

TOMRA Systems ASA 22 October 2024 © TOMRA

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~5,400 employees globally



1.29 billion EUR revenues in 2023



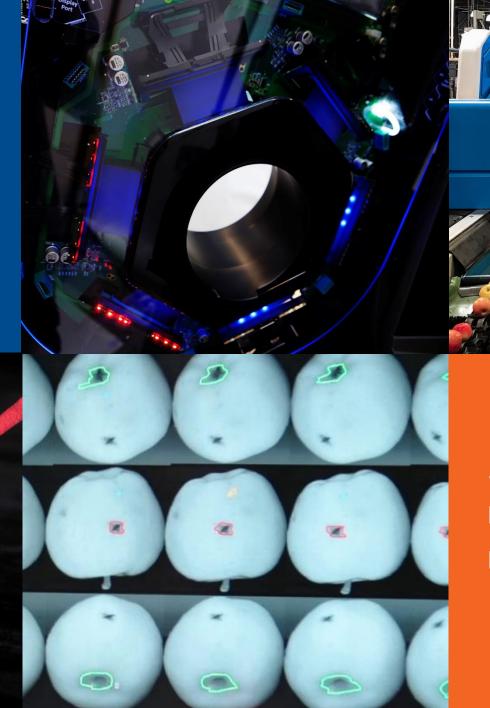




At TOMRA, our vision is to lead the resource revolution

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

We are an impact leader providing thought leadership and pushing the boundaries on technology and solutions ...





spectrim

... shaping existing markets and creating new ones.

We operate in markets where we take a leading global position and make a meaningful impact ...



... optimizing how resources are obtained, used, and reused.

Innovation, passion, and responsibility are our core values ...





... and we have an entrepreneurial culture where we empower for ownership.

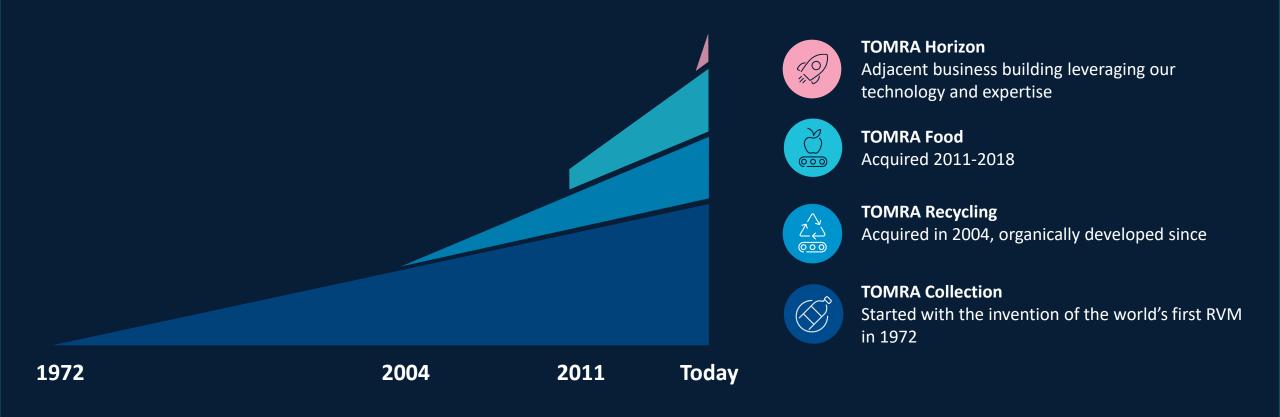
1971

A problem to solve

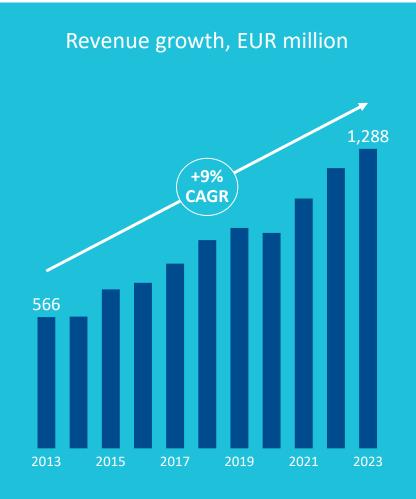
Aage Fremstad, the grocer who first asked Petter Planke what to do about manual returns, showcases the first TOMRA prototype

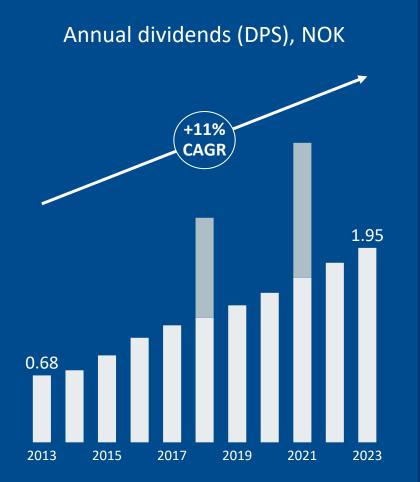


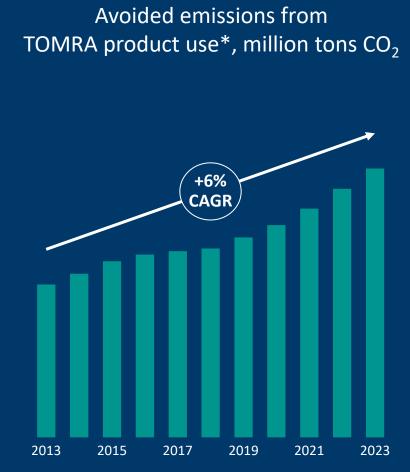
We have shaped circularity and resource optimization for over 50 years through innovation, entrepreneurship, and thought leadership



We have consistently delivered profitable growth while enabling significant emission avoidance through our products







* Estimated in TOMRA's annual reports. TOMRA will change calculation methodology to align with WBCSD and Net Zero Initiative's Guidance on Avoided Emissions. This is expected to affect nominal values, not the trend.

We have a decentralized operating model characterized by autonomy and accountability



The drivers for increased circularity and resource optimization have never been stronger than now











Resource scarcity



Accelerate growth in core

Recycling Food



Collection

Invest in double digit growth



Invest in double digit growth



Improve profitability then grow

Develop adjacent business

Horizon



Long-term business building



M&A

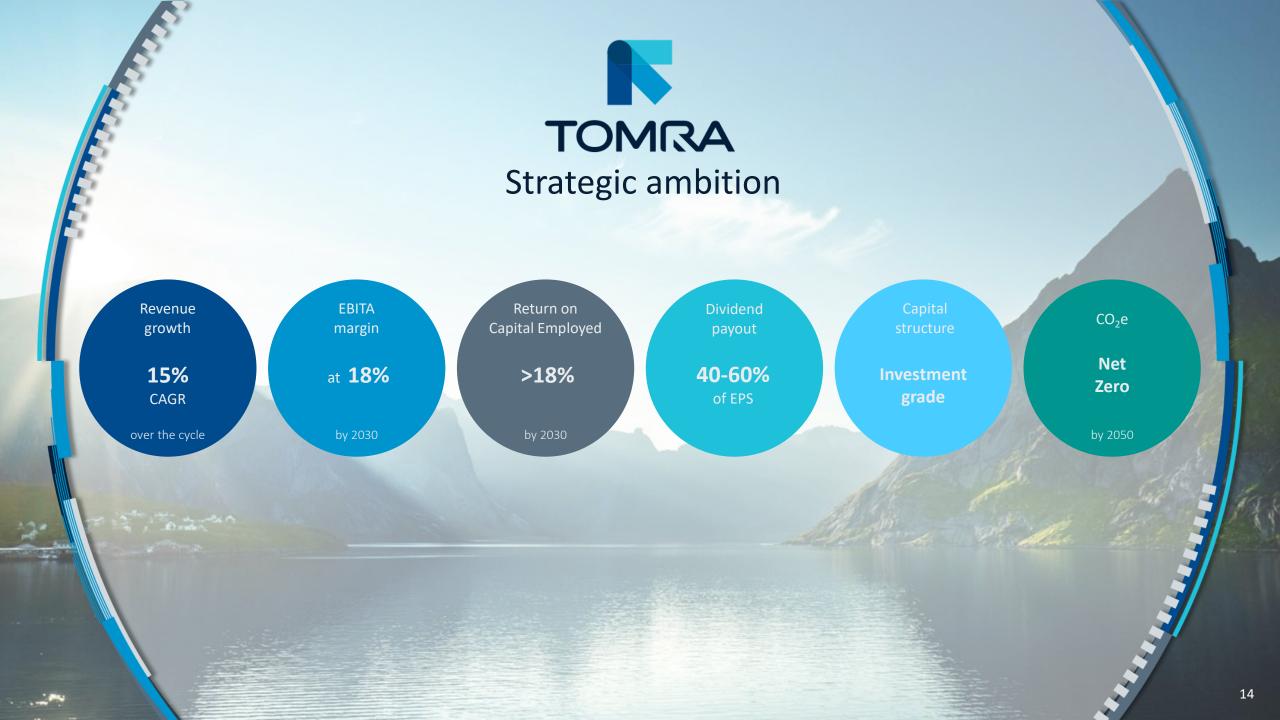
Selected valueadding verticals

Fully circular business and being safe, fair and inclusive

Climate impact

Sustainable product design

Employee value proposition



Our vision is to lead the resource revolution, to...



Increase today's

7%

of resources which are consumed circularly¹



Reduce today's

30%

of consumable food which is lost and wasted²

TOMRA Collection

Transforming society's habits to keep valuable resources in a continuous loop of use and reuse



Over 46 billion drink containers collected in 2023



This represents only 3% of all beverage containers.



