ATTACHMENT A

Nanaimo City Plan – Green Nanaimo Policies DRAFT – for Environment Committee Review 2022-01-26

D. Policies

D.1A GREEN NANAIMO: RESILIENT & REGENERATIVE ECOSYSTEMS

ABOUT A GREEN NANAIMO

A Green Nanaimo is about how we can support lands, air, and waters. It is about advancing collective knowledge, living in harmony with our environment, and responding and reducing the impacts of climate change while protecting natural systems, people, businesses, and infrastructure. It means making decisions that prioritize a resilient and regenerative environment, moving us towards a city that gives back to our natural world rather than taking from it. A Green Nanaimo recognizes and embraces its role as a sustainable city that helps maintain what we value in our larger region and beyond.

WHY IS A GREEN NANAIMO IMPORTANT FOR OUR FUTURE?

We know that action is required by all to reduce greenhouse gas emissions and preserve the lands and waters on which we rely. We also know that our world is growing and we will be asked to support more people in our community, while at the same time reducing the amount of impact each person makes. Reducing our emissions, providing clean, green alternatives, shifting to green infrastructure, and planning to protect our region's valued lands supports resilience to hazards and mitigation of climate change impacts and is imperative for a healthy, sustainable future for all.

CONTENTS

- D1.1 Greenhouse Gas Emission Reduction & Green Building
- **D1.2 Climate Adaptation & Hazard Management**
- D1.3 Urban Tree Canopy, Natural Areas & Greenways
- **D1.4 Healthy Watersheds**
- **D1.5 Contaminated & Brownfield Sites**
- D1.6 Green & Affordable Water, Sewer, & Stormwater Services
- **D1.7 Solid Waste Management**
- **D1.8 Balanced Lighting and Preservation of Dark Skies**

GREEN INFRASTRUCTURE

Maximized opportunities to sustain watershed and ecosystem health through integrated networks that include protected natural greenways, storm water retention and infiltration, absorbent landscapes, and smart water use



INTEGRATION

What does A GREEN NANAIMO look like in a NEIGHBOURHOOD?

WATERSHED SMART



change impacts, and support one another during emergencies













D.1.1 Greenhouse Gas Emission Reduction & Green Building

We are in a climate emergency. To mitigate climate impacts, Nanaimo is taking a leadership role to significantly reduce our greenhouse gas emissions through changes to our buildings, land use patterns, transportation system, solid waste management, and in our decision-making.

[TO BE ADDED: graphics/visuals and text boxes to explain concepts and terms]

Desired Outcomes

- Become a 100% renewable city by 2050 and achieving the city's greenhouse gas emissions reduction goals as part of our commitment to minimizing Nanaimo's climate change impact.
- Be a model of efficient use of land and resources to create healthy and comfortable built environments through changes in behaviours, zero-carbon and energy efficient buildings, neighbourhoods, employment centres, and use of renewable energy options.

Policies

Overall

- D.1.1.1 Leverage Nanaimo's available resources and authority and work with community members, organizations, businesses, and other levels of government to shift away from fossil fuels to 100% renewable energy by 2050 and, by sequestering or removing carbon, reduce Nanaimo's overall community greenhouse gas emissions to below zero by 2050.
- D.1.1.2 Set and actively work towards interim targets for greenhouse gas emission reductions for 2030, 2035 and 2040.
- D.1.1.3 Monitor progress annually towards targets and review/update greenhouse gas reduction targets every 3 years to ensure they are in line with the recommendations from the Intergovernmental Panel on Climate Change and reflect actions from Provincial and Federal Governments.

Buildings

- D.1.1.4 Accelerate zero-carbon and energy efficient building design and practices for all new construction before 2030 and require this for all new construction after 2030.
- D.1.1.5 Support the upgrade of existing buildings so that all buildings achieve net zero emissions by 2050.
- D.1.1.6 Develop a framework for evaluating the full-life cycle of carbon emissions of buildings, including embodied emissions.

Transportation

- D.1.1.7 Prioritize walking, cycling, and transit over other transportation modes.
- D.1.1.8 Ensure that all residents have access to zero-emission vehicle charging facilities.

D.1.2 Climate Adaptation & Hazard Management

Climate adaptation is critical to lessen the impacts of climate change and ensure our community continues to thrive even as climate change occurs.

