2022 ONE PLANET REPORT

One Planet Living® | A framework by Bioregional

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EXECUTIVE SUMMARY

In 2022, Zibi's population doubled as the newest rental building, Aalto Suites, with 162 affordable units, reached 90% capacity. With that, Zibi saw bigger turn outs at community events and many residents reported that they know at least one neighbour, so a sense of community is developing. The Resident Sustainability Committee (RSC) had monthly meetings and played a big role in making the events possible. The RSC also started a weekly walking group and piloted a special item recycling program at Kanaal Condos which will be implemented in the other residential buildings in the near future. Visual waste audits of residential waste provided some baseline data, revealing that waste diversion in the condo buildings is higher than the regional average but not quite at our target. Time in nature has been increasing and should continue to do so as the much anticipated Tesasini park opens in 2023. Water use in the condo buildings is well below the regional average and OPL target. Zibi community's carbon footprint was lowered in 2022 thanks to the district thermal energy system coming online, however, the overall footprint on average can be better as personal gas vehicles are used most often for transportation needs and dietary choices tend to be higher in carbon as well. With the opening of the One Planet Living Centre, Zibi has had the opportunity to engage with community members and visitors alike on sustainability initiatives and will continue to do so into 2023.

THE PROJECT

Located in both Ottawa and Gatineau, Zibi is a transformative project on a physical, environmental, and societal level. The only One Planet Living® endorsed community in Canada, Zibi inhabits former contaminated industrial lands, and is transforming them into one of Canada's most sustainable communities. Incorporating public spaces and parks, as well as commercial, retail, and residential real estate, Zibi is poised to become a truly integrated mixed-use community, one that will reinvigorate both the Ottawa and Gatineau downtown core.

Zibi offers a place where residents, retailers, and the public will want to call home. Straddling both the Ottawa and the Gatineau waterfront, Zibi will include unrivaled access to public and active transit routes, Ottawa's brand new light rail train system, one of Canada's most extensive cycle network, public and park space, all while offering the most stunning vistas the region has to offer. Zibi is essentially a waterfront city, reimagined for the 21st century.

We are committed to transparency and environmental and social responsibility, from conception to completion. To guide and track this commitment we have adopted a One Planet Action Plan; a framework based on 10 guiding principles of sustainability which we can use to create holistic solutions. Endorsed by Bioregional, the founder of One Planet Living, our Action Plan is Zibi specific drawing on our regional characteristics and unique site history and is integrated into our municipal development permits. The following pages will walk you through Zibi's progress as a One Planet Community by highlighting accomplishments and experiences of 2022.

SITE SPECIFICS

Uniquely situated on the Ottawa River in both the provinces of Québec and Ontario, Zibi redevelopment occupies Chaudière and Albert Islands and the north shore of the river in Gatineau.

Zibi, the Anishinabe word for River, is located on unceded Algonquin-Anishinabe territory; meaning that these lands, including all of the land in Eastern Ontario and Western Québec were never surrendered, or treatied.

The site and the surrounding area have been central to historically significant activity in the region including: serving basic needs for First Nations people for millennia, a travel route for early European explorers, and industrial activity such as lumber, pulp and paper operations. Landmarked by 60 meter wide cascading cauldron shaped falls in the middle of the Ottawa River, as a result of industrial activity, the site has been inaccessible to the public for decades.

Zibi site

PROJECT PHASING

Site redevelopment includes the coordination of various land owners, demolition of the existing industrial buildings, servicing the site, environmental remediation of contaminated soil, rehabilitating heritage buildings and the natural environment, designing and building new buildings, creating public spaces, and the list goes on. Given this complexity, the community will be constructed over the course of 12-15 years in a phased approach. The end result will be a mixed-use community consisting of residential, retail and commercial space boasting purpose built public spaces and unique waterfront green spaces over 34 acres in the heart of the National Capital Region. We will welcome approximately 5000 residents and 6000 workers to our One Planet Community.

- Commercial
- Residential
  Ground floor retail
- Under Construction
- Complete
- Existing Building Retrofit
- Zibi House
  Temporary building

Québec Construction phasing

Phase 1: Now – 2025, **Phase 2:** 2022 – 2025, **Phase 3:** 2023 – 2032

Ontario Construction phasing

Phase 1: Now – 2024, **Phase 2:** 2023 – 2027, **Phase 3:** 2026 – 2031

These proposals are being considered by various levels of Government and are provided for informational purposes only. Dream Unlimited, Dream Hard Asset Alternatives Trust, Theia Partners Incorporated and each of their respective subsidiaries are not responsible for the development of these projects. Plans are subject to change and approval. Construction dates indicate the starting year. Specifications are subject to change. E. &. O.E.

THIS REPORT

This report is intended to satisfy annual reporting requirements with respect to Zibi's progress with its One Planet Action Plan and has been peer reviewed by Bioregional's panel of experts on sustainable development.

The front half of this report provides a summary of Zibi's progress on its One Planet Action Plan in 2022 by walking through each of the 10 principles. The appendices provide a detailed analysis of data collected to achieve targets and ultimately project outcomes defined in Zibi's One Planet Action Plan.

HIGHLIGHTS OF THE YEAR

Zibi hosted several events and workshops for community members in 2022 and saw a spike in attendance compared to previous years. This could be due to a slow return to normalcy combined with the fact that our population doubled with the opening of Aalto. Nevertheless, 58% of residents indicated that they feel involved in the community, which is not yet at the target but improved from last year. Zibi now has a walking group and there are plans to start a cycling group in 2023 as well.

HEALTH AND HAPPINESS

The creation of community green spaces and play areas will provide ample infrastructure for everyone to lead active lifestyles within the community. Coordinated community gatherings and initiatives will give residents the opportunity to be active in shaping and participating in their community.

SUMMARY OF 2022 HEALTH AND HAPPINESS ACHIEVEMENTS

Refer to Appendix A for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
HH1	Increase happiness for Zibi residents.	>75%	Percentage of residents that say they're 'happy' with their lives.	Average life satisfaction between 2009-2013 in Ottawa-Gatineau was rated at approximately 8 on a scale to 10 where 10 is "very satisfied"[1]. Average from residents surveyed is 3.75 of 4 where 4 is very happy.	Average from residents surveyed is 4 (80%) on a scale from 1-5, 5 where 5 is very happy.	According to our annual residents survey, on average, residents rate their happiness a 4 on a scale from 1-5, where 5 is very happy. 90% of respondants rated their happiness 4 or better (Table 1).	According to our annual residents survey, on average, residents rate their happiness a 3.8 on a scale from 1-5, where 5 is very happy. 68% of respondants rated their happiness 4 or better (Table 1).	Zibi will explore ways to gain insight from residents on how they think a developer may be able to improve their overall happiness. This could take place in the form of focus groups, a community town hall meeting, or a q&a session on the Zibi Community online platform.
HH2	Create opportunities for community involvement.	>70%	Percentage of residents that feel actively involved in their community.	Ottawa-Gatineau residents are less likely than the national average to report that they feel a sense of belonging in their community (58% for Ottawa-Gatineau vs. 65% for all of Canada)[1].	35.7% of 60 surveyed residents feel involved in the Zibi community. Throughout the year, Zibi has hosted 24 events and workshops, 14 of which were offered exclusively to community members.	The annual survey revealed that 33% of the 49 residents surveyed feel involved at Zibi (Table 1). The survey was distributed to approximately 140 residents, the level of response may also be an indication of the lower level of involvement.	The annual survey revealed that 58% of residents surveyed feel involved at Zibi (Table 1). The survey was open to approximately 360 residents, with only 38 respondants, indicative of the low engagement within the community.	Zibi will market the online Mighty Networks community portal and the community mailing list better to gain more followers in hopes of reaching more community members. The Resident Sustainability Committee (RSC) will also share meeting minutes to spark interest in community planning.
HH3	Facilitate learning and creative expression opportunities for residents.	12	Number of events and/ or classes held per year within community spaces.	There is currently no industry standard or best practice.	Despite the global pandemic, Zibi adapted, and offered a variety of virtual workshops and events throughout the year, for a total of 24 events and workshops, 14 of which were exclusive to community members.	Zibi hosted 18 events/ workshops in 2021, 7 of which were exclusive to community members. In addition, we had yoga program which was held weekly through the summer.	Zibi hosted 16 events/ workshops in 2022, 9 of which were exclusive to community members. We offered yoga again in the summer but it wasn't popular enough to keep it going.	Zibi's One Planet Ambassador (OPA) has a 2023 event wishlist and a keen RSC to help coordinate events/workshops. With a wide range of different activities, Zibi hopes to attract community members who may not have participated in the past.

