# Our path to Net Zero in North America



# Leading the change that prioritize emissions recorded from the first North American real estate operators to sign the World Green Building Council's (WorldGBC) Net Zero Carbon Buildings value of our properties. As value of our properties.

In 2019, we were one of the first North American real estate operators to sign the World Green Building Council's (WorldGBC) Net Zero Carbon Buildings Commitment. In 2023, Grosvenor announced a global ambition to reduce emissions in line with limiting global warming to 1.5°C. As long-term owners and developers, we are motivated both by the positive impact our sustainability efforts will create and by the financial benefit we believe we will derive.

This pathway illustrates our plan for how we hope to go beyond our WorldGBC Net Zero Commitment, to achieve a 42% emissions reduction from our 2021 baseline year by 2030 (and a 90% reduction by 2050) in North America.

We will invest in capital improvements that prioritize emissions reductions while reducing our costs and improving the value of our properties. As we have done for over a decade, we will continue to publicly report our consumption data.

By lowering the carbon intensity of our properties and development projects, and developing programs to assist our tenants and suppliers in reducing their emissions, we believe we will achieve this pathway. By making targeted improvements and staying ahead of legislation, we will play our role in the carbon solution while improving our portfolio value.

### Steve O'Connell

Chief Executive Officer Grosvenor – Property Americas We track the latest science shared by the International Panel on Climate Change (IPCC) and criteria published by the Science Based Targets Initiative (SBTi) and are aligning our targets toward these sources wherever possible.

Our current business plan projects real estate portfolio (AUM) growth through 2033. To establish a 2030 carbon projection for business as usual (BAU), we reviewed our emissions data from 2021, which reflects a typical year of operations, and added our projected portfolio growth with the assumption that no investments in carbon reduction are made.

With this BAU projection established, our carbon reduction Pathway illustrates how we plan to work toward reducing overall emissions created by our business, including Scope 3 emissions, by 42% relative to our 2021 baseline year. By doing so, we aim to capture the most material climate impacts from our business.

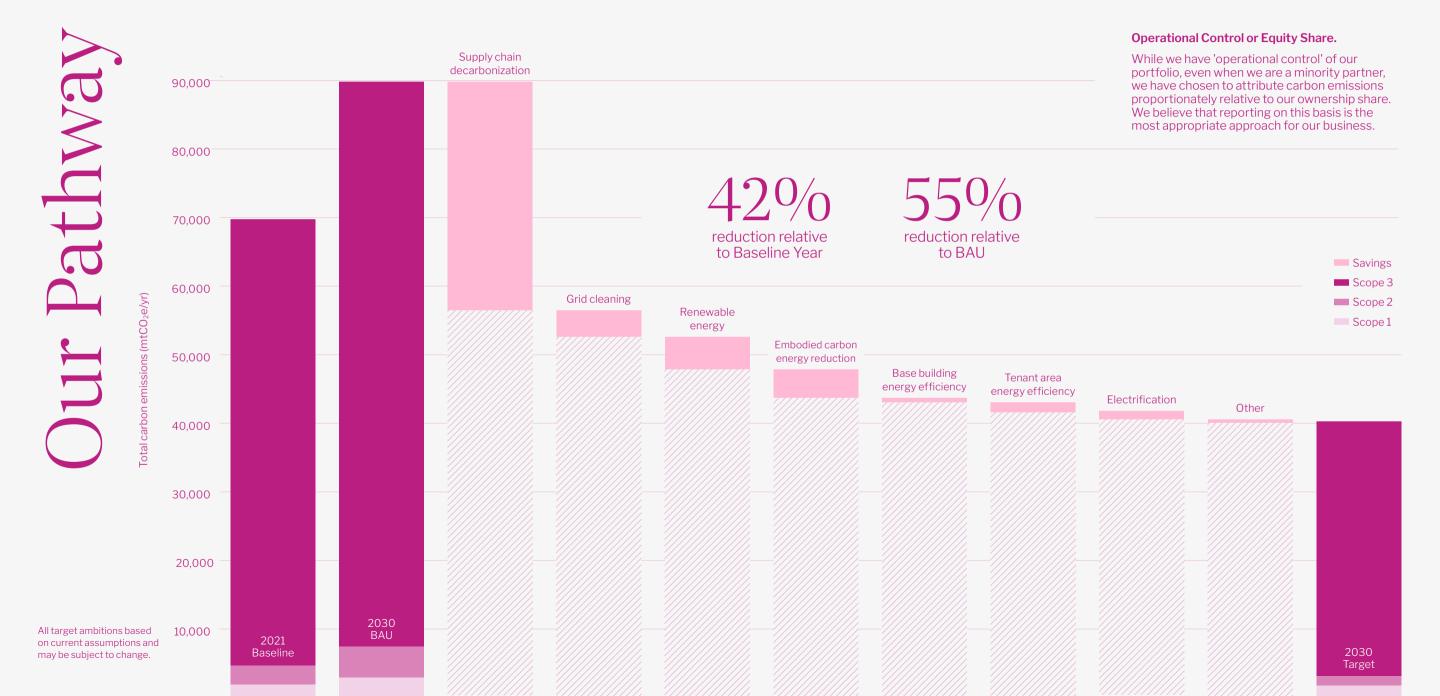
We have conducted a materiality assessment aligned with guidance from the Greenhouse Gas Protocol to identify key areas of focus, assessing the scale of climate impact, our ability to influence reductions, and the quality of underlying data. Our supply chain is the largest single contributor of emissions, including the goods and services we purchase in our development activities, and we continue to develop annual emissions inventories to track fluctuations in embodied carbon present in building materials.

