOMRA has established the broadest footprint within food sorting

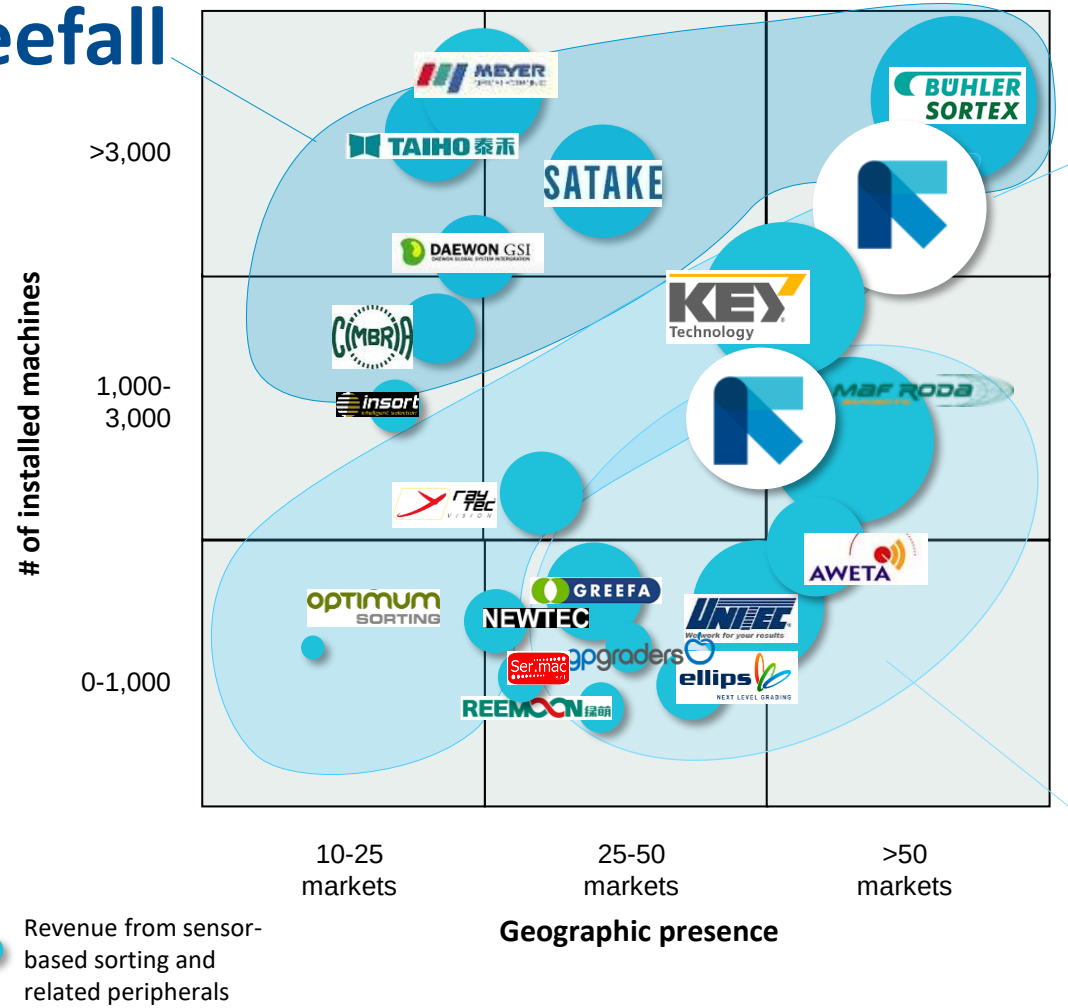




*Approximately 5% of annual global sorter sales revenue comes from other segments, like confectionary

Food competitive landscape

Freefall



Belt

TOMRA competitive positioning

- Size (revenues)
- Widest range of applications (150+)
- Broadest technology base
- Geographic reach (~80 countries)

Lane

Source: TOMRA estimates and analysis

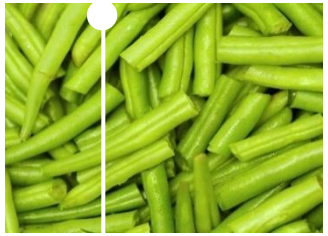
Food: applications and sensor technology

POTATOES

Chips, French fries, peeled, specialty products, sweet potatoes, unpeeled, washed

LASER, CAMERA, BSI, PULSED LED

VEGETABLES



Beans, beets, broccoli, carrots, corn, cucumbers, industrial spinach, IQF vegetables, jalapenos/peppers, onions, peas, pickles

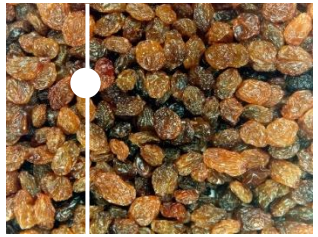
LASER, CAMERA, BSI, PULSED LED

NUTS

Almonds, cashews, hazelnuts, macadamias, peanuts, pecans, pistachios, walnuts

LASER, CAMERA, X-RAY

DRIED FRUIT



Apricots, cranberries, dates, figs, prunes, raisins

LASER, CAMERA, BSI, X-RAY

SEEDS & GRAINS

Barley, coffee, corn, dry beans, lentils, oat, pulses, pumpkin, sunflower and watermelon seeds, wheat

LASER, CAMERA, BSI, X-RAY

FRUIT

Apples, blackberries, blueberries, cherries, cranberries, peaches & pears, raspberries, strawberries, tomatoes

LASER, CAMERA, BSI, PULSED LED

FRESH CUT

Baby leaves, iceberg lettuce, spinach, spring mix

LASER, CAMERA

SEAFOOD

Mussels, scallops, seaweed, shrimps, tuna, pet food

LASER, CAMERA, BSI, X-RAY, INTERACTANCE SPECTROSCOPY

PROTEIN

Bacon bits, beef, chicken breasts, hot dogs, IQF meat, pork, pork rind, sausages, pet food

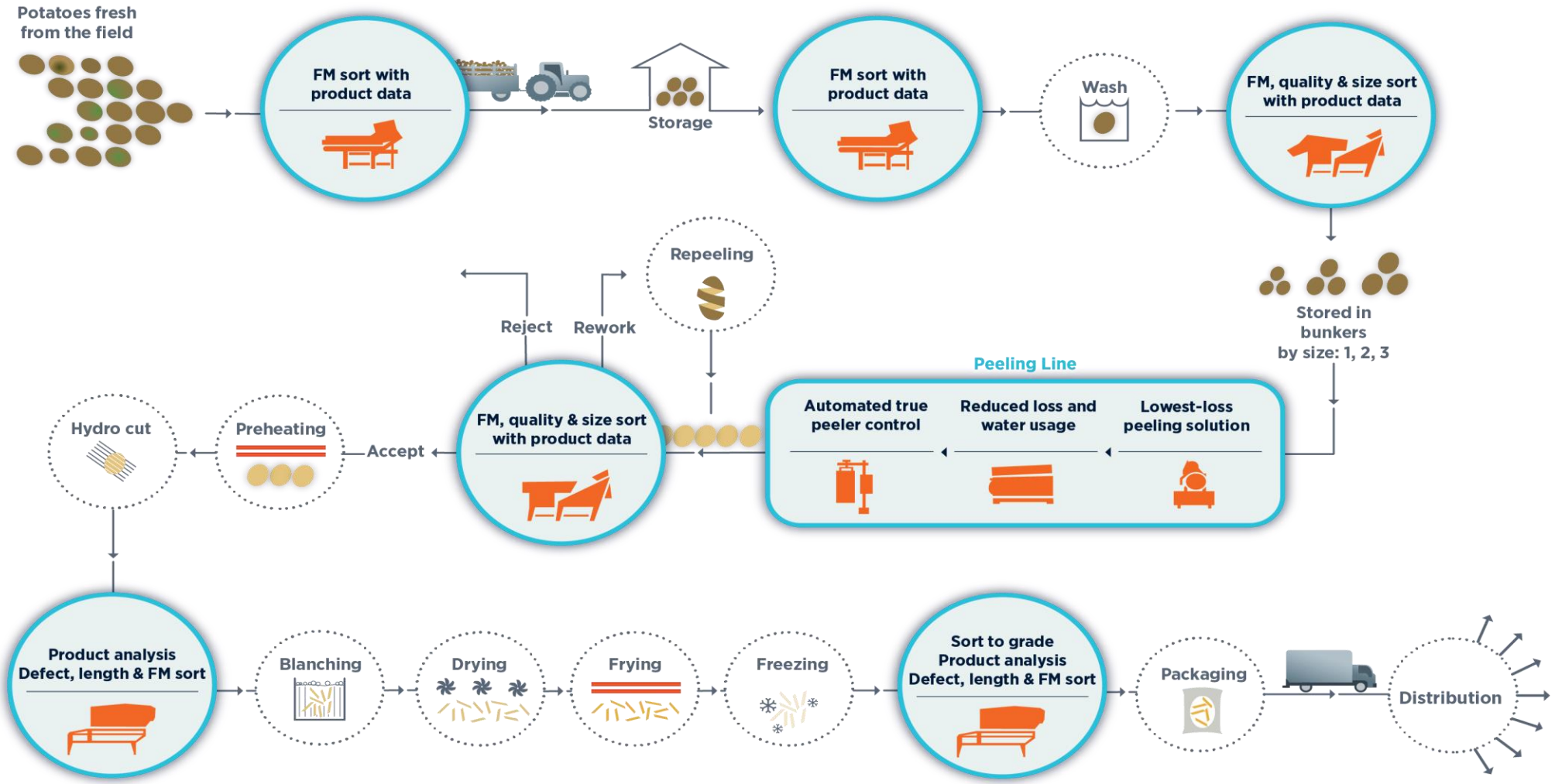
LASER, CAMERA, BSI, INTERACTANCE SPECTROSCOPY

