



EXECUTIVE SUMMARY: Tools for Municipal Governments in BC to Implement a Target of 100% Renewable Energy by 2050

An ELC Clinic report prepared for:
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Executive Summary

The purpose of this report is to provide an overview of British Columbia's municipal jurisdiction to achieve 100% renewable energy ("100% RE") commitments. In response to the threat posed by climate change and the growing movement to transition from fossil fuels, a number of municipalities on Southern Vancouver Island have committed to 100% RE by 2050. Many jurisdictions internationally, including local governments, have committed to and are striving to achieve 100% RE targets.

Municipalities may set an overall direction to achieve 100% RE in a number of planning documents. First, municipalities can use their Official Community Plans ("OCPs") as a signal of their intent to achieve 100% RE. Official Community Plans must include targets, policies, and actions for the reduction of GHG emissions, and may also include the rationale for the targets and the specific means and timelines by which the targets are to be achieved. Official Community Plans may also address energy conservation, a community energy budget and renewable energy—three critical elements of a 100% RE plan. Either adopted as part of an OCP or as a stand-alone document, it is important that a municipality create a climate or energy plan to provide direction to, and communicate and mobilize support for, the 100% RE policy direction. Neighbourhood plans or local area plans—part of OCPs but specific to a particular area—can be used to pilot energy efficiency targets and actions before rolling them out to the rest of the community. Finally, a municipality may require Sustainability Checklists to encourage new developments in advancing community sustainability objectives. These can be required as part of a new development application and can be used to evaluate projects against 100% RE goals.

Municipalities also have jurisdiction for land use, density and zoning, which are effective for discouraging urban sprawl and encourage densification by zoning in such a way as to densify residences in the downtown cores and in central neighbourhoods, particularly within walking distance of public transportation corridors. Residential and commercial uses, services, schools, and other uses can also be combined in multi-use zones to enable walkable communities where people can live, work and find shopping and other services within reasonable walking distance, or within short cycling or transit distance, which can significantly reduce transportation demand. Big box stores can be avoided, and instead zoning used to encourage a greater number of smaller, distributed neighbourhood commercial areas. Municipalities may also designate areas as Development Permit Areas ("DPAs"), in which any development must receive a permit. Such a development permit may include a number of conditions, all with the intention of conserving energy or water, or reducing GHG emissions. Municipalities can use zoning and DPAs to support the Agricultural Land Reserve, and use their zoning powers to promote attached housing, which uses less energy and is a more efficient use of land.

Municipalities can impose Development Cost Charges ("DCCs") related to applications for building or subdivision permits, and may waive or reduce DCCs for certain types of developments, including small lot subdivisions and developments designed to result in low GHG emissions, to create incentives for achieving 100% RE targets. DCCs that municipalities collect may be used for off-site infrastructure designed to reduce GHG pollution, including bus lanes, bus shelters, protected bicycle lanes, marked crosswalks, and sidewalks. Municipalities may also support amenity density bonuses, which provides a higher building density within a specific zone if the developer provides amenities (for example, environmental protection, habitat restoration, and the acquisition of parkland). Pedestrian and cycling infrastructure, as well as building to green building standards or using renewable energy sources may also be considered a public amenity.

Municipalities may also create a building permit rebate program, in which rebates are offered for developments reaching higher steps in the BC Energy Step Code (BCESC), resulting in more energy efficient buildings, or greenstream (fast-track) development applications that exceed the BC Energy Step Code.

As BC's electricity stream is already close to 100% RE, the suite of tools contained in this report largely focus on the sectors where BC municipalities can have the most immediate impact: the built environment and transportation. Within the building sector, municipalities may adopt higher steps of the BCESC, requiring new buildings to meet higher levels of efficiency. Municipalities may create incentives for complying with the BCESC by offering an incentive to developers hiring an Energy Advisor to track compliance with the BCESC. They may opt into the *Solar Hot Water Ready Regulation*, or encourage new buildings to be net-zero energy buildings. They may support the establishment of district energy systems through land use planning, zoning and in setting climate targets and creating climate plans. Further, municipalities may provide incentives, such as by promoting the Revitalization Tax Exemption and the Climate Action Revenue Incentive Program to encourage developers to build to a higher standard of efficiency.

