

# MSCI GLOBAL REAL ASSET CLASSIFICATION STANDARDS



## CONSULTATION ON SECTOR, SUB-SECTOR, PROPERTY TYPES AND DEFINITIONS

**PURPOSE:** This document provides an overview of the MSCI GRACS structure

Sector	Sub-sector	Property Type	Definition
Retail	Other Retail	Arcade	Whole or part shopping arcades - typically narrow, covered, possibly period or pseudo-period arcades.
Retail	Other Retail	Unit Shop	Retail units (single or multiple next to each other), typically low rise. Excludes arcades of shops.
Retail	Other Retail	Variety Store	Large stores usually arranged on more than one floors but not offering the full range of goods covered by a department store. Usually, one or two product ranges are dominate.
Retail	Other Retail	Bank Branch	Premises used for retail banking services.
Retail	Other Retail	Department Store	A store typically divided into departments which sell such different products and offer a wide range of options for e.g. furnishings, electronics, clothing, footwear, toys, cosmetics, etc.
Retail	Other Retail	Gallery	Building used for display/sale of art works.
Retail	Other Retail	Kiosk	Small booth style shop for sale of small goods or services e.g. tobacco products, tickets etc. Can also be moveable.
Retail	Other Retail	Post Office	Premises able to facilitate postal services.
Retail	Other Retail	Retail Showroom	Premises suitable for displaying retail items e.g. carpets, cars. Excludes industrial showrooms.
Retail	Other Retail	Supermarket	Typically, self-service stores including essential food and other household products. Clothing, DIY, gardening and other items for e.g may be included in larger stores.
Retail	Other Retail	Pharmacy	Store offering medications and other medical products for sale. Also referred to as a chemist or drug store.
Retail	Other Retail	Auto Dealership / Auto Showroom	Showroom specifically for display and/or sale of motorised vehicles.
Retail	Other Retail	Fast Food Restaurant	Assets that facilitate the purchase of fast-food sales, generally standalone sites that exclude other uses.
Retail	Retail Warehouse	Solus Unit	Stand alone, single retail warehouse units. Retail warehouses are self-service operations where there is minimum attention to merchandise display and goods are often retained in their original packing. Specialization in limited lines such as electricals, domestic appliances, carpets, DIY, furniture.
Retail	Retail Warehouse	Retail Park / Large Format Retail (LFR)	A group of retail units or single retail unit in a purpose-built park. Provides for the sale of needs of the immediate location and typically has at least one anchor tenant. Includes LFRs which are typically dominated by bulky goods retailers (furniture, white goods and other home wares, aka 'homemaker tenants'), occupying large areas to display merchandise and contains a small number of specialty shops
Retail	Shopping Centre	Convenience / Strip Centre	A smaller shopping centre with several stores offering a smaller range day-to-day necessities, such as basic groceries, dry cleaners, liquor stores, and locksmiths for example. Typically provides parking near the store fronts and stores are generally not linked with walkways that are enclosed.
Retail	Shopping Centre	District / Community Centre	Community centres (or community malls) are larger than neighbourhood centres and offer a wider range of goods. They usually feature two anchor stores which are larger than that of a neighbourhood centre's, e.g. a discount department store. They may also follow a strip configuration or may be L- or U-shaped. Size thresholds vary across markets.
Retail	Shopping Centre	Lifestyle Centre	Generally open-air retail format located in a more upscale area, normally with more upscale dining and entertainment in an outdoor setting.
Retail	Shopping Centre	Local / Neighbourhood Centre	Neighbourhood centres are small-scale malls serving the local neighbourhood. They typically have a supermarket or drugstore as an anchor and are commonly arranged in a strip mall format.
Retail	Shopping Centre	Major Regional / Super Regional	Typically includes at least one full line department store, one or more full line discount stores, one or more supermarkets and specialty stores. Typically, also include a number of entertainment attractions. Provides an extensive variety of shopping goods comparable to those of the central business district of a major metropolitan area. Has several anchor tenants (usually full-line department stores).
Retail	Shopping Centre	Outlet Centre	An outlet mall (or factory outlet centre) is a type of shopping mall in which manufacturers sell their products directly to the public through their own stores. Other stores in outlet malls are operated by retailers selling returned goods and discontinued products, often at heavily reduced prices.
Retail	Shopping Centre	Fashion / Specialty Centre	Typically, with no dominant anchors, consisting of higher-end fashion-oriented tenants.

