PROPERTY

RESOURCE EFFICIENCY

OUR OBJECTIVES

Sustainable consumption helps to ensure that the many natural resources that are fundamental to our health, wellbeing and quality of life will still be available for us to use in the future.

By using resources efficiently, we reduce our impact on the environment and improve the overall sustainability of our business and of our occupants through reduced GHG emissions and reduced spend.

ENERGY USE & EFFICIENCY

Objective: To design, construct and operate our assets in an energy efficient manner, identifying opportunities for reductions and over time, reducing overall energy consumption.

WATER USE & EFFICIENCY

Objective: To design, construct and operate our assets in a water efficient manner, identifying opportunities for reductions and over time, reducing overall water consumption.

WASTE & CIRCULAR ECONOMY

Objective: To reduce the quantity of material described as waste; efficiently manage the waste that we and our occupants generate; and to optimise facilities and opportunities for reuse and recycling across our value chain.

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RESOURCE EFFICIENCY

ENERGY USE & EFFICIENCY

Our objective is to design, construct and operate our assets in an energy efficient manner, identifying opportunities for reductions, and over time, reducing overall energy consumption.

Whilst our assets are predominantly residential in architype, we have a wide variety of assets and occupants in our portfolio, as well as a wider estate that we manage.

In the first instance, we aim to design buildings and infrastructure that are energy efficient from the outset; our approach to the design of our buildings has evolved over time, adapting to the needs of our occupiers and operational management teams. The feedback we receive as a result of our longstanding operational presence is hugely valuable in understanding and improving energy performance, and lessons learned in our existing assets are actively applied in the design of our new buildings.

ENERGY EFFICIENT DESIGN

Reducing the demand for energy is the first step in our approach to energy efficient design, contributing to lower operational costs and reduced GHG emissions.

Building Regulations Part L is the primary tool for estimating energy consumption at the design stage of a project and is generally the basis against which improvements are measured. It provides a calculation methodology that compares a compliant notional building of the same size, shape and orientation with the building under design or construction and checks for compliance, ensuring that the building fabric meets a minimum standard and that other efficiency measures are incorporated.

Part L makes standardised assumptions and was never intended to be a design tool, but so long as we understand the design assumptions used, these can be accounted for to provide more accurate assessments of energy in use.

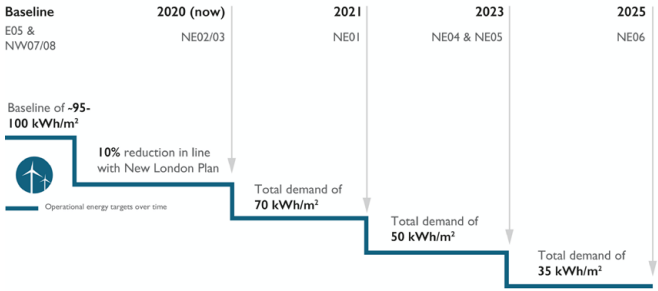
We know, for example, that Part L only includes regulated (heating, lighting, pumps and fans) consumption, which in many scenarios cannot be easily separated from the measurement of unregulated (for example plug-in equipment) consumption, so when making comparisons between design and as-built performance, we need to factor this in.

We also know that Part L applies certain assumptions based on the floor area of a property regarding occupancy and usage patterns, which won't necessarily correspond with how the building is used.

In commercial buildings, CIBSE TM54: Evaluating Operational Energy Performance of Buildings at the Design Stage can be applied to provide a more accurate estimate of consumption in-use, adjusting those assumptions so that they relate to how the building is actually going to be operated. In residential buildings, where there are a large number of different occupants, all with different patterns of usage, it isn't possible to adopt this approach, so we must instead just be aware of how individual apartment consumption can vary as a result of occupancy and the behaviours of individual occupants.

DESIGN TARGETS

Part of our Pathway to Zero Carbon workstream has been to develop targets for maximum energy consumption in our new buildings, reducing over time. Taking into account best practice guidance from the Royal Institute of British Architects (RIBA), the London Energy Transformation Initiative (LETI), as well as the ambitions of the Greater London Authority (GLA) we have defined the following trajectory for the next phase of development at Wembley Park, the North East Lands:



Our targets currently only apply to our residential development, but as this is the majority of our development portfolio over the next five years, it is sensible for us to focus on this part of our asset portfolio.

DESIGN APPROACH

To achieve these levels, we adopt a 'fabric first' approach, prioritising passive measures and ensuring our buildings are well-insulated and airtight, with controlled, energy-efficient ventilation is incorporated to ensure occupant comfort. We carry out parametric modelling at an early stage to understand the effects that orientation and glazing areas will have on energy consumption, as well as other parameters such as overheating and daylighting. Measures to reduce summer overheating can have the effect of reducing beneficial solar gains in winter, increasing energy consumption, so our approach involves fine tuning to ensure a balance across the different measures is achieved.

