

CANARY WHARF GROUP OPERATIONAL WASTE STRATEGY 2021-2026

FEBRUARY 2021



CANARY WHARF
GROUP PLC

1. INTRODUCTION

Canary Wharf Group (CWG) is a fully integrated private real estate company that develops, manages and owns approximately 7.7 million square feet of office space, 0.9 million square feet of retail and 327 Build to Rent units predominantly located at Canary Wharf, but also throughout Greater London including locations such as Southbank Place in Waterloo.

Canary Wharf is unique, overseeing projects at every stage of the construction and property management value chain; from planning and initial design of a development, to the construction and management of buildings and infrastructure on our estates. This approach enables us to ensure that the highest quality buildings and associated services are available to our customers. It also means that we have a deep understanding of sustainability and environmental risks and opportunities on our estates.

Since construction began on the Canary Wharf estate in 1987, we have been working to reduce the environmental impacts of our developments while delivering extraordinary environments that benefit our tenants, customers, residents and local community members.

Our Sustainability Strategy focuses on the following 4 areas, of which waste and resources management is key.

Waste and resources management falls under “Beyond Zero Waste” and is a core element of the Group’s Sustainability Strategy. We have aligned this with circular economy principles and key UK legislation including the Government’s Waste and Resources Strategy, the Environment Bill and the draft new London Plan.

Canary Wharf is expected to significantly expand by 2030, becoming a city within a city, through the continued expansion of the Wood Wharf and North Quay developments, all located in London.

Our approach is to be a leader in waste and resources management with the use of cutting-edge innovation. Our detailed scope is provided in Section 2.

This strategy document focuses on waste operations for our managed estates and excludes our construction business, which is developing a waste strategy appropriate to its operations.

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2. SCOPE OF OUR WASTE AND RESOURCES STRATEGY

CWG is the parent company responsible for executive guidance and administrative support to the following four business units.

MANAGED ASSETS

Canary Wharf Management consists of:

- Commercial Buildings owned by CWG
- Retail
- Infrastructure which covers the extent of the Estate and includes parks, roads, walkways, etc

Vertus consists of:

- Leased residential buildings

Canary Wharf Residential Management (CWM) consists of:

- Management of private sales of residential dwellings

DEVELOPMENT AND CONSTRUCTION

Canary Wharf Construction consists of:

- Management of planning, design and delivery of new assets and refurbishment of existing assets

Canary Wharf Management leads Waste Management across our managed assets, which is the focus of this strategy.

It should be noted that London Borough Tower Hamlets collects waste from our residential portfolio and therefore this is also excluded from this strategy.

Further details of our approach are included in Section 3



3. OUR APPROACH TO WASTE AND RESOURCES MANAGEMENT

The below highlights our approach to waste and resources management up to 2030.

