

# Let's create a more circular, greener world

Renewi plc Sustainability Review 2021





The world

---

Our approach

---

Our impact

---



Imagine a world where nothing is wasted and everything is reused. A world that is not only cleaner, but healthier and happier for people to live in. This is a world that we're determined to make possible.

The world is at a turning point, where the old methods of production and consumption are rejected for more sustainable alternatives. At Renewi, we're helping to transform the way materials are used and helping to create essential new products.

By enabling the circular economy, we're part of the sustainable solution that will allow future generations to enjoy a cleaner and happier planet.



# Contents

- 5 Our purpose and vision
- 6 Key sustainability figures

## THE WORLD

- 8 The climate emergency
- 11 So what do we do?
- 12 What is the circular economy?
- 14 Expert interview
- 16 So how do we get there?
- 17 What can countries do?
- 18 What can companies do?
- 19 The challenge
- 21 When do we make this change?
- 22 The solution
- 25 Waste as a resource

## OUR APPROACH

- 27 Renewi at a glance
- 29 Our role in the circular economy
- 30 How we create value for stakeholders
- 31 The circular economy is aligned with the UN's Sustainable Development Goals
- 32 Case study: ATM
- 33 Case study: RetourMatras
- 34 Q&A with CEO Otto de Bont
- 37 Five years of innovation in recycling and circularity
- 38 Case study: Ghent wind turbine
- 39 Case study: Electric Volvo trucks

## OUR IMPACT

- 41 Sustainability strategy summary
- 42 Enable the circular economy
- 45 Carbon emissions and waste
- 48 Care for people
- 54 UN Global Compact Ten Principles
- 55 Appendix – key divisional performance



12  
What is  
the circular  
economy?



25  
Waste as  
a resource



34  
An interview  
with CEO Otto  
de Bont



32  
A look at some  
of the ways we  
are changing  
the world



The world

Our approach

Our impact





The world

Our approach

Our impact

“ We want to live in a world free from worries about climate change. A world where our shared planet is sustainable, green and where used materials aren't wasted. ”





OUR 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  
THE WORLD'S MOST ADVANCED  
CIRCULAR ECONOMIES

“ The time is now, to act together to ensure a liveable future for us, for our children, for our grandchildren, and for generations to come. ”

Today's children face an uncertain future. Children are the least responsible for climate change, yet they will bear the greatest burden of its impact. For many years, we have all been guilty of short-term thinking. We forgot that we are part of a long, continuous stream of generations that succeed each other and are responsible to and for each other. We have colonised the future. We treat the earth – the home of future generations – as a dumping ground for our own ecological waste, as though nobody will live here in the future.

We have to learn to be better ancestors. Long-term problems ask for long-term thinking. The impact of any decision must be considered in the context of the next generations. The needs of the present should be met without compromising the needs of the future. We should all ask ourselves the following question, whatever we are doing or planning: what kind of world will my child see when he or she is 90? Our descendants own the future, but the decisions we make and the actions we take now will tremendously impact generations to come.

Renewi's purpose is to protect the world by giving new life to used materials, and our vision – to be the leading waste-to-product company in the world's most advanced circular economies – concerns everyone. It's about the next generation. It's about me and my children, you and your children and grandchildren.

Our long-term strategy will deliver sustainable value creation so that we can keep positively impacting society through innovation. In this way, we commit to continue working to create a better, and greener, future for everyone.

The eyes of all future generations are upon us. We must prove that we are serious about tackling climate change. If we don't act now, then future generations of children staring into the climate change abyss will ask: 'Why didn't you?'

Are you ready to be a better ancestor?



The world

Our approach

Our impact

# Key sustainability figures



The world

Our approach

Our impact



65.8%

Recycling rate  
(% of total waste handled)  
(FY20: 64.7%)



60.9%

Share of clean emission trucks  
(% Euro 6 trucks of total fleet)  
(FY20: 48.5%)



261

Carbon avoidance  
(kg CO<sub>2</sub> per tonne waste handled)  
(FY20: 257)



+21

Employee engagement  
(eNPS score in Pulse survey)  
(FY20: +14)



11.10

Carbon intensity of our sites  
(kg CO<sub>2</sub> per tonne waste handled)  
(FY20: 10.47)



1,495

>3 day accident rate (Number >3  
day-accidents / FTE x 100,000)  
(FY20: 1,504)



9.84

Carbon intensity collection  
(kg CO<sub>2</sub> per tonne waste collected)  
(FY20: 10.04)



21%

of the senior managers now  
working at Renewi are women  
(FY20: 20%\*)

\*restatement of last year's number based on a different calculation methodology





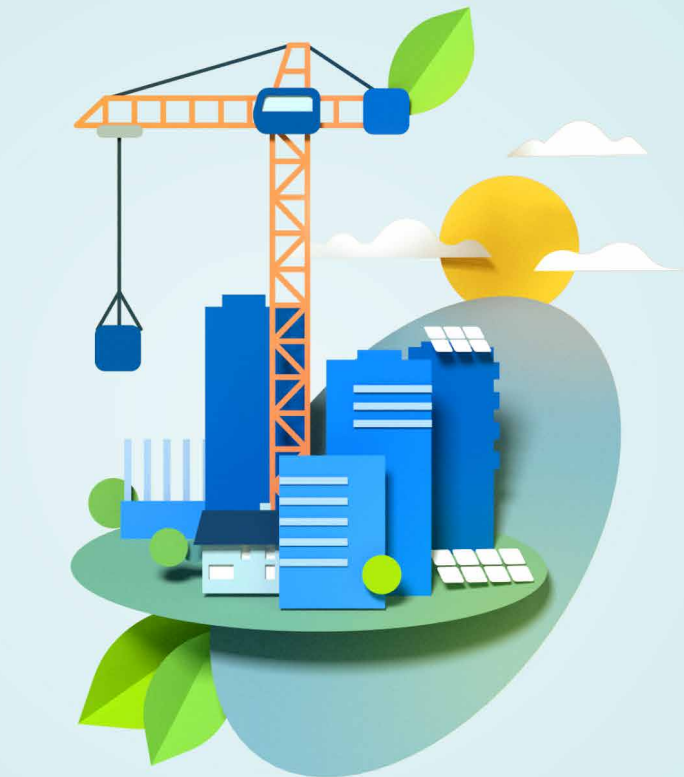
[The world](#)

[Our approach](#)

[Our impact](#)

# 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 that governments, businesses and individuals start the transition towards a more sustainable future.





The world

---

Our approach

---

Our impact

---

# THE CLIMATE EMERGENCY

Temperatures across the world are rising. If nothing is done, they could exceed 4°C by 2100, which may be catastrophic for the planet and will certainly result in a change in the world as we know it.



## The climate emergency continued

We are at a tipping point when it comes to our climate. It is estimated that a 1.5°C rise in the global average temperature above pre-industrial levels will heavily impact the planet, our way of life, and the lives of future generations.

By 2100, rising sea levels would displace 680 million people that live in low-lying coastal zones<sup>1</sup>. In 2100, the cost to the world economy would be \$54 trillion, rising to \$69 trillion for a 2°C rise<sup>2</sup>.

### Targets, projections and pledges

It seems that current efforts are having little effect, despite 195 countries signing the 2015 UN Paris Agreement and committing to reduce emissions in order to limit the rise in global temperature to 1.5°C by 2100. Current emissions are estimated to be leading us to an increase of 3°C<sup>3</sup>.

A course correction is needed to limit the rise, and this will require new pledges from around the world. At the heart of the Paris Agreement are Nationally Determined Contributions (NDCs) which state what action different countries must take in order to limit temperature increase. These differ between countries, with an understanding that developing countries will see a peak in their emissions at a later date than other countries. The 2018 UN report found that current projections suggest that by following the NDCs currently set out, the world is likely to overshoot its 2030 emissions target by 29-32 billion tonnes of CO<sub>2</sub>.

The impact of Covid-19 means countries have an opportunity to re-establish their NDCs and make additional commitments in order to reduce emissions.

### Where do emissions come from?

In order to reduce emissions, it is important to understand where they come from. The extraction, transport and processing of materials are responsible for 70% of all greenhouse gases<sup>4</sup>.

Mobility has the largest emissions footprint at 17.1 billion tonnes. The second largest footprint comes from housing at 13.5 billion tonnes. The production and provision of food, fibre and the clearing of plants for the expansion of urban centres meanwhile contributes 10 billion tonnes of emissions.

The remaining 30% of global emissions are caused by communication, services, consumables and healthcare. Consumables are related with the production of consumer electronics, clothing, personal health products. Communication (mostly for infrastructure, devices and data storage) accounts for 3.5 billion tonnes. Healthcare meanwhile has the smallest footprint of societal needs and wants, with a footprint of 3 billion tonnes, mostly generated for hospital buildings, healthcare equipment and pharmaceuticals.



70%

The proportion of greenhouse gases from the extraction, transport and processing of materials

680 million

The number of people displaced by rising sea levels by 2100



The world

Our approach

Our impact

1. The Ocean and Cryosphere in a Changing Climate by the IPCC. 2. Protecting our capital by CDP and C40 Cities. 3. UNEP, Emissions Gap Report 2018. 4. The Circularity Gap Report 2021 by Circle Economy.



The world

---

Our approach

---

Our impact

---



**The richest 1% of the  
population account for  
more emissions  
than the poorest 50%**

*Source: Confronting Carbon Inequality, Oxfam, 2019.*





The world

---

Our approach

---

Our impact

---

## So what do we do?

We need to move from climate pledges and a linear process, to a circular economy. This will require behavioural changes from individuals, organisations and governments, and innovations from forward-thinking businesses like Renewi.



# What is the circular economy?

The circular economy, or circularity, is an economic system that aims to eliminate all waste by finding continual uses for materials, creating a more sustainable society. This may be by reusing, sharing, repairing, refurbishing, remanufacturing or recycling materials after use, creating a closed loop system where new resources are not needed.

According to the Circularity Gap Report 2021, a circular economy enacted globally can close the emissions gap. Current climate pledges (which aim to keep the increase in global temperature to below two degrees by 2032) take us 15% of the way towards this goal. A circular economy can deliver the remaining 85%.

*Source: The Circularity Gap Report 2021 by Circle Economy.*



The world

Our approach

Our impact





The world

Our approach

Our impact

By 2030, the circular economy  
has the power to shrink global  
greenhouse gas emissions  
by **39%** and cut virgin  
resource use by **28%**

Source: The Circularity Gap Report 2021 by Circle Economy.



Professor Peter Hopkinson

“

I WAKE UP A PESSIMIST BUT TEND  
TO GO TO BED AN OPTIMIST.  
I THINK THERE IS GROWING  
REALISATION THAT WE HAVE TO ACT  
AND REACH FIRM COMMITMENTS  
(TO REDUCE CARBON EMISSIONS)

”

◆ A Q&A WITH...