Deposit return systems enable Clean Loop Recycling



47%
Containers **without**a deposit

94%
Containers **with**a deposit



27%
Containers **without**a deposit¹

72% Containers **with** a deposit¹ 88%
Containers in highperforming DRS²

Legislation, automation and decarbonization drive the expansion of DRS systems worldwide



Regulation

SUPD & PPWR drive **implementation of DRS** to achieve collection targets above 90%

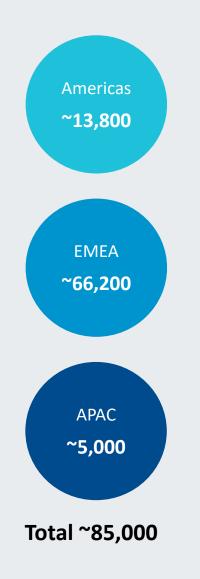
Modernization & Automation

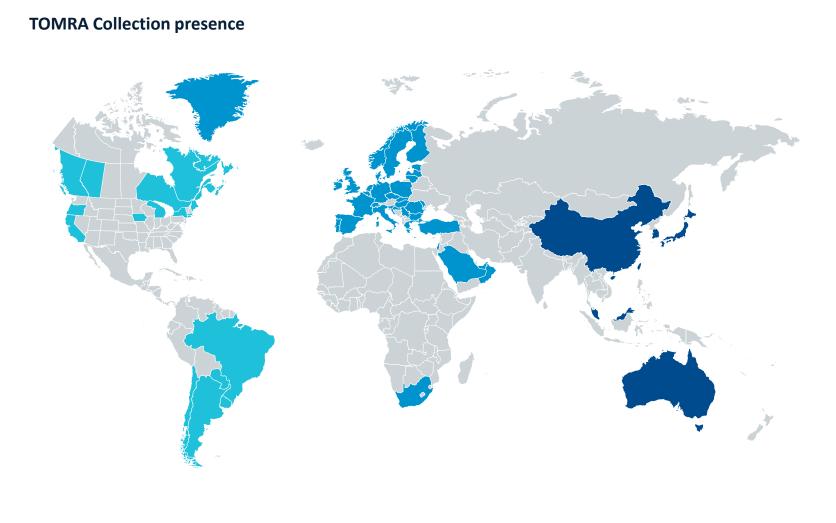
Labor cost and margin pressure lead to focus on **efficiency and ease of use** across the value chain

Decarbonization

Industry committing to SBTi targets pushing sustainability to be part of decision making

We are the global leader in reverse vending and collection solutions





TOMRA offers a wide portfolio of RVMs, digital tools with APIs, and service - for different size operations





Reverse vending machines (RVMs) tailored to a variation of needs



Unmanned RVM Kiosks



Large scale equipment for redemption centers & depots



Digital products and APIs for end users and operators



Remote and local on-site service

Our solutions are divided into six product lines



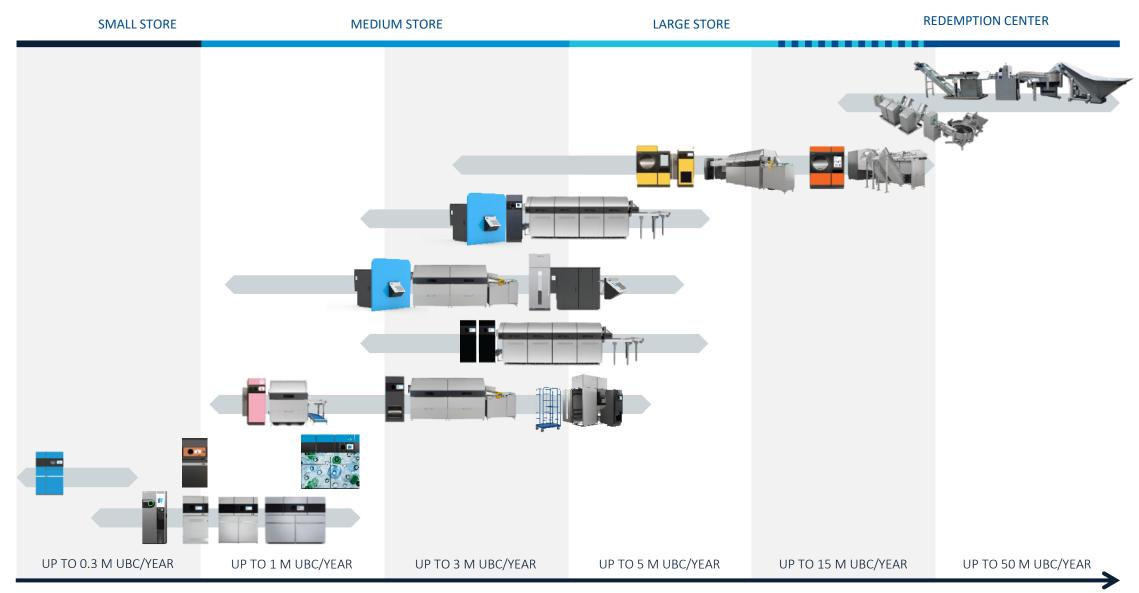






Basic

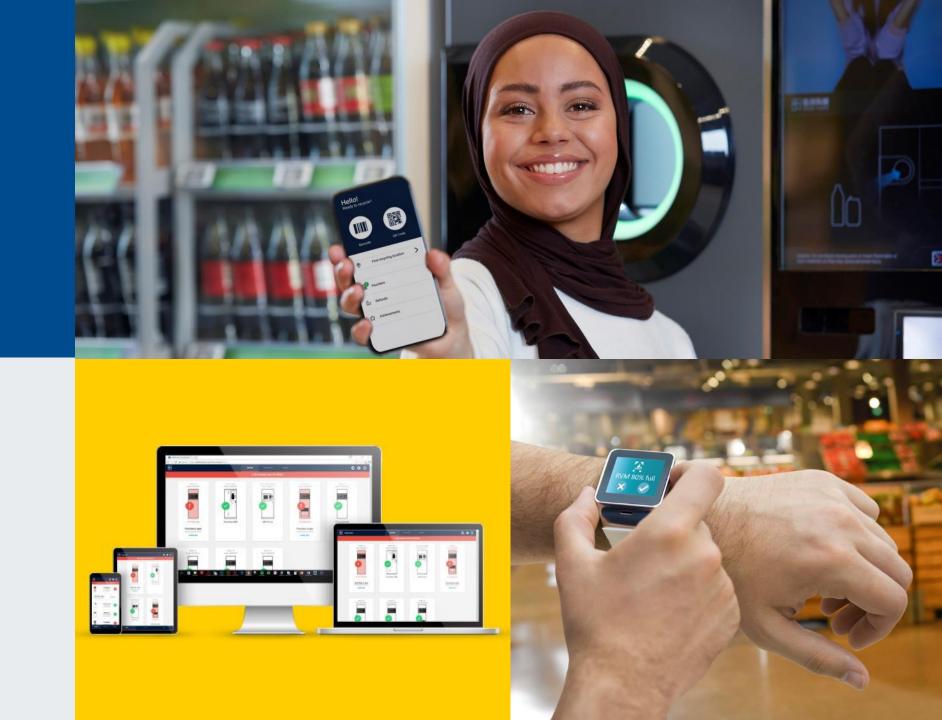
Our reverse vending portfolio





Digital tools & APIs

- Consumer Experience& Engagement products
- Operational Insights& Reports
- APIs and integration services



Service & Support





Installation



Online support



Remote monitoring



Preventive Maintenance



Training



Field Service

Customer centricity is at the core of our innovation strategy



Efficient operations for peace of mind



Strategic aspiration:
Innovate **the most attractive** solutions
and the best customer
experience

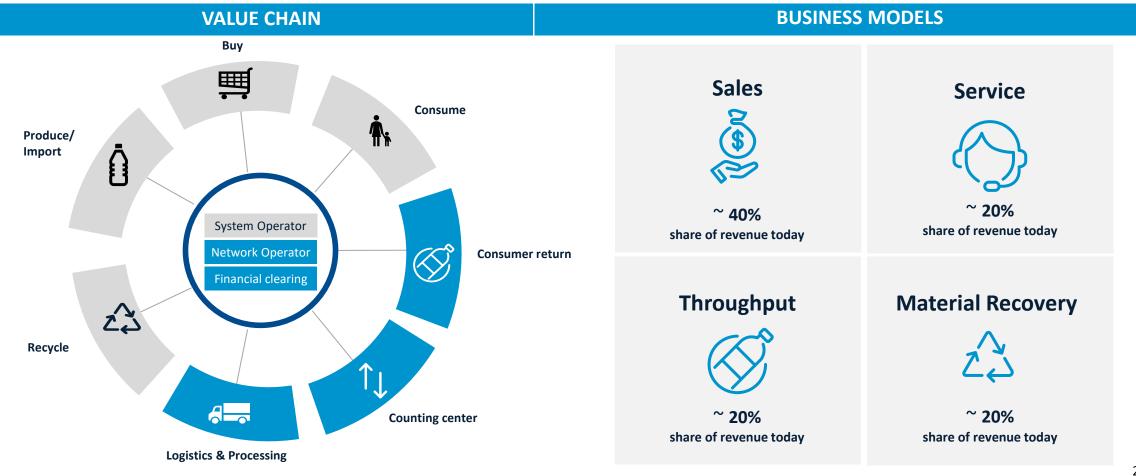
A great user experience



A smart investment for long-term benefits

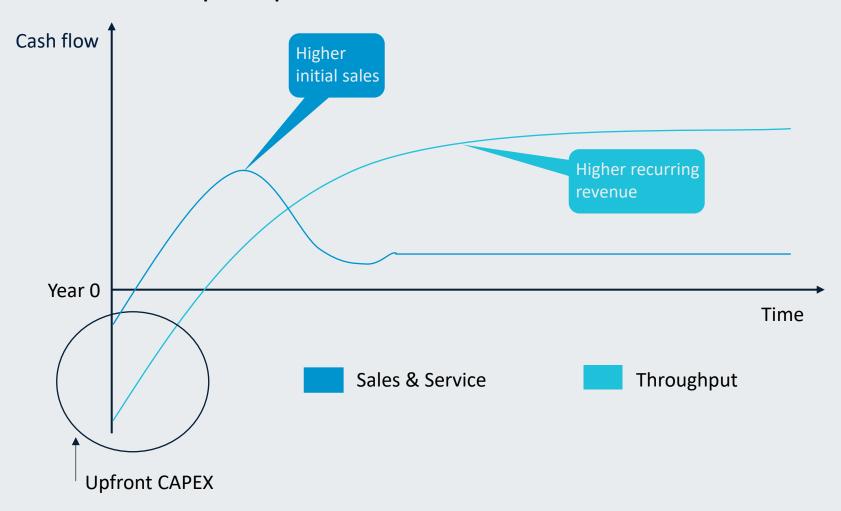
We solve customers' DRS challenges through flexible value chain positioning depending on local needs

TOMRA Collections' value chain positioning

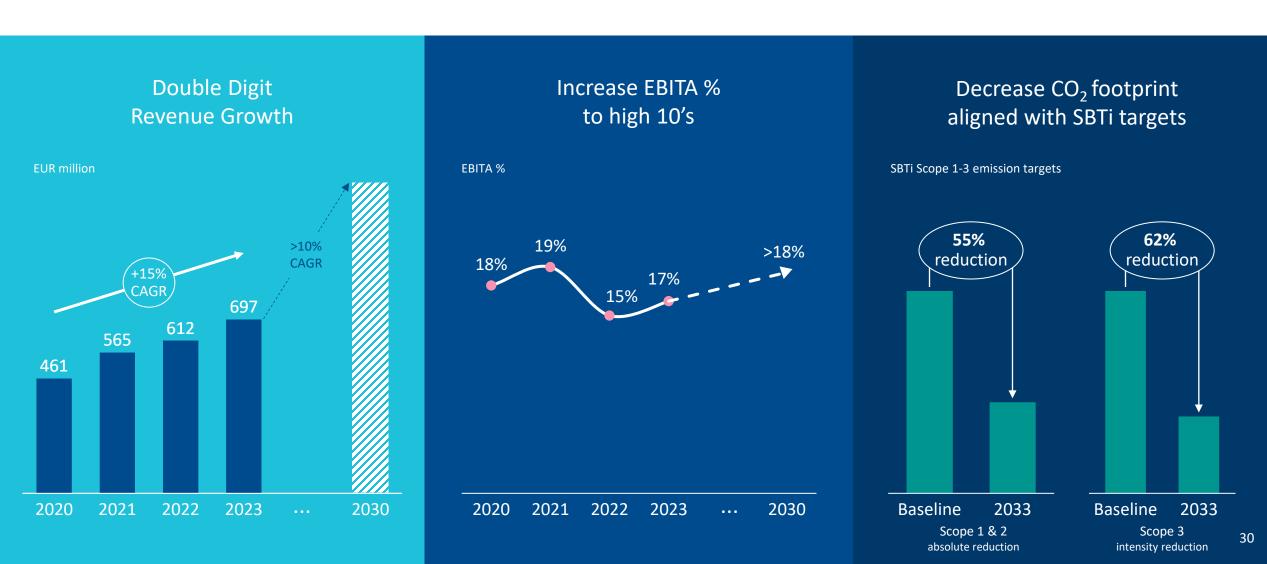


Cash flow profiles of the two main business models

Illustrative cash flow profiles per machine

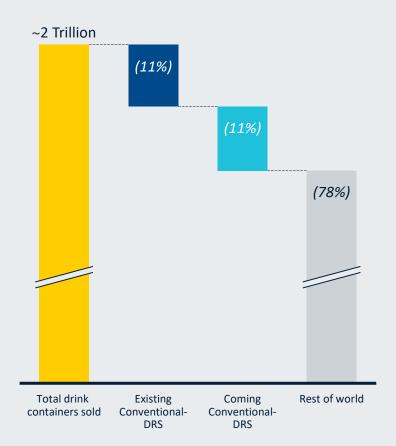


Our ambition is to continue our trend of profitable growth in Collection



Total potential to collect

(based on global sales of drink containers in 2023)