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Retail	Shopping Centre	Power Centre	Power centres are large shopping centres that almost exclusively feature several big-box retailers (eg. Wal-Mart, Kohl's or IKEA) as their anchors, and/or a large supermarket. They are usually referred to as power centres because they attract and cater to residents of an expanded population area and include tenants that are category dominant (eg. home improvement stores, discount department stores, large electronics, hardware/DIY chains and off price stores).
Retail	Shopping Centre	Regional	A medium to large sized general merchandise shopping centre typically incorporating one full line department store, fashion/clothing offerings, one or more supermarkets and many more specialty shops.
Retail	Shopping Centre	Theme / Entertainment Centre	Theme, festival or entertainment centres that have distinct unifying entertainment themes followed by their individual shops as well as their architecture. They usually cater to tourists and are anchored by restaurants or other entertainment facilities.
Office	Life Science / Lab Spaces	Life Science / Lab Spaces	A building with predominant usage as life science centre or lab space that is built and designed as specialist office property used for scientific research and development. Configured with enhanced base building infrastructure (including electrical, HVAC, ventilation, and/or plumbing systems that are designed for use within a research or production laboratory). Life science tenants encompass a wide range of medical fields, including biotechnology, pharmaceuticals, biomedical technologies, life systems technologies, nutraceuticals, and the manufacturing of biomedical devices.
Office	Medical Office	Medical Office	A building in which predominate usage is for medical purposes. This includes, but is not limited to medical clinics, offices of doctors and dentists, outpatient services, diagnostic labs and testing facilities and other medical related service.
Office	Standard Office	Standard Office	Non-specialised office use which excludes for eg. life science/lab space, medical or business parks
Office	Office / Business Park	Office / Business Park	Campus style groups of properties designed primarily for office occupancy, as whole parks or single units within a park.
Industrial	Logistics	Distribution Centre	Distribution centres that serve as part of the infrastructure for a supply chain, designed to accommodate efficient movement of goods. Typically, lower office finishes and higher clear heights. A facility designed to store large amounts of goods for varying lengths of time ranging from extensive storage to and set up for immediate distribution. Exclude cold storage/refrigerated facilities. Typically includes more docking bays than warehouses.
Industrial	Logistics	Refrigerated Cold Storage	This asset type typically features freezing/cooling functionalities which drive the use of refrigerated warehouse / distribution facilities.
Industrial	Logistics	Truck Terminal	An industrial facility designed to maximize the efficient transfer of goods from one truck to another. These facilities are primarily used for staging loads (rather than long-term storage) and possess very little if any storage area.
Industrial	Logistics	Industrial Outdoor Storage	Provides additional storage or operational capacity to support larger distribution networks for tenants. For eg. trailer storage, container storage, pallet storage and construction or heavy equipment yards. Typically have little to no building cover.
Industrial	Logistics	Warehouse	Buildings designed for long-term storage of goods, which may include raw materials, spare parts or components. Warehouses are used by manufacturers, importers, exporters, wholesalers, transport businesses, customs etc. Typically includes fewer docking bays than distribution centres. Includes tarmac at airport where airplanes taxi, or pull up to a gate, or head out to the runway. Excludes assets which have cold storage on site, which is a separate classification

