1 Carbon Free Corporation

The City of New Westminster will reduce its overall carbon footprint and will strive to achieve net zero carbon emissions by 2030.

## HERE ARE SOME EXAMPLES OF PROJECTS IN THE CAPITAL PLAN THAT HELP US ACHIEVE THIS BOLD STEP.

#### New Energy Efficient Community Facilities

Starting in 2020 you will see projects such as the replacement of Canada Games Pool and Centennial Community Centre with a new integrated facility, and the construction of the new Queen's Park Sportsplex. New buildings such as these will result in substantial reduction in GHG intensity and gross GHG production through:

- electrification of the mechanical system
- improved building envelope performance
- on-site renewables using photo voltaic panels 5% of facility demand
- reduction in embodied carbon with the use of structural wood products

#### Corporate Building Energy Upgrades

You will see repairs and upgrades to existing City buildings such as the installation of high efficiency unit heaters at Glenbrook Firehall. It will also include the implementation of energy projects from a Facility Energy Study that will result in annual GHG reductions.

#### **Low Carbon City Fleet**

Throughout the term of this financial plan, you will see the continued replacement of gasoline vehicles to low carbon vehicles (e.g. electric hybrid bucket trucks, utility vehicle). The City will also invest in infrastructure to support zero emissions electric vehicles.

HIGHLIGHTS FROM THE CAPITAL BUDGET 2020 - 2024

New Community Facilities \$102,610,000
Corporate Building Energy Upgrades

Low Carbon City Fleet \$1,750,000

\$2,430,000





### 2 Car Light Community

Accelerate the Master Transportation Plan targets for mode split: 60% of all trips within the City will be by sustainable modes of transportation (walk, transit, bike, multi-occupant shared) by 2030.

## HERE ARE SOME EXAMPLES OF PROJECTS IN THE CAPITAL PLAN THAT HELP US ACHIEVE THIS BOLD STEP.

#### Greenway Projects

In the next five years, you will see range of projects that will support a shift to sustainable modes. This will include projects such as:

- construction of the first phase of Braid Street multi-use path to connect to SkyTrain
- walking and cycling connection to NWSS via Moody Park
- protected bike lanes on the Rotary Crosstown Greenway from Eighth Street to Fifth Street
- the design and construction of the Agnes Greenway from the Pattullo Bridge to Carnarvon/Lorne, including protected bike lanes and intersection improvements

#### **Q** to **Q** Ferry Infrastructure Improvements

You will see Q to Q infrastructure improvements, including dock improvements at Port Royal. These improvements will include EV charging infrastructure for vessels

#### Sidewalk Installation and Repair

The purpose of this program is to construct sidewalks where they do not currently exist and to repair existing sidewalks. This work will include lighting improvements where necessary. In 2020, you will see two projects:

- Phillips Street, from Salter Street to Ewen Avenue
- Ninth Avenue in Connaught Heights

#### School Area Improvements

Improvements to support walking, transit, and cycling to school

#### HIGHLIGHTS FROM THE CAPITAL BUDGET 2020 - 2024

**Greenway Projects \$21,173,000** 

Q to Q Ferry Infrastructure Improvements

\$1,750,000

Sidewalk Installation and Repair

\$6,450,000

School Area Improvements \$2,100,000

SEE BOARDS #10-18
to learn more about the strategic plan and the types of capital projects that will help of achieve the sustainable transportation priority.



### Carbon Free Homes and Buildings

Community carbon emissions for all homes and buildings will be reduced significantly. By 2030, all new and replacement heating and hot water systems will be zero emissions.

#### HERE ARE SOME EXAMPLES OF PROJECTS IN THE CAPITAL PLAN THAT HELP US ACHIEVE THIS BOLD STEP.

**Community Energy and Emission Plan (CEEP)** 

As part of the City's ongoing efforts to reduce its impact on climate change, the City will update the Community Energy and Emissions Plan (CEEP) in 2020. The CEEP will outline a strategy to help conserve energy in the areas of transportation, buildings and solid waste. The plan will include specific actions and policies that help create energy efficient buildings. The CEEP will be developed with input from residents and organizations in New Westminster.

#### Implementation actions may include:

- incentive programs
- partnerships

**HIGHLIGHTS FROM** THE CAPITAL **BUDGET 2020 - 2024** 

**CEEP Update and Implementation** \$1,200,000

**Water Conservation** Program \$190,000

Most of the work being done to achieve this bold step will be captured in the OPERATIONS BUDGET (to come February - March 2020).

public education





### Pollution Free Vehicles

By 2030, 50% of kilometres driven by New Westminster registered vehicle owners will be by zero emissions vehicles.

