

## Kelowna Sustainability Checklist



The City of Kelowna endeavours to...

**Sustain the Environment.** Encourage development and land use changes that will not compromise the ability of future generations to meet their needs and to enjoy the quality of life that we experience today;

**Encourage Mixed Use Developments.** Encourage a mix of residential, employment, institutional, and recreational uses within individual buildings or larger development projects, and an increased share of development going to the Downtown or other designated Urban Centres, in order to provide greater access by proximity, thereby reducing transportation-related pollution and urban sprawl;

**Develop a Compact Urban Form.** Develop a more compact urban form that maximizes the use of existing infrastructure, by increasing densities through development, conversion, and re-development within existing areas, particularly in the Downtown or other designated Urban Centres, and by providing for higher densities within future urban areas. Encourage development to proceed in a logical, sequential order, concurrently with availability of required urban services.

**Sustainable Development.** Continue to promote social well being and quality of life by including and implementing policies and actions that are environmentally sound and sustainable for development and re-development within the City.

# KELOWNA SUSTAINABILITY CHECKLIST

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## Instructions

All applicants for *Official Community Plan Amendment, Zoning Bylaw Amendment, Subdivision, Development Permit or Development Variance Permit* are requested to complete the Smart Growth Checklist. Please review and complete the checklist and if necessary, provide a supplementary letter explaining, in more detail, how the proposed development incorporates the listed or other Smart Growth principles. Applicants are encouraged to provide as much information as possible to assist City Council, staff and advisory bodies (i.e. Advisory Planning Commission, Community Heritage Commission etc.) in their review of development proposals. The relevance of the Checklist questions will depend on the nature and scope of the project.

## Mission Statement

Kelowna's Official Community Plan seeks to maintain or enhance our unique environment and lifestyle on behalf of the people of Kelowna through the provision of dynamic and accountable leadership and effective municipal services (Kelowna 2020).

Development is an essential part of the City's future: it creates the urban environment as well as influences social wellbeing, economic strength and environmental conditions. This survey is designed to ensure that Council, staff and the development community work in partnership to achieve the long term goals and objectives of the community.

The purpose of this Sustainability Checklist is to assist Council, staff and developers to create the most sustainable project

possible. The questions in the Checklist are meant to advance the following sustainability objectives.

1. **Efficient use of public funds:** mixed use, higher density areas make better use of existing infrastructure, reduce demands for new roads and services and reduce long term infrastructure maintenance costs;

2. **Protect open space and natural areas:** concentrating growth within existing urban areas minimizes land consumption, protects natural features, preserves wildlife corridors and minimizes environmental impacts;

3. **Placemaking:** people want to live in neighbourhoods that are lively and attractive urban live/work/play environments, with adequate amenities, and which respect the existing neighbourhood and community character, design and historic features;

4. **Accessibility:** compact mixed use development reduces commuting distances, and increases transportation choice (e.g., walking, cycling, and public transit);

5. **Housing choice:** expanding housing choices for different age groups, income and household sizes allows people to remain in the same neighbourhood through different life stages and discourages out-migration due to affordability issues;

6. **Shorter commutes and more transportation choices:** locating jobs in regionally-accessible hubs served by transit and with housing nearby allows people to work closer to home or live closer to work, reducing dependence on the automobile and aids in improving air quality

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## Economic Sustainability

A healthy economy relates to the quality of life for the citizens in our community. The City would like to maintain a balance between the number of jobs and the resident labour force, and ensure those jobs are accessible by transit. Important considerations also include support for local business, job creation, infrastructure efficiency and consideration for and reduction of resource consumption.

1. Comment on **direct employment** created by this project during construction:

a) number and duration of jobs (full time, part time) \_\_\_\_\_

b) types of jobs (e.g., construction, design) \_\_\_\_\_

c) income range of jobs \_\_\_\_\_

2. Will the project provide direct employment (i.e., on the development site) after the project is completed?

**Yes/No**

If so, comment on employment provided by sector, type, income range, and the number of jobs that are full-time and part-time.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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3. Are there any other components of economic sustainability (e.g., suitability of units for home based businesses, green products, local job creation) advanced by this proposal?

