



PARKWAY HOUSE

ONE PLANET ACTION PLAN

PREPARED FOR:

windmill

OPL ENDORSED



One Planet
Living®

Global
Leader 2024

Windmill honours all First Nations, Inuit, and Métis peoples and their valuable past and present contributions to this land. The traditional territory of the Algonquin Anishnaabe Nation is honoured in Ottawa.



TABLE OF CONTENTS

6	SECTION 1 INTRODUCTION
8	SECTION 2 PROJECT CONTEXT
12	SECTION 3 WHAT MAKES THIS SITE UNIQUE
16	SECTION 4 OUR PLAN

PARKWAY HOUSE AT A GLANCE

ZERO CARBON ENERGY



- The project is zero carbon and combustion free

ZERO WASTE



- 90% of waste diverted during demolition and construction

EQUITY AND ECONOMY



- Create jobs for equity seeking groups

TRAVEL AND TRANSPORT



- 25% of parking stalls with Level 2 EV chargers
- 3 low carbon mobility options provided
- 0.5 Parking ratio per unit

HEALTH AND HAPPINESS



- Bikescore of 85
- 95% of products meet LEED Volatile Organic Compounds (VOC) requirements





SUSTAINABLE WATER



- 50% of total potable water reduced

CULTURE AND COMMUNITY



- 1 Community Benefits Plan
- 1 Eco-concierge program implemented

LAND USE AND NATURE



- 30% of site covered by green, open and outdoor amenity spaces.

MATERIALS AND PRODUCTS



- 420 kgCO₂e/m² Embodied carbon intensity

LOCAL AND SUSTAINABLE FOOD



- At least one sustainable food initiative



SECTION 1 INTRODUCTION

Overview

Parkway House is a non-profit care facility for men and women with disabilities, located in Ottawa's Lincoln Heights neighbourhood. The project presents an opportunity to replace the existing building with a new, modern facility that can better accommodate its residents, and create long-term sustainable future for the organization, by leveraging their underutilized land. Alongside a new home for the Parkway House facility, the site will feature new housing, designed and constructed to be the most sustainable new development projects in Ottawa.

Humanity is at a crossroads.

In North America, we are consuming at a rate that far exceeds our planet's resources. We are consuming as if we have not **one** planet, but **five**.

As we enter what many call the defining decade to address our warming climate, the outlook remains bleak. If all the pledges made by global governments were fulfilled, we would still fall short of limiting warming to 1.5C. The heat waves, floods and wildfires of 2021 clearly signal that action is needed to avoid a climate tipping point.

Moreover, we are under delivering on many of our social foundations, adding growing social discontent and widening inequality to our list of challenges. As a result, we are witnessing unprecedented upheaval in life as we know it.

A bold, new vision to ensure our future.

While Canada’s commitment to the Paris Accord is a good start, reducing our carbon emissions is no longer enough. We need to actively regenerate the living systems on which we depend, and for that we need a bold, new vision.

That vision is “one planet living”. At its heart, one planet living is a vision of a future where it is both attractive and affordable for people to live happy, healthy lives within the finite limits of our one planet’s resources. It is a world view that allows us not only to reconnect with and live in balance with nature but to actually regenerate nature. It also allows us to regenerate our relationships with one another.

One planet living is the type of bold vision we need to align universal principles of social and environmental sustainability with the way we design, build, and interact with our communities.

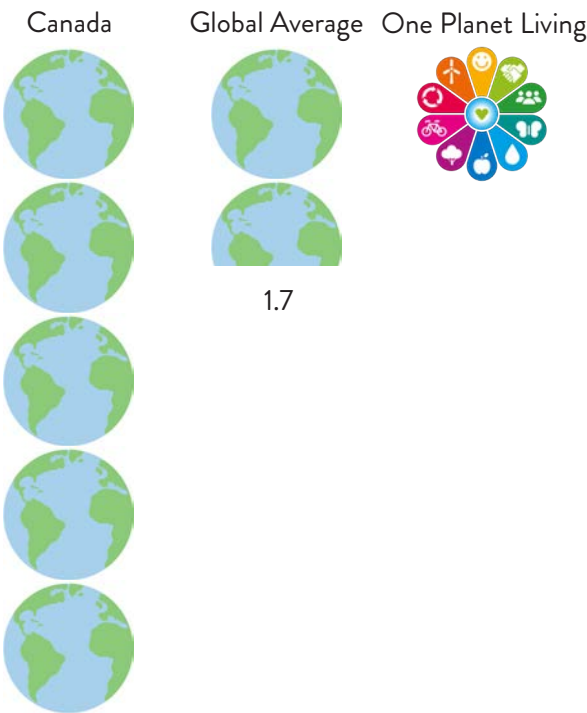
One Planet Living®: A framework for sustainability.