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IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
HH4	Support better health outcomes for residents.	>85%	Percentage of residents that indicate an overall satisfaction with their health.	63.6% of Ottawa & Gatineau residents perceive their health as very good or excellent; 72.3% perceive their mental health as very good or excellent; Canadian average is 59.9% and 72.2% respectively.	Residents were surveyed on whether or not their health allows for them to meet their day-to-day needs. 100% of respondents indicated that yes, their health allows them to meet their daily needs.	All of the survey respondants indicated their health allows them to meet their daily needs (Table 1).	100% of the survey respondants indicated their health allows them to meet their daily needs (Table 1).	Zibi will continue to advocate for a healthy, sustainable lifestyle and organize physical outdoor activities where possible.
HH5	Support better health outcomes for construction workers.	>85%	Percentage of workers that indicate an overall satisfaction with their health.	There is currently no industry standard or best practice.	The 2020 health and happiness average from trade and office workers surveyed is 3.5 on a scale from 1-5, 5 where 5 is very happy.	70% of staff rated their happiness 4 or better (5 being the best) and 100% say their health meets their daily needs (Table 2). 90% of trade workers rated their overall health a 4 or better (5 being the best) (Table 3).	On average, staff rated their happiness a 4.4 out of 5 and 92% say their health meets their daily needs (Table 2). 75% of trade workers surveyed (only 9 total) rated their overall health a 4 or better (Table 3).	The Zibi office started a monthly luncheon to encourage stepping away from computers and socializing. A desire to improve mental health came up in both staff and worker survey results, so Zibi will explore ways to assist in getting services to help with that.
		>85%	Percentage of workers that indicate increased satisfaction working at Zibi as compared to other sites.	There is currently no industry standard or best practice.	22% of construction workers surveyed indicated their increased satisfaction working on Zibi's site. We continue to struggle to track this outcome as there is significant worker turnover on site.	40% of trades workers say more can be done on construction sites in general to improve worker health; most have not noticed anything different at Zibi (Table 3).	60% of trade workers surveyed say more can be done on construction sites in general to improve worker health; 4 had positive reviews of working at Zibi, 2 suggested improvements, and 3 had no comment (Table 3).	Zibi will bring the Green Machines team together again for quarterly meetings to explore ways to improve worker health outcomes, and welcome the new Construction Manager for Block 204 into these conversations. The OPA will explore hosting a mental health lunch and learn in cooperation with the construction managers.

[1]Statistics Canada Life Satisfaction Survey 2009-2013
https://www150.statcan.gc.ca/n1/pub/11-626-x/11-626-x2015046-eng.htm

HIGHLIGHTS OF THE YEAR

Spaces, a workspace sharing centre, opened a second location at Zibi on the Ontario side. There are no other commercial tenants yet, but the One Planet Living Centre has begun featuring local businesses as an interactive station for visitors. Aalto, a 162-unit rental building reached 90% occupancy by the end of 2022, all of which fall under affordable housing thanks to the Canada Mortgage Housing Corporation.

EQUITY AND LOCAL ECONOMY

A community for all, Zibi will incorporate a range of housing opportunities to ensure a diverse mix of owners and renters. The development includes commercial and retail spaces that are preferentially allocated to local and socially responsible business, creating jobs and giving opportunity to small, ethically run enterprises.

SUMMARY OF 2022 EQUITY AND LOCAL ECONOMY ACHIEVEMENTS

Refer to Appendix B for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
ELE1	Plan for 7% affordable housing.	7%	Percentage of affordable housing, measured by number of affordable units compared to the total number of units.	In 2011, on average those living in the Gatineau-Ottawa area spent 21% of their income on shelter. According to CMHC, in order for housing to be affordable, no more than 30% of income should be spent on shelter[1].	Zibi secured a loan through Canada Mortgage Housing Corporation to be applied to Block 10. Construction began on Block 10 in 2020.	Block 10, or Aalto Suites, a 162 unit rental apartment that was funded and financed through CMHC's RCFI program began leasing to renters in December 2021. This is Zibi's first affordable housing project and currently, 53% of the units available at Zibi fall within Zibi's affordable housing program. This stat will change as the project evolves, but the early adoption of the program demonstrates Zibi's commitment to this target (Table 1).	Currently, 53% of the finished units at Zibi fall within Zibi's affordable housing program as no new residential buildings have come online since 2021 (Table 1). This statistic will change as the project evolves, but the early adoption of the program demonstrates Zibi's commitment to this target.	Block 206 will start welcoming tenants, which will have 2 floors of affordable housing units as well as 7 co-living floors, offering a variety of more affordable options.
ELE2	Promote and give precedence to smaller, local and/or ethically run enterprises.	50%	Percentage of retail space storefronts that contain small, local, and/or ethical businesses, compared to the total number of storefronts at Zibi.	There is currently no industry standard or best practice.	Commercial space was leased to "Spaces" an office, coworking and meeting room provider. Spaces will occupy part of a commercial block in Gatineau, as well as in Ottawa. The Zibi team completed a One Planet Living Leasing Guide in 2020 which will be provided to future leases.	Due to the pandemic, no leases have been signed for retail storefronts, however Spaces, a coworking establishment whose forward thinking business values align with Zibi's, opened it's doors at Zibi in 2021.	Spaces, a coworking establishment that opened a location on the Gatineau side in 2021, has opened a second location at Zibi on the Ontario side. The two offices are currently the only commercial tenants; their business values align well with Zibi's.	As Zibi waits to welcome new commercial tenants, the sustainability team is developing and refining OPL guides for different types of businesses to ensure any new tenants have the tools and information necessary to operate sustainably from the very beginning.
ELE3	Engage Zibi residents in fair trade programs and products.	One fairtrade business will be in place by the time that 50% of retail storefronts are occupied.	Deploy fair trade guidelines in retail strategy.	There is currently no industry standard or best practice.	No leases have been signed for retail storefronts, however Leasing representatives continue to target a fair trade coffee shop in phase 1 of the project.	Due to the pandemic, no leases have been signed for retail storefronts, however Leasing representatives continue to target a fair trade coffee shop in phase 1 of the project.	No leases have been signed for retail storefronts and Zibi is not close to 50% occupation.	Leasing representatives continue to target FairTrade coffee shops. In the meantime, the OPA will share local businesses in the surrounding area that offer FairTrade products.

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IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
ELE4	Provide opportunities for all community members to democratically participate in governing and managing Zibi.	Set up association within 1 year of first occupancy.	Create a community wide residents' association with documented democratic governance procedures.	There is currently no industry standard or best practice.	O's condo board celebrated its first year of existence in December 2020. Zibi will progress this target once Kanaal's condo board is established in early 2021.	Given that Zibi is still very much an active construction site with a very small community, there is currently no need for a Community Wide Residents Association. In lieu, Zibi is facilitating a Green Committee with members from both condo buildings to address issues around waste management and to plan community minded workshops and events.	The Resident Sustainability Committee (RSC) met roughly once a month to plan events and discuss ways to promote sustainable living among residents at Zibi. A preliminary Charter has been drafted outlining the structure, roles and responsibilities of the RSC. The intention is that the RSC evolves into a Residents' Association when the community is ready for such a thing.	The RSC will continue to meet once a month, giving public access to meetings and minutes, encouraging participation from any and all residents, but particularly aiming to recruit Block 10 residents as none have engaged so far.
ELE5	Create a socially responsible tourist destination.	By year 5, have 1000 tourists per year visit Zibi.	Number of tourists per year.	There is currently no industry standard or best practice.	Despite the global pandemic, Zibi adapted, and offered a variety of virtual workshops and events throughout the year, for a total of 24 events. Zibi welcomed over 12,000 guests on site in 2020, respecting physical distancing requirements.	Zibi offered a variety of workshops and events throughout the year, some virtual but mostly in person, for a total of 18 events, welcoming 17,667 visitors/ participants to the site (Table 2).	Zibi hosted 16 events/ workshops, welcoming nearly 10,500 visitors/participants on site (Table 2). Cirque du Soleil was on site again, welcoming an additional 75,000 guests and Interzip welcomed over 9,500 zipliners for their second year in business. Zibi also lead several tours for groups (schools, professionals, public servants, etc.) who were interested in learning more about sustainability initiatives.	Zibi will have support from the Dream Community Foundation (DCF) for events. The DCF is a not-for-profit dedicated to improving the well-being of individuals, families, and neighbourhoods across Canada. With their support, Zibi is in a position to offer more sponsorships and invite charitable organizations to conduct workshops or other business on site.