## Professor Peter Hopkinson

**Professor Peter Hopkinson is Co-Director of the UK Research and Innovation Council's National Interdisciplinary Research Programme and the Exeter Centre for Circular Economy at the University of Exeter Business School. He also works with the Ellen MacArthur Foundation as a Global Pioneer for Circular Economy and established the world's first MBA on the subject. He leads a Global Masterclass for the Ellen MacArthur Foundation on Implementing the circular economy.**

### Why is transitioning towards a circular economy so important in the battle against climate change?

A significant percentage of the greenhouse gas (GHG) emissions from our industrial economies come from the production and consumption of products and materials<sup>1</sup>. In the UK, many of our GHG emissions have been exported to other countries as a result of offshoring. These countries often have far higher dependency on fossil fuels, hence when we import goods from other countries, we are contributing to global GHGs even if they are not accounted for in our current carbon reporting. The principles of a circular economy are designed to increase resource productivity, drive down waste and emissions of all types, especially GHGs and rebuild natural capital which serves to sequester carbon. →

1. Completing the Picture: How the Circular Economy Tackles Climate Change by the Ellen MacArthur Foundation and Material Economics, 2019



The world

Our approach

Our impact





## A Q&A with Professor Peter Hopkinson *continued*

### Are governments doing enough to encourage this transition?

In a word, no. Many are beginning to realise the tremendous economic opportunity and multiple benefits of such a transition, but there is still a long way to go to turn around the legacy of the past decades of linear economy regulation, investment and policy initiatives. Countries such as Finland have created an overarching national circular economy strategy, and the EU Circular Economy policy package is a step in the right direction. Policy levers such as extended producer responsibility, to pass the full environmental and climate change impact onto producers – the ‘polluter pays’ concept – can make a big difference.

Some countries have set carbon taxes at over \$100 per tonne, which are necessary to shift carbon-intensive production and consumption patterns that have become habituated over the past decades. But even these will not be enough, and if we are to reach zero carbon and accelerate a future circular economy, we need systemic innovation, systemic finance initiatives and a technological and social innovation revolution akin to previous industrial revolutions.



**COP26 WILL BE A GREAT OPPORTUNITY TO FOCUS ON CLIMATE CHANGE, TAKE LESSONS FROM COVID AS A SYSTEM SHOCK AND ADDRESS THE NEED TO BUILD RESILIENCE BACK INTO OUR ECONOMIES AND SOCIAL SYSTEMS**

### How can richer countries set an example to developing nations?

By transforming the carbon intensity of our economy, stopping offshoring carbon emissions and taking full responsibility for the emissions associated with UK final demand. We must support not just developing, but also emerging and many other economies with solutions and mechanisms to avoid the carbon-intensive pathways we have followed, without denying their citizens the right to raised standards of living.

### In November 2021, the UK will host the 2021 United Nations Climate Change Conference (COP26) in Glasgow. Do you hold out much hope that firm global commitments will be made?

I wake up a pessimist but tend to go to bed an optimist. I think there is growing realisation that we have to act and reach firm commitments. There are signs this might happen, but we shouldn't pin everything on a single event. There is a lot of positive change and increasing awareness that zero carbon can be a source of economic opportunity by decoupling resource throughput from economic growth. It isn't easy, but we know that change is inevitable – how it comes about, at what speed and how we manage the transition is an endless source of debate.

### Has Covid-19 focused the minds of policymakers on solving big issues like climate change?

I would like to think it has had some impact. Just from the point of view of national security, the pandemic has revealed the lack of resilience in global supply chains. How this translates into the action on climate change and the drive to return economic growth to pre-pandemic levels is an open question. COP26 will be a great opportunity to focus on climate change, take lessons from Covid as a system shock and address the need to build resilience back into our economies and social systems.

### What are easy first steps that businesses could take to become more circular and reuse waste?

Look around for inspiration and evidence of those companies who are making the transition. We run a global masterclass three times a year designed to take businesses from any sector through a journey, showing how others are initiating and implementing the circular economy. Google, Philips, SAP, IKEA, Solvay, Renault, Ricoh and others are making the change – sometimes incrementally, sometimes transformationally. We would always propose a technique of value analysis to scan for value leakage via materials, assets and customers, and follow a simple sequence of the Circular Economy value creation and capture modelling and piloting. This should involve multi-functional teams and partners and give them appropriate tools and resources to navigate some of the challenges they inevitably face.

### What role can waste management and recycling companies play in enabling the circular economy?

In a circular economy waste and recycling companies will become resource recovery and re-use companies, using their know-how, infrastructure and capabilities to move away from ‘managing waste’ to working with upstream partners to unlock new sources of value from resources in the economy, far beyond their current single life cycle. They are therefore key enablers and have ability to integrate resource flows from multiple sources and create new partnerships within and across value creating ecosystems.

# So how do we get there?

**Reaching a circular economy will require a collaborative approach, and a creative, innovative and purposeful mindset from a wide range of stakeholders. There will need to be more than a focus on renewable energy. We must collectively overhaul our linear behaviours and commit to a transformational course-correction.**

Products will need to be designed with the end of their life considered, ensuring that they can be recycled or repurposed without creating any waste. Manufacturers will need to consider what materials they are using and who they are sourcing them from, to ensure their outputs can have new life after their initial use.

New business models will also be required. Entrepreneurs and start-ups must ensure that they build circularity into their products, services and culture from the start. Meanwhile, many large established organisations will need to encourage a shift in mindset, using their scale to leverage a change to a more circular economy across their industry.

Governments will also have a major part to play. In the short term, this means meeting the UN's Sustainable Development Goals, a collection of 17 interlinked global goals, which the organisation says are designed to be a 'blueprint to achieve a better and more sustainable future for all'.

In the longer term, governments will need to be more ambitious. The April Leaders' Summit on Climate saw many global governments make more ambitious pledges to reduce reliance on fossil fuels. European Commission President Ursula von der Leyen announced a policy to make Europe climate-neutral by 2050. While concentrating on energy alone will not be enough, there is hope that development at the summit will set the stage for a productive UN Climate Change Conference (COP26) meeting in November.

There must also be a drive to support the move to a circular economy through human capital. These changes will require large scale workforces with new skills. As individuals we must be willing to learn new things and ask new questions, but governments and business must also support this reskilling.

And of course, societies will be central to all shifts towards circularity. Behavioural changes, pressure on governments to act and choosing to associate with businesses doing their part will all help to drive long-term change to a greener world for all.

Most important of all, will be for individuals, organisations and governments to work together across the entire product cycle to stop waste. A collaborative spirit, where all parties share a common goal of building a circular economy, will be vital.



The world

Our approach

Our impact



*European Commission  
President Ursula von der Leyen  
announces a policy to make  
Europe climate neutral by 2050*



# What can countries do?



The world

Our approach

Our impact

Reaching a sustainable future – with a circular economy at its heart – will require trade-offs by governments around the world. A number of stakeholders will need to be catered for, with their needs met and concerns addressed

According to the Circularity Gap 2021 report, society has seven core societal needs that must be considered during the transition to a circular economy. In total, these needs make up around 59.1 billion tonnes of CO<sub>2</sub> emissions. By 2030, unless something is done, emissions will hit 65 billion tonnes. Bringing that number down is the responsibility of policymakers, businesses, and individuals worldwide.

But not all countries are the same. A large proportion (48% of the world's population) are developing nations, struggling to provide for their citizens. Another significant number are rapidly expanding manufacturing hubs, eager to industrialise.

The richest nations in the world are the ones that are driving the transition toward circularity, but they account for just 15% of the population. They must ensure that they take the rest of the world along with them on the journey towards circularity.

By understanding how emissions are intrinsically linked to the extraction, production and consumption of all these needs, we can show how a refocus towards circularity can dramatically cut emissions.

Governments must drive the transition towards a circular economy through legislation and policy, while also shifting the attitudes and perceptions of their populations.





# What can companies do?

Businesses will play an important role in transitioning towards a circular economy. To help bridge the gap, businesses must...



## REDUCE

Companies must use fewer materials in their products and cut the level of greenhouse gases they emit.



## EXTEND

Products and goods should be more durable, with their lifetimes extended.



## REPLACE

Use regenerative materials and renewable energy to replace toxic materials and polluting fossil fuels.



## RENEW

Reuse materials, enhance end-of-life product processing, and design for recycling.



## INNOVATE

Invest in new ways of operating and more sustainable products.

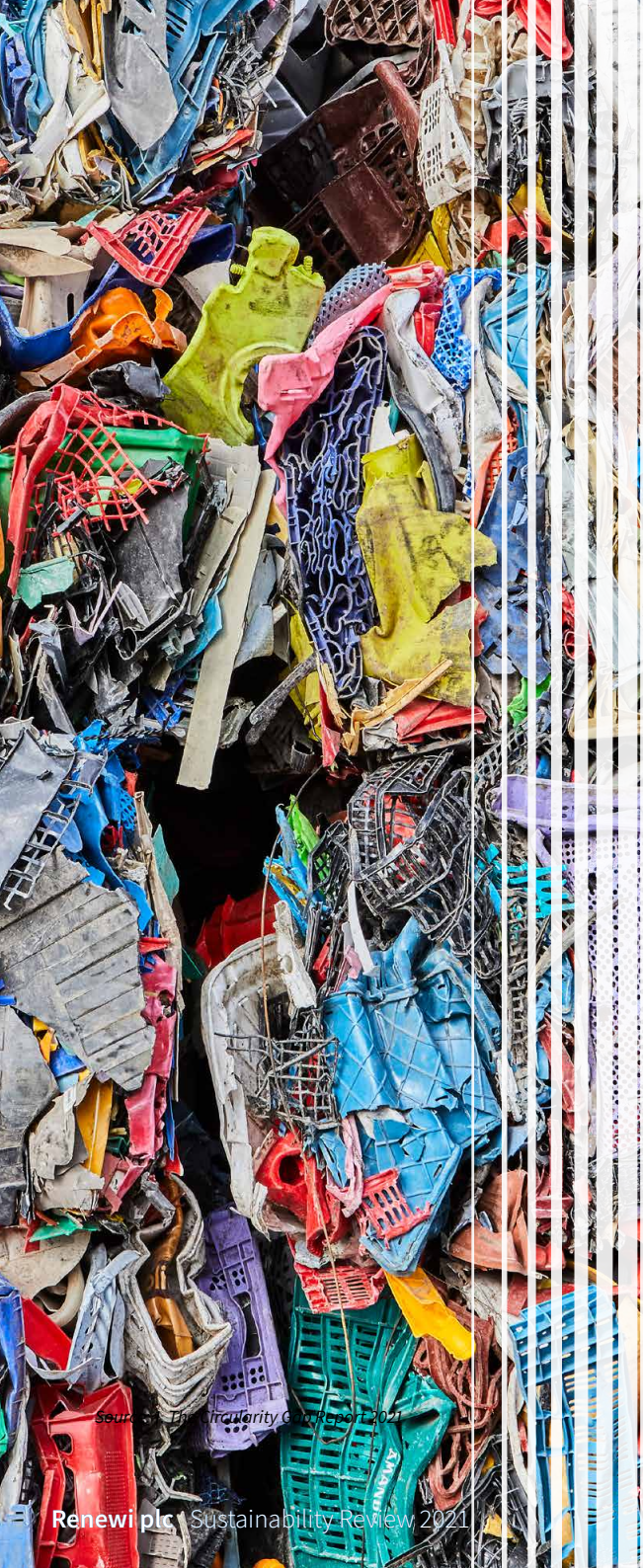




THE CHALLENGE

“ Where should wealthy countries focus their efforts? What capital investments should they make? Where should their power be funnelled if we are to see a circular economy transition? ”





## The challenge continued

### Waste is part of the challenge

We have no time to lose. It won't be long before the consequences we face are irreversible.

As developed countries, we must take steps to fulfil our responsibilities.

From a global pandemic to a warming planet that continuously faces climate challenges, the last year has reminded us that now is the time to change. The circular economy has already cemented its position in global sustainable development dialogues. It now appears to be a strong basis for governments to 'build back better'. But where should wealthy countries focus their efforts? What capital investments should they make? Where should their power be funnelled if we are to see a circular economy transition?