As well as being a world view, one planet living—or One Planet Living®—is also a framework to help citizens, companies and governments create a sustainable future.

At Parkway House, One Planet Living is being used to guide our approach to developing a complete and comprehensive plan that will tackle climate change, build resilient communities, and regenerate the living systems around us.

One Planet Living® is unique in that it is universal. Its 10 Guiding Principles cover all aspects of social, economic, and environmental sustainability. It addresses all phases of a project, from design to construction, through to operations, programming, and personal lifestyle choices. In this way, One Planet Living embeds sustainability into a projects’ DNA rather than making it a stand-alone topic.

It also reminds us that sustainability is a journey that doesn’t end when the doors to a new building open. As we get deeper into the decade that will define the legacy we leave future generations, it’s now more important than ever that we find ways to collaborate and walk this journey together.





SECTION 2 PROJECT CONTEXT

This preliminary One Planet Action Plan is a product of this projects' local context. Current site conditions, local policy, best practice, etc. have all influenced this project by acting as filters through which the Plan has been developed. In short, they have led to a customized response to sustainability that addresses the opportunities the project presents.

The Site

Parkway House Ottawa and District.

Parkway House is situated on a 2.56-acre site at 2475 Regina St. The development is currently owned and occupied by the Parkway House Ottawa and District, a non-profit care facility providing long-term supportive housing to adults with severe physical challenges.

Parkway House Ottawa and District is dependent on external funding, primarily comprising of fluctuating community donations. Assessment of the existing facility approximates \$160,000 needed to keep Parkway House running. As a project collaborator, this development will ensure this vital community asset can be better supported in the years to come. Windmill is committed to providing a new home for Parkway House in an effort to ensure a long-term sustainable future for their operations.

Design

The project consists of a 388,000 sq. ft. mixed-use development comprised of one 18 storey and one 24 storey high-rise condominium towers, one of which to include the new Parkway House facility and will be located to the Northwest end of the site.

The current design offers an opportunity to explore innovative design and construction strategies to reduce embodied and operational carbon through the use of techniques such as cross-laminated timber.



Community Context

Local Paths and trail networks

Parkway House is a short walk away from the future Lincoln Fields LRT Station as well as surrounding NCC trails and cycling paths.

From Parkway, a multi-use pathway enables pedestrians or cyclists to travel East towards downtown Ottawa or Carleton University, West along the Ottawa River, or South towards Barrhaven and Bells Corners. Irrespective of the direction chosen from the Parkway House itself, pedestrians or cyclists would rarely cross a street, providing safe and continuous connections.

Furthermore, Sunday Bike Days in the summer see the closure of the NCC Parkway, providing an enhanced cycling experience to and from downtown Ottawa. According to walkscore.com, the site has a cycling score of 88 (very bike-able) and a transit score of 76 (excellent transit).

Access to nature.

Parkway House is located within walking distance of various bodies of water, significant greenspace owned and protected by the National Capital Commission (NCC), as well as large parks. This includes the Ottawa River and Mud Lake, a 60 hectare complex of wetlands that is habitat for a wide diversity of animal species, and in a major migratory corridor. Mud Lake is one of the most popular urban sites for birdwatching in Canada, and is identified as an Area of Natural and Scientific Interest by the Province.

Amenities and recreation.

The site is a short distance away from a variety of recreational activities, including Ottawa City Rafting, Britannia Yacht Club, Tennis Centre West Ottawa, as well as NCC's Britannia Winter Trail – a new cross-country ski trail set to be expanded over the next couple of years.

Policy Context

Ottawa Official Plan.

In October 2021, the City of Ottawa approved a new Official Plan that will guide growth and redevelopment in Ottawa for the next 25 years. The Plan centers around five big moves, and is supported by several other plans that provide additional layers of detail around the City's ambitions.

1. Growth
2. Mobility
3. Urban Design
4. Resilience
5. Economy

Energy Evolution.

Energy Evolution is Ottawa's action plan toward reducing greenhouse gas emissions to zero by 2040 within the corporation, and by 2050 city-wide. Its vision is to transform Ottawa into a thriving city powered by clean, renewable energy.

Energy Evolution is one of eight priorities in the Climate Change Master Plan – the City's overarching framework to reduce greenhouse gas emissions and respond to climate change imperatives.