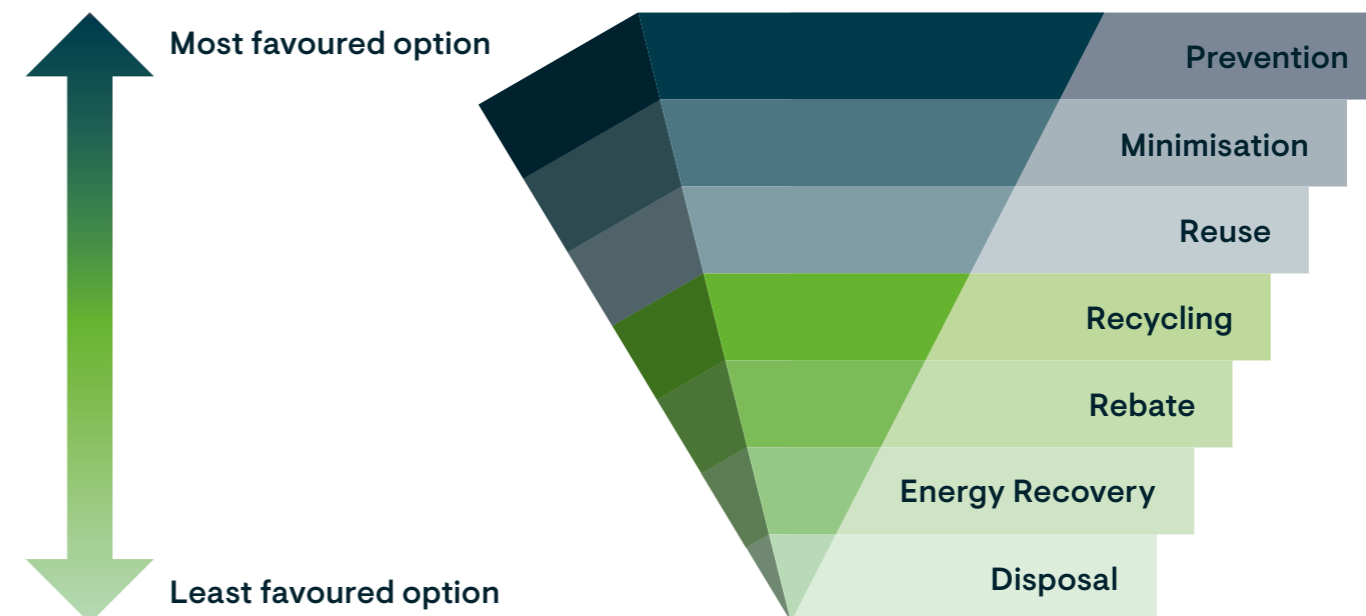


3.1. COMPLIANCE WITH LEGISLATION

We seek to comply with all applicable waste and resources legislation including (but not limited to) the following:

- Environmental Protection Act 1991
- The Waste (England and Wales) Regulations 2011
- Waste and Resources Strategy
- Hazardous Waste Regulations 2005
- Draft London Plan
- Draft Environment Bill
- Waste Electrical and Electronic Equipment 2013
- Tower Hamlets Local Plan 2031

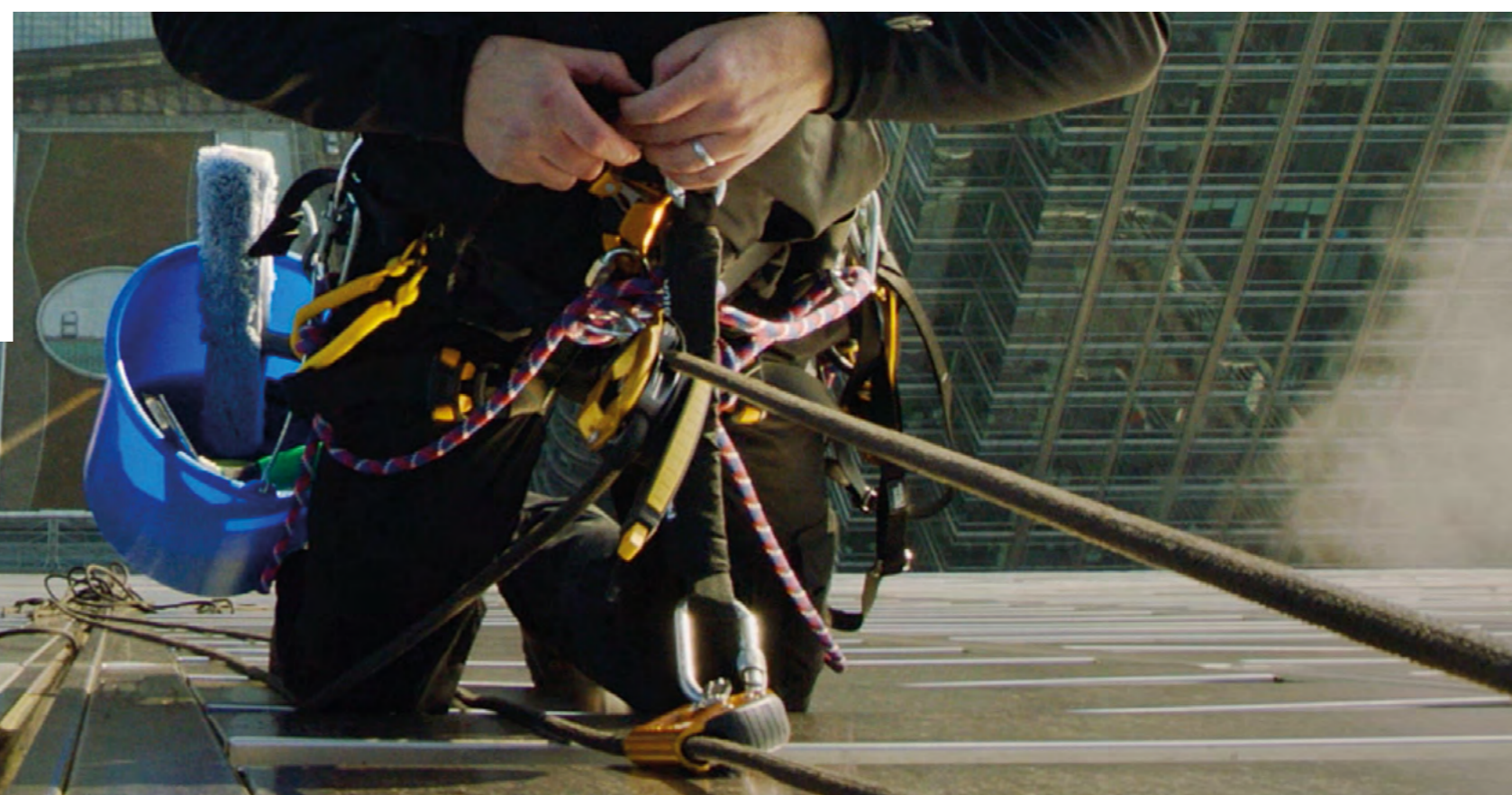
A key aspect of compliance with UK legislation is applying the waste hierarchy, which is illustrated on this page.