**Yes/No**

If yes, describe:

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\_\_\_\_\_  
\_\_\_\_\_

## Environmental Sustainability

Community and building design can significantly influence resource consumption (e.g., energy, water) and waste generation (e.g., vehicle emissions, solid waste) in the local community. New development should be designed to avoid or minimize negative impacts on the existing natural environment and maximize the benefits of the City's existing infrastructure.

## Built Environment

4. Comment on the following site planning components:

4.1 Walking distance to:

a) bus stop (in kms)

\_\_\_\_\_

b) trails, greenways, cycling routes (in kms)

\_\_\_\_\_

4.2 Is development located in the Downtown or in one of the City's designated Urban Centres (see Kelowna Official Community Plan Map 6.2) and on lands less than 30% slope (Map 7.1 of Kelowna's Official Community Plan).

**Yes/No**

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4.3 Provides additional support for alternative transportation use (check all that apply):

- variance received to provide less parking than required;
- bicycle storage;
- change rooms (end of trip facilities);
- designated parking for car share spaces, high occupancy vehicles (e.g., carpool, vanpool, smart cars, hybrids);
- incorporates Transportation Demand Management (TDM)<sup>1</sup> measures;
- other, describe:

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<sup>1</sup>Note: for TDM information see <http://www.kelowna.ca/CM/Page377.aspx>.

4.4 On site storm water management (e.g., green roof treatment, permeable paving, on-site detention/retention drainage, fish or aquatic habitat protection)

**Yes/No**

If yes, describe (note ratio of impervious to pervious surfaces):

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4.5 Floodplain mitigation (note: this is a requirement in floodplain areas)

**Yes/No**

4.6 Will site remediation be part of the development process?

**Yes/Not Applicable**

If yes, briefly outline proposed remediation approach:

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4.7 Mitigation of light pollution (e.g., spill lighting and off-site glare avoided)

**Yes/No**

If yes, describe:

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4.8 Does the project provide enhanced waste diversion facilities (e.g., on-site recycling for cardboard, bottles cans/other recyclables, or on-site composting)

**Yes/No**

If yes, describe:

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5. Comment on inclusion of the following water efficiency techniques:

5.1 Water efficient landscaping (e.g., drought resistant and/or native plantings, use of non-potable or reclaimed water for irrigation, high efficiency irrigation, use of rainwater cisterns for irrigation and Xeriscape Landscaping )

**Yes/No**

If yes, describe:

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5.2 Onsite wastewater treatment?

**Yes/No**

If yes, describe:

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5.3 Water use reduction measures (e.g., low consumption fixtures, storm water irrigation)

**Yes/No**

If yes, describe:

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6. Comment on inclusion of the following methods to reduce energy use and improve air quality:

6.1 Energy efficiency of proposed structures (e.g. building location responding to daily sun/shade patterns, high performance envelopes, passive solar gain, solar shading, natural ventilation, ground heating/cooling, high efficiency fixtures, consideration of heat island effect<sup>2</sup>).

**Yes/No**

If yes, describe:

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<sup>2</sup>For more information on the heat island effect, visit <http://eetd.lbl.gov/HeatIsland/>.

6.2 Use of renewable energy alternatives (e.g., geothermal, solar, off-grid, FortisBC Green Power).

**Yes/No**

If yes, describe:

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6.3 Chlorofluocarbons (CFC) reduction in heating, ventilating, and air conditioning (HVAC) equipment, Power Smart technology?

**Yes/No**

If yes, describe:

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7. Comment on the following methods for sustainable use and reuse of materials and resources:

7.1 Management of construction wastes (e.g. reuse of existing buildings or building materials during construction and/or demolition, remade/recycled content).

**Yes/No**

If yes, describe:

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7.2 Use of environmentally sensitive or recycled construction materials (e.g., high volume fly-ash concrete, non-toxic finishing materials<sup>3</sup>).

**Yes/No**

If yes, describe:

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7.3 Enhanced durability of construction materials (e.g. wall systems, roof materials)

**Yes/No**

If yes, describe:

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7.4 Is LEED<sup>4</sup> certification being pursued for this project?

