Merseyside Recycling and Waste Authority

SUSTAINABLE DEVELOPMENT GOALS

Baseline Sustainability Report 2020/21

@zerowastelcr

MRWA
Merseyside Recycling & Waste Authority

ZERO WASTE
Liverpool City Region
Merseyside Recycling and Waste Authority

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Unsure how these split?

1. Introduction

Merseyside Recycling and Waste Authority (MRWA) is the public-facing name of the statutory waste disposal authority for Merseyside (Merseyside Waste Disposal Authority). We are a strategic waste and resource management authority, leading on the recycling and management of household waste across the Liverpool City Region. We serve 1.5 million residents who, in 2020/21, generated 748,534 tonnes of resource materials. Along with our private sector partners, we manage waste on behalf of five District Councils and the neighbouring Halton Council. We also provide and manage four Waste Transfer Stations, two Material Recovery Facilities (MRF), a Rail Transfer Loading Station, and 16 Household Waste Recycling Centres.

In 2016, the main residual waste treatment method shifted from landfill to the Authority's Energy from Waste facility. A small percentage is still required to be diverted to landfill as a contingency for when the facility is closed for vital maintenance. A solution for this is being sought. This year, the facility produced enough electricity to power the equivalent of 66,627 homes, using the 435,101 tonnes of household waste generated by households in the region. We are also responsible for the aftercare of seven closed landfill sites across Merseyside. We lead in advocating zero waste, proactively reducing carbon from our services, and operations, and promoting the circular economy, waste prevention, recycling, and the safe and effective management of waste for our residents.

The purpose of this report is to compile a sustainability baseline for 2020/21, so we can measure our impacts and positive effects and align these to support the United Nations (UNs) Sustainable Development Goals (SDGs). This report focuses on our efforts and on those within our sphere of influence.

"This year, the facility produced enough electricity to power the equivalent of 66,627 homes, using the 435,101 tonnes of household waste generated by households in the region."

2. Supporting the United Nations Sustainable Development Goals

As a Waste Disposal Authority, with the responsibility for managing all household waste generated by the City Region's residents, the members of the Authority agree that we are in a strong position to support many of the aims and objectives of the UNs SDGs. From our perspective, our role is:

To ensure the sustainable management of resource materials no longer wanted by residents. This means promoting waste prevention, waste reduction, and recycling, so that resource materials are reused. This helps conserve virgin resources, habitats, and biodiversity and supports community health, well-being, and prosperity.

In 2019, the Authority declared a climate emergency so that we could begin to reduce carbon dioxide and other greenhouse gas emissions from our services and operations. We also recognise that by reducing waste, maximising recycling, and reusing material resources, we can retain the embodied energy of the original material resources and avoid the associated emissions from manufacturing, consumer use, waste management, and disposal.

How we deliver our services and operations plays a role in the future development of the Liverpool City Region. We have the material resources to help the region's economy become more sustainable and enable local businesses and communities to be more circular. This means keeping material resources local, and in use for longer, creating green jobs, helping communities to prosper, generating social value, and producing less waste and less pollution.

Our mission statement is:

> **"To ensure that we reduce the impact of our actions on climate change and improve the sustainable management of waste and resources.**

3. What are the United Nations Sustainable Development Goals?

The United Nations (UN) has endeavoured to bring nations together to resolve the many issues faced by humankind. These include environmental damage, loss of habitats and species, poverty, hunger, pollution, waste, and the overall impacts of climate change.

In 1987, the World Commission on Environment and Development (WCED) set a sustainable development aim for every country through its Sustainable Development Strategy - Our Common Future. The UN firmed up this strategy with commitments in 2015, which established the 2030 Agenda for Sustainable Development. This was a blueprint for the future, and was adopted by all members of the United Nations. The agenda consisted of 17 specific Sustainable Development Goals (SDGs) with aims, objectives, and targets (see Appendix 1). Governments are responsible for implementing sustainable legislation, policies, and strategies whilst, collectively, businesses, the public sector and communities, are tasked with working together to make this happen.

"This was a blueprint for the future, and was adopted by all members of the United Nations."

4. Why supporting the SDGs matters

The SDGs intend to make the world a better place. But the present economic model, based on a take–make–use–dispose philosophy, doesn't support the ethos of sustainability. Over the last two centuries, this model has extracted resources at unprecedented levels, damaged ecosystems and altered the average global temperature to the extent that extreme weather events are impacting the economy.

The fifth hottest year on record was 2021 (1880 – 2021), and the past seven years have been the hottest by far. To reduce the effects of climate change, we require a new economic model that supports the SDGs and includes alternative renewable fuels for production. We also need to reduce the consumption of finite resources by re-using what has already been extracted. For this model to work, businesses need to change, and consumers need to modify their behaviour.

The circular economy is an evolution of how the world produces and consumes both goods and services. It redefines the economy around principles of designing out waste and pollution and keeping products and materials in use for as long as possible. It can help restore the world's wilderness, build regenerative agricultural systems, and help us move towards using renewable materials and energy sources. The circular economy can be a driver for businesses to reduce carbon emissions and support other SDGs. It is estimated that carbon emissions could be cut by almost 70 per cent if the circular economy was adopted by businesses.

> **"...we require a new economic model that supports the SDGs and includes alternative renewable fuels for production."**

5. Scope

To ensure that we support the SDGs, the scope of this report is based on the following:

A review of our sustainability policies and strategies

A new sustainability policy

The establishment of sustainable key themes

An identification of aspects and impacts of service delivery

The assessment of the aspect and impact of service delivery against the SDGs

A prioritisation of SDGs relevant to aspects and impacts

The establishment baseline data

A report with challenging targets to improve SDG performance

6. Drivers

Our drivers to support the SDGs are based on equal respect for people, the planet, and the economy. Sustainability consists of social, economic and environmental sustainability. These are interconnected and dependent on each another.

Together, they make up the pillars of sustainability (see Fig 1). In terms of what we do, sustainability means returning material resources to a low carbon zero-waste circular economy. This will, over time, ensure that the planet can maintain its stock of natural resources, conserve and enhance biodiversity, and limit greenhouse gas emissions and pollutants which are influencing the global temperature.

> "...equal respect for people, the planet, and the economy."