Our construction teams are appointed early in the process so that they can work in collaboration with our design teams; this helps to ensure that everybody understands what we are trying to achieve, and that 'value engineering' measures that could jeopardise energy performance are limited.

CONSTRUCTION

We appoint a specialist independent cladding consultant who is involved at all stages, from developing the brief to reviewing external works and providing final sign-off of the completed building. This addresses the issue of ownership that was identified by Dame Hackett in her review of Building Regulations and fire safety, and applies equally to ensuring continuity in the thermal performance of our buildings and the avoidance of thermal bridges.

We also appoint a site-wide Mechanical, Electrical and Plumbing (MEP) guardian, whose remit is to review technical submissions, carry out regular site inspections as construction progresses, and support the commissioning and handover process. Installation can have an adverse effect on performance, particularly for example, with ductwork, so ensuring construction is in compliance with design drawings is essential to ensuring the intended performance of this equipment.

COMMISSIONING & HANDOVER

The commissioning and handover process typically commences 12 months before the due handover date, when our mobilisation team begin to familiarise themselves with the operational details of the building and are involved in regular discussions with the project and construction teams to ensure a 'no-surprises' environment on

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completion. We adopt a soft handover process which involves training and familiarisation sessions with building users, ensuring that the right people are present. Where additional training is required, this is carried out before handover.

At Quintain Living, the increasing scale of our operations and gaps in the skillset of the existing team have led to the recent appointment of a dedicated facilities manager who will focus on the efficiency of our residential assets.

ENERGY EFFICIENT OPERATION

Once a building is completed and handed over to our operational teams, we monitor energy use and adopt a number of strategies to reduce energy consumption.

METERING STRATEGIES

The metering strategy for a building plays an important role in providing an in-depth understanding of how assets are performing. The level of detail at which sub-metering is applied needs to relate to sensible end uses, but also be manageable. It can be difficult to understand at design stage what will be useful to measure and monitor, but effort made here can ensure our assets are operated more efficiently.

Our metering strategy for our build to rent (BtR) residential assets has evolved over time as we develop a greater understanding of our data needs and uses. We have an advantage over traditional 'build for sale' in the fact that we are directly responsible for energy supplies and are therefore able to access individual apartment consumption data without any data protection constraints. We originally followed a traditional metering approach, providing individual smart electricity, heat and water meters to each apartment. Despite this, we have had unexpected difficulties in obtaining accurate consumption data and bills from our suppliers, with a large proportion of our billing still based on estimated readings several years post-completion.

As a result, our metering strategy has been adjusted so that we have better control over our data, and we now provide separate landlord and bulk apartment supplies that are then sub-metered and monitored separately via our own data platform. The bulk supplies provide a single total that we use for reporting and for understanding aggregated building performance; whereas the sub-metered supplies can be used to understand individual apartment consumption and assist with resident engagement.

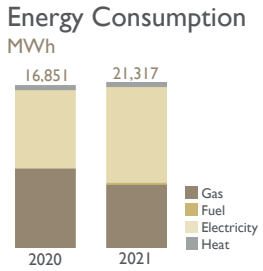
ENERGY CONSUMPTION

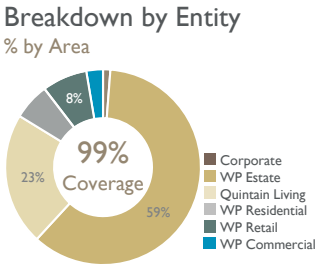
All of our assets are monitored on at least a quarterly basis, with the vast majority more frequently, and where potential consumption issues are identified, increased monitoring is carried out to help identify the reason.

We benchmark assets of a similar type against each other which helps to identify outliers and potential performance issues. Whilst in some cases, large differences can be justified through differences in services provided, equipment and operational patterns, where this is not the case, further investigation is carried out. For the reasons mentioned in the previous section, benchmarking performance against design can be difficult, but where possible and where data can be broken down so that it is comparable, we also carry out this analysis.

ENERGY WITHIN OPERATIONAL CONTROL

Our energy consumption within operational control covers the gas, electricity and heat supplies where we have the most influence over consumption. This includes our own offices and the supplies across the Wembley Park Estate, as well as landlord supplies in our residential, retail and commercial assets. This also includes where we are responsible for the generation of heat for others to consume. For several of our earlier residential assets, where we are responsible for the management of landlord areas which supply both our own BtR apartments and private apartments not included within our portfolio, consumption is split between Quintain Living and Wembley Park Residential on a proportional basis.