Ottawa High Performance Development Standard

Stemming from the Official Plan, the HPDS will set performance targets, for new construction, every 4 years to become more stringent over time to ensure buildings are net-zero. A final draft version of the HPDS is currently available for public consultation, with roll out expected in the summer of 2022.



Demographic Context

Socioeconomic and demographic context.

Located in Lincoln Fields, a sub-section of the Britannia Village neighbourhood, the project site is characterized by a notable low income and aging population.

According to the Ottawa Neighbourhood Study (2021):

- 61% of Britannia Village residents (including Lincoln Fields) earn an after-tax household income of under \$50,000 per year
- 1 in 3 (27%) adults residing in this community live in low income, compared to 11.6% Ottawa-wide
- Britannia Village has 81 units of social and affordable housing per 1000 people versus the city average of 24 units
- A third of the neighbourhood's residents live alone (29%)
- seniors (65+) make up 24% of the local population

Cultural Context

First Nations.

The site is located on unceded Algonquin Anishinaabe land.

A multicultural community.

Parkway House is situated in Britannia Village - one of the city's most demographically diverse communities.

According to the Ottawa Neighbourhood Study (2021):

- 27% of Britannia Village residents were born outside of Canada
- 23% of Britannia Village residents self-identify as members of a visible minority group
- New immigrants make up 8% of the neighbourhood's residents (more than twice Ottawa's average of 3.7%)

Development Context

While there are many factors that go into development, the following are notable for the impact they have had shaping this Action Plan.

Climate Change.

- The climate crisis is significantly shaping the way we talk about, and plan, our communities. Ottawa is increasingly experiencing warmer, wetter and more unpredictable weather, with more extreme heat, wind, rain and snow recorded in recent years. Under a high-emission scenario, the City is projected to experience four times as many days over 30 degrees Celsius by the 2050s – that’s an increase to 43 days per year from the current 11.

Transit-oriented development.

- Phase 2 of Ottawa’s Light Rail Transit (LRT) is currently being constructed, with a future station planned for Lincoln Fields. LRT is leading to densification across the City where stations are being planned or recently opened as part of Phase I. Lincoln Fields is no different with significant development underway at the former Lincoln Fields Shopping Centre.

Other development trends

- Affordable Housing. There are growing calls to action for equity, justice and anti-racism, including the provision of more affordable housing.
- COVID Pandemic. The global pandemic highlighted the need for good quality outdoor spaces and the importance of indoor air quality.

Windmill Development Group

Windmill was conceived from a belief that there must be a way to both inspire and exemplify the net positive eco-social impact possible by applying a holistic sustainability lens to development.

With a commitment to pursuing One Planet Living (OPL) endorsement across its projects and an internal ‘impact standard’ to guide its work, Windmill continues to lead the way in sustainable development.

Parkway House presents an opportunity for Windmill to continue its journey towards advancing better outcomes for the environment and our communities, and further differentiate itself as a leader in sustainable development.



Rendering of the new Lincoln Heights LRT station



SECTION 3

WHAT MAKES PARKWAY UNIQUE

Parkway House is not just an infill project. Originated as a means to create new, modern space for Parkway House Ottawa & District, its wider goal to create a sustainable community further sets it apart from other developments around Ottawa.

To guide our path to sustainability, we are using the One Planet Living (OPL) sustainability framework. One Planet Living ensures sustainability is considered from a triple bottom line perspective – **people, planet and prosperity**. One Planet Living helps create thriving, ecologically responsible communities through the development of an Action Plan.

Building on the site's context and dedicated to delivering on these opportunities, Windmill has created this preliminary One Planet Action Plan to inspire the community, our stakeholders and the design team. It also establishes direction for the project.

A One Planet Community

The Parkway House project is pursuing international endorsement as a One Planet Living community. This Plan will eventually be submitted to Bioregional, the third-party verifier of One Planet Living community plans, who will evaluate Parkway House's outcomes, indicators, targets and performance requirements.

If Bioregional endorses the project's One Planet Action Plan, Parkway House will become only the third One Planet Living community in Canada and the second in Ottawa.

Our Guiding Themes

While the ten One Planet Living Principles ensure a strong sustainable foundation for our project, it is the Big Moves that will give it a unique identity. The Big Moves act as Parkway's north star, influencing how we design and build the project, how it should be operated, and how the project can influence the lifestyle choices and behaviour of future residents. The Big Moves are Year-Round Natural Connections, Zero Carbon Living, and A Welcoming Community.



