

# Circular innovations

Capital market event

Tuesday 12 October 2021

Please watch the full video on [www.renewi.com](http://www.renewi.com)



# Disclaimer

This presentation contains certain forward-looking statements with respect to the operations, performance and financial condition of Renewi. These forward-looking statements are subject to risks, uncertainties and other factors which as a result could cause Renewi's actual future financial condition, performance and results to differ materially from the plans, goals and expectations set out in the forward-looking statements. Such statements are made only as at the date of this presentation and, except to the extent legally required, Renewi undertakes no obligation to revise or update such forward-looking statements.

These slides were presented by the management team of Renewi on the 12 October 2021 at the Circular Innovations capital markets event.

They highlight only some of the key messages and to fully understand this presentation we would recommend that you read it in conjunction with reviewing the video of the event. The video is available at <https://www.renewi.com/en/investors/capital-markets-event>

# Adam Richford

Head of Investor Relations



# Event details



## Timings

- 100 mins Presentations and virtual tours
- 30 mins Q&A panel
- 45 mins 3 virtual coffee rooms

# Sofie de Vlieger

Head of marketing communications & branding



# Circular innovations

- |                       |                    |
|-----------------------|--------------------|
| 1. Otto de Bont       | Circular Economy   |
| 2. Klaas van den Berg | Organics           |
| 3. Marc den Hartog    | Plastics           |
| 4. Theo Olijve        | Building materials |
| 5. Mark Thys          | Advanced sorting   |
| 6. Bas van Ginkel     | Innovation process |
| 7. Toby Woolrych      | Financial impact   |



# Otto de Bont

Chief Executive Officer

Introduction to Renewi's Circular Innovations



# A climate emergency leading to a global focus on ESG

- IPCC report confirms climate change is caused by carbon emissions
- We are not on track to meet our carbon reduction goals
- Pressure on politicians to accelerate the carbon transition
- ESG comes to the forefront for investors and companies
- Social demand for corporates to improve their sustainability



*Flooding Netherlands and Belgium*

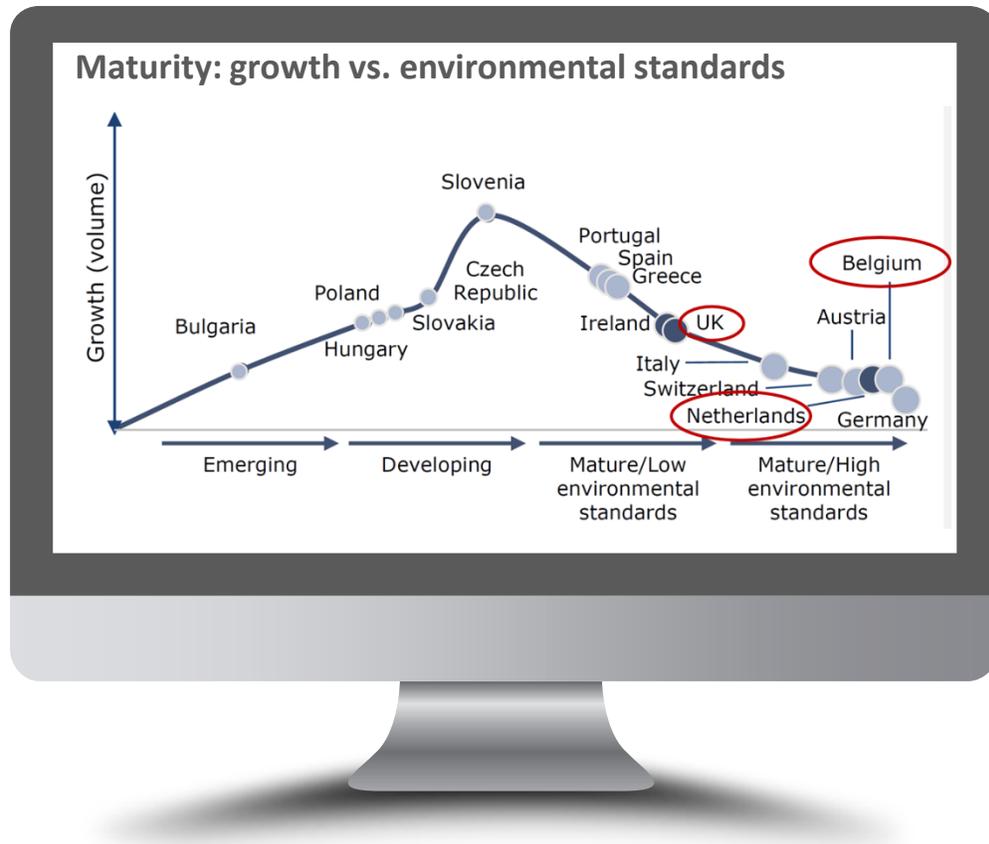


# Our markets are evolving fast in response

EU is pushing to increase recycling

- Stronger restrictions on landfill enacted into laws
- Reduction of incineration with increased taxation
- Legislation to increase recycling rates (e.g. Vlarema)
- Stimulate use of recyclates  
(In 2030 NL 50% and BE 35% circular and EU Fit for 55)

**There will be a sustained increase in demand for recyclates and their transition to being a scarce and valuable product**