### Rethinking waste

Fundamentally, we must rethink the concept of waste. Waste needs to be perceived in terms of the recovery of materials as a raw material for tomorrow. We need to recover even more valuable streams from waste through innovative processes and partnerships. This is already happening, but we need to create entire chains for it immediately.

We also need business to rethink how they produce products – to create products that are more sustainable and have a longer life span. We need them to shift their thinking as well – to be open to manufacture new products drawing on secondary raw materials instead of primary materials and to work with recycling companies to transform materials at the end of its life into new product that can be re-used in the manufacturing process.

### Harmonising regulation

Government has a key role to play as well. Their role is to put in the place the right regulatory instruments to enforce the use of secondary resources across sectors. Across Europe and the UK, sorting standards and acceptance conditions are poorly aligned. It is therefore the responsibility of Governments to work collaboratively to introduce uniform regulations and enforcement. And together they will position themselves to deliver on the circular economy.

We have outlined above a few examples of the systemic shifts to be taken by developed countries. Another responsibility is for these countries to help developing markets move from landfill to incineration with energy recovery and then start embracing recycling.



DEVELOPED MARKETS NEED TO MAKE MULTIPLE ADJUSTMENTS:  
FROM THE CONCEPT OF WASTE, PRODUCTION AND BUSINESS  
MODELS, TO REGULATION AND HUMAN BEHAVIOUR



So when do we  
need to make  
this change?

# NOW

Time is of the essence in the fight against the climate emergency. But Covid-19 has shown that by working together and showing ambition, the world is able to rise to the challenge.



The world

Our approach

Our impact





The world

Our approach

Our impact

## BEING PART OF THE SOLUTION

“ We are proud to play a key role in the fight against the climate emergency. ”

Renewi's purpose is to protect the world by giving new life to used materials. As a purpose-driven organisation, our focus is to find new ways to turn used materials into high quality secondary raw materials. In so doing, we slow down the need to extract primary materials from the earth, we prevent waste from going to incineration and play a key part in lowering CO<sub>2</sub> emissions. With these actions Renewi is at the heart of the circular economy. Resource preservation is in our DNA, and we are proud to contribute to climate action. →





## Being part of the solution *continued*

Co-operation is key if we are to cut emissions from materials use and handling, which combined are responsible for 70% of global greenhouse gas emissions. If we are to curb the rise of global warming, we, Renewi, need to stay true to one of our key values of being ‘innovative’.

### Working together

We need to work alongside our customers to help them reduce the volume of residual waste that enters the waste stream with tailor-made solutions for on-site waste sorting. We optimise our processes by investing tens of millions of euros per year in advanced sorting and processing lines in order to deliver higher recycling while emitting lower emissions.

We partner with technology providers and manufacturers to develop circular innovations. The former allows us to connect with expertise needed to create winning innovations. The latter provides offtake for the recycled raw materials or products, or financial investments in the development of recycling solutions for their products. As our secondary materials are the input for their production processes, close alignment ensures we can replace virgin materials traditionally used.

We also align with knowledge institutions, innovative logistics providers and certification bodies to exchange knowledge. Our public affairs team engages with Government, highlighting the impact of changes in regulatory regimes on sustainable operations. In this way, we help shape the legislative agenda to ensure the proposals are deliverable and will benefit the circular economy.

### Innovation is in our DNA

An example of innovation is the production of bioLNG fuel from biogas – we are currently constructing a new plant with state-of-the-art technology with Nordsol and Shell to produce clean fuel from a renewable source. Another is the improvement of our waste collection fleet. Today we have two electric vehicles on the road. Our commitment is to increase this to 65 electric vehicles in the Netherlands and Belgium, which will complement our Euro 6 low emission diesel trucks. In this way we will have a 100% clean-emissions fleet by 2025. This will drastically reduce our fleet’s nitrogen and particulate matter emissions and positively impact the carbon intensity of our waste collection activities. To combat pollution and reduce noise and traffic within cities we optimise route planning.

The two approaches will enable us to deliver on our purpose – to give new life to used materials – and will help us to deliver on our ambitious goal of uplifting our targeted recycling volumes – up 10% points to 75% by 2025. Additionally to help us reduce our carbon impact by 15%.

Our solution helps us make a difference across numerous sectors, including the construction and demolition sector – one of Europe’s major CO<sub>2</sub> emitters due to its reliance on carbon-intensive cement and steel. Renewi’s Mineralz & Water Division produces new secondary raw materials by cleaning and processing contaminated soil, water and demolition materials and recycling mineral residues for new concrete and cement. Our Commercial Waste Division in the Netherlands operates a number of highly advanced construction and demolition sorting lines, sorting these often mixed waste streams into several monostreams fractions. It also collects asbestos contaminated steel recovered during demolition and delivers it to the Purified Metals Company where it is given a new life.

Taking action today is critical if we are to fight the climate emergency. We believe that everyone – ourselves included – can and should take decisive action to support Europe’s goal to become carbon-neutral by 2050.

*Our subsidiary ATM is a European leader in purifying contaminated materials*







The world

Our approach

Our impact

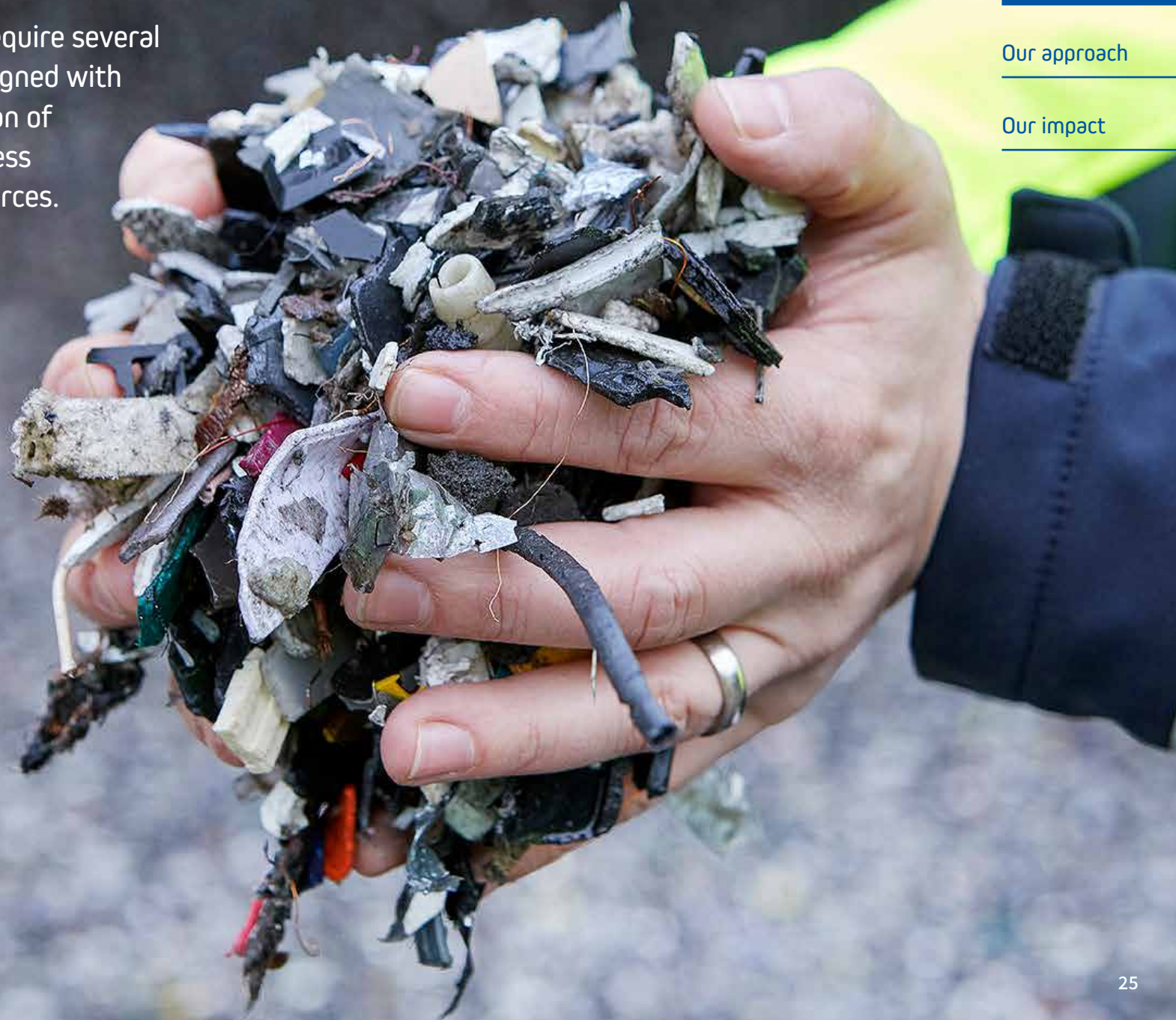
Renewi is at the heart of the circular economy.  
Resource preservation is in our DNA,  
and we are proud to contribute to climate action.



# 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



The world

---

**Our approach**

---

Our impact

---

# Our approach

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





# 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.



The world

Our approach

Our impact

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

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

**2020**

Operating  
for over  
**100**  
years

Pure-play  
waste-to-product  
recycling  
company

Benelux  
market  
leader

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

**165**  
Operating sites

**6,586**  
Employees  
at year end

## + How Renewi is structured

Our business is organised into three customer-facing Divisions:

### Commercial Waste

Our Commercial Division is the market leader within both the Netherlands and Belgium. It provides a wide range of waste-to-product solutions and represents around 72% of Renewi's revenues. The commercial waste market covers the collection, sorting and processing of waste materials from a range of sources.

### Mineralz & Water

Our Mineralz & Water (M&W) Division consists of our ATM and Mineralz businesses. Its activities are centred on decontamination, stabilisation and reuse of highly contaminated materials, including soil, sludge, water, bottom and fly ash, and packed chemical waste. It produces certified secondary raw materials for the construction industry.

### Specialities

Our Specialities Division consists of three businesses: Coolrec, Maltha and Municipal. These are focused on processing of specific waste streams: Waste from electrical and electronic equipment (Coolrec), glass (Maltha) and residual municipal waste (Municipal). The operations span the Netherlands, Belgium and the UK as well as France, Portugal and Hungary.



The world

Our approach

Our impact

## What makes us different

1

We are recognised as a waste-to-product leader in sustainability at the heart of the circular economy.

2

As a pure-play recycling company we exclusively focus on extracting value from waste rather than on its disposal through incineration or landfill.

3

Our waste-to-product approach addresses social and regulatory trends, and offers the most efficient solution to recycle used materials.

4

We have been recognised for our strong ESG performance. S&P Global Ratings recently scored Renewi 83 out of 100.



# Our role in the circular economy



The world

Our approach

Our impact

Never before has there been as much raw material extraction, product manufacture, consumption and waste as there is today. The extraction and processing of materials is responsible for 70% of all greenhouse gases. 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.





# How we create value for stakeholders



**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





### 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.



### RESPONSIBLE CONSUMPTION AND PRODUCTION

**Objective:** Ensure

sustainable consumption and production patterns.

**How we contribute:** By enabling the circular economy, we are helping to ensure that used materials are given new life. This is central to what we do.



### 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 reducing 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.