A. Absolute Energy Consumption within Operational Control

	2021						2020 RESTATED					
	Gas kWh	Other Fuel Consumption (kWh)	Electricity kWh	Heat kWh	Annualised Area m^2	Data Coverage % Area	Gas kWh	Other Fuel Consumption (kWh)	Electricity kWh	Heat kWh	Annualised Area m^2	Data Coverage % Area
TOTAL	8,970,977	26,407	11,960,974	358,222	269,371	100%	6,544,007	54,728	9,461,728	790,062	217,022	99%
Corporate	27,984	N/A	379,999	N/A	3,114	76%	42,266	N/A	381,545	N/A	2,694	72%
Wembley Park Estate	8,942,993	26,407	3,623,808	N/A	143,916	100%	6,501,740	54,728	2,934,836	N/A	132,575	100%
Quintain Living	N/A	N/A	4,986,626	N/A	83,529	100%	N/A	N/A	3,183,708	N/A	46,158	100%
Wembley Park Residential	N/A	N/A	977,447	N/A	12,810	100%	N/A	N/A	745,150	N/A	12,810	100%
Wembley Park Retail	N/A	N/A	1,603,975	N/A	7,724	94%	N/A	N/A	1,472,626	N/A	6,971	82%
Wembley Park Commercial	N/A	N/A	389,119	358,222	15,909	100%	N/A	N/A	743,863	790,062	15,814	100%
Wembley Park Leisure	N/A	N/A	0	N/A	2,369	100%	N/A	N/A	N/A	N/A	N/A	N/A

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B. Like-for-Like Energy Consumption within Operational Control

	2021			2020			
	Gas kWh	Electricity kWh	TOTAL kWh	Gas kWh	Electricity kWh	TOTAL kWh	TOTAL % Change
TOTAL	8,942,993	8,547,723	17,490,716	6,501,740	8,193,784	14,695,525	19%
Corporate	0	221,567	221,567	0	233,105	233,105	-5%
Wembley Park Estate	8,942,993	2,967,628	11,910,621	6,501,740	2,693,705	9,195,446	30%
Quintain Living	N/A	2,456,269	2,456,269	N/A	2,356,546	2,356,546	4%
Wembley Park Residential	N/A	977,447	977,447	N/A	745,150	745,150	31%
Wembley Park Retail	N/A	1,535,693	1,535,693	N/A	1,421,415	1,421,415	8%
Wembley Park Commercial	N/A	389,119	389,119	N/A	743,863	743,863	-48%

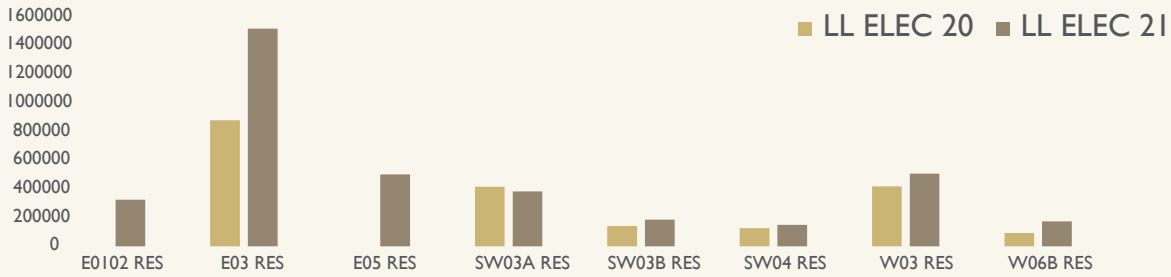
As our portfolio of assets is rapidly growing, we have few energy supplies where we are able to make full-year like-for-like comparisons, and fewer still where we are able to compare directly with our 2013/14 baseline and make meaningful comparisons with last year. 2020 and 2021 both had been exceptional year in terms of energy consumption due to intermittent lockdowns. Whilst it is expected that office, retail and general estate consumption would be lower as a result of the significantly reduced activity across those types of asset, we have also saw an increase in landlord electricity consumption across our residential assets. Whilst more people are spending time at home, we have seen a 4% increase in landlord consumption at Quintain Living, and a 31% increase across Wembley Park Residential. This is most likely as a result of increase in occupancy and more time spent in the home.