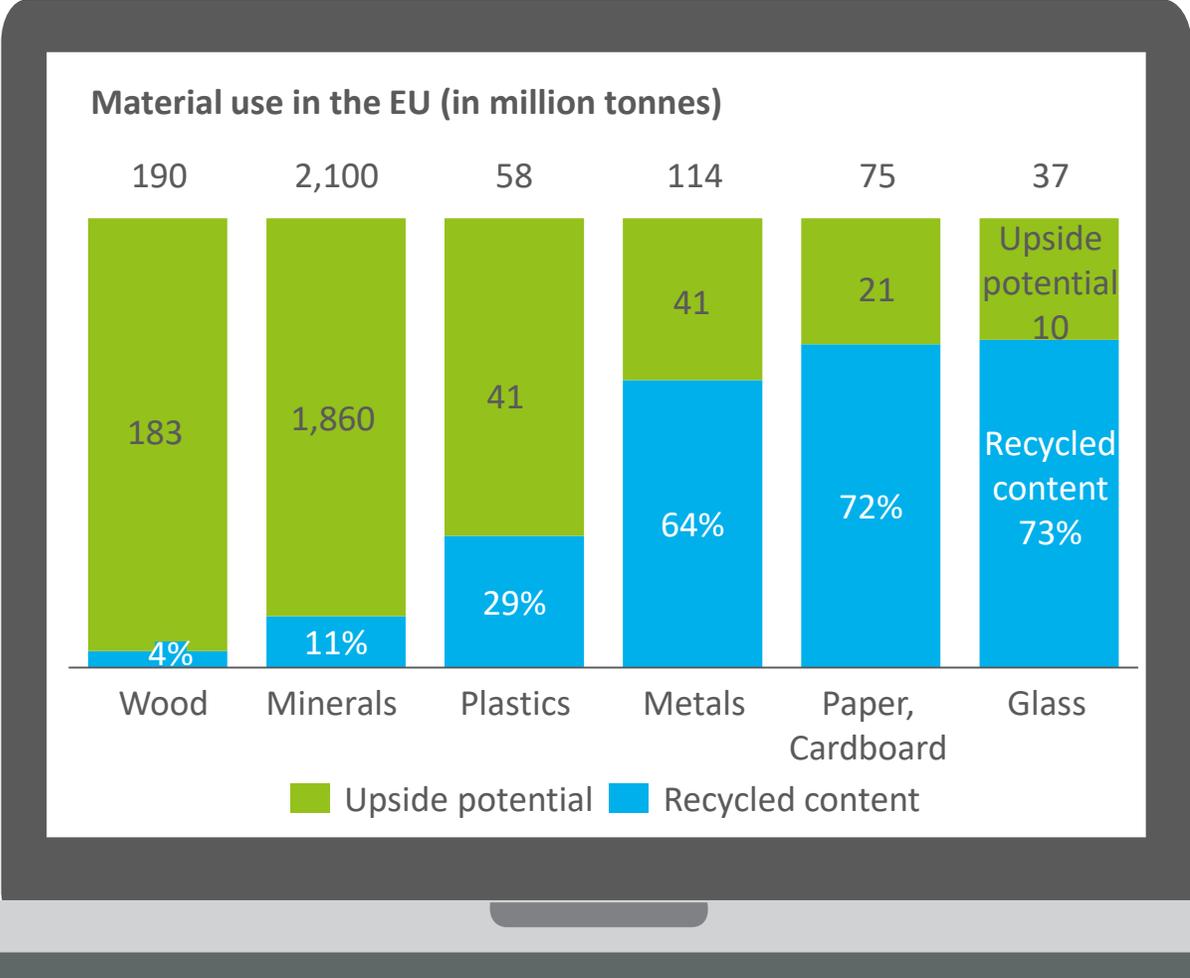
## We operate in advanced circular economies

- Netherlands and Belgium are mature markets with high environmental standards
- Environmental standards continue to increase, requiring more advanced recycling technology/processes
- UK is less mature than Netherlands and Belgium in terms of maturity and standards, still making the transition from landfill to incineration (the phase before a recycling economy)

**The transition to an advanced circular economy opens opportunity for our business model of recycling**

# Significant upside potential for recycling

- Wide variation in use of recycled fraction across key material streams
- Across each stream, large potential to grow to maximum recycled content
- NB: volume perspective only – large variations exist in price per tonne (e.g. low for minerals relative to plastics or metals)



# Renewi has a long track record as a recycling innovator

- Renewi has for years worked with innovative customers and partners to provide new closed loop and circular solutions
- We work with Universities, entrepreneurs and other corporates
- We have multiple innovation models: direct investment, co-investment in joint ventures, sourcing of selected waste (raw materials) and logistics support
- We have an established innovation process to continually generate new ideas, screen them and support them



RetourMatras



Peel Pioneers



Purified Metal Company



Forz Glaze



# Innovation is central to our growth strategy

- Our markets are evolving fast and our customers are welcoming innovative
- Innovation is a core value and is central to our vision as a waste-to-product company
- Mission 75 launched to increase recycling rate from 65% to 75% by end of 2025
- Increased recycling and higher quality can have a significant impact on the spread we earn from the materials we handle
- We have a target to deliver €20m of increased EBIT from our innovation pipeline by end '25
- We committed €80m of growth investments in the first half of this year to underpin this
- Today we bring to life an important part of innovation portfolio that will meet our current and future growth aspirations

# Innovation pipeline

	Opportunity
ATM Gravel sand & filler	€€€
Organics: bio-gas production	€
Organics: bio-gas to Bio-LNG	€€
Expansion plastic recycling	€€
Vlarema 8: Advanced residual waste sorting	€€€€€
<b>Capital markets event</b>	<b>€€€€€+</b>
Mattress recycling	€€€
Feedstock for chemical recycling of plastics	€ - €€€
Polyurethane recycling	€ - €€€
Wood flake for low-carbon steel	€€ - €€€€
<b>Future innovation projects</b>	<b>€ - €€€€</b>

€ = c€2m of additional EBIT at full run rate

# Innovation will deliver significant benefits by end of 2025

**€20m+**  
EBIT

**10**  
% points  
recycling rate  
reduction

**>0.5m**  
Tonnes CO<sub>2</sub>  
saved

**€110m**  
Capital Investments

**€30m+**  
EBITDA

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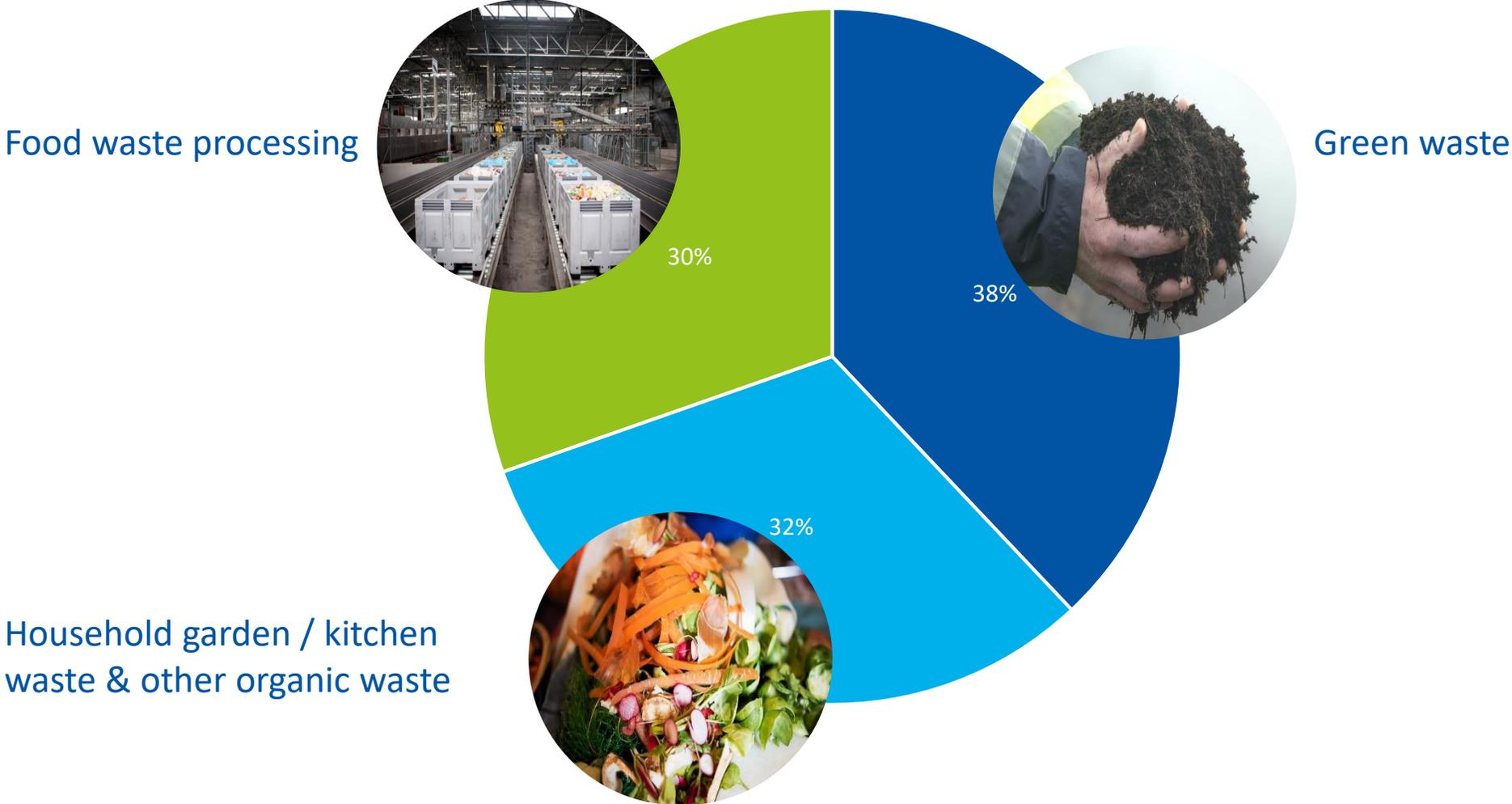
# Klaas van den Berg