### 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, which is for a considerable part delivered to the electricity grid. This way, we enable the access to sustainable energy for others. Besides that we are increasing the share of renewable energy in our own energy mix, decreasing our own independence on fossil fuels.



### 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 waste water and making it available again as safe drinking water. Each year, we do this by decontaminating enough water to fill more than 250 Olympic-sized swimming pools.



### GOOD HEALTH AND WELLBEING


**Objective:** Ensure healthy lives and promote well-being for all.

**How we contribute:** Our responsibility to keep safe our 6,586 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.

# The circular economy is aligned with the SDGs

The United Nations Sustainable Development Goals (SDGs) help provide a framework for the world to “achieve a better and more sustainable future for all”

Unveiled in 2015, the goals are designed to bring the world together, eradicate poverty, and tackle climate change by 2030. Achieving a circular economy goes hand-in-hand with many of the UNSDGs.



Demand for secondary products in the construction sector is growing as the industry seeks to reduce CO<sub>2</sub> emissions and support the circular economy



The world

Our approach

Our impact

## CASE STUDY

# From soil to sand

Our subsidiary ATM is a European leader in purifying contaminated materials. One of its key roles is to clean soil from remediation sites – something that must be done with extreme care, as contaminated waste is a threat to the environment and people’s health.

The soil is first tested in ATM’s laboratory. Once our scientists have determined that it is treatable to the standards required for safe reuse, it is placed in a rotating drum and heated at more than 400°C to evaporate and burn away all organic contaminants.

The thermally treated soil is then fragmented in the sieving and sorting installation, where it is stripped of iron, ferrous rocks and light fractions. The resulting sand, gravel and filler become secondary raw materials suitable to produce concrete and asphalt.

ATM keeps working on upgrading its facilities to produce these purified secondary raw materials in order to play its part in enabling the circular economy for the construction industry – one of the biggest CO<sub>2</sub> emitters in Europe.





The world

**Our approach**

Our impact

## CASE STUDY

# Creating a circular mattress

Since we announced our investment – together with IKEA Group – in Dutch mattress recycler RetourMatras last year, one million Renewi sourced mattresses have been saved in the Netherlands from the incinerator, and around 90% of the materials were recycled or reused.

Further investment is funding the construction of a fourth mattress recycling plant in the Netherlands and the first in Belgium.

Once the Etten-Leur plant opens, these will allow 1.5 million mattresses a year to be recycled. The amended Dutch LAP3 took effect on 2 March 2021. The minimum standard for mattresses was incineration and has therefore changed to: Separation into materials or other processing in which at least 90% of the mattresses received is recycled or removed for recycling elsewhere. Belgium already banned mattress incineration earlier this year.

The next step will be to create a truly circular mattress. With further investment in refinement processes, the polyurethane foam from discarded mattresses can be converted back into a POLYOL, from which new foam can be created for new mattresses.

## 1 million

Mattresses have been saved from the incinerator since our investment in RetourMatras in June 2019.



Otto de Bont  
Chief Executive Officer

“

BY EMBRACING AND BOOSTING THE CIRCULAR ECONOMY, BY REPLACING INCINERATION AND LANDFILL WITH RECYCLING, WE CAN SLOW DOWN GLOBAL WARMING AND TACKLE THE THREAT OF CLIMATE EMERGENCY

”

## ◆ A Q&A WITH...

# Otto de Bont

We asked Otto de Bont to share his thoughts on tackling the climate emergency and the role that Renewi, as a company that is at the heart of the circular economy, can play.

### Q: Last year, you sounded the alarm that the time to act on climate change is now. Do you feel optimistic for the future?

A: 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 US now refers to a 'climate emergency' – a phrase that highlights the problem (climate) and the need (emergency = time to act) in 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 environmental pressures, there has also been greater environmental degradation, loss of biodiversity, threat of resource depletion, climate change and other forms of environmental pressure.



The world

Our approach

Our impact



## A Q&A with Otto de Bont continued

Our demand for products is a major contributor to the destruction of the planet. As the world population grows, we can expect enhanced levels of consumption that will result in at an even higher level of production. It has been estimated we can expect to see double the number of raw materials used by 2060 compared with 2017.

But despite the risks we face I am optimistic because we have clarity on actions that can be taken particularly in the world in which Renewi operates. By embracing and boosting the circular economy, by replacing incineration and landfill with recycling, we can slow down global warming and tackle the threat of climate change. The eyes of future generations are upon us. We must prove that we are good ancestors – that we are serious about creating a better and greener future for our children and grandchildren.

### Q: Is a circular economy the only solution?

A: There are multiple parallel ways in which the climate emergency can be addressed. One way to limit global warming to under 2°C by 2050 is through the circular economy. Global plans in place through the Paris Climate Agreement are expected to contribute up to 15% of target reduction, so the circular economy must deliver the remaining 85%. The current global economy is only 8.6% circular; if international governments, industry and other key actors can double that figure, to 17%, by 2032, it is expected that we can close the gap and limit global warming to under 2°C.

Recycling therefore has a crucial role to play, not only in creating secondary raw materials, but also in producing high-quality alternatives to what is currently used – virgin materials.

Many companies operating in the waste industry are conflicted in progressing towards fully circular solutions because they have incinerators and landfill voids to fill. These are cheaper and easier solutions for the disposal of waste, but deliver poorer outcomes (in terms of GHG emissions) than recycling. As a pure-play waste-to-product company, Renewi minimises incineration and landfill and therefore drives down the proportion of inbound waste being sent for energy recovery, and we work tirelessly to give new use to waste materials, including producing secondary raw materials.

### Q: Do you feel global business is taking sustainability more seriously now?

A: No doubt about it. As the expectations on corporate responsibility increase, and as transparency becomes more prevalent, companies are recognising the need to act on sustainability. Professional communications and good intentions are no longer enough. Management needs to ensure that the strategy of the company and its sustainability efforts are aligned. Often we see divergence, which of course makes the sustainability efforts fragile, lacking real commitment and prioritisation. Businesses must put sustainability at the heart of what they do.

To boost the circular economy, business and industry must collaborate. As Prince William said when launching the Earthshot Prize competition: “We’ve got to harness our ingenuity and our ability to invent. The next 10 years are a critical decade for change.” The Earthshot Prize recognises ideas and technologies that can safeguard the planet and aims to bring together the best minds to tackle some of the world’s greatest environmental challenges. I really believe that circularity is a joint effort and innovation is its engine.



Prince William discussing the Earthshot Prize with Sir David Attenborough in October 2020

### Q: What are the most urgent challenges facing the waste industry?

A: Recycling has become more difficult as product manufacturing has evolved, with the use of complex composites and compositions of refined virgin materials. Incorporating recyclability into how products are designed is vital if the world is to successfully recover a greater percentage of materials and create circularity.

It is technically possible to recycle almost every product to create reusable materials. However, when the ‘economic’ cost of virgin materials is low and does not fully value the carbon cost or the materials’ degradation, it is not always economically viable to recycle.

Loading virgin raw materials for their full environmental cost would therefore allow the implicit value of secondary raw materials to be realised. It would also boost use and contribute to the targeted doubling of circularity.



The world

Our approach

Our impact

## A Q&A with Otto de Bont continued

Secondary materials typically struggle to achieve the same purity as virgin production due to the non-homogeneous inputs. This is a challenge when incorporated into production lines that have set precise and narrow definitions of inputs. Recycled raw materials, therefore, must be further refined to improve quality; in parallel, product designers and manufacturers need to be encouraged to broaden their design specifications to overcome the challenges of using circular materials in their production process. Producer responsibility has never been more important.

At Renewi, we are working closely with innovative partners to raise the quality of recycled and secondary materials. We are also working with manufacturers to help them incorporate secondary materials into their design and production processes. We are encouraged by the supportive dialogue with leading sustainability-conscious manufacturers, and hopeful that this design thinking and collaboration will permeate into the general manufacturing economy over time.

Renewi also wants to save more waste from ending up in incineration. Today, it is cheaper for waste streams that are difficult to recycle to be incinerated. If governments want a circular world by 2050, more incentives are needed. Incentivise manufacturers to replace hard-to-recycle materials with easily recyclable ones. Incentivise the waste sector to find new and innovative ways to do so. Make primary raw materials more expensive than secondary materials. Require that a percentage of recycled raw materials are used in every product. And, finally, make incineration more expensive.

As a pure-play recycler, Renewi has no waste incineration facilities and therefore does not follow the two tracks that many other companies in the sector do: wanting to recycle on the one hand, and to keep their waste incinerators fully occupied on the other.

### Q: What do you hope will come from the UN's Climate Change Conference, COP26?

A: Expectations are high, especially after the somewhat disappointing COP25 in Madrid in November 2019. The final declaration emphasised the “urgency” of tackling the climate problem, but it did not contain a strong and clear call to do so.

I am hopeful that COP26 will put the world on the path it needs to be on and new decisions will be made on how to cut carbon emissions. COP26 is already being viewed as the successor to COP21, where the Paris Agreement was signed.

This year's theme is 'The climate has no borders', which stresses that countries need to work together to fight climate change. Or, as Sir David Attenborough put it in February this year: “Recognise climate change as a worldwide security threat, and act proportionately.”

Climate emergency is a global threat. But, as with Covid-19, it shouldn't divide but unite us. Collectively, we need to build back better. Together, governments need to introduce the legislative and regulatory changes required to deliver. Now is the time to seize the moment.

*Our subsidiary Coolrec uses innovative separation techniques*



The world

Our approach

Our impact



# Five years of innovation in recycling and circularity



The world

Our approach

Our impact



## AUGUST 2018

Through our circular collaboration with Beautiful Cups, we have given new life to 11 million disposable coffee cups in the Netherlands in a year.

## JUNE 2020

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

## OCTOBER 2017

Five years of research culminate in the production of a clean, safe and sustainable paving tile produced from recycled residual household waste.



## JUNE 2019

Our agreement with RetourMatras and IKEA expands the capacity of mattress recycling in the Netherlands to more than one million a year.



## FEBRUARY 2021

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

2018

2019

2020

2021



## FEBRUARY 2018

We start converting organic household waste into bioplastics through our specialist organic waste subsidiary, Renewi Organics.

## NOVEMBER 2018

PeelPioneers, which processes citrus peel into secondary raw materials, opens its first facility at our Son location.



## APRIL 2020

Our collaboration with Van Straten Medical/GreenCycl leads to a new process to collect, sterilize and return used face masks from hospitals.

## SEPTEMBER 2019

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



## MARCH 2021

We pilot an innovative waste collection concept with several Amsterdam McDonald's restaurants to reduce CO<sub>2</sub> emissions.

4,300

The number of families that could be provided with energy each year by the ENGIE wind turbine's power generation.



The world

Our approach

Our impact

## CASE STUDY

# Going big on wind power

In the Belgian city of Ghent we are working with ENGIE to construct a wind turbine on one of our sites. The turbine will have a maximum tip height of no less than 242m, making it the highest on the Belgian mainland.

The turbine will be a community asset. Renewi employees and local residents have the opportunity to own shares in Electrabel CoGreen, ENGIE's cooperative company; each year, they can receive a dividend depending on the amount of electricity its wind turbines produce.

