



**QuadReal**

**2022 SASB**

**DISCLOSURE**

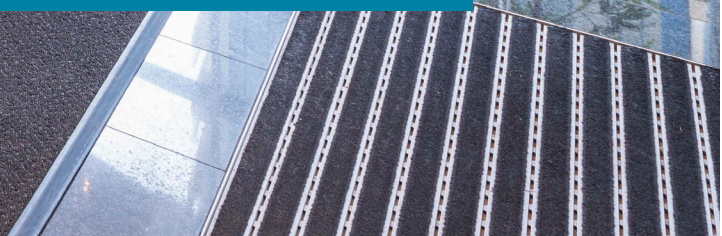






**“While climate change and other environmental challenges demand immediate action, we support a holistic approach to sustainability and shared value creation in the communities in which we operate.”**

Jamie Gray-Donald, Senior Vice President,  
Sustainability & Environmental Health & Safety







## INTRODUCTION TO THIS REPORT

# REMCO DAAL

Core to our commitment to [Being a Responsible Company](#) is fulfilling the obligation we establish for ourselves to our stakeholders. For our tenants, residents, guests and employees, including those on the frontlines, we strive to create great places that enhance the lives of the people and communities we serve—including maintaining and improving their health, safety, and comfort..

We also recognize our responsibility toward the environment, particularly the need for climate action across the real estate industry. We strive to have a positive impact by mitigating climate risk through investments in practical, cost-effective solutions to reduce our carbon footprint. In 2022, QuadReal announced its target of net zero by 2050 and its associated 2030 and 2040 interim targets. While we publicly released our targets last year, many of our property teams have been on a dedicated decarbonization journey for over a decade, achieving significant emissions reductions through investments in energy efficiency, implementing smart building technology, and optimizing operations. QuadReal's path to net zero will undoubtedly be an iterative process, requiring close collaboration with our partners and shared learnings amongst each other and our peers.

The QuadReal team's pursuit of excellence across all aspects of environmental, social and governance (ESG) garnered prestigious recognitions in 2022. We were honoured yet humbled to be selected as the 2022 winner of the Pension Real Estate Association's (PREA) Institutional Investor ESG Award. We were also once again recognized for industry leadership in the Global Real Estate Sustainability Benchmark (GRESB), with QuadReal's diversified Canadian portfolio ranking first in the Americas and fourth globally.

As decarbonization momentum continues to build in our sector and the broader economy, our commitment to transparency and disclosure only strengthens. In addition to reporting annual progress against the SASB Standard for Real Estate Owners, QuadReal has also released its inaugural Taskforce for Climate Related Financial Disclosure (TCFD) report.

Many, many colleagues across the organization directly contribute to QuadReal's leadership in ESG. As we work together to accelerate positive change in the industry and for our stakeholders, I want to thank our teams for their unwavering dedication to delivering sustainable performance and responsible growth, now and for generations to come.

**Remco Daal**  
President, Canadian Real Estate  
QuadReal Property Group

## 2022 SASB DISCLOSURE

# ABOUT THIS REPORT

This is QuadReal's 2022 disclosure report of the Real Estate SASB metrics for our Canadian portfolio. The reported portfolio excludes developments, mortgages and asset management-only properties.

These activity metrics describe the scale of QuadReal's business, enabling normalization and like-for-like comparison of the data in this report.