#### HERE ARE SOME EXAMPLES OF PROJECTS IN THE CAPITAL PLAN THAT HELP US ACHIEVE THIS BOLD STEP.

**Community and Corporate EV Charging Strategy** 

In 2020, you will see the City develop an EV charging strategy to ensure adequate capacity to promote the expanded use of electric vehicles in the city. The strategy will include transitioning the City's fleet of vehicles to more sustainable options as well as looking for opportunities to reduce the amount of time our vehicles are on the road.

**Electrical Distribution System Design and Upgrade** 

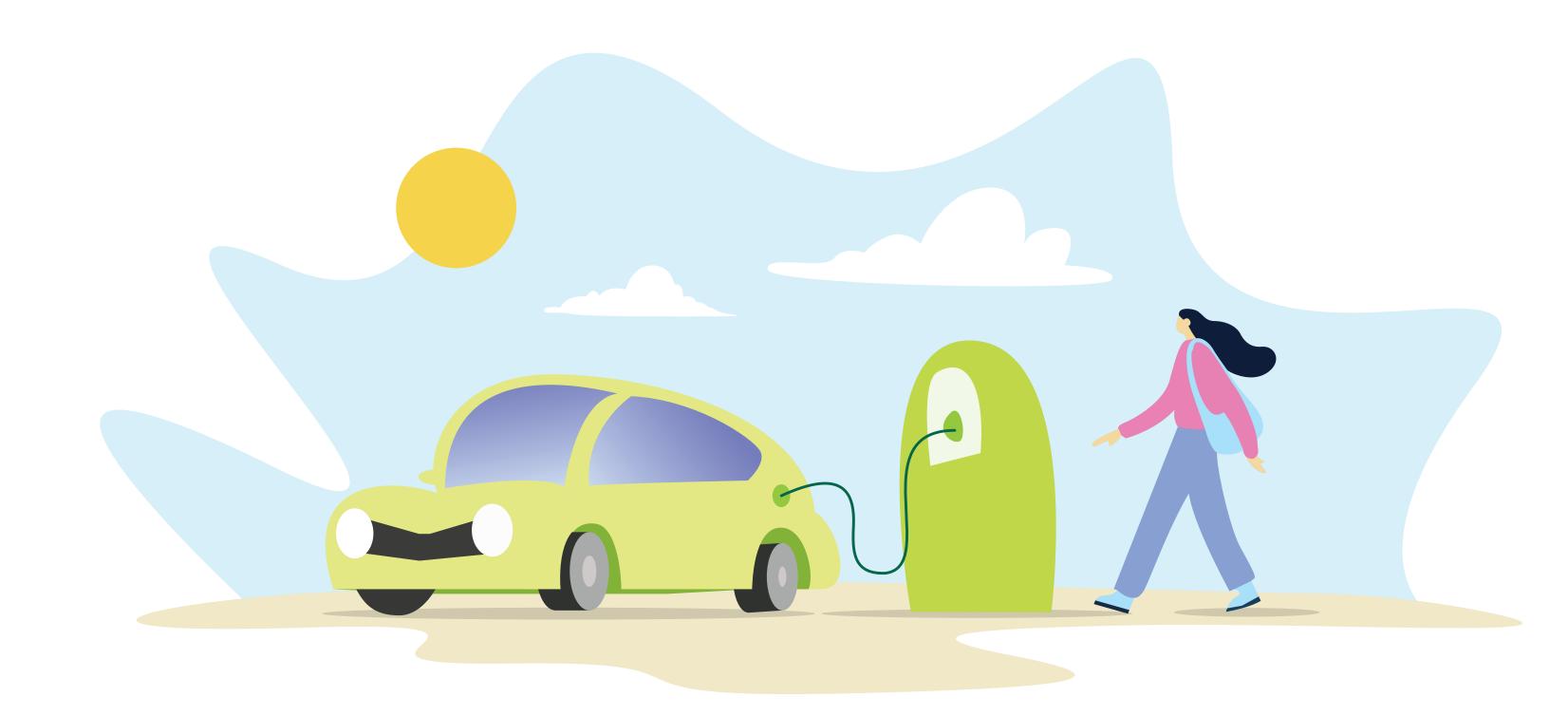
Over the next five years, the electrical system plan will give direction to how the electrical grid infrastructure would serve stakeholders to ensure we are prepared for future vehicle and building electrification.

#### **HIGHLIGHTS FROM** THE CAPITAL **BUDGET 2020 - 2024**

**Community and Corporate EV Charging Strategy and Implementation** 

\$1,162,500

**Electrical Distribution System Design and Upgrade** \$1,800,000



### **6** Carbon Free Energy

The City of New Westminster will invest in a smart electrical grid in order to accommodate the required rapid conversion to building and vehicle electrification.