As our strategy continues to mature, we see the benefits of going further than compliance. Our enhanced approach to waste and resources management is as follows.

3.2. ZERO WASTE TO LANDFILL

Our waste activities for our managed areas have been zero waste to landfill since 2009, and we will continue to achieve this goal.



3.3. INCORPORATING THE CIRCULAR ECONOMY

In addition to complying with applicable legislation and sending zero waste to landfill, we aim to embrace circular economy principles within all aspects of our business.



Our strategy for the next 10 years is to view materials as resource rather than as waste, in line with circular economy principles. This applies to all our companies and operations.

We have started to incorporate circularity in our operations; some examples of which are provided below:

Designing out waste

- In 2018, we launched Breaking The Plastic Habit (BTPH) which significantly reduced coffee cups and plastics produced on our Estate. As of December 2020, over 8.8 million pieces of single use plastic were eliminated or recycled at Canary Wharf.

Keep products in use

- Since launching the HELPFUL app at Canary Wharf as part of the Breaking the Plastic Habit programme, over 13,000 items including water bottles, coffee cups and food service items have been reused using the app.
- Items such as office furniture and crockery no longer required by CWG are given to local charities in Tower Hamlets for use by the local community.
- We recycle our security and maintenance staff uniforms.

Regenerating natural systems

- Coffee grounds are reused as a fertiliser on our Estate to improve soil and plants in our gardens.
- Other coffee grounds are sent to Bio Bean to be converted to biofuel logs for use in homes.
- Our food waste is processed through anaerobic digestion which is ultimately turned into fertiliser which helps to improve soil quality and agricultural produce in the UK. Energy is also produced from this process which is used to power the grid.

3.4. COMBATTING CLIMATE CHANGE

This decade is expected to be one focused on tackling climate change, which will have serious adverse impacts on society. In the UK, we are expected to have hotter summers and more wet and windy winters, which could lead to overheating of buildings, increased flooding events, and negative impacts on agriculture and nature. For the rest of the world, climate change is likely to lead to increasing extreme weather events and global instability, in addition to having severe global economic consequences.