Director Organics  
Commercial Waste Netherlands

Focus today on organic waste innovations



# Renewi Netherlands Organics processes c800kT inbound



# Renewi Netherlands Locations Organics highlighted



1. **Green composting:** Stadskanaal, Amersfoort & Hoek van Holland  
300,000 tonnes

# Renewi Netherlands Locations Organics highlighted



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2. **Household garden & kitchen waste:** Lelystad (2x) and Drachten  
250,000 tonnes

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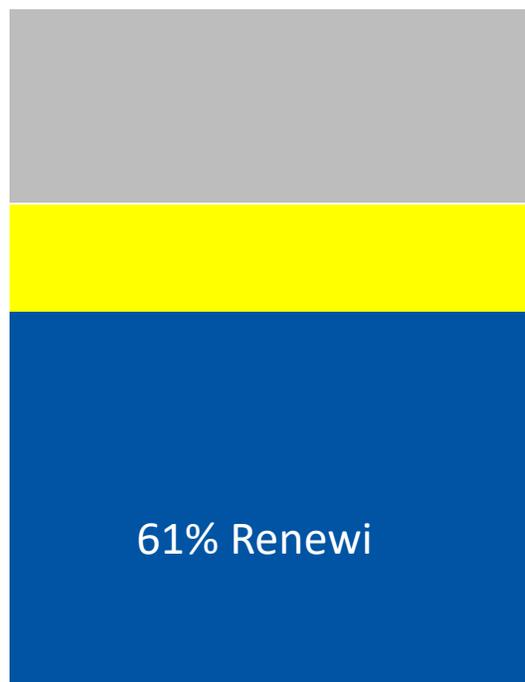
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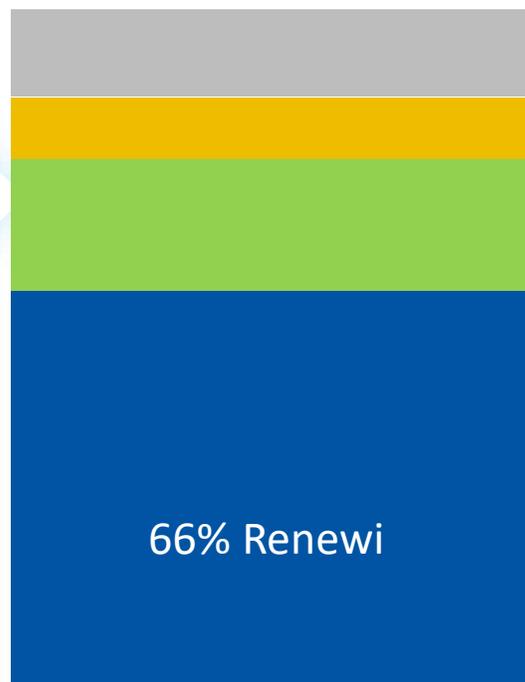
3. **Food waste processing:** Son, Lelystad and Amsterdam  
240,000 tonnes

# Renewi food waste treatment market share

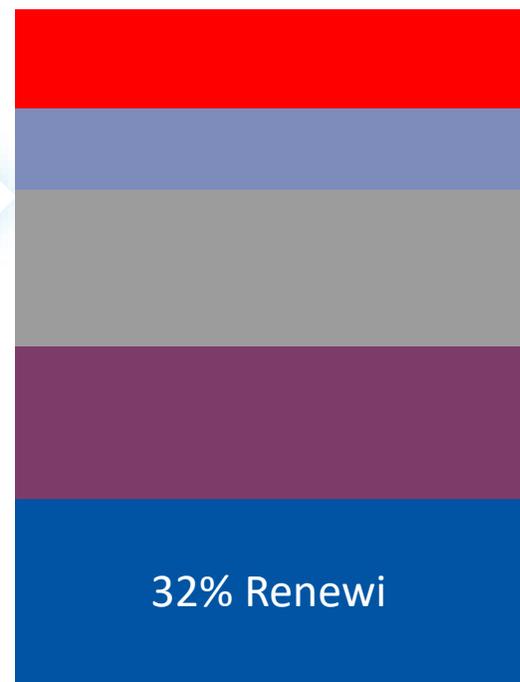
## Collection



## Pre-treatment



## Treatment



Pre-treatment  
Amsterdam

# Renewi is a front runner in organic waste valorisation

Bio-LNG

Depackaging



Digestion



Gas to grid

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# Marc den Hartog

Managing Director  
Commercial Waste Netherlands

Focus today on Plastics



Plastic production continues to increase and the amount of plastic waste grows with it....