Year-Round Natural Connections

Parkway House is ideally located to encourage active living. Just a few steps from the NCC's trail system, a short distance from an abundance of nature, and with various recreational amenities nearby, the site will enable healthy and active lifestyles. Opportunities to consume or grow local food will further support mental and physical health.

Under this Big Move, there is a focus on:

- active transportation
- micro-mobility
- encouraging outdoor fitness
- partnerships
- urban agriculture

Zero Carbon Living

Parkway House will reduce its environmental impact and, where possible, positively contribute to the surrounding ecosystem and climate system. It strives to demonstrate leadership in GHG reductions through all its facets.

Under this Big Move, there is a focus on:

- embodied carbon
- electric vehicles
- high performance building envelope
- thermal comfort
- operational emissions

Welcoming and Inclusive Community

Parkway House Ottawa & District has a reputation that one can only hope to emulate. Inspired by our project partner, the new development will be an inclusive community that honours the local culture and spirit. It is a place of pride, sharing, and celebration. It is accessible to residents and visitors of all ages, abilities, and cultural and economic backgrounds.

Under this Big Move, there is a focus on:

- cultural celebration spaces
- diverse voices to increase perspectives
- affordability
- long-term financial health of Parkway House Ottawa & District
- welcoming and healthy spaces

Our Approach

The Parkway House One Planet Action Plan is a living Plan. It will continue to evolve with new thinking, innovation, and local and global trends. In addition, ongoing collaboration with the design team and community leaders will continue to foster new ideas that will help us deliver a building we, and the community, can be proud of. In this way, Windmill will ensure the Plan stays meaningful, relevant, and impactful.

With that in mind, the Parkway House One Planet Action Plan is also grounded in several initiatives that create an unique foundation of sustainability for the project. These include a foundational commitment to carbon, community, sustainable living and innovation.



Carbon

The Parkway House project represents the first of many near-zero carbon residential projects. From the very inception of the development, Parkway House has embraced the commitment to 'Zero Carbon' aligning itself with global best practices.

As the construction industry increasingly focuses on environmentally responsible solutions, low carbon structures emerge as a promising avenue to address climate change concerns and create more sustainable and resilient built environment.

By choosing low carbon structures over traditional materials, the project will be able to reduce embodied carbon while promoting sustainable construction practices.

As part of incorporating low carbon structures, Windmill is exploring the use of alternative pre-fabricated systems, for the design of the residential towers, to reduce both operational and embodied carbon.

Additionally, the incorporation of a geo-exchange systems, the potential utilization of sewer heat recovery and an all electric solution for heating and cooling further supports the decarbonization of the built environment.

As a result, Parkway House will significantly reduce greenhouse gas that results from operating the building. In fact, the fully electric building will only use natural gas (a fossil fuel) for back up power when needed.

Community

Windmill is committed to creating communities that leave a positive impact. As leaders in the development industry, we have an obligation to learn from, and deliver benefits to each of the communities we build in.

Our corporate community benefits plan ensures we understand the communities in which we build, specifically the local culture, history and needs. This plan is tailored for every Windmill project, ensuring we provide social and economic benefits to the local community.

The Parkway House Community Benefits Plan includes social hiring requirements to provide opportunities to equity-seeking groups, promote diversity, equity and inclusion through social procurement, and support local workforce development.



One Planet Living

Individually, our lifestyles and day to day choices have a significant impact on both our communities and the environment. The way we get to work, how we dispose of waste, and even our diets - collectively have profound ecological and social impacts. At Parkway House, our goal is to empower our residents to reduce these impacts.

Our approach to one planet living begins by paying attention to the role a home plays in our ecological footprint. At Parkway, residents will be provided with a head start towards one planet living simply by moving into a near-zero carbon building.

To continue the journey, residents will be introduced to a new community committed to sustainable living. A walkable community rich in local amenities, supported by education and programming, lifestyle at Parkway House will strike a balance between modern comforts and eco-conscious choices. Together, a healthier planet is within reach.

Innovation

The project's use of prefabricated envelope systems contributes to a reduction in construction waste, further reducing ecological footprint of the development. Unlike conventional materials, the prefabricated system enables flexibility to meet market and housing demands while minimizing disruption to the surrounding neighborhood.

The project is also exploring the integration of indoor vertical farming solutions, aiming to provide healthy and sustainable food directly to the community.

Further fostering a sense of community, the project is providing housing for the residents of the existing 'Parkway House Ottawa and District' facility. This inclusion ensures both long-time and new residents to come together, share experiences and build connections. Through these practical solutions, the project aims to improve urban living while fostering a sense of community.



