

Renewing Earth

Renewi plc Sustainability Review 2022



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3.1mT
avoided carbon
emissions





Why sustainability matters and how Renewi contributes

Bas van Ginkel, Strategy & Business Development Director at Renewi, leads the company’s Sustainability Strategy.

Climate challenges remain a critical priority. It is widely acknowledged that if we don’t take action, the Earth could warm by a minimum of 4°C by 2050. The world now refers to a ‘climate emergency’ – a phrase that highlights the problem and the need to act in just two words.

During 2020, more than 100 billion tonnes of raw materials were extracted from the Earth. According to statistics published in *The Circularity Gap Report 2021*, the cost to the planet of product development of this magnitude – from extraction to end of use – is 59.1 billion tonnes of greenhouse gas (GHG) emissions, which accounts for 70% of all GHGs emitted. In addition to increased greenhouse gas emissions, there has also been greater environmental degradation, loss of biodiversity, threat of resource depletion, climate change and other forms of environmental pressure.

Why does sustainability matter?

Sustainability matters in countless ways, encompassed by the 17 Sustainable Development Goals (SDGs) identified by the United Nations. By prioritising sustainability, we can significantly lower our carbon footprint and, by doing so, cut emissions and lower our impact on the climate.

How will a circular economy deliver a more sustainable future and what is Renewi’s contribution?

Sustainability is at the heart of Renewi’s business model. Our focus, which is to give new life to used materials, enables the circular economy. This is essential if society is to meet its carbon reduction goals.



Bas van Ginkel,
Strategy & Business Development
Director, Renewi:

“

SUSTAINABILITY IS AT THE HEART OF
RENEWI’S BUSINESS MODEL

”



Why sustainability matters (continued)



According to *The Circularity Gap Report* released in 2022, even if countries globally fulfil their promises to reduce carbon emissions under the Paris Agreement, the progress will amount to 15% of the total needed. The remaining 85% requires more than energy transition. This can be achieved by prioritising the circular economy and by adopting circular strategies – reuse, recycle, production of secondary raw materials – to replace the use of virgin resources.

Where Renewi operates in the Netherlands and Belgium, landfill has virtually been eliminated and incineration is being heavily disincentivised. This has enabled us to invest in recycling technologies that will play a part in further improving our commitment to sustainability, which our purpose, vision and value are fully aligned to. These are supported by our sustainability themes – to enable the circular economy, reduce carbon emissions and care for people. In addition, sustainability is one of our six values. We are ambitious in our sustainability objectives, and to this end we are currently developing a roadmap to reduce scope 1, 2 and 3 emissions towards making a net-zero commitment.

By embracing and boosting the circular economy by replacing incineration and landfill with recycling, Renewi is playing an active role in slowing global warming. By partnering with customers and partners to create high-quality secondary raw materials for use in production, Renewi is helping to tackle the threat of climate change and helping to protect the planet for future generations.

“Renewi is working together with customers and partners to help protect the planet for future generations”



Our purpose and vision

“Renewi’s purpose is to protect the world by giving new life to used materials. Our vision is to be the leading waste-to-product company in Europe’s most advanced circular economies”



The world

Our approach

Our impact

Key sustainability figures



67%

Recycling rate
(% of total waste handled)
(FY21: 65.8%)



67%

Share of clean emission trucks
(% Euro 6 trucks of total fleet)
(FY21: 60.9%)



3mT

Carbon avoidance
(total metric tonnes
of CO₂ avoided)
(FY21: 3mT)



+21

Employee engagement
(eNPS score in Pulse survey)
(FY21: +21)



33%

Share of renewable energy
used on site
(FY21: 15.8%)



9

Number of LTIs (lost time
incidents) x 1,000,000
(FY21: 14)



22%

of the senior managers now
working at Renewi are women
(FY21: 21%)





The world

We have reached a point where critical decisions about the future of the planet must be made. Faced with a climate emergency, it is vital governments, businesses and individuals take steps to further prioritise the much-needed transition towards a sustainable future.



The world

Our approach

Our impact

The need for action: a perspective from Metabolic and Renewi

Eva Gladek, one of the top sustainability influencers in the Netherlands and CEO of Metabolic, a company tackling global sustainability challenges, met with Otto de Bont, CEO of Renewi, to explore the need for action on climate change and the opportunities the crisis presents.



Otto de Bont: Metabolic brings forward the science of sustainability – driving a transition to a more sustainable, circular and equitable society. Can you give a perspective on what must be prioritised if European countries, such as the Netherlands, are to become fully circular by 2050?

Eva Gladek: 100% circular by 2050 is a very high ambition – particularly if we look at where we are today! Delivering on the circular economy will require huge systemic change and rethinking from the top to the bottom of the value chain. Circularity has to be about fundamentally redesigning products and value chains and creating new co-operation models between parties. Re-examining how products are designed so they can stay in use for longer, redefining how new business models are set up and taking consideration of the ownership relationship – do you own or lease? And when a product has come to the end of its life, finding the most effective way to recycle it for re-use.

EG: While recycling is critical, it is an end-of-pipe solution. Can you give a perspective on progress being made?

OdB: Currently, the societal recycling rate is pretty low. According to the Circularity Gap Report 2022, only 8.5% of materials are recycled worldwide. Based on my understanding, Northern Europe is leading the world, and while the statistics are higher than the global percentage, total amount of waste collected and recycled remains low. Renewi plays a part in finding new ways to give new life to used materials – particularly where materials are not easily recyclable. Our focus is on ensuring that materials don't end up in landfill or incineration. We are actively supported by the governments in Netherlands and Belgium, where a taxonomy has been created, allowing us to compete with incineration and landfill. This taxonomy has delivered real progress – today between 1 and 2% of total waste in the Netherlands



“I am a ‘stubborn optimist’ when it comes to the fight against climate change”



goes to landfill. This should be compared with other countries, including Southern Europe, where regulation hasn't been put in place. In these countries, almost half of all waste ends up in landfill.

EG: Renewi operating in Netherlands and Belgium prioritises collection from commercial – or business – waste. This means that you collect monostreams – mixed dry recyclables separated – at higher volumes and you can therefore make more from the waste you collect. What prevents you from achieving a 100% recycling rate?

OdB: 100% is not currently possible. Right now we are on a journey to step up from a market-leading 65% of waste being recycled to 75% by 2025. To deliver on this we are making significant investments in technology. Once we get there we will of course take further steps. But as we know, every time you come closer to 100%, it gets more complicated – and expensive.

OdB: The latest IPCC report rings the alarm bell on climate change, and of course, we hear about it daily in the news. If you look forward, with all the challenges we have to face, how do you remain hopeful?

EG: It's not just climate change that is alarming. It's also massive biodiversity loss and nutrient cycle destruction. All these things are interconnected, and we face tipping points across the board in these planetary boundaries. People ask me how I get up every day and keep fighting the good fight on climate change and these other issues. I admit to

being a stubborn optimist. I have been using this term in our company to keep the spirits of the entire team up. The term is from Christiana Figueres, the architect of the Paris Climate Agreement. She brought forward 'stubborn optimist' and 'patient ambition'. In truth it takes time and the requirement is simply that we do our best. So let's try to make stuff better. And also, maintain the belief that even when chances look slim, they are there. As long as we are trying, there is a shot.

Do you also want to stay (stubbornly) optimistic and hear more? [Go to our Renewi podcast and listen to the entire conversation.](#)

Metabolic is a consulting and venture building company that helps bring human systems in line with the needs of the planet.



The challenge

“The world is facing a climate emergency. Action must be taken today if we are to keep the world at 2 degrees above pre-industrial levels”

70%

more virgin materials were extracted in the six years between COP21 and COP26 than the Earth is capable of restoring¹

Source:
1. [circularity-gap.world/2022](https://www.circularity-gap.world/2022)





The challenge (continued)

Action taken today will play a key role in defining the fate of future generations.

In 2015, at COP21, nations committed to undertake ambitious efforts to combat climate change. They also committed to intensify action in order to make the much-needed investments to create a sustainable low carbon future. Six years later, at COP26, parties came together to encourage nations and businesses to further accelerate action. If commitments made at these UN Climate Change Conferences are delivered upon, progress will be made. But will it be sufficient? According to *The Circularity Gap Report 2022*, by adding the circular economy into the mix and boosting recycling levels from 8.6%, greater progress would be made.

Why shift beyond energy to a circular economy? Because production, material handling and use account for a staggering 70% of GHG emissions.

It would be possible to significantly lower emissions if nations do the following: shift to a circular economy, keep products in use for longer, and when products reach end of life, transition them into high-quality secondary raw materials for use in manufacturing.

“The world is at a critical point. Despite the urgency, our habits simply aren't changing fast enough”



The impact of recycling

The Circularity Gap Report 2022 notes that currently our “take-make-waste economy consumes 100 billion tonnes of materials a year and wastes over 90%”.

If the world recycled at a greater pace, and moved to 65% recycling, CO₂ emissions could drop by 150mT. If we are able to optimise the end use of products too, this will have a big impact on the reduction of waste. In order to achieve this effectively, however, consumers, businesses and governments will need to work together and support a waste-to-product, not a take-make-waste economy.

Rethinking waste

We have the ability to cut emissions by half by 2030, but this relies in part on industries “using materials more efficiently, reusing and recycling products and minimising waste.”

For basic materials, including steel, building materials and chemicals, low- to zero-greenhouse gas production processes are at their pilot to near-commercial stage,” according to the Intergovernmental Panel on Climate Change (IPCC).

Our general capacity for material consumption needs to be examined in line with recycling. The issue is that our rates of recycling cannot match our consumption rates of virgin materials.

BY 2030

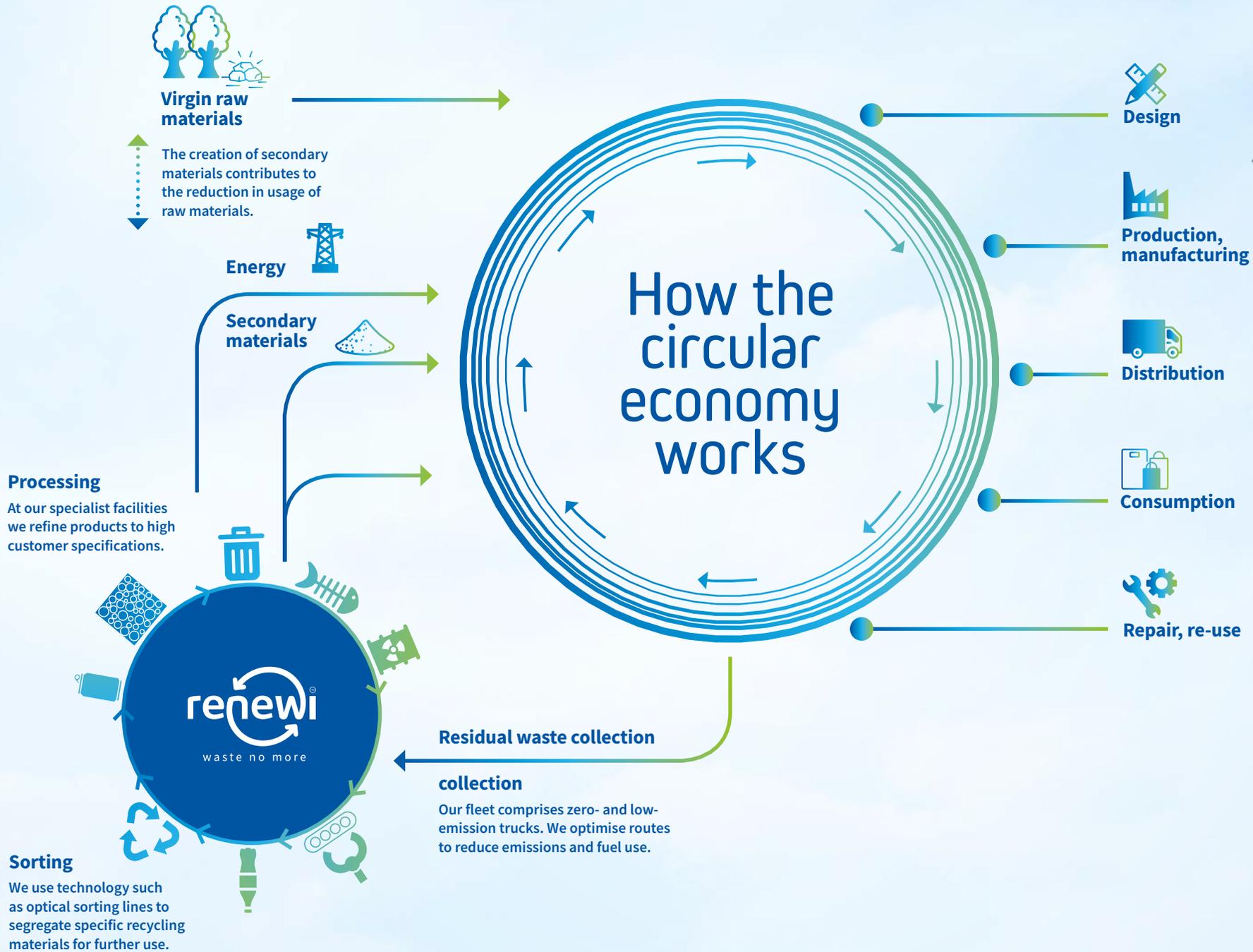
The global community has the ability to cut emissions by half²