[1] https://cmhc.beyond2020.com/HiCOMain_EN.html

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IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
ELE6	Develop Zibi beneficially with and for the Algonquin Anishinabe nation and people.	At least 20 individuals are bridged from on-reserve work to off-reserve work experience, throughout the project life cycle.	Zibi will prioritize qualified Algonquin Anishinabe and Indigenous peoples for employment opportunities at the project. Indigenous workers are employed continuously throughout the construction phase, and/or as other service-providers to the project.	There is currently no industry standard or best practice.	Zibi has created a position through the tender of the District Thermal plant, but has struggled to fill it with an Algonquin candidate, the barriers to Indigenous employment persist. Although, in 2020, 4 Algonquin individuals worked on site. Specifically, these individuals supported the COVID-19 Administration Program.	Zibi achieved this target in previous years thanks to the efforts of Decontie Construction. Zibi created an Indigenous Employment Working Group in 2021 with the goal of identifying areas where we can facilitate Indigenous Employment and to write a strategy. Approximately 8% of the staff on the administrative side of the project self identify as Indigenous.	Zibi acheived this target in previous years working with Decontie Construction, an Algonquin-Anishinabe owned business. In their time working with Zibi, Decontie identified certain barriers to bridging work, such as long registration wait times with the Quebec Construction Commission, and successfully corrected them making it easier now for on-reserve workers to move off-reserve with Decontie. Other potential barriers that Zibi faces with regards to attracting workers from target Algonquin partner communities include the small populations on the reserves and the 2-hour commute required to get to site from the reserves.	Zibi will support the Native Women's Association of Canada's National Apprenticeships Program, which may not necessarily lead to employment opportunities at Zibi but helps Indigenous workers connect with the greater community nonetheless. With regards to hiring within Zibi, a new clause in the bidding process will prompt construction companies to indicate how they plan to create positions for Indigenous workers, with preference given to those that provide such a plan.
		At least 2 opportunities for long-term investment throughout project lifecycle.	Invite First Nations as preferential partners for long-term investment opportunities. Provide detailed information for these opportunities as soon as they are available and provide support as needed to ensure First Nations partners understand the opportunity and how it works.	There is currently no industry standard or best practice.	Given both an election and the pandemic, no progress was made on this target in 2020. Zibi is scheduled to reapproach the partner in early 2021. Our partner Modern Niagara, created a position for a Project Manager with the intent of filling it with an Algonquin worker. Unfortunately the reoccurring theme seems to be that there are systemic barriers that prevent Indigenous people from filling such positions.	A long term investment opportunity was presented to two Algonquin preferential partners in 2021. Both opportunities were declined. Zibi will present an additional investment opportunity to Algonquin partnering communities in a future phase of the project.	To date, all investment opportunities have been declined by Algonquin preferential partners.	Zibi will continue to offer investment opportunities as they arise. A review of the existing investment offer will take place to determine if the structure should be modified to make it more attractive or feasible for Indigenous partners.
		Preferential pricing program details to be in place prior to launch of first residential project. Details of Indigenous inclusion to be included in formal affordable housing strategy.	Offer a preferential residential pricing program for Indigenous purchasers, and include Indigenous members as part of affordable housing strategy, to ensure that Indigenous culture is not only present at Zibi, but that Indigenous people truly live, work, and play at Zibi.	There is currently no industry standard or best practice.	A preferential pricing program is in place which provides a small discount to all First Nation, Inuit or Métis purchasers.	A preferential pricing program is in place which provides a small discount to all First Nation, Inuit or Métis purchasers. While there have been inquiries into this opportunity, nothing has been signed under this program.	A preferential pricing program is in place which provides a small discount to all First Nation, Inuit or Métis purchasers. While there have been inquiries into this opportunity, nothing has been signed under this program.	Zibi will continue to implement the pricing program. A review of the marketing strategy, as well as the program itself, will take place to determine if it is reaching far enough and whether the structure should be modified to make it more attractive or feasible for the Indigenous community.

CULTURE AND COMMUNITY

The redevelopment of the area will give citizens the opportunity to access a site of great cultural relevance. The redevelopment, through signage, architecture, and art will educate the public on the rich history of the site. Designing visual and physical connectivity to neighbouring attractions and landmarks will integrate the site into the existing destination networks.

HIGHLIGHTS OF THE YEAR

Awareness of OPL at Zibi is increasing and a sense of community is forming as almost 80% of residents surveyed say they know at least one neighbour. Zibi continues to currate local and/or Indigenous art, having installed a stunning mosaic on a stretch of the shoreline breakwall, as well as many new pieces throughout Aalto. Zibi continues to consult with the Memengweshii council, who helped organize an art installation for Tesasini Park and finished their "Shared Values" video to be published in early 2023.

SUMMARY OF 2022 CULTURE AND COMMUNITY ACHIEVEMENTS

Refer to Appendix C for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
CC1	Create a cultural identity that reflects the history of the locale throughout the development.	Implement the municipaly-endorsed Heritage Plan.	A heritage plan, endorsed by municipal heritage planners and First Nation partners, development and implemented at Zibi.	There is currently no industry standard or best practice.	Zibi continued to implement the principles of the Heritage Interpretive Plan by working with cultural advisors on space activation and art selection, some of which will be implemented in 2021.	Pangishimo Park, Zibi's first park, was delivered in 2021 and includes specific elements from our Heritage Interpretive Plan including water, wood, habitat, transport and renewal.	The Heritage Interpretive Plan continues to be implemented at Zibi and was incorporated at length into the design of Tesasini Park.	A "common element" of Indigenous culture will impermeate the Zibi site through signage and wayfinding; a plan is in continuous development and some installations will commence in 2023.
CC2	Adapt and re-use at least four existing historic industrial buildings.	4 Buildings	Number of heritage buildings preserved.	There is currently no industry standard or best practice.	In 2020, Zibi completed the restoration of Block 208 as a base building that will serve as a commercial space.	Zibi is on track to have 4 facades, plus 2 full buildings preserved and repurposed in phase 1. Preliminary retrofit design began on Block 201b in 2021.	To date, Zibi has retrofitted 3 existing buildings and is on track to meet this target by the end of phase 1 of the project (see Project Phasing page).	Block 207 will be completed, which has incorporated a facade from a historic building.
CC3	Promote local art and support the local arts community.	50%	Percentage of art installations on site that are created by local artists.	There is currently no industry standard or best practice.	In 2020, we held an online atelier program with 8 artists two of which were Indigenous. This program will help to showcase local and Indigenous art on site in the near future.	100% of the art installed at Zibi, either in the public realm or within buildings, has been created by Algonquin, Indigenous or artists local to eastern Canada (Table 1).	100% of the art installed at Zibi, in both the public realm and within buildings, was produced by Algonquin and/or local artists from eastern Canada (Table 1).	The Memengweshii Council helped organize a "13 Moons" art project featuring stone carvings by an Indigenous artist and bronze inlays created by some of Zibi's very own Indigenous community and council members. This will all be installed in Tesasini Park as part of the "common element" theme. There will be local art curation for Block 206 common spaces.
CC4	Create connectivity with the surrounding communities of the National Capital Region.	All network connections completed before 40% of the building area is complete.	A developed network of connected pedestrian and cycling pathways to and from adjacent communities.	There is currently no industry standard or best practice.	Zibi completed the pedestrian and cycling infrastructure on the Eddy/ Booth corridor in 2020. This is a significant milestone for active and sustainable transportation access in the region. While PSPC will complete their portion of the complete street at a later date, Zibi will unveil it's infrastructure in 2021.	A long awaited project by Hydro Ottawa – a connection from Zibi to a regional multi use pathway – opened in 2021. This small connector presents big opportunity to Zibi residents by providing easy access to an extensive MUP and vast green space.	Most connections have been or will be finished in phase 1 of the project; depending on block development selection, a few minor stretches on the North end may be delayed past the 40% completion mark.	Tesasini Park connections are expected to be completed.

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IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
CC5	Engage with Algonquins to ensure First Nations history, presence and culture are reflected throughout the development.	Mention traditional Algonquin territory in 100% of public speaking engagements, media events and published reports; 15% of place names will be in Algonquin . Visitors to Zibi know that Zibi is the Algonquin word for river, and Ottawa-Gatineau is within traditional Algonquin territory.	Raise public awareness that project lands are within unceded traditional Algonquin territory through public statements and	There is currently no industry standard or best practice.	Zibi acknowledged the territory of the Algonquin in 100% of speaking engagements, media events and published reports. In 2020, Zibi worked with its cultural advisor to refine its acknowledgment statement to ensure that it is relevant and meaningful. The statement will be finalized in early 2021.	Zibi acknowledged the territory of the Algonquin in 100% of speaking engagements, media events and published reports. Zibi added a statement to its event contracts to ensure that vendors understand the importance of Zibi's First Nation partners to the project.	Zibi acknowledged the territory of the Algonquin in 100% of speaking engagements, media events and published reports and continues to look for opportunities to include Algonquin heritage and language in place names.	Tesasini is Algonquin for "flat rock" which is representative of the landscape of the park. Design plans will continue for Mokaham Park, meaning "sunrise" in Algonquin, to compliment Pangishimo Park meaning "sunset", and 3 out of 6 sunshape way finding components will be installed in 2023, connecting the two parks.
		Minimum of 2 advisory Council meetings per year.	Establish a standing advisory Council of Algonquin Anishinabe to continuously guide on project matters related to First Nations culture, history and language.	There is currently no industry standard or best practice.	The council met 7 times in 2020. The majority of these meetings were virtual. Refer to Appendix C for meeting dates.	The Memengweshii Council met 5 times in 2021, including one in person meeting (Table 2). Of note, the Council provided feedback on enhancing Algonquin culture on social media, made preliminary plans for a video describing the story of the Council and discussed the need for additional members to the Council.	The Memengweshii Council met at least 2 times. Of note, the Council worked on updating their video, organized a 13 Moons art project to be installed in Tesasini Park, and explored ways to increase membership.	The Memengweshii Council will present at a job fair in the spring. The new "Shared Values 2.0" video will launch and the Zibi website will be updated to contain more culturally significant/appropriate material regarding Algonquin history and presence on site.
		Minimum of 2 youth engagements per year.	Indigenous youth engagement through internship opportunities, site tours, Zibi staff presentation, or other educational programming.	There is currently no industry standard or best practice.	Zibi retained an Indigenous summer student, whose role was extended into an internship position in the fall and winter terms. The student supported the vertical development team and played a key role on the construction site.	Algonquin consultant Christina Ruddy facilitated a One Planet Living workshop with elementary school students at the school local to Pikwakanagan in spring 2021. Further, a young Algonquin artist shadowed an established artist who was commissioned by Heritage Canada to paint a mural located at Zibi.	Zibi had a summer student, an intern, and a full time staff member in 2022 who all self-identified as Indigenous.	Zibi plans to attend a job fair in Pikwakanagan with a goal of offering 3 internship positions. Furthermore, Zibi will develop an Indigenous Participation Plan, a framework that will guide engagement commitments, becoming a roadmap for planning and annual reporting on the subject.