SECTION 4 OUR PLAN

The following One Planet Action Plan includes our aspirational outcomes, targets and requirements that will be used to guide the project team.

To meet specific outcomes under each Principle, Windmill has identified performance requirements that will help inform design and construction. As the project progresses through future stages, including operations and community life, additional performance requirements will be developed to create a culture of sustainability at Parkway House that stands long after Windmill is involved in the project.

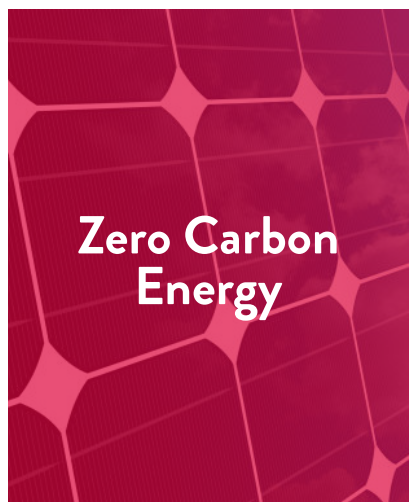
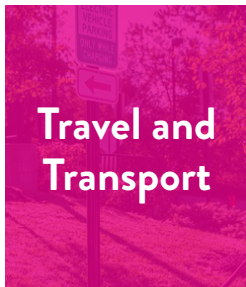
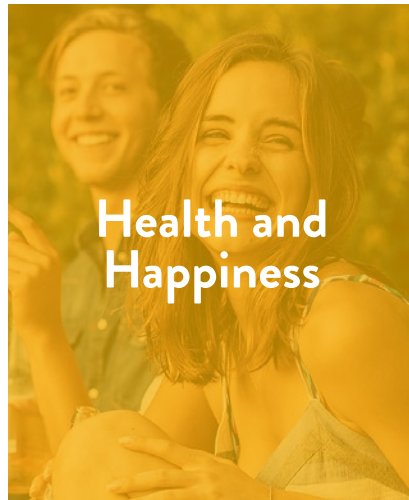
The performance requirements outlined in Appendix A are based on Windmill's experience developing precedent-setting sustainable communities and from best practices in sustainable design. They respond to the context with which the project is being developed and put us on track to achieve the Big Moves, pursue endorsement to One Planet Living, and achieve Ottawa's new High Performance Development Standard Tier 2.

While we will strive to achieve the performance requirements herein, we appreciate that the feasibility of certain performance requirements will become clearer as the project's design evolves.

Outcomes and Topic Areas

The One Planet Action Plan consists of suggested outcomes, targets, and performance requirements for each of the One Planet Living Principles. Although there is a clear separation of principle by color; the developed outcomes and topic areas are not as linear. Each of the principles and proposed strategies influence one another and are designed in cohesion to create a system that is connected and prosperous. This idea of coherent principles is represented through the multiple micro One Planet Living petals on each topic area.







HEALTH AND HAPPINESS

Encouraging active, social, meaningful lives to promote good health and wellbeing.

OUTCOMES

HH1

Residents are among the happiest in Canada

HH2

Residents are among the most physically active in Canada

HH3

Indoor and outdoor spaces are healthy, welcoming and comfortable

TOPIC AREAS



PHYSICAL HEALTH



SOCIAL WELLBEING



HEALTHY LIVING

Outcome ID	Key Performance Indicators	Baseline	Target
HH 1	% positive responses on self-reported health and happiness survey	67%	75%
HH 2	Walkscore or Bikescore	61	>80
HH 2	Minutes per week of moderate to vigorous physical activity	150	180
HH 3	% Of products that meet LEED Low emitting material requirement	N/A	95%
HH 3	% of residents that indicate common spaces are welcoming and comfortable	N/A	>75%



HEALTH AND HAPPINESS

Encouraging active, social, meaningful lives to promote good health and wellbeing.

STRATEGIES

HH1: Residents are among the happiest in Canada

- Administer occupant comfort survey to collect anonymous responses regarding building amenities, programming, lighting, thermal comfort, air quality etc.

HH2: Residents are among the most physically active in Canada

- Locate the project close to transit stations, walking and biking trails.

HH3: Indoor and Outdoor spaces are healthy, welcoming and comfortable

- Develop an indoor air quality strategy that addresses carbon monoxide; eliminated fireplaces, woodstoves or unvented combustion appliances; ensures high quality filtration; ensures low emitting products; and prohibits smoking before and after occupancy
- Develop and implement a construction indoor air quality management plan
- Capture dirt and other particulates at all regularly used entrances.





