



PARKWAY HOUSE

PRELIMINARY ONE PLANET ACTION PLAN

PREPARED BY:

**URBAN
EQUATION**

INSPIRED BY:



May 2022

The City of Ottawa honours the peoples and land of the Algonquin Anishinabe Nation. The City of Ottawa honours all First Nations, Inuit and Métis peoples and their valuable past and present contributions to this land.

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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.

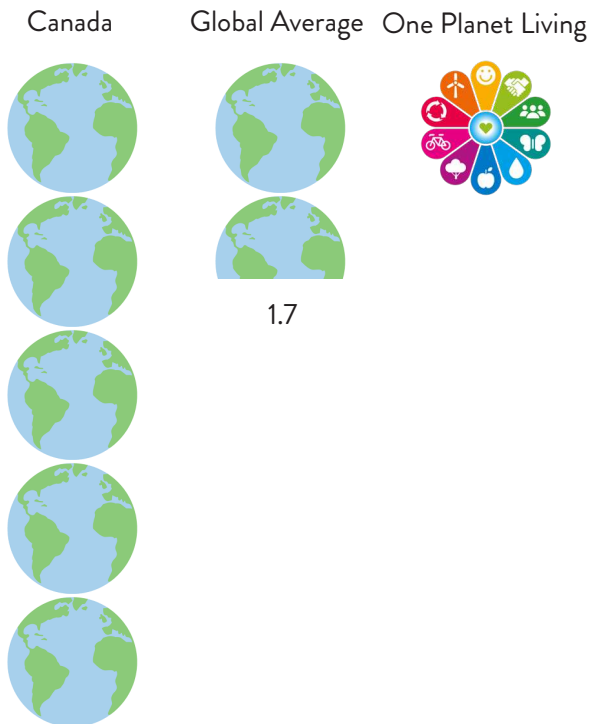
Moreover, we are under delivering on many of our social foundations, adding growing social discontent and widening inequality to our list of challenges. As a result, we are witnessing unprecedented upheaval in life as we know it.

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.



- Britannia Beach
- Mud Lake
- McEwen Park
- Parkway House
- NCC Multiuse Path
- Ottawa River
- Ambleside Park
- LH Playground
- New LH LRT Station

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 bikeable) 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

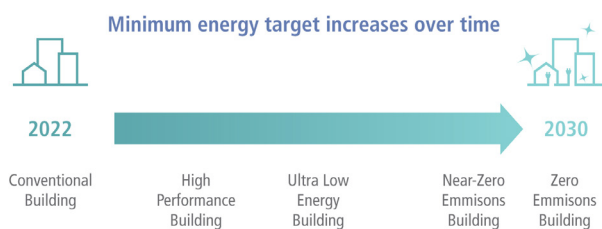
Energy Evolution.

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
- 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

SECTION 4 ONE PLANET ACTION 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.

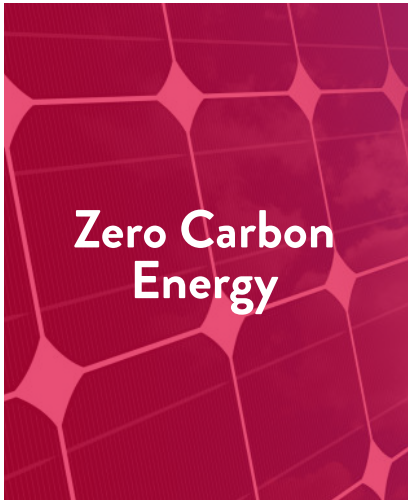
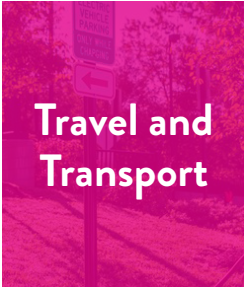
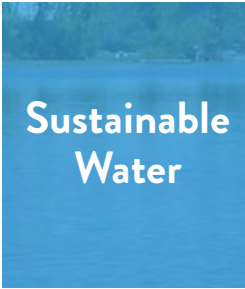
The performance requirements outlined in Appendix A (forthcoming) are based on Windmill's experience developing precedent-setting sustainable communities and from best practices in sustainable design. They respond to the context with which the project is being developed and put us on track to achieve 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

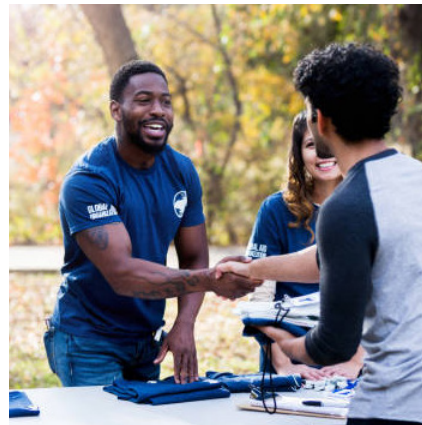
Residents and community-members are among the most physically active in Canada.