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IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
CC6	Create a sense of belonging within Zibi.	>70%	Percentage of residents that 'know their neighbour'.	There is currently no industry standard or best practice.	100% of residents surveyed claim to know at least 1 neighbour, 70% of which claim to know multiple neighbours (ranging from 2 to 10+).	80% of residents surveyed know at least 1 neighbour; 40% know at least 4 (Table 3).	79% of residents surveyed know at least 1 neighbour; 47% know at least 4 (Table 2).	Zibi will continue to host events that lend an opportunity for community members to meet, and promote the online community portal to encourage more participation on the platform.
CC7	Create a culture of sustainability throughout Zibi, from design to operations.	80% of all residents and workers will indicate that their awareness of sustainability issues and solutions has increased year-over-year.	A measurable difference in environmental and sustainability awareness among contractors, tenants and residents.	There is currently no industry standard or best practice.	47% of residents surveyed and Zibi office workers, stated that their awareness on sustainability has developed or improved since living/working at Zibi. Within the trades, 36% of surveyed workers stated that they have a great or good awareness on the subject of sustainability.	33% of residents say their awareness has improved (Table 3). 57% of staff say their awareness has improved (Table 4). 60% of trade workers feel their awareness is good, but only 50% were aware of our sustainability goals at Zibi (Table 5).	37% of residents say their awareness has improved, 51% were already aware of environmental issues and haven't learned more (Table 2). 77% of staff say their awareness has improved (Table 3). 67% of trade workers feel their awareness is good, but only 56% knew what OPL is (Table 4).	Zibi's OPA will use comments from the resident survey to innitiate conversations about sustainability issues on Mighty Networks. Zibi is releasing a new OPL onboarding video for trades and continuing a "Did you know" poster campaign on the construction site. Zibi staff have a new office with some blank bulletin boards that the OPA can use for OPL awareness.
		80% of all residents and workers will indicate that their awareness of sustainability issues and solutions has increased year-over-year.	Implement a full-time One Planet Ambassador to develop programs and implement cultural norms around sustainability until the development reaches 30,000 sq. m of buildings, and then transfer the leadership over to the community associate/BIA.	There is currently no industry standard or best practice.	2020 was the first full year with a full time One Planet Ambassador (OPA) developing and implementing programs to drive norms around sustainability on site. The OPA utilized the social platforms to engage residents in discussions, community activities like lunchtime yoga and vermicomposting workshops,as well as share lifestyle tips from things like low-carbon eating, gardening, sustainable shopping and exercising for health. With the help of her team, she developed guidelines to help future commercial tenants to understand the role that they play with respect to OPL.	The OPA used social media platforms to engage residents in discussions, organize community activities like lunchtime yoga and pollinator workshops (Zibees), and share lifestyle tips on things like low-carbon eating, gardening, sustainable shopping and exercising for better health outcomes.	The One Planet Ambassador (OPA) used Zibi's new community portal on Mighty Networks to promote sustainable living, share events and project updates, and begin to create a sense of community among residents. On the construction site, infographics were posted to inform workers of One Planet Living and related goals at Zibi, and a Trade of the Month program has been implemented site-wide to reward those who respect or exceed OPL expectations.	The OPA will continue to use the online platform and encourage members to interact and share their input, too. The OPA will continue to welcome guests to the One Planet Living Centre to share Zibi's sustainability goals, successes and lessons learned with residents, workers and visitors.

LAND AND NATURE

Starting with the remediation of this former industrial site, Zibi will restore the area as a biologically diverse ecosystem. Carefully designed landscapes and greenspaces will provide micro-habitats for indigenous species, thereby increasing biodiversity on the site.

HIGHLIGHTS OF THE YEAR

Residents continue to report an increase in their time in nature, up 2% from last year and nearing our 50% target. Members of the Resident Sustainability Committee reported noticing an uptick in foot traffic as residents and the greater community take advantage of Pangishimo Park, and it is nice to see the lands being enjoyed after years of inaccessibility. All of the species planted on site are native and over half of them have cultural or historical significance.

SUMMARY OF 2022 LAND AND NATURE ACHIEVEMENTS

Refer to Appendix D for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
LN1	Remediate contaminated land and revitalize the area to maximize the benefit to natural ecosystems within the development.	100%	Percentage of the site area that meets provincial regulations after remediation.	There is currently no industry standard or best practice.	A total of 13,937 metric tons of soil was remediated from site in 2020. Remediation meets provincial requirements.	A total of 13,500 metric tons of soil from site was remediated in 2021. Remediation meets provincial requirements.	There was no remediation work in 2022. All remediation work to date has met provincial requirements.	The ground for Block 204 will be remediated before construction begins; plans are complete and abide by provincial regulations.
LN2	Reintroduce native vegetation and increase biodiversity of plants and animals.	14%	Percentage of site area dedicated to park space.	There is currently no industry standard or best practice.	Pangishimo Park design was completed, and 30% of the park was constructed. No parks were turned over in 2020.	Pangishimo Park and Head Street Square were turned over in 2021. They represent roughly 2,500 square meters of green park space and 1,600 square meters of hardscape plaza, respectively, which together represent 21% of the total park space to be incorporated into the community (Table 1).	Work on Tesasini Park started in 2022 which will offer an additional 6,100 square meters of river-front park space at Zibi upon completion, bringing Zibi half way to the 14% goal (Table 1).	Zibi will welcome visitors at the new Tesasini Park. A new audio experience at Pangishimo park will be installed.
		400%	Increase biodiversity of plants and animals by 400%.	There is currently no industry standard or best practice.	No planting occurred in 2020. Refer to appendix D of 2019 report for plant list already on site.	Our baseline study found 131 species on site, where less than half (62) were native. Through remediation, our native plant biodiversity has dropped 31% (43 from 62), however, now 100% of species on site are native, 36 of which are new/ reintroduced (Table 2).	All 49 species of flora at Zibi are native, 39 of which have been reintroduced to the site (Table 2). While species richness has declined as we remediated the land and removed invasives, species abundance will continue to rise as we develop dedicated natural spaces at Zibi.	Tesasini park brings the opportunity to introduce more plants to site and of different varieties that are particularly flood tolerant.
		All parks will contain at least 1 plant of significance to First Nations people.	Reintroduce Indigenous plants of historic or cultural significance to First Nations people.	There is currently no industry standard or best practice.	No planting occurred in 2020. Refer to appendix D of 2019 report for plant list already on site.	With the new public spaces added in 2021, plus the Waza Plaza planting in 2019, Zibi now features 24 plant species identified as being culturally significant to First Nations people (Table 2).	There are 28 culturally significant plants on site that can be found in the parks, plazas and streetscapes at Zibi (Table 2).	Zibi will work with landscape architects to ensure this target continues to be met.
LN3	Design lighting strategies to minimize the effects of light pollution.	Meet LEED requirements.	Meet uplight and light trespass specifications for exterior areas per the LEED v4 rating systems.	There is currently no industry standard or best practice.	This requirement has been integrated into design specifications.	This requirement has been integrated into design specifications.	This requirement has been integrated into design specifications.	Zibi will continue to specify this in design requirements.