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Industrial	Manufacturing	Heavy Manufacturing	Heavy manufacturing facilities are specifically designed to house specialized equipment to produce raw goods or materials. Compared to light manufacturing buildings, heavy industrial assets are larger, often requiring hundreds of thousands of square feet to accommodate heavy equipment and production lines. Because of the amount of land required, in addition to health, safety, and environmental regulations, assets of this type are largely located outside of residential and high traffic commercial areas. Because heavy manufacturing is not part of storage and distribution, assets generally do not require a high concentration of dock doors. Rail service and trucks most often provide the transportation of goods. Production and manufacturing of this type include automobile, shipbuilding, heavy machinery, construction equipment, aerospace, and pharmaceutical. Excludes extraction/production.
Industrial	Manufacturing	Light Manufacturing	Light manufacturing buildings provide industrial space for the assembly, production, storage, and distribution of goods, and usually involves using raw materials produced in the heavy manufacturing stage. Compared to heavy manufacturing facilities, light manufacturing properties tend to be smaller in size, have lower clear heights, and because impact on inhabitants of the surrounding districts is relatively low, are often located nearer to residential and high-traffic commercial areas. Light manufacturing facilities differ from heavy in their flexibility to fulfil both manufacturing and distribution needs. To support high frequency product flow, the average building size to docks ratio is similar to that of some distribution warehouses. Excludes extraction/production.
Industrial	Production	Refinery	A production facility that refines/converts a raw material to product of value, e.g. oil into petroleum. Examples of refineries: Oil refinery (petroleum/edible), Natural gas, Sugar refinery, Metals refinery, Gas Separation Plants. Excludes manufacturing.
Industrial	Flex Space	Life Sciences	Industrial building that is configured with enhanced base building infrastructure to support usage as a lab facility for life sciences. Infrastructure includes electrical, HVAC, ventilation, and/or plumbing systems that are designed for use within a research or production laboratory. They are highly specialized research and development buildings intended for the use of life science tenants and would be classified as industrial buildings absent the specialized building infrastructure. Life science tenants encompass a wide range of medical fields, including biotechnology, pharmaceuticals, biomedical technologies, life systems technologies, nutraceuticals, and the manufacturing of biomedical devices
Industrial	Flex Space	R&D	An industrial building built to allow flexible alternative uses with a specialised build out to accommodate lab space that can be used for various research and development activities. Does not meet the definition of life sciences
Industrial	Flex Space	Other Flex Space	Typically, low rise buildings that include wide variation in industrial space utilization, ranging from retail to distribution, light industrial and occasional heavy industrial use. Can apply to individual assets, but also multi-let assets (ie. where there are several different buildings on one site, each with different uses)
Industrial	Flex Space	Industrial Showroom	Showroom that may have flexible use, intended for product displays as a destination for potential customers.
Industrial	Other Industrial	Workshops	Small purpose-built or converted units explicitly intended for use by small scale operations, typically hand-crafted goods or making or repairing small items.
Industrial	Other Industrial	Movie Studios	Specialized real estate properties designed and equipped with the physical space and technical resources necessary to produce films, television shows, and other forms of visual media.
Residential	Multi Family	High Rise Apartment	A block of apartments that is eleven storeys or more in height. Also includes assets termed 'Build to Rent'.
Residential	Multi Family	Low Rise Apartment	A block of apartments that is three storeys or less in height and includes garden apartment blocks. Also includes assets termed 'Build to Rent'.
Residential	Multi Family	Mid Rise Apartment	A block of apartments that is four to ten storeys in height. Also includes assets termed 'Build to Rent'.
Residential	Single Family	Single Family Attached	Two houses or more joined by a party wall, usually built as a single structure and designed for single family occupancy. Excludes houses sub-divided into apartments which should be considered low rise apartments. Also includes assets termed Build- to-Rent.