POTENTIAL TOPIC AREA



PHYSICAL HEALTH

Residents and community-members are among the happiest in Canada.



MENTAL HEALTH



SOCIAL WELLBEING



HEALTHY LIVING

Indoor and outdoor spaces are healthy, welcoming and comfortable.



NATURAL LIGHT



FRESH/AIR/VENTILATION



THERMAL COMFORT



ENHANCED AIR QUALITY



EQUITY AND LOCAL ECONOMY

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

OUTCOMES

Affordable and accessible options are available to all

POTENTIAL TOPIC AREA



AFFORDABLE HOUSING



UNIVERSAL DESIGN

Economic development opportunities are available to equity-seeking groups.



LOCAL TRADES



DIVERSIFIED ECONOMY

Residents, workers, and organizations engage in environmentally and socially responsible procurement practices.



JOB OPPORTUNITIES



CULTURE AND COMMUNITY

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

OUTCOMES

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

POTENTIAL TOPIC AREA



EDUCATION AND AWARENESS

The design embodies indigenous oral history to reveal its local narratives.



PUBLIC REALM



PLACEMAKING



LAND ACKNOWLEDGEMENT

All community-members feel a sense of belonging, regardless of physical ability, ethnic identity, age, or economic means.



SOCIAL GATHERING SPACES



LAND USE AND NATURE

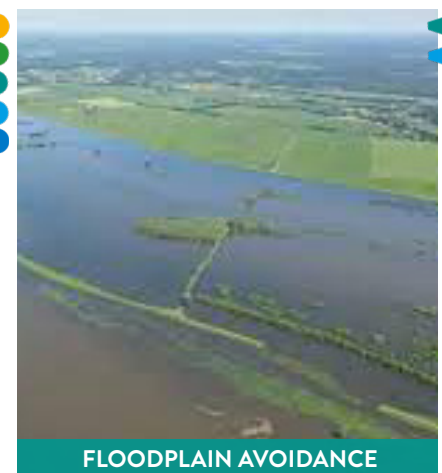
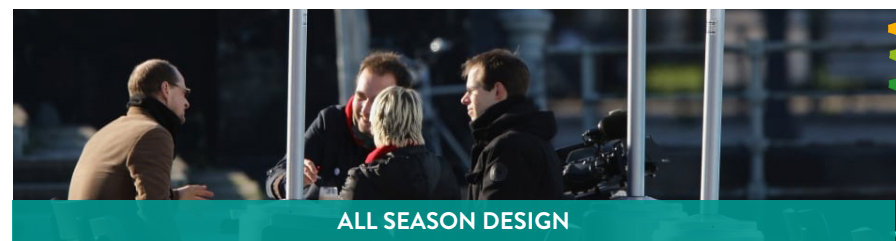
Protecting and restoring land and marine systems for the benefit of people and wildlife.

OUTCOMES

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

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

POTENTIAL TOPIC AREA





SUSTAINABLE WATER

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

OUTCOMES

The residents and community-members use less potable water.

POTENTIAL TOPIC AREA



OUTDOOR WATER USE



INDOOR WATER USE



WATER EDUCATION



RAINWATER CAPTURE

Groundwater and surface water are protected.



STORMWATER MANAGEMENT



RESTORATION

Water is celebrated as the source of life.



WATER AWARENESS



LOCAL AND SUSTAINABLE FOOD

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

OUTCOMES

Residents and visitors have access to affordable, healthy, local food.

POTENTIAL TOPIC AREA



URBAN AGRICULTURE



FOOD SECURITY

The carbon footprint associated with food is minimized.



CIRCULAR ECONOMY



FOOD WASTE



COMPOSTING

Community spirit is fostered through food.



FOOD GATHERINGS



CELEBRATE FOOD



EDUCATION



COMMUNITY GARDEN



TRAVEL AND TRANSPORT

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

OUTCOMES

Low-carbon transportation options are the primary means of transport for residents and community-members.