The built environment is responsible for 40% global emissions. Canary Wharf Group published its **Net Zero Pathway** in December 2020, which includes our carbon emissions associated with waste management.

Our new strategy incorporates the best approach for reducing emissions associated with waste produced on our Estate and ultimately reducing carbon emission associated with our operations.

For further details on this please refer to Section 4



4. OUR NEW WASTE AND RESOURCES STRATEGY

CWM manages all the waste generated from the Canary Wharf Estate infrastructure (roads, parks etc.) and the waste generated from the tenants who occupy our managed offices, as well as retailers and visitors on the Estate. As previously stated, London Borough Tower Hamlets manages the removal of waste from our residential portfolio.

Waste on our managed Estate is separated according to the following waste streams:

BUILDINGS

The following waste streams are separated in our buildings:

- Residual
- Dry Mixed Recyclables including paper, metal, glass and plastics
- Food

RETAIL

In addition to waste streams highlighted in buildings, retail also separates the following waste streams:

- Coffee
- Coffee cups

OUR WIDER ESTATE

Additional waste streams generated on our Estate include:

- Metal
- Construction fit out
- Paper/ cardboard
- Wood
- Cooking oil
- Plastic sheeting
- Clear plastic

Waste is separated and transferred to different loading bays throughout the Estate where waste streams are further separated, sorted and then sent to appropriate disposal sites. **Further information on the the downstream processing of waste is provided in Appendix A**

4.1 OUR HISTORIC APPROACH

For our operations, we have historically relied on an external contractor to manage our waste on our behalf. These providers have been a one stop shop solution dealing with the recycling and waste requirements of our estate. This approach historically had clear benefits, such as a single point of contact, fewer accounts and the provision of bulk solutions.

EVALUATING OPTIONS FOR MANAGING WASTE GOING FORWARD

We evaluated risks and opportunities associated with several options for managing waste and resources management. Our assessment was based on the following criteria:

RISK/OPPORTUNITY	CRITERIA
Recycling	Maintaining best in class recycling rates.
Cost	Reducing costs associated with waste disposal.
Climate change	Reducing carbon emissions associated with both the transport and processing of waste.
Sustainability	Ensuring our sustainability credentials are not compromised.
Compliance	Ensuring compliance with all relevant legislation.
Reporting	Ensuring ease of internal and external reporting.
Circular economy	Continuing to incorporate circularity within our business.
Waste as an asset	Incorporating changing perspective of waste as a resource.
Tracking & managing KPIs-	Ensuring key performance indicators (KPIs) are set and appropriately tracked.
3rd Sector Engagement	Encouraging the use of using local suppliers.
Greener buildings	Ensuring maintenance of sustainable building waste management.
Health and Safety	Adhering to all health and safety requirements associated with waste management.

Based on the above assessment we will internally broker our waste streams and use the River Thames for transport of waste (where practical) going forward.



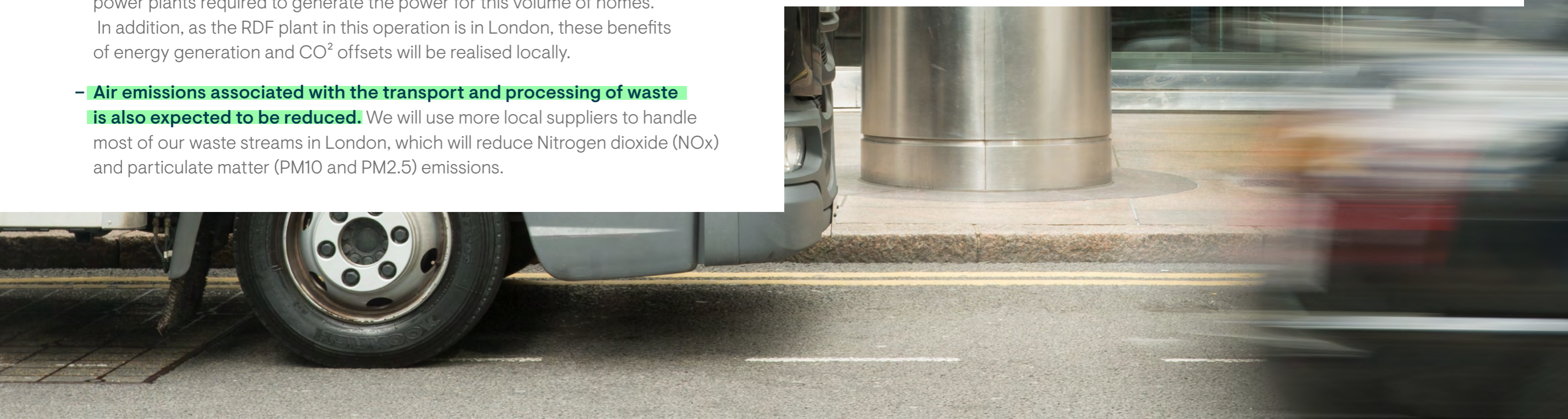
4.2. WHY WE ARE CHANGING OUR APPROACH TO WASTE AND RESOURCES MANAGEMENT?