The world

Our approach

Our impact



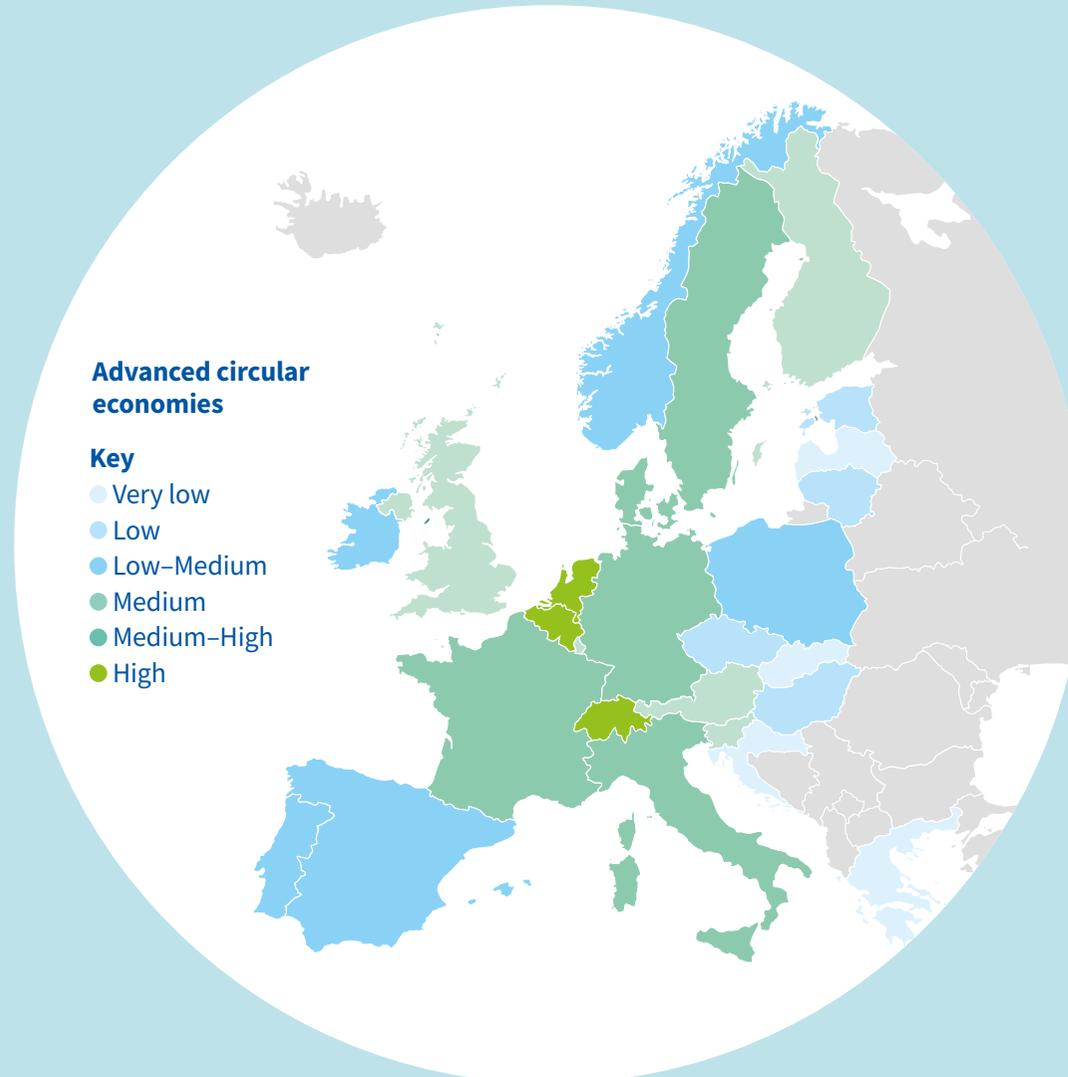
Which countries are in pole position in the Renewi Advanced Circular Economy (RACE) index?

With temperatures on the rise and the world heading towards a climate crisis, continents and countries are taking steps to fulfil their emission-cutting promises.

Currently, however, there is no formal indicator outlining progress made by individual countries in Europe. Renewi conducted its own research to bring clarity on Europe's most advanced circular economies. Unsurprisingly, Belgium and the Netherlands came out as leaders in the RACE Index. Other countries delivering include: Switzerland, Germany, France, Sweden and Italy. These countries are actively progressing towards seven pre-defined index parameters: regulation, introduction of a taxonomy related to material usage, material recycling (of municipal waste), use of secondary materials, waste-to-energy incineration trajectory, academic ranking and landfill rates. The UK is also making sound progress, though it lags slightly behind due to its current transition from landfill to incineration.

It has become clear that if the world would embrace the circular economy, further progress would be made. While there are a number of countries that have committed to introduce a circular economy, the European Union is in the lead, and a handful of countries – all based in Northern and Western Europe – are taking progressive steps.

Renewi is proud to operate in two of Europe's most advanced circular economies and to play a part in carving the path towards a global circular economy. It has plans to extend its reach to other advanced circular economies in future.



The role of governments

Governments play a crucial role in the circular economy and reversing the climate emergency. They have the power to lead the way and influence, as a collective, generating a level playing field through legislation and incentives.

The rules of the game

The Circularity Gap Report mentions that governments set 'the rules of the game' through their policies.

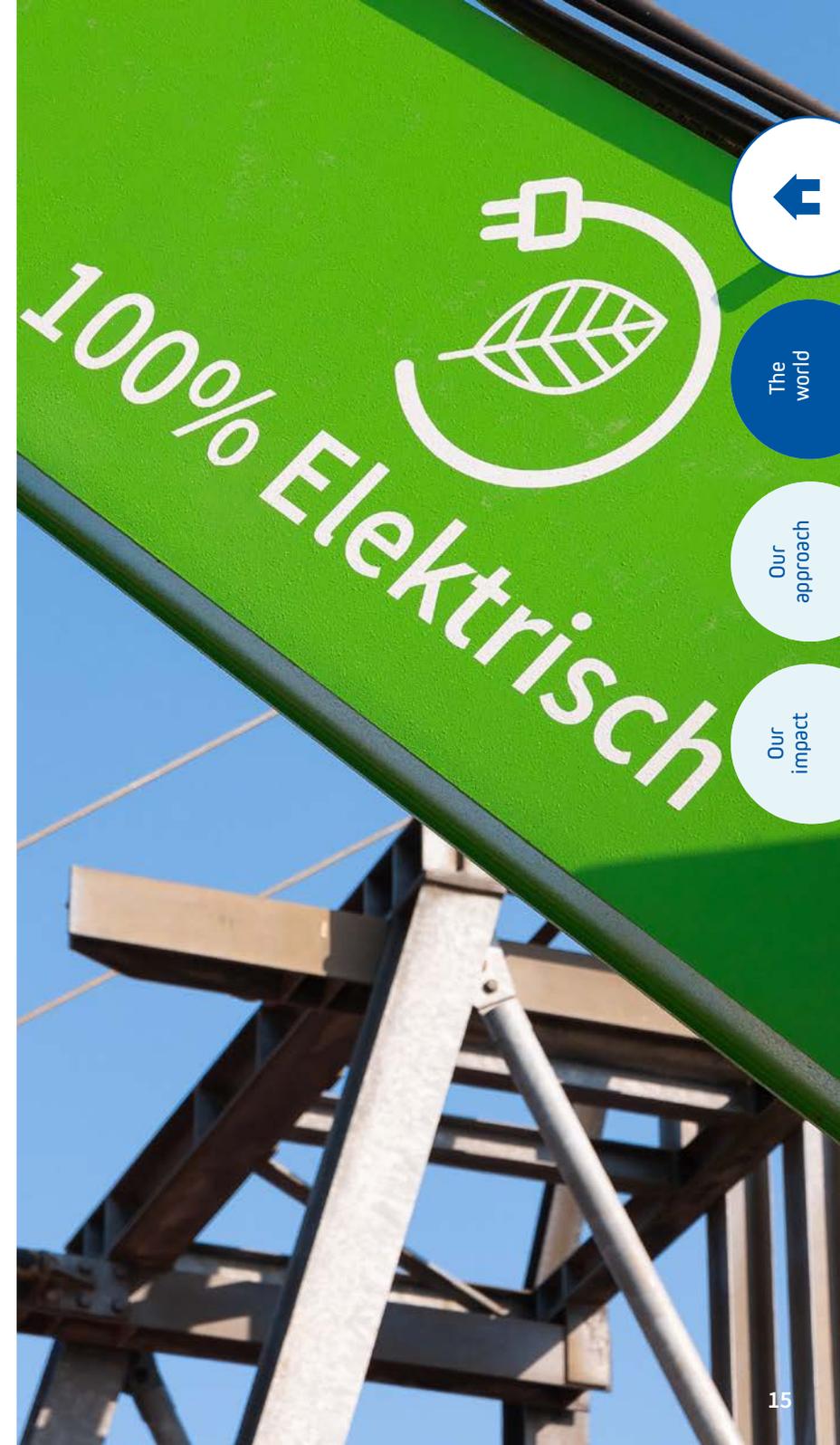
They can therefore settle on targets which push both civilians and businesses to contribute to saving the planet more effectively. Greater societal awareness and legislative pressure are catalysts to action. Governments are highly important in the change space as they are able to negotiate to set rules for businesses to be more climate conscious, as a collective – with far greater impact.

From a business perspective, certain governmental rules are making a difference already and the targets set are encouraging businesses to be more aware of the climate. The European Commission's adoption of the Corporate Sustainability Reporting Directive (CSRD), which affects EU countries, will make it mandatory for around 50,000 medium to large companies in Europe to report on sustainability and how they deal with issues such as the environment, pollution, social responsibility and diversity.

The role that governments play in creating such regulation and making a difference is significant. The overarching goal of the CSRD is transparency and accountability, meaning the business world is required to support the transition to a sustainable economy.

50,000

The number of medium to large businesses in Europe now required to report on their sustainability



Commitments made

Governments have made significant commitments to help slow climate change and keep temperature rises below 2°C.

However, while governments are taking steps, the records aren't showing the required progress. The National Oceanic and Atmospheric Administration¹ stated in June 2022 that the atmosphere has shot past a key milestone. Today, it is at levels not seen for millions of years, when the Earth was a hothouse ocean-inundated planet.

The priority for governments is to deliver on commitments made and to find alternative ways to further lower emissions – ones that are truly transformative.

Source:
1. [The Circularity Gap Report 2022, circularity-gap.world/2022/#Download-the-report](https://www.circularity-gap.world/2022/#Download-the-report)
2. [bbc.co.uk/news/science-environment-56901261](https://www.bbc.co.uk/news/science-environment-56901261)

40%
The proportion of annual CO₂ emissions generated by coal use²



The world

Our approach

Our impact



The role of businesses

In 2019, 215 of the largest companies (representing nearly \$17 trillion in market capitalisation) took the time to establish the climate crisis risks associated with their business likely to accumulate in the next five years. They discovered the potential impact would be above \$1 trillion.

Business-driven activity produces much of the CO₂ emissions causing climate change.

Businesses have an important role to play, by identifying solutions and innovating to mitigate this harm. Governing policies and regulatory frameworks have been created, resulting in financial institutions reconsidering their investments, with a focus on the climate impact on investment decisions. Today's CFOs – historically focused on revenue generation, cost reduction and risk mitigation – now understand that failing to act towards the climate crisis could create economic damage.

Business leaders are starting to appreciate that the current, linear system is unsustainable, where 91% of extracted virgin materials are wasted.

Evolving from a linear economy to a circular economy is one of the biggest challenges of our era.

This focus needs to extend to rethinking product design to ensure a reduction in the use of primary raw materials and an increase in the use of recyclates across the product chain, while extending a product's lifespan by ensuring its repairability.

There are some excellent examples of circularity, where major companies have used the latest science and innovation to create new products, for example, processing tyres to produce shoes, upcycling waste water into fertiliser, or upcycling ocean trash into clothing.

Circularity is frequently driven by legislation, which sometimes causes financial restrictions while also offering opportunities, such as subsidies or rewards for sustainable investments.

Many businesses are taking the lead, connecting the consumer with sustainable products and circular solutions.

“It's all very well talking about how sustainable we are. But actions speak louder than words”



THE ROLE OF PEOPLE

It's not just businesses and governments that will deliver a cleaner, more circular world – society and individuals play an integral role, too. People across the world can make changes in their day-to-day lives. Collectively, we can transform the world. Small acts can have big impacts. Here are three things people can do to make a difference right now.



Prioritise recycling



Reduce energy consumption and use green energy



Purchase goods made from secondary materials



The world

Our approach

Our impact

Our approach

At Renewi, circularity is central to what we do. Our activities are helping to ensure the circular economy becomes a reality.