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IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
LN4	Foster a love for nature through education and by increasing opportunities to interact with the natural world.	50% of all residents will increase their time "in nature" comparing their personal baseline prior to Zibi to one year after living at Zibi.	Participation in nature programs.	There is currently no industry standard or best practice.	34.5% of residents surveyed stated that their time in nature has increased since living at Zibi. Given the pandemic, it was challenging to facilitate time outdoors for the community as outings in groups were not permitted through much of the pandemic.	Roughly 40% of residents surveyed said their time in nature has increased since living at Zibi. Many of those that indicated their time in nature has not increased commented that the completion of parks would help this. There were also several mentions of creating walking or biking groups (Table 3).	42% of residents surveyed said their time in nature has increased since living at Zibi. Many indicated that more green spaces would be beneficial, which will come in time (Table 3).	Several residents have given feedback that they would be interested in educational walks, for example, to learn about the history of the site, development progress, plantings, etc., so something like this will be programmed.

SUSTAINABLE WATER

As a whole, the development will reduce potable water consumption by 15% compared to the regional average of 163L of water per person per day. This is to be achieved through the use of super efficient appliances and employ non-potable water for sewage conveyance and landscaping, where feasible. Zibi's landscaping will provide storm water remediation to prevent run-off pollution.

HIGHLIGHTS OF THE YEAR

Zibi residents are consuming up to 40% less water than the national average. Even so, specifications for water fixtures have been updated to be more stringent, in line with new flow rate standards. With three buildings under construction, it has been a challenge to control sediment from truck traffic, but application of best practices is being strictly enforced on bi-weekly environmental site walks.

SUMMARY OF 2022 SUSTAINABLE WATER ACHIEVEMENTS

Refer to Appendix E for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
SW1	Reduce residential potable water use to 138 litres per person, per day.	138 litres	Potable water consumed per resident, per day (L).	Ontario households currently use 271 L/ day/ person. Québec households currently use 386 L/ person/day.	Zibi's first residential building "O" continues to use low flow fixtures and a cistern (for 49% of toilets). O's water consumption has been metered since July 2020, averaging 99.3 L of potable water per resident per day.	Estimated potable water consumption by O resdients is 121 L per day; Kanaal is 83 L (Table 1).	Estimated potable water consumption by O residents is 122 L per day; Kanaal is 129 L; occupation at Aalto varied greatly month to month, therefore unable to get an accurate reading (Table 1).	Water meters will be installed in new builds and low flow fixtures used as per design specifications.
SW2	Reduce potable water use in landscaping by way of planning drought tolerant species and using non-potable means if permanent irrigation is required.	0%	Percentage of potable water used for permanent irrigation systems.	There is currently no industry standard or best practice.	No irrigation systems were installed for any public realm spaces in 2020.	No irrigiation systems were installed for any public realm spaces in 2021. Drought tolerant species were planted in Pangishimo Park.	No irrigiation systems were installed in 2022.	Block 11 will have a rain water collection cistern for irrigation needs. Zibi will continue to plant drought tolerant species to minimize the need for watering in general.
SW3	Utilize non-potable water for sewage conveyance in buildings where feasible in order to meet water consumption targets.	10%	Percentage of non-potable water used for sewage conveyance.	There is currently no industry standard or best practice.	Zibi's first building O has a cistern (capacity 47,147 L) collects rainwater from the roof of the building and distributes water to 49% of residential toilets in the building. The 48 toilets fed by non-potable water in the O building represent 19% of all toilet units in turned over buildings at Zibi.	Currently, the only infrastructure at Zibi that provides non-potable water for sewage conveyance is the cistern at O Condos, which services 48 toilets in the building. The entire Zibi site now has 331 toilets, 14.5% of which are conveyed with non-potable water using the cistern (Table 3).	ZIbi now has 560 toilets on site, with the rainwater cistern at O Condos servicing 48 of those toilets, the percentage of non-potable water used for sewage conveyance is 8.6% (Table 2).	Zibi will look for opportunities to incorporate non-potable sewage conveyance in designs for future builds in order to stay on track with this target.
SW4	Achieve near-zero export of pollutants via stormwater outflow.	Total suspended solids will be reduced by 80% prior to discharge.	Pollutant levels in stormwater outflow.	Ambient levels in the Ottawa River: Total suspended solids–6.0 mg/L and turbidity–4.2 NTU[1].	Stormwater infrastructure was installed in 2020.	Stormwater infrastructure has been installed and Zibi began sampling stormwater. Sampling occured during a significant rainfall event which would represent a worse case scenario for run off. Results were 2-3 mg/L higher than the local standard indicating that more work is required to prevent erosion and to control sediment (Table 2).	Sampling from one significant rain event in late fall revealed that total suspended solids were higher than the allowable limit (Table 3). All required sediment control best practices are being applied on site, however, better care will need to be taken to ensure they are functioning properly.	Zibi will have a more robust storm water sampling plan in place and storm sewer sediment traps will be cleaned regularly. Construction and Property Managers will be immediately notified of any excessive TSS discovered in discharge and be required to act swiftly to remedy the situation. Environmental control plans will be reviewed and updated with most recent guidelines before the new Contruction Manager for Block 204 starts work.

[1]Data collected between 1985 and 1990 at Carillon. Source Ottawa River Nomination Document, Chapter 3 prepared by Ottawa River Heritage Designation Committee.

LOCAL AND SUSTAINABLE FOOD

Zibi will serve as a model for integrating agriculture into the urban landscape. Easy access to seasonal, local, and sustainably produced food will help residents enjoy healthier, fresher diets and support local farms and vendors, while reducing the carbon footprint of their diets by 60% as compared to a conventional one.

HIGHLIGHTS OF THE YEAR

Zibi had a new CSA partner, Two Beets Farm, which allowed share holders to choose the veggies they like with delivery weekly on site to a secure drop box. A facilitator from a local gardening non-profit, Just Food, came to Zibi to teach residents how to grow plants/food on balconies. Gardening space was not originally designed into the Kanaal Condo building but a few determined residents transformed a small plot within the building's footprint into a vegetable garden. The annual resident survey suggests some education around local and low carbon diets could be beneficial.

SUMMARY OF 2022 LOCAL AND SUSTAINABLE FOOD ACHIEVEMENTS

Refer to Appendix F for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
LSF1	Provide access to modest garden spaces for 90% of households that want it.	1.4 Meter squared	Area of food-growing garden spaces onsite per household.	There is currently no industry standard or best practice.	O Community Garden was created in early Spring 2020. 11 members were part of the self-governed committee and have succeeded in sowing various types of vegetables, harvesting enough to feed the entire group throughout the summer.	O Community Garden conitnued to be self run in 2021 and had a successful growing season. All garden boxes at O Condo are 1.4 m2 in size.	The second floor terrace at Aalto received garden boxes at the end of the year, with 1.4 m^2 of gardening space for up to 10% of units.	Aalto residents will have their first growing season. Zibi will host another balcony gardening workshop with plans to pair it with a community seedling sharing exercise. Lessons learned to be documented for knowledge sharing with future blocks.
		1:10	Ratio of food-growing garden spaces to households.	There is currently no industry standard or best practice.	There is a ratio of 5 food-growing garden spaces to 43 households on the Zibi site in 2020 (1:8.6 ratio). According to the survey results, 23 people expressed definite interest in having a garden space available to them out of 56 respondants. Each of the 15 garden boxes in O's Community Garden enclosure can house 2 gardeners, providing 100% of the interested people with a garden space.	Zibi is currently exceeding this ratio at 1:8.6.	Zibi remains on target with a ratio of 1:9.7 (Table 1).	Block 206 and Block 11 will have terrace garden boxes although their first season won't be until 2024.

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IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
LSF2	Create a community scale food distribution network to improve connections between food and farmers and increase access to local, fairly traded, and organic food.	>70%	Percentage of Zibi residential tenants that purchase at least 25% of their food (by value) that is organic, or local, or fair trade.	Organic food represents less than 1% of Canada's retail food sales.	60% residents surveyed indicated that at least 25% of their food (by value) is organic, or local, or Fair Trade.	55% of residents surveyed indicated that at least 25% of their food is oragnic, local or Fair Trade (Table 1).	39% of residents surveyed indicated at least 25% of their food is local and 34% indicated that at least 25% is organic or FairTrade. "I don't know" was added to this year's survey and, in both cases, 21% selected this, indicating perhaps more education on this principle should be programmed (Table 2).	Zibi's OPA will use Mighty Networks to keep residents informed of what's in season and encourage recipe sharing using local, in season ingredients. The OPA will explore interest in a local farm visit as an opportunity to reconnect with where our food comes from. Zibi's local business map will also be reviewed and updated.
		5% in year 1, growing to 25% by year 5.	Percentage of Zibi residential tenants that participate in Zibi's various farm-to-table programs.	There is currently no industry standard or best practice.	16% of surveyed residents indicated that they participate in Zibi's CSA program with Roots and Shoots.	16% of residents participated in CSA or farm-to-table progams. Many of the reasons for not participating were due to either not knowing about available programs or fearing getting too much food to consume in one week (many were single persons).	18% of residents surveyed participated in CSA or farm-to-table programs (Table 2).	Zibi will have a CSA drop box from Two Beets Farm again and will work on marketing to try and gain more participation in the program.
LSF3	Engage residents in education programs to encourage a reduction in consumption of high-carbon foods.	50% of all residents will report a decrease in high-carbon food consumption year over year.	Percent reduction in the consumption of high-carbon foods.	There is currently no industry standard or best practice.	37.5% of surveyed residents indicated that they consume at least 50% of their food that is either from local, Fairtrade or organic sources.	90% of residents surveyed indicated at least 25% of their food is organic, or local or Fair Trade; up from 60% in 2020 and 33% in 2019. 16% of surveyed residents indicated that they participated in a CSA program (Table 1).	37% of residents surveyed consume little- (once or twice a week) to-no (vegetarian or vegan) meat and/or animal products and 39% indicated at least 25% of their food is from local sources.	Zibi's OPA will use Mighty Networks to keep residents informed of what's in season, with knowledge sharing about the carbon intensity of certain foods and recipe sharing for delicious alternatives.