Internal brokering and using the River Thames to transport our waste meets our aspirations of complying with legislation, adhering to circular economy principles, sending zero waste to landfill, lowering our carbon emissions, and ultimately reducing costs associated with waste management on the Estate, amongst other benefits.

We have provided a summary below of some of the reasons we are changing our approach:

- **We will significantly reduce carbon emissions associated with transport of our waste via the River Thames.** Our residual waste previously has been transported via lorries to a location outside of London and ultimately a Refuse Derived Fuel (RDF) plant located in Europe. We have now engaged with a local waste-to-energy provider in London and will transport our residual waste via the River Thames going forward. We estimate that this new solution will result in a reduction of emissions when compared with our existing model. Carbon emissions associated with the transport and processing of residual waste is expected to reduce by approximately 10%.
- **The energy from our residual waste from our new approach, is estimated to power approximately 2,000 homes in London per year.** The RDF waste to energy process generates energy to power approximately 1,900 homes per year, offsetting some 2,400 tonnes of CO² emissions from gas turbine power plants required to generate the power for this volume of homes. In addition, as the RDF plant in this operation is in London, these benefits of energy generation and CO² offsets will be realised locally.
- **Air emissions associated with the transport and processing of waste is also expected to be reduced.** We will use more local suppliers to handle most of our waste streams in London, which will reduce Nitrogen dioxide (NOx) and particulate matter (PM10 and PM2.5) emissions.