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

POTENTIAL TOPIC AREA



PUBLIC TRANSIT (LRT)



PEDESTRIAN FOCUSED



CYCLING PATHWAYS



EV'S



PARKING



ADAPTABLE DESIGN



MATERIALS AND PRODUCTS

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

OUTCOMES

Embodied carbon is reduced.

POTENTIAL TOPIC AREA



CERTIFIED TROPICAL WOOD



WASTE MANAGEMENT



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



RESILIENT MATERIALS

Materials for building construction and operations are selected to minimize their lifecycle impact.



CROSS-LAMINATED TIMBER



ZERO WASTE

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

OUTCOMES

Residents and community-members generate less waste.

POTENTIAL TOPIC AREA



COMPOSTING



EDUCATION



RECYCLING



COMMUNITY SHARING

The construction process generates less waste.



CONSTRUCTION WASTE



WASTE MANAGEMENT PLAN

A sharing culture is developed and supported by residents and community-members.



CIRCULAR ECONOMY



ZERO CARBON ENERGY

Making buildings energy efficient and supplying all energy with renewables.

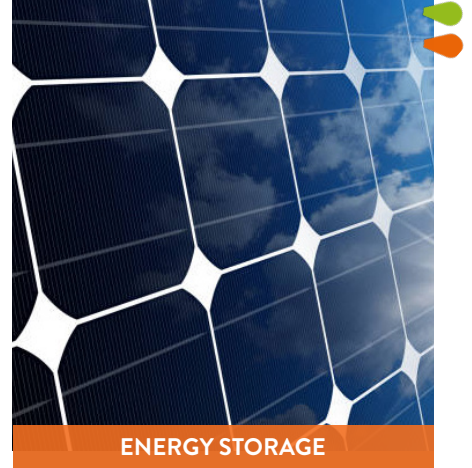
OUTCOMES

There are zero operational greenhouse gas emissions.

POTENTIAL TOPIC AREA



OPERATIONAL CARBON



ENERGY STORAGE

Renewable energy is generated on-site.



GEOHERMAL

Building occupants enjoy superior indoor thermal comfort year-round.



PASSIVE DESIGN



LOW AIR LEAKAGE



DAYLIGHT



HEAT ISLAND EFFECT



SECTION 5 OUR APPROACH

Our Approach

The Parkway House One Planet Action Plan is a living Plan. Once rezoning has been approved, technical performance requirements will be updated based on the emerging design, feedback from the City, and the final Ottawa High Performance Development Standard. It will also continue to reflect new thinking, technological innovations, and local and global trends where possible. In this way, Windmill will ensure the Plan stays meaningful, relevant, and impactful.

More exciting to us than creating the Parkway House One Planet Action Plan is the collaborations it can foster and the actions it could inspire in everyone involved. We hope this Plan inspires local innovators, businesspersons, and civic and community actors in helping us deliver a model sustainable community at Parkway House. In doing so, we can create a community where residents can live happy, healthy, and sustainable lives.

Be part of our One Planet Living journey.

Seeking solutions requires a holistic process, where the whole is more than the sum of its parts. In this systems-based approach, we work with nature and people rather than against them. This approach values and enhances the health and wellness of the people that live in their communities. It is one that welcomes and celebrates our differences while seeing the big picture.

From day one, bringing together an ecosystem of aligned partners is the foundation to collaboration. To enhance the vibrancy and diversity of our future community, development must be done by the community for the community. These are the voices we seek out, engage with, and listen to.

Contributions from many people.

This Plan reflects input and ideas from many different people. The outcomes were identified early in the process and are largely based on engagement with the City, consultants and the citizens of Ottawa.

The targets were informed by the results of the ecological footprinting study as well as the combined knowledge of Windmill, sustainability consultants Urban Equation, and the design team.

A living plan.

This One Planet Action Plan is the guiding document for the Parkway House. It will be used throughout the development process to check that sustainability goals for the development are meaningfully addressed.

This document is a living Plan. The outcomes and targets noted in this Plan are aspirational goals that Parkway House will strive to achieve. As the Parkway House design progresses, the outcomes and targets may evolve to reflect new opportunities and constraints. The Plan will also be adapted over time to reflect new thinking, technological innovations, and emerging local and global trends.

As the project moves beyond the design phase, the Plan will also evolve to include strategies that address construction, operations and community life.



**URBAN
EQUATION**