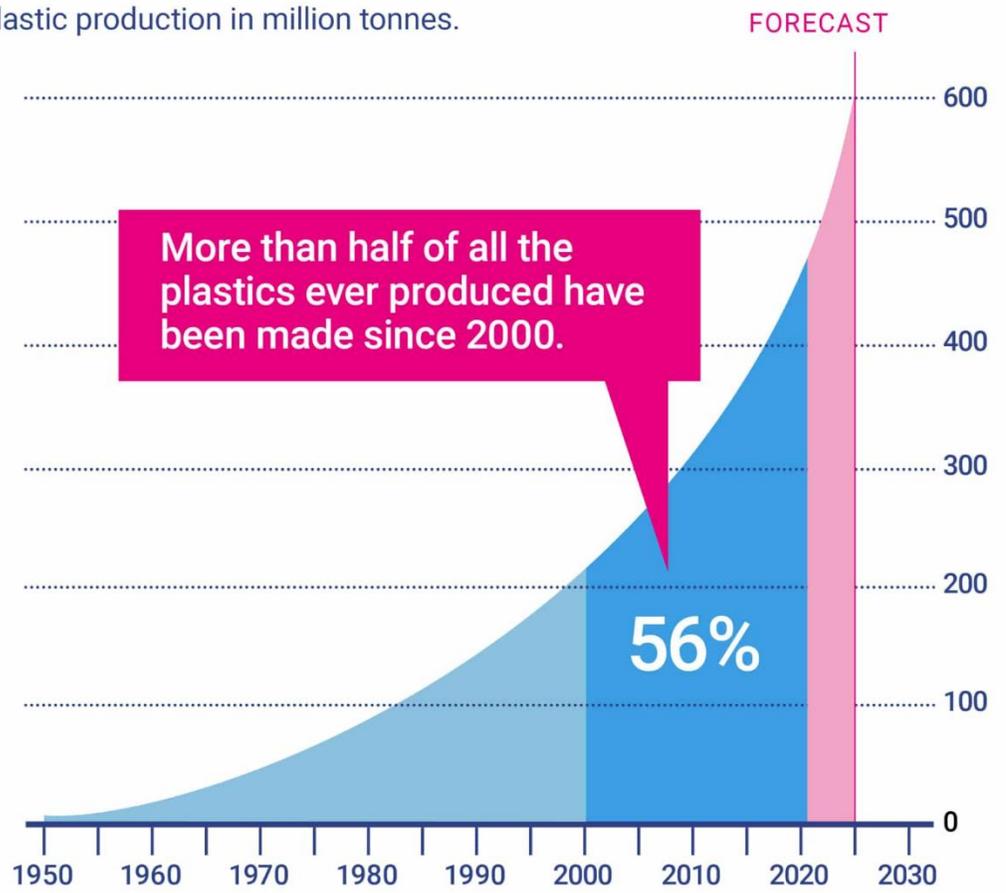
**PLASTICS PRODUCTION INCREASED TWENTY-FOLD OVER THE LAST 50 YEARS**

Plastic waste continues to grow **10%** per year

(source: KPMG)

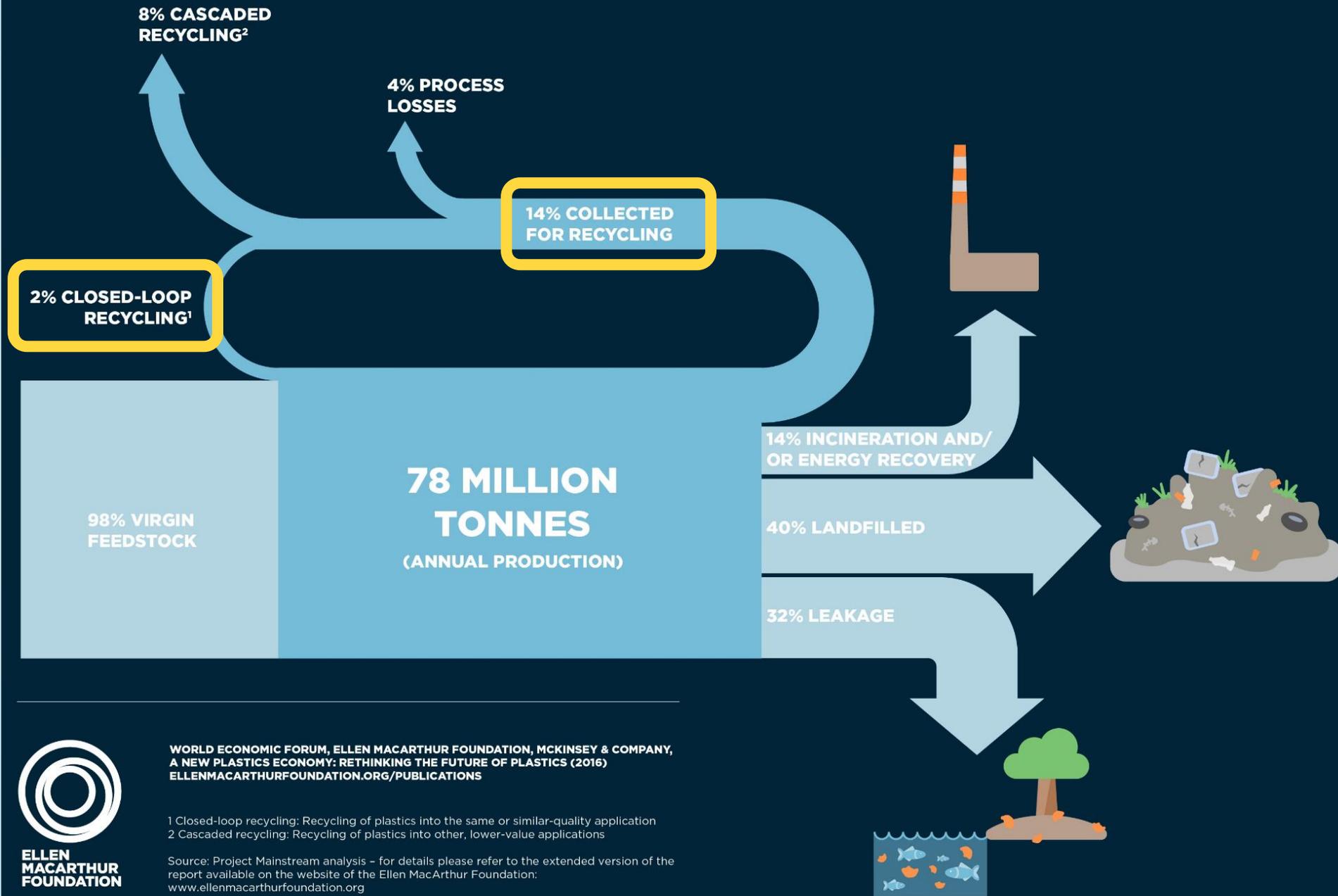
### PRODUCTION OF PLASTIC

Global annual plastic production in million tonnes.