OTHERS

Gummies, Tobacco

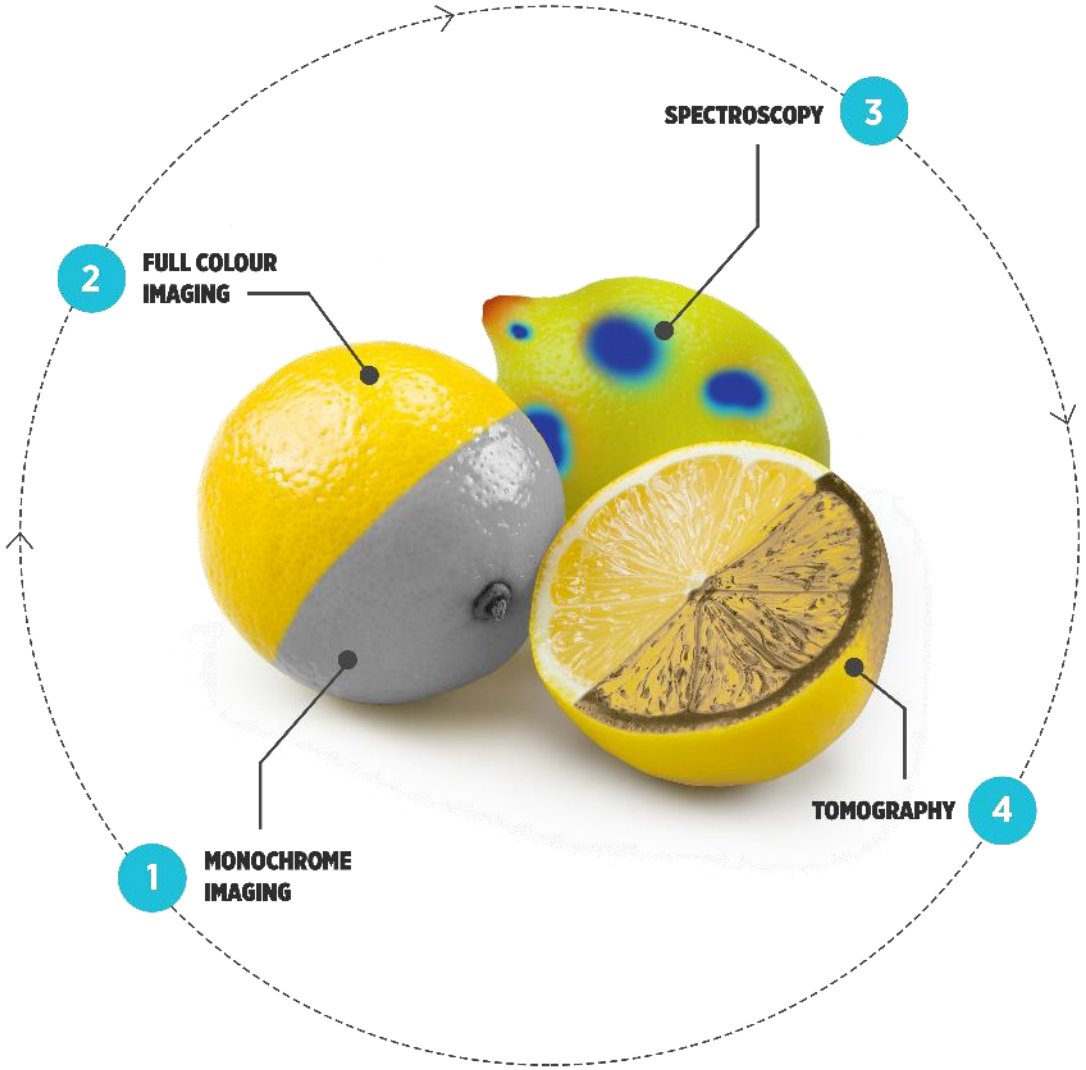
LASER, CAMERA

Creating value in various parts of the food process



Our food sorting customers

New sensor technologies will unlock new opportunities…



- From measuring visual appearance...

… to measuring

- **Internal defects**
- **Taste**
- **Shelf life / Freshness**
- **Food hazards**

RESOURCES ARE FINITE

- **Today:** we are paying to get rid of our waste through landfill fees and incineration
- We are wasting perfectly good materials that can be reused
- **Tomorrow:** The Circular Economy is a driver for change
- Creating **value out of waste**
- That is what the **Circular Economy** is all about

TOMRA SORTING SOLUTIONS | RECYCLING

The circular economy drives a legislative push…

Continued ambitious EU regulations and recycling targets:
Attract capital and drives investments

"A common EU target for recycling 70% of packaging waste by 2030"

The Strategy also highlights the need for specific measures, possibly a legislative instrument, to reduce the impact of single-use plastics, particularly in our seas and oceans

- **From Green Fence to National Sword:** Short-term demand for recycling solutions in waste exporting countries

- **Limits the import of contaminated recyclable commodities and increases inspections of recyclable commodity imports**
- **Purity level set to 99.5%**

Source: European Commission, RecyclingToday

…promoting recycling

2018 CIRCULAR ECONOMY PACKAGE

	Description	Targets and measures
Waste Framework Directive	• Rules on how waste should be managed in the EU. It provides general principles for doing so, such as the Waste Hierarchy, Polluter Pays Principle and Extended Producer Responsibility.	• A common EU target for recycling 60% of municipal waste by 2030 • A common EU target for recycling 70% of all packaging waste by 2030 • A common EU target for recycling 55% of all plastics by 2030 • A binding landfill target to reduce landfill to maximum of 10% of municipal waste by 2030 • Minimum requirements are established for extended producer responsibility schemes • Simplified and improved definitions and harmonized calculation methods for recycling rates • Concrete measures to promote re-use and stimulate industrial symbiosis • Economic incentives for producers to put greener products on the market and support recovery and recycling schemes
Packaging and Packaging Waste Directive	• Rules on the production, marketing, use, recycling and refilling of containers of liquids for human consumption and on the disposal of used containers • 2015 revision includes lightweight plastic carrier bags	
Waste Electrical and Electronic Equipment (WEEE) Directive	• Collection, recycling and recovery targets for all types of electrical goods • 10 categories: Large household appliances, Small household appliances, IT and telco equipment, Consumer equipment, Lighting equipment, Electrical and electronic tools, Toys, Leisure and sports equipment, Medical devices, Monitoring and control instruments, Automatic dispensers	
Landfill Directive	• The objective of the Directive is to prevent or reduce as far as possible negative effects on the environment from the landfilling of waste • In particular: impact on surface water, groundwater, soil, air, and on human health by introducing stringent technical requirements for waste and landfills.	
End of Life Vehicle (ELV) Directive	• Aims at reduction of waste arising from end-of-life vehicles • The scope of the directive is limited to passenger cars and light commercial vehicles	

Source: www.ec.europa.eu, letsrecycle.com, www.Eurometrec.org, wastemanagementworld.com

…and a market pull

100% reusable, recyclable or compostable **plastic packaging by 2025**

Follow their lead NEW PLASTICS ECONOMY

Large companies committing to use recycled raw materials = increased demand for recycled offtake

Source: Ellen McArthur Foundation @ World Economic Forum

Recycling: market growth expectations

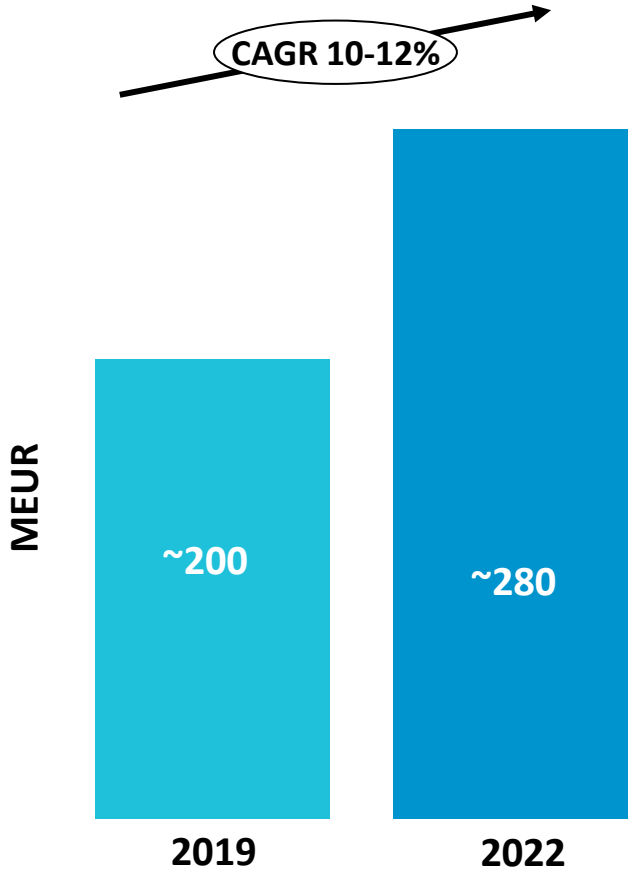
MARKET DEFINITION RECYLING

Sensor-based sorting equipment

- Excluding cullet glass sorting
- Excluding peripheral equipment and turn-key solutions

