
Baker District, Guelph, Ontario

One Planet Living® Peer Review
2020

Project information

Project	Baker District
Project Type	Mixed use development
Developer	Windmill Developments and City of Guelph
Project contact	Alex Speigel, Partner, Windmill Developments
Brief Description	Baker District is being delivered through a partnership between Windmill Developments and the City of Guelph. The approximately 45,000m ² mixed-use development will provide more than 300 residential units, a new central library and further community uses. The site is located a short walk from down-town Guelph on an existing car park.
One Planet Living Integrator	Steve Dulmage, Senior Consultant, Urban Equation
Peer Reviewer	Ben Gill (Bioregional)
Date of review	July 2020
Performance	Global Leader in One Planet Living [®]

Peer-Review Summary

Baker District, by Windmill Developments and the City of Guelph, has published a high-level One Planet Action Plan, outlining its One Planet Living outcomes and targets and the key strategies to achieve their targets. This has been reviewed with supporting documentation including further detail on specific actions. Based on the commitments in the public documents and the proposed actions, Bioregional has recognised Baker District as a Global Leader in implementing One Planet Living.

Highlights:

- Close to a 40% reduction in parking provision compared to City standards, with a residential car parking ratio of 0.7 spaces per unit. This would be highly ambitious in a city-centre in north America, and yet will be delivered in a small town.
- Clear commitment to achieving zero carbon energy
- Partnership with the City of Guelph to deliver a much-needed library and urban square
- Building on the City of Guelph's position as a leader in agricultural research and innovation, the project aims to build a strong community while promoting sustainable diets.

Rational for decision

The outcomes published in the high-level Action Plan are broadly aligned with all the One Planet Living® goals, and the project has a clear plan and strategy across all the Principles. The development has started from the perspective of allowing a sustainable ecological footprint and has highlighted the need to minimise the impact of building, transport and food. Additionally, the team are comprised of a developer with a track record in delivering sustainable communities in partnership with a City run by a Green Member of the Provincial Parliament, giving confidence that their targets will be met.

Promoting sustainable transport and addressing the embodied energy of construction are challenges for all development. While the development could go further in these areas it is important to understand both the regional context behind the proposed approach.

Baker District is very centrally located in Guelph, and therefore many amenities are in walking distance, but the City itself is not well served by public transport. Canada has the 11th highest level of car ownership in the world and average car ownership per household in Ontario is almost 1.5 cars. Put in this context, the car ownership level of 0.7 is exceptionally low - the only city in the United States with a lower per household car ownership ratio is New York City, and is a lower parking ratio than Windmill have achieved in Toronto or Vancouver. This low parking ratio is being supported by initiatives to support active and public transport. So, the Baker District is setting a new standard of car parking provision for medium-sized towns across the continent.

Embodied carbon is a significant impact in construction and the project team has identified this issue and are undertaking research into how to reduce this, as low-carbon concrete is not as prevalent in North America as some countries in Europe. A key opportunity that has been identified is to make one of the later buildings, Building B, a mass timber building. While the developers are not able to commit at this stage to a timber building, there is a commitment to identify and implement relevant strategies to minimise the embodied carbon.


Key areas of focus

In the first annual review of its One Planet Action Plan, Bioregional is keen to see:

- More detail on the key strategies for meeting the project's outcomes,
- A clear commitment and strategy for reducing the embodied carbon, particularly development of the plan for a timber building onsite
- A finalised zero carbon plan, with a clear strategy to tackle the risks of biomass if that is the selected technology
- A clear strategy for promoting sustainable living in operation.

Outcome of Peer-Review

<p>Project Sponsor: Alex Speigel</p> 	<p>The Baker District in Guelph, Ontario represents an exciting opportunity to demonstrate how a public-private partnership can be leveraged to create benefits for people, the planet and prosperity—otherwise known as the triple bottom line. The new One Planet Community will revitalize the downtown of this mid-sized city with a vibrant, mixed-use, walkable infill project on what is currently a surface parking lot owned by the municipality. The redevelopment will feature a new public library and urban square as well as new residential development, both rental and condominium ownership, an institutional/educational building and supportive retail.</p> <p>Using the One Planet Living® framework as our guide, the project is particularly focused on three principles: zero carbon, sustainable food, and sustainable transportation. The Baker District’s three “Big Moves” strongly align with the City of Guelph’s resources and aspirations. Guelph is already positioned as a Canadian leader in agricultural research and innovation and has demonstrated a genuine commitment to planning for a low-carbon future and active transportation. The Baker District will enable the City of Guelph to better achieve its ambitions, while providing a precedent for future sustainable communities.</p> <p>Windmill Developments is excited to be part of this legacy community-scale project for the City of Guelph. We are hopeful that the Baker District’s success will inspire other municipalities to set the bar high when determining and implementing their sustainability goals for future developments.</p>
<p>Project One Planet Living Integrator: Steve Dulmage</p> 	<p>Baker District is an exciting project that puts Windmill at the forefront of understanding how development projects can create real impact and achieve meaningful sustainability, as defined by the ecological footprint of future residents.</p> <p>Baker District’s OPAP puts Windmill on a journey that will go well beyond the design and construction of the project. Rather it is a journey that will involve the City, the library, the community, design professionals and the residents themselves, all learning how their collective choices can create a thriving community that minimizes its impact on the planet. From a sustainability perspective, development projects don’t get any more exciting than this!</p>

