



Guide 13

**Ecological footprint and
land-use planning**

Blue Dot

Municipal Toolkit
Building a Low-Carbon Future



Blue Dot Municipal Toolkit

People in Canada take pride in this country's natural landscapes, rich ecosystems and wildlife. But Canada's Constitution doesn't mention environmental rights and responsibilities. Municipalities across the country are recognizing and supporting their residents' right to a healthy environment. By adopting the Blue Dot declaration, more than 150 municipal governments now support the right to clean air and water, safe food, a stable climate and a say in decisions that affect our health and well-being.

For some municipalities, adopting the Blue Dot declaration is a clear statement about environmental initiatives already underway. For others, it's a significant first step. Either way, after passing a declaration, many ask "What happens next?"

This toolkit provides practical ideas for next steps. Its introduction and 13 downloadable guides cover topics related to human health, green communities and a low-carbon future. Written for policy-makers, each guide shares examples of policies and projects undertaken in communities in Canada and around the world. The goal is to inform, inspire and share good ideas and great practices that will lead to healthier, more sustainable communities now and in the future.

The following guides are available:

Introduction to the Blue Dot Municipal Toolkit

Protecting Human Health

- Guide 1: Air quality
- Guide 2: Clean water
- Guide 3: Non-toxic environment
- Guide 4: Healthy food

Creating Green Communities

- Guide 5: Access to green space
- Guide 6: Protecting and restoring biodiversity
- Guide 7: Waste

Building a Low Carbon-Future

- Guide 8: Transitioning to 100% renewable energy
- Guide 9: Green buildings
- Guide 10: Sustainable transportation
- Guide 11: Green economy
- Guide 12: Climate change adaptation
- Guide 13: Ecological footprint and land-use planning

To read more about municipal actions for environmental rights, and to access all the Blue Dot toolkit guides, visit <http://bluedot.ca/municipal-toolkits/>. To read more about the Blue Dot movement and work at the local, provincial and federal levels, visit www.bluedot.ca.

Ensuring a healthy environment requires action in communities of all sizes and at all levels of government. This toolkit helps municipalities continue to take the lead.

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David
Suzuki
Foundation

Fondation
David
Suzuki

Building a Low-Carbon Future

Guide 13: Ecological footprint and land-use planning

The widely used measure of ecological footprint takes into account all the impacts listed in the sections above. It assesses a municipality's sustainability by estimating the number of Earths needed to support all humans at that level of impact. Some cities, such as Vancouver, have set goals to reach a per capita ecological footprint that could be supported by one Earth.

Many of the policies listed in other sections will help municipalities reduce their ecological footprint. This section lists more land-use planning practices Canadian and international communities have adopted to educate residents and reduce impact.

Canadian examples of good practices

a. Brampton, Vaughan, and Richmond Hill: Sustainability Metrics

- i. **Initiatives:** The municipalities collaborated to develop a set of sustainability tools for assessing project applications during the planning process. Qualitative sustainable development guidelines were developed first, followed by quantitative targets aimed at improving building performance, ecological footprint, green space integration, sustainable transportation access and interior environment quality. Applicants calculate a sustainability score based on targets for the built environment, mobility, green space and infrastructure/buildings.¹
- ii. **Results:** The sustainability tools project won the Ontario Professional Planners Institute's 2014 Research/New Directions Excellence in Planning.²

b. Ucluelet: Smart growth strategy

- i. **Initiatives:** In 2007, the town adopted smart growth standards into its Official Community Plan. It uses density bonusing — exchanging density for amenities or parkland — which has led to retaining 40 to 60 per cent of green space in development properties. The town requires LEED Silver buildings for all new commercial and industrial developments and protects green space in subdivisions through local riparian area regulations in the OCP.⁴

c. Saanich: Urban Containment Boundary

- i. **Initiatives:** Saanich established its urban containment boundary in 1964 and has since extended twice, for public health reasons. The boundary, based on sewer system capacity, is designed to protect agricultural lands and encourage density.⁵ Under the 2008 OCP, the district cannot change the boundary without a referendum or plebiscite. It also maintains a

1 Richmond Hill, "Sustainability Metrics," 2015, <https://www.richmondhill.ca/en/find-or-learn-about/sustainability-metrics.aspx>.

