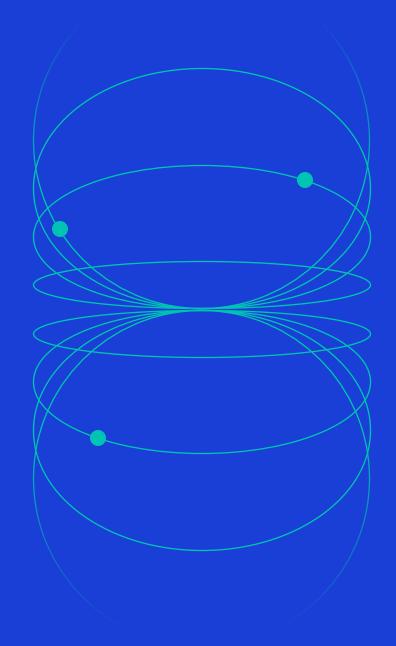


MSCI Global Real Asset Classification Standards

MSCI GLOBAL REAL ASSET CLASSIFICATION
STANDARDS (MSCI GRACS) STRUCTURE AND
FRAMEWORK

Q3 2025 Update v1.1



Q3 2025 Update v1.1 \rightarrow

Overview

→Q3 2025's v1.1 update follows a consultation on MSCI's Global Real Asset Classification Standards (MSCI GRACS) that was launched on 15 July 2024 and concluded on 29 November 2024 with v1.0. MSCI thanks participants from the real assets investment community for their feedback on the proposed structure and definitions of MSCI GRACS.

→v1.1 updates include:

- Senior Housing
 - : Sector name updated to Senior Housing & Care
 - : Sub-sector name now includes a With Care element
- Five new Data Center characteristics
- Three new Transport characteristics each for Depots and Stations
- Amendment to definition of Theme/Entertainment Center
- Addition of Other, Leisure, Leisure Center
- Minor definition/label/property type updates (please see separate definitions attachment)
- →MSCI GRACS aims to establish a single global hierarchy and classification standard to promote transparency and efficiency across the industry globally.
- →MSCI GRACS comprises of 12 Sectors, 44 Sub-sectors and 178 property types (please see separately attached accompanying definitions).
- →MSCI GRACS will be implemented in all new product developments and MSCI will issue further announcements with a roadmap for MSCI GRACS adoption in existing Real Assets products by late 2025/early 2026.



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Healthcare



Data Center

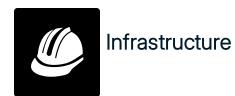




Self Storage



Other





GRACS Structure →

MSCI GRACS Structure | Sub-Sectors

Retail



- Shopping Center
- Retail Warehouse
- Other Retail

Office



- Life Science / Lab Spaces
- Office / Business Park
- Medical Office
- Standard Office

Industrial



- Logistics
- Manufacturing
- Industrial Outdoor Storage
- Production
- Flex Space
- Industrial Park / Multi-let
- · Other Industrial

Residential



- Multi Family
- Single Family
- Student Housing
- Other Residential

Hotel



- Full Service
- Limited Service
- Other Hospitality

Senior Housing & Care



- Senior Housing With Care
- Nursing / Care Homes

Healthcare



- Healthcare
- Other Healthcare

Data Center



- Colocation
- Enterprise / Self Build
- Other

Land



- Development Land
- Natural Capital Land

Self Storage



Self Storage

Other



- Education
 - Leisure
 - Extraction
 - Parking
 - · Other Subsectors

Infrastructure



- Communication
- Power Generation Excl Renewable Energy
- Power Transmission & Distribution Excl Renewable Energy
- Renewable Energy
- Energy Storage
- Water
- Transport
- Waste



Retail Sector

Sub-Sector	Property Type		Additional Characteristics (where applicable)
Retail Warehouse	• Solus Unit	Retail Park / Large Format Retail / Power Center	
Shopping Center	 Convenience / Strip Center District / Community Center Lifestyle Center Local / Neighbourhood Center Major Regional / Super Regional 	 Outlet Center Fashion / Specialty Center Regional Center Theme / Entertainment Center 	 Tenure: Leasehold, Freehold, Air Rights Mixed Use characteristic: Mixed Use Retail Street Location: High / Main
Other Retail	 Arcade Unit Shop Variety Store / Discount Store Bank Branch Department Store Gallery Auto Dealership / Auto Showroom 	KioskPost OfficeRetail ShowroomSupermarketHypermarketPharmacy	 Street Property Lease Type: Ground Rent