INSIGHTS

Absolute Landlord Energy Consumption (kWh) 2021 & 2020

	LL ELEC 20	LL ELEC 21
E0102 RES	New Asset	324,629
E03 RES	877,644	1,515,254
E05 RES	New Asset	500,698
SW03A RES	414,458	382,371
SW03B RES	140,685	186,106
SW04 RES	126,962	148,807
W03 RES	417,436	506,717
W06B RES	92,370	173,795

Across all of our residential assets, consumption per m2 of landlord area has increased in 2021. Most of this increase is in part to new buildings opening to residents such as in the Eastern Lands, Buildings E0102 and E05 which do not have operational consumption from last year. With high occupancy rates achieved by year end across all buildings, the communal spaces and high energy uses such as the lifts were in constant use. Our landlord areas include the common social spaces, gyms and other facilities that during lockdown have had to close in 2020 but were in intermittent use during 2021.



PROPERTY

RESOURCE EFFICIENCY

ENERGY OUTSIDE OPERATIONAL CONTROL

Our most significant area of consumption outside our control currently relates to our residential occupiers and retail tenants, however this is because of the very limited activity across our leisure assets in 2020 and 2021. In a year with a 'normal' event schedule, it is likely that consumption at The SSE Arena, Wembley would contribute more significantly to our total.

Our metering strategy discussed on the previous page has allowed us to more easily collect data relating to consumption in our residential assets through the use of bulk supplies, and we have achieved 80% data coverage in 2021, less than 2020. This can be explained by the increase in residential units being handed over for occupancy.

We have over 130 individual retail units within Wembley Park, and whilst the majority of meters are read on a monthly basis, we have had some difficulties gaining access and having the resource to read these meters in 2020 and in 2021. Wembley Park Boxpark is also included in these figures, although we only have a 50% stake in this asset and have no operational involvement; this accounts for 12% of our retail area. A further 9.5% is accounted for by Cineworld at LDO, where again, we do not have access to meters or consumption data.

C. Absolute Energy Consumption outside Operational Control

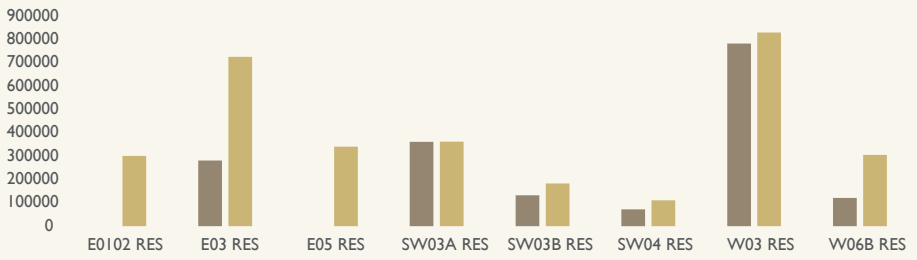
	2021					2020 RESTATED				
	Gas kWh	Electricity kWh	Heat kWh	Annualised Area m^2	Data Coverage % Area	Gas kWh	Electricity kWh	Heat kWh	Annualised Area m^2	Data Coverage % Area
TOTAL	2,701,522	10,869,902	10,907,245	228,129	78%	2,352,989	9,399,956	7,157,602	163,473	89.27%
Corporate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wembley Park Estate	N/A	19,723	N/A	1,535	100%	N/A	N/A	N/A	N/A	N/A
Quintain Living	N/A	3,160,202	10,907,245	179,768	80%	N/A	3,087,342	7,157,602	117,583	100.00%
Wembley Park Residential	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wembley Park Retail	2,701,522	5,774,418	N/A	36,887	69%	2,352,989	4,679,478	N/A	36,116	59.22%
Wembley Park Commercial	N/A	0	N/A	1,763	0%	N/A	0	N/A	1,599	0.00%
Wembley Park Leisure	N/A	1,915,558	N/A	8,175	85%	N/A	1,633,137	N/A	8,175	85.23%

INSIGHTS

Absolute Resident Electricity Consumption (kWhr) 2021 & 2020

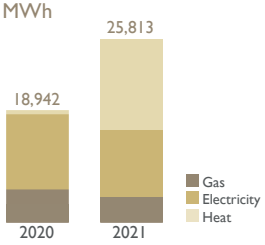
Our residential occupiers consume varying of amounts of energy in their apartments, which to some extent is affected by their personal circumstances and the increase in people staying and working from home during COVID restrictions. Aggregated to block level, differences will also occur as a result of differing levels of occupancy. In 2021 we saw a big increase in occupancy across all our blocks and this is reflected in the increases in consumption in the new Canada Gardens buildings referenced as E0102 and E03. In As we now have in place the ability to monitor vacancy and occupancy we have been putting in place incentives to encourage residents to reduce their consumption and bills.