SOURCE: PLASTIC ATLAS 2019 | © PLASTIC SOUP F

# TODAY, PLASTIC PACKAGING MATERIAL FLOWS ARE LARGELY LINEAR



WORLD ECONOMIC FORUM, ELLEN MACARTHUR FOUNDATION, MCKINSEY & COMPANY,  
A NEW PLASTICS ECONOMY: RETHINKING THE FUTURE OF PLASTICS (2016)  
[ELLENMACARTHURFOUNDATION.ORG/PUBLICATIONS](http://ELLENMACARTHURFOUNDATION.ORG/PUBLICATIONS)

<sup>1</sup> Closed-loop recycling: Recycling of plastics into the same or similar-quality application  
<sup>2</sup> Cascaded recycling: Recycling of plastics into other, lower-value applications

Source: Project Mainstream analysis – for details please refer to the extended version of the report available on the website of the Ellen MacArthur Foundation:  
[www.ellenmacarthurfoundation.org](http://www.ellenmacarthurfoundation.org)

# Increasing societal awareness and demands for a change in re-use and recycling

# Reduce  
# Reuse  
# Recycle



At a recent study, **86%** of those interviewed somewhat or strongly agree to the statement that 'we need to change our economy from one that throws things away to one that emphasizes reuse and recycling'

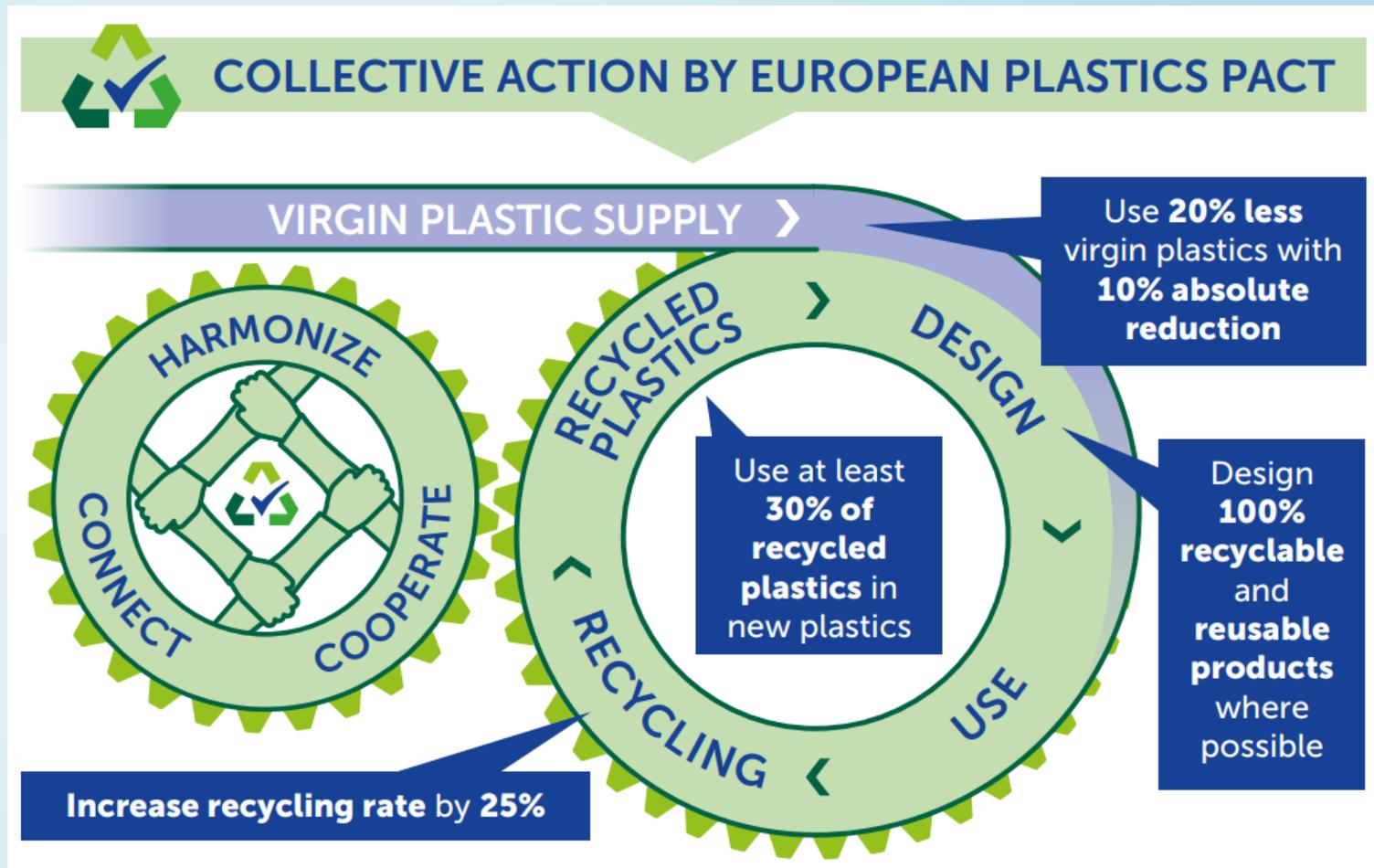
# Government actions gaining traction

## EU Single-use Plastic Directive

What will be banned by 2021?

 COTTON BUDS	 CUTLERY, PLATES, STRAWS, STIRRERS	 STICKS FOR BALLOONS AND BALLOONS	 FOOD CONTAINERS	 CUPS FOR BEVERAGES
 BEVERAGE CONTAINERS	 CIGARETTE BUTTS	 BAGS	 CRISP PACKETS/ SWEET WRAPPERS	 WET WIPES AND SANITARY ITEMS

 FISHING GEAR



# Renewi's position in plastic recycling today



- Our right to play: Significant volumes from commercial collection
- Interconnected network of processing facilities
- Collecting and processing up to 100kT of rigid plastics annually
- Leading position in the Netherlands and Belgium markets
- Significant investments to strengthen it





## Proctor & Gamble

Goal: Reduce our use of virgin plastics in packaging by **50%**



## IKEA

Only recycled or renewable based plastics in IKEA products by 2030



## Ahold Delhaize

Concretely, this means that by **2025** all our plastic packaging will be fully reusable, recyclable, or compostable



Companies are making public commitments to use recycled plastic



# Renewi's ability to Close the Loop with Circular plastics

- ✓ Access to significant commercial waste streams and ability to recycle these
- ✓ Investing in enhancing sorting and treatment to produce higher quality materials
- ✓ Minimising residual streams diverted to incineration directly contributes to Mission75
- ✓ Serving a growing demand for high quality recycled plastic streams
- ✓ Allowing brand owners to realise their ambitions in use of recycled materials and sustainability goals