Desired Outcomes

- Protected and enhanced ecological assets and natural diversity to support resiliency and prepare for a changing climate.
- Increased agility in preparing for, responding to, and recovering from climate-related hazards.
- Enhanced community awareness, support, and understanding about climate change and adaptation measures.
- People and major community assets protected from the impacts of climate change.

Policies

Communication & Capacity Building

- D.1.2.1 Improve community capacity and resilience by increasing public awareness of climate change, its expected local impacts, and how individuals, businesses, community groups, and others can contribute to mitigation and adaptation.
- D.1.2.2 Support community and neighbourhood-level organizations that help community members prepare for climate change and other hazards.
- D.1.2.3 Encourage and incentivize community members and local businesses to adopt mitigation and adaptation strategies to make homes, businesses, and local economy resilient to a changing climate.

Planning & Strategy

- D.1.2.4 Prioritize hazardous lands and properties at risk for consideration in the City's property acquisition strategy. Advocate to the Province for support in acquisition.
- D.1.2.5 Apply a climate change resilience lens when assessing, planning, designing, or retrofitting cityowned facilities and infrastructure.
- D.1.2.6 Encourage shoreline naturalization to support and protect waterfront properties from flooding risk and landslip while also protecting and restoring habitats.
- D.1.2.7 Manage lands and infrastructure:
 - » to reduce wildfire risk while balancing urban tree canopy health, environmental protection,

and community use and enjoyment.

- » to reduce flood and landslip risk while balancing protection of public and private property and protection of aquatic environments and sensitive slopes where possible.
- » to adapt to sea level rise while balancing protection of public waterfront assets.
- » to protect and increase resilience of infrastructure against sea level rise and climate extremes.
- D.1.2.8 Discourage and redirect existing and future development away from areas prone to flooding, landslip, or sea level rise. Where development does occur, require efforts to mitigate climate change impacts while protecting the natural environment.
- D.1.2.9 Regularly update coastal flooding plans and regulations to encourage public and private development to avoid areas at risk of anticipated sea level rise, and where development exists be resilient to potential sea level rise during the remaining life-cycle of the development.
- D.1.2.10 Ensure contingency reserves contain an allowance for recovery from severe weather-related events.
- D.1.2.11 Work with community partners to minimize the health impacts of extreme weather on community members.

D.1.3 Urban Tree Canopy, Natural Areas & Greenways

Urban tree canopies and natural areas are a fundamental part of the city's infrastructure that support wildlife habitat; ecological services including rainwater attenuation, air, and water quality improvements; heat island attenuation and climate resiliency; human health and safety; and livability of our city. The City now manages over 1,000 hectares of parkland, of which over 70% is natural area with significant tree canopy and lands along watercourses. Creating and maintaining a connected urban tree canopy, parks, and natural areas throughout the city are essential for community health and wellbeing.

Desired Outcomes

- Natural and constructed infrastructure and landscapes that are adapting to climate change, increasing our resiliency, and being sustained through management of trees and absorbent areas on both public and private lands.
- Continuation of Nanaimo's treed character and recreational networks through a strongly integrated system of connected parks and trails, open spaces, and habitat corridors.
- Increased number and quality of trees throughout all parts of the city.
- Improved community understanding of the benefits of tree canopies and green infrastructure.

Policies

Urban Tree Canopy

- D.1.3.1 New development and redevelopment in the city will endeavour to maintain and expand the city's tree canopy in balance with other desired land use outcomes.
- D.1.3.2 Street tree planting and other climate resilient landscaping should be considered in new neighbourhoods and redevelopment sites.
- D.1.3.3 Planting of trees on public and private lands will be promoted throughout the city.
- D.1.3.4 Consider ecosystem biodiversity and resilience when replacing or planting new trees in public spaces.
- D.1.3.5 Wherever possible, private landowners will be encouraged to retain trees that are not a hazard and to replant or plant new trees that support and enhance the treed character of the city.
- D.1.3.6 Removal of trees purely for view enhancement is not supported.
- D.1.3.7 Provide information and education to raise community awareness on the importance of healthy trees.

- D.1.3.8 Consider incentives and programs that encourage retention of existing trees or planting of new trees on private lands.
- D.1.3.9 Where possible, the City will continue to acquire and protect lands that possess significant tree values.