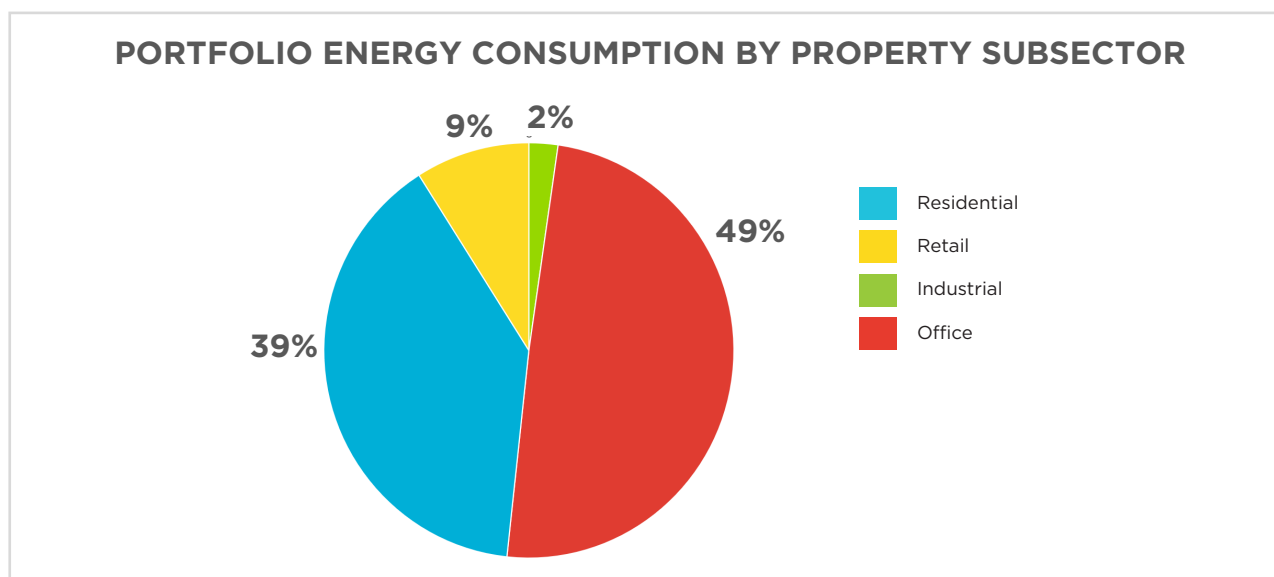
Activity Metric	Measurement	2020	2021	2022	SASB Code
Number of assets, by property subsector	Number of assets - Industrial	159	160	<b>138</b>	IF-RE-000.A
	Number of assets - Office	57	58	<b>57</b>	IF-RE-000.A
	Number of assets - Residential	52	45	<b>43</b>	IF-RE-000.A
	Number of assets - Retail	24	24	<b>24</b>	IF-RE-000.A
Leasable floor area, by property subsector	Square feet (ft <sup>2</sup> ) - Industrial	14,966,279	15,337,578	<b>16,098,569</b>	IF-RE-000.B
	Square feet (ft <sup>2</sup> ) - Office	15,014,315	14,903,116	<b>13,511,270</b>	IF-RE-000.B
	Square feet (ft <sup>2</sup> ) - Residential	8,919,970	8,897,732	<b>8,838,446</b>	IF-RE-000.B
	Square feet (ft <sup>2</sup> ) - Retail	5,179,972	5,179,963	<b>5,179,961</b>	IF-RE-000.B
Percentage of indirectly managed assets, by property subsector	Percentage (%) by floor area - Industrial	100	100	<b>100</b>	IF-RE-000.C
	Percentage (%) by floor area - Office	0	0	<b>0</b>	IF-RE-000.C
	Percentage (%) by floor area - Residential	0	0	<b>0</b>	IF-RE-000.C
	Percentage (%) by floor area - Retail	48	48	<b>48</b>	IF-RE-000.C
Average occupancy rate, by property subsector	Percentage (%) - Industrial	95	95	<b>97</b>	IF-RE-000.D
	Percentage (%) - Office	92	90	<b>86</b>	IF-RE-000.D
	Percentage (%) - Residential	95	93	<b>96</b>	IF-RE-000.D
	Percentage (%) - Retail	88	89	<b>89</b>	IF-RE-000.D



## 2022 SASB DISCLOSURE

# ENERGY MANAGEMENT

In Canada, buildings consume 22% of the country's total energy used. Tracking energy use helps building owners identify efficiency opportunities and plan for long-term emissions reductions. Energy sources, consumption patterns, and decarbonization strategies differ between both regions and asset classes.