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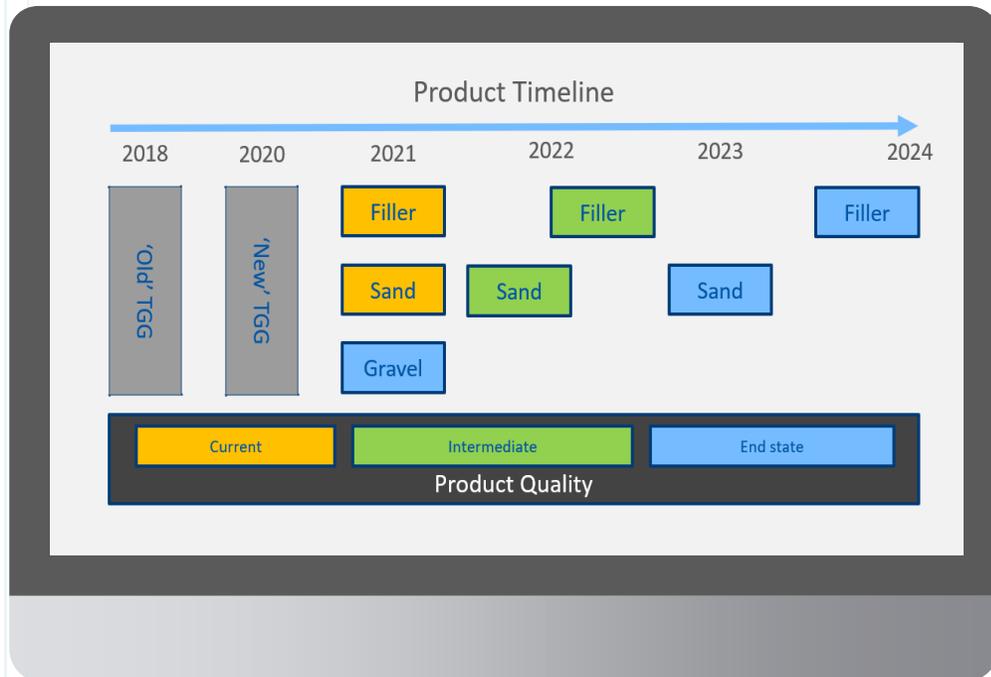
# Theo Olijve

Managing Director  
Mineralz & Water

- ATM: water treatment, packed chemical waste and thermal soil treatment
- Mineralz: soil and bottom ash cleaning, hazardous waste landfill

Focus today on ATM and how it can meet the growing need for secondary construction materials





## Product certification

- Customer demand and available market for secondary materials is clear
- Increasing available market creates “pull” to allow ATM to ramp up its throughput
- Value creation is driven by the certification process, ultimately to “end of waste”



# Gravel

## Already “end of waste” and high demand

- **Volumes:** 400kT at full production
- **Applications:** Concrete and asphalt
- **Total available market:** Dutch market is 20mT
- **Indicative pricing:** €9 to €12 positive price per tonne, depending on applications and improving with evolving certifications
- **Certification:** Product is certified under NEN-EN-12620 and BRL 2506 for concrete applications and end of waste secured already



# Sand

## Two stages to open market

- **Volumes:** 500kT at full production
- **Applications:** Currently infrastructure, targeting concrete
- **Total available market:** Dutch market is 120mT once end of waste, significantly smaller at current point
- **Indicative pricing:** €5 negative (plus logistics) to €5 positive price per tonne, depending on applications and improving with evolving certifications
- **Certification:** Currently ship under soil quality decree for infrastructure use. Next step is to secure NEN-EN-12620 for use in concrete applications mid-2022. End of waste status expected from 2023.



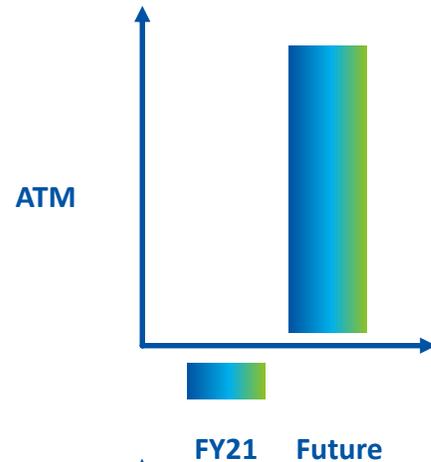


# Filler

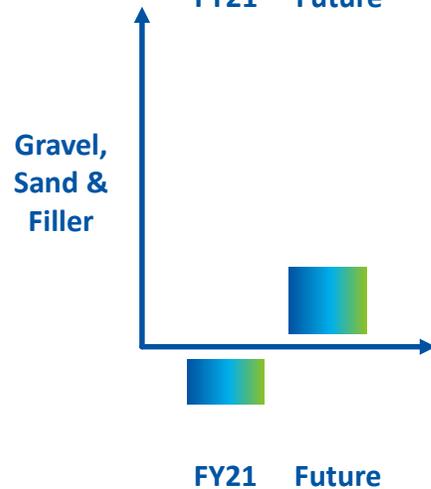
## Potential for unique emerging applications

- **Volumes:** 100kT at full production
- **Applications:** Replacement for coal fly ash in cement, geopolymers and other niche applications. Compositions with filler for M&W use as alternative binders.
- **Total available market:** Current is approx. 20kT, expanding to 500kT
- **Indicative pricing:** €10 negative to €10 positive price per tonne, depending on applications and improving with evolving certifications
- **Certification:** for concrete additive NEN-EN-12620 and BRL 1804 with expected end of waste status from 2023

# ATM financial projections



- Getting back to full throughput will restore the previous €20m of profitability
- Historically this profitability was based on negative €5 per tonne offtake
- Ramp up currently impacted by availability of inbound products
- Expect full earnings recovery



- Sales of gravel, sand and filler support ATMs throughput as above
- Incremental contribution from gravel, sand and filler calculated against negative €5 per tonne input. Initially production costs will exceed incremental revenue
- Spread will increase with certifications and growth in customer demand
  - FY22 intermediate status of sand and filler
  - FY23/FY24 final end of waste status for sand and filler



# Confident in our ultimate markets for secondary materials

## Customers

- A certain and growing need for secondary construction materials.
- Clear end markets in cement, concrete, asphalt and geopolymers/ advanced materials as well as in current infrastructure.
- Working with multiple customers to secure outlet opportunities.

## Production

- Intend to return to >1MT per annum of soil processed.
- Progressive improvements in quality and certification increase the available market and the pricing (spread).