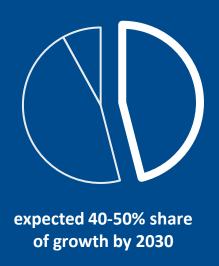
Coming conventional DRS

Existing conventional DRS

Rest of the world

We will drive significant growth in existing DRS markets by maintaining our industry leadership

EXISTING MARKETS Maintain industry leadership







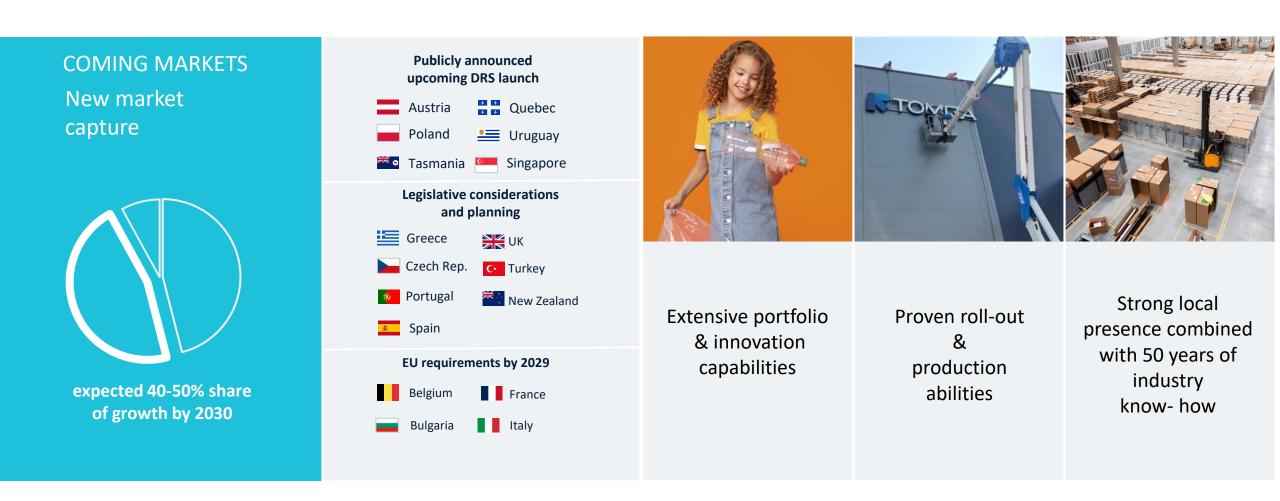


Technology leadership to trigger replacement of installed base

Solution- and business model innovation

Increased throughput & material recovery volumes

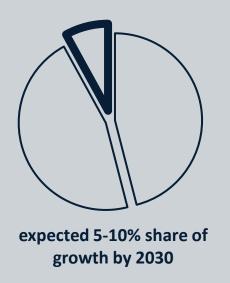
We will drive significant growth in coming DRS markets by leveraging our current strengths



We will position for growth beyond 2030 in rest-of-the-world markets by exploring alternative collection solutions

REST OF THE WORLD

Long-term positioning and investment









Holistic solution provider of circular solutions

Solution- & business model innovation

First-hand experience from pilot concepts in Middle East and Asia

Our ambition is to steadily increase the EBITA margin towards 2030 while realizing significant growth





Increase operational efficiency in existing DRS markets, both COGS and OPEX



Launch of new innovative products and volume growth in throughput markets

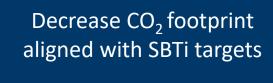


Ramp-up costs and initial warranty period reduces margin at the launch of new markets

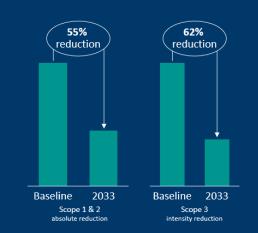
We aim to decouple our growth from our footprint



by reducing the emissions from our operations and increasing the circularity of our products



SBTi Scope 1-3 emission targets









Our 2030 ambition:

130

on the way to
Responsibly collecting 500bn drink containers
for clean loop recycling and reuse





Continued strong profitable growth



Unique **position** & **market momentum**



Maintain leadership in existing markets, capture new markets & prepare for beyond 2030

TOMRA Recycling

Giving every piece of material we sort and analyze – may it be waste, metal or ore – a value.



Giving every piece of material we sort and analyze – may it be waste, metal or ore – a value.

At least 33%

of waste is not managed in an environmentally safe manner

The world generates at least

2.24 billion

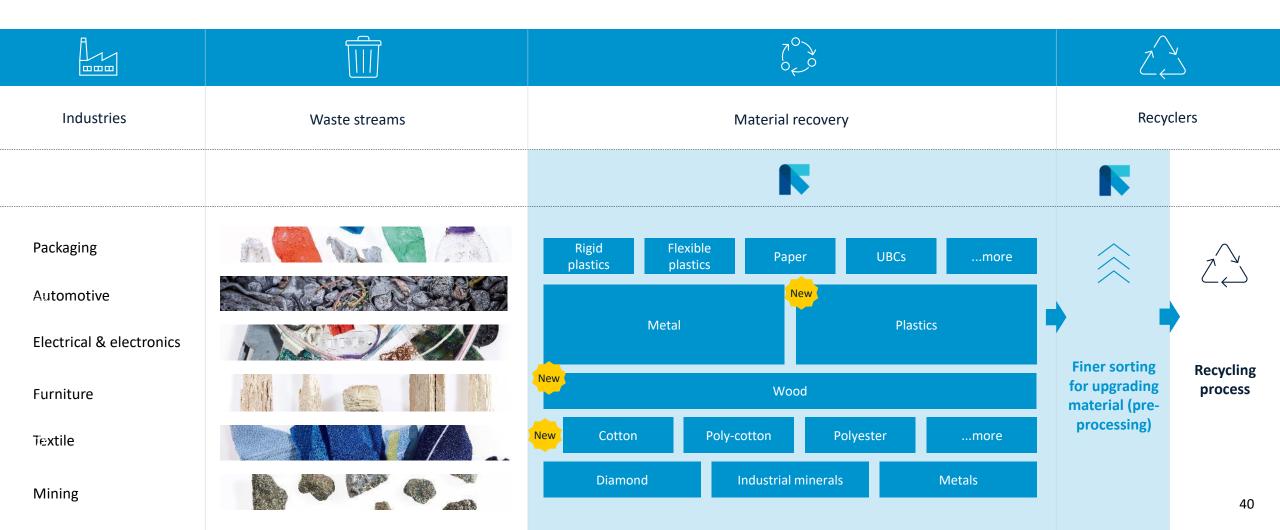
tons of municipal solid waste annually

TOMRA's smart sorting machines maximize resource recovery

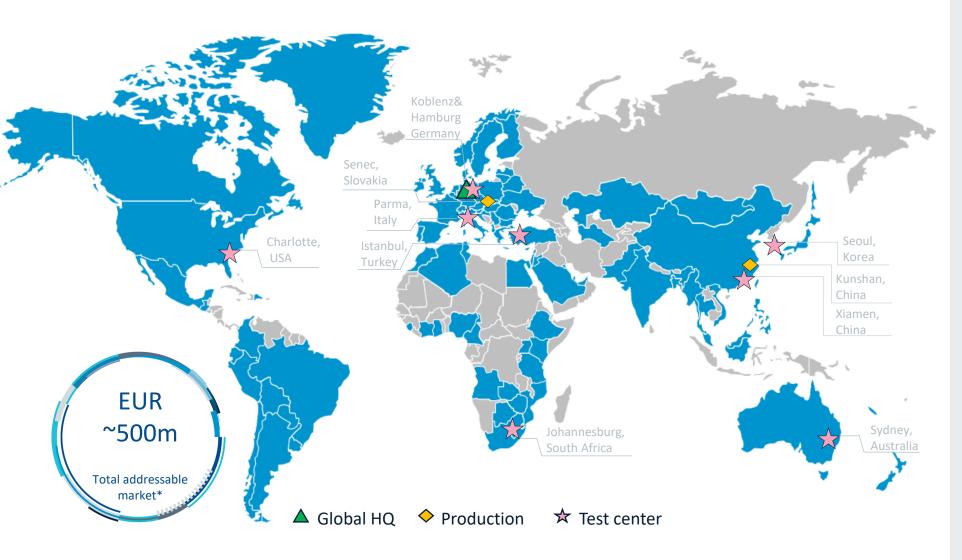


We support our recovery and recycling customers to enable circularity and decarbonization

TOMRA Recycling's value chain positioning



Global leader in sensor-based technology enabling recycling and mining



TOMRA Recycling Installed base worldwide







Total ~10 200

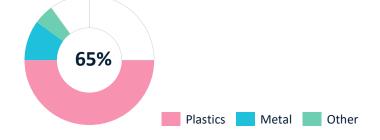
Our installed base by segment



Material recovery segment

Recover materials for recycling from both source separated and mixed household waste

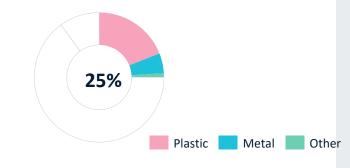
Segment share of installed base



Recycling segment

Upgrade material to pure fractions for high quality recycling

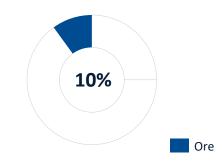
Segment share of installed base



Ore sorting segment

Recovery and ore sorting to reduce environmental impact

Segment share of installed base



Decarbonization, legislation and modernization is driving optical sorting market to grow at 8-10% until 2030



Regulation

- EPR, PPWR, ELV Regulation encourage more waste streams to be sorted
- Improvement to recycling practices requires industrialscaled sorting