Fig. 1

6. Drivers

6.1 People

It is our responsibility to treat our employees with respect, take care of their physical and mental well-being, and value their talent and contribution. Besides employees, we interact with other stakeholders such as our members, contractors, local council representatives, businesses, community groups, individuals, and global society. This interaction may be in terms of our services, material resources, and emissions. This responsibility extends from our employees to stakeholders who are part of the sustainable solution.

6.2 Planet

Sustainability is about interacting with the planet to ensure that natural resource levels are maintained or improved and avoiding the risk of future generations meeting their needs. In 2020/21, we managed 748,543 tonnes of material resources extracted from the Earth or synthetically made, used, and perceived by residents to be waste. Therefore, they had no economic or social value. Our responsibility is to ensure that we can return as much of the material resources we manage to the economy, so we can do our bit to protect the planet.

6.3 Economy

As a public body that delivers services with public money, we must always ensure that we obtain value for money and, where possible, identify opportunities to add significant social value and protect the environment. To be open and transparent, our governance ensures that the stakeholders who have a vested interest in what we do are identified and engaged.

How society develops economically is critical to achieving the aims of the SDGs. We urgently need to move towards an economic model that is circular, decouples economic activity from consumption and waste, and circulates materials at their highest value whilst regenerating nature. A circular economy can be a catalyst for new skills and green jobs.

7. Aspects and impacts

To align our activities with the United Nations (UNs) SDGs, we undertook an assessment of the aspects and impacts of our activities. Aspects are typical activities undertaken by us that may or may not impact people, the planet or the economy and are relatable to the SDGs. Appendix 2 highlights the results of our aspects and impacts assessment. We understand that some aspects and their impacts cut across all drivers, and we will address these within our findings and future targets. For example, the aspects of climate change and social value affect people, the planet, and the economy. However, the impacts can differ significantly. Table 1 provides examples of where related aspects and impacts, such as climate change and social value, cut across our drivers.

Table 1. An example of aspects and impacts that cut across our drivers

Drivers	Aspects	Impacts				
People	Climate action plan	Reduce the impacts of climate change on people	Emissions to air, land, and water	Extreme weather events (heating, cold, storms, flooding)	Sea level rises	Education and awareness
	Climate risk	Adaptation	Resilience	Financial	Insurance	Infrastructure and assets
	Zero carbon action plan	Emissions to air, land, and water	Decarbonise services	Renewable energy	Carbon storage and capture	Landfill avoidance
	Social value	Volunteering	Skills	Green jobs	Improve health	Employment
Planet	Climate Action Plan	Greenhouse gas emissions	Zero carbon	Resource conservation	Employment	
	Climate risk	Adaptation	Resilience	Financial	Biodiversity	Infrastructure and assets
	Zero carbon action plan	Zero carbon action plan	Reduce GHG emissions	Maximise reuse	Insurance	Infrastructure and assets
	Social value	Health	Well-being	Access to nature	Biodiversity	Improve health
Economy	Climate Action Plan	Reduce the impacts of climate change on people	Emissions to air, land, and water	Extreme weather events (heating, cold, storms, flooding)	Sea level rises	Education and awareness
	Climate risk	Adaptation	Resilience	Financial	Insurance	Infrastructure and assets
	Zero carbon action plan	Emissions to air, land, and water	Decarbonise services	Renewable energy	Carbon storage and capture	Landfill avoidance
	Social value	Skills	Green jobs	Well-being	Employment	Improve health

8. Prioritising the SDGs

As a single function authority that predominantly manages household waste, we needed to prioritise the goals that we should support with respect to our aspects and impacts. As strategic actions develop, we will review these priority goals. At present, our services contribute to climate change through emissions of pollutants from transportation, operations, and disposal. We have also factored into the assessment that being office-based means that there are impacts here too. However, by managing material resources and energy more efficiently and effectively, we can contribute to a sustainable region.

We are in a strong position to mitigate emissions from these aspects by changing how we function. We can also influence the behaviour of residents through our behaviour change programme so that waste is reduced, recycled, and reused. This is less energy-intensive than making new products. Table 2 shows the results of our assessment of aspects and impacts and which of the SDGs were prioritised. See Appendix 3 for the assessment.

> **"... we needed to prioritise the goals that we should support with respect to our aspects and impacts."**

Rank	Priority SDGs	Aspects
1	Take urgent action to combat climate change and its impacts	54
2	Ensure sustainable consumption and production plans	51
3	Make cities and human developments inclusive, safe, resilient, and sustainable	49
4	Ensure healthy lives and promote well-being for all at all ages	35

9. Establishing baseline data and performance

The specific aims of our corporate plan are to measure the climate change impacts of waste, improve sustainability performance and report both our performance and our contributions in support of the United Nations Sustainable Development Goals.

We have recently reviewed and updated our Climate Action Plan and set goals to reach zero carbon and waste by 2040. Our sustainable procurement guide is updated, and a framework to maximise social value has been developed. We promote the benefits of a circular economy and have increased membership of the Liverpool City Region Circular Economy Club through our outreach programme. We support community groups with our Community Fund and recently commissioned our own Carbon Metric tool to enable us to intensify efforts to decarbonise our activities.

9.1 People

Our Governance and policies supported UN Goals 1, 2, 3, 4, 5, 10, 13, 14, 15, 16 and 17

i. Governance

The purpose of local governance is to provide an organised system where authorities exercise their power and responsibilities to work together for peace, order, and good governance of their municipal region. We expect to work towards improving social, economic, and environmental sustainability to benefit the region. This can include promoting sustainable practices and opportunities such as the circular economy, waste prevention and reuse.

With respect to openness and transparency, we received and resolved eight Freedom of Information requests, three Environmental Information Regulations requests, satisfied 159 complaints and received 18 compliments (see Section 10, Table 3). We maintained accreditation for ISO 14001 for the tenth consecutive year, completed 12 internal audits and resolved 17 non-compliances.

This year we established a Health and Safety System and completed one audit with no non-compliances. Figure 3 below illustrates how good governance is structured.

ii. Policy

Recent policy developments have become increasingly focused on decarbonising our use of material resources and moving to a circular economy. An important aspect of our work is to influence these policies and encourage those who can help us to develop more sustainable waste management services for the people of the Liverpool City Region. Recent examples include identifying waste and resources as a theme in the city region 'LCR Year One Climate Action Plan', 'Pathway to Net Zero' and 'Plan for Prosperity' documents.