TRAVEL AND TRANSPORT

Sustainable transport is based on both reducing the need for energy reliant transportation by giving priority to bikes and pedestrians and, when energy reliant transport is needed, provide infrastructure for efficient and low-impact alternatives such as ride-share and electric cars.

HIGHLIGHTS OF THE YEAR

Very few community members are driving EVs and 42% indicated they use their personal vehicle for most transportation needs while roughly 37% are choosing active transport (biking or walking). While some EV chargers have been installed on site as per the target, Zibi is pivoting to ensuring conduit is available instead, so when more residents actually have EVs, more current EV charger models can be easily installed.

SUMMARY OF 2022 TRAVEL AND TRANSPORT ACHIEVEMENTS

Refer to Appendix G for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
TT1	Reduce carbon dioxide (co2) emissions associated with local transportation of residents.	20%	Percentage of parking spaces with electric car charging stations.	Québec building code makes it mandatory that 240v infrastructure be installed in all new builds. Ontario building code requires that no less than 20% of parking spaces in a building be provided with EVSE.	There is empty conduit in place for every parking spot in Block 205A to receive a car charging station. For 301, there is 1 empty conduit for every 2 spaces to receive a car charge station, where a double unit could be installed thus allowing every parking stall in 301 to have access to a car charging station.	There is conduit in place for every parking spot in Block 205A to receive a car charging station. For 301, there is 1 empty conduit for every 2 spaces to receive a car charge station, where a double unit could be installed thus allowing every parking stall in 301 to have access to a car charging station. Block 211 will have conduit to 21% of parking stalls and 4 chargers will be installed by Zibi for occupancy.	Zibi has installed 11 EV chargers to date, covering 4% of parking spaces, however residents have installed more (exact quantity unknown). 35% of parking stalls have readily available conduit to facilitate future expansion of EV charging stations (Table 1).	Parking for Block 10/11 will have 24 chargers installed by Zibi and conduit readily available to the majority of remaining stalls. Block 206 will have conduit available at all stalls with 6 chargers installed for occupancy.
		0.7	Ratio of car parking spaces per household.	Car ownership is 1.3 vehicles per household[1]. Provincial average is 1.45 vehicles per household[2].	The portion of the 301 underground parking garage dedicated to Kanaal's residential parking was designed with a 1:1 ratio.	To date residential parking is at a 1:1 ratio.	Residential parking is at a 1:1 ratio, this will change as the development evolves.	This ratio will decline once the new blocks and their respective parking garages are complete.
		Modify roadway to reduce car lanes from 4 to 2, implement new bus shelters and transit schedule improvements, sidewalks and bikeway in both directions.	Modify the Booth/Eddy Corridor Transformation to prioritize active methods of transportation and transit over personal automobile.	There is currently no industry standard or best practice.	Zibi has completed the City of Ottawa, the City of Gatineau, and its own portions of the works on the Booth/Eddy Corridor Transformation project. The Federal Government has introduced bike lanes for most of the crossing, but one critical section of widening remains. This marks a significant milestone for Zibi and for active and sustainable transportation in the area.	Zibi's portion of the Eddy-Booth St Transformation project was completed in 2020.	Zibi's portion of the Eddy-Booth Street transformation project was completed in 2020. Public Services and Procurement Canada (PSPC) began their portion of the work on the Eddy Booth Corridor transformation project in 2022. A new bus shelter was installed with anticipated service to start once the bridge is complete.	Work on the bridge will be completed, allowing full use of the transformed corridor.
		Auto driver: 25%, auto passenger: 10%, transit: 45%, non-motorized: 20%.	Achieve modal split targets to decrease personal vehicle trips.	There is currently no industry standard or best practice.	Zibi's portion of the Eddy-Booth St Transformation project was completed in 2020. This marks a significant milestone for Zibi and for active and sustainable transportation in the area.	Zibi's portion of the Eddy-Booth St Transformation project was completed in 2020. According to resident survey data, most respondants are traveling 100 kms or more per week and most often with a gasoline vehicle; very few have electric or hybrid vehicles; many are also often biking or walking as a suppliment to driving (Table 1).	42% of residents surveyed are using gas-powered vehicles most often for their transportation needs, 37% are choosing active transportation (walking or biking) most often, 16% are using public transit most often, and very few are carpooling (Table 2).	ZIbi will work with local NGOs to offer workshops and/or information sharing, and explore ways to incorporate friendly competitions on site to encourage active transport.

[1] CMHC figures for Ottawa Centre.
[2] NRCAN 2009 vehicle survey.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
TT2	Reduce the travel distance for basic goods and services to within walking distance.	>90 at 50% build-out.	Community walkscore.	The region's walkscore is 54.	Zibi continued to progress this outcome with 2020 planning and construction. The pandemic has forced us to put on hold the design of a block that could house some amenities.	We are several years away from 50% buildout however a multi use pathway connecting the Zibi community to an existing regional network opened in 2021 increasing the walkabiity of the site.	We are several years away from 50% buildout, however as of 2021, Zibi is connected to a multi use pathway which has increased the walkability of the site. Currently, Block 13 has a Walk Score of 71 and Block 205A has a Walk Score of 57, which will undoubtedly improve as the community expands.	Leasing will continue to seek a variety of tenants for commercial spaces to ensure Zibi residents have nearby access to all necessities.

MATERIALS AND PRODUCTS

When considering the materials comprising the development, a life-cycle analysis approach will be implemented. This approach takes into consideration the environmental impacts of all materials over their respective lifetimes. New technologies and innovative construction solutions will minimize the environmental impact of assembly.

HIGHLIGHTS OF THE YEAR

A special mention should be awarded to a determined and benevolent superintendent on site, François, who has collected over 300 metric tons of scrap materials and either transformed them into new items or sold them for profit that was donated to a local food bank. His enginuity has been contagious as several other workers are following his footsteps and/or looking for opportunities to help his cause. Otherwise, there is very little demolition left to do on site so reuse of materials has been minimal. The poor data available for Block 10 has reinforced Zibi's decision to contract out material tracking for future builds.

SUMMARY OF 2022 MATERIALS AND PRODUCTS ACHIEVEMENTS

Refer to Appendix H for data. Refer to previous reports for earlier statuses.

INDICATOR	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
PM1	Retain and repurpose 50% of the existing buildings on-site (excluding the primary mill buildings).	50%	Percentage of existing building area retained and repurposed (excluding primary mill buildings).	There is currently no industry standard or best practice.	Zibi is exceeding this target as per the master plan. Refer to Appendix H for a summary of buildings being retained.	Zibi is exceeding this target as per the master plan. Refer to 2020 report for a summary of buildings being retained. Preliminary design began on Block 24, a building originally used as a match factory.	Zibi is exceeding this target as per the master plan; refer to the Project Phasing page for a summary of buildings being retained.	The Block 210B redesign/ retrofit will commence should an interested tenant come along.
PM2	Repurpose or recycle 90% of all demolition materials (excluding hazardous materials), of which a minimum of 5% by volume should be reused.	90% 5%	1. Percentage of demolition materials that are recycled or repurposed (by weight). 2. Percentage of demolition materials that are reused on site (by weight).	There is currently no industry standard or best practice.	No demolition occurred in 2020. There is very little demolition left to do on site. Although, a significant amount of wood was saved for upcycling on future projects.	No demolition occured in 2021. There is very little demolition left to do on site.	There was no demolition in 2022, however, wood beams from old mills on site were salvaged, which will produce 6,600 board feet of reclaimed lumber. Many other salvaged materials also found a new life in the new OPL Centre, such as old factory lights, bricks, wood, a workbench, and some pipes that became a decorative feature.	Materials and/or structures set aside from past demolition will be reincorporated as appropriate. For example, salvaged metal trusses that were pulled from the old Ottawa Mill will be reused/ installed in Head Street Square.
PM3	Reduce embodied carbon of buildings.	20% 20%	1.Percentage of materials that contain recycled content. 2. Percentage of materials that are locally sourced or manufactured.	There is currently no industry standard or best practice.	The 2020 projects poured concrete with a combined total of 53.34% recycled content. Zibi continues to grow its list of locally sourced products that will help reduce embodied carbon. The sources of the raw materials used in the production of all concrete poured in 2020 projects meet the local requirements of the LEED certification program.	Of the products that were reported on for Block 211 (76 products), roughly 12% contained recycled content (Table 1). Of the products that were reported on for Block 211 (76 products), roughly 35% contained locally sourced materials (Table 1).	For Block 10, 1,346 m^3 of concrete was supplied, consisting of 58% recycled content. At least 29 products were locally sourced for Block 10 (Table 1).	Zibi will continue to spec this target and a consultant will track trade submittals for all materials and products purchased to confirm compliance so we can better report on this. Zibi will continue to spec this target and a consultant will track trade submittals for all materials and products purchased to confirm compliance so we can better report on this.