EQUITY AND LOCAL ECONOMY

Creating safe, equitable places to live and work which support local prosperity and international fair trade

OUTCOMES

EE1

Economic development opportunities are available to equity-seeking groups

EE2

The project delivers local economic benefits

TOPIC AREAS



JOB OPPORTUNITIES



LOCAL TRADES



UNIVERSAL DESIGN

Outcome ID	Key Performance Indicators	Baseline	Target
EE1	% of construction jobs created for equity seeking groups	N/A	20%
EE2	# of total jobs created	N/A	TBD
EE2	% of residents that regularly shop local	66%	>75%



EQUITY AND LOCAL ECONOMY

Creating safe, equitable places to live and work which support local prosperity and international fair trade

STRATEGIES

EE1: Economic development opportunities are available to equity-seeking groups

- Create jobs for equity seeking-groups

EE2: The project delivers local economic benefits

- Prioritize hiring of local workers
- Support local economy by promoting local businesses to residents





CULTURE AND COMMUNITY

Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.

OUTCOMES

CC1

There is a culture of sustainability that is rooted in indigenous knowledge and wisdom

CC2

All residents feel a sense of belonging, regardless of physical ability, ethnic identity, age or economic means

CC3

The design embodies local culture and/or history to reveal its narratives

TOPIC AREAS



EDUCATION AND AWARENESS



LAND ACKNOWLEDGEMENT



PLACEMAKING

Outcome ID	Key Performance Indicators	Baseline	Target
CC1	# of Community Benefits Plan Implemented	N/A	1
CC2	Eco-Concierge program implemented	N/A	Yes
CC2	% of residents who know all or most of their neighbours	24%	75%
CC3	# of artistic expressions installed onsite	N/A	1
CC3	% of residents familiar with the history of the site	N/A	>75%



CULTURE AND COMMUNITY

Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.

STRATEGIES

CC1: There is a culture of sustainability that is rooted in indeneous knowledge and wisdom

- Create and implement a Community Benefit Agreement

CC2: All residents feel a sense of belonging, regardless of physical ability, ethnic identity, age or economic means

- Implement eco-concierge
- Actively enagage with residents through an Eco-Concierge program to nurture a culture of sustainability that values environmental and social advocacy, participation and volunteerism.

CC3: The design embodies local culture and/or history to reveal its narratives

- Enhance the beauty of the site, and support local artists, by installing one or more artistic expressions.
- Provide educational materials to residents to explain the projects' sustainable features and local history.





LAND USE AND NATURE

Protecting and restoring land and marine systems for the benefit of people and wildlife.

OUTCOMES

LN1

The natural cycles and resource flows of the local ecosystems are respected and regenerated

LN2

Connections to the surrounding natural beauty and landscape create a love of nature

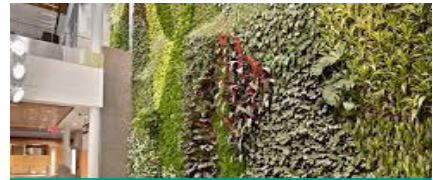
TOPIC AREAS



PROTECT AND RESTORE HABITAT



ACCESS TO NATURE



BIOPHILIC DESIGN

Outcome ID	Key Performance Indicators	Baseline	Target
LN1	Project specific biodiversity strategy	0	1
LN2	% of site covered by green, open and outdoor amenity spaces	N/A	30%
LN2	% of dwelling units with unobstructed, quality views to the outdoors	N/A	100%



LAND USE AND NATURE

Protecting and restoring land and marine systems for the benefit of people and wildlife.

STRATEGIES

LN1: The natural cycles and resource flows of the local ecosystems are respected and regenerated

- Plant trees along street frontages to encourage shade and enhance biodiversity on and around the site.
- Plant only native, adaptive or drought-tolerant vegetation and consider our pollinator friends and other species in our planting strategy.
- Reduce bird collisions utilizing bird friendly glazing and/or using visual markers on glass.
- Ensure exterior fixtures are dark sky compliant.
- Install green and/or cool roof surfaces across the entire available roof area.
- Treat the site's non-roof hardscape with high albedo paving materials and/ or open grid pavement systems.

LN2: Connections to the surrounding natural beauty and landscape create a love of nature

- Enable residents to connect with nature by providing outdoor amenity spaces.
- Design landscape encouraging 4 season interaction with nature
- Provide unobstructed view to the outdoors to enhance the health benefits associated with direct views of nature.
- Implement indoor biophilic design strategies.