9. Establishing baseline data and performance

Our People

Our People supported UN Goals 3, 5, 8, 11 and 17

Our commitment to sustainability starts with our own people. Our governance structure includes nine local councillors that form our board to ensure openness, transparency, and assurance. Our activities are driven by a Chief Executive Officer and three Directors. To deliver our multi-functions, we have the following sections: Corporate Services, Finance, Strategy, Estates and Contracts (see fig 2).

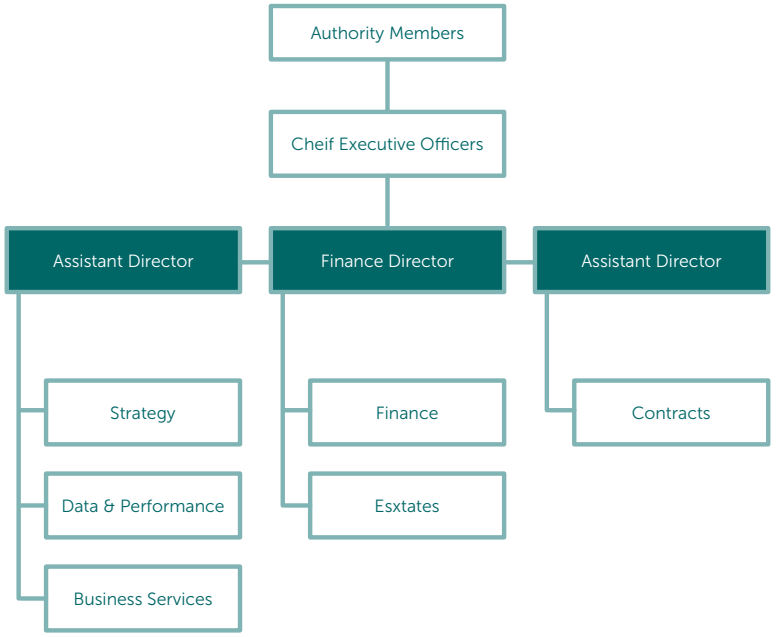


Fig. 2
Governance structure of Merseyside Recycling and Waste Authority

We are accountable for people both locally and globally. With respect to our own people, we aim to have a uniquely talented, equal, diverse, and responsible workforce. In 2020-21, we employed 31 people and, indirectly, were responsible for 271 people employed by our two main contractors. Our contractors manage and treat 748,543 tonnes of household waste on our behalf, all of which are collected by six District Councils. We are responsible for unwanted household goods, which have been manufactured and transported by people from around the world, that are discarded by residents. Our waste emissions to air, land and water can be detrimental to the global population and affect ecological biodiversity, especially our contribution to climate change and global heating.

Of the 31 people employed by MRWA, 16 were males - representing 52% of all employees. There were 15 females (see Section 10, Table 5). The gender split of employees is almost 50/50. The per cent of females in management positions was 44%. Employee commitment to MRWA is reflected in the number of employees that have provided exemplary long-term services. 13 employees had between 10 and 19 years of service, four had between 20 and 29 years of service, one person had between 30 and 40 years of service, and two people had 40 or more years of service.

We regularly have a two-way dialogue with employees about opportunities to upskill during Staff Development Interviews, and we specify training requirements to ensure employees are up to date with policies or subject matters. All 31 employees received Diversity and Equality training this year. One person is a qualified First Aider, and four staff are recognised as Fire Marshals for everybody's safety.

9. Establishing baseline data and performance

iv. Communities

Our work with community groups supported UN Goals 1, 2, 3, 4, 5, 8, 10, 11, 12, 13, 16 and 17

Being part of a community gives us a sense of belonging. Community participation enables empowerment, and when people feel empowered, they feel more in control. This allows them to influence positive change. Sharing and learning, for example, stimulates innovation and growth. Ideas breed new ideas. Apart from having personal benefits such as gaining knowledge and insight, sharing also contributes to the community's greater worth (10).

Our Behavioural Change Programme aims to deliver communications, awareness, information, and education across our region. From a business and social enterprise perspective, we manage the LCR Circular Economy Club and promote the benefits of a new and sustainable business model that keeps resources in use for longer and at a higher value. There were 65 members of the Circular Economy Club, and four events were organised. To keep members updated on best practice circular activities, four newsletters and six case studies were produced (see Section 10, Table 6).

Due to the Covid-19 pandemic, opportunities to engage with the public were limited. However, we delivered two local communication campaigns: 'Waste Can Wait' and RecycleRight, during Recycle week (see Section 10, Table 6). Due to minimal possibility of direct engagement with the public, we utilised social media and had 5,866 hits on all channels with 2,835 hits on RecycleRight.

In partnership with our contractor Veolia Ltd, £165,000 was made available to the region's community groups through our Community Fund. Due to the impact of Covid 19, £135,057 was distributed to 13 community groups. Together, community groups diverted 291 tonnes of waste and helped avoid 541 tonnes of carbon emissions. With the help of 12,125 volunteer hours, the projects were delivered. Funding also supported 85 locally organised community events which helped the 'spread the word' (see Section 10, Table 7).

Covid-19 also had a significant impact on other projects that we would have supported, such as the Gilmoss Resource Discovery Centre and the Southport Eco Centre. Both events would usually attract thousands of adults and children but were closed to the public. Our contractor, Suez Ltd, provided £51,200 of funding to support 10 communities in Kirkby, Knowsley.

9. Establishing baseline data and performance

v. Social Value

Our work to maximise social value supported UN Goals 1, 2, 3, 4, 5,8, 10, 1, 12, 13 and 17

As a service provider of waste treatment and management, we have an opportunity to support the well-being of communities and individuals, whilst reducing waste redistributing material resources, and avoiding carbon emissions. In 2020/21, the social return on our investment of £135,057 through our Community Fund realised £902,422. A return of £6.68 for each £1 of investment (see Section 10, Table 7).

vi. Health, Safety and Environmental Management

Our work on Health, Safety and Environmental Management supported UN Goals 3, 4, 8,11, 13, 14, 15 and 17

Policies and plans are essential for implementing health, safety, and environmental management systems (EMS). Effective systems require us to plan and control risks, and reacting to changing demands helps sustain positive health, safety and environmental attitudes and behaviours. Three new employees received health and safety and EMS inductions.