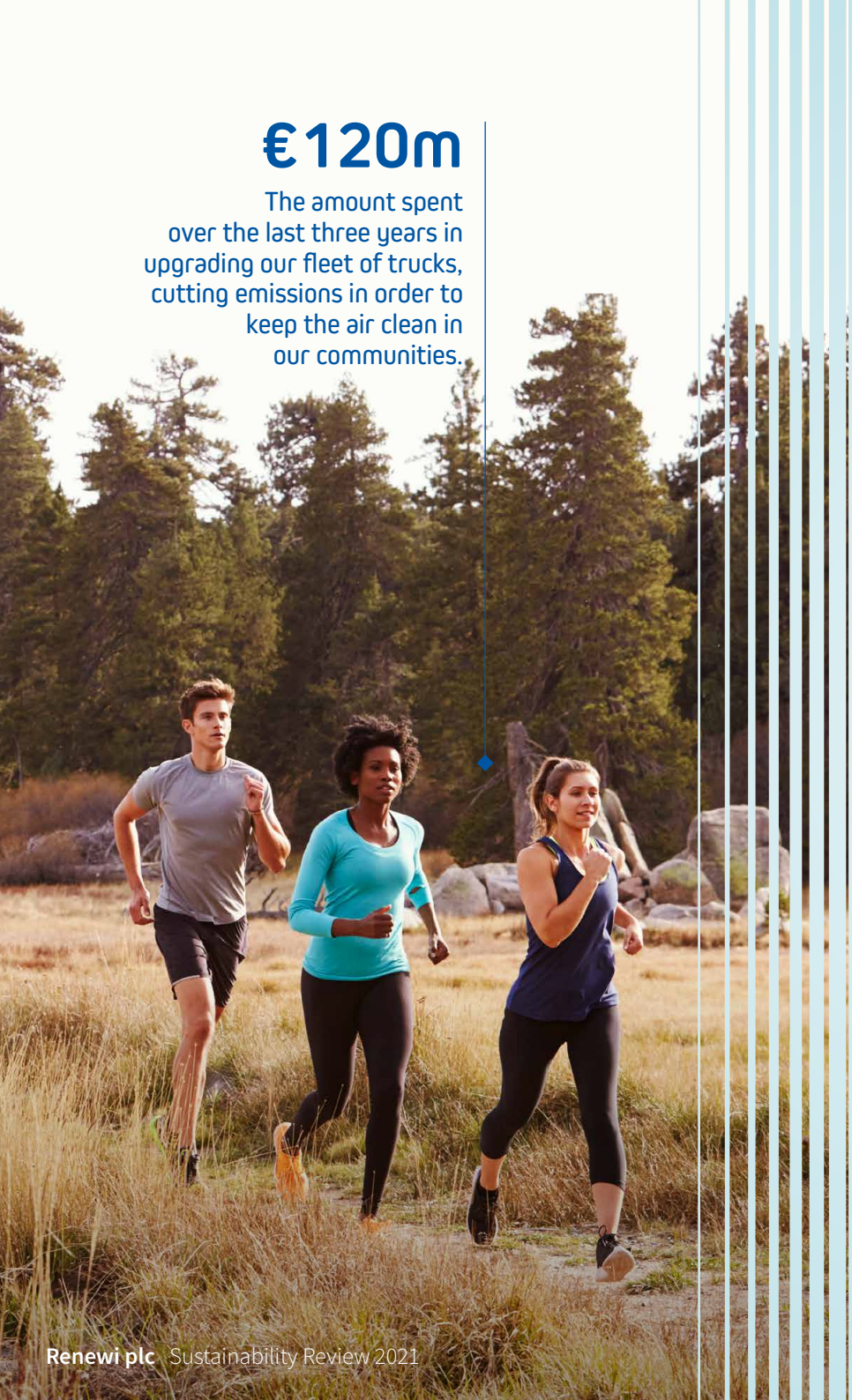
The new turbine is expected to generate 13 million kilowatt hours of electricity annually – equivalent to the annual consumption of around 4,300 families. It will be able to cover 75% of the electricity use at the site, saving about 5,700 tonnes of CO<sub>2</sub>.

We're looking into installing wind turbines on other sites to reduce the carbon impact of our operations. Where our own renewable energy isn't sufficient, we will purchase green energy from green energy providers.



# €120m

The amount spent over the last three years in upgrading our fleet of trucks, cutting emissions in order to keep the air clean in our communities.



The world

Our approach

Our impact

## CASE STUDY

# Emission-free waste collection

We have always carried out waste collections as sustainably as possible, to minimise our effect on the environment. Over the past three years we have invested more than €120m in upgrading over 50% of our fleet of trucks to Euro 6 standard, cutting NOx and particulate emissions by over 25%. We also work with other waste companies to reduce distances travelled by collecting jointly from inner-city locations.

But the future of waste collection is zero-emission vehicles (ZEVs) – a growing number of Dutch cities will only allow emission-free vehicles in built-up areas from 2025 – and this year we became the first waste company in the Netherlands to trial an electric collection vehicle. Our Volvo FE Electric 6x2 is now collecting commercial waste in the Amsterdam region.

We intend to continue to lead the way in developing and operating ZEVs, working with the manufacturers to optimise performance and help keep the air clean for the communities we serve.



The world

---

Our approach

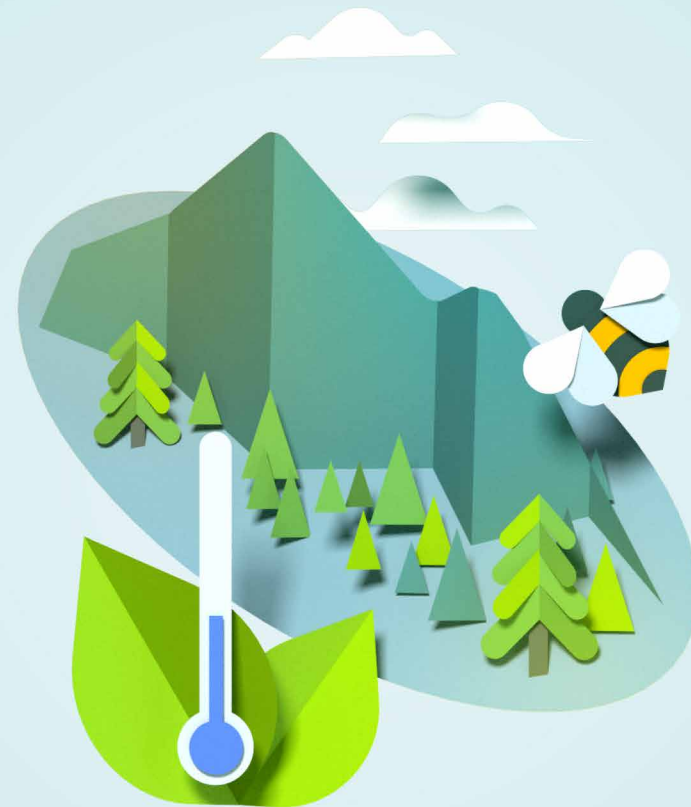
---

**Our impact**

---

# Our impact

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





# Sustainability strategy summary

Sustainability is at the heart of our operations. Last year, we introduced our new sustainability strategy. We identified three sustainability themes that fit with the fundamentals of our company:



**Enable  
the circular  
economy**

page 42



**Reduce carbon  
emissions  
and waste**

page 45



**Care  
for people**

page 48

We also established six bold objectives which underline these and which have a clear connection with 6 of the 17 United Nations Sustainable Development Goals. To each objective we assigned a set of key performance metrics, each with ambitious targets.



The world

Our approach

**Our impact**





# Enable the circular economy

At Renewi, our purpose is to protect the world by giving new life to used materials. To achieve this, we need to take action to make the economy more circular

When your business strategy and sustainability strategy meet, sustainability becomes part of your organisation's DNA.

At Renewi we take a precautionary approach to environmental challenges. Enabling the circular economy is at our core and expressed in our purpose: to protect the world by giving new life to used materials. That is exactly why two of our business strategy objectives are to be both a leader in recycling and a leader in secondary raw material production.

## Our goals and metrics for 2025

Our objective is to turn our customers' waste into new products, by focusing on three metrics: recycling rate, carbon avoidance and innovative secondary materials produced. →



The world

Our approach

Our impact

## OBJECTIVES

- Turn our customers' waste into new products

## SDG LINK







## Transforming waste into new products

An important element of closing the circularity gap is turning waste into new products and, as such, one of our key objectives is to give new life to our customers' waste. We help customers with guidance and advice on circularity. By bringing forward inspirational ways to make customers' procurement practices more circular.

We have set three clear and measurable metrics to track how we will continue to close the circularity gap. First, by 2025, we intend to divert 75% of all the waste we receive towards recycling, saving more than 10 million tonnes of materials from going to incineration and landfill. Second, by 2025, we want to produce one million tonnes of secondary raw materials annually using new and innovative processing.

**75%**  
The recycling rate we aim to reach by 2025

## Carbon avoidance from recycling and recovery

An important aspect of a circular economy is the carbon avoidance that occurs in the supply chain when secondary raw materials are used instead of primary raw materials. Recycling leads to huge savings, both in terms of primary raw materials used as well as the energy expended to bring these into our production cycle. Giving preference to recycled materials over primary raw materials could make a big difference.

We are committed to boost our CO<sub>2</sub> avoidance per year in the supply chain by 2025, mainly through recycling and the production of secondary raw materials, but also through the creation of waste-derived fuels, biogas production from food waste, landfill gas power generation and the use of waste-derived fuels on the ATM site.

It is important to note that with the increasing effort to recycle and produce secondary raw materials, the energy use of companies like Renewi will also increase. We are working on reducing these carbon emissions by switching to green energy where possible and by producing our own energy via solar and wind. However, the net carbon benefit of our efforts is always positive because the amount of carbon avoidance in the supply chain is almost seven times higher than our own footprint.

## How do we want to accomplish this goal?

Recycling is the engine of a circular economy. It is precisely in the ability to recycle products that there is growth potential. A significant amount is already recycled in Western Europe, partly by producers rethinking and reinventing production processes to achieve eco-design targets. But there are still some challenging material flows, such as residual mixed waste, mixed plastics, wood and hazardous waste, which are difficult to recycle and therefore need innovation.

### Mission75

Renewi already has an industry leading recycling rate of 65.8%. Last year, we committed to raise this to 75% by 2025 through the launch of Mission75. To achieve this uplift, we must work innovatively to extract as much value as possible from waste and recycled materials.

Launched in April 2021, Mission75 is an ambitious goal that will require teamwork, focus and effort from everybody at Renewi. We are already a market leader in recycling, diverting eight million tonnes of waste away from incineration or landfill. Mission75 will aim to divert an additional 1.3 million tonnes of waste.

This mission requires new and innovative recycling solutions from us. We can start by recycling materials that currently end up in landfill or incineration, as well as working towards uplifting current low-grade recycling to achieve higher specifications. But we also need to innovate on the supply side, since we will become an essential supplier of secondary raw materials in the future. Hence, our recycled products will have to be as close as possible to virgin materials to be a valuable alternative. →

## Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY25 TARGET
Turn our customers' waste into new products	<b>Recycling rate</b> (% of total waste handled)	64.7%	65.8%	<b>75.0%</b> (+10% point)
	<b>Carbon avoidance</b> (kg CO <sub>2</sub> per tonne waste handled)	257	261	<b>275</b> (+15%)
	<b>Innovative secondary materials produced</b> (tonnes)	~200,000	353,500	<b>1M</b>

## Enable the circular economy continued

We're currently working on several new, advanced technologies across the whole Renewi portfolio. With Mission75, we identify hard to recycle waste streams such as mattresses and undertake advanced sorting that will allow sorting of mixed streams into recyclable fractions.