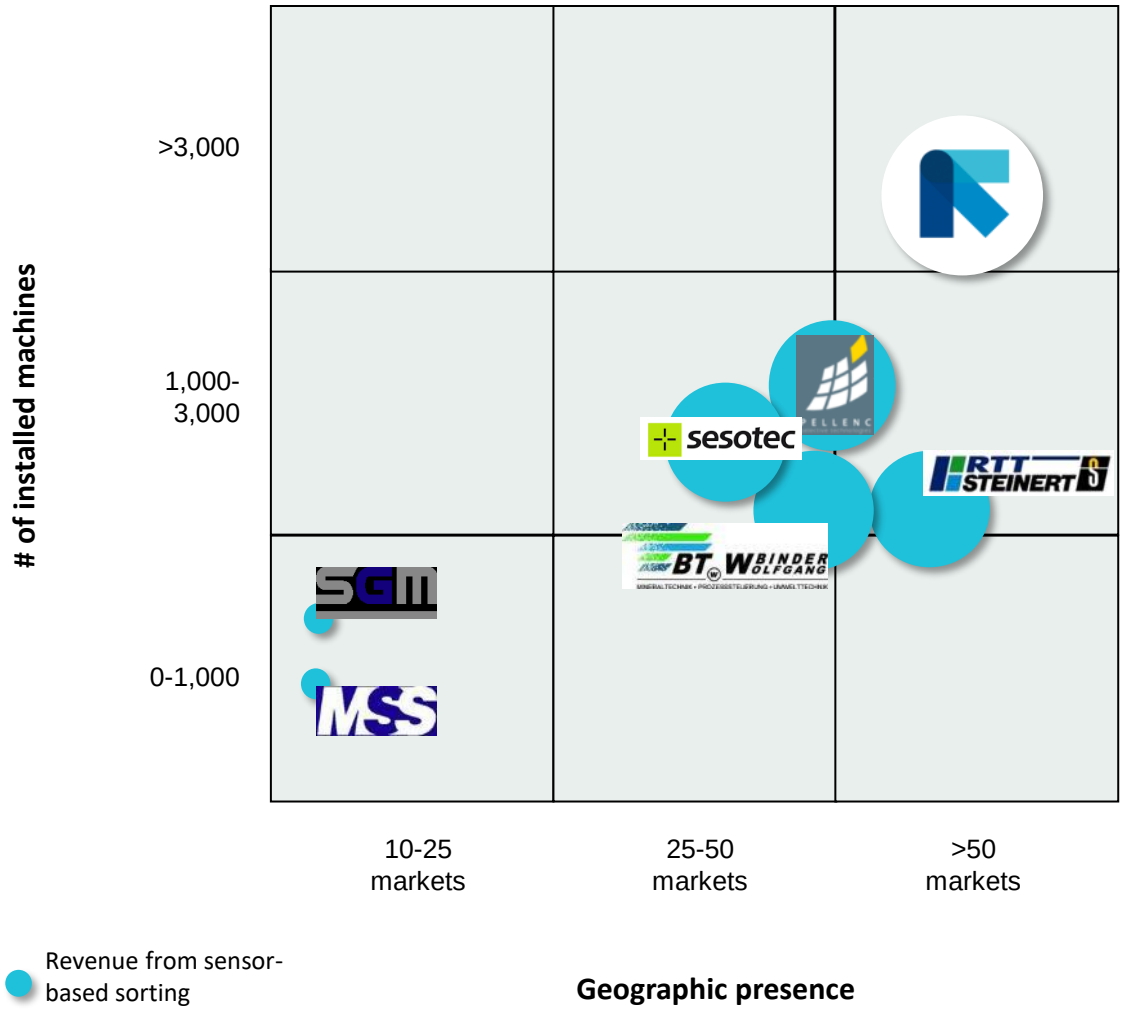
AFFECTING FACTORS

Tightening regulation	Access to capital
Consumer awareness	Commodity price fluctuations
Political instability (emerging markets)	Emerging countries ban



Source: TOMRA estimates and analysis

Recycling: competitive landscape



TOMRA competitive positioning

- Largest installed base
- Highest revenues
- Broadest technology platform on WR
- Highest number of applications and markets served
- Leading brand
- **Market share: 55-60%**

Source: TOMRA estimates and analysis

Recycling: applications and sensor technology

MUNICIPAL SOLID WASTE

Hard plastics, plastic film, mixed paper, RDF, metals, organics/biomass

NIR, VIS, XRT, LASER

PACKAGING

Plastics, plastic film, cardboard, mixed paper, deinking paper, metal

NIR, VIS, EM

UPGRADING PLASTICS

PET, PE, PP, flakes

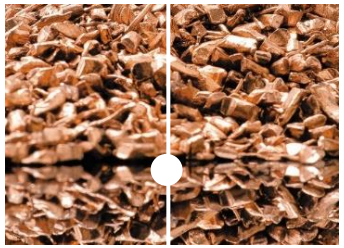
NIR, VIS, EM

POST-SHREDDER

NF metal, stainless steel, copper cables, copper, brass, aluminum

NIR, VIS, XRT, XRF, EM, COLOR

ELECTRONIC SCRAP



Printed circuit boards, non-ferrous metal concentrates, cables, copper, brass, stainless steel