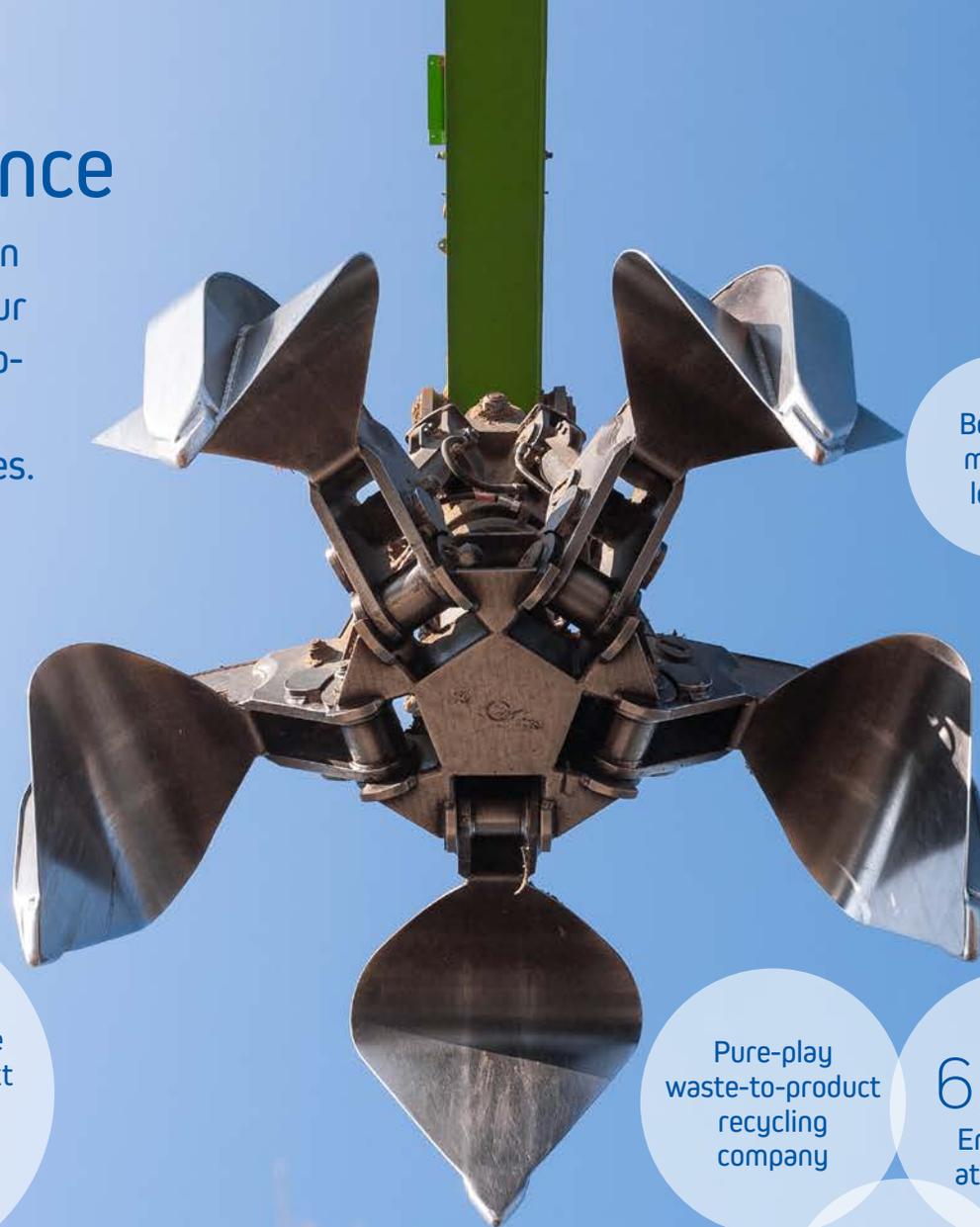
The world

Our approach

Our impact

Renewi at a glance

We have over 6,500 employees in six countries, all united behind our vision: to be the leading waste-to-product company in the world's most advanced circular economies.



Launched as Renewi in
2017
when Shanks and Van
Gansewinkel Groep
were combined

Operating
for over
100
years

Listed on London
Stock Exchange since
1988, and on Euronext
Amsterdam since
2020

Benelux
market
leader

Operating in
the Netherlands,
Belgium, UK,
France, Portugal
and Hungary

Pure-play
waste-to-product
recycling
company

6,641
Employees
at year end

162
Operating sites



The
world

Our
approach

Our
impact

Progress against our sustainability themes

Sustainability is at our core. It is part of our purpose and one of our six central company values. Two years ago, we fully refreshed our sustainability strategy, linked to the six UN SDGs which we have a significant positive impact on. This is realised across three themes: Enable the circular economy, Reduce carbon emissions, and Care for people. These themes split into different objectives, each quantified with several performance metrics. We're pleased to report good progress across the three themes, laid out in this table.

Enable the circular economy

This is the core of our business model, turning waste into high-value secondary materials. We measure progress with our recycling rate and the resulting carbon avoidance achieved. Last year we launched, both internally and externally, our ambitious Mission75 programme to activate our journey to a 75% recycling rate.

Reduce carbon emissions

We realise that while recycling is an inherently sustainable activity, both our logistics and processing operations have a significant carbon footprint. For that reason, this second theme aims to reduce the impact of operations. We have made continued progress and are currently working on a longer-term roadmap.

Care for people

We take a holistic approach to sustainability, and include our employees and the communities in which we operate. Our aim is to positively impact these communities, tirelessly working to improve the safety of our operations, and we want Renewi to be the most rewarding, diverse and inclusive working environment possible.

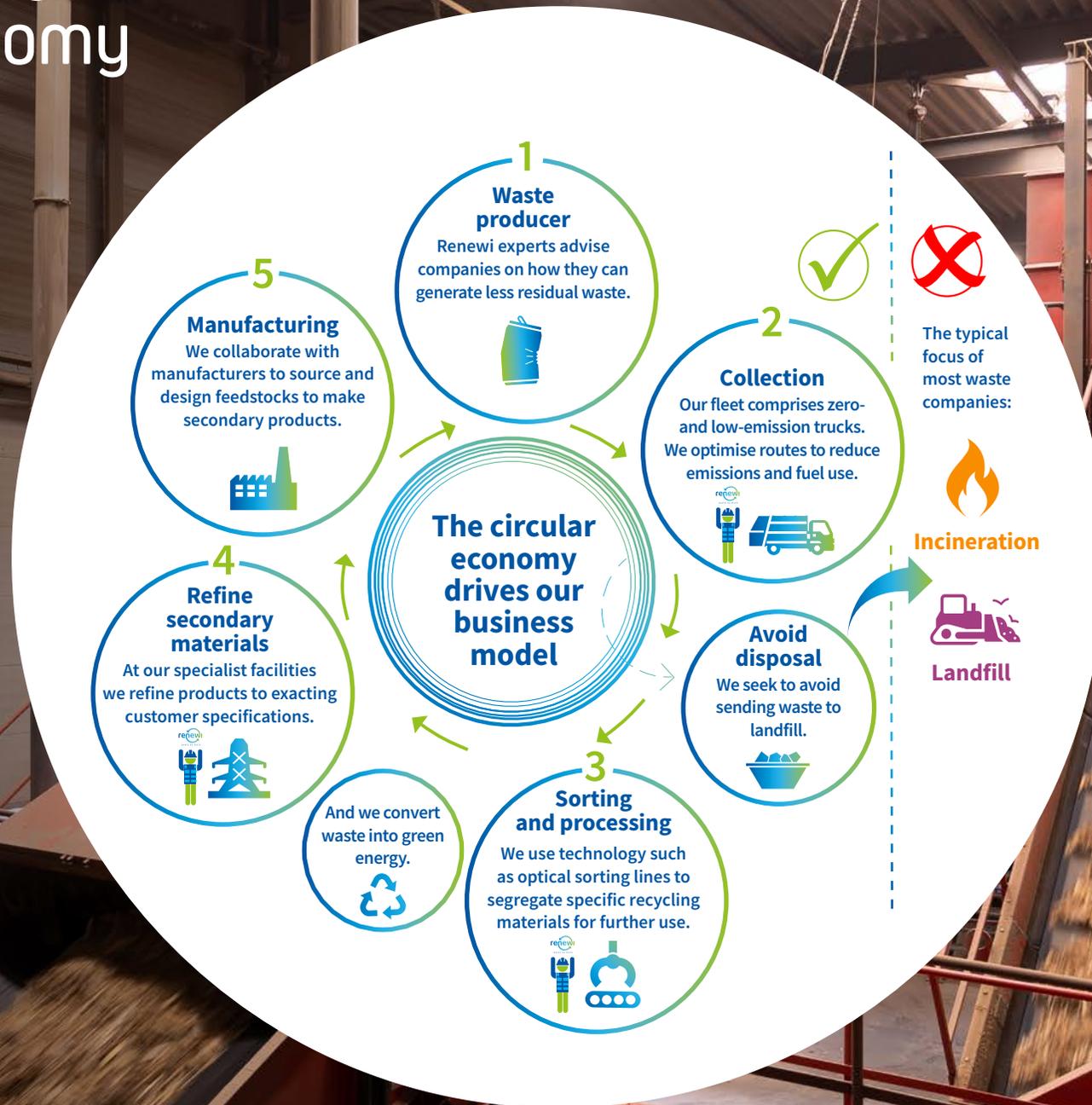
THEMES	OBJECTIVES	KEY PERFORMANCE INDICATORS	EXPLANATORY COMMENTS	2025 TARGETS
 <p>Enable the circular economy We want to be a driving force in the transition towards a circular economy, one where all waste is converted into new products.</p> <p>SDG links</p> 	<p>Turn our customers' waste into new products.</p>	<p>Recycling rate (%)</p>  <p>FY20: 64.7 FY21: 65.8 FY22: 67.2</p> <p>Carbon avoidance (kg CO₂ per tonne of waste handled)</p>  <p>FY20: 257 FY21: 261 FY22: 252</p>	<p>Good progress in the year with an additional 0.2 mT diverted from incineration and 0.1 mT diverted from landfill.</p> <p>An absolute total carbon avoidance of 3.1mT, similar to FY21, and an increase in total waste handled led to a slight decrease.</p>	<p>Recycling rate (% of total waste handled)</p> <p>75%</p> <p>Carbon avoidance (kg CO₂ per tonne of waste handled)</p> <p>275</p>
 <p>Reduce carbon emissions We understand the need not only to reduce our footprint, but also to decrease the negative impact of carbon emissions on wider society.</p> <p>SDG links</p> 	<p>Be a leader in clean and green waste collection.</p>	<p>Kg CO₂ per tonnes of waste collected</p>  <p>FY20: 10.04 FY21: 9.84 FY22: NA¹</p> <p>Kg CO₂ per tonne of waste handled</p>  <p>FY20: 10.47 FY21: 11.10 FY22: 8.57</p>	<p>The percentage of Euro 6 trucks owned by Renewi rose to 67% during the year. These trucks are more fuel-efficient. In addition, we focused on ongoing route optimisation, and 'Green Collective' initiatives have driven improvements.</p> <p>Carbon emissions in scope 1 and 2 dropped, thanks to continuous effort to reduce our energy consumption and a switch to 100% green electricity by our Commercial Waste Netherlands Divisions. Our FY25 target is now met. As we will be building a plan towards net-zero in the coming year, a more ambitious target will be established by next year.</p>	<p>Carbon intensity of collection (kg CO₂ per tonne of waste collected)</p> <p><9</p> <p>Carbon intensity of our sites (kg CO₂ per tonne of waste handled)</p> <p><9.42</p> <p>Target achieved</p>
 <p>Care for people We have a responsibility to deliver our employees home safe and well, to create a rewarding, equal and inclusive working environment and to have a positive impact on our communities.</p> <p>SDG links</p> 	<p>Deliver people home safe and well every day.</p>	<p>Lost time incidents (LTIs)</p>  <p>FY20: 11.54 FY21: 13.97 FY22: 8.88</p> <p>Employee engagement</p>  <p>FY20: +14 FY21: +21 FY22: +21</p>	<p>The number of LTIs decreased by 36% within one year, shifting the LTI frequency (LTIF) rate from 13.97 to 8.88. The goal for FY23 is LTIF of less than 8. In addition to this, the amount of significant events decreased dramatically from 38 to 10 events.</p> <p>It is our goal to position ourselves as a leading company to work for in the circular economy. We expect employee engagement to improve post-Covid-19.</p>	<p>LTIF Number of LTIs x 1,000,000</p> <p><7</p> <p>Employee engagement (eNPS score in Pulse survey)</p> <p>+30</p>

1. Metric being restated.



Our role in the circular economy

Renewi's role as a pure-play recycling company is to slow down the need to extract and process virgin materials by giving new life to used materials. This puts us at the heart of both climate action and resource preservation – at the heart of the circular economy.



The world

Our approach

Our impact

How we create value for stakeholders

Led by Our purpose

To protect the world by giving new life to used materials

Our vision

To be the leading waste-to-product company in the world's most advanced circular economies

Taking into account

Why what we do matters

Climate change is the key issue of our times; the circular economy is a key part of the solution

Our Divisions

Our people, investments, innovation and technology are all essential to our business

Engaging with our stakeholders

We encourage feedback from all our stakeholders, so that we can continue to grow and strengthen our business

Driven by Our strategy



Value drivers



Our sustainability themes



Creating value at the heart of the circular economy

What we do

We generate revenue from collecting and processing waste and by selling the recyclates and secondary materials we produce. Our focus is shifting towards the downstream end of the value chain in line with market value – from collection to processing. We plan to deliver more and higher-quality secondary raw materials and biofuels. This focus on creating products from waste differentiates us from many large competitors, who typically draw revenues from incineration activities.



For all stakeholders

What we do

We regularly engage with our stakeholders, responsive to their feedback so that we can continually address key issues, add value and resolve any problems:

- Local communities
- Waste-producing customers
- Product customers
- Suppliers
- Innovation partners
- Government
- Regulators
- Employees
- Global communities
- Lenders
- Investors

Aligned to the UN SDGs



UNDERPINNED BY OUR VALUES



Safe
Safety above
all else



Innovative
Do it better
every day



Sustainable
Make a daily
difference to
our planet



Accountable
Do what we
say we'll do



Customer-focused
Add value for
our customers



Together
Always open
and respectful

The circular economy is aligned with the UN's SDGs

The UN Sustainable Development Goals (SDGs) help to provide a framework for the world to “achieve a better and more sustainable future for all”. Renewi prioritises 6 of 17 SDGs.