This mission focuses on all of the Renewi divisions. Within the Commercial Division our primary goal is to divert at least 25% of the current residual waste volumes (mixed consumer and business waste) from incineration and landfill. We want to accomplish this by actively encouraging better sorting at source and by using innovative techniques in post-sorting.

Within our Mineralz & Water Division our primary goal is to get ATM soil recycling volumes back to full production volumes and increase the secondary material production of sand, gravel and filler to one million tonnes annually. Beyond ATM, we also want to increase FORZ and other mineral product volumes.

Within our Specialities Division the focus mostly lies in improving quality of material outputs at Maltha and Coolrec and maintaining volumes. Long-term UK PPP contracts limit the scope of possibilities within our UK business. However, we continue to increase volumes that are diverted from landfill to waste-derived fuels production.

# 3.5%

The percentage increase of our carbon avoidance intensity ratio through FY21

### Performance

Renewi is impacted by economic activity. In FY21, Covid-19 slowed down that pace considerably. However, despite the lower volumes of waste (-1.13 million tonnes), recycling and recovery rates and the carbon avoidance as a result of our activities – the key indicators for our sustainability performance – are progressing towards our target. The recycling rate rose almost 1.1 percentage points to 65.8%, mainly due to a decrease in waste sent to incineration, while at the same time levels of waste recycled remained stable.

The level of innovative materials produced significantly increased, to 353,500 tonnes, mainly due to ATM's production of purified gravel, sand and filler. We will continue investing to enable a major leap forward. For example, RetourMatras (our investment with IKEA Group), our bio-LNG investment with Shell and Nordsol, the AP4Terra products, and our investments to get higher quality and quantity waste to products.

As a result of our increased recycling and recovery rate, our carbon avoidance intensity ratio rose by 1.5% compared with FY20, to 261kg CO<sub>2</sub> per tonne waste handled.

### Conclusion and outlook

Despite the Covid-19 crisis, these rates show a positive trend and slight increases. We are therefore making progress towards meeting our 2025 targets. We continually invest in innovative technologies and business models for circular products to maximise sustainability benefits.



The world

Our approach

Our impact

### Recycling and recovery performance

Volumes (million tonnes)	FY20	FY21
Total waste handled at sites	13.18	12.05
Materials recycled <sup>1,2</sup>	8.52	7.94
Materials recovered for energy production from waste <sup>1,2</sup>	3.45	3.16
Total materials recycled and recovered for energy production	11.97	11.11
<b>Recycling rate</b> (% of total waste handled)	64.7%	65.8%
<b>Recycling and recovery rate</b> (% of total waste handled)	90.8%	92.2%

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)	FY20	FY21
Materials separated for re-use/recycling	2,630	2,425
Energy recovery and waste-derived fuels produced and sold	469	473
Landfill gas/anaerobic digestion electricity production	42	44
Waste-derived fuel used at ATM	250	206
Total avoided emissions	3,391	3,148
<b>Carbon avoidance</b> (kg CO <sub>2</sub> per tonne waste handled)	257	261





# Reduce carbon emissions and waste

Our operations result in a net carbon reduction. However, we are committed to reducing our own carbon footprint even more

Globally, 2020 was the equal hottest year on record, tying with 2016. Overall, Earth's average temperature has risen more than 1.2°C since the late 19th century. Human activities, specifically those that generate emissions of CO<sub>2</sub>, methane and other greenhouse gasses, play a significant role in the rising temperature. If we do not stop global warming, the negative impact on humans and global ecosystems will become irreversible.

The good news is that climate change can still be tackled. Renewi's purpose is to be part of the solution: reducing millions of tonnes of carbon emissions in value chains every year through the replacement of virgin materials by secondary materials. →



The world

Our approach

Our impact

## OBJECTIVES

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

## SDG LINK





## Reduce carbon emissions and waste *continued*

However, Renewi’s collection and recycling activities also use electricity and fuel, leading to CO<sub>2</sub> emissions. Some of our processes to treat the waste arising in other industries, like thermal cleaning of soil, the production of compost and mechanical biological treatment, create direct carbon emissions. In addition, we have a large fleet of trucks that collect and transport waste across the Benelux; these emit vehicle particulate matter, nitrous oxide and further carbon emissions. Despite the fact that the entire chain of recycling and waste processing avoids emissions in much greater quantities than it produces itself, we acknowledge the impact our operations have on the environment, and we are working to decrease our emissions.

As we produce more secondary raw materials and recycles, our own energy use is likely to rise in the coming years. That’s why we have put a focus on reducing our environmental impact and carbon footprint per tonne of waste handled.

In the short term, we cannot get to carbon neutral as defined by linear manufacturing companies producing consumables. Instead, we are ‘carbon positive’ in the value we bring through circularity.

### Our goals and metrics

Our dual objectives are to be the leader in clean and green waste collection and to reduce the carbon impact of our operations. We have three metrics for each of these objectives (see table right).



**WE ARE ‘CARBON POSITIVE’  
IN THE VALUE WE BRING  
THROUGH CIRCULARITY**

### Performance

We are committed to growing our share of clean-emission trucks and zero-emission trucks. To this end, we commissioned 239 Euro 6 vehicles, Europe’s highest specification trucks, across the Netherlands and Belgium last year. In total, 95% of trucks purchased replaced older trucks in the fleet, and 5% were new additions. We have also acquired two zero-emission vehicles (ZEVs), prototypes from leading manufacturers Volvo and DAF, one of which has been deployed in the city of Amsterdam. We expect delivery of the second truck during FY22. Through the year the carbon intensity of our collection has decreased slightly compared with FY20 (-0.20 kg CO<sub>2</sub> per tonne of collected waste), to 9.84. This is largely as a result of the expansion of our Euro 6 fleet, which is more fuel efficient.

To reduce the carbon impact of our operations on site, we have invested in renewable energy production such as solar panel roofing at our sites. We have commissioned seven such roof panels over the past 18 months. We have another to be completed soon and are currently investigating installing panels in four more locations. In Ghent, we have secured the permit for a wind turbine, which will be the biggest land turbine in Belgium. It will be capable of covering 75% of the electricity use at our Ghent site and therefore around 10% of total electricity use within Commercial Belgium.

Another area of development is the electrification of our company car fleet. Renewi is actively migrating its fleet of employee cars to electric and hybrid cars and building energy charging stations on our sites. →



## Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY25 TARGET
<b>Be a leader in clean and green waste collection</b>	<b>Carbon intensity of collection</b> (kg CO <sub>2</sub> per tonne waste collected)	10.04	9.84	<b>&lt;9.00</b> (-10%)
	<b>Share of clean-emission trucks</b> (% Euro 6 trucks of total fleet)	48.5%	60.9%	<b>100%</b>
	<b>Zero-emission trucks</b> (number)	0	2	<b>65</b>
<b>Reduce the carbon impact of our operations</b>	<b>Carbon intensity of our sites</b> (kg CO <sub>2</sub> per tonne waste handled)	10.47	11.10	<b>&lt;9.42</b> (-10%)
	<b>Share of renewable energy used on site</b> (% renewable electricity out of total electricity use)	~15%	15.8%	<b>25%</b> (+10% points)
	<b>Hybrid or electric lease cars</b> (% (PH)EV vehicles out of total fleet)	12.5%	23.7	<b>40.0%</b> (+27.5% points)



## Reduce carbon emissions and waste *continued*

The carbon intensity at our sites remained about the same as it was in FY20. Energy production from anaerobic digestion decreased, but this loss was counterbalanced by an increase in renewable energy through our solar panels.

### Outlook

We will continue our efforts to be a leader in clean and green waste collection through the acquisition of at least 40 ZEVs in the Netherlands and 25 in Belgium. We have also invested in two compressed natural gas trucks in Groningen. We have taken steps to optimise our collection routes to reduce the number of kilometres driven, urban traffic and emissions.

This has been achieved in a number of ways including by collaborating with competitive waste collectors on a “White Label” collection basis in the Netherlands and Belgium by increasing route density and collecting contracted waste from multiple parties. “Green Collective”, a joint venture with Suez, is an example of this, and is a platform that other collectors can also join in order to minimise heavy logistics within urban areas.

To decrease the total carbon impact from our operations, we are currently investigating the installation of wind turbines and solar roofs on other Renewi sites and, where our own renewable energy isn’t sufficient, we will purchase green energy from front-runner green energy providers.



*We have charging stations for our fleet of electric trucks at all our sites*



The world

Our approach

Our impact

### Carbon footprint<sup>1</sup>

Volumes (CO <sub>2</sub> equivalent '000 tonnes) <sup>2</sup>	FY20 ex UK	FY20 UK	FY21 ex UK	FY21 UK
Process-based emissions (scope 1)	286	50	255	42
Transport-based emissions (scope 1)	108	4	105	4
Site fuel use emissions (scope 1)	32	3	31	3
Site gas use emissions (scope 1)	22	1	18	1
Site electricity use emissions (scope 2)	70	12	73	12
<b>Total emissions from significant sources</b>	<b>517</b>	<b>70</b>	<b>482</b>	<b>62</b>
<b>Carbon intensity</b> (kg CO <sub>2</sub> equivalents per tonnes waste handled)	<b>44</b>	<b>49</b>	<b>45</b>	<b>42</b>

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 use<sup>1</sup>

Megawatt hours	FY20 ex UK	FY20 UK	FY21 ex UK	FY21 UK
Fuel use transport (scope 1)	356,755	4,070	356,740	3,662
Fuel use sites (scope 1)	106,300	10,888	101,217	10,709
Gas use sites (scope 1)	114,220	6,068	95,156	5,534
Electricity use (scope 2)	156,098	32,799	163,353	34,927
<b>Total energy use from significant sources</b>	<b>733,374</b>	<b>61,054</b>	<b>716,466</b>	<b>61,427</b>

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.



## Care for people

People are at the heart of Renewi, both our colleagues and the communities we work in. The past year has been particularly hard, but our people have risen to the challenge

Our people are our most valued asset. Over the past year our colleagues have lived and worked in truly unusual circumstances. The Covid-19 pandemic has shown just how important a happy, healthy, engaged and committed workforce is. Our primary goal is to ensure the safety and wellness of all our people every day. Another priority goal is to keep our people motivated by emphasising how important their role is in serving their communities and customers. They are helping us to deliver on our purpose – to protect the world by giving new life to used materials.

We have also worked alongside our people to support them as they adapt to the changes needed as we deliver on our Renewi 2.0 programme aimed to harmonise, simplify and digitise Renewi. We are committed to improving our working environment with the aim of making Renewi a leading company to work for in the circular economy. →



The world

Our approach

Our impact

### OBJECTIVES

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

### SDG LINK







## Care for people – Renewi people *continued*

### RENEWI PEOPLE Operating in unusual circumstances

We entered FY21 shortly after the world was struck by the Covid-19 pandemic. Our key focus at the outset was to protect our employees while continuing to support our customers. Early on, we introduced a set of new policies and guidelines to help our people to work in the safest possible way. As a critical business employing key workers, our priority was to create a safe working environment for our frontline workers operating on 165 sites across the Netherlands, Belgium and UK. Our office-based employees worked largely from home throughout the period.

### Our goals and metrics for 2025

Our two objectives are: to deliver people home safe and well, every day; to make Renewi a rewarding, diverse and inclusive working environment.