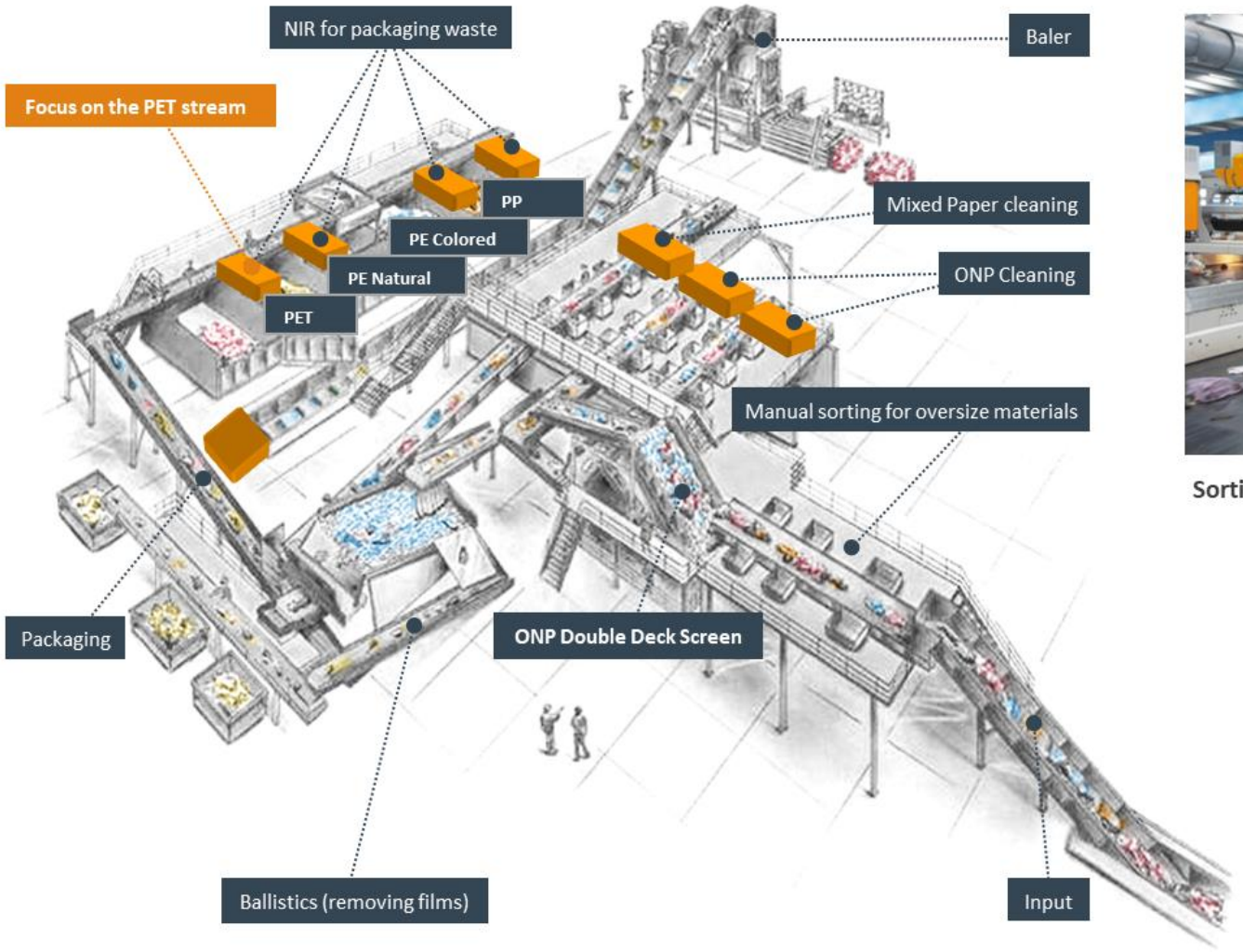
XRT, XRF, EM, NIR, COLOR

PAPER

Deinking, cardboard, carton

NIR, VIS, EM

Automation with TOMRA Sorting units

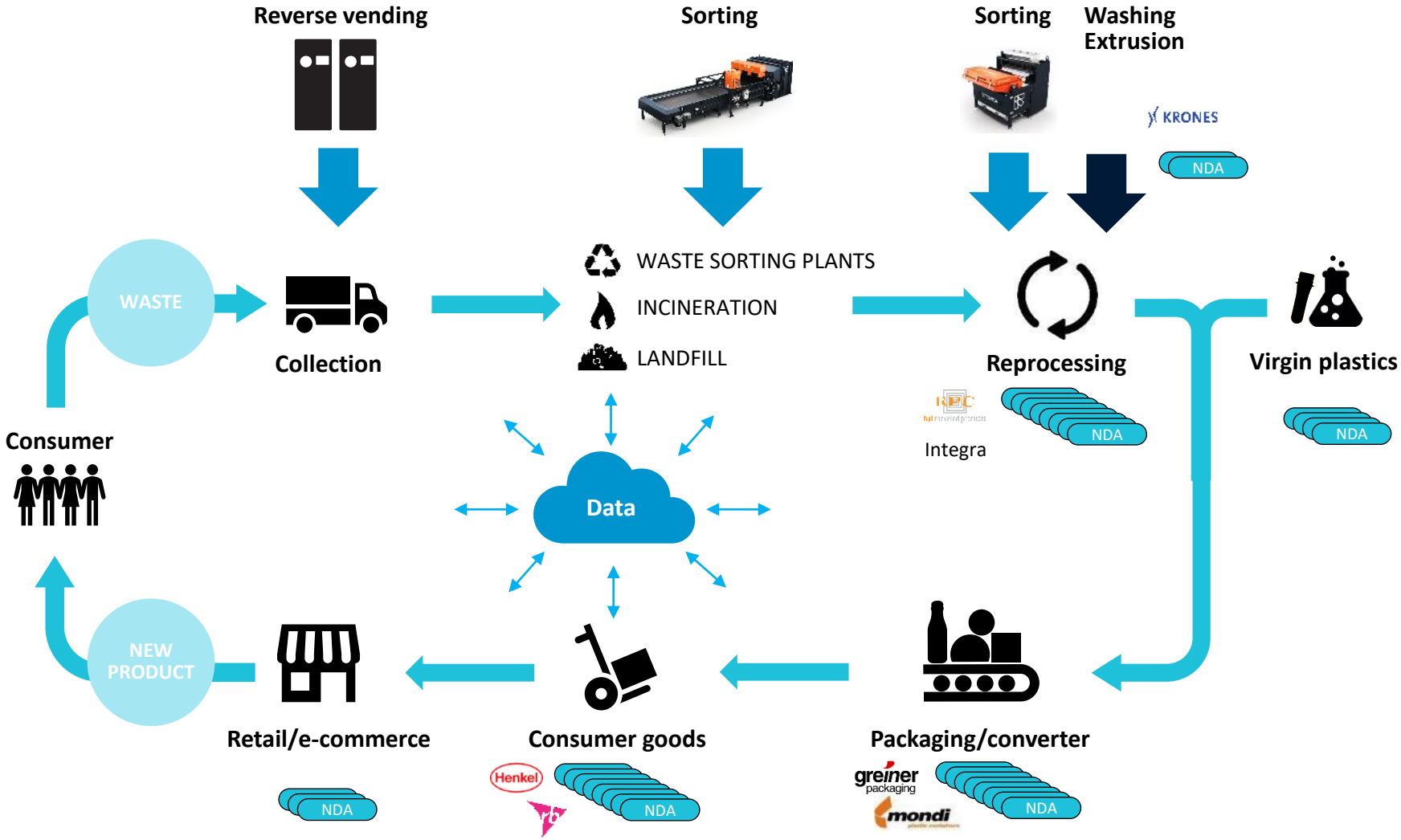


Sorting of Municipal Solid Waste, Cyprus

Industrializing the process for recycled plastic

SUCCESS FACTORS

- **Sufficient demand** for the recycled material
- Output to be of **high quality** and **stable quantity** in order to replace virgin material
- **Political leadership** that sets targets and monitors
- **Access to capital** and willingness to invest
- **Collaboration with multiple partners on commercialization**



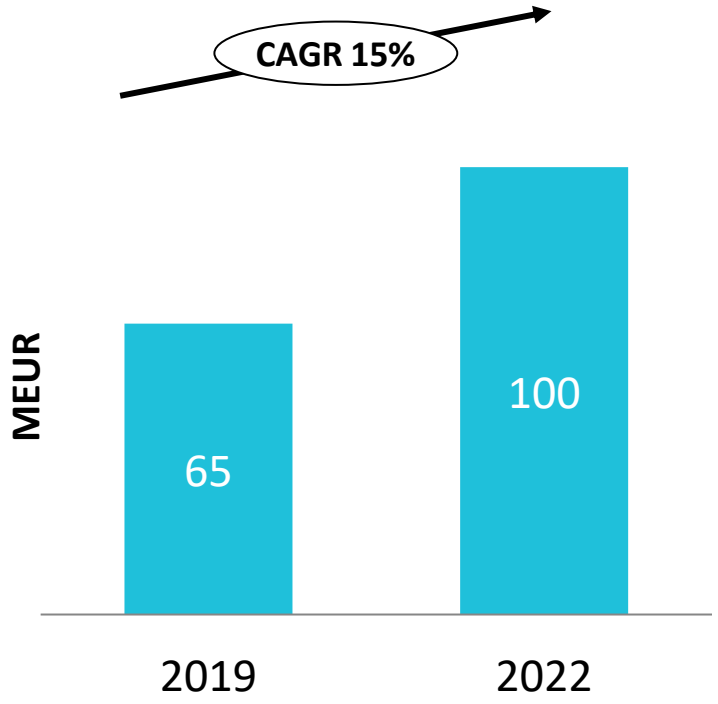
INTELLIGENT MINE

- **Mining** is an old industry. But chances are that it will it **look very different** in 10 years time
- Energy intensity and water stress are major drivers…
- **…for disruptive technology forces to reshape the industry**
- Commodity prices and capex impact the investment sentiment

TOMRA SORTING SOLUTIONS | MINING

Mining: market growth expectations

Total annual market size



MARKET DEFINITION MINING

Sensor-based sorting equipment

- is still a technology to be accepted
- Growth is conditional on new applications and technologies being developed

AFFECTING FACTORS

Political climate	Access to capital
Cost drivers	Commodity price fluctuations

Mining: applications and sensor technology

INDUSTRIAL MINERALS

Phosphate-silica removal, lime-stone-silica removal, quartz up-grade, MgO_2-silica removal, fluorite pre-conc., talc pre-conc., lithium pre-conc., barite pre-conc.,

COLOR, XRT, NIR

DIAMONDS

Kimberlite-waste removal, diamond ROM conc., diamonds final recovery, emeralds ROM conc., rubies ROM conc.

COLOR, XRT, NIR

FERROUS METALS

Iron ore grading, hematite pre-conc., manganese pre-conc., chromite pre-conc.

XRT, EM, NIR

NON-FERROUS METALS

Copper, zinc, gold, nickel, tungsten, silver, platinum group metals

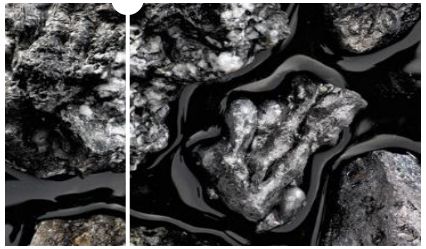
XRT, COLOR, EM, NIR

FUEL

Coal waste dumps

XRT

SLAG

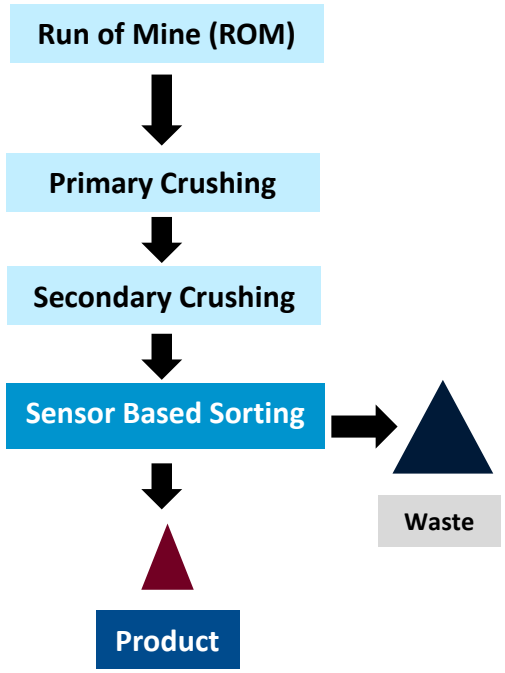


Stainless steel slag, ferro silica slag, ferro chrome slag

XRT, EM

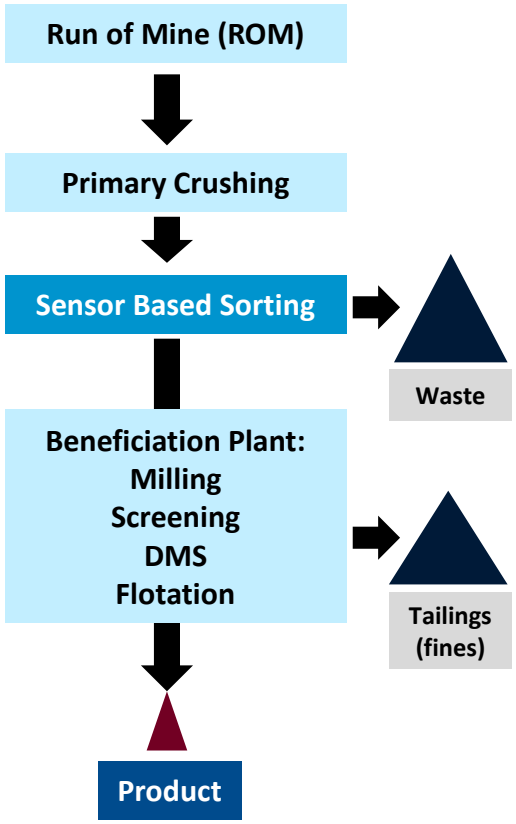
The concept of sensor-based sorting in mining