In 2020/21, there were no serious injuries, diseases, and dangerous incidences (RIDDOR) reported or prosecutions. 12 internal EMS audits were completed, with 17 non-compliances noted. All non-compliances were resolved. A Health and Safety system was put in place this year and an internal audit was completed with no non-compliances. The EMS was twice externally audited and retained its ISO14001 accreditation (see Section 10, Table 8).

9. Establishing baseline data and performance

9.2 Planet

i. Biodiversity

Our work to provide for nature recovery supported UN Goals 3, 4, 11, 14, 15 and 17

Global biodiversity loss has been continuing despite numerous international efforts. The aspect with the greatest impact is consumerism which affects biodiversity in complex ways. Biodiversity loss is also being accelerated by an increasing global population, demand for land (to build homes and infrastructure), carbon-based fuel for energy and transport, and to make, use, and dispose of unwanted products.

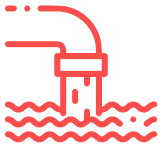
We are responsible for 29 sites that either manage waste or provide aftercare management. Together these sites cover 147 hectares of land (117ha) and infrastructure (30ha). This year, we have not undertaken any work to improve biodiversity. However, we are working on plans to measure and identify what we have to maximise the opportunities to protect, conserve, and enhance biodiversity (see Section 10, Table 9).

ii. Office resource consumption and in-direct renewable energy

How we manage resources and energy support UN Goals 3, 4, 7, 11, 12, 13, 14 and 17

We are based in an office complex which provides shared arrangements for energy, water supply and waste management. The metrics are pro-rata, based on either personnel or floorspace (M2). Our consumption of resources was:

Electricity
43,500 kWh



Water
172 Litres

Recycling
210 kgs

Waste Disposal
254kgs

(see Section 10, Table 10).

During the year, most staff worked from home because of Covid-19. Therefore, the data is a misrepresentation of our true consumption of resources.

To solve the inherent problem of sending household waste to landfill, an Energy from Waste (EfW) was commissioned and opened in September 2017. The EfW generated 273,784 MWh of electricity and 388,396 tonnes of steam. Enough renewable energy was generated to power 66,627 homes.

9. Establishing baseline data and performance

iii. Waste

Managing, treating, recycling, and recovering energy from waste supported UN Goals 3, 8, 11, 12, 13 and 17

Recycling, reuse, treatment, and management is our forte. Waste is only waste when it is perceived by others to have no further value. We endeavour to maximise the value of the unwanted resources (not waste) we receive from residents. Total refuse collections and street cleansing in 2020/21 was 423,681 tonnes. We treated 435,101 tonnes of residual waste through the EfW, recycled 70% of resource materials deposited at HWRCs and 84% of recycling materials collected at kerbside through the Material Recovery Facility (MRF). Contamination of recycling bins was 17%. Green waste (5,152 tonnes) and food waste (3,152 tonnes) were collected and composted. Annual maintenance at the Energy from Waste facility means that a proportion of residual waste is sent to landfill (26,385 tonnes). Our goal is to find a solution so that landfill can be avoided (see Section 10, Table 11)

iv. Carbon Footprint

Our Carbon Footprint is aligned with UN Goals 3, 4, 9, 10, 11, 12, 13 and 17

The Authority calculated its CO2e emissions using the Green House Gas Emissions Protocol and conversion factors produced by Defra. Emissions are attributable to the Authority's activities, including administrative and contractual duties, its obligation to manage seven closed landfill sites (along with those from our Contractors), Veolia Ltd and Suez Ltd. MRWA's carbon footprint was 27,127 tonnes of CO2e (see Section 10, Table 12).

Our most significant direct carbon footprint is associated with activities that occur on our closed landfill sites - gas flaring, electricity consumption and leachate management (1,018 tonnes CO2e). In comparison, the impact from our office is much smaller at 28 tonnes of CO2e. Energy, waste recycling and disposal are calculated on a pro-rata basis of the total floor space, and water consumption is pro-rated on staff numbers.

The services provided by Veolia Ltd, our Waste and Recycling Management contractor, had a carbon footprint of 3,369 tonnes of CO2e. Electricity consumption across 21 sites had the most significant footprint at 1,704 tonnes CO2e. The carbon emissions associated with Suez Ltd (Resource Recovery contractor) operations were 7,709 tonnes of CO2e. Transporting waste by rail using diesel to the Energy from Waste facility (Wilton) contributes 6,095 tonnes of CO2e. By far, the biggest carbon impact of the household waste management system in the LCR is the emissions from our Energy from Waste Facility. Although they are not emitted in the region, they are part of the UK picture.

9. Establishing baseline data and performance

9.3 Economy

i. Financial

Our financial activities support UN Goals 8, 9, 11, 12, 13, 16 and 17

We are a single function Authority responsible for household waste disposal generated by 1.5 million residents of the Liverpool City Region. The Local Government Act 1972 (Sec 151) states that every local authority shall arrange for the proper administration of their financial affairs. In 2020/21, Net Operating Expenditure was £77,670,150. Our main expenditure is related directly to the two contracts procured to deliver our statutory services. We spent £111,150 on our infrastructure and contributed £150,000 to the Community Fund and £15,000 to the Southport Eco Centre (see Section 10, Table 13). Indirectly, Veolia Ltd contributed £15,000 to the Community Fund, and Suez provided £51,200 from their Environmental Trust Fund for communities in Kirkby, Knowsley, where the Rail Loading Transfer Station is located.

ii. Infrastructure

Our infrastructure supported UN Goals 3, 6, 7, 8, 11, 12, 13, 14, 15 and 17

Managing 784,534 tonnes of household waste requires significant infrastructure. The household residual waste collected by local districts is deposited at three Waste Transfer Stations. Here, waste is bulked up and a good proportion is direct to a Rail Transfer Loading Station. The waste is loaded onto trains and taken to Wilton Energy from Waste Facility. Recycling resources are taken to two Material Recovery Facilities where resources are separated and sent on to processors to be recycled (see Section 10, Table 14).

A key performance indicator of our contract with Veolia Ltd is the generation of Photovoltaic (PV) electricity to reduce reliance on non-renewable energy. PV panels are stalled at four sites and, in 2021/22, 33,149 kWh of electricity was produced and used on the sites.

Household Waste and Recycling Centres provide residents with the opportunity to recycle more materials or dispose of waste. Residual waste is taken to the Rail Transfer Loading Station (RTLS). There are 16 centres across the region. We also play a significant role in the aftercare of seven closed landfill sites. We plan to review our infrastructure to ensure that it will be able, where possible, to support nature recovery.