Decarbonization

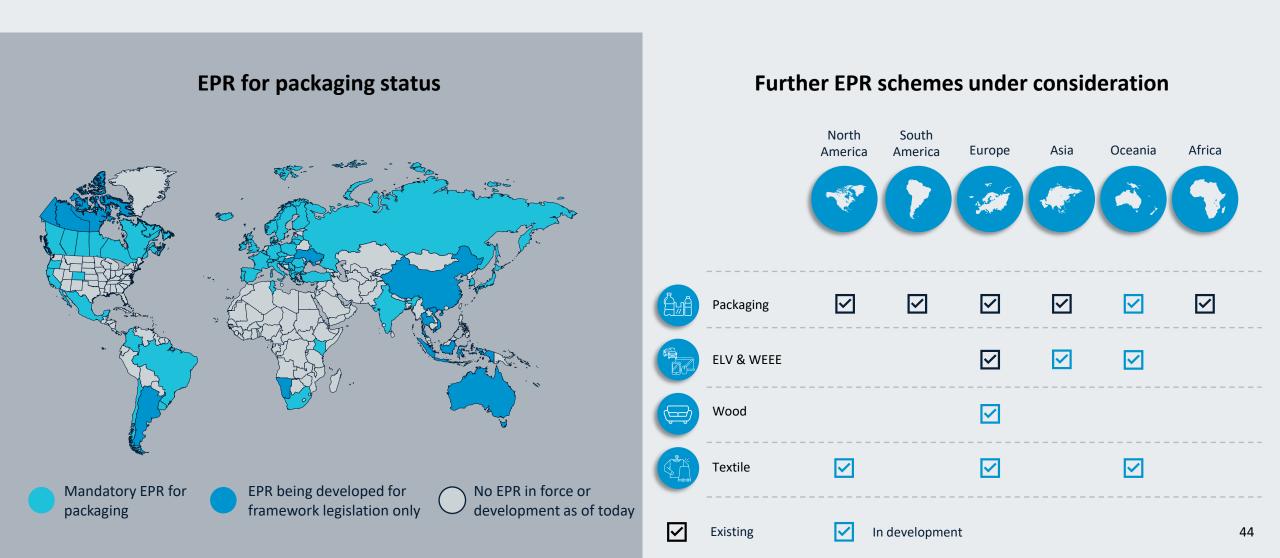
- Companies signing up to science-based targets to net zero
- Increase recycled content
- Demand for higher quality feedstock



Modernization & Automation

- Increased competition and focus on operational efficiency drive infrastructure modernization
- Labor shortage demands high degree of automation

Emergence of Extended Producer Responsibility (EPR) beyond packaging increases adoption of automated sorting



Macro drivers present abundant opportunities for the sensor-based sorting market, leading to sustained growth



Why sensor-based sorting in recycling?











Revenue increases

Raises recovery and purity rates for a consistent high-quality output stream in a growing market

Cost reduction

Automates processes and plant efficiency with low operational costs

Environmental benefits

Supports the circular use of primary resources while leading to less landfilling and pollution

Regulatory demand

Is the key to meeting increased recycled content targets demanded by regulation

Future-proof business

Flexibility to adapt to new material streams and digital possibilities to continuously enhance plant performance



The automated sorting process

Product-specific equipment design often including multiple sensors and technologies

High-tech sensors to **identify objects** on a transport system

High speed **processing of information** (material, size, color, shape and position of objects)

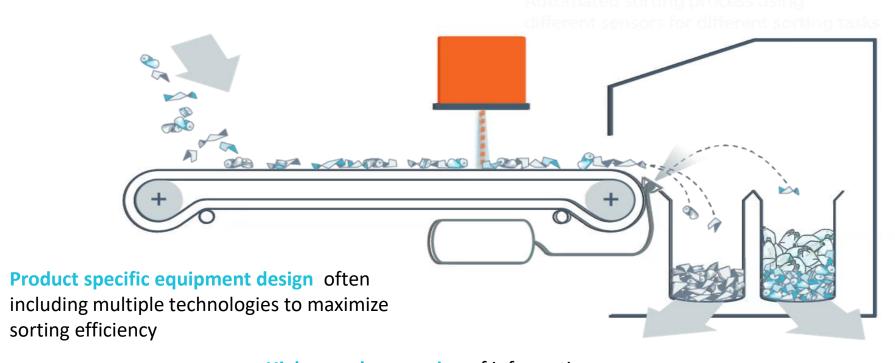
Precise sorting by air jets

Continuous **monitoring** and **improvements** using digital tools

How does sensor-based separation work?

Feeding of unsorted material

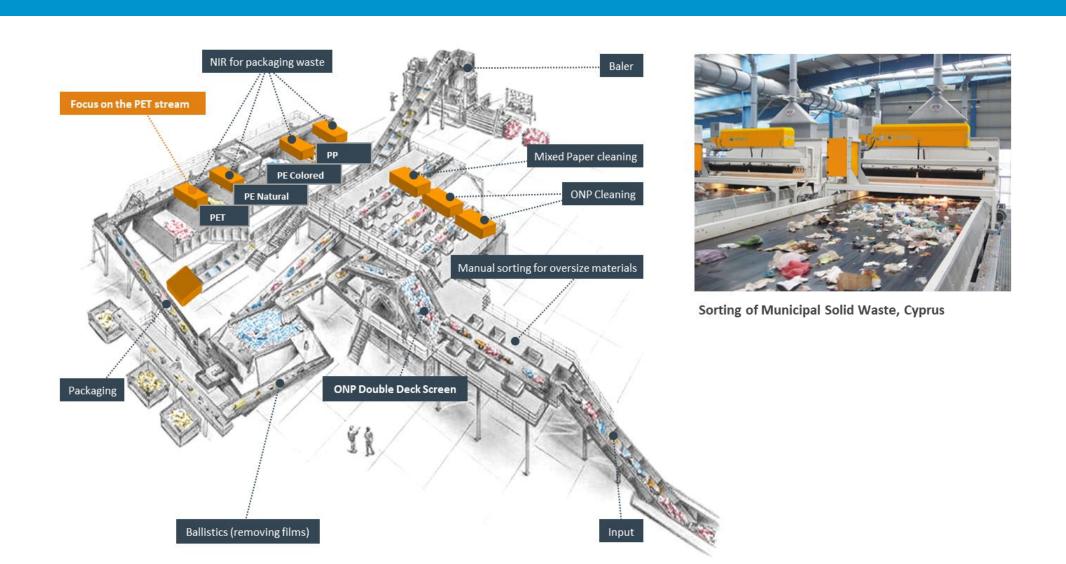
High-tech sensors to identify objects



Precise ejection by ultra fast air jets

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

Example layout of an automated sorting plant



Different sensors for a tailor-made solution



Near-infrared spectrometry (NIR)



X-ray transmission (XRT)



Laser reflection/ fluorescence laser (LASER)



Color camera (color)



MID INFRARED (MIR)



3D Laser height



Electromagnetic sensor (EM)



LASER INDUCED BREAKDOWN SPECTROSCOPY (LIBS)



Visible light spectrometry (VIS)



Deep Learning

Latest AI technology that solves challenges that cannot be solved with conventional sorting methods

FLYING BEAM™

Groundbreaking illumination technology for stable material classification and up to 80% energy savings

SHARP EYE™

Optical solution providing intelligent, automated image analysis and increases the sharpness of images

And many more!

We believe in a digital future for sorting



The most
sophisticated sorting
systems based on
traditional sensors
and the latest Al
technologies



Data-driven real-time optimization through cloud-based monitoring



Material flow analysis along key points of the sorting lines



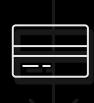
High-quality service with remote diagnostics and preventive maintenance



Reduce Downtime



Reduce Operational Cost



Maximize Throughput



Sort to Target Quality





Get the most out of your whole sorting plant with end-to-end object tracking and classification on any sorting line



Al waste analytics and compliance reporting



Real-time images of material flows

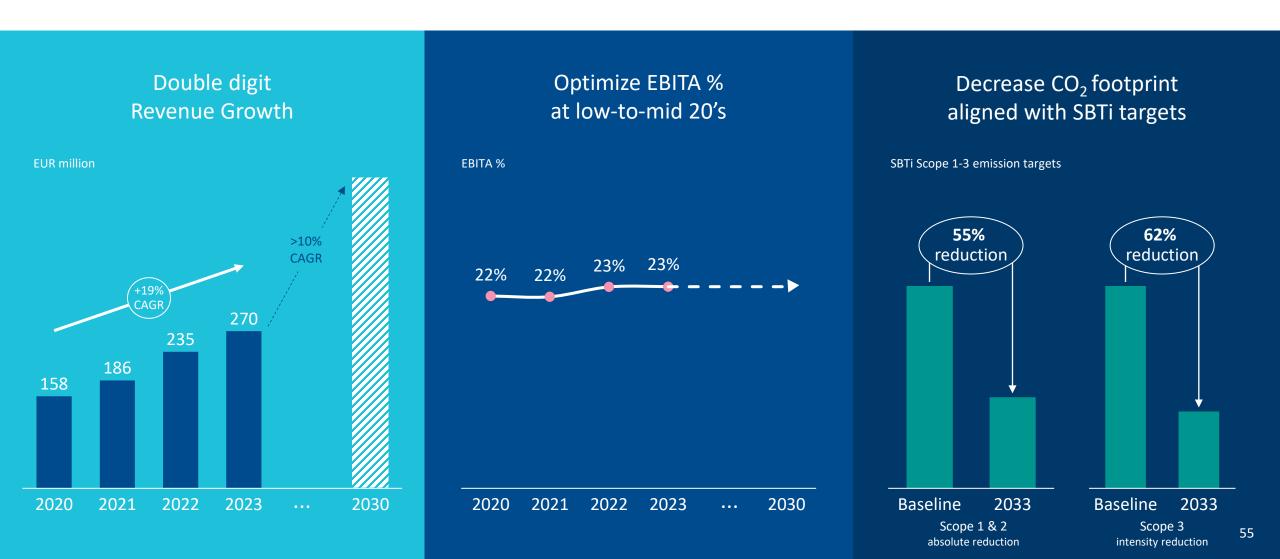


Food vs. non foodgrade plastic analysis



Integration with TOMRA machines

We target double digit revenue growth, maintained profitability and reduced carbon footprint in Recycling



We are the technology leader in an evolving recycling market

Technology leader

Value drivers











Commitment to innovation and cutting-edge research

Most extensive sensor portfolio for high-performance machines

New success with AI and LIBS technology

Advisory and close collaboration with our customers

We will transform our service offerings for superior client deliveries

Transform service offerings Value drivers











Servitization strategies and "as-a-service" productized offers

Rise of remote field service

Technology advancement & enablement

New service business models to reduce and optimize footprint



Key takeaways



Demand for more and better feedstock drives sorting demand



We are the technology and market leader



We target double digit growth with strong profitability



Our 2030 ambition:

Enable additional tons material for circularity

180 M

to give every piece of material a value by sorting and analyzing it and enabling its best use

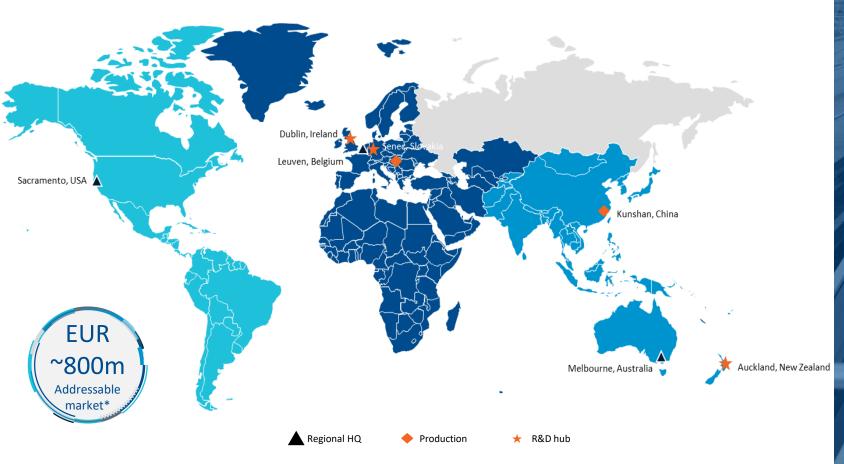


TOMRA Food

Our sorting and grading solutions help to maximize food safety and minimize food loss by making sure Every Resource Counts.