Our approach is to reduce emissions from our business operations and properties by striking a balance between meaningful capital investments and commercially competitive decisions that support our property level returns. We are focusing our investments primarily on reduction related improvements before focusing on renewable energy generation and procurement, and then investing in carbon credits: we are taking this 'reduction first' approach for both our operational and embodied carbon. Our teams will make investment and supply chain decisions with a goal of reducing the energy demands in our buildings and, where remaining emissions cannot be eliminated, we intend to supplement with strategic carbon removal purchases in the future.

For many years we have been working to reduce our carbon footprint; today, detailed decarbonization budget development, emissions performance tracking, and making sustainable design decisions are just a few initiatives underway. Going forward, we will continue to evolve our targets alongside industry developments and climate science.



All target ambitions based on current assumptions and may be subject to change.



Reduce operational energy and embodied carbon to align with 1.5 degree Grosvenorwide carbon ambition **Tactics** 

Invest in onsite and offsite renewables, selecting the greenest energy mix feasible across our assets. Prioritize generation and direct procurement wherever possible

Reduce supply chain emissions by engaging with businesses on opportunities to improve their climate impact and resilience

Monitor the impact of our efforts and implement lessons learned to improve our approach over time and achieve our climate goals

Source materials to reduce impact from construction activity and follow sustainable design principles

2019

Grosvenor becomes a signatory to the WorldGBC's Net Zero Carbon Buildings Commitment. 2023

Announcement of Grosvenor-wide carbon ambition to reduce emissions in line with limiting global warming to 1.5 degrees celsius. 2025

Progress assessment halfway to 2030.

2030\*

Targeted reductions of operational carbon emissions (Scopes 1 and 2) and emissions from embodied carbon (Scope 3) and optimized use of high quality, credible compensation activities to offset residual emissions. Targeted overall emissions reduction of 42% from baseline year (2021) and 55% from BAU.

# 2050 Net Zero\*

Targeted reduction of the remainder of our emissions in line with net zero guidance, with residual emissions offset to bring our value chain impact to zero.

<sup>\*</sup> Target achievement year, based on current assumptions and may be subject to change.

Our reductions targets align with our focus areas: supply chain, tenant spaces, and embodied carbon as identified in our 2021 baseline emission calculations.

Carbon credit purchases may eventually play a role in getting us to net zero; however, our approach is to prioritize improving the overall performance of our assets first. Additionally, we will benefit from returns that come from capital investments in sustainability upgrades which will provide lower near-term utility expenses and will help us stay ahead of costs associated with carbon-related legislation.