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INDICATOR	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
PM4	Reduce reliance on unsustainable wood sources. Instead, use wood products with a minimum of 80% FSC certified content, and/or are re-claimed, recycled or from locally managed supply chains.	80%	Proportion of timber or wood products reclaimed, reused or certified by FSC (by value).	There is currently no industry standard or best practice.	Block 208 did not have this as a requirement in the specifications when tendered to the rough carpentry, so no FSC wood was used. Although, some cabinetry and doors in 205A contain FSC wood products, the details of total FSC wood products used for the construction of block 205A will be reported on next year.	Zibi met this target in 2021 as all wood used in Head Street Square and almost all wood used in Pangishimo Park was FSC certified or reclaimed/salvaged. Being a base-build commercial space, there was very little wood used in 211. What continues to remain a challenge is sourcing FSC wood for temporary works on site as the market demand for this type of FSC has changed, more work is to be done on this.	Although Zibi is confident the correct materials were specified, the process to verify that they were used was flawed for Block 10. FSC certified products continue to be a challenge in this region as many producers in the supply chain have stopped actively participating in the program.	For future blocks, Zibi has outsourced data compilation for products and materials to a consulting firm in order to collect more dependable/ accurate results.
PM5	Meet or exceed established best practice standards for indoor air quality.	Achieve LEED IEQ V4 Indoor Environmental Quality: Prerequisites 1 and 2, plus credit IEQc3, plus a minimum of 3 points from IEQc1 and/or IEQc3	LEED v4 IEQ standards.	LEED v4 IEQ standards.	Zibi included this guidance in design and construction specifications and parameters were verified in shop drawing reviews. 46% of all insulation materials used in 208 are GREENGUARD Gold Certified, CFC & HCFCs free, and have less than 100ppm product formaldehyde content. All paints, coatings, sealants and adhesives used in 208 are LEED certified for VOC content. All paints, coatings, sealants and adhesives used in 205A have 45 g/l VOC content or lower.	Zibi included this guidance in design and construction specifications and parameters were verified in shop drawing reviews.	Zibi included this guidance in design and construction specifications and parameters were verified in shop drawing reviews.	Zibi will continue to spec this target and a consultant will track trade submittals to confirm so we can better report on this; on-site spot checks can also be performed to assure compliance.
PM6	Embed a culture of reducing and reusing within the development by providing opportunities to share resources.	1	Number of sharing centers and/or related web-based sites established at Zibi.	There is currently no industry standard or best practice.	Residents have been provided with an online forum that allow for them to share, buy and sell.	Residents have been provided with an online forum that allow for them to share, buy and sell. The yard sale scheduled for 2021 was postponed due to changing covid restrictions.	The Mighty Networks community portal now has a “Marketplace” board, launched late in 2022. Zibi had a first annual Yard Sale in late spring where several residents brought items to sell.	Zibi will have a second-annual yard sale event in 2023. More promotion for the community marketplace on Mighty Networks, and the online platform in general, will be programmed. Zibi will also sponsor Repair Cafes on site through a local non-profit organization.

ZERO WASTE

Offer waste alternatives to increase waste diversion rates, including recycling and compost programs, to more than 70%. Establish a sharing culture by encouraging residents to share resources.

HIGHLIGHTS OF THE YEAR

Visual waste audits revealed that the condo buildings are diverting on average 53% of household waste, which is much better than the regional average for multi-residential buildings (17%), slightly better than Ottawa's overall curbside waste diversion rate (49%), and a good start to hitting our 70% target. A fair amount of community members do not compost so more promotion to encrouage this will be programmed. On the construction site, a visit to the waste treatment facilities confirmed that almost all of contruction waste is being recycled but personal trash cannot be processed and so it represents the bulk of landfilled materials.

SUMMARY OF 2022 ZERO WASTE ACHIEVEMENTS

Refer to Appendix I for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
ZW1	Divert 70% of total annual residential and commercial waste from landfill.	>70%	Percentage of residential and commercial waste diverted from landfill.	In 2016, the city of Ottawa's residential diversion rate was 44%[1]. The Ville de Gatineau has a target of 45% diversion by 2020[2].	Zibi explored financially feasible means of auditing waste in Gatineau as an audit comes at a minimum cost of $1400/audit. Given that waste is collected by the municipality, there is no means of estimating diversion rates through the waste hauler. Attempts to conduct a visual waste audit were impacted by pandemic work from home orders.	Only 2% of those surveyed do not recycle; 2% do not compost and 18% only compost sometimes. 100% of staff recycle and 78% compost. These numbers suggest we should be hitting the 70% target, however waste audits are necessary to be sure and have not been possible to date (Table 1 & 2).	According to visual (by volume) audits and estimated weight conversions, Kanaal Condos is diverting 57% of waste (Table 1) and O Condos is diverting 50% (Table 2). Due to set backs with the tri-sorter at Aalto, accurate waste audits were not possible in 2022. Commercial spaces on average diverted 43% of waste (Table 3).	Zibi's OPA will share this data with residents to get them excited about diverting more waste to hit the 70% target. The RSC will work on a waste management education campaign and promote the special waste collection and bottle drives that will be available in the condo buildings. Waste audits will begin at Block 10/Aalto. The OPA will connect with the commercial tenants to ensure they have the proper waste sorting resources as the data suggests many of the blocks don't seem to be composting and often don't have recycling.
ZW2	Reduce residential waste.	291 kg/person/ year reduction compared to municipal average.	Weight of residential waste produced per person, per year.	Municipal average 349 kg/person/ year.	Zibi explored financially feasible means of auditing waste in Gatineau as an audit comes at a minimum cost of $1400/audit. Given that waste is collected by the municipality, there is no means of estimating diversion rates through the waste hauler. Attempts to conduct a visual waste audit were impacted by pandemic work from home orders.	Given that waste is collected by the municipality, there is no means of estimating waste tonnage through the waste hauler. However Zibi's One Planet Ambassador developed a system for visual waste audits at the end of 2021 to be implemented in 2022.	Based on the estimated averages from the visual audits, Kanaal residents produced roughly 25,427 kg of waste in 2022, with 98 residents, that's roughly 259 kg per person. O Condos produced roughly 24,797 kg, with 103 residents, that's roughly 241 kg per person.	Zibi's OPA plans to share tips for repurposing household items and explore ways to initiate a zero waste challenge. Zibi will also host a first-annual Repair Cafe where residents, and the greater community, can bring broken items to be fixed.

[1]https://Ottawa.ca/en/residents/garbage-and-recycling/solid-waste-data-and-reports

[2]http://www.Gatineau.ca/portail/default.aspx?p=la_ville/salle_medias/communiques/communique_2015&id=-117.580.8251

Chart continued on next page

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
ZW3	Reuse concrete demolition waste.	75% re-use on site, 20% re-use offsite, 5% clean fill.	Percent of concrete demolition waste that is crushed and reused as aggregate on site.	There is currently no industry standard or best practice.	No concrete demolition occurred in 2020.	No demolition occured in 2021. There is very little demo left to do.	There was no demolition in 2022.	Zibi will continue to maximize on concrete reuse opportunities with the small amount of demo work remaining.
ZW4	Divert 90% of construction waste from landfill.	90%	Percentage of construction waste diverted from landfill (by weight).	There is currently no industry standard or best practice.	We have noticed an interesting difference between provincial construction sites waste diversion rates. With Québec diverting 98% of their waste, but Ontario having a much higher volume of waste, a weighted average showed a site-wide waste diversion rate of 83%. See Appendix I for details.	Ontario construction waste diversion was 78.2% while Quebec was 99.6%, making our total average roughly 90% (Table 3 & 4).	Between the Quebec site and the Ontario site we appear to be reaching our target of 90% diversion (Tables 5 & 6). A visit to each of the facilities revealed that in ON, almost all construction material waste is in fact being recycled, the "residuals" are most often personal trash that is sent to another facility for landfill. In QC, all construction material waste is also being recycled but since the facility does not process personal trash they do not include it in their audit, so "residuals" are almost non-existant, making their percentages appear much better.	Zibi will explore having separate containers on the construction site for personal trash in order to be able to account for this type of waste leaving Zibi. A "pack in, pack out" initiative for workers will also be explored for future blocks.