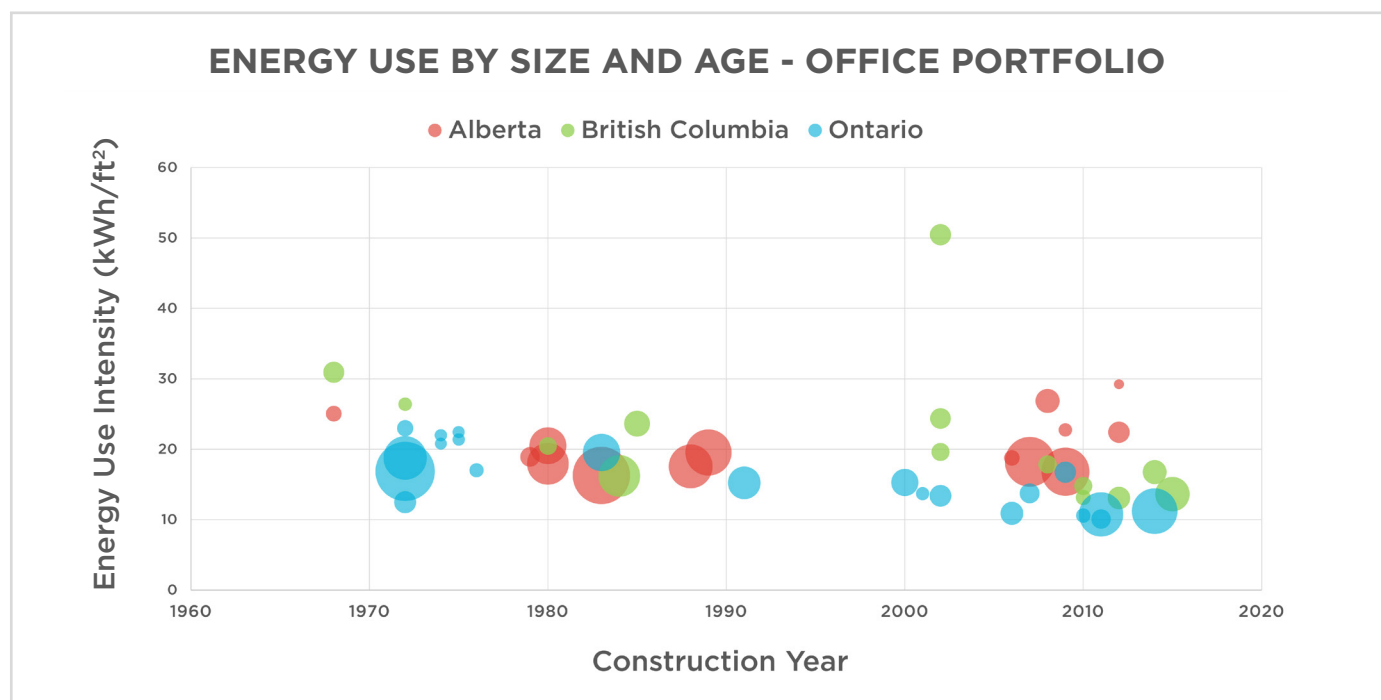


## ACCOUNTING METRICS

Accounting Metric	Measurement	2020	2021	2022	SASB Code
Energy consumption data coverage as a percentage of floor area, by property subsector	Percentage (%) by floor area, Industrial	63	59	55	IF-RE-130a.1
	Percentage (%) by floor area, Office	98	99	100	IF-RE-130a.1
	Percentage (%) by floor area, Residential	100	100	100	IF-RE-130a.1
	Percentage (%) by floor area, Retail	99	99	99	IF-RE-130a.1
(1) Total energy consumed by portfolio area with data coverage, by property subsector	Gigajoules (GJ), Industrial	33,999	69,974	47,209	IF-RE-130a.2
	Gigajoules (GJ), Office	1,162,160	1,117,838	1,021,273	IF-RE-130a.2
	Gigajoules (GJ), Residential	818,850	782,149	811,803	IF-RE-130a.2
	Gigajoules (GJ), Retail	189,862	174,616	185,989	IF-RE-130a.2
(2) Percentage grid electricity, by property subsector	Percentage (%), Industrial	100	98	97	IF-RE-130a.2
	Percentage (%), Office	80	82	84	IF-RE-130a.2
	Percentage (%), Residential	95	95	96	IF-RE-130a.2
	Percentage (%), Retail	88	87	86	IF-RE-130a.2
(3) Percentage renewable, by property subsector	Percentage (%), Industrial	0	2	3	IF-RE-130a.2
	Percentage (%), Office	20	18	16	IF-RE-130a.2
	Percentage (%), Residential	5	5	4	IF-RE-130a.2
	Percentage (%), Retail	12	13	14	IF-RE-130a.2