Office Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)
Life Science / Lab Spaces	• Life Science / Lab Spaces	
Medical Office	• Medical Office	 Zone: CBD, Non-CBD Investment Purpose: Built For Sale Tenure: Leasehold, Freehold, Air Rights
Standard Office	Standard Office	 • Tendre: Leasenold, Freehold, Air Rights • Mixed Use characteristic: Mixed Use • Property Lease Type: Ground Rent
Office / Business Park	Office / Business Park	



Industrial Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)
Logistics	Distribution CenterRefrigerated Cold StorageTruck Terminal / Cross DockWarehouse	
Manufacturing	Heavy ManufacturingLight ManufacturingFood Processing	
Production	• Refinery	Tenure: Leasehold, Freehold, Air Rights Mixed the sharest existing Mixed Lies
Flex Space	Life SciencesR&DIndustrial ShowroomOther Flex Space	 Mixed use characteristic: Mixed Use Manufacturing Type: Cold Product / Storage Property Lease Type: Ground Rent
Industrial Outdoor Storage	Industrial Outdoor Storage	
Industrial Park / Multi-let	• Industrial Park / Multi-let	
Other Industrial	WorkshopsMovie Studios	



Residential Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)
Multi Family	High Rise ApartmentLow Rise ApartmentMid Rise Apartment	
Single Family	Single Family AttachedSingle Family Detached	 Letting: Social / Affordable, Rent Capped, Subsidised Physical: Garden Apartment
Student Housing	• Student Housing	 Investment Purpose: Built For Rental, Built For Sale Tenure: Leasehold, Freehold, Air Rights Sale characteristic: Shared Ownership Property Lease Type: Ground Rent Age Restricted – Housing characteristic: Campus Living / UBRC Mixed Use characteristic: Mixed Use
Other Residential	Age RestrictedCo-LivingServiced Apartment / PropertyManufactured HousingCondominium	 Student Housing Lease Type: Operational / Master Lease, Direct Let



Hotel Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)
Full Service	Luxury Chain (Full-service)Midscale Chain (Full-service)Upscale Chain (Full-service)Economy Chain (Full-service)	
Limited Service	 Luxury Chain (Limited-service) Midscale Chain (Limited-service) Upscale Chain (Limited-service) Economy Chain (Limited-service) Extended Stay 	 Tenure: Leasehold, Freehold, Air Rights Property Lease Type: Ground Rent Mixed Use characteristic: Mixed Use Hotel Lease Type: Managed, Leased
Other Hospitality	Holiday ResortHoliday ParkCasino with HotelHostel	



Senior Housing & Care Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)	
Nursing / Care Homes	Continuing Care Skilled Nursing	 Letting: Rent Capped, Subsidised, Social / Affordable Physical: garden apartment Investment purpose: Built For Rental, Built For Sale Tenure: Leasehold, Freehold, Air Rights 	
Senior Housing With Care	Independent LivingAssisted Living	 Tenure: Leasehold, Freehold, Air Rights Property Lease Type: Ground Rent Mixed Use characteristic: Mixed Use Housing characteristic: Campus Living / UBRC 	



Healthcare Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)
Healthcare	 Healthcare Clinic / Consulting Rooms Hospital & Treatment Center Physical & Learning Disability Homes 	 Tenure: Leasehold, Freehold, Air Rights Property Lease Type: Ground Rent Mixed Use characteristic: Mixed Use
Other Healthcare	Ambulance StationDentist Surgeries	



Data Center Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)
Colocation	Wholesale Colocation Retail Colocation	 Tenure: Leasehold, Freehold, Air Rights Property Lease Type: Ground Rent
Enterprise / Self Build	• Enterprise / Self Build	 Build Characteristics: Shell, Fitted / Turnkey, Built To Suit Use Characteristics: Cloud Based, Crypto, Al / High Density, Carrier Hotel / Network Dense Scale Characteristics: Hyperscale Cooling Characteristics: Liquid Cooling
Other	Other Data Center	Mixed Use Characteristic: Mixed Use