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Residential	Single Family	Single Family Detached	Free standing property, physically separated from nearby properties and designed for single family occupancy. Excludes houses sub-divided into apartments which should be considered low rise apartments. Also includes assets termed Build-to-Rent.
Residential	Student Housing	Student Housing	Residential accommodation where occupants registered at an academic institution are the primary demand source.
Residential	Other Residential	Age Restricted	Specially designed to accommodate tenants of certain age brackets, can be amenitized or not, but offer no healthcare provision on site. Examples include active adult or retirement communities with maintenance free living and no on-site medical component.
Residential	Other Residential	Co-Living	Residential properties with a degree of specifically designed shared communal facilities, for eg. bathrooms, kitchens, cooking or living areas
Residential	Other Residential	Serviced Apartment	Furnished apartments available for short-term or long-term stays, which provide self-use in-unit amenities for daily use. Typically include soft-furnishings and fully equipped kitchen and have cleaning services included in the rent. Usually high-end decor.
Residential	Other Residential	Manufactured Housing	Manufactured housing complexes, typically single-family houses constructed in a controlled factory environment which are then transported to destination. The permanent chassis assures the initial and continued transportability of the home, for example RV Parks
Residential	Other Residential	Condominium	Residential property that is designed as a for sale product where units are intended to be for sale individually (usually resulting in many different owners)
Hotel	Full Service	Luxury Chain	Luxury (as defined by brand), full service hotels are generally hotels with meeting space, a restaurant, and lounge facilities, as well as minimum service levels often including concierge service and room service.
Hotel	Full Service	Midscale Chain	Midscale (as defined by brand), full service hotels are generally hotels with meeting space, a restaurant, and lounge facilities, as well as minimum service levels often including concierge service and room service.
Hotel	Full Service	Upscale Chain	Upscale (as defined by brand), full service hotels are generally hotels with meeting space, a restaurant, and lounge facilities, as well as minimum service levels often including concierge service and room service.
Hotel	Full Service	Economy Chain	Economy (as defined by brand), full service hotels are generally hotels with meeting space, a restaurant, and lounge facilities, as well as minimum service levels often including concierge service and room service.
Hotel	Limited Service	Luxury Chain	Luxury (as defined by brand), limited service hotels have rooms-only operations (i.e., without food and beverage service) or offer a bedroom and bathroom for the stay duration, but very few other services and amenities.
Hotel	Limited Service	Midscale Chain	Midscale (as defined by brand), limited service hotels have rooms-only operations (i.e., without food and beverage service) or offer a bedroom and bathroom for the stay duration, but very few other services and amenities.
Hotel	Limited Service	Upscale Chain	Upscale (as defined by brand), limited service hotels have rooms-only operations (i.e., without food and beverage service) or offer a bedroom and bathroom for the stay duration, but very few other services and amenities.
Hotel	Limited Service	Economy Chain	Economy (as defined by brand), limited service hotels have rooms-only operations (i.e., without food and beverage service) or offer a bedroom and bathroom for the stay duration, but very few other services and amenities.
Hotel	Limited Service	Extended Stay	Furnished, limited service hotel rooms or suites available for short-term or long-term stays, which provide self-use in-unit amenities for daily use. Typically include soft-furnishings and cooking utensils and have cleaning services included in the rent. Usually sober decor.
Hotel	Other Hospitality	Holiday Resort	Full-service accommodation catering to travellers. Resort properties are normally arranged as a self-contained village, and offer a range of recreational activities, amenities and features designed primarily to provide relaxation and recreation.