Natural Areas

- D.1.3.10 Development should avoid ecological features such as steep slopes, watercourses, riparian areas, significant trees, and environmentally sensitive lands.
- D.1.3.11 Where riparian or other environmentally sensitive sites have been altered from natural state historically or by development, appropriate restoration will be encouraged as a part of redevelopment, targeting net gain of ecological values.
- D.1.3.12 On steep slope areas, efforts will be made to maintain existing treed areas and restore tree and vegetative cover for the purpose of controlling erosion, enhancing ecological services, reducing visual and aesthetic impacts, and protecting the ecosystem.
- D.1.3.13 Through development applications, private lands with significant environmental, urban tree canopy, natural capital or recreational value should be protected by means of tools such as covenant, eco-gifting, or land dedication.
- D.1.3.14 When planning for natural assets and park spaces, strive to find creative solutions that protect ecological assets and functions and allow defined public access and amenities if and where appropriate while balancing watercourse, tree protection, and environmentally sensitive area regulations.
- D.1.3.15 Through programs and partnerships, the City will endeavour to preserve ecosystem integrity by removing invasive species from natural areas, restoring disturbed ecologically sensitive areas with native and/or appropriate non-invasive vegetation, and joint stewardship and restoration initiatives.
- D.1.3.16 Continue to acquire natural areas as parkland and continue to manage forests and ecosystems within them so they adapt and evolve with climate change.

Greenways

- D.1.3.17 The City will work with other agencies and interested community groups to promote and implement potential greenways, including both habitat greenway systems and recreational greenway systems, which may be combined in appropriate locations.
- D.1.3.18 Over the long term, the City will continue to create an interconnected greenway network, including along lake and ocean waterfronts, watercourses, and slopes.

D.1.3.19 Greenways will continue to be established to protect and enhance natural habitat, support wildlife, and allow for active transportation routes where environmental setbacks and constraints allow. Development of trails, viewing points, and rest areas within greenways will be supported, sited and installed in an environmentally sensitive manner.

D.1.4 Healthy Watersheds

In addition to the role of vegetated riparian shoreline areas, ecological function in Nanaimo's streams, lakes, wetlands, and waterfronts is dependent on the quality and quantity of water provided by related watersheds that drain to them.

Desired Outcomes

- A significant number and wide array of biologically diverse freshwater and saltwater ecosystems throughout the city that are preserved for future generations.
- Restoration of areas that have been impacted by erosion related to past development.
- Thoughtful integration of urban development and built and natural systems that protect and enhance the quality of the city's watersheds, even as the city densifies.

Policies

- D.1.4.1 Wherever possible, incorporate best management practises for new and existing developments to support watershed health, such as pervious paving, rain gardens and bioswales, deep absorbent soils, green / blue roof, rainwater capture or detention systems, or other best practices that evolve.
- D.1.4.2 Regularly review and update City design standards and regulations for public and private development and stormwater and rainwater management systems to be resilient to anticipated climate change, including attention to cumulative flows and water quality at the watershed scale. Objectives include:
 - » supporting stream summer base flows and limiting in-stream or bank erosion related to stormwater flows and volumes, by addressing extent and sizing of rainwater management best practices and detention storage;
 - » maintaining environmental water quality standards, by addressing erosion and sediment control and stormwater pollution risks;
 - » managing risks of flooding including overland flow paths and relationships with sea level rise.
- D.1.4.3 Continue to protect and manage freshwater and saltwater shoreline areas to maintain the best possible hydrological functions.
- D.1.4.4 Continue to work with adjacent jurisdictions including Snuneymuxw First Nation, the RDN, and other organizations to collaborate on areas of shared interest for watershed management including drinking water protection.

D.1.5 Brownfield Sites

Redeveloping brownfields is one of the most promising ways to promote the environmental, economic, and social health in Nanaimo and aligns with the Nanaimo Doughnut.

Nanaimo has a number of brownfield sites throughout the community which are a legacy from the City's coal mining history, early industrial activities, and fossil fuel storage for transportation. Many sites are found in prime locations with significant development potential, but have sat idle for years as redevelopment is complicated by remediation costs, regulations, liability concerns, and other barriers.

Desired Outcomes

Redevelopment of key brownfield sites in Nanaimo, ensuring that the work generates significant triple-bottom line benefits by improving the City's economic, environmental, and social health.