Within the transportation sector, municipalities may re-allocate road space to make non-motorized transportation more efficient, thus encouraging a switch to public transit (for example, by working with the provincial government to create bus lanes), as well as to increase the proportion of human-powered transportation (for example, by expanding sidewalks, implementing bicycling networks and establishing pedestrian plazas). Municipalities also may encourage residents to switch from gas-powered cars to electric vehicle (EVs) by requiring EV charging stations in public places and in new developments. Finally, they may encourage human-powered transportation through intentionally calibrating parking policies (as well as through the development of walkable, compact communities with local commercial areas, as discussed throughout this report).

In summary, the following tools summarize immediate action municipalities can take to achieve 100% RE:

TOOL #1: SET THE FOUNDATION FOR STRONG CLIMATE ACTION IN THE OFFICIAL COMMUNITY PLAN, INCLUDING SETTING A 100% RE TARGET AND CREATING A PLAN TO ACHIEVE THAT TARGET.

TOOL #2: DISCOURAGE URBAN SPRAWL AND ENCOURAGE DENSIFICATION THROUGH THE USE OF ZONING:

- i. Zone to maximize walkability or access to most services by short cycling or transit trips;
- ii. Zone to avoid big box stores or large shopping complexes that are designed to attract shoppers from a large catchment area; zone instead for smaller, distributed neighbourhood commercial;
- iii. Zone for increased density within easy walking distance of frequent public transit;
- iv. Separate Industrial zones and environmentally sensitive areas or watersheds;
- v. Implement one or more Development Permit Areas (DPA);
- vi. Zone to protect the Agricultural Land Reserve (ALR); and
- vii. Zone to promote attached housing over single detached homes.

TOOL #3: CREATE INCENTIVES FOR DEVELOPERS TO BUILD ENERGY EFFICIENT AND LOWER EMISSION BUILDINGS:

- i. Strategically impose and waive or reduce development cost charges (DCCs) for eligible developments;
- ii. Implement amenity density bonuses;
- iii. Implement building permit rebate programs; and
- iv. “Greenstream” or fast-track energy efficient building applications.

TOOL #4: REQUIRE NEW DEVELOPMENTS BE BUILT TO A HIGHER STANDARD OF EFFICIENCY:

- i. Reference the highest level of the BC Energy Step Code (BCESC) as soon as legally allowed; and
- ii. Opt into the *Solar Hot Water Ready Regulation*.
- iii.

TOOL #5: ENCOURAGE THE ESTABLISHMENT OF DISTRICT ENERGY THROUGH LAND USE PLANNING, ZONING AND IN CREATING CLIMATE PLANS.

TOOL #6: CREATE INCENTIVIZES FOR BUILDING TO A HIGHER STANDARD OF ENERGY EFFICIENCY:

- i. Offer a rebate to developers hiring an Energy Advisor to track compliance;
- ii. Use and promote the Revitalization Tax Exemption; and
- iii. Use and promote the Climate Action Revenue Incentive Program.

TOOL #7: CREATE BEHAVIOURAL CHANGES ON THE PART OF RESIDENTS TO REDUCE THE TRANSPORTATION SECTOR’S IMPACT BY:

- i. Re-allocating road space to encourage a switch to public transit (for example, creating bus lanes, where possible, on municipal roads and working with the provincial government on their roads);
- ii. Increasing the proportion of human-powered transportation (for example, expanding sidewalks, bicycling networks and pedestrian plazas);
- iii. Taking steps to make public transit faster and more reliable through work with BC Transit;
- iv. Encouraging residents to switch from gas-powered cars to EVs by requiring EV charging stations in public places and in new developments; and
- v. Encouraging human-powered transportation through intentionally calibrating parking policies.