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# Mark Thys

Managing Director  
Commercial Waste Belgium

Focus today on advanced sorting of  
residual waste





Sustainable  
innovation to  
outperform in a  
competitive  
industry

# Belgium leading in Circular Economy

Flanders / Belgium

**2017**

Vision 2050  
Theory moving into  
practice

**2021**

Circularity Flanders  
As an answer to  
EU  
Green deals

**Future**

Efforts on EU  
level to deliver  
sustainability  
goals

# Vlarema 8 and the Code of Good Practice

## Background

- ▶ Residual waste keeps growing
- ▶ Objective: **Increase Recycling**
  1. improve source sorting
  2. reduce **volumes to incineration**
- ▶ New regulation will **impact the total supply chain for residual waste** as current sorting lines do not comply with these requirements



## Vlarema 8 requirements

1. Separate 24 waste streams
2. Waste collectors supervise the sorting behaviour



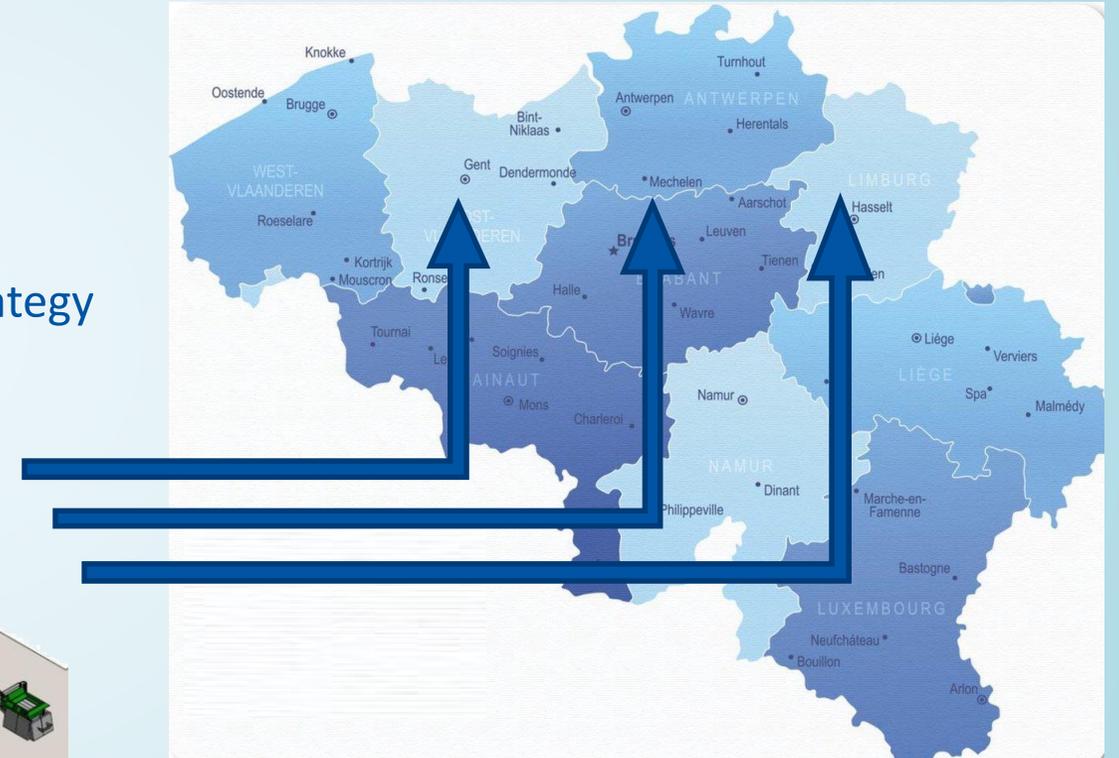
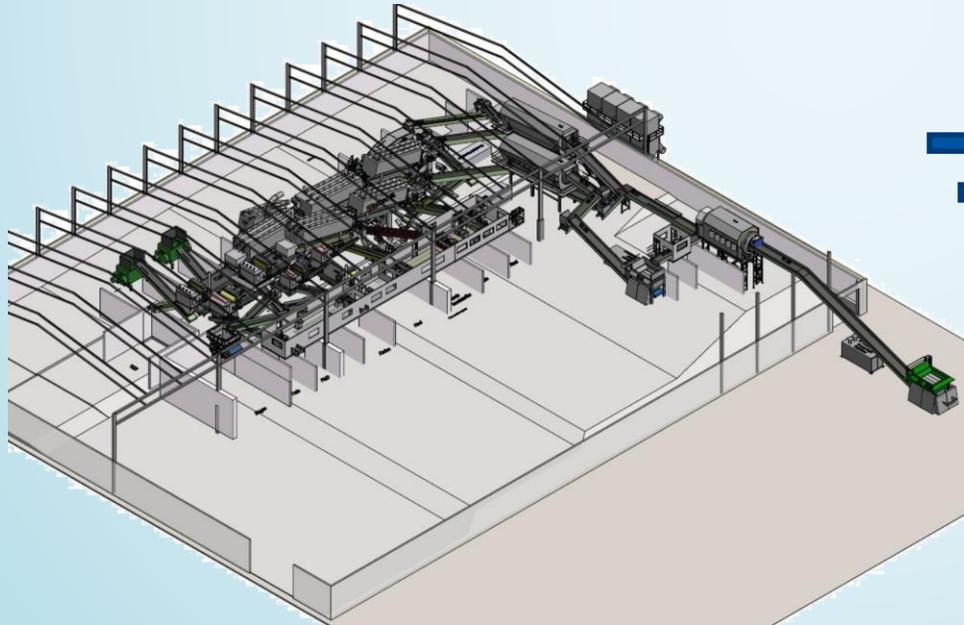
# Renewi as market leader in Commercial Waste



- Flanders: 1.5mT of commercial waste per annum
- Renewi is market leader in this field, with over 500kT
- None of the existing infrastructure can meet the needs of Vlarema 8
- We are investing in 3 lines with a capacity of 400kT
- Advanced sorting will save 130kT per annum from incineration
- Residual waste recycling rate to increase from 28% to >50%
- Saves an additional 32kT of CO<sub>2</sub>
- Expectation is that Wallonia will follow soon, this would likely require more lines

# Endorsed by the new regulatory Vlarema 8 environment, Renewi's answer is to invest in Advanced Sorting capabilities

- At 3 sites in Flanders, strategically located
- Underlining our Market leadership position
- Unique Technology
- Step change towards our "Waste to Product" strategy





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# Bas van Ginkel

Strategy & Business Development Director

Focus today on strategic innovation approach



# Filling our pipeline with impactful innovation projects

1

The market for circular solutions provides tremendous opportunity

**Key drivers:**

- Regulation:** In the EU, 2018 of all material 50% should be circular.
- Recyclate demand:** Multinationals seek partnerships to secure high quality, high volume recyclates.
- Technology:** Advanced technologies bring new recycling opportunities.

Innovative recycling technology required to meet growing demand

**Innovative recycling technology required to meet growing demand for secondary materials**

2

Launched "Mission75" to generate ideas and co-innovate

One of our six core values

Internal activation with recurring events

External platform launched

**Launched "Mission75" to generate ideas and co-innovate**

3

We focus on six themes, together with leading partners

The focus	Innovations with partners (selected examples)
1. Sorting mixed waste	Mixed wood separation
2. Organics and wood	Bio-LNG
3. Plastics	RetourMatras: PU foam
4. Minerals	Geopolymers
5. Automated identification and tracking	Gas bottle detection
6. Innovation approach	Innovation challenges

**We focus on 6 themes, together with leading partners**

4

Disciplined process, from innovation process to investment proposal

**Innovation Process:** Idea (Market, Technology, Feasibility, Viability, Scalability) -> Concept (Priority, Feasibility, Viability, Scalability) -> Prototyping (Feasibility, Viability, Scalability) -> Commercial

**Investment Proposals:** Comprehensive set of project-specific, targeted reports

**A disciplined process, from innovation approach to investment proposal**

# The market for circular solutions provides tremendous opportunity

## Key drivers:



### Regulation

In the EU, 2030 of all material 50% should be circular.