Policies

- D.1.5.1 Stimulate and leverage private and public sector investment to promote the remediation, rehabilitation, adaptive re-use, and overall improvement of brownfield sites throughout the city.
- D.1.5.2 Increase community awareness of the economic, environmental, and social benefits of brownfield redevelopment.
- D.1.5.3 Continue to use city resources to demonstrate leadership in the remediation, rehabilitation, adaptive re-use, and overall improvement of brownfield sites throughout the city.
- D.1.5.4 Achieve appropriate permanent redevelopment or interim uses of brownfield sites throughout the city.
- D.1.5.5 Leverage financial opportunities from a range of stakeholders.
- D.1.5.6 When considering land dedication of potentially contaminated sites, the City will consider risks and public benefit of accepting the property.

D.1.6 Green & Affordable Water, Sewer, & Stormwater Services

Provision of affordable and sustainable utility services is critical to the health of a community. Thoughtful, compact urban growth and adoption of best practices for conservation and management helps to control costs of servicing; reduces pressure to increase taxes, servicing levies, and development cost charges; and frees up money for investment in other community services.

The City's role in servicing includes:

- Drinking Water Provision: The City owns and operates its water system, with supply provided by the South Nanaimo River watershed, located 20 km southwest of the city. Water is delivered to all customers through a system of dams, distribution mains, treatment facilities, reservoirs, and pumping stations. The City manages water supply so it can continue to serve a growing population and encourages conservation so that costs of expansion are managed.
- Sewer Services: The City is responsible for the collection of sanitary sewage and conveyance to the Regional District of Nanaimo's sewer trunk mains and waste water treatment facilities.
- Stormwater Services: The City manages infrastructure to manage runoff from rainfall within the city. Effective management of rainwater reduces flood risk and protects natural aquatic environments. With impacts of climate change contributing to more intense rainfall events, the City takes a forward-looking view to stormwater management and seeks to integrate both built infrastructure and natural assets such as wetlands, ponds and creeks.

Desired Outcomes

- A clean, safe, cost-effective, resilient and sustainable drinking water supply for all customers that supports continued growth while maintaining environmental quality and accounting for climate change impacts.
- Continued provision of an efficient sewer system to the urban areas of the city that meets public health and environmental standards and supports thoughtful urban growth.
- An affordable, resilient stormwater system that integrates both built infrastructure and natural assets to provide flood protection, support healthy aquatic environments, and meet demands of climate change resiliency.
- Sufficient capital and operating funds to ensure long-term financial viability of city services and certainty regarding future development cost charges.
- Innovations that support service delivery that is more cost effective, sustainable, and environmentally friendly developed in partnership with other levels of governments and organizations.
- Strongly linked growth and servicing capacity planning so that expansion and upgrades are strategic and efficient.

Policies

Overall

- D.1.6.1 Growth in areas with sewer, water, drainage, or transportation infrastructure capacity restrictions will not proceed until there is confirmed funding and plans to address capacity shortfalls.
- D.1.6.2 Investigate and apply current climate science to ensure resilience of infrastructure life-cycle financial planning and sustainable maintenance.
- D.1.6.3 Coordinate utility infrastructure upgrades with transportation and/or parks improvements to minimize disruption and optimize community investments.
- D.1.6.4 Make land use, planning, and capital investment decisions with a long-term life-cycle asset management perspective for the design, maintenance, and renewal of servicing infrastructure, including natural assets.
- D.1.6.5 Where possible, consider mitigation of air, noise, and light pollution associated with the provision of civic infrastructure including parks, buildings, and facilities.

Drinking Water Provision

- D.1.6.6 To ensure the long-term sustainable use and protection of its water source, the City will continue to participate in planning and monitoring land and water use in the region in conjunction with the other major water users and license holders.
- D.1.6.7 The City will continue advancing its water conservation program.

Sewer Services

- D.1.6.8 Plans for future expansion and upgrading of sewer services should reflect:
 - » priority of servicing of Urban Centres based on their priority designation (see policy C5.3.3);
 - » priority of servicing land within the UCB, except lands designated low-density residential or resource management; and
 - » limiting new services outside the UCB.
- D.1.6.9 The City supports the RDN's Liquid Waste Management Plan (LWMP). The City's sewage collection system will continue to evolve to support the principles, goals, and objectives of the LWMP.
- D.1.6.10 The City and the RDN will continue to explore and implement ways to improve the efficiency of the liquid waste collection and treatment system.