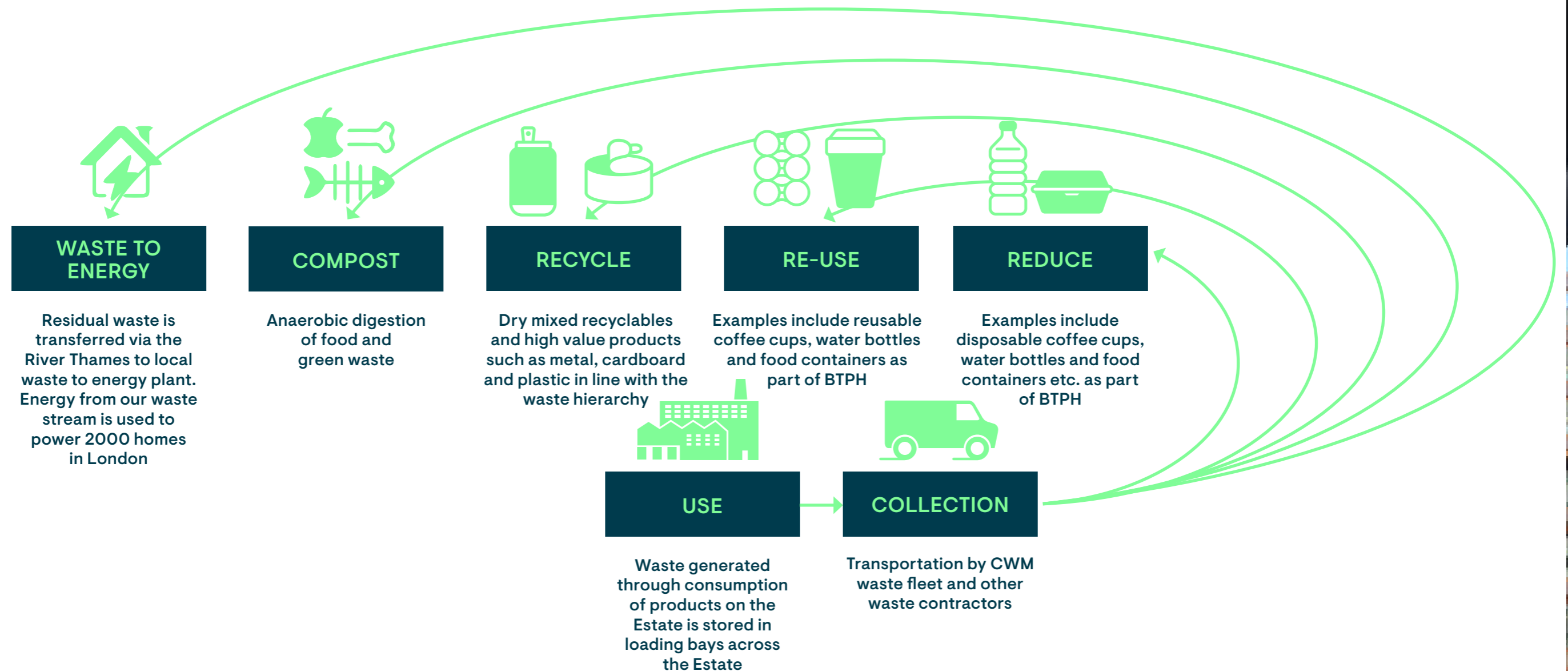
- **Incorporating a circular economy into our daily activities while continuing to adhere to the waste hierarchy has great benefits to the economy and environment.** Over the last few years, we have begun to see waste as a resource and will incorporate circular economy principles into our approach. We will continue to recycle high value streams and sell these onto recyclers within London. This will assist us with reducing costs associated with waste management on our Estate and support local recycling.
- **Changing our waste fleet to low emission vehicles will benefit local air quality.** We have purchased a low emissions fleet to transport the waste and resources produced on our Estate. This will assist with reducing both air and carbon emissions associated with waste transport and associated resources.
- **Reducing the risk of exporting of waste and negatively impacting human and environmental health of other countries.** By using mainly local suppliers, we reduce the risk of our waste being exported to countries that do not have the infrastructure to appropriately process it. We will continue to conduct due diligence of our waste suppliers to ensure that our waste is appropriately processed and is not negatively impacting human and environmental health in other countries.
- **Supporting the local economy by using London Based suppliers.** Most of our waste and resources will be transferred from our sites in Canary Wharf and Wood Wharf to local waste recyclers/suppliers within the M25.



4.3 ZERO WASTE TO LANDFILL

As previously stated, we will also continue to adhere to zero waste to landfill for our managed areas on the Estate and continue to comply with the principles of the waste hierarchy.

A description of our waste process is provided below



5. OUR LONG-TERM STRATEGY

5.1. OUR NEW WASTE AND RESOURCES OBJECTIVES UP TO 2026

Benchmarking of our peers demonstrates that our waste and resources management practices are best in class, with high recycling targets across our Estate. On average, the typical recycling rate for a local council is 40% - and recycling rates for large property owners are around the same. Historically, our recycling rates have been significantly above these.

We have developed internal recycling targets to encourage employees, visitors and building managers to engage in good waste practices across the estate. These targets will be well above recycling rates of local councils and guidance from the new Draft London Plan.

5.2. TENANT ENGAGEMENT

In addition to the above, we will also continue to engage with our stakeholders such as our retail and commercial tenants on programmes such as Breaking the Plastic Habit. Another area of focus will be on reducing the amount of residual waste and food waste produced on our estates going forward, and we intend to launch programmes to assist with this over the next few years.