13 CLIMATE ACTION
CLIMATE ACTION
Objective: Take urgent action to combat climate change and its impacts.
How we contribute: We play a key role in eliminating carbon emissions from the supply chain through recycling waste. We are also significantly reducing the use of fossil fuels in our operations.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
RESPONSIBLE CONSUMPTION AND PRODUCTION
Objective: Ensure sustainable consumption and production patterns.
How we contribute: By enabling the circular economy, we are helping to ensure used materials are given new life. This is central to what we do.

11 SUSTAINABLE CITIES AND COMMUNITIES
SUSTAINABLE CITIES AND COMMUNITIES
Objective: Make cities and human settlements inclusive, safe, resilient and sustainable.
How we contribute: We are determined to be the leader in green and clean waste collection, improving air quality and decreasing carbon emissions in the process. By doing this, we can also reduce the strain on infrastructure caused by waste collection in both cities and rural communities.



7 AFFORDABLE AND CLEAN ENERGY
AFFORDABLE AND CLEAN ENERGY
Objective: Ensure access to affordable, reliable, sustainable and modern energy for all.
How we contribute: We are a producer of renewable energy, a significant part of which is delivered to the electricity grid. This way, we enable access to sustainable energy for others. We are also increasing the share of renewable energy in our own energy mix, reducing Renewi's dependence on fossil fuels.

3 GOOD HEALTH AND WELL-BEING
GOOD HEALTH AND WELL-BEING
Objective: Ensure healthy lives and promote well-being for all.
How we contribute: Our responsibility to keep safe our 6,641 employees is extremely important to us. We are also responsible for people we come into contact with – for example, on the roads where we drive our trucks. And by handling waste responsibly, we ensure it doesn't threaten people's health.

6 CLEAN WATER AND SANITATION
CLEAN WATER AND SANITATION
Objective: Ensure availability and sustainability of water and sanitation for all.
How we contribute: A key part of what we do is cleaning contaminated waste water and making it available once more for local municipal waste water treatment stations. Each year, we do this by decontaminating enough water to fill more than 250 Olympic-sized swimming pools.



Sustainability goals: progress to date

Progress over the past three years

2019



Joint investment with Retourmatras and IKEA expands the capacity of mattress recycling in the Netherlands to more than 1 million a year



Coolrec launches a new circular polystyrene regranulate called Coolstar, which can be used as a sustainable economic solution for virgin plastics



Renewi achieves a recycling rate of 65%, an industry leading figure

2020



We form a strategic partnership with Nordsol and Shell to jointly produce bio-LNG, turning organic waste into a sustainable fuel



Together with ENGIE, we obtain a permit for the construction of the tallest wind turbine on land in Belgium, on our Ghent site

2021



Launch of Mission75, our ambitious goal to increase our recycling rate from 65% to 75% by 2025, saving more than 10mT



Glass recycler Maltha, a joint venture between Renewi and Owens-Illinois, celebrates its 100th anniversary and its contribution to the circular economy by converting glass into secondary raw materials

2022 >



8.4mT of materials was put back into reuse and recycling – an increase of 5% on the prior year. Our recycling rate is also over 67%, up 1.4pps



Although recycle prices are expected to moderate in FY23, we expect prices to stabilise above pre-Covid levels for the medium term, reflecting the structural growth of the circular economy



Renewi 2.0 programme on track to conclude next year and deliver full benefits from FY24



Good progress made on our key value drivers to deliver €60m of additional EBIT in FY26, with €10m delivered in FY22



Renewi aspires to be the leading waste-to-product company in Europe's most advanced circular economies



We will work to help make Europe carbon neutral by 2050 with our waste-to-product solutions



Care for people 2025 goals: to deliver people home safe and well and to make Renewi a rewarding, diverse and inclusive working environment. We also want to increase the number of women employed by 25% by 2025



We will continue to be the leader in clean and green waste collection through the acquisition of 40 zero-emission vehicles in the Netherlands and 25 in Belgium



The world

Our approach

Our impact

PART OF THE SOLUTION

“ We are proud to be helping in the fight against climate change ”

Renewi's purpose is to be part of the solution in order to make the planet more sustainable for future generations. By exploring new ways to turn used materials into high-quality secondary alternatives, we contribute towards reducing the amount of virgin materials extracted, preventing waste from incineration and reducing CO₂ emissions. Our work contributes to the dialogue around sustainability, showing both businesses, governments and people how important it is to act now to save the planet.



The world

Our approach

Our impact



Waste as a resource

Reaching a circular economy will require several actions – ensuring products are designed with the future in mind, the incorporation of digital technology, adjusting business models and using renewable resources.

A key action will be using waste as a resource. By turning waste into new products, we can turn today's waste materials into tomorrow's resources.



The world

Our approach

Our impact

Making the world a more sustainable place



The world

Our approach

Our impact

“ We are committed to working in partnership to find new ways to preserve precious resources ”

Customer insights

“We use Renewi’s regrinds to produce custom-made granules. The demand for post-consumer plastics is increasing. Previously, we only used post-production material to create granules. We’re delighted to work with Renewi to achieve our sustainability targets. Several years ago, our customers were only interested in granules based on the price difference compared to virgin materials. Today, there is a big change. Our customers prefer granules made with post-consumer plastics. It is crucial that the product can be recycled and that it’s made with recycled material.”

Caroline van der Perre, Managing Director at RAFF Plastics, a Flemish specialist in compounding, extruding and recycling plastic.

“We see the use of bio-LNG as one of the important sustainable fuels on the menu. In addition to electricity and possibly hydrogen, the renewable fuel bio-LNG is of great importance and allows us to take the steps needed to reduce carbon dioxide emissions.”

Peter Leegstraten, Manager Transport Expertise at Albert Heijn, the largest supermarket chain in the Netherlands.

“We have been working closely with Renewi for several years to identify opportunities to use circular materials in our constructions, in order to achieve our sustainability goals. For example, we use concrete, asphalt and sand for landscaping and foundations. We have therefore been able to collaborate with Renewi to identify usable materials from their processing and turn these into construction-grade products.”

Bas van de Pol, Project Manager Secondary Materials at Heijmans, a leading European construction services business based in the Netherlands.

67.2%

Renewi’s recycling rate in 2022, with the aim of reaching 75% by 2025



The world

Our approach

Our impact

The impact our leaders have

All our leaders follow from the front - they want to influence and inspire.

Here is a selection of the published comments by some of our leaders, who dare to challenge the status quo based on their expertise.

Otto de Bont MSc,
Chief Executive Officer:

“

CIRCULARITY AND RECYCLING MUST BE THE DRIVING FORCE BEHIND OUR CLIMATE ACTION. SYSTEM CHANGES AROUND THE RE-USE OF MATERIALS AND GIVING WASTE A NEW LIFE ARE CRUCIAL FOR THE TRANSITION TO A CIRCULAR ECONOMY.

”

[Read the full opinion piece on IPCC report here](#)



Helen Richardson,
Human Resources Director:

“

BESIDES THE OPPORTUNITY TO LEARN, A COMPELLING PURPOSE, GOOD LEADERSHIP, SUSTAINABILITY, A REWARDING WORK ENVIRONMENT AND WELL-BEING ALL SERVE TO CREATE A REAL COMMUNITY OF PERMANENT AND TEMPORARY EMPLOYEES.

”

[Read the full opinion piece on Purpose and case study on well-being here](#)



The world

Our approach

Our impact

The impact our leaders have continued



Mark Thys,
Managing Director,
Commercial Waste Belgium:

“

TRANSITIONING FROM LINEAR PROCESSES TO A CIRCULAR ECONOMY REQUIRES BEHAVIOURAL CHANGES FROM PEOPLE, ORGANISATIONS, GOVERNMENTS AND FROM PURPOSE- AND INNOVATION-DRIVEN MARKET LEADERS IN THE WASTE-TO-PRODUCT INDUSTRY.

”

[Read the full opinion piece on Vlarema 8 here](#)



Jeanine Peppink-Van der Sterren,
Group SHEQ Director:

“

WORLD-CLASS SAFETY PERFORMANCE INVOLVES MORE THAN MECHANICALLY APPLYING A SAFETY MANAGEMENT SYSTEM. IT REQUIRES THE INVOLVEMENT OF EVERYONE IN THE ORGANISATION, FROM TOP TO BOTTOM, USING KNOWLEDGE AT ALL LEVELS AND FULLY INTEGRATING THIS INTO EVERYDAY BEHAVIOUR.

”

[Read some of our safety initiatives here](#)



Marc den Hartog,
Managing Director,
Commercial Waste Netherlands:

“

THE BUSINESS COMMUNITY IS COMMITTED TO A ROBUST SUSTAINABLE INVESTMENT POLICY. IT IS READY TO ACT, BUT SHOULD BE REQUIRED TO DO SO THROUGH THE CREATION OF A LEGAL FRAMEWORK DRIVING THE NEED TO INVEST IN THE CIRCULAR ECONOMY.

”

[Read the full opinion piece on COP26 here](#)



1.5
kilotonnes of CO₂
emissions are avoided
when we recycle 500
kilograms of PVC

CASE STUDY

A MORE CIRCULAR MEDICAL SECTOR

Hospitals generate vast quantities of medical waste, much of which is incinerated. While there are strict requirements to limit potential contamination, some materials can be recycled after disinfection.

With our partner GreenCycl, Renewi has enabled circularity of medical products in the Netherlands, such as face masks, surgical instruments and medical packaging. Additionally, in partnership with Van Straten Medical, we have produced the GO Jack®, a medical product created from recycled hospital waste.

We also have a pilot project in Belgium. Together with Raff Plastics and VinylPlus, polyvinyl chloride (PVC) is recycled from oxygen masks, Baxter bags, nasal cannulas and infusion systems. PVC can be hygienically recycled eight to 10 times without losing quality. To fully close the cycle, our goal is to reuse this PVC multiple times.



The world

Our approach

Our impact



97%

Renewi's glass recycling rate – a key contributor to our company-wide Mission75 goals

CASE STUDY

GLASS: RECYCLING WITHOUT LIMITS

Recycling glass is one of many ways people can help reduce air pollution, cut waste and save energy. Historically, landfill was piled with glass objects, threatening safety and the environment. Today, this endlessly recyclable material is used to make new products, such as bottles.

Glass recycler Maltha, part of Renewi's Specialities Division, has invested in innovative (optical) sorting techniques such as the new spectrum-flash machine, which uses ultraviolet light to screen for heat-resistant glass.

Recycled glass has life beyond the norm, from qualitative drainage layers in road construction to insulating glass wool and abrasive blasting. Today, the brick industry uses recycled glass dust as an additive which makes these renewed bricks circular – baking them at a much lower oven temperature than traditional bricks. A sustainable win-win!



The world

Our approach

Our impact



CASE STUDY

ENGAGING OUR FUTURE GENERATION

Renewi's Municipal business, operating across England and Scotland, runs waste treatment facilities where waste is accumulated for recovery, treatment, reprocessing and recycling. In partnership with Barnsley, Doncaster and Rotherham councils (BDR), we help educate local communities about re-use and recycling. We engage with them via storytelling, with articles published in local newspapers and social media.

We also visit primary schools with an interactive workshop in which students learn about the need to recycle, about local waste processing, and how technology can convert waste into secondary materials. We encourage children to make small changes, such as passing on toys, separating rubbish and recycling at home. Thanks to this workshop, the future generation sees that reducing waste is not only possible, but necessary.

2,000
primary school pupils
learn how the future
is being made in the
present, at our
Barnsley, Doncaster
and Rotherham
facilities





50+
Renewi SMART
trucks are already
on the Belgian roads



CASE STUDY

HELPING CREATE CIRCULARITY IN FLANDERS

Flanders wants to become the circular hub of Europe. Its objective is to keep materials in the product cycle as long as possible. As a waste-to-product company and Belgian market leader, Renewi also wants to take the lead in this.

Proper sorting (at the source) is a prerequisite for high-quality recycling and less residual waste going to high-polluting incineration. We continuously invest in innovative sorting technologies to keep materials in the loop. For example, one of our future-proof investments is our Renewi SMART truck, equipped with artificial intelligence cameras.

The cameras and corresponding systems of the SMART trucks automatically interpret layers of waste that trucks pick up. We objectively monitor sorting behaviour and understand the type of waste, volumes, homogeneity and value. As a result, companies cannot mix recyclable fractions with residual waste, and we can adjust emptying and post-sorting to the type of waste collected.





13m
kilowatts of renewable
electricity annually
means having
the wind at our backs
to become more
sustainable

CASE STUDY
**WASTE-TO-PRODUCT
WITH LESS CO₂ IMPACT**

Our partnership with renewable energy producer ENGIE is an excellent example of our strategy to lower our CO₂ emissions. In 2022, ENGIE will start building the tallest wind turbine on the Belgian mainland on our site in the port of Ghent. The turbine will be operational in April 2023. In addition, we're looking into installing wind turbines on other sites to reduce the carbon intensity of our operations.

