

ENVIRONMENTAL DATA SUMMARY

INTRODUCTION

The environmental data summary discloses the environmental performance of businesses under Ayala Land’s operations in support of our sustainability reporting suite. It should be read in conjunction with:

- [2023 Integrated Report](#) – Ayala Land’s Integrated Report prepared in accordance with the International Integrated Reporting <IR> framework using supplemental guidelines from the Global Reporting Initiative (GRI) Standards, Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures (TCFD).
- [Disclosures on Management Approach](#) – Descriptions of how we manage and respond to material economic, environmental and social issues.
- [Four Focus Areas](#) – List and descriptions of economic, environmental and social issues that are material to Ayala Land.
- [Sustainability Reporting Index](#) – Index tables relating to the 2023 Integrated Report and 2023 Sustainability Data Packs with the GRI Standards, SASB Standards and TCFD Recommendations.

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BOUNDARY AND METHODOLOGY

The data summary encompasses environmental data from various businesses under Ayala Land’s operational control for each calendar period. In line with the GHG (Greenhouse Gas) Protocol Corporate Accounting and Reporting Standard, Ayala Land has operational control of a property if it has the full authority to introduce and implement its operating policies for the property. The table below provides an explanation on the methodology of accounting the environmental data of each business unit.

Property	Energy and Emissions
Malls and Offices	<p><i>Energy consumption within the organization:</i> Electricity consumption from common areas and fuel consumption from generator sets and service vehicles.</p> <p><i>Energy consumption outside the organization:</i> Electricity and fuel consumption from leased areas.</p> <p>Emissions per scope: <i>Scope 1:</i> Fuel consumption and refrigerants <i>Scope 2:</i> Electricity consumption from common areas <i>Scope 3:</i> Electricity and fuel consumption from leased areas</p>
Hotels and Resorts	<p><i>Energy consumption within the organization:</i> Electricity consumption from the property and fuel consumption from generator sets, kitchen area and service vehicles.</p> <p><i>Energy consumption outside the organization:</i> Electricity and fuel consumption from locators and long-term leases for hotels.</p> <p>Emissions per scope: <i>Scope 1:</i> Fuel consumption and refrigerants <i>Scope 2:</i> Electricity consumption <i>Scope 3:</i> Electricity and fuel consumption from locators and long-term leases.</p>
Residential Properties	<p><i>Energy consumption outside the organization:</i> Electricity consumption from common areas of residential projects and excludes consumption within individual units.</p> <p>Scope 3 emissions not yet reported; to be reported under “Use of Sold Products” category starting 2022.</p>
Construction Projects	<p><i>Energy consumption within the organization:</i> Electricity consumption from construction sites and fuel consumption from construction stationary and mobile equipment.</p> <p>Emissions per scope: <i>Scope 1:</i> Fuel consumption <i>Scope 2:</i> Electricity consumption</p>
Estates and Carparks	<p><i>Energy consumption within the organization:</i> Electricity consumption from the properties and fuel consumption of generator sets.</p> <p>Emissions per scope: <i>Scope 1:</i> Fuel consumption <i>Scope 2:</i> Electricity consumption</p>
District Cooling Systems	<p><i>Energy consumption within the organization:</i> Fuel consumption and electricity consumption of the district cooling system</p> <p>Emissions per scope: <i>Scope 1:</i> Fuel and refrigerant consumption <i>Scope 2:</i> Electricity consumption</p>
Airline	<p><i>Energy consumption within the organization:</i> Electricity consumption of airline operations and fuel consumption from airline fleets.</p>

Emissions per scope:
 Scope 1: Fuel consumption
 Scope 2: Electricity consumption

Industrial Parks & Warehouses *Energy consumption within the organization:* Electricity consumption from common areas of industrial parks and warehouses under ALLHC.
Energy consumption outside the organization: Electricity consumption from leased areas of industrial parks and warehouses under ALLHC.