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Hotel	Other Hospitality	Holiday Park	A property usually located in a resort setting and having accommodation including Static Caravans as well as Lodges/Cottages /Chalets that are rented on a short-term basis for vacations/holidays. They can sometimes also have a separate area for pitching tents and parking Touring Caravans (RVs). They are often family orientated and self-catering, although they may have food halls at extra cost.
Hotel	Other Hospitality	Casino with Hotel	Venue (normally licensed) for clientele to engage in various gambling activities (such as slots or roulette), card games, food/drink and possibly live entertainment. Also includes hotel offering. Typically, indoors.
Hotel	Other Hospitality	Hostel	Are often budget friendly, sociable accommodation where guests can generally rent a bed, usually a bunk bed, in a dormitory and share a bathroom, lounge and sometimes a kitchen.
Senior Housing & Care	Care Homes	Independent Living	Residential homes providing accommodation and facilities for elderly people. Excludes full nursing care, but typically includes additional services such as communal dining, housekeeping, transportation, emergency calls and social programming services.
Senior Housing & Care	Care Homes	Assisted Living	Residential homes providing accommodation and facilities for elderly people. Excludes full nursing care but may include ADL (Activities of Daily Living) services like assistance with bathing, dressing, eating, walking, and bathroom activities. Twenty-four-hour protective oversight is normally offered, but twenty-four-hour medical care is not.
Senior Housing & Care	Nursing Homes	Continuing Care	Provide variety of care services supporting in place aging and include units with nursing care beds to facilitate assisted living and memory care. Fee arrangements may differ to typical lease arrangements owing to the variety of care services that can be included.
Senior Housing & Care	Nursing Homes	Skilled Nursing	Properties where nursing care beds make up the majority of the accommodation offering. Owing to the care services involved, they are usually licensed for long term health care and residents include those needing round the clock medical supervision or those who require physical assistance in mobility, management of continence and use of medical devices.
Healthcare	Healthcare	Healthcare Clinic/Consulting Rooms	Health care centres or consulting rooms offering a wide range of generally out-patient medical services. Examples include general practitioner and specialist doctor's consulting rooms. Excludes hospitals
Healthcare	Healthcare	Hospital & Treatment Centre	Hospitals, mental health hospitals and special treatment centres. Buildings fully equipped for in-patient medical treatment. Usually including operating theatres, but including also mental health, and other in-patient treatment premises, specifically designed for treatment and care of mental patients or other special treatments offering highly specialized treatment requiring specialized equipment such as MRI scans, hydro-therapy, radio-therapy etc.
Healthcare	Healthcare	Physical & Learning Disability Homes	Centres for in- and/or out-patient treatment of children or adults with physical or learning disabilities.
Healthcare	Other Healthcare	Ambulance Station	Ambulance garage and associated paramedic offices and accommodation.
Healthcare	Other Healthcare	Dentist Surgeries	Dental surgeries and dental hospitals.
Data Centre	Colocation / Multi Client	Colocation / Multi Client	Facility used to house computer systems and associated components to facilitate data storage/processing at scale, for numerous companies/clients within the same space - often with a more standardised offering for users of the service who typically are not the owners. Lease rates can also be designated in megawatts, rather than square footage.
Data Centre	Enterprise / Single Client	Enterprise / Single Client	Facility used to house computer systems and associated components to facilitate data storage/processing at scale, for a single company/client - these are often bespoke to the needs of the user and can be owned or rented by the user. Lease rates can also be designated in megawatts, rather than square footage.
Land	Development Land	Hotel	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with planning permission active or pending and end use known to be predominantly hotel use. Can be operating or not prior to development.
Land	Development Land	Office	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with planning permission active or pending and end use known to be predominantly office use. Can be operating or not prior to development.