We are the global leader in food sorting and grading





Our technology optimizes the value of food for producers and packers

TOMRA Food's value chain positioning



Our technology serve multiple purposes while enhancing value for producers and processors

Reduce food loss and **Food safety** Food quality **Optimize Storage** Increase Yield

Focus segments

We are focused on high value market segments, where technology can differentiate



Kiwifruit

Blueberries







Apples

Processed fruit

Nuts









Cherries

Processed vegetables





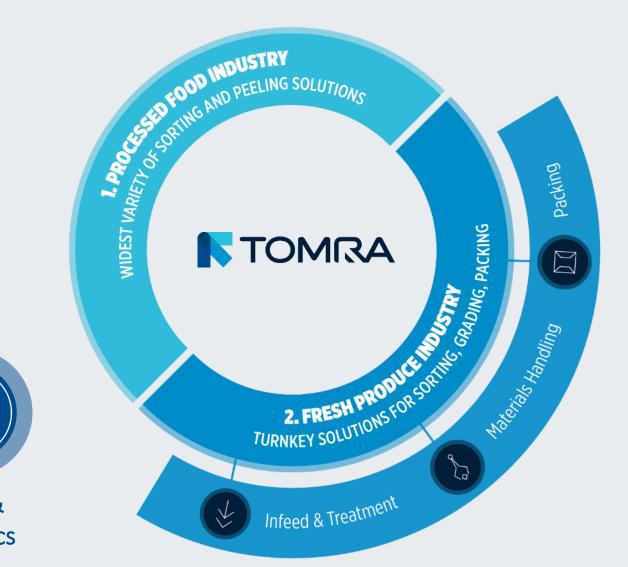




Leading technology









Artificial Intelligence



Data & Analytics



Service & Support

Our technology detects a wide range of parameters

Visible



Blemishes

Objects with spots or other (small) blemishes are removed



Shape & Size

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



Damage

Broken, split and damaged objects are detected and removed



Color

Grading by color or removal of discolorations in mono and mixed color material

Invisible



Toxins

Removal of produce contaminated with aflatoxin



Structure

Removal of soft, molded or rotten food



Density

Detection of density differences



Fluo

Based on the chlorophyll level present in produce defects are removed

Both



Defects

Removal of visible and invisible small and substantial defects



Foreign Material

Removal of foreign material in a material stream, e.g. insects, glass, metal, wood & plastics



Biometric Characteristics

Sort based on chemical composition such as water, protein content, sugar content (Brix) and dry matter

Benefits for our customers

 Increased foreign Material (FM) Detection

- 2. Sort processed food accurately and maximize yield
- 3. Simplify operator interactions



Increase food safety by eliminating FM that is loose, or on the surface of an object

Avoid costly recalls or reputational issues



Best in class technology to sort small and sticky objects

Smart detection and analysis minimizes false ejections

Quickly achieve the exact detection sensitivity and quality required



Intuitive interface enables operators to quickly master operation

Time and skill level required to complete tasks is reduced

Standard interface between TOMRA machines makes it easy for operators to rotate between machines

Our platforms Solutions for Fresh and Processed produce

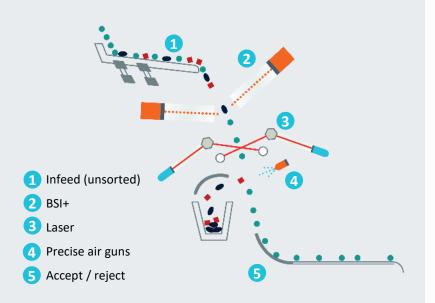


Integrated sorting solutions for Fresh Produce

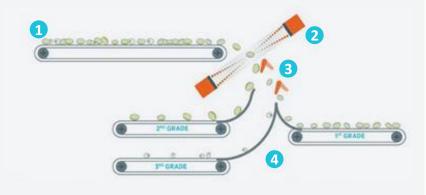


Working principles in Food sorting

Chute or Channel sorter

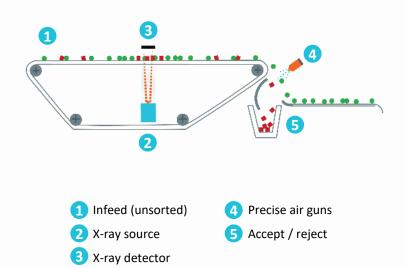


Air inspection

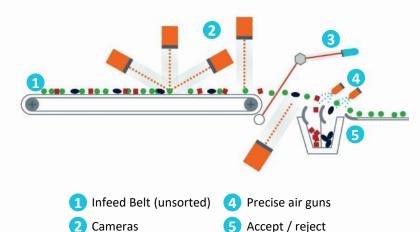


- 1 Infeed belt (unsorted)
- 3 Intelligent finger ejectors
- 2 Full width NIR and Color Vision sensors
- Accept/reject

Xray sorter

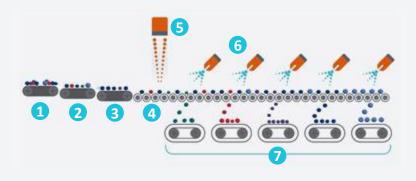


Belt inspection



Singulated grading

3 Lasers



- 1 Accumulation conveyor
- 2 Singulation conveyor
- 3 Acceleration conveyor
- 4 Roller rotation units
- 5 Cameras and NIR sensors
- 6 Gentle tipping or air jets
- Specified grade

Global trends underpin market acceleration that fuel the rise of automated sorting technology



Demographics

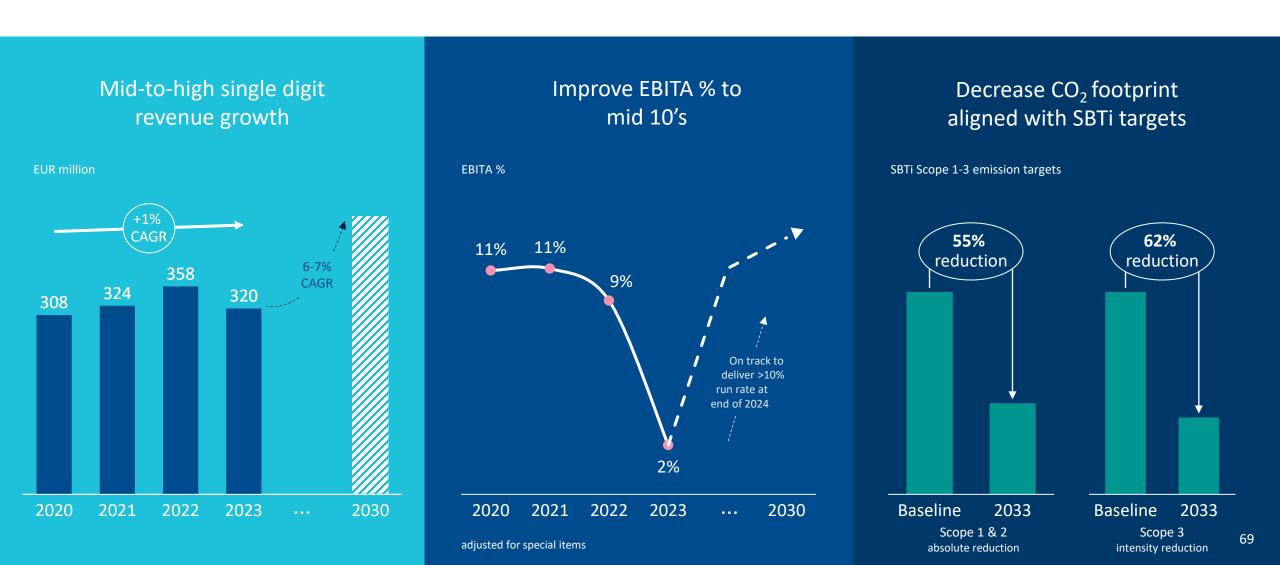
- Population growth driving increased demand for food
- Rising middle class change dietary habits



Modernization & Automation

- More detailed requirements
- Pressure on labour cost and availability
- Machine efficiency to increase yield
- High rate of technology change

First, we improve profitability then target growth



Phase 1 is focused on profitability and customer satisfaction

1. Restructuring



Value drivers



Focus & simplify our portfolio and operations to reduce complexity



Establish local partnerships to complement our solutions, streamlining delivery and installation



Improve service performance, increasing aftermarket share of wallet



Implement a platform approach to speed up time to market of new products

Phase 2 will be about profitable growth through technology leadership and service innovation

2. Profitable Growth



Value drivers



Innovative service products that add value across the whole customer life cycle



Expand sorting opportunities to increase share of wallet of our customers

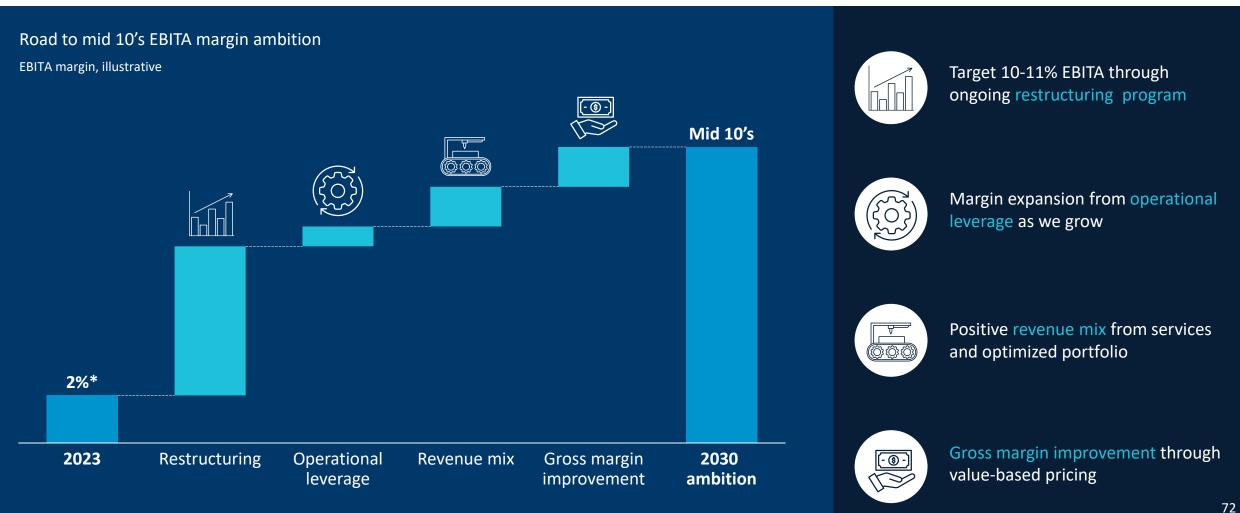


Digital and data offerings that create new value streams for our customers



Sensor technology development to open up new segments and opportunities

We start with our restructuring program but see further opportunities to improve our margin