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

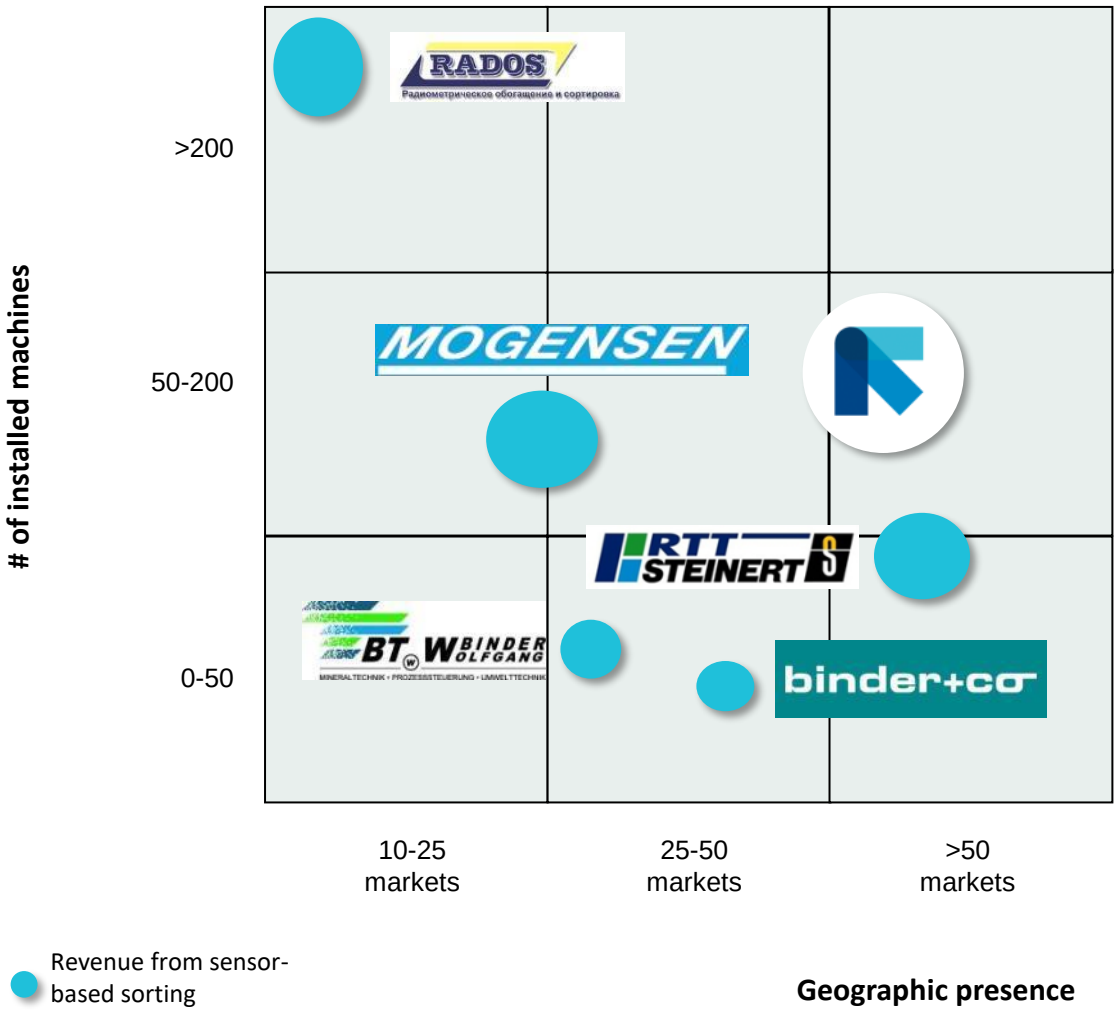
Mining process:
Metal mining



Current segment

Potential new segment

Mining: competitive landscape



TOMRA competitive positioning

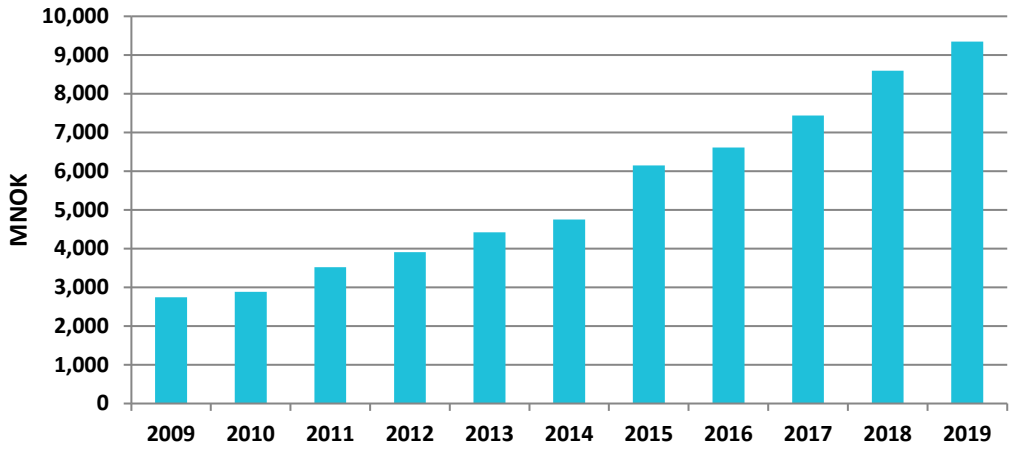
- Wide geographical coverage
- Broadest technology platform
- Leading brand
- **Market share: 40-50%**