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Land	Development Land	Retail	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with planning permission active or pending and end use known to be predominantly retail use. Can be operating or not prior to development.
Land	Development Land	Industrial	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with planning permission active or pending and end use known to be predominantly industrial use. Can be operating or not prior to development.
Land	Development Land	Data Centre	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with planning permission active or pending and end use known to be predominantly data centre use. Can be operating or not prior to development.
Land	Development Land	Mixed Use	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with planning permission active or pending and end use known to be mixed use. Can be operating or not prior to development.
Land	Development Land	Residential	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with planning permission active or pending and end use known to be predominantly residential use. Can be operating or not prior to development.
Land	Development Land	Other	Green or brown field sites, including empty buildings available for demolition or redevelopment. Development sites with end use not initially known. Can be operating or not prior to development.
Land	Farmland	Farmland	Operating land used for agricultural purposes, including farmhouses and other farm buildings.
Land	Forestry	Forestry	Operating land used for timber production, including bare land where trees have been felled and planting is intended.
Other	Education	Pre Schools	Premises used for pre-school nurseries, crèches, kindergartens and other day care for babies and very young children.
Other	Education	Schools	Buildings and land used for primary/secondary education such as public or privately operated schools, including classrooms, cloakrooms, assembly rooms, sports facilities, staff premises and administrative offices. May include dormitories for boarders. Excludes summer camps and care homes for children.
Other	Education	Tertiary / Post Secondary Education	Buildings and land used for tertiary/post-secondary education such as university, including lecture theatres, seminar and other classrooms, laboratories and other specialist areas, administrative offices, cafeterias and sports facilities. Include music, catering, horticulture, sports, secretarial and other specialist tertiary colleges. Excludes student housing.
Other	Education	Training centre	A place where people undergo skills training for work (so the company operates it and their employees take part in the trainings), but also where a company holds trainings for clients (e.g. about their products). We also consider as training centre those establishments where a private person can take place in a workshop (e.g. cooking, creative WS etc.)
Other	Leisure	Bars & Pubs	Premises used for bars and pubs, where predominant offering is focused on sale of alcoholic beverage, but maybe also offer some food and beverage.
Other	Leisure	Cinema	Movie theatres. Premises showing films to the public in one or more auditoria. Includes drive-through cinemas.
Other	Leisure	Marinas	Land and buildings associated with docks or basins providing mooring facilities and supplies for pleasure boats, either coastal or on inland waterways.
Other	Leisure	Restaurant	Premises used for predominant offering of food and beverage, but maybe also offer some alcohol.
Other	Leisure	Sports Centre	Includes gyms, racquet sports, boxing, dance studios, climbing walls football, equestrian centres, athletics tracks and swimming pools and any other indoor or outdoor sports with specific facilities, changing rooms and training equipment.
Other	Leisure	Theatre	Buildings designed for largely indoor live performances. Includes concerts and opera houses.
Other	Leisure	Arena / Stadium	Venue generally used to facilitate entertainment or sporting events such as music concerts, exhibitions, Olympics/associated sports or sports matches and/or other events. Includes both indoor and outdoor areas, with partial or complete roof covers

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Other	Leisure	Amusement Park	Destination site that usually includes to a variety of typically outdoor activities such as mechanical rides (eg. rollercoaster or big wheel), fun games where prizes can be won, magic shows or live entertainment.
Other	Leisure	Bowling Alley	Typically, indoor venues comprised of multiple parallel bowling lanes where external attendees can do ten pin bowling. Can also be used for professional bowling leagues. Adjacent to these are normally light food and beverage offerings for the clientele, and equipment such as balls/shoes can be rented.
Other	Leisure	Casino	Venue (normally licensed) for clientele to engage in various gambling activities (such as slots or roulette), card games, food/drink and possibly live entertainment. Usually does not include a hotel offering. Typically, indoors.
Other	Leisure	Golf Course	Usually, large outdoor land that has been greened and shaped into 9- or 18-hole courses, where attendees can play golf. Many golf courses offer memberships and there is often a food and beverage offering on site.
Other	Extraction	Mines	Extraction of mineral or other geological materials from the earth. On a satellite image one can often see large pits that characterises the locations. This is not the same as fossil drilling, which is the extraction of fossil-fuel, i.e. components composed of mainly carbon and hydrogen bonds. Excludes manufacturing.
Other	Extraction	Fossils drilling	Extraction of Fossil Fuels, e.g. oil and natural gas from the earth surface. This can occur both onshore and offshore. Fossil fuel drilling and Fossil Fuel extraction is often used in synonyms. Site can include for example: Oil rigs, Oil drilling derricks (hydraulic fracturing), Natural gas drilling (hydraulic fracturing). Excludes manufacturing.
Other	Other subsectors	Community Hall	Buildings where members of a community can gather for group activities, social support, public information and other purposes.
Other	Other subsectors	Convention / Conference Centres	Purpose built centres designed for permanent conferences or trade fairs use, typically covered. Exclude hotels used for conferences.
Other	Other subsectors	Court	Buildings used to carry out the administration of justice in accordance to the law. Including court rooms, associated administrative offices and cells.
Other	Other subsectors	Places Of Worship	Any building used as a place of worship including churches, chapels, mosques, synagogues, friends meeting houses etc.
Other	Other subsectors	Prisons	Secure detention centres which can be privately or publicly owned.
Other	Other subsectors	Service / Fuel / Gas Stations	Fuel filling and service stations for motor vehicles.
Other	Other subsectors	Auto Repair	Site where automobiles are repaired by auto mechanics and technicians.
Other	Other subsectors	Salvage Yard	Property for unusable vehicle/scrap storage and/or harvesting of spare parts or crushing to re-use/sell materials of value.
Other	Other subsectors	Car Wash & Detailing	Facility (typically outdoors) to allow for receiving of and mechanical or manual cleaning/washing of different types of vehicles and detailing including waxing or polishing.
Other	Other subsectors	Military base	Military bases including air force, naval or other such bases
Other	Other subsectors	Other Public buildings	Judicial or governmental buildings such as City Hall, fire brigade station, police station, States Defense Agency or enforcement officer building, specifically built for that public use tenant.
Other	Parking	Garage	Lock-up garages for private parking.
Other	Parking	Parking	Includes multi-storey car parks, underground and outdoor parking areas where income is generated from term parking agreements (e.g., hourly, daily, weekly, monthly). Unimproved properties used for storage of vehicles should not be classified as parking but should be considered operating land.
Other	Parking	Parking Space / Parking Box	Individual spaces allocated for parking, either in open or within a covered parking area.
Other	Self Storage	Self Storage	Rooms, lockers, containers, and/or outdoor space where tenants can store and access goods, for businesses or individuals. Can be single and multi-story, basic or climate controlled.
Infrastructure	Communication	Mobile Telephone Towers	Mobile phone masts sitting on land or buildings.
Infrastructure	Communication	Television and Radio Transmission Stations	Stations used for transmitting TV and radio frequencies for broadcasting.