Emissions per scope:
 Scope 1: Fuel consumption
 Scope 2: Electricity consumption from common areas
 Scope 3: Electricity consumption from leased areas

Boundary of Environmental Data

No. of Buildings/Projects Covered	2018	2019	2020	2021	2022	2023
Commercial Properties						
Malls	39	42	45	45	46	47
Offices	36	43	50	50	49	49
Hotels	10	14	15	15	16	17
Resorts	10	10	10	10	10	8
District Cooling Systems	7	11	12	12	12	12
Construction Projects ¹	248	273	129	129	158	190
Residential	135	149	143	160	160	184
Estates and Carparks						
Estates	20	22	23	30	30	31
Carparks	27	27	27	24	24	24
Airline ²	-	4	4	4	4	4
Industrial Parks & Warehouses ³	-	-	3	3	3	12

¹ Covers construction projects, precast plants, and equipment yards of MDC.

² AirSWIFT operations added starting 2019.

³ Operations of industrial parks and warehouses under ALLHC added starting 2020.

ENERGY

This section details energy consumption across Ayala Land's businesses which are sources of greenhouse gas (GHG) emissions under Scope 1, 2 and 3.

Total Energy Consumption⁴

in mWh	2018	2019	2020	2021	2022	2023
Within the Organization ⁵	488,935	545,416	410,865	437,879	605,477	659,868
Commercial Properties ⁶	293,338	346,781	249,266	240,788	417,142	356,420
District Cooling Systems ⁷	71,276	81,763	61,444	47,012	143	62,322
Construction Projects	117,647	50,777	63,876	107,493	124,383	156,470
Estates and Carparks	6,673	7,400	12,280	14,071	5,855	8,249
Airlines	-	58,696	23,448	27,699	56,876	75,259
Industrial Parks ⁸	-	-	551	817	1,079	1,149
Outside the Organization ⁹	490,757	520,980	454,832	532,243	634,659	695,716
Commercial Properties	451,469	462,873	378,308	371,637	526,311	461,178
Estates and Carparks	-	-	-	-	-	2,866
Residential Properties	32,615	58,107	75,683	155,328	100,812	222,163
Industrial Parks & Warehouses	-	-	840	5,278	7,536	9,509
Total	973,019	1,066,397	865,697	970,122	1,240,136	1,355,584

Total Renewable Energy Consumption¹⁰

in mWh	2018	2019	2020	2021	2022	2023
Within the Organization	82,259	115,048	189,032	198,482	321,973	334,746
Outside the Organization ¹¹	116,471	198,119	252,329	279,948	350,510	415,525
Total	198,730	313,167	441,362	478,430	672,483	750,271

Energy Mix - Within the Organization

in mWh	2018	2019	2020	2021	2022	2023
Electricity (Renewable)	17%	21%	43%	45%	53%	51%
Electricity (Non-Renewable)	58%	54%	37%	26%	16%	12%
Fuel	25%	25%	20%	28%	31%	37%

⁴ Total energy consumption from electricity and fuel use. Operations of AirSWIFT and ALLHC's industrial parks added starting 2019 and 2020 respectively.

⁵ Consumption within the organization comprises consumption within areas where ALI has operational control.

⁶ Includes Malls, Offices, Hotels, and Resorts.

⁷ From 2020 to 2022 electricity consumption of district cooling systems was reported under commercial properties (malls, offices, hotels) where it is located. Consumption of non-ALI properties has been declared under Scope 3 or outside the organization. The share of electricity consumption has been estimated based on BTU consumption. 2023 electricity consumption is separated for the district cooling system.

⁸ Electricity consumption from ALLHC's industrial parks was added starting in 2020. Fuel consumption was added starting 2021.

⁹ Consumption outside the organization comprises consumption within (1) leased areas for commercial properties and industrial parks, and residential properties that have been turned over. No data is available for consumption within non-Ayala Land properties located in our estates.

¹⁰ Commercial buildings – malls, offices and hotels – that are contestable (defined as meeting the minimum 500 kW demand per month) are able to purchase electricity from renewable sources through our retail electricity suppliers that secure power purchase agreements with renewable energy providers. Renewable energy sources include geothermal, wind and solar.

¹¹ By securing power purchase agreements for malls and offices, our merchants and tenants are also able to consume renewable energy in their leased areas.