SUSTAINABLE WATER

Using water efficiently, protecting local water resources, and reducing flooding and drought.

OUTCOMES

SW1

Residents use less potable water

SW2

Water is celebrated as the source of life

SW3

Groundwater and surface water are protected

TOPIC AREAS



INDOOR WATER USE



OUTDOOR WATER USE



RAINWATER CAPTURE

Outcome ID	Key Performance Indicators	Baseline	Target
SW1	Water consumption per resident (m ³ /year)	76	36
SW1	% reduction of indoor potable water	N/A	50%
SW2	# of water features	N/A	1
SW3	% of rainwater infiltrated onsite	50%	50%



SUSTAINABLE WATER

Using water efficiently, protecting local water resources, and reducing flooding and drought.

STRATEGIES

SW1: Residents use less potable water

- Install industry leading low flow fixtures and fittings.
- Do not use potable water for irrigation.
- Provide meter and sub-meters in appropriate locations to measure the water consumption on the project, and educate used on consumption.

SW2: Water is celebrated as the source of life

- Implement at least one water feature

SW3: Groundwater and surface water are protected

- Retain rainwater on site through infiltration and other low impact development strategies.
- Protect water quality through the long-term removal of total suspended solids from run-off leaving the site.





LOCAL AND SUSTAINABLE FOOD

Promoting sustainable, humane farming and healthy diets that are high in local, seasonal, organic food and vegetable protein.

OUTCOMES

LF1

Residents have access to affordable, healthy, local food

LF2

The carbon footprint associated with food is minimized

TOPIC AREAS



FOOD SECURITY



COMPOSTING



COMMUNITY GARDEN

Outcome ID	Key Performance Indicators	Baseline	Target
LF1	# of sustainable food initiatives	N/A	1
LF2	% reduction in meat/ dairy consumption	N/A	25%



LOCAL AND SUSTAINABLE FOOD

Promoting sustainable, humane farming and healthy diets that are high in local, seasonal, organic food and vegetable protein.

STRATEGIES

LF1: Residents have access to affordable, healthy, local food

- Implement one of the sustainable food initiatives
 - CSA Baskets
 - Urban Agriculture
 - Food programs
 - Community gardens
 - Education programs

LF2: The carbon footprint associated with food is minimized

- Provide education materials to promote plant based diet, and reduce emissions associated with high-carbon diets.





TRAVEL AND TRANSPORT

Reduce the need to travel, and encourage walking, cycling and low carbon transport.

OUTCOMES

TT1

Low carbon transportation options are the primary means of transport for residents and visitors

TT2

Parking infrastructure is adaptable and flexible for future re-use and growth

TOPIC AREAS



EV'S



PUBLIC TRANSIT



CYCLING PATHWAY

Outcome ID	Key Performance Indicators	Baseline	Target
TT1	# of low carbon mobility options for residents	N/A	3
TT2	Parking ratio	0.5	0.5
TT2	% of parking spaces with Level 2 EV chargers	N/A	25%
TT2	% of parking spaces with EV Ready Infrastructure	N/A	100%



TRAVEL AND TRANSPORT

Reduce the need to travel, and encourage walking, cycling and low carbon transport.

STRATEGIES

TT1: Low carbon transportation options are the primary means of transport for residents and visitors

- Locate the project close to transit station(s).
- Provide at least 1 bike parking space for each residential unit.
- Provide bike parking facilities that can accommodate electric bikes.
- Design for future micro mobility options, such as scooters and bike share programs.
- Provide safe, direct, universally accessible pedestrian routes that connect to off-site pedestrian and bike networks,
- Reduce single occupancy vehicle trips by encouraging active mobility.

TT2: Parking infrastructure is adaptable and flexible for future re-use and growth

- Minimize the impacts associated with building on-site parking.
- Ensure all parking is electrified with no less than 25% of spaces installed with level 2 chargers.





MATERIALS AND PRODUCTS

Using materials from sustainable sources and promoting products which help people reduce consumption.

OUTCOMES

MP1

Embodied carbon is reduced

MP2

Building materials are culturally appropriate and provide a healthy indoor environment for all occupants

MP3

Materials for building construction and operations are selected to minimize their life cycle impact

TOPIC AREAS



FSC CERTIFIED WOOD



RESILIENT MATERIALS



SUSTAINABLE PRODUCT PURCHASE

Outcome ID	Key Performance Indicators	Baseline	Target
MP1	Embodied carbon intensity (kgCO ₂ /m ²)	N/A	420
MP2	No added urea formaldehyde products in the project	No	Yes
MP3	% of building occupants who report purchasing sustainable products and supplies	N/A	75%



MATERIALS AND PRODUCTS

Using materials from sustainable sources and promoting products which help people reduce consumption.