**Yes/No**

If yes, what level of certification are you aiming for:

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<sup>3</sup> For more information on environmentally sensitive or recycled construction materials, see <http://www.ecosmart.ca/>.

<sup>4</sup> For more information on LEED (Leadership in energy and Environmental Design) certification, see [http://www.usgbc.org/LEED/LEED\\_main.asp](http://www.usgbc.org/LEED/LEED_main.asp).  
Or  
<http://www.cagbc.org/index.php>

7.5 Has the applicant considered PowerSense Residential/Commercial energy saving initiatives offered by FortisBC:

**Yes/No**

If yes, which initiatives are you pursuing:

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<http://www.fortisbc.com/powersense/about.htm>

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7.6 Has the applicant considered rebate and energy efficiency programs offered by Terasen Gas:

Yes/No

If yes, which initiatives are you pursuing?

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<http://www.terasengas.com/Residential/default.htm>

8. Comment on inclusion of the following suggested strategies to improve indoor environmental quality:

8.1 Improved air quality through low emitting materials (e.g., paint, carpets) and natural ventilation with windows that open.

Yes/No

If yes, describe:

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8.2 Design attempts to maximize exposure to natural light (i.e. through building orientation).

Yes/No

9. Does the street layout and design encourage walking and cycling, while providing for personal and commercial vehicle use?

Yes/No

If yes, describe:

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10. If new streets or lanes are constructed as part of the development, are they designed to reduce storm water runoff (e.g., narrow right of ways, permeable shoulders)?

Yes/No

If yes, describe:

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11. If the property is adjacent to existing park space, open space, paths or trails, is a visual and pedestrian connection provided?

Yes/No

If yes, describe:

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12. Do any of the City of Kelowna's policies or regulations currently prevent you from implementing identified Sustainability initiatives?

**Yes/No**

If yes, describe:

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13. Is the proposed residential, commercial or institutional development within a ten-minute walk (approximately 800 meters) from:

a) neighbourhood store or other shopping opportunities

**Yes/No**

b) school

**Yes/No**

c) community services (e.g., library, community centre)

**Yes/No**

d) child care facility

**Yes/No**

e) health services (e.g., hospital, doctor's office)

**Yes/No**

f) parks or trails

**Yes/No**

g) bus stop

**Yes/No**

h) Other Amenities ?

**Yes/No**

List:

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## Natural Environment

14. Comment on green-space and natural environment.

14.1 Is proposed development in an environmental development permit area (eg. Steep Slope, Hazardous Conditions, Wildland Fire, Natural Environment)?

**Yes/No**

If yes, describe:

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14.2 Was an environmental assessment of the property completed prior to the commencement of design work:

**Yes/No**

14.3 Are any of the following environmental features present on the property:

a) Significant trees **Yes/No/Unknown**

b) Natural grassland areas **Yes/No/Unknown**

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- c) Riparian areas **Yes/No/Unknown**
- d) Wildlife (red or blue listed species) **Yes/No/Unknown**
- e) Wildlife habitat **Yes/No/Unknown**
- f) Wildlife corridors **Yes/No/Unknown**
- g) Has the preservation and/or enhancement of the areas listed above been incorporated in the proposed project? **Yes/No/Unknown**

14.4 Provision of green-space and trees on site (includes retention of existing trees).

**Yes/No**

If yes, note and show calculations for:

h) Amount of green-space in square feet:

\_\_\_\_\_

i) Amount of usable open space in square feet:

\_\_\_\_\_

j) Number and percentage of existing trees to be retained on site:

\_\_\_\_\_

k) Number of trees removed:

\_\_\_\_\_

l) Number of trees to be planted:

\_\_\_\_\_

14.5 Are there any significant existing environmental features that are maintained or enhanced on the site (e.g., tree and/or shrub preservation or daylighting of a stream)?

**Yes/No**

If yes, describe:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Social Sustainability

The primary purpose of a city is to provide for the well being of its residents, labour force and visitors. New development should contribute to the health and safety of Kelowna, as well as enhance the range of housing, service and recreational options to meet diverse community needs. The design of new development should respect local heritage and provide attractive spaces that encourage social interaction.