Electricity

We collect electricity consumption data monthly. For properties and projects with unavailable data, consumption was estimated based on the previous months or year's data.

Electricity Consumption Within the Organization

in mWh	2018	2019	2020	2021	2022	2023
Commercial Properties						
Malls	136,636	149,773	103,069	106,535	181,465	157,835
Offices	79,836	90,102	103,164	74,473	151,915	93,073
Hotels ¹²	30,748	35,005	37,998	27,024	40,258	54,392
Resorts ¹³	-	-	-	-	29	4,888
District Cooling Systems ¹⁴	71,276	81,763	61,189	46,565	-	62,191
Construction Projects	42,587	42,932	30,298	45,780	36,051	33,263
Estates and Carpark ¹⁵						
Estates	2,921	6,369	10,055	10,326	4,801	5,732
Carparks	3,408	892	2,193	2,445	890	1,140
Airline	-	85	393	63	86	146
Industrial Parks & Warehouses	-	-	551	722	955	996
Total	367,413	406,922	348,909	313,932	416,450	413,655

Electricity Consumption Outside the Organization

in mWh	2018	2019	2020	2021	2022	2023
Commercial Properties						
Malls	291,887	303,404	213,085	227,489	257,306	288,843
Offices	116,282	141,757	123,966	106,935	125,735	137,169
Hotels	7,604	5,954	1,676	6,331	4,896	4,704
District Cooling Systems	-	-	-	-	-	1,056
Estates and Carparks	-	-	-	-	-	2,866
Residential Properties ¹⁶	30,302	56,821	70,369	152,708	98,905	222,163
Industrial Parks & Warehouses	-	-	840	5,278	7,536	6,012
Total	446,075	507,936	409,937	498,740	494,378	662,813

Whole Building Electricity Intensity – Commercial Properties¹⁷

	2019	2020	2021	2022	2023
Malls	196.72	128.54	152.43	170.23	179.74
Offices	175.85	145.59	139.70	144.50	154.51
Hotels	198.76	220.17	179.90	230.89	266.77

¹² Starting 2018, hotel consumption has been broken down between short-term occupants classified under electricity within the organization vs long-term leases and other connected properties classified under electricity outside the organization.

¹³ Starting 2022, some resort facilities have been sourcing energy through solar panels.

¹⁴ Starting 2020, electricity consumption of district cooling systems has been reallocated under ALLI-connected commercial properties (malls, offices, hotels). 2020 and 2021 values restated.

¹⁵ For properties and projects with incomplete data, consumption was estimated based on previous month's data.

¹⁶ Includes only the consumption within common areas. No data available for consumption of unit owners.

¹⁷ To consider significant changes in occupancy rate due to the pandemic, intensity has been measured as kWh consumption per sq. meter of occupied floor area. 2019 and 2020 intensities restated.

Common Area Electricity Intensity – Commercial Properties¹⁸

	2019	2020	2021	2022	2023
Malls	145.99	94.10	106.57	130.59	142.77
Offices	221.61	182.84	179.34	207.45	203.96

Tenant/Merchant Area Electricity Intensity – Commercial Properties¹⁹

	2019	2020	2021	2022	2023
Malls	245.38	162.99	196.72	190.44	200.26
Offices	154.31	128.52	121.06	125.12	132.40

Fuel

This section reports fuel consumption across our businesses. Fuel is consumed for the company's generator sets, service vehicles, kitchen activities, and airline fleets.

Fuel Consumption Within the Organization

in mWh	2018	2019	2020	2021	2022	2023
Stationary						
Diesel	67,366	60,404	37,233	44,695	68,078	61,238
LPG	6,579	10,883	2,128	2,310	4,878	4,010
Unleaded	9	181	22	11	-	65
Gasoline	-	39	71	28	-	
Mobile						
Diesel	45,206	6,341	23,283	48,547	58,832	105,070
Unleaded	2,359	2,452	1,044	1,544	2,022	2,462
Gasoline	4	39	49	110	33	344
Jet Fuel	-	58,156	22,897	26,703	55,184	73,025
Total	121,522	138,495	86,728	123,947	189,027	246,213

¹⁸ To consider significant changes in occupancy rate due to the pandemic, intensity has been measured as kWh consumption per sq. meter of occupied common area. 2019 and 2020 intensities restated.