Stormwater Management Services

- D.1.6.11 Watercourses used for storm drainage should be maintained in a natural state and daylighted where practical.
- D.1.6.12 The City will continue to maintain and update a Stormwater Management Policy, along with subdivision standards and specifications for stormwater management, to support the goals and desired outcomes of City Plan.
- D.1.6.13 The City will work with the RDN regarding stormwater management planning where drainage basins cross jurisdictional boundaries.
- D.1.6.14 The City acknowledges the importance of integrated stormwater management planning for significant watercourses and their watersheds and supports preparation of Drainage Master Plans for significant watercourses in Nanaimo.
- D.1.6.15 The City recognizes the integrated role of watercourses both as drainage and flood control systems and as ecosystems that provide valuable aquatic habitat.
- D.1.6.16 The City acknowledges that overland flooding resulting from heavy rainfall may increase with climate change and will seek to identify, enhance, and establish overland flood paths, drainage basins, and protected rights-of-ways on private property to reduce potential impacts.
- D.1.6.17 The City recognizes and supports the role of natural assets in stormwater management and supports the protection, enhancement, and maintenance of their function.

Servicing Costs

- D.1.6.18 Development Cost Charges (DCCs) planning will endeavour to reflect the land use designations in this Plan in determining the demands and priorities for use of DCC funds.
- D.1.6.19 DCCs will be reviewed and updated on a regular and ongoing basis (generally every five years), and involve input from stakeholders and the public.
- D.1.6.20 DCCs will seek to achieve equitable distribution between existing and future residents of the costs associated with new development.
- D.1.6.21 Comprehensive servicing planning and costing may be included as part of Area Planning processes for Urban Centres (see policy C5.3.16).
- D.1.6.22 Servicing investments will be prioritized to align with the development of Urban Centres based on their priority designation

D.1.7 Solid Waste Management

Solid waste management is a collaborative process. The City is responsible for curbside compost, garbage, and recycling pickup while the RDN is responsible for solid waste management and disposal, including the Regional landfill site on Cedar Road. Private sector services also provide recycling drop-off depots and other services. Reduction in solid waste supports preservation of land, reduction of greenhouse gas emissions, and other benefits.

Desired Outcomes

- Effective and responsible solid waste, composting, and recycling collection, management, and disposal to meet community needs.
- Progress towards zero waste throughout the full life-cycle of production, consumption, recycling, and disposal to achieve local and regional waste management goals.
- Support for development of circular economies which aim for maximum use of finite resources, transition to renewable resources, and recovery of materials and products that result in minimum waste generation.

Policies

Partnerships

- D.1.7.1 Work with the RDN, Nanaimo residents, businesses, partners, and agencies to accelerate waste reduction and avoidance in support of regional goals.
- D.1.7.2 Work with appropriate government partners to change to existing regulatory barriers that discourage the reuse of materials and promote material exchange networks and the re-engineering of recycled materials.
- D.1.7.3 Support the Regional District of Nanaimo's Solid Waste Management Plan.
- D.1.7.4 Work with similar municipalities across the globe to develop and enhance circular economies.

Zero Waste

- D.1.7.5 Work to eliminate organic matter sent to the regional landfill by 2030.
- D.1.7.6 Increase public awareness to overcome barriers to recycling, reuse, and waste reduction through City outreach programs and community partnerships. Practice the "four R's," providing city residents opportunities to refuse, reduce, reuse, and recycle, as well as to explore redesign, composting, and other practices.
- D.1.7.7 Incorporate zero waste management and circular economy principles in the development of new buildings, landscapes, and neighbourhoods.

- D.1.7.8 The City aims to increase public awareness and participation in the zero waste mandate and refusing, reducing, reusing, and recycling by improving access to recycling and re-use opportunities and supporting programs for the sharing of resources.
- D.1.7.9 Support waste diversion through improved reuse and recycling services for a diversity of materials.
- D.1.7.10 Set the fee structure for solid waste collection so that it provides residents with an acceptable basic level of service at reasonable cost while encouraging users to reduce unnecessary waste.
- D.1.7.11 City-operated recycling services will provide incentives for users as alternatives to waste disposal that pursue the "four R's" and will focus on cost effective programs that have the greatest potential for materials diversion from the landfill.
- D.1.7.12 Continue to set good examples of waste reduction in the City's procurement practices by emphasizing reusable packaged products, minimizing the procurement of over-packaged products, and promoting products that contain recycled materials.
- D.1.7.13 Encourage recycling and reuse programs run by others to locate in the city in places that are accessible to multiple modes of transportation.
- D.1.7.14 Encourage the adaptive reuse of buildings to help reduce construction waste.
- D.1.7.15 Support local material bans that align with local, regional, provincial, and federal initiatives.