ZERO CARBON ENERGY

Zibi's objective is to create a zero carbon community during operations. In addition to sustainable materials and sustainable transport, this will be achieved by creating a district energy system whose aim is to eliminate 100% of the community's reliance for building operations on GHG emitting energy sources by 2025.

HIGHLIGHTS OF THE YEAR

2022 was the first year of operation of the district energy system in the permanent central plant. Some work has been delayed for the bridge crossing, which meant most heating for January and Februray plus the full year of domestic hot water was still heated with natural gas. The remaining heating and cooling was via the zero-carbon system. The commissioning process used significant amounts of input energy compared to outputs, which increases carbon emissions for this year only. In total, Zibi saved 38% of the emissions compared to business as usual, with a total footprint of 415 tonnes CO2e. While a few commissioning challenges remained in the latter part of 2022, cooling is fuctioning well. In order to get to our goal of zero, the pipes must be finished across the bridge. The success of ZCU triggered significant media interest and resulted in hundreds of people touring the plant and learing about the zero carbon initiative.

SUMMARY OF 2022 ZERO CARBON ENERGY ACHIEVEMENTS

Refer to Appendix J for data. Refer to previous reports for earlier statuses.

IDENTIFIER	PROJECT OUTCOME	TARGET	INDICATOR	BASELINE	2020 STATUS	2021 STATUS	2022 STATUS	2023 ACTION
ZC1	Ensure 100% of Zibi energy needs, including peak energy, are satisfied on a net zero carbon basis.	100%	Percentage of total building energy demand met through zero carbon sources.	There is currently no industry standard or best practice.	Zibi obtained permits from federal and provincial regulatory authorities to construct and operate the district thermal energy system in 2020. Construction began on Zibi's district thermal energy central plant and much of the connection from the plant to the river was done this year. Finally, Zibi secured financing and a grant for its district thermal energy system.	Zibi Community Utility (ZCU) faced delays in opening due to delays with Public Services and Procurement Canada, the government department that was installing sections of pipe on behalf of ZCU. However, infrastructure required for heating of Zibi was installed in the fall of 2021.	All buildings are connected to the district energy system (ZCU). Due to delays on the bridge, gas was burned to make domestic hot water (DHW) all year and for heat in January and February. In addition, there were some ongoing comissioning issues that required gas to be burned for short periods in the later part of the year. In total, 5,014 MWhrs of energy was provided to the buildings at Zibi by ZCU, producing roughly 415 tonnes of CO2e, with 97% of CO2e coming from the natural gas energy inputs (Table 1 & 2). This represents a 38% savings compared to business-as-usual. Given the significant gas energy consumed during the commissioning process, this is a favourable outcome.	The carbon/energy use reporting, including the isolation of gas used to test emergency generators (required by code) will be automated. PSPC will finish the bridge by Q3 2023, henceforth allowing all DHW energy to come from Kruger rather than gas. ZCU continues to work on commissioning issues at Kruger to improve the efficiency of heat exchange as well as response times for issues that result in the use of gas.
ZC2	Decrease building energy demand by 30%.	30%	Percent reduction in building energy demand during operations.	A code-compliant baseline building.	The final energy modeling report for Kanaal reported a performance rate of 25.4% relative to ASHRAE 90.1.	Block 211 will perform 18% better than a code compliant building.	Zibi reduced this goal for the moment to 25% because the improved building code has made 30% out of reach. That said, Block 10 was modeled at 24% better than a code compliant building (Table 3). Zibi continues to struggle with the cost of envelope leaving this target continuousely out of reach, though the development team is working hard to find economical solutions to make the target viable.	Zibi will work diligently to reach 30% on future blocks and will be in a position to provide data on actual energy used rather than just modeled, and looks forward to reporting that moving forward. Dream is actively partnering with a large window-wall company to develop a triple glazed high performance modular system that could be within budget for future blocks.
ZC3	Decrease construction emissions by processing excavated rock on site into aggregates for use in the development.	50% on site, 50% off site	Volume of excavated rock processed on site for reuse as aggregate on site, off site in the city's core.	There is currently no industry standard or best practice.	Opportunities to reuse rock on site were maximized: 71% of all blast rock was crushed and reused or kept in stockpiles on-site.	There was no opportunity for reuse at Zibi in 2021 as there were no roads to build or excavations requiring filling.	Zibi had an opportunity to reuse 10,867 m3 (41%) of excavated material from the foundation of block 11 as backfill for the road running behind it, with the remaining 15,831 m3 (59%) sent to another fill project in Gatineau.	Due to Zibi's urban location and having residents on site now, it may not be possible to get permits for on-site processing, however, rock will be reused as much as practical and otherwise sent for reuse elsewhere for other projects.

SPECIAL HIGHLIGHT

The One Planet Living® Centre, conceived to be an education centre for all things sustainability, opened its doors in 2022. The Centre showcases all 10 principles of OPL and Zibi's One Planet Ambassador holds office hours so visitors can learn first-hand all about Zibi's One Planet Action Plan. It also has an interactive station where visitors can explore the ins and outs of the district thermal energy system, and they could also benefit from a tour of the state-of-the-art plant located conveniently in the lower level of the same building (Block 10). The Centre embodies examples of the 10 principles at work, with clever reuse of materials built in, like reclaimed brick walls, lights, desk and other furniture, a rotating local business feature, zero waste DIY example projects, low carbon food recipes, and more. In its' first 6 months open, the Centre welcomed highschool classes, university classes, residents and a vatriety of business professionals to explore how Zibi is applying OPL. The One Planet Ambassador has also moved employee onboarding sessions from virtual to in person at the Centre, sparking excitement and interest in our new hires. Zibi held events in the Centre and it doubles as a meeting room space so the Resident Sustainability Committee has a new home.

2022 IN REVIEW

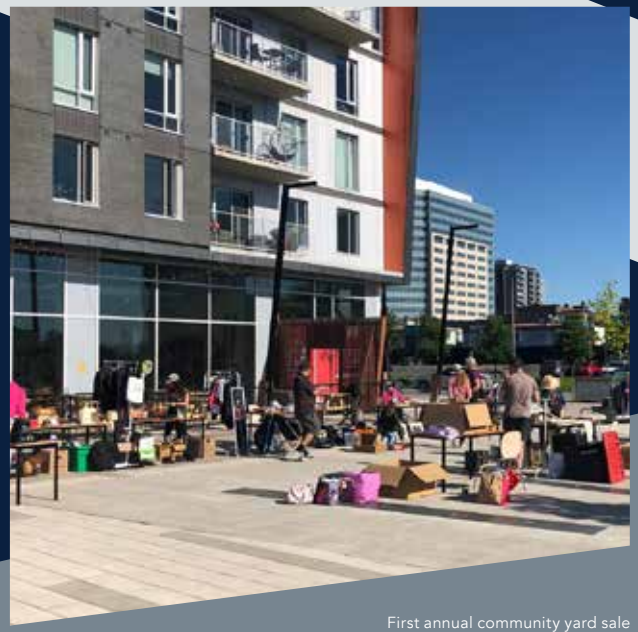
Guided tour of Zibi

Cirque du Soleil "Kooza"

Kanaal garden plot

Outaouais Against Cancer fundraiser,
hosted by the Gatineau Health Foundation

ECOSPHERE fair



First annual community yard sale

LOOKING AHEAD

Zibi looks forward to the opening of Tesasini Park, giving long overdue access to a piece of shoreline that has been inaccessible for decades. Furthermore, with Tesasini's pathways complete, as well as the bridge work on Eddy/Booth Street coming to a close, the Zibi community and the greater community will finally get to take full advantage of the connectivity the project has provided. There is an exciting list of events and workshops already planned for 2023, including a first-annual Repair Cafe, a second-annual Street Market and a winter version of the popular beer fest, "Festibiere". Following some reflection on Zibi's Indigenous engagement commitments and lack of documentation, a novel framework, an Indigenous Participation Plan, will be drafted that will elaborate on how Zibi plans to action said commitments. This plan will also elicit annual reports to allow for further reflection and knowledge sharing. The Zibi community will grow even more in 2023 as Block 206 begins to welcome residents. Block 206 is particularly unique as it has affordable units, regular units, and co-living floors, all in one building. Construction will also begin on Block 204, yet another highrise residential rental building. Finally, Zibi will be running on near-zero carbon energy in 2023 as the final pipes are installed to complete the loop. The future at Zibi is exciting and green as the community continues to grow and take shape!

Rendering of Tesasini Park

Repair Cafe.
Photo Credit: Ottawa Tool Library

Rendering of completed bridge crossing

2022 ONE PLANET REPORT

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