### Mental health is a top priority

If we are to achieve our ambitions, we recognise the importance of strengthening our ‘Together’ value. We therefore work hard to further enhance employee safety, boost engagement, prioritise wellbeing and keep our people motivated. Through our employee Pulse survey, undertaken four times per year, our colleagues tell us how they feel at work, let us know whether they have everything they need to do their job, and provide feedback on topics such as Covid-19 and safety. This feedback gives leaders and managers clarity on where action needs to be taken.

We have made a substantial effort throughout the year to invest in our colleagues’ wellbeing – both mental and physical – through online and offline activities. In terms

of mental health, our leadership training programme – LEAD – has given leaders tips and tricks to better support their teams through this difficult time. Physical health was promoted and encouraged through activities such as RUNewi, Virgin Pulse and Fit to Finish. The RUNewi campaign engaged and rewarded our people for creating space in their workday to get away from their desks and do physical exercise during winter 2021 lockdowns in the UK and continental Europe. The Virgin Pulse competition, which was held in Belgium for the third year running, stimulated healthy habits, collaboration, friendship, job satisfaction, productivity and stress-management through a team-based challenge. The Fit to Finish health programme, which

is based on six key themes – more exercise, no smoking, no alcohol, eat healthy food, relax and better sleep – promoted a series of health activities with the aim of encouraging long-term healthy habits amongst our Commercial Waste Netherlands’ employees.

### Engage our people

At Renewi we have a clear purpose: to give new life to used materials, thereby preserving our planet from pollution, carbon emissions and resource depletion. Our purpose resonates with our teams, who see their job as a calling – as a result they stay longer, are more committed and engagement is higher. We have been humbled by the response of our people to the challenges faced throughout the year. →

## Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY25 TARGET
<b>Deliver people home safe and well every day</b>	<b>&gt;3-day accident rate</b> (number >3-day accidents/FTE x 100,000)	1,504	1,495	<b>600</b> (-60%)
	<b>Safety training</b> (% employees trained annually)	N/A	~25%	<b>100%</b>
	<b>Employee mood</b> (‘mood’ score in Pulse)	7.2	7.3	<b>7.5</b> (+5%)
	<b>Healthy at work rate</b> (% healthy employees)	94.8%	95.1%	<b>96.0%</b>
<b>Make Renewi a rewarding, diverse and inclusive working environment</b>	<b>Employee engagement</b> (eNPS score in pulse survey)	+14	+21	<b>+30</b> (doubled)
	<b>Employee development</b> (avg. annual # training hours)	~10	~10	<b>16</b> (+60%)
	<b>Females in higher management</b> (% of all employees)	20%*	21%	<b>30%</b> (+7% point)

\*Restatement of last year’s numbers based on a different calculation methodology.



## Care for people – Renewi people *continued*

During the first lockdown we experienced significantly lower absenteeism than we had seen in the same period in the previous year, and we recorded higher levels of engagement in our Pulse survey. Our people showed they understood their role as an essential service and delivered their duties despite the risks they faced being out in the community. In return, the community has shown its appreciation for our ongoing service via letters and gifts of refreshments, and there were site visits in the Netherlands from the Dutch Prime Minister and other ministers. Renewi is a purpose-driven business and those who work with us are confident they make a difference to the world.

### Helping our people to thrive LEAD

Good leaders are critical to enable business success. We recognise this and have therefore increased our investment in developing our leaders. Over the past 12 months we expanded our LEAD programme, a framework of sequential training modules that created a shared and clear leadership framework, language and skillset across Renewi. Launched in-person in the Netherlands in 2019, a remote version of this training was delivered in Belgium in 2020 and was kicked off in the UK early in 2021. The programme is based on our values and the principles of emotionally intelligent leadership.

95%

The percentage of healthy at work employees in FY21

### Time investment in PDR

Twice a year our people leaders and managers engage in a dialogue with their employees to discuss how they have performed against their objectives, how they are living Renewi's values and how they are delivering against leadership expectations. Called the performance development review (PDR), performance expectations are measured. During the year, we upgraded our PDR process by adding a mid-year review and rolling out our PDR via a digital platform for easy completion and secure storage. We are also increasingly reviewing our grading to ensure that a fair distribution of grades is taking place within the business.

### Investment in learning

Learning is a lifelong opportunity. Our internal learning management system (LMS), set to support employees' development journeys, offers training to all Renewi employees on safety, our Code of Conduct and other essential topics.

### Listening to our people

We greatly value a listening culture within Renewi. Two-way communication encourages honest and constructive feedback and brings confidence that employees have a role to play in bringing the business to the next level. Our listening activities are delivered through the Pulse survey, Pulse Exchange sessions – open or themed listening sessions among small groups – and via our regular Renewi Leadership Team monthly calls. Since the first Pulse survey was rolled out in 2019, 59% of employees have said that necessary actions have been taken to address their concerns.

### Ethics, compliance and people Creating a fair working environment

Delivering our circular economy ambitions can only be done if we are in this together. Together is one of our core values, and working together in a diverse and inclusive environment is a priority. After all, diverse teams perform better and inclusive organisations have higher engagement.

We are committed to becoming a more diverse and inclusive employer, to better reflect and interface with our communities. The Board and Executive Committee recently approved our first diversity and inclusion strategy. We are putting in place a Diversity and Inclusion Board, which comprises people from across Renewi, to establish projects that will increase our diversity and promote an inclusive culture. A primary focus is to increase the number of women we employ. We have set an initial target of 25% women within our workforce by 2025. →

*Our teams have continued to deliver an essential service*







## Care for people – Renewi people *continued*

As an equal opportunities employer, Renewi gives full and fair consideration to applications from disabled people, partners with them to support career development through training and supports continuing employment.

The gender pay gap is another priority that we take very seriously. Not only in the UK, where we disclose male and female pay details annually under the UK gender pay gap reporting legislation, but in all of our countries. We are therefore using our UK disclosures as a benchmark to build our data in our other operating territories.

While we do not operate in higher-risk countries, we uphold the principles in the United Nations Universal Declaration of Human Rights 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 policy to combat the possibility of human trafficking and slavery in our business and supply chain – see our Modern Slavery Statement at [renewi.com](https://renewi.com).

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.

# 75%

The increase in the number of concerns raised by our teams

### A unified and respectful approach

Following the merger between Shanks and Van Gansewinkel Groep in 2017, we had different reward systems and schemes across our countries and Divisions. A priority has been to create a single, common, clear and fair reward structure across the entire business. Launched in 2019, the One Reward programme has unified our system to create a performance-based structure that creates fairness, internal equity and simplicity for our office workers. We have worked closely with the Central Works Council to develop One Reward, while creating a new reward and job matrix for career paths and talent development.

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.

*The safety of our staff is of utmost importance to us*



### SAFETY HomeSafe

The main programme we use to ensure the safety of our people is HomeSafe. The HomeSafe campaign has a simple purpose: to get every one of our team members safely home to their families at the end of each and every day. The campaign stands on seven founding pillars to ensure that everyone is aware of the rules and lives by them.

The campaign also guides our teams on how to report hazards, incidents or threats (HIT) at our sites and encourages open discussion with safety, health, environment and quality (SHEQ) managers.

During the year we introduced our 10 Lifesaving Rules (LSR), one of the seven pillars of the HomeSafe programme. We have undertaken mandatory safety training across the Group, for people working on site in all our markets and for desk-based workers. We expect that these rules will be a platform to reduce serious accidents.

### Ten Lifesaving Rules (LSR)

Of all safety incidents, those that cause serious harm, or even threaten lives, are our top priority. As a result, we train our employees about our 10 LSRs. During FY21, we have had an increase in events that have resulted in significant physical harm, many of which involved a breach of an LSR. This shows clearly that if every employee follows our LSRs, there will be a major improvement in our safety. The goal of our new mandatory training is to embed these rules in our people's minds to create a 24/7 safety mindset. →

## Care for people – Renewi people *continued*

To push it beyond one-way communication, we have also created a discussion group between managers and employees to talk openly about the “grey areas” where people may seek excuses to cut corners.

### Performance

Over the period, we saw a slight improvement in the number of >3-day accidents that occurred, from 1,504 in FY20 to 1,495 in FY21. However, over the past 12 months we experienced two fatalities within our workforce. One on site, another on the road. This has made it clear to us that we must work harder and make better progress in safeguarding our people to meet all of our safety goals.

Throughout the year, we have strengthened our HomeSafe initiative, which was designed to improve safety across Renewi, and to roll out others, namely 10 Life Saving Rules (LSR), Worksafe, Safety Academy and Speak Up. Despite these efforts, and as a result of the fatalities, our safety performance did not meet expectations, which led us to introduce a new Board committee called SHE (Safety, Health and Environment) Committee. Safety statistics can be seen in the table opposite.

Safety improvements were achieved in a number of areas, including delivering an uplift in the number of concerns raised by our teams in our new IT reporting system, Assure. These rose to circa 50,000; this indicates that our employees take our initiatives seriously and participate in building a safety culture. We also started with safety and fire audits done by the central group SHEQ team to ensure a consistent implementation of our safety guidelines. As follow up, we executed the actions raised from those audits to get our site safety to a higher level.

Our Pulse survey indicates that the mood of our people has improved, reaching a score of 7.3 (target score over the next three years is 7.5). Our healthy at work rate improved too, reaching a rate of 95.1%. These items have brought confidence that our colleagues’ focus on health is becoming more broadly embedded. Our employment engagement grew to +21 according to our Employee Net Promoter Score employee survey, which is carried out four times a year. This result keeps us on track for the +30 target by 2025. There has also been an increase by +1% in the number of female employees on our journey to make Renewi more diverse and inclusive.

### Conclusion

Safety is our first value and we will continue to further improve our safety culture and to deliver on our target outcome – to achieve zero serious incidents. We have built a strong foundation, with clear and uniform rules in place, and we are committed to further strengthen our safety culture in all areas across the organisation. →



Health and safety performance		
Indicator	FY20	FY21
Number fatal accidents (Number)	1	2
>3-day accident rate <sup>1</sup> (Number/number >3-day accidents/FTE x 100,000)	95/1,504	92/1,495
Lost Time Injuries (LTIs)/rate <sup>2</sup> (Number/number LTIs/total number hours worked x 1,000,000)	147/9.6	135/9.9
Severity rate (Total number days lost as result of accidents/total number LTIs)	20.8	20.1
Concerns/close-out rate <sup>3</sup> (Number/number concerns closed-out/number concerns raised as a %)	28,006/79%	49,208/73%

1. Next year (at the end of FY22), Renewi will switch from the >3-day accident rate (a UK-based rate) to the more internationally recognised Lost Time Injury (LTI) frequency rate.  
 2. LTI: accident which results in a person being off work for a day or more.  
 3. Concern: an accident which nearly, but did not, happen. Also called risk reports, close calls, near-misses etc.

*We greatly value a listening culture and encourage honest feedback from our people*



The world

Our approach

Our impact





## Care for people – Communities

### COMMUNITIES

Having a beneficial influence on communities is another fundamental part of our sustainability strategy. We play a key role in enabling the circular economy for society, and we need close collaboration with our communities to reach this goal. Processing society's discarded items can have an unwanted impact on the local surroundings, including the risk of odour, dust and noise pollution, as well as the risk of fires on site. We work hard to minimise these effects on neighbouring communities. Transparent and regular dialogue enables us to identify, understand, address and manage risks together, while enabling us to build trusted relationships.

We also have an important role in educating communities. This helps build understanding about recycling and the circular economy, can result in better inbound waste streams and also develops appreciation for the essential work we do.