	RES ELEC 20	RES ELEC 21
E0102 RES	New Asset	301,482
E03 RES	281,624	725,888
E05 RES	New Asset	340,638
SW03A RES	361,220	362,180
SW03B RES	132,798	183,254
SW04 RES	72,139	111,178
W03 RES	783,421	830,055
W06B RES	121,528	305,527



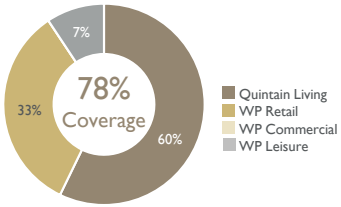
Annual Consumption

MWh



2021 Breakdown

% Consumption by Entity



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RESOURCE EFFICIENCY

WATER USE & EFFICIENCY

Our objective is to design, construct and operate our assets in a water efficient manner, identifying opportunities for reductions, and over time, reducing overall water consumption.

In a similar vein to our approach to energy use and efficiency, we design our assets to be water efficient from the outset, and then ensure that this is monitored during operation to identify any issues and potential reduction opportunities.

WATER EFFICIENT DESIGN

Reducing the demand for water in our buildings and across our public realm are the first steps in our approach to reducing our overall water consumption.

WATER USE IN OUR BUILDINGS

Building Regulations Part G includes a method for estimating water consumption per person, per day in residential apartments is based on the types of fittings installed. Average UK water consumption per person per day in a single person household is currently estimated to be 149 litres. New dwellings are required to include fittings to reduce this to 125 litres per person per day, and our design requirements push this further, ensuring the combination of fittings and appliances we provide allow a maximum of 105 litres per person, per day to be consumed. We use a combination of fittings and appliances that reduce consumption, without impacting on the experience of our occupants. Across our commercial assets, we adopt a similar approach, in addition installing leak detection equipment to identify any potential supply problems.

WATER USE IN OUR LANDSCAPING

Our landscaping strategies vary depending on their location within the public realm. Particularly in recent years, we have installed planting that requires minimal water and can survive in periods of drought, and a large proportion of the new park currently under development will be of this low-maintenance type.

There are certain species, particularly of trees, that do have specific watering requirements in the first few years after installation. One of the measures we have adopted is the use of systems such as Silva Cells, which provide stormwater storage, contributing to a reduction in watering volumes required to promote healthy tree development.

WATER USE ACROSS THE PUBLIC REALM

Across the public realm, we have several thousand square feet of hard landscaping which needs cleaning on a regular basis. Two of the main items we have to contend with are manmade chewing/ bubble gum litter; and the natural problem of algae, particularly on our concrete surfaces. Instead of cleaning by jet washing these surfaces, which would use large volumes of water, we adopt alternative approaches such as the use of the EcoGum system for sticky substances.

EcoGum safely removes chewing gum, sticky labels, oils stains, rubber and other similar products that are difficult to sweep away in the public realm. An eco-friendly detergent is fed into a boiler located in a backpack powered by a rechargeable lithium battery that vaporizes the sticky substance; it can then be safely swept away.

Water has a great amenity value across the public realm, so it is carefully incorporated to reduce the need to top up with potable water supplies. The layout of our new park for example includes the use of rain gardens that will help to keep the new pond topped up with rainwater and manage stormwater as well as providing an attractive visual landscape with amenity value.

WATER EFFICIENT OPERATION

Once a building is completed and handed over to our operational teams, we monitor water use and adopt a number of strategies to reduce consumption; the same applies across our public realm.

METERING STRATEGIES

Similar to the way in which we monitor our energy consumption, our metering and monitoring strategies allow us to understand how assets are performing.

Most notably in our newer residential buildings, we now include a single bulk supply that feeds both landlord and resident areas. Whilst individual sub-meters are useful for honing in on areas of consumption, the aggregated total can be unreliable due to failed or non-communicative sub-meters, so this approach provides a definitive total and reduces our risk of under-reporting, allowing us to compare and understand total building consumption. As the majority of water consumption in our residential buildings is resident consumption, the total for these buildings is recorded as being outside our operational control; a building total comparison has been provided by residential asset on the following page for all residential buildings.

WATER CONSUMPTION

We monitor water and benchmark water consumption in the same way that we monitor energy consumption.

Water consumption in our buildings is monitored on an absolute basis, so is difficult to compare with design consumption which is based on a maximum level of consumption per occupant. We do, however, benchmark consumption across our buildings, using different methods depending on the water area supplied.

WATER WITHIN OPERATIONAL CONTROL

We have reported our 2021 consumption (and where available, compares this with 2020), providing insights into our usage patterns where possible.