## 2022 SASB DISCLOSURE

# ENERGY MANAGEMENT



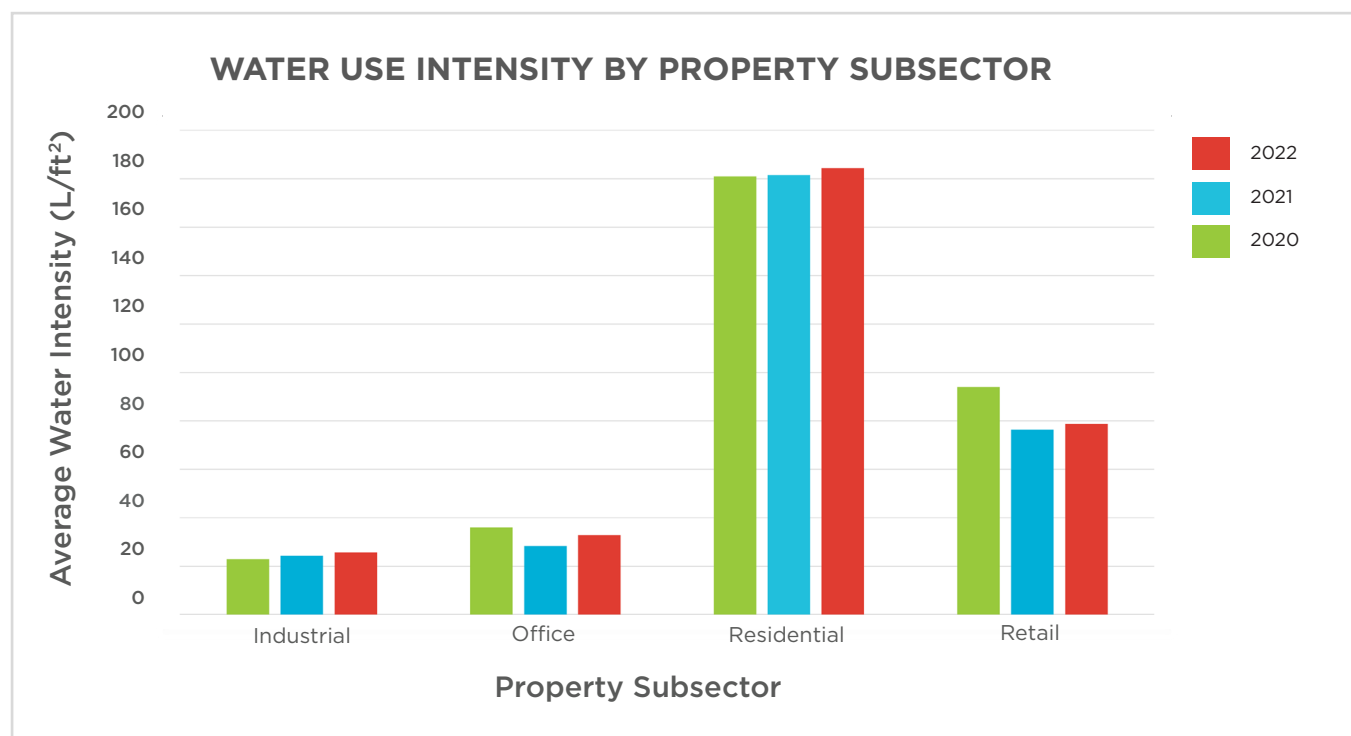
## ACCOUNTING METRICS

Accounting Metric	Measurement	2020	2021	2022	SASB Code
Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property subsector	Percentage (%), Industrial	-9	-4	-3	IF-RE-130a.3
	Percentage (%), Office	-14	-2	2	IF-RE-130a.3
	Percentage (%), Residential	1	-7	4	IF-RE-130a.3
	Percentage (%), Retail	19	-33	9	IF-RE-130a.3
Percentage of eligible portfolio that (1) has an energy rating by property subsector	Percentage (%) by floor area, Industrial	63	59	55	IF-RE-130a.4
	Percentage (%) by floor area, Office	98	99	100	IF-RE-130a.4
	Percentage (%) by floor area, Residential	100	100	100	IF-RE-130a.4
	Percentage (%) by floor area, Retail	99	99	99	IF-RE-130a.4
Percentage of eligible portfolio that (2) is certified to ENERGY STAR, by property subsector	Percentage (%) by floor area, Industrial	N/A	N/A	N/A	IF-RE-130a.4
	Percentage (%) by floor area, Office	65	62	69	IF-RE-130a.4
	Percentage (%) by floor area, Residential	N/A	10	2	IF-RE-130a.4
	Percentage (%) by floor area, Retail	N/A	N/A	N/A	IF-RE-130a.4
Description of how building energy management considerations are integrated into property investment analysis and operational strategy	Discussion and analysis			2022	IF-RE-130a.5
	QuadReal's target for the existing buildings we manage is to perform in the top 10% for energy efficiency of comparable buildings and as closely as possible to new buildings. To achieve this, property teams complete annual target setting to identify opportunities for improvement and to plan out capital investments. Proactive, thoughtful, and systematic investments in upgrades that deliver energy efficiency improvements help avoid building obsolescence. Increasing access to granular, real-time energy use data is key to monitoring the impact of these investments and continually improving operational performance. Where applicable, we use ENERGY STAR to benchmark performance against comparable buildings. In 2022, 69% of the office portfolio was certified to ENERGY STAR, meaning they were in the top quartile of energy performance for similar office buildings in Canada. One QuadReal residential community also achieved ENERGY STAR certification in 2022.				