Source: TOMRA estimates and analysis

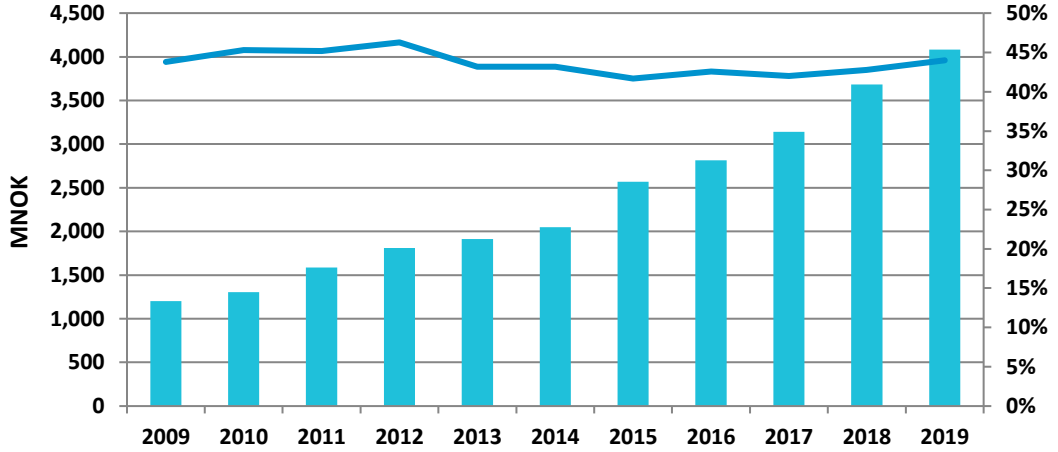
HISTORICAL GROUP FINANCIALS AND TARGETS

Group financials development – solid track record

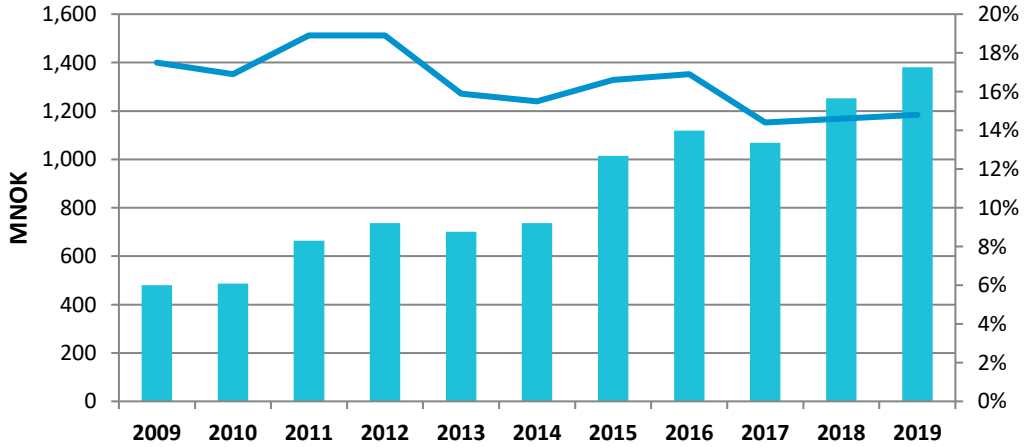
Revenues



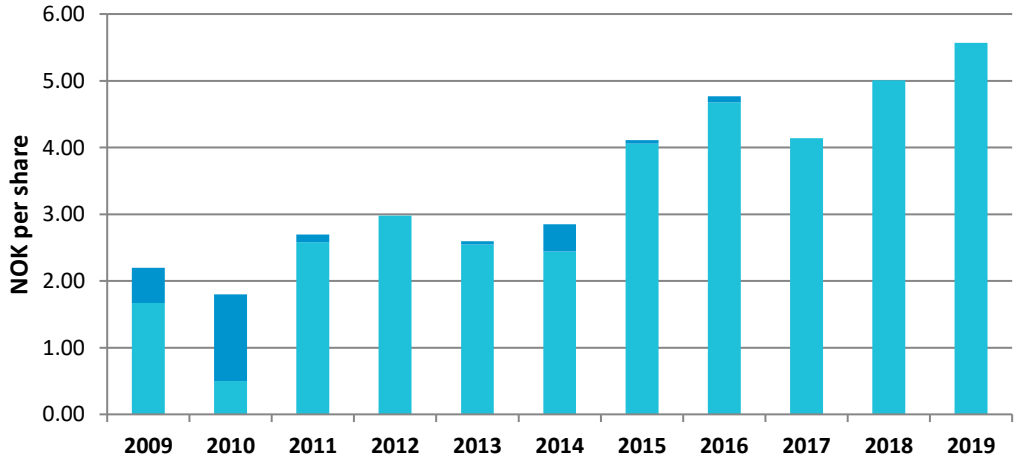
Gross contribution and margin



EBITA and margin

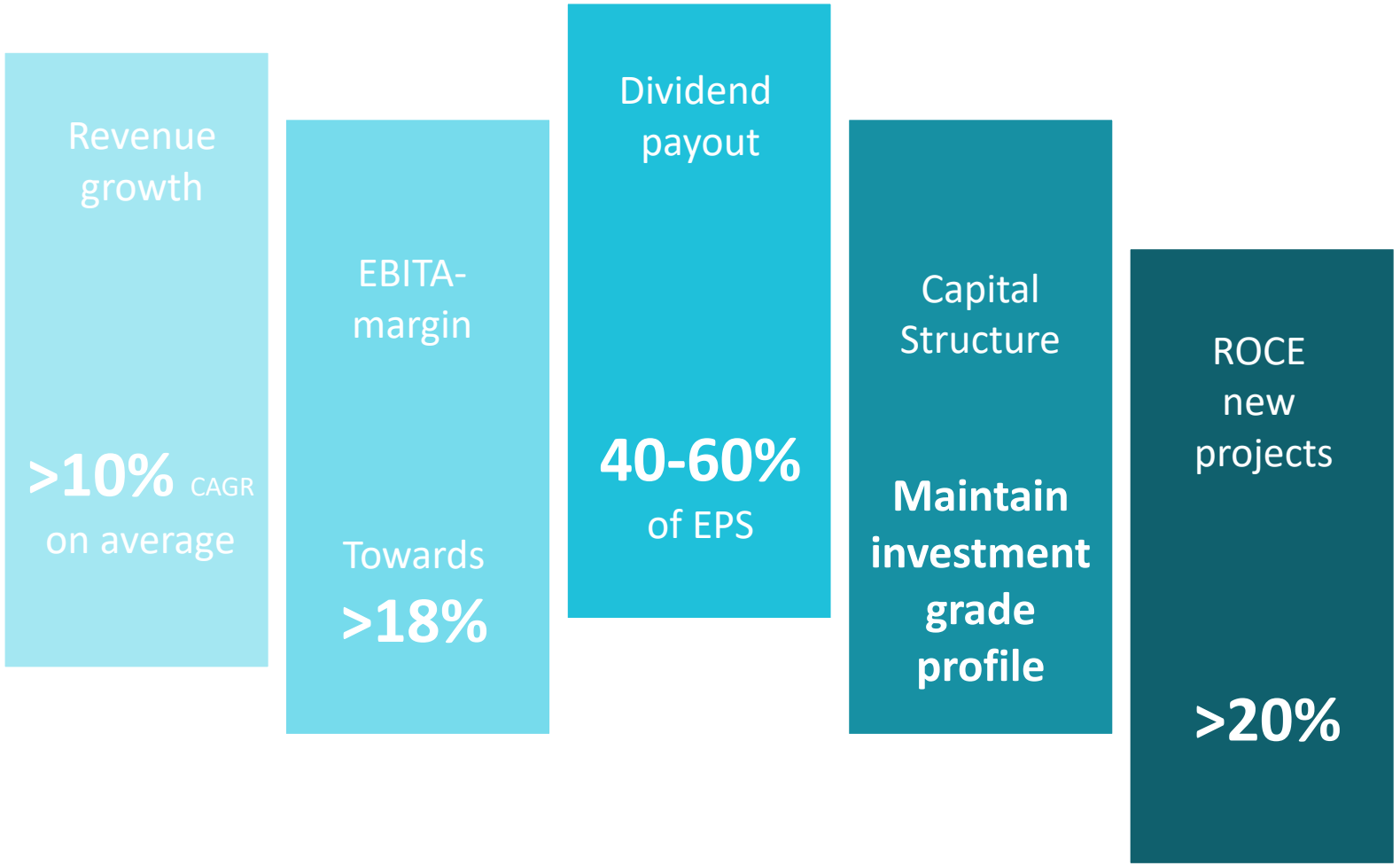


Earnings per share

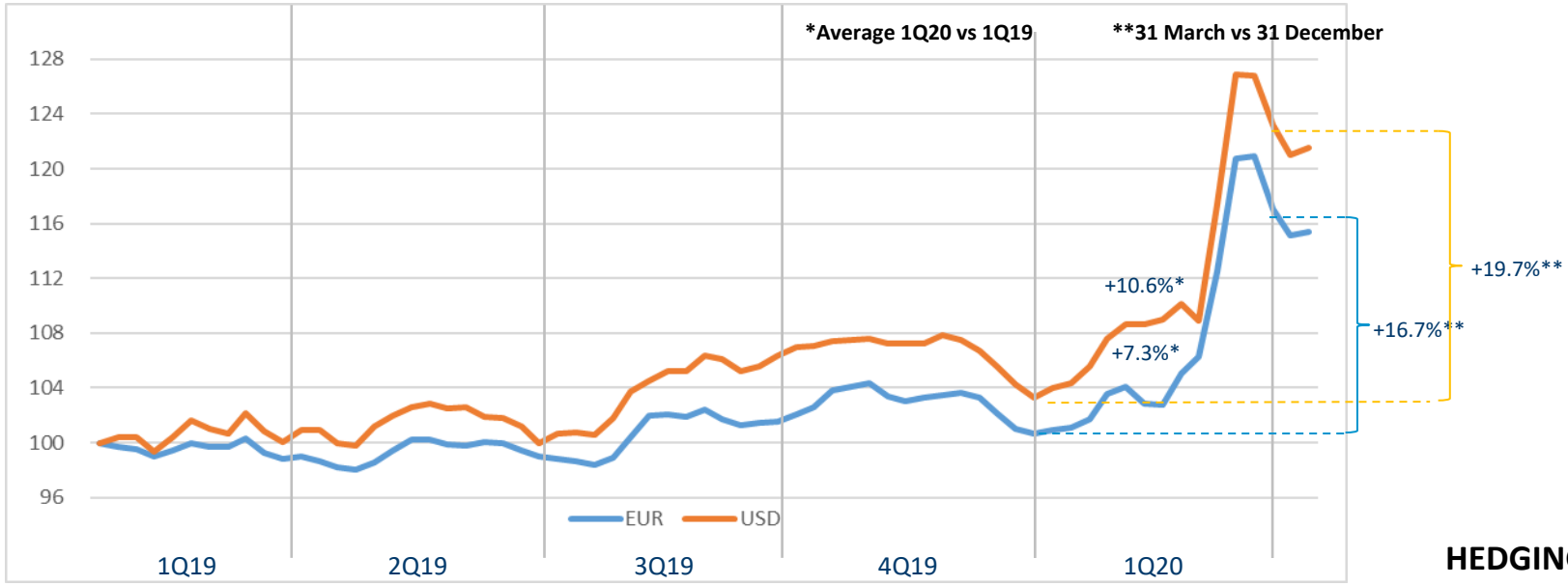


Does not include discontinued operations (California divested 2011 and Orwak divested 2014), except for EPS

Group financial targets 2018-2023 – our ambitions affirmed



Currency risk and hedging policy



10% change in NOK towards other currencies will impact:

	Revenues	Expenses	EBITA
EUR*	4.5%	4.0%	7.0%
USD	3.5%	2.5%	8.0%
OTHER**	2.0%	3.0%	-4.0%
ALL	**10.0%**	**9.5%**	**11.0%**

Revenues and expenses per currency:

	EUR[1]	USD	NOK	OTHER[2]	TOTAL
Revenues	45 %	35 %	0 %	20 %	100 %
Expenses	40 %	25 %	5 %	30 %	100 %

Assets and liabilities per currency:

	EUR[1]	USD	NOK	OTHER[2]	TOTAL
Assets	50 %	15 %	15 %	20 %	100 %
Liabilities	60 %	10 %	20 %	10 %	100 %

[1] EUR includes DKK

[2] Most important: AUD, NZD, RMB, CAD, SEK, GBP and JPY

NOTE: Estimated and rounded figures

HEDGING POLICY

CASHFLOW AND P/L

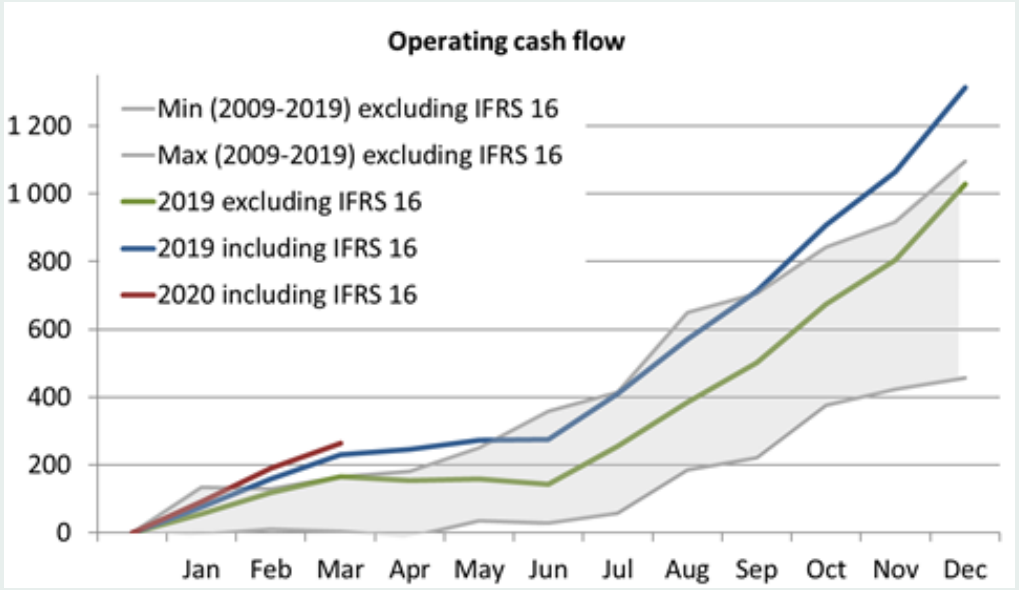
- TOMRA can hedge up to one year of future predicted cash flows. Gains and losses on these hedges are recorded at the finance line, not influencing EBITA

B/S

- TOMRA only hedges B/S items where exchange rate fluctuations could have P/L impact. Gains and losses on B/S hedging are recorded in accordance with IAS 21 and will normally not have P/L impact

Financial highlights | Balance sheet and cash flow

	31 March		31 Dec
Amounts in NOK million	2020	2019	2019
ASSETS	**12,250**	**10,695**	**10,868**
Intangible non-current assets	4,226	3,765	3,788
Tangible non-current assets	2,638	2,281	2,330
Financial non-current assets	463	343	406
Inventory	1,943	1,563	1,596
Receivables	2,536	2,267	2,288
Cash and cash equivalents	444	476	460
LIABILITIES AND EQUITY	**12,250**	**10,695**	**10,868**
Equity	5,924	5,222	5,247
Lease liabilities	1,260	1,044	1,102
Interest-bearing liabilities	1,939	1,543	1,880
Non interest-bearing liabilities	3,127	2,886	2,639



Ordinary cashflow from operations

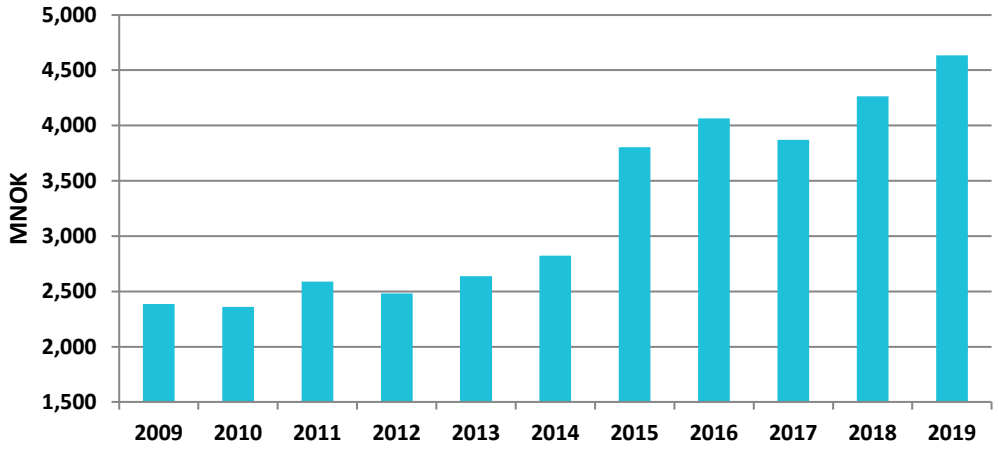
- 265 MNOK in the first quarter (229 MNOK in first quarter 2019)

Solidity and gearing

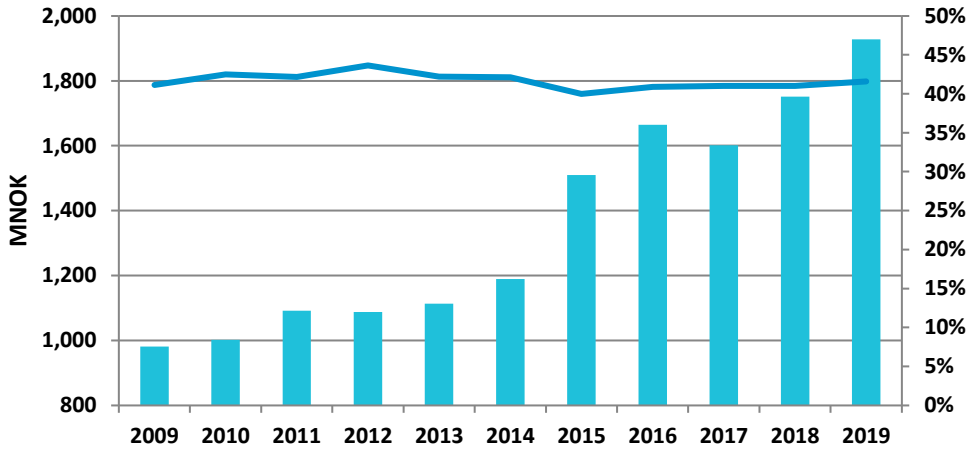
- 48% equity ratio
- NIBD/EBITDA (Rolling 12 months)
  - 0.9x without IFRS 16
  - 1.4x including IFRS 16