¹⁹ To consider significant changes in occupancy rate due to the pandemic, intensity has been measured as kWh consumption per sq. meter of occupied leasable area. 2019 and 2020 intensities restated.

Fuel Consumption Within the Organization

in mWh	2018	2019	2020	2021	2022	2023
Commercial Properties						
Malls	7,193	4,927	5,303	7,752	4,819	4,739
Offices	4,834	12,424	5,268	7,259	3,393	4,192
Hotels	5,493	10,196	5,379	2,650	10,389	12,703
Resorts	28,598	44,354	13,856	15,095	24,874	24,598
District Cooling Systems			256	448	143	130
Construction Projects	75,060	7,845	33,578	61,713	88,131	123,208
Estates and Carparks ²⁰						
Estates	337	95	19	847	113	1,360
Carparks	7	44	14	453	51	17
Airline	-	58,611	23,055	27,635	56,790	75,114
Industrial Parks & Warehouses ²¹	-	-	-	96	124	153
Total	121,522	138,495	86,728	123,947	189,027	246,213

Fuel Consumption Outside the Organization

in mWh	2018	2019	2020	2021	2022	2023
Stationary						
Diesel	1,515	1,142	6,586	3,170	2,081	3,003
LPG	35,695	11,759	38,310	29,929	138,179	29,354
Unleaded	550	-	-	15	-	92
Gasoline	-	-	-	-	-	2
Mobile						
Diesel	215	-	-	289	22	171
Unleaded	33	144	-	100	-	31
Gasoline						249
Total	38,009	13,045	44,895	33,503	140,282	32,902

Fuel Consumption Outside the Organization²²

in mWh	2018	2019	2020	2021	2022	2023
Commercial Properties						
Malls	35,695	11,759	38,310	29,929	138,179	29,354
Offices	-	-	-	-	-	51
Resorts ²³	-	-	1,272	953	196	-
Residential Properties	2,314	1,286	5,314	2,620	1,907	3,497
Total	175,041	13,045	44,895	33,503	140,282	32,902

²⁰ For properties and projects with incomplete data, consumption was estimated based on previous month's data.

²¹ Starting 2021, fuel consumption of industrial parks & warehouses has been included.

²² No data available for tenants of industrial parks.

²³ Starting 2020, fuel consumption of resort locators has been included.

EMISSIONS

Emissions declared are market-based and are computed using the control approach of the GHG Protocol Corporate Accounting and Reporting Standard. For Scope 1 emissions, reference for the GWPs (global warming potential) is the 2014 IPCC 5th Assessment Report, with gases including carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Emission factors used come from the Philippine Department of Energy.

For properties that shifted to purchasing electricity from renewable energy power plants which are accompanied by iRECs (International REC Standard) certification, Scope 2 and 3 emissions are considered zero from the date of shifting.

Total Emissions

in t-CO ₂ e	2018	2019	2020	2021	2022	2023
Scope 1	30,772	62,770	41,940	61,236	46,716	61,903
Scope 2	257,679	214,227	133,299	73,316	73,464	49,732
Scope 3 ²⁴	286,930	218,501	96,479	47,848	68,051	19,392

Scope 1 Emissions

in t-CO ₂ e	2018	2019	2020	2021	2022	2023
Commercial Properties						
Malls	1,831	1,258	1,352	6,978	1,223	1,900
Offices	1,231	3,164	1,343	1,849	855	1,036
Hotels	1,340	2,492	1,346	462	2,608	3,156
Resorts	7,249	11,266	3,517	3,867	6,294	6,299
District Cooling Systems ²⁵	-	22,223	20,423	25,495	49	33
Construction Projects	19,033	8,537	8,520	15,650	21,838	31,229
Estates and Carparks						
Estates	86	24	5	223	22	352
Carparks	2	11	4	116	13	4
Airline	-	13,795	5,431	6,572	13,783	17,854
Industrial Parks & Warehouses ²⁶	-	-	-	24	31	39
Total	30,772	62,770	41,940	61,236	46,716	61,903

²⁴Includes emissions from downstream leased assets only. Other emission categories will be reported in 2023 report.