Key takeaway

We are the **global leader** and we aim to strengthen this position by delivering leading customer satisfaction

We will **complete the restructuring**, delivering on profitability

We will then deliver **profitable growth** through **technology leadership and service innovation**



Our 2030 ambition:

Contribute to reduce the

30%

of food loss and waste while enforcing food safety and maximizing the yield for our customers

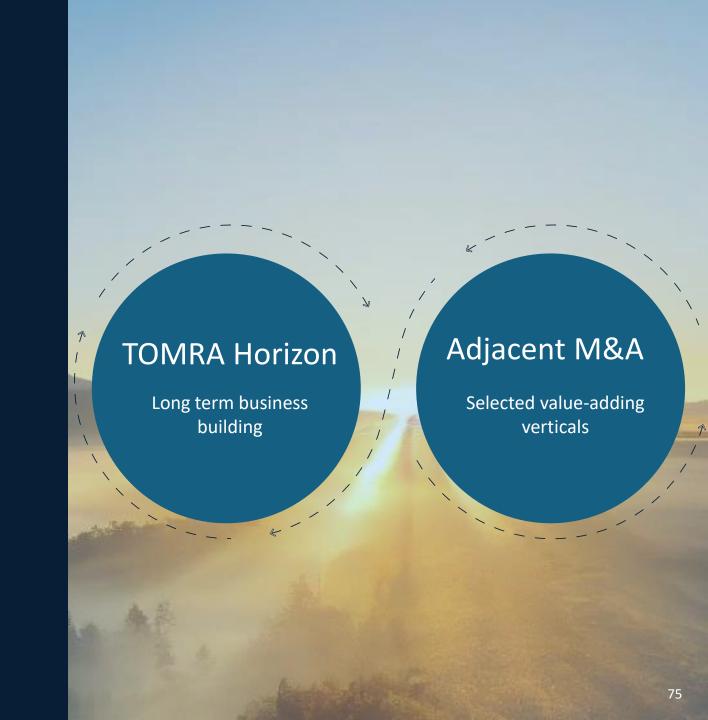


Develop Adjacent Business

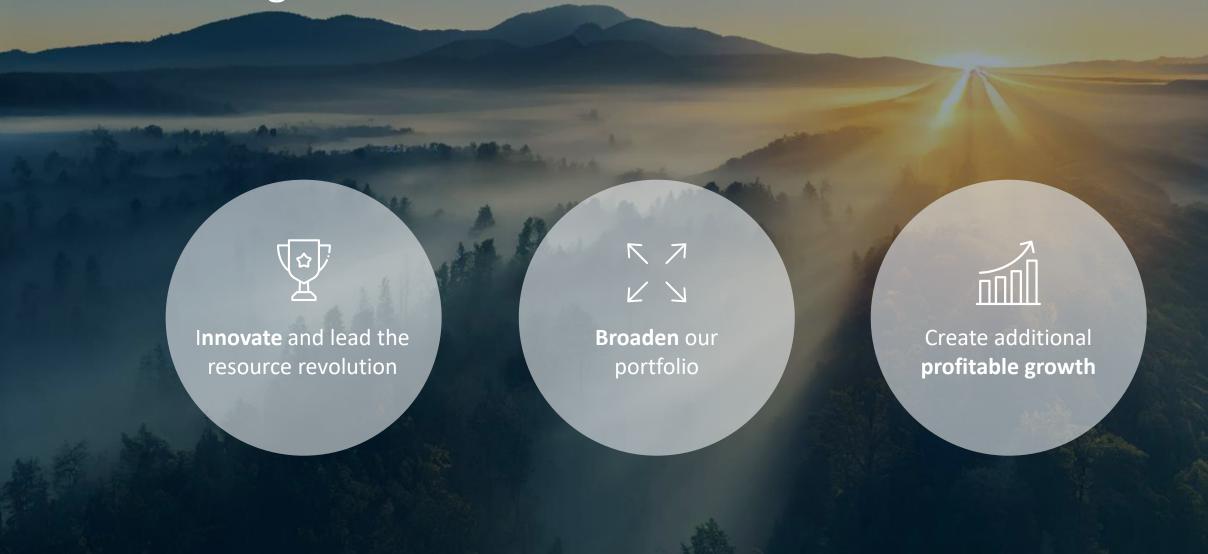


Develop adjacent Business

Exploring new adjacent business opportunities and **alternative** business models leveraging our technology and decades of know-how in order to **facilitate and accelerate** the transition to circular economies.



Horizon is a vehicle to broaden the TOMRA portfolio and create long term value



Business models solving global issues, with the **potential to become a sizeable business**

Within market and technology that is **ripe for scaling** over the next few years

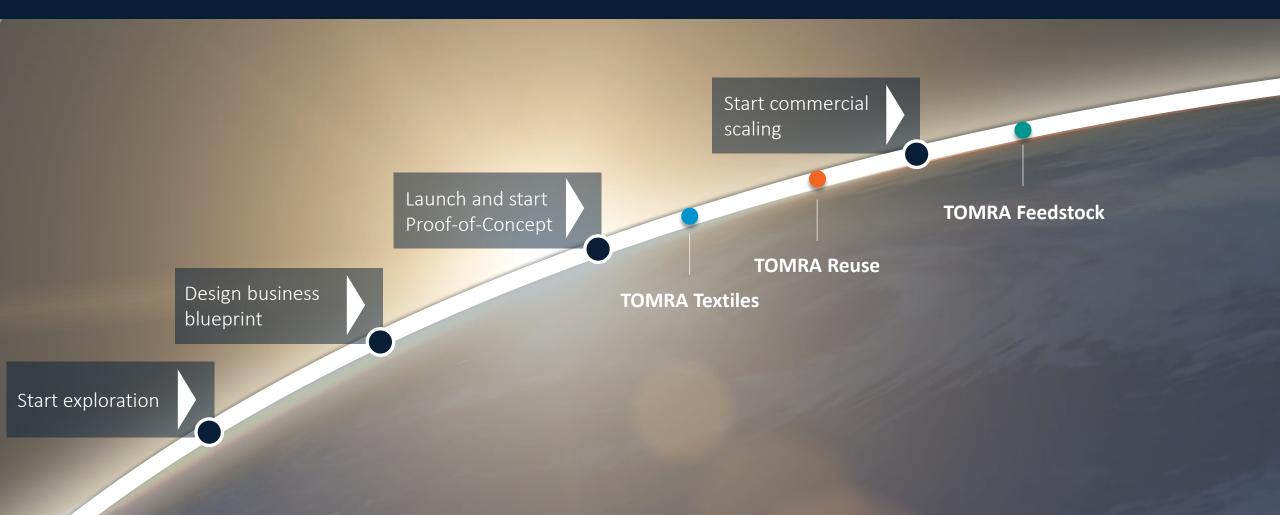


Opportunities where TOMRA has a competitive advantage to succeed

Potential for **strong capital returns** supporting TOMRA to deliver on our Group targets



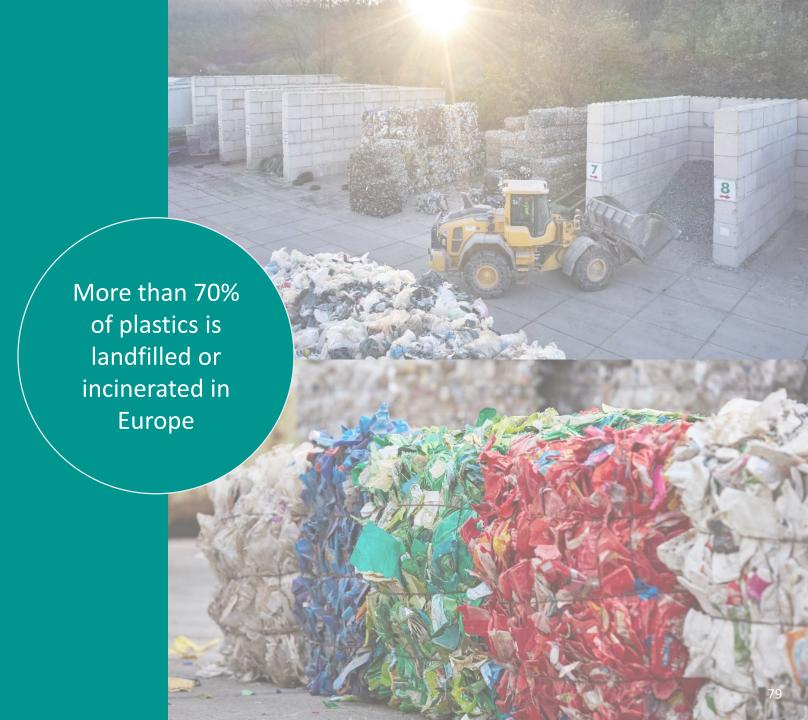
Our three ventures are past the business blueprint phase, ready to demonstrate and scale technology



TOMRA Feedstock

TOMRA Feedstock utilizes our waste sorting technology to create new value chains that recover plastic waste which is typically incinerated or landfilled today.

Through advanced sorting plants, we turn this material into high quality plastic feedstock for closed loop recycling.



TOMRA Feedstock

Post-consumer plastics waste value chain in Europe



Key needs to believe

- 1 Regulatory push for more plastics recycling
- Industry committing to more recycled content in products
- Advancements in mechanical and chemical recycling technology and capacity



TOMRA Textiles

TOMRA Textiles is on a mission to close the gap between waste textiles and fiber-to-fiber recycling, using our unique sensor-based sorting technology to create solutions and develop value chains that enable textiles circularity at scale.





TOMRA Textiles

Key needs to believe

- Regulatory push towards a circular textiles value chain
- Recycling technologies matured and scaled for main fiber fractions
- Brands committing significant off-take for recycled material





TOMRA Reuse

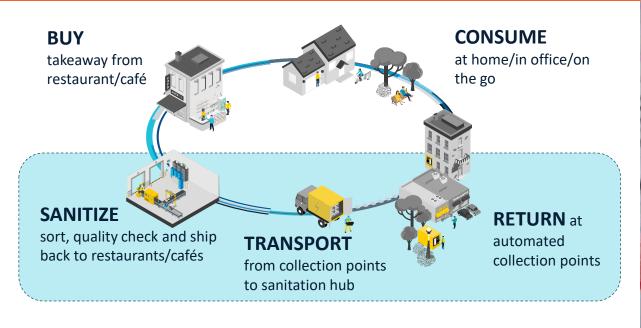
TOMRA Reuse leverages our reverse vending technology to create open managed systems and complete infrastructures for reusable takeaway packaging for cities and events around the world – reducing waste and optimizing resources in urban areas.