## 2022 SASB DISCLOSURE

# WATER MANAGEMENT

Real estate practices can have a significant impact on our water supply. Water consumption rates and accompanying costs are influenced by asset class, tenant type, location, supply, and other factors.



## ACCOUNTING METRICS

Accounting Metric	Measurement	2020	2021	2022	SASB Code
Water withdrawal data coverage as a percentage of (1) total floor area, by property subsector	Percentage (%) by floor area, Industrial	76	75	70	IF-RE-140a.1
	Percentage (%) by floor area, Office	98	99	100	IF-RE-140a.1
	Percentage (%) by floor area, Residential	100	99	93	IF-RE-140a.1
	Percentage (%) by floor area, Retail	99	99	99	IF-RE-140a.1
Water withdrawal data coverage as a percentage of (2) floor area in regions with High or Extremely High Baseline Water Stress, by property subsector	Percentage (%) by floor area, Industrial	91	91	91	IF-RE-140a.1
	Percentage (%) by floor area, Office	100	100	100	IF-RE-140a.1
	Percentage (%) by floor area, Residential	100	100	100	IF-RE-140a.1
	Percentage (%) by floor area, Retail	100	100	100	IF-RE-140a.1



## 2022 SASB DISCLOSURE

# WATER MANAGEMENT



### ACCOUNTING METRICS

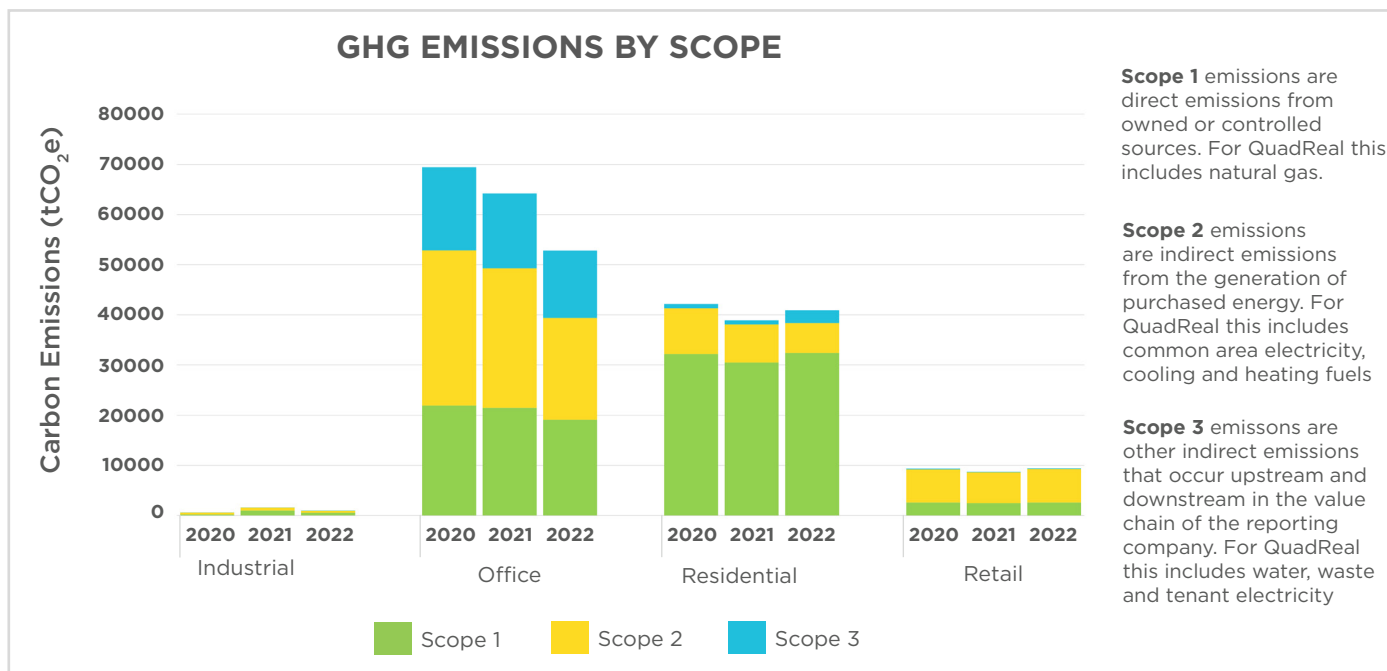
Accounting Metric	Measurement	2020	2021	2022	SASB Code
(1) Total water withdrawn by portfolio area with data coverage, by property subsector	Thousand cubic meters (m <sup>3</sup> ), Industrial	277	281	<b>288</b>	IF-RE-140a.2
	Thousand cubic meters (m <sup>3</sup> ), Office	452	417	<b>444</b>	IF-RE-140a.2
	Thousand cubic meters (m <sup>3</sup> ), Residential	1,692	1,602	<b>1,511</b>	IF-RE-140a.2
	Thousand cubic meters (m <sup>3</sup> ), Retail	376	392	<b>405</b>	IF-RE-140a.2
(2) Percentage water withdrawn in regions with High or Extremely High Baseline Water Stress, by property subsector	Percentage (%), Industrial	14	16	<b>18</b>	IF-RE-140a.2
	Percentage (%), Office	29	28	<b>24</b>	IF-RE-140a.2
	Percentage (%), Residential	22	23	<b>25</b>	IF-RE-140a.2
	Percentage (%), Retail	12	15	<b>15</b>	IF-RE-140a.2
Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property subsector	Percentage (%), Industrial	-23	7	<b>-1</b>	IF-RE-140a.3
	Percentage (%), Office	-40	-7	<b>16</b>	IF-RE-140a.3
	Percentage (%), Residential	7	-5	<b>-2</b>	IF-RE-140a.3
	Percentage (%), Retail	-24	5	<b>13</b>	IF-RE-140a.3
Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and analysis			<b>2022</b>	IF-RE-140a.4