We will seek to review our practices around waste from refurbishment and continue to implement circular principles around this area.

5.3. CONTACT US FOR FURTHER INFORMATION

Our new approach was implemented in January 2021.

We can work with tenants to implement this within their operations if required. If you are located on the Canary Wharf estate and would like to learn more about our approach to waste management, please contact:

**Canary Wharf Management
Waste Department**
waste@canarywharf.com
020 7418 2867

We will continue to innovate and maintain best in class waste practices in the UK. Our updated recycling rates are as follows:

0%
WASTE TO LANDFILL
IN MANAGED AREAS

75%
WASTE RECYCLED
IN RETAIL

70%
WASTE RECYCLED
IN MANAGED OFFICE

60%
WASTE RECYCLED
IN INFRASTRUCTURE



Appendix A

Table 1 below details our approach to waste management from 2021 - 2026

WASTE STREAM	FURTHER DETAILS
Residual	Our largest waste stream, residual waste, has not been sent to landfill since 2009. Over the last 5 years this was sent to Refuse Derived Fuel in Europe. We have re-evaluated the end destination and now this waste stream will be transported via the River Thames to a local waste to energy site in South London.
Food	This is our largest waste stream after residual waste; this is sent to anaerobic digestion in Barking, East London. This is the process of breaking down and decomposing organic producing digestates and biogas. The anaerobic digestion facility processes up to 35,000 tonnes of food waste per annum collected from local households, commercial and manufacturing enterprises which is combusted by two gas engines to generate enough renewable energy to power approximately 2,000 homes. The process also produces 42,000 tonnes of PAS110 accredited digestate each year which is used as a fertiliser on local farmland. We will continue to process our food waste via anaerobic digestion going forward.
Dry mixed recyclables (e.g. plastic, metal cans, paper etc).	Since 1996 several waste management companies have developed materials recycling facilities where mixed Dry Mixed Recycling (DMR) is generally collected (typically at lower rates), sorted into its component parts and sold to re-users of the material. Large volumes of this material were sent to Asia, but due to recent changes in import policy and television programmes like “Blue Planet” outlining the true end of life solutions in Asia, the exporting of this material has reduced. We will send this to a local MRF in South London for onward recycling processing.
Cardboard	Baling of cardboard provides a recovery method for a re-sellable commodity. Cardboard is baled onsite collected by a local recycling plant and remanufactured into new cardboard.
Glass	Canary Wharf produces large volumes of glass particularly via its food retail outlets such as restaurants and bars. We will continue to send to a recycling plant in Essex where it is further converted into more glass products.

Construction (including fit-out)	This consists of several waste streams. Waste is sent to a local MRF in East London for onwards recycling.
Coffee	A percentage of coffee grounds are reused as fertiliser for plants on our Estate. Additional coffee groups ultimately are dried and pressed into biofuel briquettes.
Green	Green waste sent to Essex where it is composted to be used as fertiliser.
News and Pamphlets	Newspapers are collected by a local waste plant in East London and ultimately recycled.
Other recyclables (plastic bottles, soft plastics, cans)	Other recyclables such as plastics bottles, soft plastics, cans, milk bottles, pallets are collected and sent to a local recycler in East London.
Hazardous waste	Hazardous waste includes our waste electrical and electronic equipment (WEEE), fluorescent lamps and spills from buses and other vehicles on the Estate. WEEE are collected and appropriately processed, lamps are recycled and hazardous waste from spills (which takes place on a very rare basis) are sent to incineration.
Metal	Collected and recycled locally in London.

BIBLIOGRAPHY

- Ellen Mc Arthur Foundation
- Environmental Protection Act 1991
- The Waste (England and Wales) Regulations 2011
- Waste and Resources Strategy
- Hazardous Waste Regulations 2005
- Draft London Plan
- Draft Environment Bill
- Waste Electrical and Electronic Equipment 2013
- Tower Hamlets Local Plan 2021