2 Ontario Professional Planners Institute, "Excellence in Planning Awards," 2015, <http://ontarioplanners.ca/Knowledge-Centre/Excellence-in-Planning-Awards>.

3 Province of BC, "Ucluelet's Approach to Sustainable Development," <http://www.toolkit.bc.ca/success-story/ucluelet-s-approach-sustainable-development-planning>.

4 District of Ucluelet, Official Community Plan: Life on the Edge, 2011, http://ucluelet.ca/images/OCP_Bylaw_2011.pdf.

5 SmartGrowthBC, Urban and Rural Containment Boundaries, 2008, <http://wcel.org/smart-bylaws-guide-%E2%80%93-part-1-urban-containment-boundaries-%E2%80%93-saanich>.

6 District of Saanich, Sustainable Saanich Official Community Plan, 2008, http://www.saanich.ca/living/community/ocp/ocp_adopted_jul808_amended_aug1715.pdf.



minimum parcel size outside the boundary to further reduce sprawl.⁶ Saanich strengthened its protection of riparian areas by designating a streamside development permit area.

d. Hamilton, Kitchener, Waterloo and Ottawa: Brownfield development incentives

- i. **Initiative:** Hamilton, Kingston and Waterloo offer incentives to develop brownfields by offering grants to assist developers and builders to prepare environmental site assessment reports. All four cities offer tax rebates to further offset the costs of remediation and redevelopment.⁷

International examples of good practices

e. Portland: Smart growth and containing sprawl

- i. **Background:** Oregon State law requires that all cities and counties have an urban containment boundary.⁸
- ii. **Initiatives:** Portland's urban containment boundary has increased density by 50 per cent.⁹ The Healthy Connected City strategy, part of the 2012 Portland Plan, requires that all neighbourhoods have accessible food, housing, businesses and services. The goal is to have complete neighbourhoods for 80 per cent of the city by 2035. The city's 20-minute neighbourhood completeness assessment analyzes accessibility to amenities, parks and schools.¹⁰
- iii. **Results:** Portland won in the Sustainable Communities category of the C40 Cities Climate Leadership Group 2014 awards. The city estimates it already saves \$1 billion a year as a result of residents driving less than other American municipalities.¹¹

7 Ryval, "From Brown to Gold: The Trials, Tribulations-and Rewards-of Developing Brownfields."

8 Oregon Metro, "Urban Growth Boundary," <https://www.oregon.gov/LCD/Pages/urbanrural.aspx>

9 Economist Intelligence Unit, US and Canada Green City Index.

10 City of Portland, "20-Minute Neighbourhoods," Portland Plan, 2012, <http://www.portlandonline.com/portlandplan/index.cfm?a=288098&c=52256> .

11 C40 Cities, "Portland: Healthy Connected City Network," <http://www.c40.org/profiles/2014-portland>.



Advisory services

The **Natural Step Canada (TNSC)** is a national charity whose mission is to tackle climate change and accelerate the transition to a truly sustainable society that thrives within nature's limits. Its academy, advisory services and Sustainability Transition Labs use best-in-class science, systems thinking and facilitation to help individuals and organizations collaborate, solve complex problems, foster innovation, optimize performance and drive systems change.

TNS Canada offers a **Service Cycle for Sustainable Communities** to help municipal governments plan for long-term sustainability and resiliency, embed sustainability into their culture and operations, and engage community stakeholders in their sustainability plans.

To learn more go to: <http://naturalstep.ca/>

The **Whistler Centre for Sustainability (WCS)** is a non-profit organization with the mission to "inspire and facilitate effective planning and meaningful conversations for a better world." WCS provides innovative community engagement, planning and implementation services to local governments across Canada, drawing on its expertise and experience in more than 40 communities. The Centre's work is rooted in future-focused social, environmental and economic values, so that final deliverables embed sustainability throughout.

To learn more go to: <http://whistlercentre.ca>