	Investment	Development	Governance
Years 1-5	• NZE Plan for each asset	• Inclusion of sustainability standards in Owner's Project Requirements (OPR)	· Supply chain principles adopted
	<ul> <li>Informal and formal information sharing between teams</li> </ul>		• GRESB reports submitted
		<ul> <li>Informal and formal information sharing between teams</li> <li>Portfolio energy consumption track</li> </ul>	Portfolio energy consumption tracked
	<ul> <li>Implement simple &amp; ambitious strategies</li> </ul>		Annual reporting & (re)certification
	<ul> <li>Tenant outreach to obtain energy data</li> </ul>	<ul> <li>Cost estimations for all buildings</li> <li>Embodied carbon assessments for new development projects</li> </ul>	<ul> <li>Assess and refine sustainability-related policies</li> <li>Green leases &amp; financing</li> <li>Policy development: waste clean energy, carbon credits</li> </ul>
	· Continue on site renewable assessments		
	and installations		
	<ul> <li>Tenant space submetering</li> </ul>		
	Tenant emissions reduction projects		
Years 5 +	• Electrification	• Embodied carbon tracked & reduced	· Refine & adapt sustainability-related policie
	• Measure 80%+ of tenant usage	· Internal cost of carbon established	
	· Carbon credits & virtual PPA's	· Whole life carbon approach well established	

Scope	Emissions Source/Category	Reduction Measures	
Scope 1	Natural Gas	Efficiency, electrification	
Scope 2	Electricity	Efficiency, grid cleaning, renewables, electrification	
	Downstream Leased Assets	Efficiency, grid cleaning, renewables, electrification	
	Purchased Goods & Services	Supply chain program, improved data, vendor selection	
	Embodied Carbon	Improved data, updated sustainable development guidelines, preferred materials	
Soone 2	Fuel & Energy Related Activities	Reduction in energy consumption, grid cleaning	
Scope 3	Water	Efficiency	
	Business Travel	Reduced air travel, low-carbon transit	
	Employee Commute	Flexible working and rideshare/pool programs	
	Upstream Leased Assets	Efficiency	

Designed in alignment with Grosvenor's global carbon reduction ambition, we voluntarily removed all natural gas systems from each home.

# Delivering 163 rental residences powered by electric energy

The project has achieved GreenPoint Rated Gold certification, California's independent rating system, based on healthy, energy- and resource-efficient residences.

Ace includes electric vehicle charging stations and all electric ranges in the kitchens. Each unit will have its own electrical and water meter, encouraging efficient use.

Offering nine Electric Vehicle charging stations, 90 secured bicycle parking spots and enhanced public spaces featuring indigenous pollinator/butterfly attracting species of trees and planters, the construction of Ace commits to hiring local trades and laborers and supports the neighboring Berkeley Food & Housing's HOPE Center.





Brentwood Block is an 8-acre, low-carbon, pedestrian-focused masterplan that will bring 3,500 carbon-free homes to Metro Vancouver next to rapid transit.

# A low carbon community predicated on long-term resilience, wellness and economic vitality

The project will exceed the City of Burnaby's sustainability requirements and will meet Grosvenor's global carbon ambition through efficient envelope design, low carbon systems and renewable energy.

Brentwood Block is one of the first projects of this scale to be entirely pedestrian, with all vehicles accessing the underground parking from the site's periphery.

# **Environmental highlights include:**

- Utilizing the local 98% clean, renewable energy grid
- 100% electric appliances, space heating and cooling in all homes
- 90% of all water heating will be powered by clean, renewable energy
- Targeting a 30% water reduction through sub-metering and 100% low flow fixtures
- Transforming an asphalt parking lot into over four acres of landscaped, pedestrianized public realm
- A 20% reduction in vehicle traffic from the site as a result of reduced parking ratios and transportation strategies



At Orchard Trimble, a three-building office and R&D campus in North San Jose, we have completed a drought-resistant landscaping project and are advancing a substantial solar panel array installation.

# Implementing solar energy solutions at Orchard Trimble

Due to complete in early 2024, the panels are estimated to result in a 91% usage offset at both 2610 and 2630 Orchard buildings, and a 55% usage offset at 55 West Trimble. The ~2.3 million kWh estimated annual production of this system is equivalent to the amount of electricity consumed by 314 homes in a year. The payback period for this sustainable solution is just under six years, which positively impacts our profit margin over the property investment period.

We have also replaced all exterior high pressure sodium lighting fixtures with LED lights, resulting in a 45% decrease in electrical consumption.

The property is 100% leased to Toshiba America Electronics Corporation, Inc., whose green management program aligns with Grosvenor's social benefit and ESG objectives.