### Our goals and metrics for 2025

Our objective is to positively impact our communities, and we will measure our progress through three metrics: community engagement projects, community feedback and community impact events (see table below).

### Performance

The pandemic has highlighted our crucial role in society. Our teams overcame challenges to ensure the continuity of essential services, and our communities recognised this essential role and expressed their gratitude. We extended the scope of our pandemic support by working with GreenCycl and Van Straten Medical in the Netherlands to recycle medical personal protective equipment (PPE), specifically facemasks, and to process and recycle medical waste. We have now started a pilot project with our partners to recycle medical equipment.



Unfortunately, due to the pandemic, we were unable to connect with our communities as much as we would have liked. To mitigate this, we shared expertise and knowledge in several ways, including digitally through social media by participating in webinars on the importance of sorting at source and on the circular economy. We also produced an animated film informing local Belgian residents about the reconstruction and redevelopment of a site in Kampenhout.

By enhancing relationships with our neighbours the total number of registered comments provided by communities rose. This led to more awareness and a proactive approach in our organisation. As a result we saw a decrease in the number of substantiated complaints.

### Conclusion and outlook

Through the year, as a result of Covid-19, we were unable to grow the number of community engagement projects as we had hoped. We will take active steps to continue to reduce the number of complaints from our neighbours, while focusing on strengthening our direct contribution to our communities. During FY22 Renewi will roll out the Renewi Purpose Week, giving colleagues an opportunity to proactively engage with local communities, Covid-19 permitting.

We are committed to make a difference to our communities, to the countries in which we operate and to serve the planet.

## Our goals and targets

OBJECTIVE	METRIC	FY20	FY21	FY25 TARGET
Positively impact our communities	Community engagement projects (Number of projects annually)	~150	n/a*	180 (+20%)
	Community feedback (Number of substantiated comments per site annually)	2.7	2.2	2.0 (-26%)
	Community impact events (Number of events annually)	43	28	21 (-50%)

\*Due to Covid-19 our community engagement projects were put on hold. We hope to launch our Renewi Purpose Week in the fall of 2021.

# 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 the 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](https://renewi.com/en/sustainability) for the GRI content index.

	PRINCIPLES	PAGES
Human rights	<b>Principle 1</b> Businesses should support and respect the protection of internationally proclaimed human rights; and	50/51
	<b>Principle 2</b> make sure they are not complicit in human rights abuses.	50/51
Labour	<b>Principle 3</b> Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	50/51
	<b>Principle 4</b> the elimination of all forms of forced and compulsory labour;	50/51
	<b>Principle 5</b> the effective abolition of child labour; and	50/51
	<b>Principle 6</b> the elimination of discrimination in respect of employment and occupation.	50/51
Environment	<b>Principle 7</b> Businesses should support a precautionary approach to environmental challenges;	42
	<b>Principle 8</b> undertake initiatives to promote greater environmental responsibility; and	42
	<b>Principle 9</b> encourage the development and diffusion of environmentally friendly technologies.	43
Anti-corruption	<b>Principle 10</b> Businesses should work against corruption in all its forms, including extortion and bribery.	50/51



The world

Our approach

Our impact



# Appendix – key divisional performance



Enable the circular economy



The world

Our approach

Our impact

## Recycling and recovery performance per division

VOLUMES (MILLION TONNES)	COMMERCIAL BE		COMMERCIAL NL		MINERALZ & WATER		SPECIALITIES	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
Total waste handled at sites	2.73	<b>2.13</b>	5.18	<b>5.15</b>	2.31	<b>2.38</b>	2.73	<b>2.56</b>
Materials recycled <sup>1,2</sup>	1.10	<b>0.87</b>	3.50	<b>3.60</b>	1.69	<b>1.95</b>	1.76	<b>1.62</b>
Materials recovered for energy production from waste <sup>1,2</sup>	1.38	<b>1.14</b>	1.46	<b>1.28</b>	0.03	<b>0.03</b>	0.71	<b>0.76</b>
Total materials recycled and recovered for energy production	2.48	<b>2.01</b>	4.97	<b>4.89</b>	1.72	<b>1.98</b>	2.48	<b>2.38</b>
Recycling rate (% of total waste handled)	40.3%	<b>40.8%</b>	67.7%	<b>69.9%</b>	73.3%	<b>81.9%</b>	64.6%	<b>63.4%</b>
Recycling and recovery rate (% of total waste handled)	90.9%	<b>94.2%</b>	96.0%	<b>94.8%</b>	74.6%	<b>83.1%</b>	90.8%	<b>93.1%</b>

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 performance per division

VOLUMES (MILLION TONNES)	COMMERCIAL BE		COMMERCIAL NL		MINERALZ & WATER		SPECIALITIES	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
Materials separated for re-use/recycling	453,923	<b>382,869</b>	819,670	<b>889,306</b>	460,629	<b>538,756</b>	655,464	<b>603,570</b>
Energy recovery and waste derived fuels produced and sold <sup>1</sup>	64,415	<b>138,981</b>	63,560	<b>-2,374</b>	-5,971	<b>-6,021</b>	333,152	<b>343,004</b>
Landfill gas / Anaerobic digestion electricity production	11,949	<b>11,949</b>	22,929	<b>25,972</b>	3,306	<b>3,176</b>	3,434	<b>3,130</b>
Waste derived fuel used at ATM	-	-	-	-	250,927	<b>244,281</b>	-	-
<b>Total avoided emissions</b>	530,287	<b>533,799</b>	906,159	<b>922,904</b>	587,845	<b>607,776</b>	992,050	<b>949,704</b>
<b>Carbon avoidance</b> (kg CO <sub>2</sub> per tonne waste handled)	0.19	<b>0.25</b>	0.18	<b>0.18</b>	0.54	<b>0.48</b>	0.36	<b>0.37</b>

1. A negative figure for Energy recovery means a net emission towards the atmosphere





## Reduce carbon emissions and waste

### Be a leader in clean and green waste collection

METRIC	COMMERCIAL BE		COMMERCIAL NL	
	FY20	FY21	FY20	FY21
<b>Carbon intensity of collection</b> (kg CO <sub>2</sub> per tonne waste collected)	10.03	<b>9.92</b>	10.05	<b>9.80</b>
<b>Share of clean-emission trucks</b> (% Euro 6 trucks of total fleet)	41.3%	<b>53.5%</b>	51.9%	<b>64.5%</b>
<b>Zero-Emission trucks</b> (number)	0	<b>0</b>	1	<b>2</b>

### Carbon footprint per division

VOLUMES (CO <sub>2</sub> EQUIVALENT TONNES) <sup>1</sup>	COMMERCIAL BE		COMMERCIAL NL		MINERALZ & WATER		SPECIALITIES	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
<b>Process based emissions (scope 1)</b>	39,525	<b>39,922</b>	34,446	<b>31,995</b>	211,908	<b>183,233</b>	50,090	<b>42,100</b>
<b>Transport based emissions (scope 1)</b>	33,908	<b>32,295</b>	73,139	<b>72,647</b>	–	–	–	–
<b>Site fuel use emissions (scope 1)</b>	9,615	<b>9,613</b>	13,062	<b>14,343</b>	6,968	<b>4,704</b>	5,897	<b>5,282</b>
<b>Site gas use emissions (scope 1)</b>	3,352	<b>4,126</b>	9,058	<b>6,567</b>	5,310	<b>4,004</b>	5,551	<b>4,781</b>
<b>Site electricity use emissions (scope 2)</b>	5,227	<b>6,180</b>	21,019	<b>22,823</b>	36,131	<b>35,907</b>	19,677	<b>19,456</b>
<b>Total emissions from significant sources</b>	91,627	<b>92,136</b>	150,724	<b>148,376</b>	260,316	<b>227,851</b>	81,216	<b>71,619</b>
<b>Carbon intensity</b> (kg CO <sub>2</sub> equivalents per tonnes waste handled)	6.67	<b>9.34</b>	8.13	<b>8.49</b>	21.66	<b>20.24</b>	11.42	<b>11.53</b>

1. 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 use per division

MEGAWATT HOURS	COMMERCIAL BE		COMMERCIAL NL		MINERALZ & WATER		SPECIALITIES	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
Fuel use collection/transport (scope 1)	111,802	<b>108,410</b>	244,953	<b>248,330</b>	–	–	–	–
Fuel use sites (scope 1)	31,702	<b>31,698</b>	43,068	<b>47,293</b>	22,974	<b>15,521</b>	19,444	<b>17,414</b>
Gas use sites (scope 1)	17,327	<b>21,329</b>	46,819	<b>33,947</b>	27,447	<b>20,669</b>	28,694	<b>24,715</b>
Electricity use (scope 2)	20,288	<b>23,968</b>	44,224	<b>47,854</b>	67,109	<b>66,776</b>	64,914	<b>65,189</b>
<b>Total energy use from significant sources</b>	181,119	<b>185,404</b>	379,064	<b>377,425</b>	117,530	<b>102,997</b>	113,052	<b>107,318</b>





Care for people

Community comments performance per division

NUMBER	COMMERCIAL BE		COMMERCIAL NL		MINERALZ & WATER		SPECIALITIES	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
Substantiated community comments received	31	<b>35</b>	13	<b>21</b>	9	<b>6</b>	390	<b>298</b>
Total number of sites	37	<b>40</b>	72	<b>71</b>	10	<b>11</b>	43	<b>43</b>
Average number of complaints per site (out of total number)	0.8	<b>0.6</b>	0.2	<b>0.3</b>	0.9	<b>0.6</b>	9.7	<b>6.9</b>

Community impact events performance per division

NUMBER OF SIGNIFICANT COMMUNITY IMPACT EVENTS	COMMERCIAL BE		COMMERCIAL NL		MINERALZ & WATER		SPECIALITIES	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
Spills/emissions to soil, water, air	5	<b>2</b>	7	<b>1</b>	18	<b>0</b>	2	<b>0</b>
Fires	3	<b>1</b>	3	<b>8</b>	2	<b>2</b>	3	<b>4</b>
<b>Total</b>	<b>8</b>	<b>3</b>	<b>10</b>	<b>9</b>	<b>20</b>	<b>2</b>	<b>5</b>	<b>4</b>



## Safety performance per division

SAFETY INDICATORS	COMMERCIAL BE		COMMERCIAL NL		MINERALZ & WATER		SPECIALITIES	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
Number fatal accidents	0	<b>1</b>	1	<b>1</b>	0	<b>0</b>	0	<b>0</b>
Number >3 day accidents	37	<b>44</b>	37	<b>37</b>	5	<b>1</b>	16	<b>10</b>
>3 day accident rate	1,839	<b>2,201</b>	1,346	<b>1,219</b>	1,874	<b>301</b>	2,081	<b>1,268</b>
Number lost time injuries	56	<b>58</b>	64	<b>58</b>	7	<b>2</b>	20	<b>17</b>
Lost time injury rate	13.9	<b>15.5</b>	9.1	<b>8.2</b>	4.3	<b>2.4</b>	9.2	<b>8.7</b>
Severity rate	24.5	<b>26.2</b>	24.8	<b>12.6</b>	18.0	<b>74.0</b>	6.4	<b>18.5</b>
Number of concerns	7,789	<b>10,387</b>	3,534	<b>10,343</b>	521	<b>1,625</b>	16,162	<b>26,853</b>
Concern close out rate	73%	<b>90%</b>	70%	<b>46%</b>	82%	<b>89%</b>	84%	<b>76%</b>





**Renewi plc** Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Buckinghamshire MK1 1BU