10. Moving forward

We have assessed our aspects and impacts against the United Nations Sustainable Development Goals and identified our four priority SDGs. Each of our priorities is specifically relevant to a single function Authority responsible for managing household waste.

It is evident that what we do is important in helping society tackle climate change. We are returning material resources to a low carbon zero-waste circular economy and improving people's well-being and prosperity whilst contributing to a sustainable region.

Having established our baseline performance, our next step is to review and identify where we are doing well and what we need to improve in terms of sustainability. By doing this, we can continue to support the United Nations Sustainable Development Goals.

This baseline report provides the starting point for MRWA to report against the SDGs. We will continue to improve data capture and availability and produce a yearly report.

11. Data & Performance

Data and performances are based on information collected for the year 2020/21 (see Tables 3 – 14 below).

i. Governance of MRWA Table 3.

People - Governance	Metric	Measure	SDGs
Freedom of Information requests	N°	8	3 4 10 16 17
Environmental Information Regulations requests	N°	3	3 4 10 16 17
Data Protection / SARS requests	N°	2	3 4 10 16 17
Complaints received	N°	159	3 4 10 16 17
Complaints resolved	N°	159	3 4 10 16 17
Compliments received	N°	18	3 4 10 16 17
Internal EMS audits	N°	12	3 4 13 14 15 17
Internal Health and Safety audits	N°	1	3 4 13 14 15 17
External EMS audit	N°	2	3 4 13 14 15 17

ii. Influencing government policy Table 4.

People - Governance	Metric	Measure	SDGs
Consultation responses	N°	2	3 4 11 12 13 16 17
Policy briefings	N°	55	3 4 8 11 12 13 16 17
Strategy reviews	N°	5	3 4 8 11 12 13 16 17
Policy reviews	N°	5	3 4 8 11 12 13 16 17
New policies	N°	1	3 4 8 11 13 16 17

11. Data & Performance

MRWA's workforce Table 5.

People - Governance	Metric	Measure	SDGs				
Total employees	N°	31	3	5	8	11	17
Total male employees	N°	16	3	5	8	11	17
Per cent of male employees	N°	51.61	3	5	8	11	17
Total female employees	N°	15	3	5	8	11	17
Per cent of female employees	N°	48.39	3	5	8	11	17
Per cent of women in management in positions	N°	44.44	3	5	8	11	17
People achieve 10 years + service in the year	N°	13	3	5	8	11	17
People achieved 20 years + service in the year	N°	4	3	5	8	11	17
People achieved 30 years + service in the year	N°	1	3	5	8	11	17
People achieved 40 years + service in the year	N°	2	3	5	8	11	17
People trained in first aid	N°	1	3	5	8	11	17
People aware of fire protocol (Marshalls)	N°	4	3	5	8	11	17
Well-Being Ezine	N°	12	1	2	3	4	17

11. Data & Performance

iii. Working with communities to support the SDGs Table 6.

People and Funding, Communications, Education, and the Circular Economy	Metric	Measure	SDGs
LCR Population	N°	1.5m	17
LCR households	N°	660,000	17
Community Funds			
Projects support by MRWA/Veolia Community Fund	N°	13	1 2 3 4 10 11 12 13 17
Projects support by Suez Community Fund	N°	10	1 2 3 4 10 11 12 13 17
Monies granted by MRWA/Veolia Community Fund (including £15,000 - Southport Eco Centre)	N°	180,000	1 2 3 4 10 11 12 13 17
Monies granted by Suez Environmental Fund	N°	52,100	1 2 3 4 10 11 12 13 17
Community Fund events supported	N°	85	1 2 3 4 10 11 12 13 17
Suez Community Fund events supported	N°	0	1 2 3 4 10 11 12 13 17
Communications			
Communication and awareness 'paid for' campaigns	N°	1	3 4 10 11 12 13 17
Communication and awareness 'national campaigns supported	N°	0	3 4 10 11 12 13 17
Communication and awareness 'local' campaigns supported	N°	2	3 4 10 11 12 13 17
Education			
Education and awareness outreach to groups/organisations/ community	N°	0	3 4 10 11 12 13 17
Education and awareness resources published	N°	0	3 4 10 11 12 13 17
Resource Discovery Centre communications initiatives supported	N°	0	3 4 10 11 12 13 17
Resource Discovery Centre visits/visitors	N°	0	3 4 10 11 12 13 17
Southport Eco Centre – visits/visitors	N°	0	3 4 10 11 12 13 17
Southport Eco Centre communications initiatives supported	N°	0	3 4 10 11 12 13 17

11. Data & Performance

Working with communities to support the SDGs (Continued) Table 6.

People and Funding, Communications, Education, and the Circular Economy	Metric	Measure	SDGs
Social media			
Social media engagements (MRWA) – all channels	N°	5,866	3 4 10 11 12 13 17
Social media engagements (Recycle Right) – all channels	N°	2,835	3 4 10 11 12 13 17
Circular Economy			
LCR CEC members	N°	65	8 11 12 13 17
Events	N°	4	4 8 11 12 13
Newsletters	N°	4	4 8 11 12 13 17
CE Case Studies	N°	6	4 8 11 12 13 17

11. Data & Performance

iv. Maximising social value Table 7.

People Social Value	Metric	Measure	Value	SDGs
Waste diverted	Tonnes	291	29,100	3, 11, 12, 13, 17
Food waste prevented	Tonnes	188	1452	1, 2, 3, 12, 13, 17
Furniture reused	Tonnes	31	4,650	1, 11, 12, 13, 17
Textiles	Tonnes	70	16,800	1, 3, 11, 12, 13, 17
Carbon savings (£20.54t)	Tonnes	541	11,112	3, 4, 13, 17
Direct engagement	£8.91	19,915	177,443	3, 4, 12, 13, 17
Wider engagement	£2.23	28,361	63,245v	3, 4, 12, 13, 17
Volunteer hours	£8.91 (hr)	12,125	108,034	3, 4, 8, 12, 13, 17
Training	£53.46	451	24,110	3, 4, 8, 12, 13, 17
Community events	£250	85	21,250	3, 4, 11, 12, 13, 17
Social return on investment	£	£6.68	902,422	3, 4, 11, 12, 13, 17

v. Managing Health, Safety, and the Environment Table 8.