15. Anticipated price range of units (note price range for both commercial and residential units, if applicable). Average price per square foot: \_\_\_\_\_

16. Does the proposed development include non-market housing units (affordable housing)?

**Yes/No**

If yes:

a) number of units:

\_\_\_\_\_

b) as a percentage of total units:

\_\_\_\_\_

c) form of tenure (e.g., rental, co-op, owner):

\_\_\_\_\_

d) targeted population, if applicable (e.g. seniors, family):

\_\_\_\_\_

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17. Does the project include rental housing units?

**Yes/No**

If yes:

Number of units:

\_\_\_\_\_

Expected average rent for a one bedroom unit

\$ \_\_\_\_\_

Expected average rent for a two bedroom unit

\$ \_\_\_\_\_

18. If the project includes low or medium density residential, are the housing units ground-oriented (i.e. does a door have direct outdoor access to a street or courtyard as opposed to a corridor)?

**Yes/No**

If yes:

Number of units:

\_\_\_\_\_

As a percentage of total units

\_\_\_\_\_

19. Does the project design incorporate Crime Prevention Through Environmental Design (CPTED<sup>5</sup>) principles.

**Yes/No**

<sup>5</sup>For more info on Crime Prevention Through Environmental Design Principles CPTED, see:

<http://www.kelowna.ca/citypage/docs/pdfs/development%20services/crime%20prevention%20thru%20design%20guidelines.pdf>

20. Does the project incorporate features to enhance adaptability and accessibility within the proposed housing units for people with disabilities (e.g. wider door openings, reinforced walls in bathrooms for future installation of grab bars, ground-oriented entrances)?

**Yes/No**

If yes, describe:

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21. Actions proposed to mitigate noise from external sources such as traffic, railways, industry, commercial uses, patrons, etc.

**Yes/No**

If yes, describe:

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\_\_\_\_\_

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22. Does the project enhance local identity and character (e.g., through architectural style, landscaping, colours, project name)?

**Yes/No**

If yes, describe:

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23. Describe the existing neighbourhood character (i.e., historical, single family, mixed use etc.) and how the proposed development will enhance the adjacent neighbourhood.

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24. Does the project contain a mix of uses (e.g. residential, commercial) or introduce a new community serving land use type to the neighbourhood (e.g., new housing form, commercial service)?

**Yes/No**

25. Does the project contribute to heritage revitalization through the reuse, relocation or rehabilitation of an existing structure or feature?

**Yes/No**

If yes, describe:

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26. Does the project involve provincial designation of a heritage building?

**Yes/No**

27. Are public amenities provided with the development (check all that apply):

- Public art
- Child care facility
- Walking / Bike Trails
- Other, describe:

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28. Does the development incorporate space for public gathering and activities (e.g., courtyards, communal gardens, play areas)?

**Yes/No**

If yes, describe:

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29. Does the proposed development enhance the streetscape?

**Yes/No**

If yes, describe:

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30. Are private amenities provided with the development (e.g., meeting rooms, outdoor space)?

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**Yes/No**

If yes, describe:

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31. Are residents, community stakeholders, and end-user groups involved in the planning and design process?

**Yes/No**

If yes, describe (e.g., public meetings, residents association meetings, workshops, etc.):

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32. Is there something unique or innovative about your project that has not been addressed in this checklist (e.g., creation of a new zone, other sustainable features, contributions to the community)?

**Yes/No**

If yes, describe:

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## OTHER

33. Have you engaged any Green Building or LEED experienced consultants in association with this development proposal?

If yes, please list and briefly describe their experience:

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## VERIFICATION BY THE APPLICANT

34. I hereby certify that the information provided on this Kelowna Sustainability Checklist is accurate and truthful to the best of my knowledge and release the contents for use by the City of Kelowna:

Applicant Name: \_\_\_\_\_

Owner Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

35. I have read and considered the Kelowna Sustainability Checklist and have elected not to complete it at this time.

(Check Here if Applicable)