<p>The majority of QuadReal's domestic portfolio is located in low water-stressed areas. We monitor water consumption across the portfolio where we have operational control. In 2022, we expanded access to water interval meter data across our residential portfolio using unintrusive, clamp-on monitoring devices. Monitoring water consumption in near real-time allows operations teams to identify and promptly respond to leaks and other water waste within buildings. Recognizing that southern Alberta faces water constraints, we place a particular focus on enhanced water efficiency measures, xeriscaping, and rainwater capture for that region. We also use our tenant and resident engagement program to communicate water conservation tips to our communities.</p>					



## 2022 SASB DISCLOSURE

# GHG EMISSIONS

QuadReal is committed to net zero carbon by 2050 across in alignment with science-based carbon reduction goals. To reduce our emissions, we focus on low-carbon design for new developments, energy efficiency and smart building upgrades for existing buildings, converting fossil fuel-based heating systems to electric alternatives where viable, and sourcing clean energy directly from providers wherever we can - or producing it ourselves. QuadReal has chosen to voluntarily disclose our emissions data in accordance with the GHG Protocol, in addition to the SASB metrics. See our GHG emissions methodology on our website at <https://www.quadreal.com/sustainability/our-progress/>.



## VOLUNTARY METRICS

Accounting Metric	Measurement	2020	2021	2022	SASB Code
Total location-based portfolio GHG emissions, by scope	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e), Scope 1	56,850	55,422	<b>54,617</b>	N/A
	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e), Scope 2	47,096	42,153	<b>33,357</b>	N/A
	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e), Scope 3	17,622	15,901	<b>16,056</b>	N/A
Total location-based emissions	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e)	121,568	113,476	<b>104,029</b>	N/A
Total market-based portfolio GHG emissions, by scope	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e), Scope 1	56,850	55,422	<b>54,617</b>	N/A
	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e), Scope 2	11,182	10,273	<b>10,901</b>	N/A
	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e), Scope 3	1,815	1,860	<b>1,667</b>	N/A
	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e), Offsets purchased	(34,271)	(36,623)	<b>(32,100)</b>	N/A
Total market-based emissions net of offsets	Tonnes of CO <sub>2</sub> equivalent (tCO <sub>2</sub> e)	69,847	30,933	<b>35,086</b>	N/A