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Infrastructure	Power Generation Excl Renewable Energy	Coal Fired Power Plant	Coal fired power stations and associated cooling plants. Make use of coal to be burned to generate electricity. The heat generated from burning coal, causes water to boil and turn into steam. The steam is then used to turn the rotors in a turbine, which initiates the generation of electricity. In terms of how the function, they are very similar to other fossil-fuelled power plants such as natural gas and coal
Infrastructure	Power Generation Excl Renewable Energy	Nuclear Reactor	Includes nuclear reactors and associated power generation plant. Make use of nuclear fusion (from Uranium) to create energy to generate electricity. The heat generated from the nuclear reaction causes water to boil and turn into steam. The steam is then used to turn the rotors in a turbine, which initiates the generation of electricity. In terms of how the function, they are very similar to other fossil-fueled power plants such as natural gas and coal. Often located close to water body to use water for cooling
Infrastructure	Power Generation Excl Renewable Energy	Gas Power Plant	Make use of natural gas to be burned to generate electricity. The heat generated from burning gas, causes water to boil and turn into steam. The steam is then used to turn the rotors in a turbine, which initiates the generation of electricity. In terms of how the function, they are very similar to other fossil-fueled power plants such as oil and coal
Infrastructure	Power Generation Excl Renewable Energy	Oil Power Plant	Make use of oil to be burned to generate electricity. The heat generated from burning oil, causes water to boil and turn into steam. The steam is then used to turn the rotors in a turbine, which initiates the generation of electricity. In terms of how the function, they are very similar to other fossil-fueled power plants such as natural gas and coal
Infrastructure	Power Transmission & Distribution Excl Renewable Energy	Electricity Transmission Grid Infrastructure	Pylons, transformer stations and other power transmission plant.
Infrastructure	Power Transmission & Distribution Excl Renewable Energy	Interconnectors / Gas Pipelines	Gas pipelines and interconnectors.
Infrastructure	Power Transmission & Distribution Excl Renewable Energy	Other utility services	Transmission and distribution of other material where the specific type has not been identified or does not fall into any of the power transmission categories.
Infrastructure	Renewable Energy	Hydro - Excl Tidal & Wave Power Plant	Plants relating to electricity generation by water power. Is normally any of the three: Run-of-river, Dam or Pumped storage. Excludes tidal assets
Infrastructure	Renewable Energy	Solar Farms	Solar panels for electricity generation. Examples: Solar panels or Concentrated solar power
Infrastructure	Renewable Energy	Tidal & Wave Power Plant	Makes use of natural water movement to generate electricity. Tidal: Make use of the energy created when the Gravitational pull from the Earth cause rise and fall of the sea level. Wave: Make use of the Waves from water as the surface moves due to e.g. wind. Their design can differ for both the two types
Infrastructure	Renewable Energy	Waste To Energy	Plants generating electricity from bio-mass or other waste. Make use of waste to be burned in order to generate electricity, for example heat generated from burning waste causes water to boil and turn into steam. The steam is then used to turn the rotors in a turbine, which initiates the generation of electricity.
Infrastructure	Renewable Energy	Wind Farms	Group of wind turbines, either onshore or offshore.
Infrastructure	Renewable Energy	Biomass Power Plant	Make use of biomass to be burned to generate electricity. Example of biomass is residues from agriculture. The heat generated from burning biomass causes water to boil and turn into steam. The steam is then used to turn the rotors in a turbine, which initiates the generation of electricity. In terms of how the function, they are very similar to other fossil-fueled power plants such as natural gas and coal
Infrastructure	Renewable Energy	Geothermal Power Plant	Make use of the earth's heat to generate electricity. The heat stemming from the Earth causes water to boil and turn into steam. The steam is then used to turn the rotors in a turbine, which initiates the generation of electricity. In terms of how the function, they are very similar to other fossil-fueled power plants such as natural gas and coal
Infrastructure	Transport	Airports	Public and private airports.