The Pacific is a 39-storey LEED Gold certified residential tower connected to a low-carbon renewable energy system which reduces the use of fossil fuels.

# Delivering British Columbia's tallest Passive House certified building

The project included the restoration of an iconic heritage house and the construction of 825 Pacific, the City of Vancouver's first commercial Passive House building.

The seven-storey arts and culture building at 825 Pacific Street was developed as part of our Community Amenity Contribution to the City.

The ultra-low energy property was constructed with thicker walls, fewer and more strategically placed windows, and efficient heating and cooling systems resulting in lower carbon emissions.





Designing 265+ residences utilizing mass timber

Currently in design, 3300 Whitehaven is a nine-storey residential building with a focus on reducing embodied carbon. In keeping with Grosvenor's ambition to reduce embodied carbon emissions, the project's innovative mass timber structure has the potential to achieve a substantial reduction in the project's overall embodied carbon footprint. By going this route, the structural system alone would eliminate thousands of metric tonnes of carbon equivalent from the building's carbon footprint, compared to buildings with conventional concrete structures.

Utilizing this emergent structural solution also promises other far-reaching benefits for the enduser, namely that the exposed timber structure would introduce a unique, stress-reducing biophilic design element into residents' physical surroundings.

As currently designed, other environmental and social benefit highlights for the project include:

- Pursuing LEED Gold certification
- Constructing over 20,000 SF of green roof
- $\cdot \, \text{Installing} \, 100\% \, \text{electric appliances in each home}$
- Setting aside 15% of the building's residential floor area as affordable housing
- Delivering a 0.15-acre publicly-accessible pocket park for use by residents and the community

# Baseline Methodology Our 2021 Carbon Baseline

Our GHG emissions are measured and calculated according to the standards and guidelines in the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol's Corporate Standard and Value Chain Standard.

Relative to our asset portfolio, our boundary includes assets that we operate and/or occupy, regardless of whether we have full financial control over these assets. We use an equity share approach to accounting, meaning that where assets are concerned, GHG emissions are weighted by ownership stake. For example, an ownership stake of 25% results in 25% of the associated total emissions for that asset in our pathway. While we report publicly on an equity basis, we measure and manage emissions internally across the full building using an operational control approach.

# Energy use in buildings (scope 1, scope 2 and scope 3: energy use by tenants)

We have attributed energy consumption between Grosvenor and tenants in alignment with the GHG Protocol. The emissions resulting from energy use in Grosvenor-controlled areas, including base building and common spaces, are included within our operational Scope 1 and 2 boundaries. Tenant-controlled areas are included in Scope 3.

To calculate carbon emissions from energy use in buildings, we multiplied energy consumption by corresponding emissions factors using a market-based approach. For assets missing consumption data, energy use is estimated by multiplying the floor area by an energy benchmark. This benchmark is drawn from Energy Star Portfolio Manager (ESPM) Target Finder intensity factors, which are based on the US Commercial Buildings Energy Consumption Survey (2012) and regional data collected through ESPM.

# Scope 3 purchased goods & services & capital goods

Emissions in these categories are calculated using a spend-based approach. Procurement spend is multiplied by US Environmentally Extended Input Output (EEIO) emission factors for the relevant commodity or service. Construction-related spend for specific development projects is included in embodied carbon.

# Scope 3 embodied carbon

Emissions from project-based development activity have been calculated using floor area based carbon intensity factors. Factors are specific to property type and are either derived from a Life Cycle Analysis (LCA) model of the structure and exterior for a typical development project or from the Carbon Leadership Forum (CLF) embodied carbon benchmark database. The carbon intensity factors were multiplied by the total floor area of respective development assets with substantial completion in the reporting year.

# Scope 3 upstream leased assets

Emissions from upstream leased assets includes Grosvenor leased corporate office space. Emissions were estimated using a floor areabased carbon intensity factor.

# Scope 3 employee commute

Employee commute emissions are comprised of two aspects: physical commuting from employees' homes to Grosvenor offices; and work from home emissions associated with remote work. Employee commute emissions were calculated by distributing the commuting distance of FTEs across transportation modes based on regional transportation commuting statistics, then multiplying by the applicable emission factors from US EPA based on transit mode.