Health, Safety and Environmental Management	Metric	Measure	SDGs
EMS and Health and Safety inductions	No	3	3, 4, 13, 14, 15, 17
RIDDOR incidences	No	0	3, 4, 13, 14, 15, 17
Injury frequency rate	No	0	3, 4, 13, 14, 15, 17
EMS prosecutions	No	0	3, 4, 13, 14, 15, 17
EMS financial penalties	£	0	3, 4, 13, 14, 15, 17
Health and Safety prosecutions	No	0	3, 4, 13, 14, 15, 17
Health and Safety financial penalties	£	0	3, 4, 13, 14, 15, 17
EMS and H&S non-compliance reports	No	17	3, 4, 13, 14, 15, 17
EMS and H&S non-compliance reports resolved	No	17	3, 4, 13, 14, 15, 17
Accreditations	No	1	3, 4, 13, 14, 15, 17

11. Data & Performance

vi. Supporting nature recovery Table 9.

Planet Biodiversity	Metric	Measure	SDGs			
Total area of MRWA estate	Ha	147	3	14	15	17
Total area of closed landfill sites	Ha	117	3	14	15	17
Total area of facilities	Ha	30	3	14	15	17

11. Data & Performance

vii. Office resource consumption, waste production and renewable energy produced Table 10.

Planet Energy and resources	Metric	Measure	SDGs
Office electricity	kWh	43,500	3 7 12 13 17
Office water	Litres	172	3 12 13 14 17
Office gas	kWh	7,473	12 13
Office recycling	kgs	210	11 12 13 15 17
Office waste	kgs	254	4 12 12 13 17
Electricity generated from energy-from-waste	MWh	273,784	3 7 12 13 17
Steam generated from energy-from-waste	Tonnes	338,396	3 7 11 12 13 17

viii. Waste and resource management Table 11.

Planet Waste	Metric	Measure	SDGs
HWRCs resource materials	Tonnes	140,463	3 4 11 12 13 17
HWRC recycling	%	70	3 4 11 12 13 17
Refuse collection and street cleansing	Tonnes	423,681	3 4 11 12 13 17
Street sweepings	Tonnes	15,712	3 4 11 12 13 17
Litter bin refuse	Tonnes	2,643	3 4 11 12 13 17
Dry recyclate collections	Tonnes	120,070	3 4 11 12 13 17
Material Recycling Facility performance	%	84	3 4 11 12 13 17
Material Recycling Facility contamination rate	%	17	3 4 11 12 13 17
Green waste	Tonnes	5,152	3 4 11 12 13 17
Food waste	Tonnes	3,159	3 4 11 12 13 17
Residual waste through RRC	Tonnes	490,181	3 4 11 12 13 17
Waste sent to landfill – non hazardous	Tonnes	26,271	3 4 11 12 13 17
Waste sent to landfill – hazardous	Tonnes	114	3 4 11 12 13 17
Residual waste treated at EfW	Tonnes	435,101	3 4 11 12 13 17
Residual waste treated at other facilities	Tonnes	10,035	3 4 11 12 13 17
Household waste recycled and composted (NI 192)	%	35	3 4 11 12 13 17

11. Data & Performance

ix. Direct and in-direct carbon footprints Table 12.

Planet Carbon footprint	Metric	Measure	SDGs	
MRWA emissions				
Emissions from closed landfill sites	CO2e t	1,127.46	12	13
Staff commute on public transport	CO2e t	0.10	12	13
Office electricity consumption	CO2e t	17.32	12	13
Office water consumption	CO2e t	0.07	12	13
Office paper	CO2e t	0.11	12	13
Website server	CO2e t	0.64	12	13
Furniture recycling	CO2e t	0.66	12	13
Food waste reduction	CO2e t	4.05	12	13
Textile reuse	CO2e t	1.49	12	13
Veolia emissions				
Electricity	CO2e t	1,233.24	12	13
Site vehicles	CO2e t	1,131.55	12	13
Waste transfer between sites	CO2e t	346.87	12	13
Waste transfer to final sites	CO2e t	85.66	12	13
Water consumption (supply and treatment)	CO2e t	9.50	12	13

ix. Direct and in-direct carbon footprints Table 12. (Continued)

Planet Carbon footprint	Metric	Measure	SDGs	
Suez emissions LTRS				
Electricity	CO2e t	1,233.24	12	13
Site vehicles	CO2e t	1,131.55	12	13
Waste transfer between sites	CO2e t	346.87	12	13
Waste transfer to final sites	CO2e t	85.66	12	13
Water consumption (supply and treatment)	CO2e t	9.50	12	13
Waste transfer between sites (train, diesel)	CO2e t	5,813.17	12	13
Waste transfer between sites (road)	CO2e t	13.99	12	13
Site vehicles (diesel)	CO2e t	801.71	12	13
Electricity consumption	CO2e t	550.00	12	13
Natural gas	CO2e t	5.98	12	13
Water consumption (supply and treatment)	CO2e t	0.64	12	13
Suez emissions Wilton				
Natural gas	CO2e t	1,815.48	12	13
Electricity consumption	CO2e t	543.16	12	13
Water consumption (supply and treatment)	CO2e t	354.52	12	13
Waste bottom ash	CO2e t	108.67	12	13
Site vehicles (diesel)	CO2e t	87.50	12	13
Waste fly ash	CO2e t	8.12	12	13
Landfill	CO2e t	11,774.21	12	13

11. Data & Performance

x. Financial activities Table 13.

Economy Financial	Metric	Measure	SDGs
Annual turnover (service costs)	£	77,760.150	3 8 11 12 13 17
Investments in facilities, research, and development	£	111,150	3 8 11 12 13 17
Cost per household of disposal of residual waste	£	116.99	3 8 11 12 13 17
Average cost per tonne to dispose of residual waste	£	100.09	3 8 11 12 13 17
MRWA and Veolia Community Fund	£	165,000	3 4 11 12 13 17
Suez Community Fund (in-direct)	£	52,100	3 4 11 12 13 17

xi. Infrastructure Table 14.