Key needs to believe

- 1 Regulations on city, country or European level
- Reuse solution is convenient for consumers, ensuring high adaption
- Reuse solution is convenient for businesses reducing the barriers to shift to Reuse







2035 north star



TOMRA Feedstock

Recover 2 mton mixed plastics from incineration or landfill, making it available for closed loop recycling



TOMRA Textiles

Enable 1.5 mton
fiber-to-fiber recycling by
scaling automated sorting
and shaping circular
standards



TOMRA Reuse

Avoid 400 million single use takeaway packaging annually through our reuse systems

We will target selective adjacent M&A plays to diversify and strengthen TOMRA





M&A to diversify and strengthen the TOMRA portfolio and create additional value



Capital allocation framework

by strong business cases supporting TOMRA to deliver on our Group targets



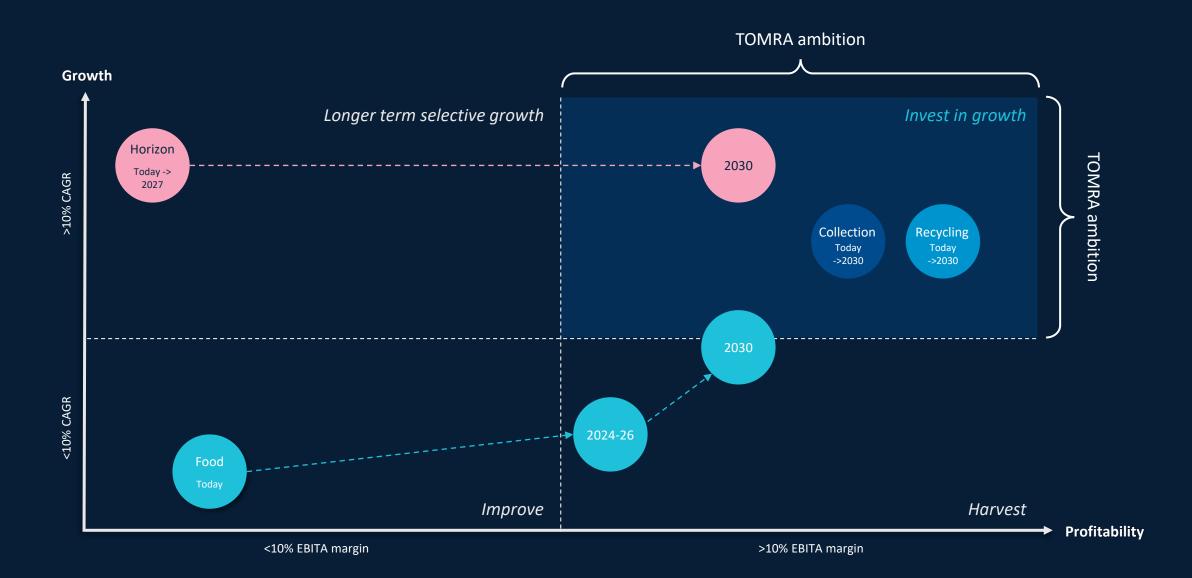
What we look for

Purpose driven businesses well positioned in high-growth markets where technology is a key differentiator

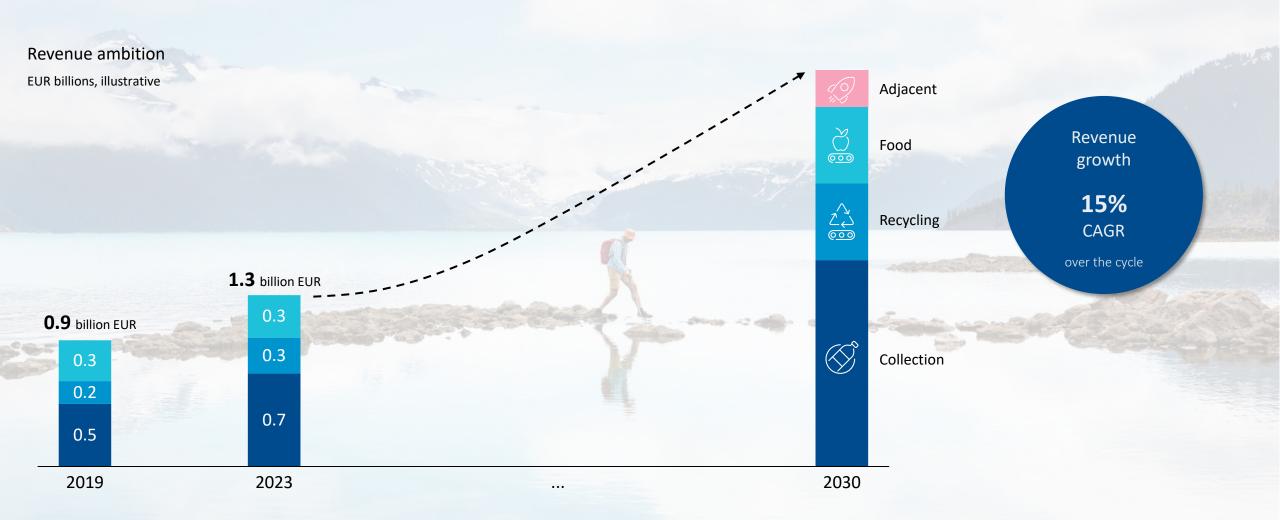
TOMRA Financials



We are positioning our portfolio for profitable growth

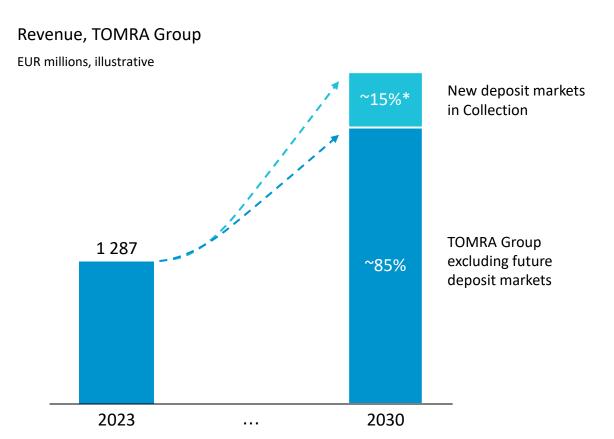


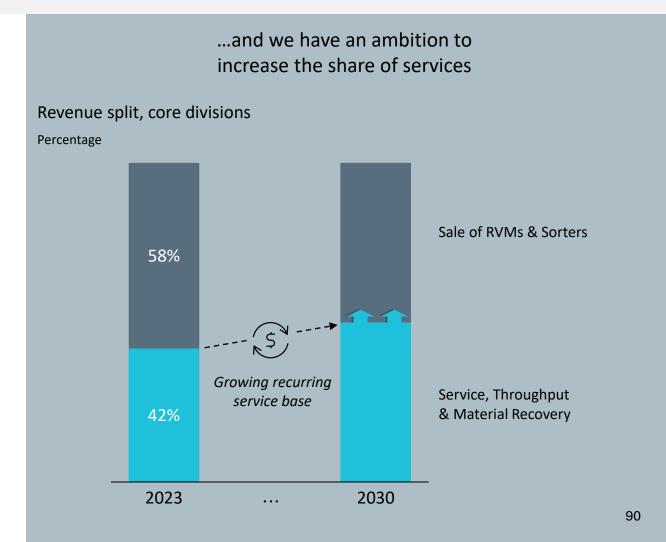
We remain committed to our ambition of 15% annual growth



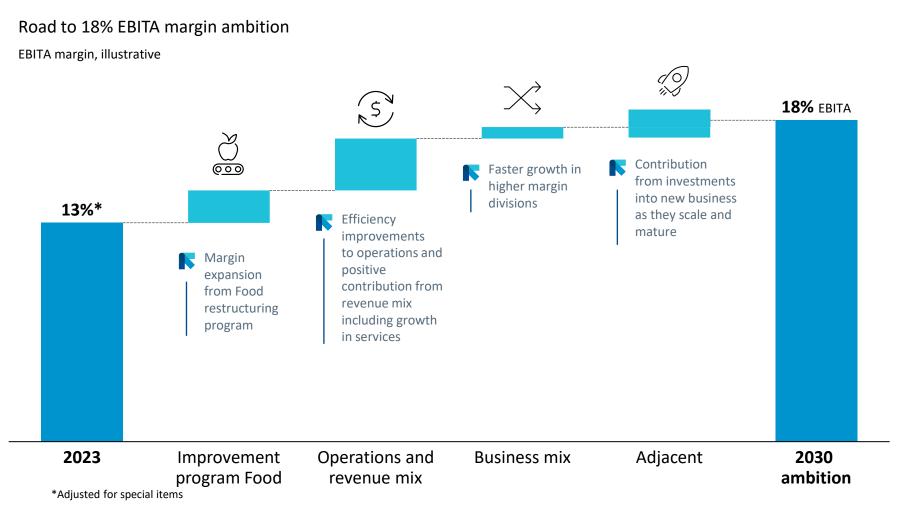
We have a solid underlying business generating steadily growing revenues

There is significant growth potential for TOMRA even before considering new deposit markets in Collection...