D.1.8 Balanced Lighting and Preservation of Dark Skies

Enjoyment of dark night skies is becoming increasingly challenging in our city due to light pollution from artificial lighting. Besides affecting views of the night sky, light pollution can have harmful effects on ecosystems, wildlife, and quality of life. Careful consideration of use of artificial lighting on streets, buildings, community spaces, and facilities, can improve the quality of our urban environments while also addressing community safety, quality of life and environmental health, and energy savings.

Desired Outcomes

- Recognition of Nanaimo as a Dark Sky Community through public and private initiatives to protect dark sky views.
- Effective and smart lighting on public and private lands that protects access to dark sky views while also directing light where it is needed for human safety.
- Education of community and organizations of the environmental and quality of life benefits of dark skies and ways to avoid light pollution, increase safety and save energy through lighting design and placement.

Policies

Partnerships

D.1.8.1 Work with neighbouring governments including Snuneymuxw First Nation, District of Lantzville and the RDN, Nanaimo residents, businesses, partners, and agencies to build awareness and understanding of the benefits of protecting dark skies and support for collaborative strategies and actions.

Street Lighting

D.1.8.2 Continue to balance community safety, energy, and dark sky preservation in the selection and installation of new and upgraded street lighting infrastructure.

City Buildings and Facilities

D.1.8.3 Continue to balance dark sky values with safety principles when building new or retrofitting existing City buildings and facilities.

New and Upgraded Buildings and Developments

D.1.8.4 Continue to support dark sky principles balanced with safety considerations for new and upgraded buildings and developments.

Parks, Trails and Natural Areas

- D.1.8.5 Work with community and other interested parties to prioritize the designation of suitable City Parks as Dark Sky Parks or Preserves.
- D.1.8.6 Recognize Dark Sky spaces as recreational amenities for community members and visitors.
- D.1.8.7 Work to establish a hierarchy of lighting of trails, parks, and natural areas to provide a range of user options that balance dark sky and community safety.

DRAFT Glossary of Terms used in the Green Policies – UNDER CONSTRUCTION

Absorbent landscapes

Adaptation: Actions taken to cope with or adjust to a changing climate.

Adaptive re-use

Brownfield - A brownfield is defined as an abandoned, vacant, derelict or underutilized commercial, industrial or institutional property where past actions have resulted in actual or perceived contamination or threats to public health and safety, and where there is active potential for redevelopment.

Carbon negative: Carbon negative means that greenhouse gas emissions are less than those sequestered or removed on an annual basis.

Carbon Sequestration/Removal: natural or technological processes that provide long-term storage of carbon dioxide from the atmosphere.

Circular Economy

Dark Sky Principles

Ecological Capital

Ecological function

Embodied Emissions: The greenhouse gas emissions produced in creating and delivering a particular material (e.g., infrastructure or consumable goods), including the energy used for extraction of raw materials, manufacturing and transportation of the end product.

Environmental Capital

Fossil fuel: fuels such as coal, gasoline, natural gas, oil, diesel, etc. that are sourced from organic materials formed over a long geological time period.

Fossil fuels

Green infrastructure

Greenhouse Gas: A gas that contributes to climate change by trapping heat in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases.

Greenway network

Greenway - Habitat

Greenway - Recreational

Hydrologic function. Means soil, stream, wetland and riparian area properties related to the storage, timing, distribution, and circulation of water.

Light Pollution

Mitigation: Actions taken to reduce climate change, primarily by reducing greenhouse gas emissions. Make this broader to relate to a range of hazards

Natural Capital

Natural Systems

Net-Zero Carbon: Net-zero carbon means that greenhouse gas emissions minus carbon sequestration equals zero on an annual basis.

Net-Zero Energy: In the context of a building, it is a building that produces as much energy as it consumes on an annual basis.

Recreational Greenway

Regenerative

Renewable city

Renewable Energy: Renewable energy is energy derived from natural processes (e.g., sunlight and wind) that are replenished at a faster rate than they are consumed.

Resilient
Retrofitted
Riparian
Sustainability
Tree canopy
Triple bottom line
Zero Emission Vehicle: a vehicle that emits no greenhouse gases from tailpipe exhaust, such as a
battery electric or a hydrogen powered vehicle.