STRATEGIES

MP1: Embodied carbon is reduced

- Conduct a life cycle assessment and identify low carbon material alternatives.
- All wood in the building will be procured from sources that follows sustainable forestry practices, such as FSC certification.
- Where possible, procure local materials.
- Purchase materials that have an environmental product declarations (EPD's)
- Source responsible materials, such as those with extended product responsibility; include bio-based content; are reuse; include recycled content; and/or are within 800 km of the project site.

MP2: Building materials are culturally appropriate and provide a healthy indoor environment for all occupants

- Ensure no product has added urea formaldehyde
- Install moisture control measures in wet areas such as kitchen, bathrooms and laundry rooms

MP3: Materials for building construction and operations are selected to minimize their life cycle impact

- Educate residents on how to purchase sustainable products.





ZERO WASTE

Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.

OUTCOMES

ZW1

Residents generate less waste

ZW2

The construction process generates less waste

ZW3

A sharing culture is developed and supported by building occupants

TOPIC AREAS



CONSTRUCTION WASTE



RECYCLING



COMMUNITY SHARING

Outcome ID	Key Performance Indicators	Baseline	Target
ZW1	% of units with organic and recyclable collection systems	N/A	100%
ZW1	Total residential waste generated (kg/person/year)	340	255
ZW2	% of waste diverted from landfill	N/A	90%
ZW3	# of initiatives for sharing, selling, gifting or refurbishing used durable goods	N/A	3



ZERO WASTE

Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.

STRATEGIES

ZW1: Residents generate less waste

- Provide cabinet space in all kitchen to support the segregated collection of recyclables, organics and garbage.
- Provide a central waste collection and waste diversion facility on the ground floor for garbage, recycling and organics collection.
- Provide space for bulky items, and a separate area for hazardous waste collection.

ZW2: The construction process generate less waste

- Develop and implement a construction waste management plan to divert at least 90% of the total construction and demolition waste generated from landfill

ZW3: A sharing culture is developed and supported by building occupants

- Provide opportunities for residents to donate and/or swap household items, furniture, etc. in good conditions.





ZERO CARBON ENERGY

Making buildings energy efficient and supplying all energy with renewables.

OUTCOMES

ZC1

There are zero operational greenhouse gas emissions

ZC2

Building occupants enjoy superior indoor thermal comfort year-around

TOPIC AREAS



GEO THERMAL



ENERGY STORAGE



OPERATIONAL CARBON

Outcome ID	Key Performance Indicators	Baseline	Target
ZC1	The project is zero carbon and combustion free	N/A	Yes
ZC2	Thermal Energy Demand Intensity (TEDI)(kWh/m ² /year)	N/A	<33



ZERO CARBON ENERGY

Making buildings energy efficient and supplying all energy with renewables.

STRATEGIES

ZC1: There are zero operational greenhouse gas emissions

- Do not install any equipment that requires combustion.
- Develop a commissioning plan and complete commissioning process to ensure the efficient operations of the systems.
- Provide meter and sub-meters in appropriate locations to measure the energy consumption on the project, and educate the users on consumption
- Design the building such that the majority of annual energy consumption is drawn from a geo-exchange system

ZC2: Building occupants enjoy superior indoor thermal comfort year-around

- Meet ambitious targets for Total Energy Demand Intensity (TEDI) and Total Energy Use Intensity (TEUI) through passive design strategies such as, a lower window to wall ratio; a passive house level prefabricated envelope; a lower solar heat gain coefficient for glazing; and, an air tight envelope.



Our Commitments

This project is targeting the following sustainability commitments

OHPDS - Tier 2

LEED BD+C v4 – Platinum

One Planet Living - Global Leader



To achieve these ambitious goals, each project applies our Impact Standard. This internally developed standard outlines more than 100 detailed performance requirements that ensure we can deliver on the certification and endorsement commitments we have made. The Impact Standard is further supported by several other documents that provide the detail necessary to support those working on our projects (see the image below).

Underlying the technical requirements is a process that ensures sustainability is woven into the DNA of the project. A robust engagement plan ensures everyone working on our projects understands sustainability, including the challenges we’re trying to solve and how we work together to deliver. This engagement touches everyone, including planners, project managers, our design and construction teams (including trades), marketing and sales teams and future residents themselves.

IMPACT STANDARD - Performance Requirements

