# Green City facilities

We are making sure that all City facilities are as sustainable as possible, by:

- Building new, high efficiency facilities to strict environmental standards
- Upgrading existing City facilities to make them more energy efficient

The City requires that all new municipal facilities be built to Leadership in Energy and Design (LEED) Gold - the highest standard of any municipality in North America.

Green City facilities built to LEED Gold standards

### Sunset Community Centre

The Sunset Community Centre is a showcase for this achievable standard.

Its many energy saving features include:

- High-efficiency glazing to prevent heat loss
- Geothermal heating and cooling
- · Radiant floor heating
- · Light sensors in every room
- Dual-flush toilets

The centre's geothermal system supplies 40% of the heating and cooling required by the building.

### Mount Pleasant Civic Centre

The Mount Pleasant Civic Centre's energy-saving features include:

- Light tubes to provide natural daylight
- · Green roof
- Geoexchange heating

## New green City facilities built to LEED Platinum standards

LEED Platinum is the highest LEED standard for environmentally sustainable buildings.

## Creekside Community Centre

Creekside Community Centre is the first time a Canadian community centre to receive this designation. The Centre has:

- 69% energy/cost savings compared to a conventional community centre
- Rainwater collection for toilet flushing and irrigation
- Solar energy
- 25% recycled content (post consumer and post industrial, 27 per cent regional materials, 80 per cent FSC-certified wood
- Heat from Neighbourhood Energy Utility (50% heat recovery from sewer)

### Ask. Tell. Connect.

### Phone 3-1-1

Outside Vancouver: 604-873-7000

Speak your own language

9-1-1 Emergencies 7-1-1

More ways to contact us

#### Learn about LEED



LEED certification is an internationally accepted benchmark for the design, construction, and operation of high performance green buildings.

Learn about LEED

### VanDusen Botanical Garden Visitors Centre

The VanDusen Botanical Garden Visitors Centre targets the "living building challenge". A living building generates all of its own energy with renewable resources, captures and treats all of its water, and uses resources efficiently and for maximum beauty. Living buildings cause no negative impact to the environment. Sustainable features include:

- Solar energy for both water and electricity
- · Rainwater collection for non-potable water use
- On-site black water treatment
- No toxic materials used, including PVC
- · Reclaimed wood and local sourcing
- · Geoexchange system stores solar energy and heats building

Leadership in our own municipal facilities enables us to build staff capacity, test innovative solutions, develop best practices, and provide experience for the local industry professionals, all of which can catalyze broader action.

# Upgrading existing City facilities to make them more efficient

To reduce energy consumption, and lower the amount of greenhouse gases (GHGs) emitted by City facilities, lighting, building automation, and heating systems are being upgraded.

Not only will these improvements reduce the harmful carbon emissions that contribute to climate change, they also make facilities cheaper to operate.

Thanks to recent improvements, City facilities have already reduced greenhouse gas emissions by 22% over 1990 levels.

Here are some of the recent energy efficient upgrades made to City facilities:

## Vancouver City Hall

Improvements	Projected annual savings	Savings are equal to
<ul> <li>New boilers</li> <li>Water conservation</li> <li>Building automation system</li> <li>New lighting, with instant on/off capability</li> </ul>	<ul> <li>\$132,829</li> <li>1.37 megawatt hours of electricity</li> <li>4,066 gigajoules of natural gas</li> <li>16,122 m3 of water</li> <li>319 tonnes of carbon dioxide</li> </ul>	<ul> <li>58 cars permanently removed from the road</li> <li>8,179 new trees planted</li> <li>72.5acres of pine forest saved</li> </ul>

# Library Square

Improvements	Projected annual savings	Savings are equal to
<ul> <li>Building automation system</li> <li>New lighting, with instant on/off capability</li> </ul>	<ul> <li>\$51,170</li> <li>595,953 kilowats of electricity</li> <li>14 tonnes of carbon dioxide</li> </ul>	<ul> <li>2.6 cars permanently removed from the road</li> <li>359 tree seedlings planted</li> <li>3.2 acres of pine forest saved</li> </ul>

### Vanier Park

Improvements	Projected annual savings	Savings are equal to
<ul> <li>New high-efficiency boiler</li> <li>New air handlers with advanced drying technology</li> <li>Building automation system</li> <li>Water conservation</li> </ul>	<ul> <li>\$138,000</li> <li>320,000 kilowatt hours of electricity</li> <li>8,646 gigajoules of natural gas</li> <li>4,968 m3 of water</li> <li>440 tonnes of carbon dioxide</li> </ul>	<ul> <li>80 cars permanently removed from the road</li> <li>11,282 tree seedlings planted</li> <li>100 acres of pine forest saved</li> </ul>

### **National Yards**

Improvements	Projected annual savings	Savings are equal to
<ul> <li>Building automation system</li> <li>HVAC upgrades</li> <li>Energy metering</li> <li>New lighting, with instant on/off</li> </ul>	<ul> <li>\$21,566</li> <li>282,556 kilowatt hours of electricity</li> <li>3,295 gigajoules of natural gas</li> <li>171 tonnes of carbon dioxide</li> </ul>	<ul> <li>11 cars permanently removed from the road</li> <li>1,615 tree seedlings</li> <li>14.34 acres of pine forest saved</li> </ul>

## Manitoba Works Yard

Improvements	Projected annual savings	Savings are equal to
<ul> <li>New air handling</li> <li>New high-efficiency boiler</li> <li>New lighting, with instant on/off capability</li> </ul>	<ul> <li>\$64,320</li> <li>282,556 kilowatt hours of electricity</li> <li>3,295 gigajoules of natural gas</li> <li>171 tonnes of carbon dioxide</li> </ul>	<ul> <li>31 cars permanently removed from the road</li> <li>4,385 tree seedlings</li> <li>39 acres of pine forest saved</li> </ul>

## Learn how you can green your own business

## Sustainable programs for businesses

Learn about programs and incentives you can take advantage of to reduce energy use, save money, and make your business operations more sustainable.

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