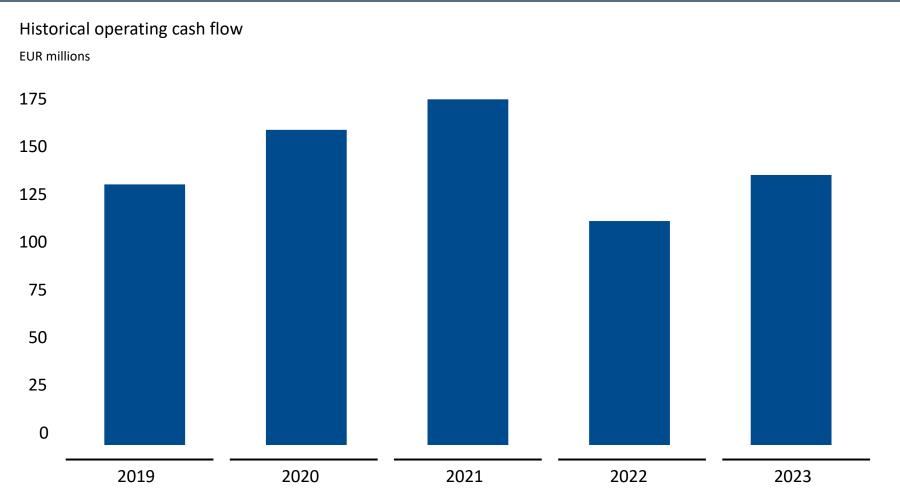


Our profitability target stay firm, and we will increase EBITA to 18% by 2030



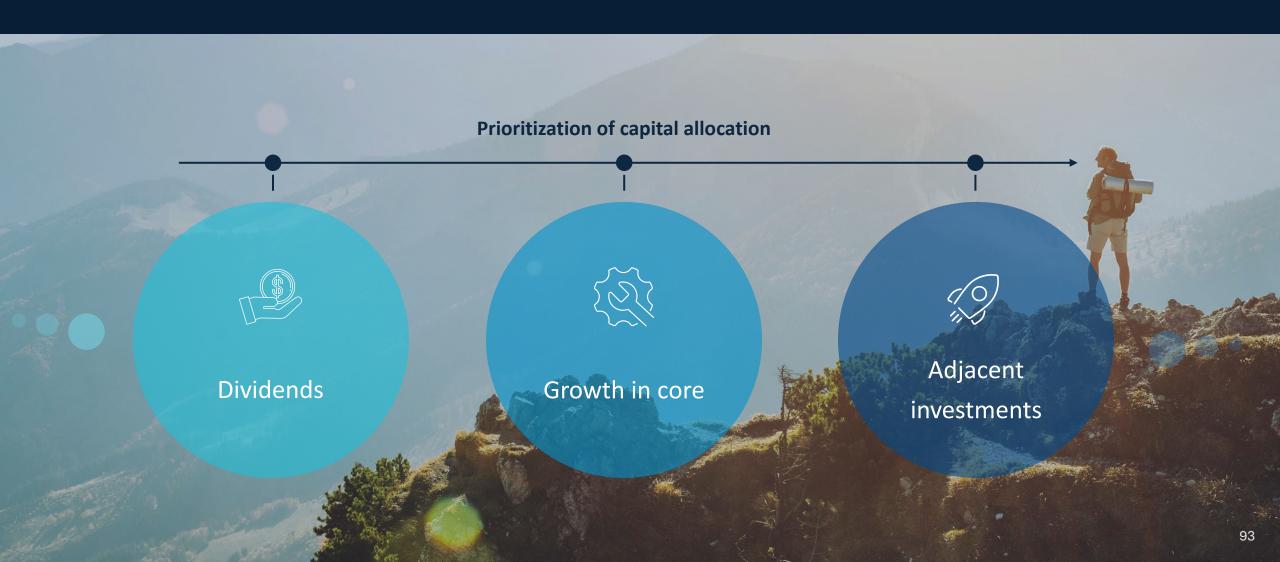


TOMRA has historically generated robust cash flows supporting our capital allocation

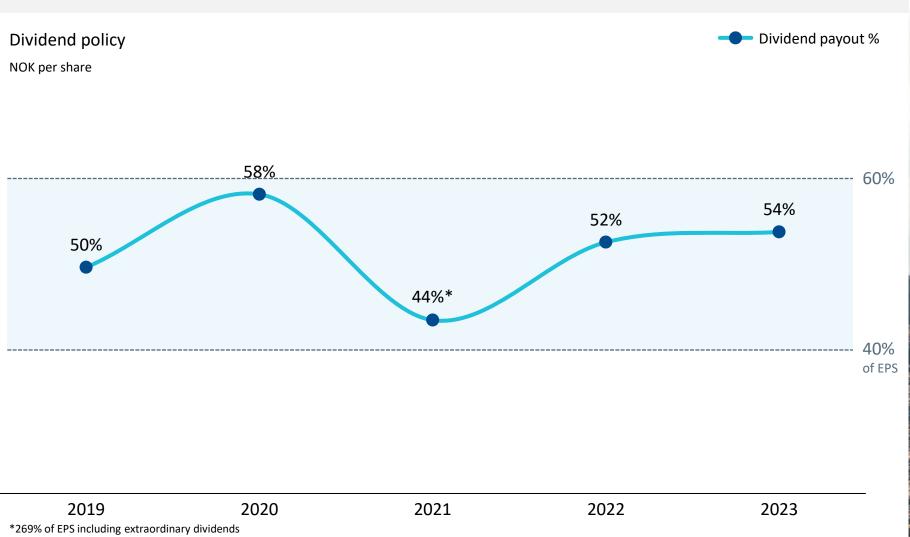




We have a disciplined capital framework and allocation prioritization



Our dividend policy is a cornerstone of TOMRA and will be kept unchanged

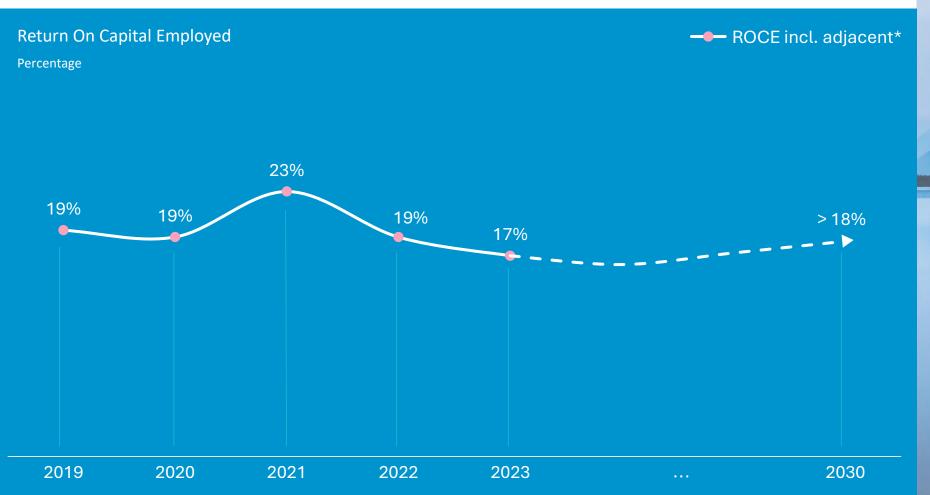




We plan to invest in accelerated growth within our core divisions while supporting selected adjacent opportunities

Future oriented spending Accelerate growth in Core Maintenance Adjacent Maintenance CAPEX spend Future oriented spend* Future oriented spend ~4-5% ~6-8% **Project dependent** of revenues of revenues Capital light expansion in core business where Investment principle based on a Maintaining a stable maintenance strict framework that is dependent we support technology leadership through capex driven by installed base and R&D, tech innovation and ramp-up of new on available free cash flow used to mainly allocated to Collection markets grow Horizon and for selective M&A

We are focused on reaching a ROCE above 18%





Maintaining investment-grade status is important for us and we expect our rating will remain stable

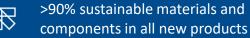


We are committed to reach our sustainability targets across material topics by 2030





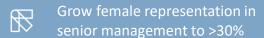
Sustainable product design



>50% of our products are circular at their end of live



Employee value proposition



Improve employee satisfaction with top quartile NPS score

Attract diverse talents from all facets of humanity, with a goal of 50% women and men joining annually



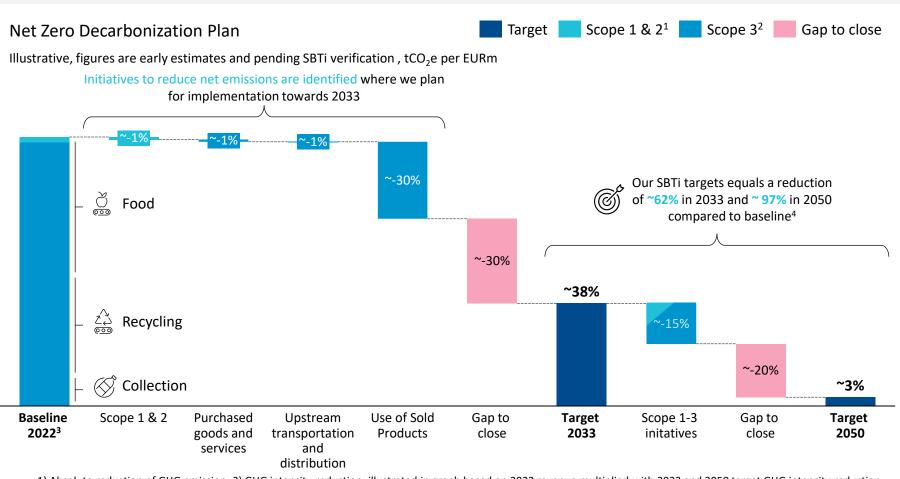
Climate impact

100% renewable electricity

>80% reduction in operational transport emissions

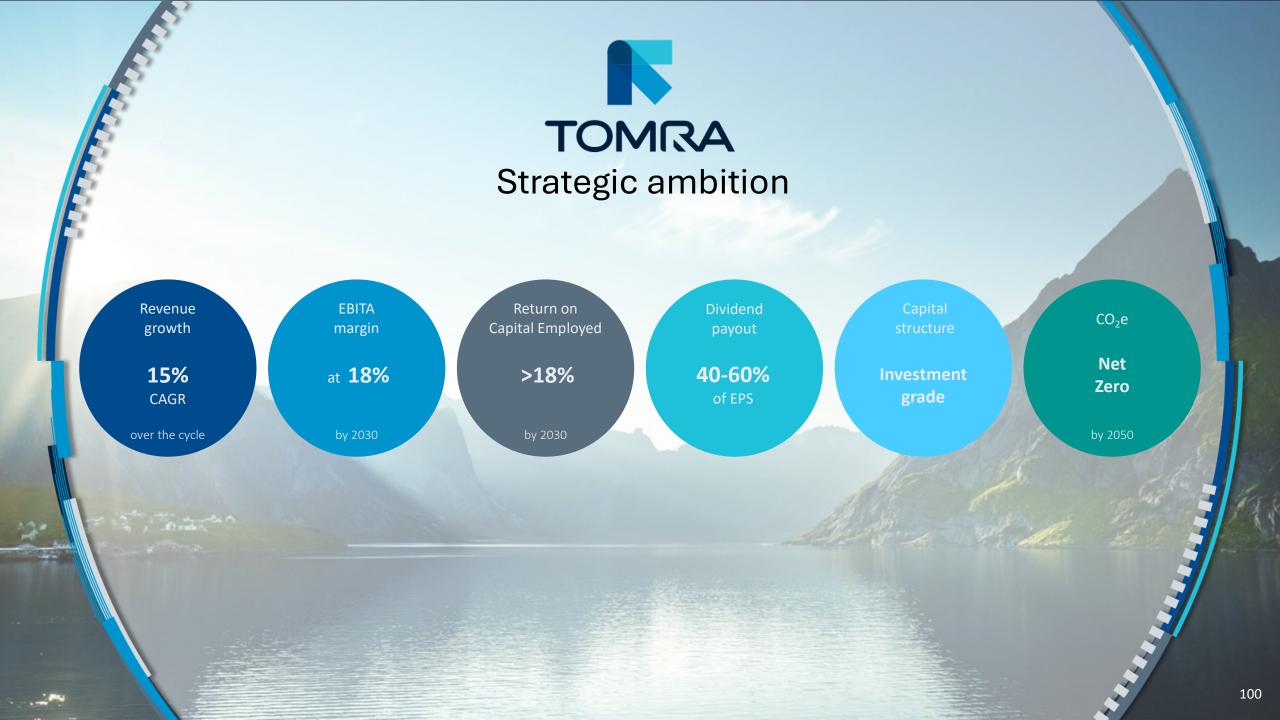
Commitment to Net Zero emissions and setting SBTi targets

We have developed our SBTi targets as part of our pathway to reach net zero



¹⁾ Absolute reduction of GHG emission, 2) GHG intensity reduction, illustrated in graph based on 2022 revenue multiplied with 2033 and 2050 target GHG intensity reduction per EURm, 3) Baseline estimated at ~1.5m tCO₂e, 4) Target reduction percentages when holding 2022 revenue constant to illustrate GHG intensity reduction for Scope 3 at current baseline level – For instance Scope 3 emissions could be unchanged in 2050, but the GHG per EURm revenue will be reduced by 62% in 2033 and 97% in 2050 for Scope 3 following revenue increase





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