Economy Infrastructure	Metric	Measure	SDGs
Transfer stations	No	4	8 11 12 13 17
Rail Transfer Loading Stations	No	1	8 11 12 13 17
Trade waste recycling (HWRCs)	No	2	8 11 12 13 17
Material Recycling Facilities	No	2	4 8 11 12 13 17
Household Waste and Recycling Centres	No	16	8 11 12 13 17
Reuse shops	No	2	4 8 11 12 13 17
Energy-from-Waste facilities	No	1	4 8 11 12 13 17
Closed landfill sites	No	7	11 12 13 14 17

Appendices

Appendix 1. United Nations Sustainable Development Goals

SDGs		Aims
1	No poverty	End poverty in all its forms everywhere
2	Zero hunger	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
3	Good health and well-being	Ensure healthy lives and promote well-being for all at all ages
4	Quality education	Ensure inclusive and equitable quality education and promote long-life learning opportunities for all
5	Gender equality	Achieve gender equality and empower all women and girls
6	Clean water and sanitation	Ensure availability and sustainable management of water and sanitation for all
7	Affordable and clean energy	Ensure access to affordable, sustainable, and modern energy for all
8	Decent work and economic growth	Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all
9	Industry, innovation, and infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
10	Reduced inequalities	Reduce inequality within and among countries
11	Sustainable cities and communities	Make cities and human developments inclusive, safe, resilient, and sustainable
12	Responsible consumption and production	Ensure sustainable consumption and production plans
13	Climate action	Take urgent action to combat climate change and its impacts
14	Life below water	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development
15	Life on land	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and half biodiversity loss
16	Peace, justice, and strong institutions	Promote peaceful and inclusive societies for sustainable development provide access to justice for all and build effective, accountable, and inclusive institutions at all levels
17	Partnership for the goal	Strengthen the means of implementation and revitalise the global partnership for sustainable development

Appendices

Appendix 2. Drivers, aspects, and impacts

Driver	Aspects	Impacts				
	Social value	Volunteering	Skills	Green jobs	Improve health	Employment
	Climate action plan	Reduce the impacts of climate change on people	Emissions to air, land and water	Extreme weather events (heating, cold, storms, flooding)	Sea level rises	Education and awareness
	Climate risk	Adaptation	Resilience	Financial	Insurance	Infrastructure and assets
	Zero waste action plan	Resource management	Maximised reused	Maximised recycling	value resources	Education and awareness
	Zero carbon action plan	Emissions to air, land and water	Decarbonise services	Renewable energy	Carbon storage and capture	Landfill avoidance
	Community fund	Social value	financial support	Volunteering	Skills	Green jobs
	Community enhancement	Protect from negative service impacts	Engagement	Partnerships	Social/Private landlords	Community groups
	Education & awareness	Engagement	Resources	Partnerships	Communications	Campaigns
	Communications	Campaigns	Literature	Social media		
	Stakeholders	Engagement	Openness, transparency	collaboration		
People	Legal & regulatory compliance	Statutory duties	Due diligence	Non-compliance	Financial penalties	Government agencies
People	Health, safety, and well-being	Statutory duties	Due diligence	Non-compliance	Financial penalties	Government agencies
People	Accountability and transparency	Statutory duties	Non-compliance	Financial penalties	Openness	Corruption
People	Consumer behaviour	Education and awareness	Communications	Attitudes	Perceptions	Marketing, peer pressure
People	Supporting skills and green jobs	Employment	Community enhancement	Education and awareness	Recycling and reuse	
People	Resource consumption	Education and awareness	Communications	Waste management	Reuse and recycling	Energy from Waste
People	Waste management	Contracts	Communications	Education and awareness	Energy from Waste	Carbon capture and storage
People	Contracts	Financial	Green jobs	Resource management	Energy consumption	Water consumption
People	Equality and diversity	Protected characteristics	Unlawful discrimination	Corporate culture	Inclusion	Exclusion
People	Responsibility	Drivers	Stakeholder interests	Ethics	Workplace	Impacts
People	Governance	Leadership	Decision-making	Communications	Financial reporting	Risk management
People	Biodiversity	Health	Well-being	Aesthetics	Carbon storage	
People	Mobility	Business vehicles	Private vehicles	Bicycles	Walking	

Appendices

Appendix 2. Drivers, aspects, and impacts (Continued)

Driver	Aspects	Impacts				
	Social value	Health	Well-being	Improve health	Access to nature	Biodiversity
	Climate Action Plan	Greenhouse gas emissions	Zero carbon	Resource conservation	Biodiversity	
	Climate risk	Adaptation	Resilience	Financial	Insurance	Infrastructure and assets
	Zero waste action plan	Zero waste	Maximise reuse	Maximise recycling	Zero waste to landfill	
	Zero carbon action plan	Reduce GHG emissions	Maximise reuse	Maximise recycling	Infrastructure and assets	
	Community fund	Resource conservation	Resource reuse	reduced GHG emissions	Circular economy	
	Community enhancement	Increasing biodiversity	Carbon reductions	Access to nature	Well-being	Health
	Consumer behaviour	Resource conservation	Resource reuse	reduced GHG emissions	Circular economy	Product composition
	Resource consumption	Resource conservation	Education and awareness	Communications	reuse and recycling	Energy from Waste
	Waste management	Emissions	Resource conservation	Circular economy		
Planet	Education & awareness	Behavioural impacts (+/-)	Education resources	Engagement	Communication	
	Communications	Behavioural impacts (+/-)	Campaigns	Engagement		
	Circular economy	Resource conservation	Resource reuse	reduced GHG emissions	Circular economy	Product composition
	Supporting skills and green jobs	Resource conservation	Resource reuse	reduced GHG emissions	Circular economy	
	Contracts	KPIs	Infrastructure and assets	Emissions		
	Water	Consumption	Emissions	Conservation	Grey water use	Financial
	Energy	Consumption	Emissions	Production (renewable)	Financial	
	Biodiversity Action Plan	Protection	Conservation	Enhancement	Carbon capture	Carbon sequestration
	Infrastructure & assets	Sustainable construction	Materials	Maintenance	Social value	Carbon sequestration
	Legal & regulatory compliance	Statutory duties	Due diligence	Non-compliance	Protection orders	Government agencies
	Procurement	Specification	Materials	End of life/use		
	Mobility	Access to nature	Well-being	Aesthetic appeal		

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Appendix 2. Drivers, aspects, and impacts