We have achieved 9% data coverage this year, improving year on year since the 77% coverage we achieved in 2019. This is mainly due to increased visibility of across our residential assets. Water usage has decreased and increased across the portfolio largely in terms of which entity was able to be open during the UK's COVID response. In additional, the readings are compared to 2020 figures which were also anomalies due to the changing COVID restrictions.

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A. Absolute Water Consumption within Operational Control

	2021			2010 (Restated)		
	Water m^3	Annualised Area m^2	Data Coverage % Area	Water m^3	Annualised Area m^2	Data Coverage % Area
TOTAL	14,824	133,862	97%	22,054	115,308	95%
Corporate Offices	340	1,324	46%	906	1,838	65%
Wembley Park Estate	1,863	72,201	100%	3,166	62,095	100%
Quintain Living	3,426	20,484	99%	4,440	14,243	100%
Wembley Park Residential	3,357	13,378	96%	6,862	13,378	100%
Wembley Park Retail	5,254	7,292	74%	6,547	7,940	35%
Wembley Park Commercial	584	15,814	100%	134	15,814	100%
Wembley Park Leisure	0	2,369	100%	N/A	N/A	N/A

B. Like-for-Like Water Consumption within Operational Control

	2021	2020 (Restated)	2021 LfL Area	
	Water m^3	Water m^3	Area m^2	TOTAL % Change
TOTAL	14,446	21,797	75,991	-51%
Corporate Offices	302	736	615	-143%
Wembley Park Estate	1,673	3,126	31,254	-87%
Quintain Living	3,394	4,440	14,243	-31%
Wembley Park Residential	3,257	6,862	12,999	-104%
Wembley Park Retail	5,137	6,499	1,065	-27%
Wembley Park Commercial	584	134	15,814	77%

WATER OUTSIDE OPERATIONAL CONTROL

For assets outside our operational control, the comparison against previous years is inconclusive. Water data collection only started in 2019 and we have increased data coverage to improve accuracy. The majority of missing data is from our retail assets, where, due to COVID-19 restrictions, we were unable to arrange access to obtain this data for most of the year. As our newer residential assets include a single bulk supply that serves both landlord and resident areas, this is the basis for which we compare the water consumption of our residential assets. Due to the metering arrangements in our earlier residential buildings outlined earlier in this section, we currently only have estimated water consumption data from the supplier in those apartments.

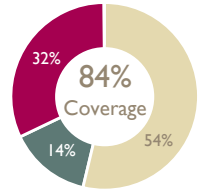
Our leisure assets include The SSE Arena, Wembley and Troubadour Wembley Park Theatre, both of which were closed for large portions of the year as well as in 2020, so we expect that this will be reflected with higher consumption in future years when COVID-19 restrictions are no longer in place. Data is currently only available for The SSE Arena, Wembley which is the most significant asset by floor area.

C. Absolute Water Consumption outside Operational Control

	2021			2010 (Restated)		
	Water m^3	Annualised Area m^2	Data Coverage % Area	Water	Annualised Area m^2	Data Coverage % Area
TOTAL	105,951	282,865	84%	120,529	195,887	91%
Quintain Living	97,702	238,342	88%	104,389	151,055	100%
Wembley Park Retail	2,429	36,347	53%	1,902	36,657	55%
Wembley Park Leisure	5,820	8,175	85%	14,238	8,175	85%

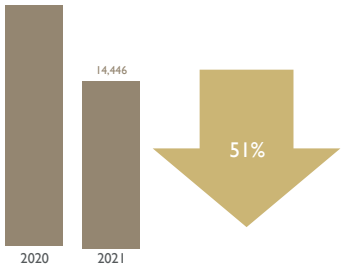
2021 Breakdown

% Consumption by Entity



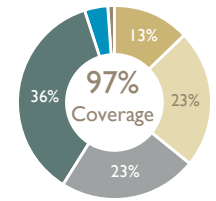
Absolute Consumption

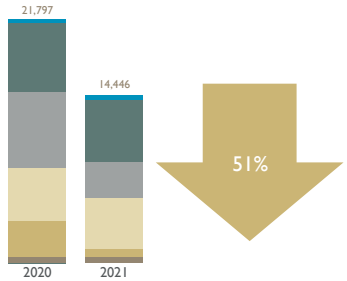
m^3



2021 Breakdown

% Consumption by Entity





PROPERTY

RESOURCE EFFICIENCY

WASTE & CIRCULAR ECONOMY

Our objective is to reduce the quantity of material described as waste; efficiently manage the waste that we and our occupants generate; and to optimise facilities and opportunities for reuse and recycling across our value chain.

How we manage waste has been an important part of our public realm strategy for over a decade. The decision to pioneer the UK's first - and until recently, only - underground vacuum waste system was made over a decade ago, and we continue to identify ways to reduce, reuse, recycle and recover our waste, achieving 100% diversion of waste from landfill across our operations.