# MSCI GLOBAL REAL ASSET CLASSIFICATION STANDARDS



## CONSULTATION ON SECTOR, SUB-SECTOR, PROPERTY TYPES AND DEFINITIONS

**PURPOSE:** This document provides an overview of the MSCI GRACS structure

Sector	Sub-sector	Property Type	Definition
Infrastructure	Transport	Road Bridges	Road bridges over rivers, other roads or any other obstructions. Note these are not railway bridges.
Infrastructure	Transport	Bus Or Tram Systems	Land and buildings used for used for public or private passenger bus or tram services, including bus stations and tram terminals.
Infrastructure	Transport	Ports / Harbours	Passenger and cargo ports. Excludes marinas which should be coded under leisure.
Infrastructure	Transport	Railways	Land and buildings used for railway lines, shunting yards stations etc. Includes railway bridges
Infrastructure	Transport	Road / Highway Networks	Road or highway infrastructure that excludes road bridges, which are separately categorised.
Infrastructure	Transport	Depot	Depot for bus, metro, train, etc. use.
Infrastructure	Transport	Stations	Stations for bus, metro, train, etc. use.
Infrastructure	Waste	Other Waste Disposal	Other waste that cannot be disposed as solid waste, e.g. hazardous waste. Normally requires more safety measures.
Infrastructure	Waste	Solid Waste Disposal	Facility in which large-scale disposal of solid waste occurs, for e.g. landfill and waste incineration plant where no power is being generated from the waste.
Infrastructure	Water	Desalination Plants	Plants which concentrate on removing salt and other minerals from saline waters.
Infrastructure	Water	Drinking Water Filtration & Storage	Filtration plants and storage tanks to purify and store water for drinking.
Infrastructure	Water	Flood Control Systems	Barrages, dykes, pumping stations, reservoirs and other flood prevention plants.
Infrastructure	Water	Major Irrigation Systems	Artificial application of water to assist in the product of agricultural crops.
Infrastructure	Water	Sewage Treatment Plant	Treatment plants used for sewage filtration tanks and other sewage treatment.
Infrastructure	Water	Water & Wastewater	Water treatment plant: treatment of water to increase its quality. Wastewater treatment plant: specifically, the treatment of wastewater. The two differ in process, but their characteristics are often similar.

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