### Recyclate demand

Multinationals seek partnerships to secure high quality, high volume recyclates.



### Technology

Advanced technologies bring new recycling opportunities.



Innovative recycling technology required to meet growing demand

Sources: EU list of critical materials, EC Plastics Strategy Factsheet, Eurostat, JRC Science for Policy Reports, cepi.org



# Launched “Mission75” to generate ideas and co-innovate



One of our six core values

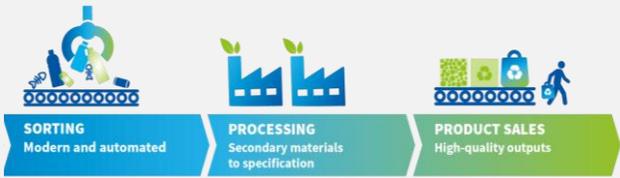


Internal activation with recurring events



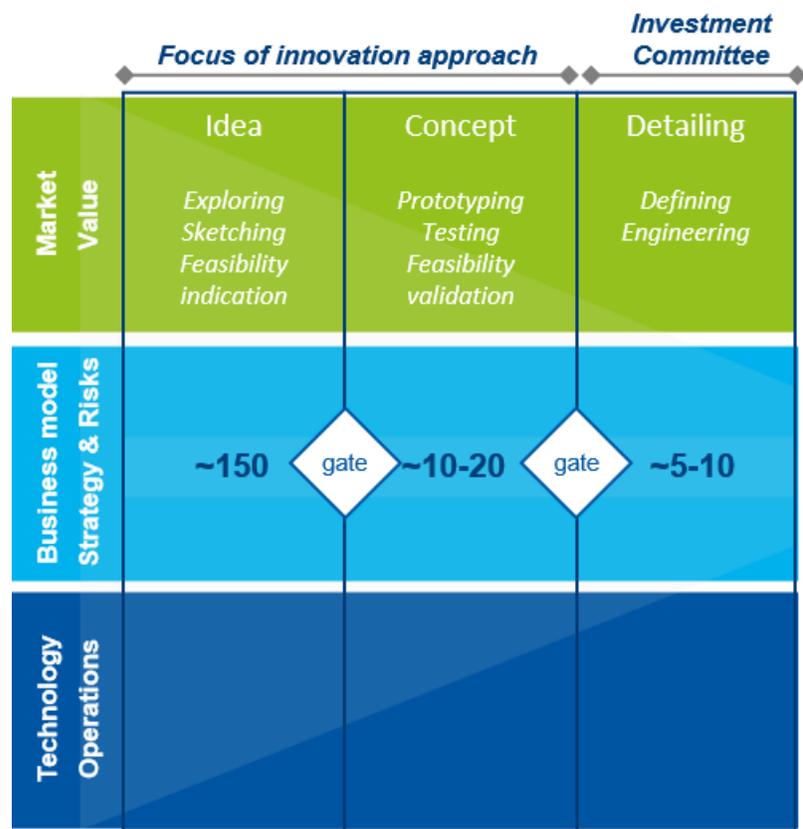
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# We focus on six themes, together with leading partners

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# Disciplined process, from innovation process to investment proposal

## Innovation Process



## Investment Proposals

Comprehensive set of project-specific templates in place

# Filling our pipeline with impactful innovation projects

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The market for circular solutions provides tremendous opportunity

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**Innovative recycling technology required to meet growing demand for secondary materials**

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**We focus on 6 themes, together with leading partners**

4

Disciplined process, from innovation process to investment proposal

**Innovation Process:** Focus of innovation approach (Idea, Concept, Prototyping, Refining, Scaling) leading to Investment Committee.

**Investment Proposals:** Comprehensive set of proposals (Business Plan, Financial Model, etc.)

**A disciplined process, from innovation approach to investment proposal**

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# Toby Woolrych

Chief Financial Officer

Delivering €20m of EBIT



# Our target returns

- Pre-tax target Return on Operating Assets 16-20% accretive to WACC of 6.0% - 7.5%
- Strong track record of delivering target returns - investment pipeline expected to meet at least the minimum hurdle
- Small investments tend to be immediately accretive, new lines may take longer
- Investments may increase revenue or reduce cost, so a target top line change is not relevant to the model
- Working capital is not material
- Following slides show timing of investment



# Committed investments

Project	Quantum	Status
Organics	€21m	Commission 2021, assumed Bio-LNG purchase
Building materials at ATM	€17m	Certification and scale up underway
Plastics	€10m	Commission Acht late 2022
Advanced Sorting	€60m	Line 1 commission 2022, lines 2 and 3 in 2023
Mineralz	€2m	Commission early 2022
RetourMatras	<€5m	Fifth line built and more in planning

# Committed investment and returns profile

Investments	FY21 & Prior	FY22	FY23	FY24	FY25	FY26	Total
Organics	€6m	€8m	-	-	€7m	-	€21m
Building materials	€10m	-	€3m	€4m	-	-	€17m
Plastics	€3m	-	€7m	-	-	-	€10m
Advanced sorting	-	€13m	€32m	€15m	-	-	€60m
Other innovations	-	€2m	-	-	-	-	€2m
<b>Total investments</b>	<b>€19m</b>	<b>€23m</b>	<b>€42m</b>	<b>€19m</b>	<b>€7m</b>	<b>-</b>	<b>€110m</b>
<b>EBIT</b>	<b>€(4)m</b>	<b>€(2)m</b>	<b>€2m</b>	<b>€9m</b>	<b>€19m</b>	<b>&gt;€20m</b>	<b>&gt;€20m</b>

- €20m of EBIT by end 2025 from €110m of committed capital investment
- RetourMatras excluded as below EBIT
- Expected return on investment in excess of target 16-20%
- Further projects remain in pipeline

# Circular Innovations: Our exciting growth story

- The climate emergency is leading to a global focus on ESG
- Our markets are evolving fast in response
- We operate in advanced circular economies
- Our recycling model offers unique customer solutions, attractive growth and good returns
- Enormous upside potential for recycling
- Renewi has a long track record as a recycling innovator
- Innovation is central to our growth strategy
- Programme outlined today expected to deliver €20m EBIT by end 2025
- Additional scalability and further projects under development

# Innovation will deliver significant benefits by end of 2025

**€20m+**  
EBIT

**10**  
% points  
recycling rate  
reduction

**>0.5m**  
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