DESIGNING OUT WASTE

Identifying opportunities to reduce waste begins at the design and procurement stages of a project, so we set design briefs to target waste reduction and identify opportunities for higher-value reuse of materials.

OFF-SITE MANUFACTURE

The production of building components off-site in a factory environment can result in significant savings compared with construction on-site – we estimate that we have achieved a 6% reduction in waste through the use of pre-fabricated bathroom pods, MEP risers, precast columns and precast facades at Wembley Park.

When constructing specific components in a controlled environment, materials are used more efficiently and offcuts, for example, are significantly reduced. Precast concrete manufacturing facilities employ exact-batch making technologies, resulting in reduced waste when compared with on-site mixing and we are currently investigating the opportunity for using prefabricated plasterboard walls for internal partitions to reduce plasterboard offcuts.

MATERIAL STORAGE

The correct storage of materials can result in significant waste and cost savings by reducing the quantity of materials that are rejected on site because they are damaged. Our off-site consolidation centre offers the advantages of economies of scale in the procurement of materials, whilst safe and secure storage reduces the likelihood of damage. Materials are called-off as required by each contractor, so are not left out overnight or stored in areas open to the elements. The Waste and Resources Action Program (WRAP) estimates that waste savings of between 7% and 15% can be made through reduced damage and shrinkage of materials.

CONSTRUCTION WASTE MANAGEMENT

Each contractor produces a waste management plan and waste predictions are used to determine the best site set up and waste routes for materials, prioritising reduction and reuse where possible.

All of our contractors have identified measures to reduce packaging waste and take-back schemes from manufacturers are used where possible to deal with packaging.

Our contractors identify offsite opportunities for reusing and reclaiming materials where possible, partnering with charities such as Community Wood Recycling, or working with local organisations to donate materials. A joint project in 2018 as part of our Contractor Community Framework involved the refurbishment of the playground for Ark Academy primary school, carried out using reclaimed materials from the various project sites. These measures have resulted in lower than industry average waste generation totals and higher diversion from landfill figures than industry averages.

A NEW LEASE OF LIFE

Evaluating the materials we already have on hand and finding new ways to reinvent them is an approach we are taking across the business.

DECONSTRUCTION VS. DEMOLITION

The next phase of construction at Wembley Park is on land currently occupied by several industrial buildings. By carefully deconstructing these assets and creating an asset register of the materials we find, we hope to reduce the amount of waste that is removed from site for further processing by identifying higher-value uses for it in the design of the new buildings that will be located in this area of the site.

Our design team has been briefed to identify material that we can reuse from the decommissioned buildings in new buildings, or failing that, identify other potential users in the industry.

PARTNERSHIPS

Our fully-furnished apartments across Quintain Living are designed to withstand robust usage, with furniture and other products selected accordingly. In 2018, we entered into a partnership with John Lewis & Partners to furnish the majority of our apartments across Quintain Living. By building long-term relationships with key suppliers, we can ensure that we are procuring high-quality items that will last, but at the same time, can work together to identify opportunities to meet our shared vision for reducing waste and transitioning to a circular economy.

We are currently planning a refresh of furniture across our earlier apartments; our preference is to repair rather than replace, however, this won't always be possible whilst still maintaining our high standards. Following the partnership that John Lewis formed with The Reuse Network, who have been successfully running the John Lewis Sofa Reuse Scheme since 2014, furniture that is no longer suitable for use in our apartments will be given a second lease of life and passed on to those in need.

John Lewis have committed that by 2025, all own-brand product categories will have a 'buy back' or 'take back' solution, and they are already developing sustainable rental and resale options for their customers. This model is consistent with our BtR model and is something we will be discussing in detail as our partnership progresses.

PROPERTY

RESOURCE EFFICIENCY

WASTE PERFORMANCE

Although we are not directly responsible for the majority of waste generated at our assets, we monitor waste data so that we can provide targeted support to our occupiers.

We are currently working in partnership with Veolia for the collection of waste across Wembley Park, both via Envac and through standard refuse and recycling collections for our retail tenants. From late 2020, this has also included residential waste, which as a service included in Council Tax payments made by residents, has traditionally been collected by the local authority.

52% of operational waste by floor area is currently collected via Envac, 60% of which is via a direct connection, with the remainder collected by the Estate Operations Team and manually deposited into the Envac inlets in the W05 service yard. This includes waste collected from the public realm and from our various offices, hubs and marketing facilities.