### HERE ARE SOME EXAMPLES OF PROJECTS IN THE CAPITAL PLAN THAT HELP US ACHIEVE THIS BOLD STEP.

#### Sapperton District Energy System

The City is looking at implementing a District Energy System (DES) using sewer heat recovery from Metro Vancouver's main sewer line to meet energy needs of areas surrounding the Sapperton and Braid SkyTrain stations. Up to 80% of the energy demand from future development and growth in Sapperton will be addressed with a renewal energy source by the DES. With an estimated greenhouse gas reduction of 8600 tonnes per year at full build, out of the system, the Sapperton District Energy System represents a major step forward in achieving emission reduction targets expressed in New Westminster's Official Community Plan (OCP). The GHG emission drop is equivalent to removing 1,700 vehicles from our roads each year.

#### Queensborough Substation

By 2022 you will see a new substation in the Queensborough area. Benefits of this new substation include:

- adding capacity to the entire utility infrastructure
- minimizing the need for additional feeders
- accommodating future capacity for building and vehicle electrification
- increasing system reliability

#### Urban Solar Gardens

The City has successfully implemented two large community-owned solar gardens. The City will look at other opportunities to expand its solar generation on other City buildings and have community involvement where possible.

#### HIGHLIGHTS FROM THE CAPITAL BUDGET 2020 - 2024

Sapperton District Energy
System
\$53,500,000
Queensborough Substation
\$30,000,000



**8 Robust Urban Forest** 

New Westminster's urban forest canopy cover will be increased to 27% by 2030 to support the removal of 4,050 tonnes of carbon pollution every year and increase our forest's carbon storage capacity by 50%.

## HERE ARE SOME EXAMPLES OF PROJECTS IN THE CAPITAL PLAN THAT HELP US ACHIEVE THIS BOLD STEP.

**Growing and Caring for the Urban Forest** 

You will see the City planting new and replacement trees on City lands, sustaining ongoing maintenance of existing City trees, and funding and promoting the planting of trees on private lands.

Natural Environment Enhancement & Biodiversity

You will see the development of a Biodiversity strategy which will include initiatives to strengthen the ecological health of the city's urban forest and green spaces. Natural areas will also continue to be enhanced.

#### HIGHLIGHTS FROM THE CAPITAL BUDGET 2020 - 2024

**Growing and Caring for the Urban Forest** 

\$489,200

Natural Environment Enhancement & Biodiversity \$243,800



#### WHAT IS THE ROLE OF THE URBAN FOREST

#### 1. Health and well-being

Trees clean the air by capturing particulates and through absorption and adsorption of other pollutants. Research also supports that trees and greenspaces provide a broad range of benefits including reduced stress, improved attention span, faster recovery from surgery, higher levels of physical activity and community connectivity.

#### 2. Environmental health

The urban forest provides habitat and contributes to urban biodiversity. Trees and vegetation intercept and clean stormwater before it reaches natural waterways.

#### 3. Energy savings

Trees, and green infrastructure, when strategically placed can provide savings on heating and cooling costs for buildings.

#### 4. Comfort/shade/microclimate

Trees provide comfort by moderating the climate at street level. Trees provide shade and evapo-transpirative cooling that gives people relief on hot summer days.

# Quality People-Centered Public Realm

A minimum of 10% of today's street space that currently only serves motor vehicles, excluding transit, will be reallocated for sustainable transportation or public gathering by 2030. The natural environment will be integrated with the public realm.

### HERE ARE SOME EXAMPLES OF PROJECTS IN THE CAPITAL PLAN THAT HELP US ACHIEVE THIS BOLD STEP.

#### **Fourth Street Feature Stairway**

In the 2022 budget, you will see the installation of a permanent staircase to connect Columbia Street to Front Street complete with public realm enhancement. Permanent stairs at Fourth Street contribute to the downtown pedestrian network, further connecting people to retail and amenities along the Front Street Mews and the riverfront. The hillside and landing below have been designed as a "place" with seating areas, outdoor lighting, public art and recreational activities.

#### Sustainable Landscape Demonstration Projects

You will see pollinator garden demonstration projects and the transition of City landscapes to landscapes to a more naturalized and climate change resistant aesthetic. Naturalized landscapes to be implemented to support greater resilience and long-term sustainability.

#### Parks and Public Realm Planning and Development

You will see planning and/or development of new parks, features within parks, and spaces in the public realm including: Parks & Recreation Masterplan, completion of Hume Park Master Plan, Muni Evers Park planning, westerly expansion of Westminster Pier Park, Queen's Park Farm planning, Brow of the Hill Park, Sixth Street public realm, and additional artificial turf sports field.

#### Riverfront Vision

You will see continued planning for the Riverfront Connection between Westminster Pier Park and Sapperton Landing.

#### Great Streets

You will see streetscape design for Uptown and including Sixth Street and E. Columbia Street to ensure improvements can be delivered as adjacent properties redevelop.

#### HIGHLIGHTS FROM THE CAPITAL BUDGET 2020 - 2024

Fourth Street Feature Stairway

\$500,000

Sustainable Landscape
Demonstration Projects

\$200,000

Parks and Public Realm Planning and Development

\$7,726,700

**Great Streets** 

\$152,000