Collection solutions – segment financials

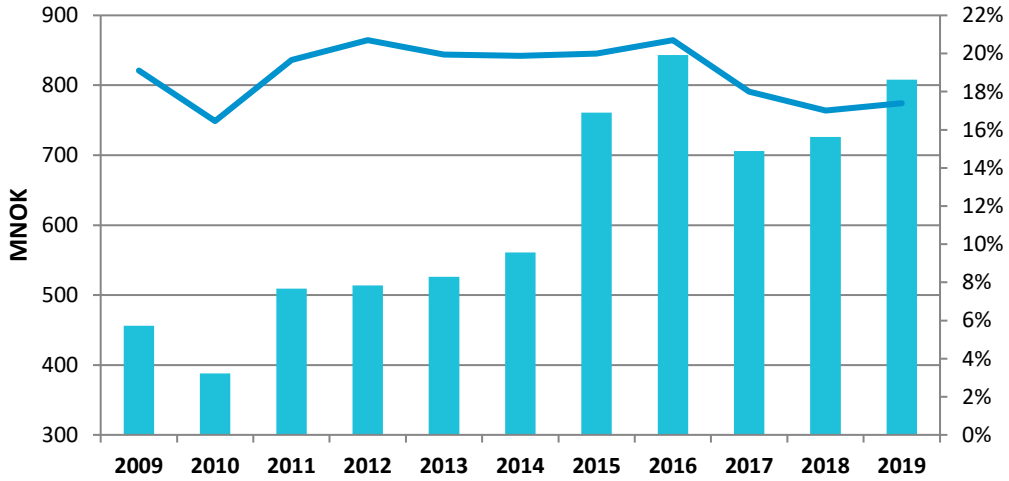
Revenues



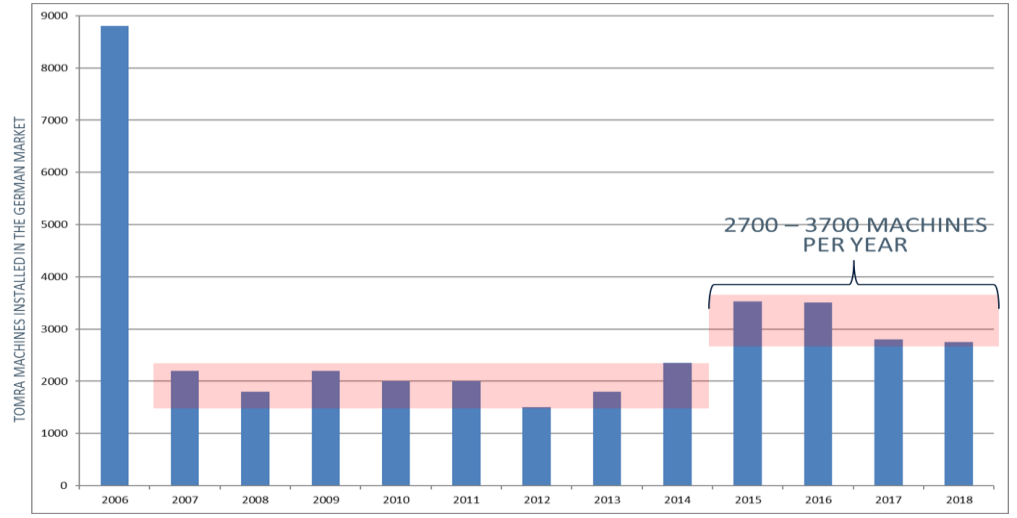
Gross contribution and margin



EBITA and margin

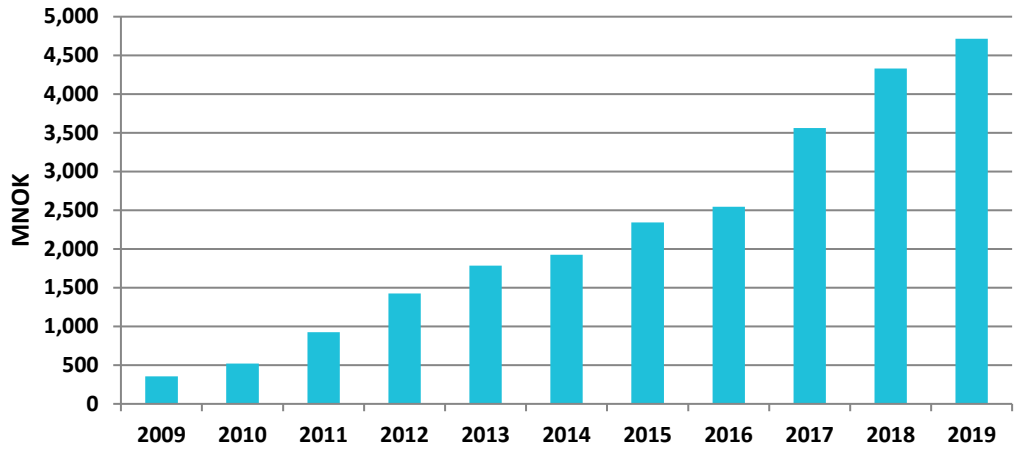


TOMRA machines installed in the German market

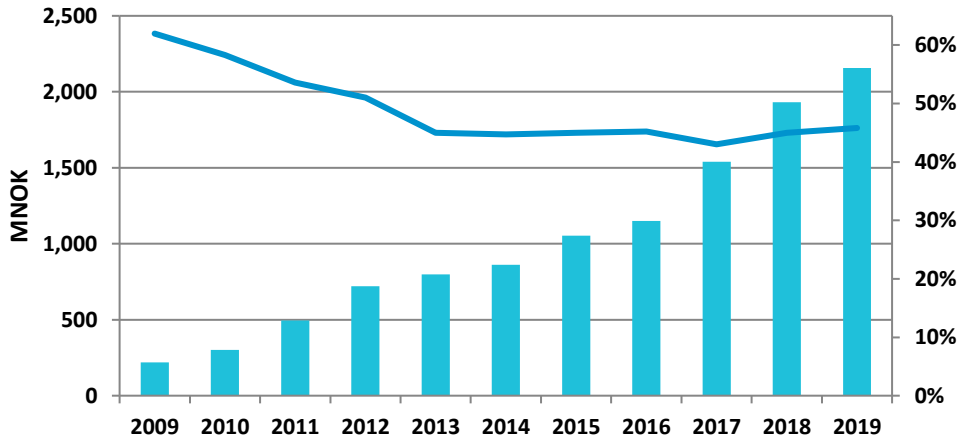


Sorting solutions – segment financials

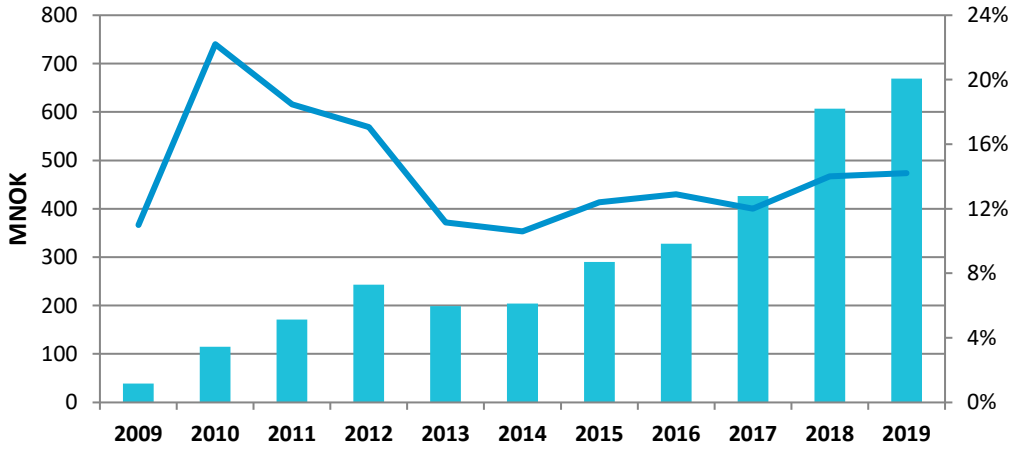
Revenues



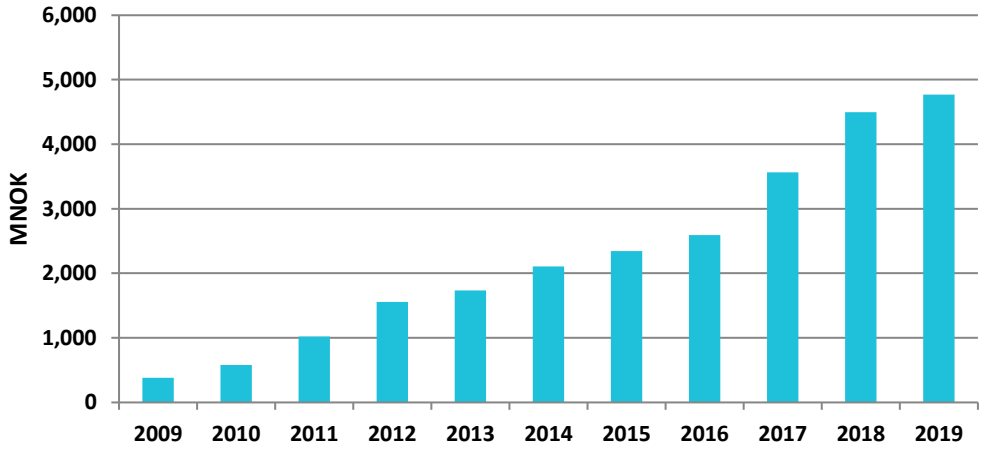
Gross contribution and margin



EBITA and margin



Order Intake

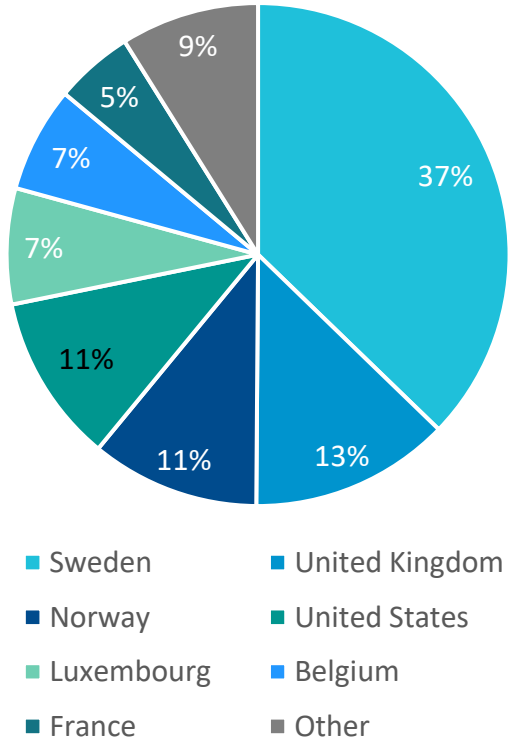


Shareholder structure

Top 10 shareholders as of 01 April 2020

1	Investment AB Latour	39 000 000	26,3 %	
2	Folketrygdfondet	8 850 147	6,0 %	
3	The Bank of New York Mellon SA/NV	7 978 000	5,4 %	(NOM)
4	State Street Bank and Trust Comp	6 298 716	4,3 %	(NOM)
5	Clearstream Banking S.A.	5 813 427	3,9 %	(NOM)
6	RBC Investor Services Bank S.A.	2 059 112	1,4 %	(NOM)
7	JPMorgan Chase Bank, N.A., London	1 979 019	1,3 %	(NOM)
8	Credit Suisse (Luxembourg) S.A.	1 760 025	1,2 %	(NOM)
9	J.P. Morgan Bank Luxembourg S.A.	1 690 899	1,1 %	(NOM)
10	Citibank, N.A.	1 241 395	0,8 %	(NOM)
	Sum Top 10	76 670 740	51.8%	
	Other shareholders	71 349 338	48.2%	
	TOTAL (8.516 shareholders)	148 020 078	100.0%	

Shareholders by country



Source: VPS

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