Driver	Aspects	Impacts				
Economy	Social value	Skills	Green jobs	Well-being	Unemployment	Improve health
	Climate Action Plan	Reduce the impacts of climate change on people	Emissions to air, land, and water	Extreme weather events (heating, cold, storms, flooding)	Sea level rises	Education and awareness
	Climate risk	Adaptation	Resilience	Financial	Insurance	Infrastructure and assets
	Zero Waste Action Plan	Resource management	Maximised reused	Maximised recycling	value resources	Education and awareness
	Zero carbon action plan	Emissions to air, land and water	Decarbonise services	Renewable energy	Carbon storage and capture	Landfill avoidance
	Community fund	Returns on investment	Community group support	Well-being	Responsibility	Network development
	Community enhancement	Engagement	Partnerships	Social/Private landlords	Community groups	Infrastructure and assets
	Education & awareness	Returns on investment	Engagement	Resources		
	Communications	Returns on investment	Engagement	Social media		
	Consumer behaviour	Financial saving	Resource conservation	Embedded energies	carbon reduction	
	Circular economy	Higher value products	local green jobs	Resource conservation	Embedded energies	carbon reduction
	Supporting skills and green jobs	Green skills	Green jobs	Community enhancement	Education and awareness	Circular economy
	Water	Emissions	Consumption	Grey water use	Financial	
	Energy	Emissions	Consumption	Renewable energy	Financial	
	Infrastructure & assets	Financial	Procurement	Social value	Value for money	
	Legal & regulatory compliance	Statute	Law	Financial	Social responsibility	Accountability
	Gender equality	Recruitment policy	Unlawful discrimination	Pay parity	Human rights	Exclusion
	Procurement	Financial	Goods and services	Product composition		
	Consumer behaviour	Financial savings	Education and awareness	Communications	Reuse	
	Waste management	Resource conservation	Consumption	Communications	Biodiversity	Contracts
	Contracts	Financial	Governance	Responsibility	Compliance	KPIs
	Business sector	Triple bottom line	Circular economy	Efficiency	Productivity	
	Third sector	Returns on investment	Circular economy	Proficiency	Community enhancement	
	Contracts	Financial	Value for money	KPIs	Community enhancement	Circular economy
	Biodiversity	Access to nature	Well-being	Aesthetic appeal		
	Mobility	Business vehicles	Private vehicles	Bicycles	Walking	Financial burdens

Appendices

Appendix 3. Aspects and prioritising SDGs

Driver	Aspects	Relative to SDGs															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
People	Social value	■	■	■	■				■		■	■	■	■				■
	Climate action plan			■				■	■			■	■	■	■	■		■
	Climate risk			■								■	■	■	■	■		■
	Zero waste action plan	■	■						■			■	■	■				■
	Zero carbon action plan							■				■	■	■	■	■		■
	Community fund	■	■	■						■	■	■	■	■				■
	Community enhancement	■	■	■							■	■	■	■			■	■
	Education & awareness	■	■	■	■								■	■	■	■	■	■
	Communications	■	■	■	■			■			■	■	■	■			■	■
	Stakeholder engagement	■	■	■					■		■	■	■	■	■	■	■	■
	Legal & regulatory compliance			■		■	■		■			■	■	■	■	■	■	■
	Health, safety and well-being			■					■					■	■	■		■
	Accountability & transparency			■			■	■	■					■			■	■
	Equality and diversity					■			■		■							■
	Responsibility			■	■	■			■		■		■	■	■	■	■	■
	Governance			■	■	■			■		■			■				■
	Mobility			■	■	■			■		■			■				■
		7	7	14	6	6	2	3	10	1	9	11	12	16	8	8	8	17

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Appendix 3. Aspects and prioritising SDGs continued

Driver	Aspects	Relative to SDGs																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Planet	Social value	■	■	■	■				■		■	■	■	■				■
	Climate Action Plan			■					■			■	■	■	■	■		■
	Climate risk			■			■					■	■	■		■		■
	Zero waste action plan	■	■			■			■			■	■	■				■
	Zero carbon action plan					■		■				■	■	■	■			■
	Community fund	■	■	■					■			■	■	■				■
	Community empowerment	■	■	■	■	■		■				■	■	■	■		■	■
	Education & awareness	■	■	■	■	■			■			■	■	■				■
	Communications	■	■	■	■	■						■	■	■				■
	Circular economy	■	■	■			■		■	■		■	■	■	■	■		■
	Supporting skills development and green jobs			■					■			■	■	■				■
	Waste and resources	■	■									■	■	■		■		■
	Water	■	■				■					■	■	■	■	■		■
	Energy	■	■					■				■	■	■		■		■
	Biodiversity Action Plan						■					■	■	■	■	■		■
	Infrastructure & assets						■	■	■	■		■	■	■	■	■		■
	Legal & regulatory compliance			■							■	■	■	■	■	■	■	■
	Procurement			■			■	■	■	■	■	■	■	■	■	■	■	■
	Mobility											■	■					■
		10	10	11	4	5	6	5	9	3	3	19	19	18	9	10	3	19

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Appendix 3. Aspects and prioritising SDGs continued

Driver	Aspects	Relative to SDGs															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Economy	Social value	■	■		■				■	■	■	■	■	■				■
	Climate Action Plan			■				■				■	■	■	■	■		■
	Climate risk			■			■					■	■	■	■	■		■
	Zero Waste Action Plan	■	■						■			■						■
	Zero carbon action plan							■				■	■	■	■			■
	Community fund	■	■	■					■		■	■	■					■
	Communities	■	■	■							■	■	■	■	■	■	■	■
	Education & awareness	■	■	■	■				■			■						■
	Communications	■	■	■	■							■						■
	Circular economy	■	■	■					■	■		■	■	■	■	■		■
	Supporting skills development & green jobs	■	■	■	■				■	■		■	■	■				■
	Waste and resources	■	■									■	■	■				■
	Water		■				■					■	■	■	■			■
	Energy		■									■	■	■				■
	Infrastructure & assets						■	■				■	■	■	■			■
	Legal & regulatory compliance			■		■							■	■	■	■	■	■
	Procurement						■	■		■	■	■	■	■	■	■		■
	Business sector							■		■		■	■	■				■
	Third sector							■		■		■	■	■				■
	Contracts			■			■	■		■	■	■	■	■	■	■		■
	Mobility																	■
		9	11	10	4	1	5	7	7	7	5	19	20	20	10	7	2	21

For more information about our Sustainable Development Goals, visit the Merseyside Recycling and Waste Authority website at:
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