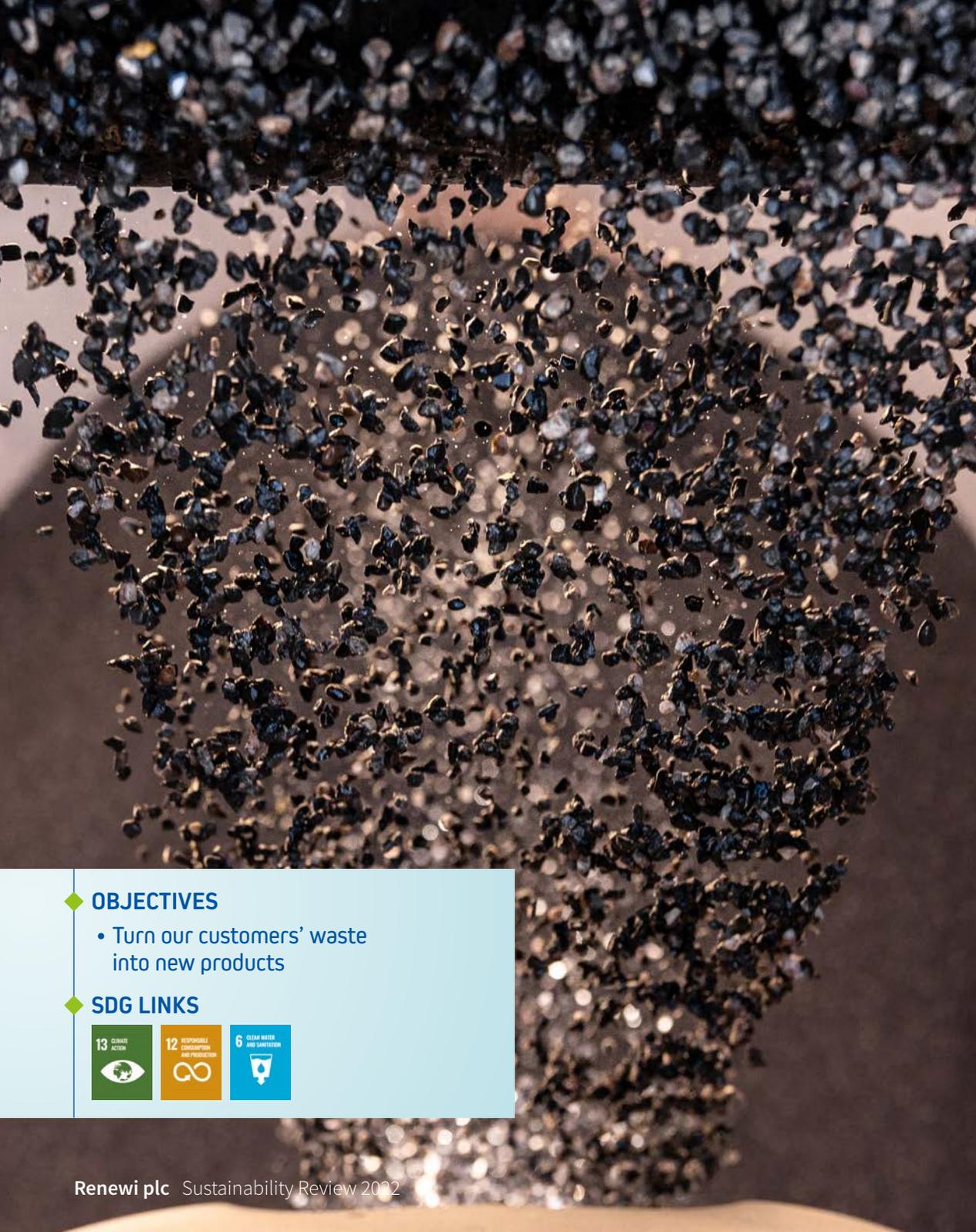
The new wind turbine in Ghent will generate 13 million kilowatt-hours of electricity annually. Its production will cover 75% of our electricity consumption at our site in the Belgian port. This is how we hope to lower our CO₂ emissions by around 5,700 tonnes. This equates to the total annual carbon emissions of around 2,850 diesel vehicles. We plan to purchase power from green energy providers to cover the remaining 25%.

This wind turbine will also be a community asset. Renewi employees and local residents have the opportunity to own shares in Electrabel CoGreen, ENGIE's co-operative company. Each year, they can receive a dividend, depending on how much electricity their wind turbines produce.



Our impact

We know our actions impact the environment,
the communities we serve and our people.



Enable the circular economy

Today's waste is the raw material for tomorrow. Renewi contributes to a circular economy and protects the world by giving new life to used materials.

Climate change and weather-related hazards are having life-changing and devastating impacts on communities across the globe. Floods, droughts, heat waves and wildfires are on the increase causing devastation to agricultural production, health, the economy and biodiversity. 2021 was one of the hottest years on record across the globe. It is widely known that there is a strong correlation between material use and global warming.

The role of Europe in becoming circular

Europe is taking essential steps to reduce global warming and embrace the circular economy, on a legislative level and by grass-roots initiatives. See page 15 for more information about what governments are doing to enable a circular economy. The European Union wants to be net-zero by 2050. The Netherlands, Belgium and the UK have also committed to this goal. According to the Paris Agreement, we need to limit the global temperature rise to 1.5°C in this century.

OBJECTIVES

- Turn our customers' waste into new products

SDG LINKS



Enable the circular economy continued

Contribution of the European waste industry

Only 8.6% of the global economy is now circular. Our waste sector plays a central role in this number because we provide secondary raw materials derived from public and commercial waste. The growth potential of the circular economy lies in the ability to reuse products or raw materials. A significant amount is already recycled in Western Europe, but there are still some material flows that are challenging to recycle.

By recycling and recovering secondary raw materials, we avoid carbon emissions from extracting, transporting and processing virgin raw materials. In addition, carbon emissions are saved by recovering energy from non-recyclable materials and producing fuels from waste. The waste sector could make a massive contribution to Europe's climate goals.

RENEWing Earth by giving life to used materials

Circularity is essential to meet climate targets, but our current take-make-waste economy wastes over 90%. This circularity gap offers incredible opportunities to reduce CO₂ in the short term by giving new life to used materials.

Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY22	FY25 TARGET
Turn our customers' waste into new products	Recycling rate (% of total waste handled)	64.7%	65.8%	67.2%	75.0% (+10% point)
	Carbon avoidance (kg CO ₂ per tonne waste handled)	257	261	252	275 (+15%)
	Innovative secondary materials produced (tonnes)	200,000	353,500	282,400	1m

At Renewi, we keep valuable materials in the product value cycle, preventing the extraction of new materials and associated emissions. Today's waste materials are the resources for the future. Recycling and recovering help retain the world's natural resources and preserve the planet for future generations.

However, we face many challenges in recycling, like dealing with higher costs than competing virgin markets or the struggle to achieve the same purity due to non-homogeneous inputs. But at the same time, we are proud of our innovations to create high-quality secondary materials that can be used repeatedly.

Our goals and metrics for 2025

Our objective is to turn waste into new products by focusing on recycling rate, carbon avoidance and innovative secondary materials produced. We have set clear, ambitious and attainable goals (see table below).

Transforming waste into new products

We contribute to more circularity and a smaller circularity gap by transforming our customers' waste into new

materials and products. This year Renewi has a recycling rate of 67.2%. By 2025, we intend to divert 75% of all the waste we receive towards recycling, saving more than 10mT of materials from incineration and landfill. For our entire organisation to work towards this goal, we launched the Mission75 programme.

Heading steadily for our FY25 target

Together with our partners, we made notable progress in optimised sorting, exploring new destinations for our secondary materials and producing high-quality circular materials and products. Last year we produced 353,500 tonnes of innovative secondary materials, and this year 282,400 tonnes. This is a small reduction linked to the discontinuation of one of the two innovative secondary materials produced by our Mineralz & Water Division (M&W). Our internal innovation pipeline still gives us confidence in reaching our FY25 target of 1mT per year.

To successfully close the circularity gap means achieving a higher recycling rate. That is why we advise our customers about circularity, from inspiration on circular purchases to eco-design and from developing circular business models to sorting waste better at the source.

Carbon avoidance from recycling and recovery

Our goal for 2025 is to enable a total of 4.2mT of CO₂ avoidance in the supply chain annually. When secondary instead of primary raw materials are used, it leads to substantial carbon savings, accounting for 2.5mT of avoided CO₂ emissions per year.

Other sources of carbon avoidance are the production of waste-derived fuels such as biogas from food waste, energy production from residual waste, landfill gas power generation, and the use of waste-derived fuels on the ATM site or by our customers. Together, these



Enable the circular economy continued

account for another 1.6mT of avoided CO₂ emissions for a total of 3.1mT of avoided CO₂ emissions.

Our target for 2025 is to avoid 275kg CO₂ per tonne of waste handled. This year we avoided 252kg CO₂ per tonne of waste handled.

Of course, our energy use also increases with our increasing effort to recycle more and produce more secondary materials. We are working on reducing our own carbon emissions by switching to green alternatives if possible and by creating energy via solar and wind. Read more at 'Reduce carbon emissions' (page 41).

Looking at our impact at a different scale, Renewi contributes to a great 'carbon benefit' for the planet. The amount of carbon avoidance Renewi enabled in the supply chain this year was six times higher than our own carbon footprint (scope 1 and 2). Our overall industry contributes to avoiding carbon emissions in much higher quantities than it directly emits.

Performance

Renewi is positioned in the middle of our society and is subject to external influences. Covid-19 also caused high raw material prices due to high demand, and a greater need for recyclates, which led to higher yields and worked out as a boost for circularity.

Despite lockdowns, levels of waste recycled slightly increased. The recycling rate rose by 1.4% to 67.2%.

This outcome is driven by significant investments in post-sorting techniques, and we know that regulation like Vlarema 8 in Belgium will also contribute in the coming year to boost our recycling rate in the Commercial Waste Divisions. Our total carbon avoidance this year remains almost equal to 2021. This can be explained by the fact that, on one side, our recycling volumes and recycling rate did go up. However, the three other contributors to our total carbon avoidance did not rise and more actual carbon emissions were emitted from incinerators with energy recovery, with a negative effect on our total carbon avoidance.

Outlook

The numbers show a positive trend and slight increases. We are still on track to meet our 2025 targets. We expect recyclate prices to rise further, which will also be in our favour. We are optimistic about the progress of a circular economy, especially when regulations that require better sorting at source, like Vlarema 8, become more uniform. In addition, achieving the CO₂ reduction potential will require efforts across Europe to further boost recycling capacity, including public support for more systems allowing separate collection of more waste streams.

Also, companies should focus more on the ecological design and recyclability of the products they put on the market. The government can also do its part by introducing new regulations that, for example, impose a minimum use of recycled materials in new products.

Recycling and recovery performance

Volumes (million tonnes)	FY21	FY22
Total waste handled at sites	12.05	12.44
Materials recycled ^{1,2}	7.94	8.36
Materials recovered for energy production from waste ^{1,2}	3.16	3.19
Total materials recycled and recovered for energy production	11.11	11.54
Recycling rate (% of total waste handled)	65.8%	67.2%

1. Recycling is material given a 'second life' for reprocessing into new goods/materials. Recovery is waste used for energy production, such as production of waste-derived fuels, bio-mass and similar
2. Includes water recovery and moisture loss during treatment for some technologies employed

Carbon avoidance in the supply chain as a result of our activities

Volumes ('000 tonnes)	FY21	FY22
Materials separated for re-use/recycling	2,425	2,476
Energy recovery and waste-derived fuels produced and sold	865	712
Landfill gas/anaerobic digestion electricity production	44	41
Waste-derived fuel used at ATM	206	200
Total avoided emissions	3,148	3,134
Carbon avoidance (kg CO ₂ per tonne waste handled)	261	252

FY25

We are moving in the right direction to meet our 75% recycling rate target





Reduce carbon emissions

Waste collection, recycling and producing secondary materials all use energy, generating carbon emissions. Although it has a net benefit, creating value from waste requires energy consumption, so at Renewi we actively seek ways to reduce our carbon footprint for these processes.

Heat records are being broken yearly, and climate-related incidents are increasing across the world. According to the IPCC, human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels. Furthermore, the IPCC states global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.

Source:
[1. IPCC Special Report.](#)

OBJECTIVES

- Be a leader in clean and green waste collection
- Reduce the impact of our carbon operations

SDG LINK



Reduce carbon emissions *continued*

High-carbon economy

Fossil fuels are generally inexpensive, convenient and widely available. Consequently, their large-scale mining and exploitation are key features of the developed world, resulting in high-carbon economies.

The current levels of GHGs pumped into the atmosphere are unsustainable. Fossil fuels are depleting fast. If we don't act now, the impact of climate change on future generations and global ecosystems will be irreversible and catastrophic.

Besides being more circular, energy reduction and cleaner alternatives to fossil fuels are the solutions to reducing carbon emissions. Generating energy via green or renewable sources, such as solar cells and wind, is needed to turn the tide.

Responsibility of governments and businesses

COP26 sent a clear reminder that each government and every company should comply and participate in order to meet the Paris Agreement by the end of the century. The pressure is increasing, as we are yet to see enough effort being made to start reversing the trend. Furthermore, disruptive solutions are still too few to produce a game-changing impact. We need to act NOW. By the nature of our activities, we at Renewi contribute to fight climate change.

By recycling waste, we avoid carbon emissions and we enable the circulation of recycled raw materials. We do, and will continue doing, our part to enable a lower-carbon economy.

While continuing to do what we do well, we support governments and institutions where we operate in building a regulatory framework that should foster the ecological transition.

Responsibility of Renewi

Renewi is evolving fast across all parts of the business – not least by improving support to our customers to help them achieve the required sustainability goals by 2023. We play a crucial role in lowering carbon emissions within both our own and our customers' value chain. Consequently, we work hard to expand our waste-to-product activities, reduce CO₂ emissions and find innovative solutions that accelerate this journey.

Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY22	FY25 TARGET
Be a leader in clean and green waste collection	Carbon intensity of collection (kg CO ₂ per tonne waste collected)	10.04	9.84	NA ¹	<9.00 (-10%)
	Share of clean-emission trucks (% Euro 6 trucks of total fleet)	48.5%	60.9%	67%	100%
	Zero-emission trucks (number)	–	2	2	65
Reduce the carbon impact of our operations	Carbon intensity of our sites (kg CO ₂ per tonne waste handled)	10.47	11.10	8.57	<9.42 (-10%) TARGET ACHIEVED ✓
	Share of renewable energy used on site (% renewable electricity out of total electricity use)	15%	15.8%	32.7%	25% (+10% points) TARGET ACHIEVED ✓
	Hybrid or electric lease cars (% (PH)EV vehicles out of total fleet)	12.5%	23.7%	32%	40.0% (+27.5% points)

1. Metric being restated.



THE CURRENT LEVELS OF GHG PUMPED INTO THE ATMOSPHERE ARE UNSUSTAINABLE



Reduce carbon emissions *continued*

Our goals and metrics for 2025

Our objectives are to be a leader in clean and green waste collection and reduce the carbon impact of our operations. We aim to reduce our carbon intensity within our scopes 1 and 2.

We work with several metrics for our logistics, fleet and direct site operations. (See table on page 42 for our six metrics, results and targets.)

Clean and green waste collection: what we do

Within our two Commercial Waste Divisions, our efforts were mainly focused on: optimised route plan, collaborations like Green Collective, less polluting fuels and more clean-emission Euro 6 vehicles. Zero-emission vehicle usage will play an increasing role over time as we start to electrify our fleet. We optimised our collection routes to reduce the number of kilometres driven, urban traffic and emissions. A part of this optimisation is 'Green Collective', a joint venture between Renewi and other large waste collection companies. As a result, we now jointly collect waste within 25 municipal regions in the Netherlands. By driving with one collection vehicle via one combined route, we reduced collection traffic by up to 50%. Every reduction per 100 kilometres driven leads to a saving of 160kg of CO₂. By 2025, we aim to reach 30 regions within this project.

We are on track to complete our transition to 100% Euro 6 trucks with 67% of the fleet already transitioned in 2022.



Carbon footprint¹

Volumes (CO ₂ equivalent '000 tonnes) ²	FY21 ex UK	FY21 UK	FY21 Total	FY22 ex UK	FY22 UK	FY22 Total
Process-based emissions (scope 1)	255	42	297	244	53	297
Transport-based emissions (scope 1)	105	4	109	101	2	103
Site fuel-use emissions (scope 1)	31	3	34	31	2	33
Site gas-use emissions (scope 1)	18	1	19	18	1	19
Site electricity-use emissions (scope 2)	73	12	85	45	9	54
Total emissions from significant sources	482	62	544	439	67	506
Carbon intensity (kg CO ₂ equivalents per tonne of waste handled)			11.10			8.57

1. This table is drafted in accordance with the Streamlined Energy and Carbon Reporting (SECR) disclosure requirements. For a full methodology on numbers used to calculate the information disclosed above, please see the Sustainability section on our corporate website.

2. Figures rounded to nearest 1,000 tonnes – totals may reflect rounding. Some data based on carbon 'factors'. These vary from country to country and are periodically updated, such as by government agencies.

Energy use¹

Megawatt hours	FY21 ex UK	FY21 UK	FY21 Total	FY22 ex UK	FY22 UK	FY22 Total
Fuel use transport (scope 1)	356,740	3,662	360,402	316,237	3,892	320,128
Fuel use sites (scope 1)	101,217	10,709	111,926	89,069	8,469	97,539
Gas use sites (scope 1)	95,156	5,534	100,690	89,430	5,592	95,022
Electricity use (scope 2)	163,353	34,927	198,280	162,820	40,661	203,481
Total energy use from significant sources	716,466	61,427	777,893	657,556	58,614	716,170

1. This table is drafted in accordance with the Streamlined Energy and Carbon Reporting (SECR) disclosure requirements. For a full methodology on numbers used to calculate the information disclosed above, please see the Sustainability section on our corporate website.



Reduce carbon emissions *continued*

Reduce carbon impact of our operations: what we do

To reduce our carbon footprint in our operations, several levers and solutions are available and rolled out within our operations.

- ▶ **Reducing our energy consumption, eliminating unnecessary energy needs and driving continuous improvement initiatives.** As a result, our total energy consumption (gas, electricity and fuel) decreased by 11% versus FY21.
- ▶ **Greening-up our energy mix. Our on-site energy requirements are increasingly provided by solar roofs and wind turbines, and the procurement of renewable electricity.** In Ghent, we will be installing panels and the largest wind turbine on the Belgian mainland in 2022. This turbine should cover 75% of the electricity use at our Ghent site and around 10% of total electricity use within our Commercial Waste Division in Belgium (see case study page 36).
- ▶ **Step by step, we are prioritising the procurement of renewable electricity.** Commercial Waste Netherlands took a first move this year by switching to 100% green electricity. By doing so, the total share of renewable energy used on site climbed up to 32.7%, which is already beyond our FY25 target (25%). Furthermore, this had a significant impact on the carbon intensity in our operations: Renewi has therefore already met the target of 'well below 9kg CO₂ emitted per tonne of waste collected', with a carbon intensity of 8.57 this year.



**WE HAVE ALREADY REACHED
OUR FY25 CARBON INTENSITY
IN OPERATION TARGET**

- ▶ **Participating in carbon-capture innovation projects.** M&W has engaged with multiple parties in the Moerdijk region to investigate options for carbon capture. Specifically, the goal for M&W of the exploration is to investigate the options for capturing all of the emissions of the ATM site in Moerdijk.

Reducing our carbon footprint in our operations is aided by the awareness of our employees. For those who have a company car, we are working with our fleet leasing partners to encourage hybrid or electric cars. This year the percentage of hybrid or electric cars out of our total employee mobility fleet increased from 23.7% to 32%.

Outlook

We will continue our efforts to remain at the forefront of clean and green waste collection and will set a new carbon reduction target in our operations. As mentioned earlier in this report, we are currently embarking on a project to map and quantify our carbon footprint scope 3 and to set emissions targets aligned with Science Based Targets initiative (SBTi). The outcomes from this project will be included in our subsequent disclosures.

Moerdijk ATM, Mineralz & Water





Care for people

Our people are key to the successful delivery of our business objectives. We strive for an engaged and inclusive workforce. Valued and well-supported staff can fulfil their potential and ambitions, inspired by our compelling purpose. Their safety, health and well-being are paramount.

Engaging our people

Our employees are Renewi ambassadors. We strive to ensure they are aligned with our business purpose and objectives. The culture of our workforce will enable the company's long-term success and pivotal role in society.

Our ambition is to be a responsive employer with an open, collaborative and inclusive management structure which includes regular engagement with all staff. This year, we implemented a range of human resources and internal communications initiatives to boost employee engagement. We launched an internal social media platform called RenewiGO – this will transform the way we communicate with our staff across our 162 sites, 68% of whom are operations-based.

OBJECTIVES

- Deliver people home safe and well every day
- Make Renewi a rewarding, diverse and inclusive working environment
- Positively impact our communities

SDG LINK



The current labour market

The current labour market is challenging. The economy is growing at a faster pace than the available workforce. Despite this, we are pleased with our recruitment performance – our Talent Team filled 501 vacancies, hired 165 new female colleagues and we launched a variety of marketing campaigns this year to strengthen our employer brand. The average staff turnover rate for 2021 is 11.8% which we are satisfied with, given the current labour market. National statistics for the Netherlands show an average turnover rate of 18%. The Benelux has been unaffected by the acute truck driver shortages.

Nurturing talent and developing our future leaders

Renewi is a leader in the markets in which it operates. To maintain this position, we must develop and adapt to a rapidly changing world. People are energised when allowed the opportunity to flourish and progress their careers, and we work to nurture the best talent in order to have the right people in the right place at the right time, doing the right things for Renewi.

LEAD is the Renewi leadership development programme launched in 2019. It has been expanded to offer training, development and support for managers, with uniformity across Divisions. In the leadership team itself, 4.5% of staff had previous non-leadership roles within the company.

Our learning platform RenewiYou is now available in all our Divisions across each country we operate in. Our Learning and Development Team has supported our departments SHEQ, Legal and IT with the rollout of mandatory e-learnings on this platform, including

the Renewi Code of Conduct, 10 Lifesaving Rules (LSR) and Cyber Security.

A journey of transformation and digitisation

Renewi is on a journey of transformation. As part of the Renewi 2.0 programme and ongoing investment in people, we are investing in WorkDay, an upgraded HR system. This cloud-based human resource management software system unifies a wide range of HR functionality into a single dashboard.

RenewiGO

RenewiGO is the name of our new, internal communications social media app. This new communications channel was selected in order to encourage bottom-up communication and improve the way we interact with our frontline staff. It facilitates tailored communication to increase accessibility and encourages feedback. This operates in addition to text messages, screens and on-site notice boards. Important communications are also delivered via daily stand-up meetings and team briefings.

Pulse

We listen to and respond to our people. This year, we conducted three Pulse surveys, with a response rate of 70%. When employees were asked to rate how they feel about working at Renewi, a large proportion of staff responded positively, returning a score of 7.3 out of 10. We intend to further improve both this score and the overall Pulse response rate.

Small changes can have a big impact on people’s day-to-day working lives. Pulse surveys are just one way to identify and resolve issues to benefit our employees and improve their day-to-day working experience. Recent ‘you said, we did’ examples include:

Health and safety performance

Indicator	FY21	FY22
Number fatal accidents (Number)	2	-
Lost Time Injuries/Rate (Number LTIs/total number working hours × 1,000,000)	208/ 13.97	137/ 8.88
Concerns/Close-out rate ¹ (Number/number concerns closed-out/number concerns raised as a %)	49,208/ 73%	42,616/ 99%
Significant events Any accident identified with a ‘very high’ risk score, major environmental incident, major fire or any incident or concern that had the potential to be a major event	38	10
Major environmental incidents Incidents/Minor environmental incidents	4/701	3/502
Major fires/Minor fires	24/399	16/339

*Wateringen, Commercial
Waste Netherlands*



Care for people – Renewi people *continued*

- ▶ Improved PPE for adverse weather conditions
- ▶ A café for our drivers in Belgium
- ▶ Improved signage at one of our sites

Health and welfare

We aim to support our staff to remain healthy and fit for future employment. We have modernised equipment to ease the physical burden of many of our frontline roles. We have purchased trucks with lower access points and replaced heavy and difficult to manipulate containers with

lighter alternatives. Our fire, environmental and safety investments have grown to promote a healthier and safer working environment. Many of our staff canteens on sites across the Netherlands are currently being upgraded and re-styled to give them a better look and feel for staff to enjoy.

Our Maltha business has launched an improvement project called 'Factory of the Future'. This will look at everything from safety and well-being of staff to quality of inputs, process control, organisational set-up and innovation. This will enable the business to perform at the highest levels in the industry.

Health and well-being

This year, we launched a range of initiatives to enhance well-being. Mental health continues to be a priority. We increased support through Covid-19 restrictions and lockdowns and provided tailored guidance for all our staff. The Mental Health Committee, now in its third year, held a Mental Health Awareness Week and supported World Mental Health Day. A cross-section of staff, including leaders, shared their personal mental health journeys via video. This resulted in a series of powerful testimonies, which generated much discussion and engagement. In November, we focused on men's health, supported Movember and



Staff taking part in our RUNewi challenge



Care for people – Renewi people *continued*

published a series of blogs on various aspects of men's health awareness. We also published blogs in support of World Menopause Day, Global Diversity Day and International Women's Day.

We have embedded a working from home policy, allowing people to preserve a new work-life balance. This includes introducing a package of support to help homeworkers to remain fit and well.

RUNewi

One of our popular initiatives focusing on health and well-being is the RUNewi challenge. We launched this in 2021 to encourage staff to include exercise in their everyday lives and to make this a habit during the darker winter days. They are supported to run or walk in virtual teams during February, helping boost physical and mental health, while fostering togetherness and raising funds for our chosen mental health charities.

Renewi pledged €15,000 for these charities every time teams covered a distance equivalent to circling the globe. RUNewi has proved so popular, 830 people took part in 186 teams this year, a big increase on last year. The teams clocked up 127,832 kilometres – enough to circumnavigate the world three times. Their efforts raised a much-needed donation of €45,000 for our charities.

RUNewi is now a yearly initiative and our aim in 2023 is to encourage more of our operations-based staff to participate.

Ethics, compliance and people

Creating a more diverse and inclusive environment

Delivering our circular economy ambitions can only be achieved if we work together – this is one of our core values. Working as one in a diverse and inclusive environment is our ambition and our commitment is to become an ever more diverse organisation.

We have started a journey that promotes diversity and inclusion by hiring a more diverse group and lowering the gender pay gap.

We are focused on diversity in operational roles, building on this through awareness, branding, and targeted campaigns internally and on social media. We would particularly like to increase female truck drivers and we are running a targeted campaign to encourage applicants. We are equally concerned to increase diversity in our office-based workforce and therefore we have set a target of 30% women in higher management by 2025.

To facilitate a more diverse and inclusive working environment, we continue to adjust employee benefits such as parental leave, study leave, and enhanced maternity and paternity leave.

As an equal-opportunities employer, Renewi is committed to nurturing a culture of equality and fair treatment throughout our processes, including recruitment, training and development. In 2021, we have retained the prestigious PSO certification that recognises our social enterprise efforts in the Netherlands since 2017. Renewi was awarded the Step 1 certification.