Work from home emissions were calculated in alignment with guidance from Anthesis Work from Home White Paper (referencing IEA 2018). To estimate the incremental amount of electricity and natural gas attributable to remote work, remote FTE employees by country are assigned daily incremental energy consumption intensities calculated based on geographic region. Energy consumption is then multiplied by the appropriate emission factors to calculate the emission from remote employees.

# Scope 3 other

This includes carbon emissions from upstream transmission and distribution of energy, business travel, and water use. Emissions from these categories have been calculated using primary or estimated activity data and emissions factors published by the US EPA and UK DEFRA. Business travel was calculated by multiplying distance and type of travel by relevant emission factors. Water consumption was estimated using a floor area-based intensity factor developed from primary activity data in 2019. Water supply and treatment emissions were calculated by this consumption by the appropriate emission factors.

### **Exclusions**

## **Tenant Waste**

Tenant waste is currently not included in our pathway due to lack of actual data, and is currently an optional accounting category.

# Structured Development Finance (SDF)

This aspect of our business is currently excluded from our pathway until regulations and legislation around this type of business is fully determined. We anticipate including SDF in a future update once that guidance is available.

# Forecast Methodology

### **Business as usual forecast**

We believe it is important to measure and track our decarbonization efforts relative. to our base year, 2021, as well as relative to business projections in our target year. 2030. Using information from our strategic plan and development pipeline, as well as our understanding of municipal decarbonization regulations in our markets, we developed a business as usual forecast. Individual forecasts based on market, property type, and existing vs new assets were developed, then aggregated to develop a single, organization-wide forecast. Some emissions sources are relatively linear in nature while others, such as embodied carbon, are highly variable year-over-year. The business-as-usual forecast does not reflect grid decarbonization; however, our reduction plan distinguishes between grid decarbonization and Grosvenor-led efforts so that we can better track the impacts of our action.

Our Pathway forecast will be revised over time as new information becomes available. As with our baseline, all emissions are reported based on our equity stake in each asset.

# **Pathway forecast**

In developing our forecast, we took a portfolio approach that reflects the cumulative impact of multiple reduction measures. Where these measures are interactive, these complexities are built into the forecast. For example, electrification efforts drive an increase in electricity consumption, which then requires further renewable energy procurement. As with our business-as-usual forecast, our net zero pathway forecast will be revised over time as new information becomes available. Asset-related emissions are reported based on our equity stake in each asset. Our forecast includes the following:

- Reduction in emissions related to Scope 3 embodied carbon due to improved data (EPDs), low-carbon development policies, and preferred low-carbon material and vendor selection.
- Reduction of remaining emissions from Purchased Goods & Services and Capital Goods due to improved data, supplier engagement and preferred vendor selection.
- Reduction in Scope 2 and Scope 3 emissions related to electricity consumption in our buildings due to grid cleaning in the markets in which GPA operates. This includes base building as well as common and tenant space.
- Reduction in remaining Scope 1, 2 and 3
   emissions related to natural gas and electricity
   consumption due to energy efficiency projects
   across base building and downstream leased
   assets.

- Reduction in remaining Scope 2 and Scope 3 emissions related to electricity consumption due to increased procurement of renewable energy (using market-based approach).
- Reduction in remaining natural gas consumption via electrification projects in existing or acquired assets. This reduces Scope 1 and Scope 3 emissions by decreasing natural gas consumption and increases Scope 2 and 3 emissions by increasing electricity consumption.
- Non-material reductions across other emissions sources are consolidated within our pathway. This includes investments in the energy efficiency of our upstream leased assets; and in water conservation efforts, which limit the energy required to treat and deliver water to our buildings.
- We anticipate purchasing carbon credits and renewable energy credits in 2030 to compensate for residual emissions. We view carbon credits as an impactful and supplemental action to our efforts to decarbonize within our business and value chain. Our first priority is to invest in efforts to avoid, reduce and replace sources of emissions.

**Disclaimer**: Certain information contained in this report, including, but not limited to, the net zero carbon Pathway and the targets set within, are forward-looking statements regarding Grosvenor's goals and objectives, and are based on current expectations, assumptions, estimates, projections, opinions and beliefs. Forward-looking statements are inherently uncertain, and actual results may differ materially from those reflected within. Grosvenor does not assume any obligation to update such information, whether as a result of new information, future developments or otherwise, except as required by law.