Land Sector

Sub-Secto	r	Property Type	Additional Characteristics (where applicable)
Developme Land	ent	 Development Land - Hotel Development Land - Office Development Land - Healthcare Development Land - Infrastructure Development Land - Senior Housing Development Land - Retail Development Land - Industrial Development Land - Data Center Development Land - Residential Development Land - Self Storage Development Land - Other 	 Zone: CBD, non-CBD (applicable to Office Land use) Tenure: Leasehold, Freehold, Air Rights Property Lease Type: Ground Rent Mixed Use characteristic: Mixed Use
Natural Ca Land	pital	 Farmland Forestry (operational) Forestry (carbon capture) Grassland Wetland Peat Bog / Peatland Mangrove Forest / Swamp 	



Self Storage Sector

Sub-Sector	Property Type	Additional Characteristics (where applicable)
Self Storage	Basic Self Storage Climate Controlled Self Storage	 Tenure: Leasehold, Freehold, Air Rights Property Lease Type: Ground Rent Mixed Use characteristic: Mixed Use



Other Sector

Sub-Sector	Property Type		Additional Characteristics (where applicable)
Education	Pre Schools Schools	Tertiary / Post Secondary EducationTraining Center	
Leisure	 Bars & Pubs Cinema Camping / Lodging Spa / Wellness Center Marinas Restaurant Fast Food Restaurant Sports Center 	 Theatre Arena / Stadium Amusement Park Bowling Alley Casino Golf Course Leisure Center 	 Tenure: Leasehold, Freehold, Air Rights Property Lease Type: Ground Rent
Extraction	• Mines	 Fossils drilling 	Mixed Use characteristic: Mixed Use
Other subsectors	 Community Hall Garden Center Convention / Conference Centers Court Places Of Worship Prisons Service / Fuel / Gas Stations 	Auto RepairSalvage YardCar Wash & DetailingMilitary BaseOther PublicBuildings	
Parking	GarageParking	Parking Space / Parking Box	



MSCI GRACS Structure | Sub-Sectors →

Infrastructure Sector

Sub-Sector	Property Type	
Communication	Mobile Telephone TowersDistance Communication Cables	
Power Generation Excl Renewable Energy	Coal Fired Power PlantNuclear ReactorGas Power Plant	
Power Transmission & Distribution Excl Renewable Energy	Electricity Transmission / DistributionGas Transmission / DistributionWater Transmission / Distribution	
Renewable Energy	 Hydro - Excl Tidal & Wave Power Plant Solar Farms Tidal & Wave Power Plant Biomass Power Plant Geothermal Power Plant 	
Transport	AirportsRoad BridgesBus SystemsTram SystemsPorts / Harbors	
Waste and Water	Other Waste DisposalSolid Waste DisposalDesalination PlantsDrinking Water Filtration & Storage	
Energy Storage	Battery Energy StoragePumped Hydro Energy StorageCompressed Air Energy Storage	

Additional Characteristics (where applicable)

• Television and Radio Transmission

• Other Transmission / Distribution

Stations

Oil Power PlantOther Powerplant

Heating Networks

Waste To EnergyWind Farms

Road / Highway Networks

Flood Control SystemsMajor Irrigation SystemsSewage Treatment PlantWater & Wastewater

Flywheel Energy StorageThermal Energy Storage

Railways

Depots

Stations

- Tenure: Leasehold, Freehold, Air Rights
- Property Lease Type: Ground Rent
- Mixed Use characteristic: Mixed Use
- Infrastructure Lease Type: Contracted, Regulated
- Transport Facility Type: Bus Depot, Tram Depot, Train / Metro Depot, Bus Station, Tram Station, Train / Metro Station



Mohammed B Solar Farms example: MBRAM Solar Farm, Dubai, UAE (randomized asset example selected from publicly available information)



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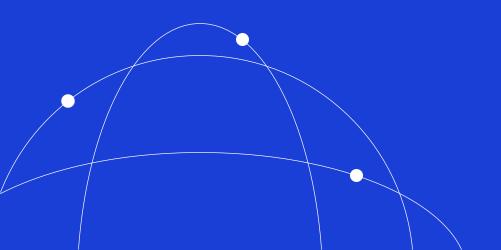
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