The Social Enterprise Performance Ladder (PSO)¹ is a nationally recognised accreditation in the Netherlands which recognises efforts in inclusive enterprise, particularly the importance of employing people who are at a disadvantage in the labour market. Renewi makes an above-average contribution in the field of inclusive and social entrepreneurship. In addition, Renewi meets other requirements regarding appropriate work, integration, functioning, development and guidance for these employees.

Wendy Wernert, HR Group Director Talent: “I am proud Renewi is working on being a diverse and inclusive employer. We have launched various initiatives and we learn and evolve daily on this important topic. PSO fits perfectly with our ambition! I strongly believe in diversity and inclusion. Talent cannot be pigeonholed. That is why we think it is important to give people with a distance to the labour market an extra push where we can. It is great that we can also demonstrate this with the PSO certification.”

The gender pay gap is another priority that we take very seriously. We use our UK disclosures, under the UK gender gap reporting legislation, as a benchmark to build our data in our other operating territories.

“I am proud Renewi is working on being a diverse and inclusive employer”

1. Prestatieladder Socialer Ondernemen.



Care for people – Renewi people *continued*

An ethical and respectful workplace

While we do not operate in higher-risk countries, we uphold the principles in the UN Universal Declaration of Human Rights and the UN Anti-Corruption Convention and subscribe to the UN Global Compact (see the table on page 54). We respect our employees' human rights. We support the rights of the child and don't employ anyone under 16. We consider the rights of other young people relative to their work and don't employ anyone under the age of 18 in operational roles. We have a Code of Conduct that formalises the way we work together by giving employees the tools to act in a safe and

INTEGRITY OF THE BUSINESS AND ETHICAL TRADING

The Renewi Code of Conduct guides managers and employees on how to act and what we expect from one another. Despite the challenges brought by Covid-19, the Integrity Management, HR and other Renewi organisational units continued to collaborate to enhance awareness among employees, teach them how to handle integrity violations, improve social safety and provide care for our people. These investments delivered an increase in issues raised and investigations. Having an open, no-retribution reporting of concerns lets our management act and improve its performance. Renewi's Integrity Management Team independently conducts business investigations to ensure objectivity and protect those who report concerns. Another important item of the Code of Conduct is training managers on avoiding and preventing fraud, bribery and similar issues, while teaching them fair practices within the business. Renewi complies with ethical trading requirements and standards such as the UK Anti-Bribery Act. While Renewi doesn't operate in higher-risk countries, it upholds the UN Universal Declaration of Human Rights principles and subscribes to the UN Global Compact.

trustworthy manner – see our [Code of Conduct at *renewi.com*](#).

Freedom of association and the right to collective bargaining are self-evident, fundamental rights. As such, Renewi is committed, in accordance with local laws, to respect the rights of all employees to form and join trade unions, to bargain collectively and to engage in peaceful assembly.

We exercise good governance across our planet, people and partnership activities. We seek external verification of our approach and performance where appropriate. This may be through accreditation to formal standards or assessment to known standards, such as FTSE4Good.

A zero-tolerance approach to modern slavery

Modern slavery is the illegal exploitation of people for personal or commercial gain, and is often hidden in plain sight. Renewi has a zero-tolerance approach to this heinous crime, which has no place in our society.

We have a responsibility to raise awareness across our workforce and supply chains and we are committed to ensuring our everyday procurement practices are robust and cannot be infiltrated by traffickers and exploitative recruiters.

This year, Renewi has made significant progress with anti-slavery prevention and awareness-raising in the UK and Benelux. This will continue next year, unifying the work across the Group with the ambition to have a single company-wide approach.

One reward

Following the merger between Shanks and Van Ganswinkel Groep in 2017, we had multiple reward systems and schemes across our countries and Divisions. We have created a single, common, clear and fair reward

structure across the entire business. During 2021, we completed the harmonisation and implementation.

Our goals and metrics for 2025

Our two primary objectives are: to deliver people home safe and well every day, and to make Renewi a rewarding, diverse and inclusive working environment (see table on page 52).

Seraing, Commercial Waste Belgium



Communities

Being a positive force in communities is a fundamental part of our Care for People pillar within the Sustainability Strategy. We actively take part in community engagement projects to educate and inform people on the circular economy and the importance of keeping materials in use. We encourage our communities to consider ways to ‘waste no more’. We also work tirelessly to minimise the impact of our operations on local communities.

Engaging with communities

Over many years, Renewi’s UK operation has partnered with local councils to educate children on what happens to household waste thrown away, and how they can play their part in giving new life to used materials through recycling. Over the past 12 months our educators have visited primary schools with an interactive workshop in which they playfully but powerfully unite waste and science. Read more about it on page 34.

Over and above engaging children in person, Renewi communicators have also informed parents by publishing articles in local newspapers and posting stories on home composting, food waste action, the re-use revolution, upcycling and the re-use of toys on social media channels.

In the Netherlands and Belgium, Renewi has also undertaken a programme to educate children, but in these countries among Europe’s most advanced circular economies – this has also been extended to university students.

Through this proactive approach, Renewi plays a part in helping community members solve a real-world problem, to shift from today’s throw-away culture towards one of re-use. According to *The Circularity Gap Report* only 8.6%

of products manufactured and purchased worldwide are recycled. By bringing an understanding of the importance of keeping materials in use for as long as possible, Renewi is actively enabling the circular economy.

Listening and acting

Processing discarded items can significantly impact neighbouring local communities. Issues with odour, dust, noise pollution and flies are real challenges. Therefore, it is important that site managers, across 162 sites in the Netherlands, Belgium, the UK, France, Portugal and Hungary, have an open dialogue with the local community to identify and understand issues and be able to take action where required to mitigate the impact.

We also remain committed to managing and reducing emissions to air, land and water, and pollution of any kind.

Keeping communities safe

Fires are a major issue in our industry. Renewi cannot entirely control the composition of waste that we receive on-site from customers. Due to inappropriately discarded combustible waste, notably lithium batteries and gas canisters, fires can happen. Renewi has undertaken measures to manage these risks carefully. These include improved waste storage protocols, new thermal sensors to detect heat, sophisticated intelligent camera technology to identify dangerous items and state-of-the-art deluge systems to fight fires quickly. We also collaborate with innovators to constantly redefine and maintain best-in-class practices. Renewi and the wider industry also work with regulators to improve dangerous waste handling legislation and to educate community members around separation and enforcement – to make a difference before waste arrives on site.

Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY22	FY25 TARGET
Positively impact our communities	Community feedback (Number of substantiated comments per site annually)	2.7	2.2	0.96	2.0 (-26%) TARGET ACHIEVED ✓
	Community impact events (Number of events annually)	43	28	21	21 (-50%) TARGET ACHIEVED ✓

“ We encourage our communities to consider ways to ‘waste no more’ ”



Care for people – Renewi people *continued*

Performance

Our engagement with our communities across all countries in which Renewi operates, our teams maintained continuity of service.

Our engagement with our communities was unsurprisingly limited but wherever possible – for example, in the local media, we sought to educate and guide. We continued to stress the importance of re-use and recycling and to inform and educate on the importance of prioritising re-use and recycling where possible.

Over the year under review we saw a 25% drop in the number of major fires onsite, down from 24 in FY21 to 18 in FY22. We also saw a reduced number of substantiated complaints from our communities compared with FY21 – down 56.4%.

*Nieuwegein, Commercial
Waste Netherlands*



Conclusion and outlook

We look forward to increasing our community engagement post Covid-19. We will continue to take active steps to keep the number of fires on-site at the lowest possible level, and seek to reduce the number of community complaints even further.

Safety

Our priority is the health and safety of our employees, contractors, customers and visitors. Safety is a core value at Renewi, sitting at the heart of our organisation. This commitment has been translated to all levels of the business, demonstrated by the implementation of our 10 Lifesaving Rules, internal audits and multiple safety campaigns. Performance in FY22 has shown the benefit of several years of intensive focus. We have seen an important reduction in LTIs, fires and environmental concerns. After several difficult years, we are pleased to report zero fatalities among our employees.

Though our safety results have improved significantly over the past year, we are still focused on further improvements and keeping our people safe through continuous improvement. Our most important responsibility is to create the safest possible working environment. Our ultimate goal is to achieve an accident rate of zero. This is a serious ambition that we cannot achieve without investment.

Evolution of Safety, Health, Environment and Quality (SHEQ)

Renewi has made important steps towards the evolution of the SHEQ organisation, starting with the appointment of a Group SHEQ Director, Jeanine Peppink-Van der Sterren. We have also increased the prominence of SHEQ by promoting Jeanine to be part of the Executive Committee. This ensures the closest

co-operation between SHEQ and our Divisions, helping to promote one way of working company-wide. This standardisation means we can learn and perform better.

Implementation of the International Sustainability Rating System

We are committed to the implementation of the International Sustainability Rating System (ISRS). This implementation is resulting in more structure and alignment throughout the entire organisation. ISRS is an internationally recognised system for measuring, improving and making safety, environmental and corporate performance more visible and transparent. So far, assessments have been conducted in each Division and training has commenced for key members of staff. The goal is to roll the system out across the organisation during FY23. This system also results in improved environmental performance.

Renewi Safety Academy

The 10 LSR continued as an area of critical focus, reinforcing the training in prior years. We launched an engaging and interactive LSR e-learning requirement, which is the first component for our SHEQ Excellence Campus.

In the past year, the expertise of Renewi's SHEQ professionals has been collected to create a learning programme for the Excellence Campus. This is the umbrella name for tailored training whereby employees learn interactively about Safety Leadership, Driver Safety, Plant and Machinery Safety, Incident Reporting, Working at Height, Environmental Compliance, Process Safety, Fire Safety and HomeSafe. The training will be rolled out during FY23 and onwards, at entry, learner and expert levels.



Care for people – Renewi people *continued*

The summer and winter seasons each have their own safety challenges and we have campaigns linked to these risks to target awareness.

SHEQ Awards

SHEQ Awards have been implemented to recognise positive behaviour in relation to safety. There has been a significant increase in these awards throughout the business. This also applies to site and driver tours, which more employees, including management, are asked to undertake. This helps to create a safety dialogue.

Audits

Audits are carried out to monitor and improve our SHEQ performance. The past year saw a continuation of the execution and reporting of the HomeSafe and Fire Safety audits, with excellent co-operation and support across the sites. Our top management participated in some of these, which positively demonstrated their commitment to improving our safety performance. In addition, there was an increase in the HomeSafe audit scores compared to last year, meaning HomeSafe is becoming embedded across our organisation. Next year all internal audits will be integrated according to the ISRS methodology.



Wateringen, SHEQ

Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY22	FY24 TARGET
Deliver people home safe and well every day	LTIF (number LTI/number of hours worked x 1 million)	10	14	8.9	7 (-60%)
	Safety training (% employees trained annually)	N/A	25%	78%	100%
	Employee mood (‘mood’ score in Pulse survey)	7.2	7.3	7.3	7.5 (+5%)
	Healthy at work rate (% healthy employees)	94.8%	95.1%	93.9%	96%
Make Renewi a rewarding, diverse and inclusive working environment	Employee engagement (eNPS score in Pulse survey)	+14	+21	+21	+30 (doubled)
	Females in higher management (% of all employees)	20%	21%	22%	30% (+7% points)

Care for people – Renewi people *continued*

An evolving safety culture

Evidence shows Renewi's safety culture is evolving. We are fostering a culture of continuous improvement around safety awareness. We are confident that we are moving in the right direction, with evidence of good safety leadership and the use of Hearts and Minds tools. This is undoubtedly leading to a positive shift in attitude across the organisation.

In FY22, a 'Fire Season' campaign was launched, in addition to several Internal Fire Audits, and the fires decreased 33.3%. Fire Season takes place from April until October. For all Renewi sites, a standard has been set up for the minimal fire requirements for each site, based on the industry-recognised WISH (Waste Industry Safety and Health Forum) guidance. This standard includes general requirements but also guidance on how waste should be stored and the emergency response on site.

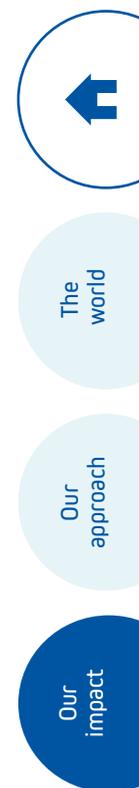
Tours and awards

Over the past year at Renewi there has been an increase in tours and awards. SHEQ tours are a fundamental tool of engagement and are the basis of visibility of leadership. There are three types of tours: driver tours, site tours and leadership visits. Tours are an instrument to raise concerns and praise employees. SHEQ Awards are given to employees to recognise safe behaviour, ideas or actions.

In the past year, Renewi has stepped up tours and awards. Unfortunately, due to Covid-19 restrictions, several driver tours were postponed or cancelled due to prioritising safety and health and in some cases local legislation. We have, however, seen a significant increase in all activities, prompting all employees to start a dialogue concerning SHEQ on all sites. During these tours, 7,193 safe situations and 12,661 unsafe situations were reported – sharing knowledge between operations, SHEQ and leadership. This shows the culture of learning from each other in the business.