²⁵ Per the property managers, consumption for other DCS were integrated in the ALI-connected commercial properties during the data reporting.

²⁶ Emissions from fuel consumption reported starting 2021.

Scope 2 Emissions

in t-CO ₂ e	2018	2019	2020	2021	2022	2023
Commercial Properties						
Malls	105,039	78,814	39,618	7,645	6,122	4,010
Offices	42,114	31,781	44,181	13,074	24,268	7,444
Hotels	24,265	29,546	16,160	9,889	10,036	742
Resorts	108	-	-	-	-	2,922
District Cooling Systems ²⁷	56,782	48,692	7,262	7,007	-	9,994
Construction Projects	25,569	20,964	18,190	27,372	28,109	20,136
Estates and Carparks						
Estates	1,765	3,845	6,012	6,397	3,743	3,432
Carparks	2,037	533	1,311	1,462	694	616
Airline	-	51	235	38	67	87
Industrial Parks & Warehouses	-	-	329	431	425	348
Total	257,679	214,227	133,299	73,316	73,664	49,732

Scope 3 Emissions²⁸

in t-CO ₂ e	2018	2019	2020	2021	2022	2023
Downstream Leased Assets						
Malls	231,636	162,578	50,455	24,537	47,359	9,811
Offices	47,234	49,951	43,797	19,717	20,018	6,407
Hotels	8,060	5,972	1,284	195	-	-
Resorts ²⁹	-	-	440	243	50	631
Estates and Carparks	-	-	-	-	-	1,714
Industrial Parks & Warehouses ²⁵	-	-	502	3,156	624	829
Total	286,930	218,501	96,479	47,848	68,051	19,392

Emissions Intensity³⁰

in kg-CO ₂ e/sqm GFA	2018	2019	2020	2021	2022	2023
Malls	53.24	34.10	7.99	3.49	1.93	1.65
Offices	35.25	20.39	14.88	10.15	14.20	5.66
Hotels	132.67	136.62	73.04	53.34	28.73	2.77

²⁷ Electricity Consumption of DCS and hence its emission is reallocated to the malls or offices.

²⁸ Covers only downstream leased assets. Other scope 3 categories to be reported in 2023.

²⁹ Starting 2020, emissions from energy consumption of resort and industrial parks and warehouse locators have been included.

³⁰ To take into account significant changes in occupancy rate in light of the pandemic, intensity has been measured as kg-CO₂e of Scope 2 and 3 emissions per sq. meter of occupied floor area. Emissions intensities restated.

WATER

This section details water consumption across Ayala Land's businesses.

Water Consumption Within the Organization

in cum	2018	2019	2020	2021	2022	2023
Commercial Properties ³¹						
Malls	6,084,565	6,332,352	3,932,443	3,692,426	5,175,366	5,937,113
Offices	2,587,337	2,589,591	1,180,002	1,088,351	1,005,067	1,420,285
Hotels	382,476	403,740	318,544	272,505	393,332	605,619
Resorts	112,921	97,843	36,503	53,859	117,459	83,005
District Cooling Systems	233,669	161,816	440,598	408,938	417,468	416,511
Construction Projects	3,379,158	944,626	1,328,528	1,698,557	1,424,409	1,628,230
Estates and Carparks ³²						
Estates	489,603	107,442	698,271	390,173	384,930	407,954
Carparks	95,059	20,460	65,552	52,447	52,447	49,843
Airline	-	6,000	2,335	1,535	2,549	6,775
Industrial Parks & Warehouses	-	-	32,928	1,101	6,923	37,219
Total	13,364,788	10,663,870	8,035,705	7,659,894	8,979,950	10,592,574