## 2022 SASB DISCLOSURE

# MANAGEMENT OF TENANT SUSTAINABILITY IMPACTS

Much of the impact of our business lies in how we build our buildings and how our tenants and residents work and live within them. Accordingly, QuadReal actively supports our occupants in their adoption of sustainable behaviours and practices through our tenant and resident engagement program.



## ACCOUNTING METRICS

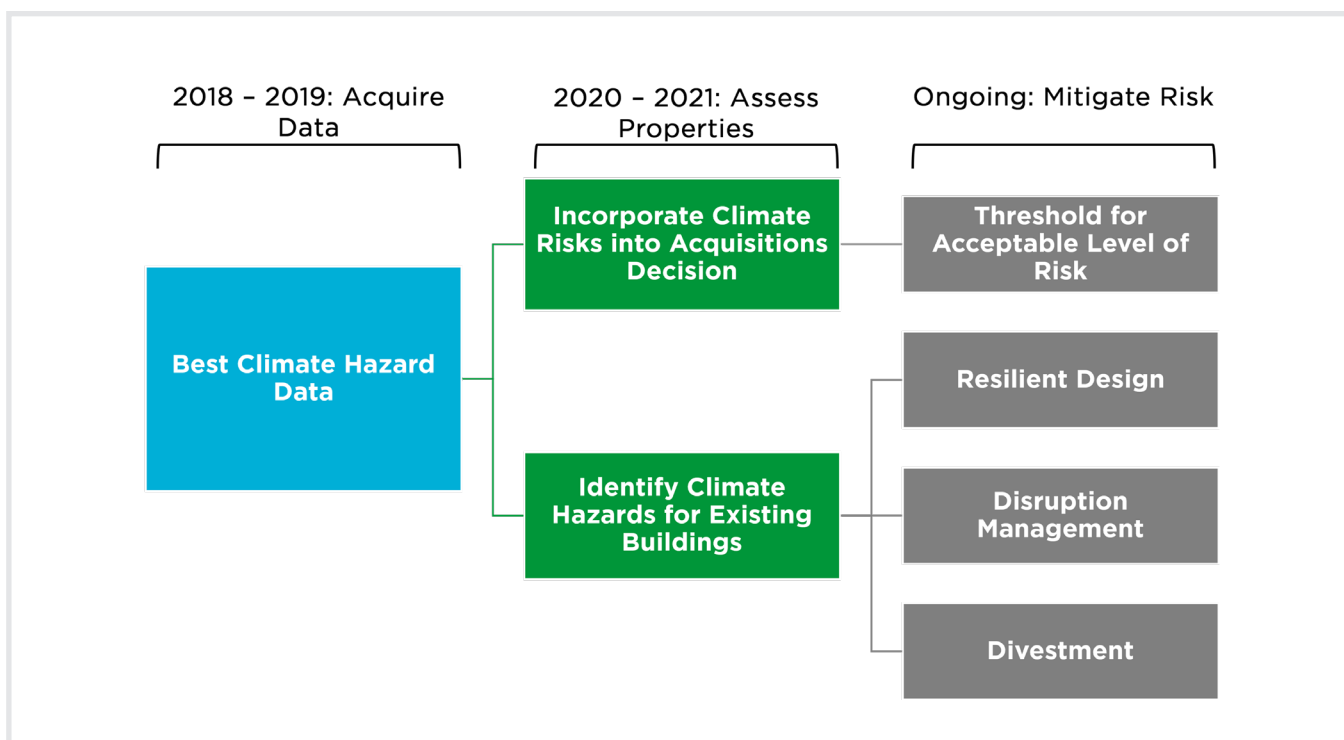
Accounting Metric	Measurement	2020	2021	2022	SASB Code
(1) Percentage of new leases and (2) associated leased floor area of new leases that contain a cost recovery clause for resource efficiency-related capital improvements, by property subsector		N/A	N/A	N/A	IF-RE-410a.1
(1) Percentage of tenants that are separately metered or submetered for grid electricity consumption, by property subsector	Percentage (%) by floor area, Industrial	100	100	100	IF-RE-410a.2
	Percentage (%) by floor area, Office	82	82	87	IF-RE-410a.2
	Percentage (%) by floor area, Residential	80	96	78	IF-RE-410a.2
	Percentage (%) by floor area, Retail	100	100	100	IF-RE-410a.2
(2) Percentage of tenants that are separately metered or submetered for water withdrawals, by property sub-sector	Percentage (%) by floor area, Industrial	100	100	100	IF-RE-410a.2
	Percentage (%) by floor area, Office	3	3	3	IF-RE-410a.2
	Percentage (%) by floor area, Residential	0	0	3	IF-RE-410a.2
	Percentage (%) by floor area, Retail	100	100	100	IF-RE-410a.2
Approach to measuring, incentivizing, and improving sustainability impacts of tenants	Discussion and analysis			2022	IF-RE-410a.3
	While QuadReal does not have a separate green lease addendum, we integrate key clauses in our standard leases. Most importantly, QuadReal includes cost recovery clauses in leases. For buildings with energy and other utility use outside our operational control, we are introducing sustainability data disclosure clauses in leases. We regularly communicate sustainability initiatives with tenants and residents across the portfolio through digital and in-property channels, including monthly posters, quarterly newsletters, and tenant meetings. In the office portfolio, we are increasing the roll-out of tenant sub-meters, which lead to an approximately 9% reduction in tenant electricity use. In multi-residential, the electricity savings from in-suite sub-meters is approximately 30 to 40%. We are investigating opportunities to cost-effectively expand the submetering program to cover additional utilities. QuadReal's goal is to deploy sub-meters in all multi residential suites, where feasible, by 2030. We also provide a green tenant fit-out guide and support for our commercial tenants to achieve their sustainability targets.				