	FY20	FY21	FY22
Site Tours	-	2	2,553
SHEQ Awards	13	160	559
Driver Tours	-	5	378
Leadership Visits	115	419	370

	COMMERCIAL WASTE NETHERLANDS			COMMERCIAL WASTE BELGIUM			MINERALZ & WATER			SPECIALITIES		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Number of Fatal Accidents	1	1	-	-	1	-	-	-	-	-	-	-
Lost Time Injuries	64	78	58	56	104	50	7	3	2	20	23	27
Lost Time Injury Rate	9.1	9.8	6.9	13.9	26.2	12.57	4.3	4.06	2.37	9.2	10.31	12.1
Concerns Raised	3,534	10,343	11,773	7,789	10,387	9,456	521	1625	1,977	16,162	16,162	22,974
Close-out Rate	70%	46%	95%	73%	90%	97%	82%	82%	96%	84%	84%	95%
Significant Events	12	10	2	14	11	1	9	8	5	15	9	2



UN Global Compact Ten Principles

Renewi stands in full support of the UN Global Compact's Ten Principles, committing to continuously pursue improvements in human rights, labour, the environment and anti-corruption.

This review describes our actions to continually improve the four areas established by the UN Global Compact and demonstrates how the Ten Principles are fully integrated into our business strategy, culture and day-to-day operations.

The table directs readers to the sections of this review that apply to each of the Ten Principles.

This report has been prepared in accordance with the GRI Standards: Core option. Please see our website at renewi.com/en/sustainability for the GRI content index.

	PRINCIPLES	PAGES
Human rights	Principle 1 Businesses should support and respect the protection of internationally proclaimed human rights; and	49
	Principle 2 make sure they are not complicit in human rights abuses.	49
Labour	Principle 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	49
	Principle 4 the elimination of all forms of forced and compulsory labour;	49
	Principle 5 the effective abolition of child labour; and	49
	Principle 6 the elimination of discrimination in respect of employment and occupation.	48 to 49
Environment	Principle 7 Businesses should support a precautionary approach to environmental challenges;	38 to 40
	Principle 8 undertake initiatives to promote greater environmental responsibility; and	38 to 40
	Principle 9 encourage the development and diffusion of environmentally friendly technologies.	38 to 40
Anti-corruption	Principle 10 Businesses should work against corruption in all its forms, including extortion and bribery.	49



Beyond carbon

Broadening the understanding of climate change beyond carbon.

Climate change – a multifactor global phenomenon

Climate change is the main lens through which we evaluate our environmental impacts and contribution. Our recycling activities and resulting carbon avoidance are a start, but more is required.

Ecosystems are a complex network of dependencies across various systems, all depending on each other for maintaining the fragile balance. This is a perspective that we have been reminded of in the *Climate Change 2022: Mitigation of Climate Change. Working Group III Contribution to the IPCC Sixth Assessment Report* and in our conversation with Eva Gladek. She brought to our attention the failing circulation of nutrients we are now experiencing (see pages 8 and 9). Climate change, among other consequences, increases the risks of biodiversity loss, land degradation and loss of freshwater sources, thus destabilising the environment we humans depend on for safe existence.

In reverse, protection of the ecosystems and maintaining their ability to provide ecosystem services can support humanity's efforts to adapt to the ongoing climate change and increase resilience.



Beyond carbon continued

ATM – Moerdijk, Netherlands

	FY22
Total water consumption (km ³)	2,483
1st source: Surface water	2,413
2nd source : Municipal potable water	70
Total discharged water (km ³)	2,959

One of the business activities of the site is to clean externally delivered contaminated waste water. A portion of the discharged water volume is process water (from the main activities of the sites) and a portion of it is decontaminated water (business activity).

Dordrecht, Netherlands

	FY22
Total water consumption (km ³)	482
1st source: Surface water	480
2nd source : Municipal potable water	1.3
Total discharged water (km ³)	482

Surface water used by the site is used for cooling purposes. In a closed piping system, local surface water is pumped inside the plant, circulated through different cooling piping equipment (without any contact with the products) and then rejected in the same initial environment.



+
2 SITES
EQUALS 92%
OF RENEWI'S
TOTAL WATER
CONSUMPTION.

Key: blue pins are the sites covered in this case study, blue numbers are the sites investigated for physical risks scenarios under our TCFD exercise.

1. Amersfoort
2. Amsterdam Corsicaweg 2
3. Amsterdam Kajuitweg
4. Drachten de Lier
5. Eindhoven Acht
6. Hoek van Holland
7. Nieuwegein
8. Rucphen
9. Velp (papier)
10. Vlaardingen
11. Wateringen
12. Weert
13. Moerdijk ATM
14. Rotterdam Maasvlakte
15. Weert Wetering CFS
16. Dordrecht Coolrec
17. Maltha, Heijningen



The world

Our approach

Our impact

Beyond carbon *continued*

Broadening our environmental impact awareness

Renewi is reshaping the flow of materials through recycling, but we find ourselves in a position where our actions could have a positive impact beyond just climate change. This is a power but also a responsibility highlighted during our first Climate-related Financial Disclosures (TCFD) assessment and disclosure (see pages 66 to 73 in our Annual Report 2022).

We may capitalise on the transition from a linear economy to a circular one, but none of our facilities remain immune to the physical risks the rest of the regions face, most notably heat waves and scarcity of freshwater.

In light of the urgency of water risks exposed by TCFD, Renewi has started exploring other impacts beyond its CO₂ footprint. This year, we were able to gather the water-related data referring to the sites that are most material for water management.

A first deep dive on water scarcity risk

Part 1: Water stress and drought – a future physical risk for some of Renewi's locations

- ▶ Through the TCFD analysis, we have identified water stress and drought will be emerging as a moderate to high risk for many sites, particularly those in the Netherlands. This may be a particular point of focus within our M&W, due to highly water-intensive activities.
- ▶ The moderate to high increase in water stress and drought conditions projected for 2030 and 2050 may exacerbate existing impacts on activities. Business disruption may be caused from lower river levels (disrupting barge shipments of products to destination sites), reduced water supplies (potentially halting processing capacity), more expensive cost of water supplies and adjusted restrictions on water discharge (potentially impacting operational capacity).

- ▶ Renewi will be drafting a map of priorities in the coming year to assess where new mitigation plans need to be put in place to lower sites' risk profiles from this event type.

Part 2: Preliminary water consumption mapping

To start building visibility on Renewi's internal awareness of the water consumption, a preliminary water overview was collected for all sites, especially the most water stress exposed sites. An overview of the different inlet water sources, outlet destinations and their respective quantities was gathered. Specific information on on-site pre/full waste water treatment plant was also collected.

There is a wide range of technologies and processes within Renewi's sites and we have identified a diverse number of water consumption profiles. The vast majority of our sites have very little water consumption in the processing areas and only a limited number of sites have water intensive activities. As displayed on the map on page 56, two of the most exposed sites in the Netherlands for high water stress and drought risks are highlighted. Together, they represent 92% of the company's total consumption. In the coming year, we will aim to better understand and quantify the water stress and drought risk and build risk mitigation plans where needed.

Conclusion

While this is a humble beginning, Renewi recognises further investigation is required, and this will take place in the course of the coming year.

Broadening sustainability goals across all impacts is imperative if we are to successfully tackle climate change. It won't be an easy transformation. It will require effort, resilience and a strong ability to cope with change.

Beyond carbon, Renewi is at the start of a journey to better understand its impact and to broaden its sustainability strategy.

“We find ourselves in a position where our actions could improve the balance of more ecosystem elements than just climate change. This is a power but also a responsibility”



The world

Our approach

Our impact

Appendix – key divisional performance



Carbon avoidance performance per division

VOLUMES ('000 TONNES)	RENEWI			COMMERCIAL WASTE DIVISION			MINERALZ & WATER			SPECIALITIES		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Carbon avoidance from materials separated for re-use/recycling	2,630	2,425	2,476s	1,515	1,282	1,374	460	538	514	655	603	588
Carbon avoidance from energy recovery and waste- derived fuels produced and sold ¹	469	473	417	148	136	138	(-6)	-6	(-7)	333	343	284
Carbon avoidance from landfill gas/ anaerobic digestion electricity production	42	44	41	35	38	34	3	3	3	3	3	3
Carbon avoidance from waste-derived fuel used at ATM	250	206	200	-	-	-	250	206	200	-	-	-
Total carbon avoidance	3,391	3,148	3,134	1,700	1,456	1,547	707	741	711	992	949	876
Carbon avoidance (kg CO₂ per tonne of waste handled)	257	261	252			204			316			366



 Enable the circular economy

Recycling performance per Division

VOLUMES (mT)	RENEWI			COMMERCIAL WASTE DIVISION			MINERALZ & WATER			SPECIALITIES		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Total waste handled at sites	13.18	12.05	12.44	8.14	7.11	7.58	2.31	2.38	2.25	2.73	2.56	2.60
Materials recycled^{1,2}	8.52	7.94	8.36	5.07	4.37	4.74	1.69	1.95	1.89	1.76	1.62	1.73
Materials recovered for energy production from waste^{1,2}	3.45	3.16	3.19	2.71	2.37	2.44	0.03	0.03	0.03	0.71	0.76	0.71
Recycling rate (% of total waste handled)	64.7%	65.8%	67.2%	62.3%	61.5%	62.6%	73.3%	81.9%	83.8%	64.6%	63.4%	66.4%

1. Recycling is material given a 'second life' for reprocessing into new goods/materials. Recovery is waste used for energy production such as production of waste-derived fuels, bio-mass and similar.
 2. Includes water recovery and moisture loss during treatment for some technologies employed.



 **Reduce carbon emissions**

Be a leader in clean and green waste collection

	RENEWI			COMMERCIAL WASTE BELGIUM			COMMERCIAL WASTE NETHERLANDS		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Carbon intensity of collection (kg CO ₂ per tonne of waste collected)	10.04	9.84	NA ¹	10.03	9.92	NA ¹	10.05	9.8	NA ¹
Share of clean-emission trucks (% Euro 6 trucks of total fleet)	48.5%	60.9%	67%	41.3%	53.5%	59.1%	51.9%	64.5%	71.2%
Zero-emission trucks (number)	-	2	2	-	-	-	-	2	2

1. Metric being restated.

Overview of Renewi’s carbon footprint scope 1 and 2

VOLUMES ('000 TONNES)	RENEWI			COMMERCIAL WASTE DIVISION			MINERALZ & WATER			SPECIALITIES		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Process-based emissions (scope 1)	336	297	297	73.9	71.8	83	212	183	161	50	42	53
Transport-based emissions (scope 1)	107	109	103	107	105	103	-	-	-	-	-	-
Site fuel-use emissions (scope 1)	35	34	33	23	24	22	7	5	6	6	5	5
Site gas-use emissions (scope 1)	23	19	19	13	11	10	5	4	3	6	5	6
Site electricity-use emissions (scope 2)	82	85	54	26	29	4	36	36	33	20	20	16
Total emissions from significant sources	584	544	506	242	240	222	260	228	203	81	72	81
Carbon intensity (kg CO ₂ per tonnes of waste handled)	10.47	11.10	8.57	8	9.2	4.7	21.6	20.2	20.1	11.4	11.5	10.3





Care for people

Community comments performance per Division

NUMBER	COMMERCIAL WASTE BELGIUM			COMMERCIAL WASTE NETHERLANDS			MINERALZ & WATER			SPECIALITIES		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Substantiated community comments received	31	35	-	13	21	-	9	6	-	390	298	-
Total number of sites	37	40	-	72	71	-	10	11	-	43	43	-
Average number of complaints per site (out of total number)	9.07	1.50	12.80	0.90	0.63	3.25	0.50	2.7	2.2	9.7	6.9	-

Community impact events performance per Division

NUMBER OF SIGNIFICANT COMMUNITY IMPACT EVENTS	COMMERCIAL WASTE BELGIUM			COMMERCIAL WASTE NETHERLANDS			MINERALZ & WATER			SPECIALITIES		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Spills/emissions to soil, water, air	5	2	-	7	1	-	18	-	-	2	-	-
Fires	3	1	-	3	8	-	2	2	-	3	4	-
Total	5	3	2	3	-	-	-	43	28	5	4	-



Appendix – key divisional performance continued



Care for people

Safety performance per Division

SAFETY INDICATORS	COMMERCIAL WASTE BELGIUM			COMMERCIAL WASTE NETHERLANDS			MINERALZ & WATER			SPECIALITIES		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Number fatal accidents	-	1	-	1	1	-	-	-	-	-	-	-
Number >3 day accidents	37	44	30	37	37	38	5	1	-	16	10	21
>3 day accident rate	1,839	2,201	1,524	1,346	1,219	992	1,874	301	-	2,081	1,268	1,720
Number lost time injuries	56	58	44	64	58	58	7	2	2	20	17	28
Lost time injury rate	13.9	15.5	14	9.1	8.2	7.5	4.3	2.4	2.4	9.2	8.7	13.4
Severity rate	24.5	26.2	17	24.8	12.6	8	18	74	-	6.4	18.5	8
Number of concerns	7,789	10,387	8,828	3,534	10,343	10,718	521	1,625	1,977	16,162	26,853	21,093



The world

Our approach

Our impact

Appendix – key divisional performance continued

Beyond carbon

Key water related data

VOLUMES IN KM ³	ATM – MOERDIJK, NETHERLANDS			DORDRECHT, NETHERLANDS		
	FY20	FY21	FY22	FY20	FY21	FY22
Total water consumption	2,044	1,741	2,483	483	483	482
1st source: Surface water	1,970	1,670	2,413	482	482	480
2nd source : Municipal potable water	74	71	70	0.9	0.9	1.3
Total discharged water	2,499	2,131	2,959	482	482	482

If you have any queries on this document or other aspect of Renewi’s sustainability performance please contact: info@renewi.com or by post or telephone to: Renewi plc, Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Buckinghamshire, MK1 1BU, UK. Tel: +44 (0)1908 650650

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