Water Consumption Outside the Organization

in cum	2018	2019	2020	2021	2022	2023
Commercial Properties ²⁵						
Malls	-	-	-	-	117,147	115,702
Offices	-	-	784,761	536,785	710,219	730,095
Hotels	-	-	-	7,926	-	-
Resorts	-	-	10,197	9,609	14,817	19,096
Estate	-	-	-	-	5,243	17,240
Residential Properties	1,441,748	1,636,698	3,571,176	5,028,602	5,028,602	6,696,242
Industrial Parks & Warehouses	-	-	26,416	41,387	112,969	95,715
Total	1,441,748	1,636,698	4,392,550	5,624,310	5,988,998	7,674,089

Whole Building Water Intensity³³

	Unit	2019	2020	2021	2022	2023
Malls	cum/sqm GFA	2.59	1.59	1.64	2.27	2.51
Offices	cum/sqm GFA	1.79	1.48	1.26	1.33	1.44
Hotels	cum/ sqm GFA	1.99	2.03	1.51	2.12	2.51

³¹ Starting 2020, offices and resorts' water consumption has been broken down between consumption in common areas (within the organization) vs leased areas (outside the organization). Disaggregation for hotels and malls done in 2021 and 2022, respectively.

³² For properties and projects with unavailable data, consumption was estimated based on previous year's data.

³³ To consider significant changes in occupancy rate due to the pandemic, intensity is measured as cubic meter consumption per sq. meter of occupied floor area.

MATERIALS

This section details materials – cement and rebars – consumed by our construction operations.

Total Materials Consumption

in metric tonnes	2018	2019	2020	2021	2022	2023
Cement	277,718	249,660	169,612	173,327	191,400	201,374
Rebars/Steel	171,756	196,031	89,042	82,025	61,791	62,184

WASTE

This section details solid and hazardous waste generated from our properties and projects as reported by our haulers. Waste generation includes operational waste and construction waste.

Total Solid Waste Generation and Diversion

in metric tonnes ³⁴	2018	2019	2020	2021	2022	2023
<i>Total Waste Generated</i>	47,352	43,515	25,486	21,558	26,241	38,918
<i>Waste Sent to Landfill</i>	41,214	35,574	19,798	16,480	21,037	32,469
Residual ³⁵	25,867	20,948	10,186	9,777	12,248	18,266
Food	8,749	10,593	3,355	4,865	6,578	10,037
Compostable ³⁶	6,598	4,033	6,257	1,838	2,211	4,165
<i>Waste Diverted from Landfill</i>	6,138	7,941	5,688	5,078	5,204	6,449
Sent to Recyclers ³⁷	6,138	7,894	5,641	5,022	4,905	5,286
Plastics Collected from Ecohubs ³⁸	-	32	46	56	106	383
Plastics Processed for ALI projects	-	1	28	75	130	383
Plastics Stored for non-ALI projects	-	2	1	-	-	-
Yard Waste for Waste to Energy ³⁹	-	-	-	-	-	216
Food Composted	-	15	1	-	192	565

Construction Waste Generation

in cubic meter ⁴⁰	2019	2020	2021	2022	2023
<i>Total Waste Generated⁴¹</i>	1,230,603	885,144	1,136,685	366,690	218,543
Waste Sent to Landfill	724,002	541,595	443,307	265,452	146,635
Waste Diverted from Landfill & Sent to Recyclers ⁴²	506,600	343,549	693,378	101,238	71,908

³⁴ Total waste generated across all businesses. Excludes 1,641 cubic meters waste from Residential Properties

³⁵ All other solid waste that are non-food and non-compostable.

³⁶ Includes landscape waste such as leaves, shrubs, tree trimmings, and grass clippings

³⁷ Includes traditional recyclables such as paper, cartons, glass bottles and aluminum cans.

³⁸ Plastics collected and diverted through Arca South Ecohub.

³⁹ Yard waste from established estates used as inputs for waste-to-energy power plants for a laundry facility that caters to Seda laundry needs.

⁴⁰ Additional waste from construction activities measured in cubic meters. Due to the varying densities of construction materials, waste in cubic meters is reported separately from waste in metric tonnes.

⁴¹ 2019 to 2021 data included solid waste from ancillary construction activities. In 2022 and 2023, conversion factors for different waste profiles with varying densities were rationalized to improve data management and reporting.