<p>Peer Reviewer: Benjamin Gill</p> 	<p>Baker District is a partnership between Windmill Developments, which has a track record of delivering high-quality, low-carbon developments, and the City of Guelph, home to the first Green Member of the Provincial Parliament in Ontario. The two partners have published a high-level action plan listing out the outcomes that the project wishes to achieve, all of which are closely aligned with the One Planet Living goals. This document is supported by a more detailed draft action plan and designs which lay out how the outcomes and associated targets will be met.</p> <p>The development capitalised on its brownfield city centre location to maximise the promotion of sustainable transport and increase biodiversity value. The car parking level and sustainable transport plan would be exceptional almost anywhere across the continent, and yet are being delivered in a small town. Guelph is a national centre in sustainable food production, and the project intends to build on this to create a strong sense of community engaged with sustainable living. The developer is committed to delivering a timber building onsite if feasible, which would significantly reduce the embodied carbon of the project.</p> <p>With construction not due to start until mid-2021 not all the strategies are yet fixed, but the draft action plan provides a clear map for how the outcomes will be achieved. There are some areas that require further detail, particularly around how the vision for a community engaged in sustainable lifestyles will be brought to fruition. But there is a clear commitment to develop these strategies in timely fashion and ensure that the Baker District provides an example for implementing One Planet Living in small town.</p>
<p>Bioregional</p>	<p>We concur with the One Planet Living Integrator and peer reviewer that Baker District has addressed all One Planet Living principles to a very high standard and is awarded recognition as a One Planet Living Global Leader 2020.</p>

Peer Review

Scope and impact

Review	Overall review			
	Comment	Highlights	Opportunities	Rating 1-5
Impact	The Outcomes address all aspects of One Planet Living, based on the ecological footprint assessment undertaken by the team. The Actions are strongly focused on design, it will be important to develop a clear strategy for resident engagement.	The project aims to engage with a large range of stakeholders and suppliers. The project has identified food, transport and building energy, the three main components of an individual's footprint, as key focus areas.	Ensure that a detailed construction site Action Plan is developed, and a long-term operations strategy	4
Ambition	The outcomes for all the principles are clearly aligned with the One Planet Living Goals	The project has a clear commitment to engage with residents and help them reduce the impact of their food	The commitment to reducing the embodied carbon of the construction could be increased	5
Transformation	The development team has shown a clear commitment to maximise the benefits of the project's location and use this to drive wider change. The reduction in residential parking is a good example of this	The project has reduced car parking provision and is building on the City's sustainable food experience to also push this issue. The project will set a new sustainability standard for smaller towns.	Given its city centre location the project has the potential to further promote public transport and cycling, and minimise the use of the private car in the city	5
Reference	Windmill has a proven track record in green building and Guelph is a progressive city			4

Action Plan

Implementation	Overall review			
	Comment	Highlights	Opportunities	Rating 1-5
Health and Happiness	A clear commitment to, and plan for, creating a healthy and happy community.	Clear strategy to provide healthy buildings.	Operational plan yet to be developed in detail.	5
Equity and Local Economy	The plan shows a clear desire to maximise benefits to the local community, epitomised by the early engagement with First Nations representatives - though this could be further formalised.	Maximising affordable housing, commitment to support local retail and engaging early with First Nations representatives.	Development of retail strategy provides opportunity to further benefit the local community, and First Nations engagement can be formalised.	4

Culture and Community	The development is a cultural hub, with a desire to be a centre for sustainability also.	The library will provide a new facility for the City and community kitchens will enhance community cohesion.	Can a Green Caretaker, or equivalent help to build the culture of sustainability onsite?	4
Land and Nature	A site of minimal biodiversity value will be enhanced through the development.	The site is of minimal biodiversity value. This will be enhanced through green roofs and native planting.	Further develop opportunities to link residents to nature	5
Sustainable Water	Demand will be minimised.	Clear commitment to water efficiency	Can water recycling and reuse be included?	4
Local and Sustainable Food	Guelph is a sustainable food hub, and the project is already collaborating with a number of local initiatives in the local food community, as well as promoting urban agriculture.	Significant early engagement with food programmes, including Our Food Future, and sponsoring of urban agriculture initiative.	Ensure that low meat and dairy diets are promoted, not just local food, in the projects and initiatives.	4
Travel and Transport	The project is taking many steps to maximise the benefits of its city centre location, and the residential parking has been reduced. Ideally the City parking would also be reduced to further encourage people to come to the city centre by sustainable means.	Residential parking ratio, 0.7 and reduced City parking to give an overall reduction of 40% on requirements. Supported by provision of cycling and car-share facilities.	Green transport strategy to engage with residents as they move into the building	4
Materials and products	While the team has acknowledged the need to reduce embodied carbon and gained funding to research the opportunities, there is a need to develop strategies that can be implemented from day one. The commitment to deliver a timber building if feasible is excellent.	Sustainable consumption in operation and the need to reducing the embodied energy of construction, both addressed, including a commitment to achieving maximum credits in relevant LEED category.	Develop a clear strategy to reduce the impact of cement in early buildings and ideally avoid cement in later buildings. The opportunity for building B to be a timber building should be aggressively pursued.	3
Zero Waste	Design strategy in place, with a commitment to develop the operational engagement strategy.	Clear strategy to provide excellent recycling facilities.	Operational engagement plan to be developed.	4
Zero carbon energy	The project has made a clear commitment to achieving zero carbon, with biomass identified as the most viable heating option. This does cause air quality and operational challenges that need to be fully planned for.	High standards of energy efficiency to minimise demand. Incorporation of renewable electricity and heat onsite.	Finalise zero carbon strategy for heat and electricity in full.	4