Our partnership with Veolia is evolving, and we are currently working together to identify opportunities for engagement with our various occupiers on waste, with the intent of reducing waste generation and improving recycling rates. Now that we are collecting residential waste and recycling directly, we are receiving data on the quantity of waste and proportion of recycling for each collection.

Household recycling rates across London are typically lower than the UK average recycling rate of 45%. The population density and resulting large proportion of purpose-built residential accommodation with communal bin stores is often considered to be a key reason for this difference and a Resource London research project that concluded in January 2020 in collaboration with the Peabody Estate and WRAP found that average recycling rates in London apartments are circa 10.7%. Across the seven residential buildings not currently connected to Envac, we achieve an average recycling rate of 45%, which is significantly better than these figures. Engagement work with our residents and waste providers is a key task for 2022 to improve the recycling rates and to reduce the quantity of waste.

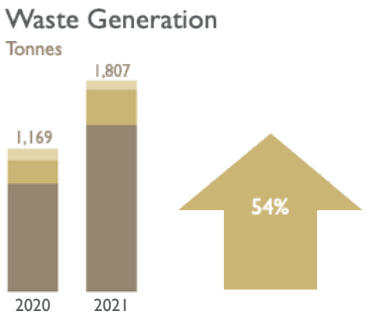
As described in our case study below, technical problems with our All waste collected via Envac is deemed to be within our operational control, even if we don't generate it ourselves. This is because we are unable to breakdown the source of waste from our different assets and in 2022, once the issues described have been repaired, we plan to carry out an audit of waste by diverting waste, one inlet at a time, into separate containers so that it can be weighed. We will study the waste, recycling and where relevant, organic waste pulled from each inlet over a period of a week so that we can determine a 'typical' waste week for each location. This will help us to estimate overall proportions of waste for each asset, from which we will be able to identify the assets with the best and worst recycling rates and target our ongoing engagement accordingly.

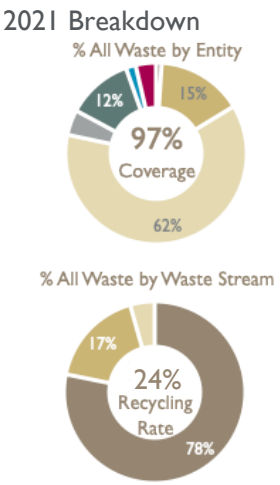
A. Waste within Operational Control

	2021						2020 (Restated)					
	Refuse [kg]	Mixed Recycling [kg]	Organic [kg]	Annualised Area m²	Data Coverage % Area	Recycling Rate %	Refuse [kg]	Mixed Recycling [kg]	Organic [kg]	Annualised Area m²	Data Coverage % Area	Recycling Rate %
TOTAL	277,313	15,878	13,603	99,390	99%	10%	238,982	10,240	8,289	87,699	99%	7%
Corporate Offices	10,171	4,129	3,335	3,282	77%	42%	9,087	2,378	1,042	2,694	72%	27%
Wembley Park Estate	263,255	7,863	6,382	94,819	100%	5%	225,339	7,863	7,104	83,503	100%	6%
Wembley Park Retail	3,886	3,886	3,886	1,289	100%	67%	4,556	3,886	144	1,502	100%	47%

B. Waste outside Operational Control

	2021						2020 (Restated)					
	Refuse [kg]	Mixed Recycling [kg]	Organic [kg]	Annualised Area m²	Data Coverage % Area	Recycling Rate %	Refuse [kg]	Mixed Recycling [kg]	Organic [kg]	Annualised Area m²	Data Coverage % Area	Recycling Rate %
TOTAL	1,135,267	299,572	65,471	313,244	97%	24%	695,181	231,836	29,730	245,705	84%	27%
Quintain Living	877,227	216,801	25,842	241,891	100%	22%	524,761	149,064	15,229	171,097	92%	24%
Wembley Park Residential	77,500	2,095	1,883	25,716	100%	5%	19,902	2,095	627	6,561	100%	12%
Wembley Park Retail	120,339	51,196	29,346	37,847	73%	40%	119,095	51,196	11,234	44,607	78%	34%
Wembley Park Commercial	20,561	11,641	0	821	100%	36%	8,405	11,641	0	16,472	4%	58%
Wembley Park Leisure	39,640	17,840	8,400	6,968	100%	40%	23,019	17,840	2,640	6,968	100%	47%





EXPLANATORY NOTES:

Wembley Park Estate includes all residential, retail, commercial and other occupier waste collected via Envac, all of which would a) normally be considered outside of our operational control and b) would be aggregated under Quintain Living, Wembley Park Retail or Wembley Park Commercial. Wembley Park Residential is out of scope for waste collection as it is not owned or operated by Quintain. Recycling Rate includes dry recyclables and organics..