⁴² Waste sent to recyclers or processing facilities

Total Hazardous Waste Generation⁴³

in tonnes	2019	2020	2021	2022	2023
D406 ULAB ⁴⁴	150	34	42	36	61
D407 CFL ⁴⁵	114	30	26	20	21
I101 Used Industrial Oil	42	19	87	45	-
J201 Containers	10	16	12	9	34
M506 WEEE ⁴⁶	19	60	28	23	16
H802 Grease Wastes	-	-	-	3	-
F601 Paint/Organic Sludge	-	-	-	1	<1
M501 Infectious Wastes	-	-	-	<1	3
M503 Pharmaceuticals and Drugs	-	-	-	<1	<1
M507 Special Wastes	-	-	-	1	<1
in '000 liters	2019	2020	2021	2022	2023
I101 Used Industrial Oil	-	-	-	20	77
I102 Vegetable Oil Including Sludge	-	-	-	5	33
I104 Oil-contaminated Materials	-	-	-	1	8
H802 Grease Wastes	-	-	-	-	13

Hazardous Waste Diversion and Disposal 2023

	% Recycled⁴⁷	% Stored On-Site
D406 ULAB ⁴⁷	68%	32%
D407 CFL ⁴⁸	68%	32%
I101 Used Industrial Oil	56%	44%
J201 Containers	49%	51%
M506 WEEE ⁴⁹	20%	80%

⁴³ Started reporting HW from Malls and Resorts. HW from ALLHC, Construction Projects, and ALICAP will be reported in 2023.

⁴⁴ ULAB – Used Lead Acid Batteries

⁴⁵ CFL – Compact Fluorescent Lightbulbs

⁴⁶ WEEE – Waste Electrical and Electronic Equipment (e-waste)

⁴⁷ Commonly generated hazardous waste – lead acid batteries (D406) and industrial oil (I101) for generator sets, and waste electronic (M506) – are recycled through the Bantay Kalikasan program of ABS-CBN Lingkod Kapamilya Foundation, Inc.

CARBON NEUTRALITY

This section reports company performance in line with its [carbon neutrality](#) goal by 2022. Emissions under the carbon neutrality scope are composed of scope 1 and 2 emissions from commercial properties (malls, offices, hotels, resorts).

Emissions under Carbon Neutrality Scope⁴⁸

in t-CO ₂ e	2019	2020	2021	2022	2023
Gross Emissions from BAU Scenario ⁴⁹	280,272	261,985	214,832	302,377	313,649
Less:					
Emissions Reductions from Renewable Energy	(121,951)	(154,403)	(163,946)	(250,723)	(276,113)
Carbon Stored in Carbon Forests ⁵⁰	(1,245.48)	(2,490.96)	(4,151.60)	(8,732)	(7,824)
Net Emissions	157,076	105,091	46,734	45,428	29,713

Buildings with Renewable Energy Sources⁵¹

in t-CO ₂ e	2018	2019	2020	2021	2022	2023
Total	34	51	57	65	87	111
% to Total (in sqm GLA) ⁵²	48%	59%	73%	85%	91%	91%

Carbon Forest Sites

Forest Site	Project Area (hectares)	2023 Carbon stock (t-CO ₂ e)
Alaminos	133	16,504
Cebu	124	11,014
Davao	50	7,239
Lio	80	8,251
Nuvali	120	Ongoing remeasurement
Sicogon	80	Ongoing remeasurement
Total	586	43,008

Carbon Forest Activities

	2019	2020	2021	2022	2023
Total area allocated (hectares)	586	586	586	586	586
Total area planted (hectares)	32	24	36	31	32
Trees planted per year	35,719	25,415	56,510	56,681	25,521
Volunteers mobilized per year	4,177	635	486	500	2,253

⁴⁸ Emissions are market-based and calculated using the GHG Protocol Corporate Accounting and Reporting Standard

⁴⁹ Emissions if properties had not shifted to renewable energy sources (business-as-usual scenario).

⁵⁰ Only consider the removals from carbon sinks as calculated and verified by a third party.