## 2022 SASB DISCLOSURE

# CLIMATE CHANGE ADAPTATION

Real estate owners and operators must respond to the increasing frequency and severity of extreme weather events. QuadReal has aligned with our clients in taking a strategic approach to integrating climate risk management into our operations. QuadReal’s governance bodies have an active role in our approach, with the board of directors receiving annual updates on climate-related issues and the investment committee providing direct oversight to our resilience objectives. As a responsible fiduciary, we seek to integrate climate considerations throughout the life cycle of our investments, from evaluating risk exposure during acquisition, to incorporating resilient design into developments and retrofits. For further details, see QuadReal’s 2022 TCFD Report.



## ACCOUNTING METRICS

Accounting Metric	Measurement	2020	2021	2022	SASB Code
Area of properties located in 100-year flood zones, by property subsector	Square feet (ft <sup>2</sup> ), Industrial	1,351,863	1,468,893	<b>1,025,674</b>	IF-RE-450a.1
	Square feet (ft <sup>2</sup> ), Office	364,176	364,173	<b>364,174</b>	IF-RE-450a.1
	Square feet (ft <sup>2</sup> ), Residential	879,282	879,282	<b>879,281</b>	IF-RE-450a.1
	Square feet (ft <sup>2</sup> ), Retail	1,590,394	1,505,392	<b>1,590,389</b>	IF-RE-450a.1
Description of climate change risk exposure analysis, degree of systemic portfolio exposure, and strategies for mitigating risks	Discussion and analysis			<b>2022</b>	IF-RE-450a.2
	QuadReal continues to update our approach to resilience to maintain alignment with our clients. In 2019, we initiated a multi-phased approach to managing the physical climate risks of our investments. Our first step was to implement a process for evaluating climate risks during acquisition due diligence. For our existing assets, we conduct an annual portfolio-level exposure analysis. While we evaluate exposure to multiple climate hazards, we consider riverine and coastal flood, as well as wildfire risk to present the largest potential impacts to our portfolio. To further improve portfolio resilience, we developed an in-house vulnerability and preparedness assessment for flood risk. In 2022, we completed internal assessments of all properties exposed to riverine and coastal flood risk. The results will be used to inform investments in resilience measures and operational preparedness.				









**FOR MORE INFORMATION, PLEASE CONTACT:**

**Jamie Gray-Donald**

Senior Vice President, Sustainability & Environmental Health & Safety  
[sustainability@quadreal.com](mailto:sustainability@quadreal.com)

**[QUADREAL.COM](http://QUADREAL.COM)**