⁵¹ No. of buildings updated from 2017 onward based on shift dates

⁵² Percentage share of buildings with renewable energy sources as measured in square meters of GLA of malls and offices.

FOUR FOCUS AREAS

This section reports company performance in line with metrics under [Four Focus Areas](#).

Site Resilience

Green Space in Ayala Land Developments⁵³

in hectares	2019	2020	2021	2022	2023
Total Recorded Green Space	418	1,153	1,075	1,152	1,242
Estates	333	957	880	957	1,028
Residential Developments ⁵⁴	85	195	195	195	215

Native Trees in Ayala Land Developments

in hectares	2020	2021	2022	2023
Total Recorded Native Trees	103,942	105,291	106,481	109,779
Native Tree Share in Estates ⁵⁵				
Established Estates	39%	44%	44%	40%
Emerging Estates	72%	71%	71%	70%
Estates under Planning	89%	87%	87%	69%

Biodiversity

	2019	2020	2021	2022	2023
Total Recorded IUCN Red-List Species ⁵⁶	57	66	66	66	66
Critically Endangered	2	3	3	3	3
Endangered	7	12	12	12	12
Near Threatened	20	20	20	20	20
Vulnerable	28	31	31	31	31

	in hectares
Total area with high biodiversity value	4,870
Anvaya Cove	470
El Nido	323
Alviera	1,125
Nuvali	1,860
Sicogon	1,092

⁵³ Green space refers to parks and open spaces that are covered with greenery.

⁵⁴ No data for 2022 Residential Development and hence, 2021 value was used. Will be restated in 2023.

⁵⁵ Native tree share is measured as the percentage of trees from the total tree population that are native. Changes in native tree share are due to newly recorded trees in Ayala Land developments.

⁵⁶ Number of threatened species as identified by the International Union for Conservation of Nature (IUCN) that are found in Ayala Land developments – El Nido and Anvaya. No updated studies conducted as of 2022.

Pedestrian Mobility and Transit Connectivity

Transit Connectivity in Ayala Land Developments

P2P Buses ⁵⁷	2019	2020	2021	2022	2023
Bus Routes in ALI Malls and Estates	25	38	19	25	20
Average Daily Passengers ⁵⁸	21,850	8,451	7,770	10,173	4,941

Bike Lanes in Estates⁵⁹

In kilometers	2020	2021	2022	2023
Bonifacio Global City	13.6	20.5	20.5	20.5
Makati Central Business District	6.57	6.57	6.57	6.57
Nuvali	-	7	7	53.5
Vermosa	-	-	-	24.2
Total	20.17	34.07	34.07	104.77

Resource Efficiency

LEED-Certified Buildings in Ayala Land Commercial Portfolio

	2019	2020	2021	2022	2023
Total # of Buildings	11	11	11	14	14
Office	9	9	9	12	12
Hotel	2	2	2	2	2
% to Total					
Office (in GLA)	9%	9%	9%	9%	9%
Hotel (in # of rooms)	14%	13%	13%	13%	13%

LEED-Certified Buildings as of 2023

	Property Type	Certification
One Evotech	Office	Silver
Teleperformance Cebu	Office	Gold
Bonifacio Stopover	Office	Gold
Vertis Corporate Center 1	Office	Certified
Vertis Corporate Center 2	Office	Certified
Vertis Corporate Center 3	Office	Certified
SEDA Nuvali	Hotel	Silver
SEDA Vertis North	Hotel	Gold
High Street South Corporate Plaza 1	Office	Gold
High Street South Corporate Plaza 2	Office	Gold
MDC Corporate Center	Office	Gold
Ayala Triangle Gardens Tower 2	Office	Gold
Ayala North Exchange Tower 1	Office	Certified
Ayala North Exchange Tower 2	Office	Certified

⁵⁷ Following the Metro Manila Bus Rationalization Program implemented by the DOTr-Land Transportation Franchising and Regulatory Board in June 2020, the P2P bus routes have decreased starting 2020.

⁵⁸ Lower average daily passengers starting 2020 due to the pandemic.

⁵⁹ Shared bike lanes with lane markings, bollards, and/or safety signages. Values from 2020 to 2021 corrected.