

LAND ACKNOWLEDGEMENT

We acknowledge with

EXECUTIVE SUMMARY

Vancouver Community College (VCC) recognizes the importance of a healthy environment for both present and future generations. We have been dedicated to protecting the natural environment by minimizing our daily impacts and fostering a more sustainable community through our program offerings. Our goal is to demonstrate leadership and accountability in environmentally conscious decision-making across

VCC

PLANS TO CONTINUE REDUCING EMISSIONS IN 2023 AND BEYOND

Expanding upon our accomplishments in (g u)-i7 ((o)1.2 (m)1.5 (p)-004 Tc l-i7 ((o)1.(n)-0.7 (17 0 RG6-004 T(MA)6.RG6-004

EMISSIONS AND OFFSET SUMMARY TABLE

Vancouver Community College 2022 GHG Emissions and Offsets Summary	
GHG emissions for the period January 1 - December 31, 2022	
Total BioCO ₂	
Total Emissions (tCO ₂ e)	
Total Offsets (tCO ₂ e)	
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	
Grand Total Offsets for the 2022 Reporting Year	
Grand Total Offsets to be Retired for 2022 Reporting Year (tCO ₂ e)	
Offset Investment (\$)	

Re-Use and Re-Upholstery Program

VCC has taken steps to promote sustainable and fiscally responsible practices through its Furniture Re-Use and Re-Upholstery Program. By partnering with local reupholstery service providers, VCC can extend the life of its existing furniture inventory while reducing landfill waste and minimizing its impact on the environment. Refurbishing existing furniture allows VCC to create high-quality, customizable pieces. In addition to the environmental benefits, refurbishing existing furniture is a much quicker process than ordering new, which means less disruption and impact on academic and administrative operations.

E-bike charging stations

As part of its commitment to promoting sustainable transportation, VCC has implemented a range of initiatives to encourage cycling as a means of transportation on campus. Among these initiatives is VCC's first-of-its-kind e-bike storage and charging station, along with bike racks and other end-user services. These services include a commercial-sized air pump for tire inflation and a fix-it bike station equipped with tools for on-campus repairs and tune-ups.

2040 strategic vision for Vancouver. Furthermore, VCC's Contractor's Guide stipulates that contractors are responsible for disposing of their generated waste in accordance with VCC guidelines, ensuring proper waste management practices.

Organics

Organic waste generated at VCC is processed by Anaconda Systems or Surrey Biofuels at their composting facilities where it is turned into high quality soil supplements that are utilized in agricultural production.

Metals

Metal waste generated at VCC is sent to ABC Recycling in the City of Burnaby

Transportation Trades program

With industries shifting to adopt more sustainable, eco-friendly practices, education must undergo a similar transformation. For decades, VCC's Transportation Trades program has taught students how to service and repair vehicles and heavy-duty equipment. But if one thing is certain, it is that electric vehicle (EVs), and fuel cell electric vehicles (FCEVs) are the future of transportation as they reduce carbon emissions and air pollution. In 2022 the college acquired the Volvo ECR25 compact electric digger for student training. Students receive hands-on instruction in the operation, repair, and maintenance of FCEVs and EVs in addition to fossil fuel powered vehicles, as reported in the valuable, real-world training for the jobs of today and tomorrow.

Culinary and Commercial Services departments

These departments have successfully incorporated several sustainable practices and initiatives in

VCC BEES

A CLIMATE ADAPTATION PROJECT

To enhance the survival rate and egg production of Mason and Leaf Cutter bees

Did you know that VCC has been supporting local bee populations since 2010?

THE PROGRAM

VCC has four bee hotels that can be found in the courtyard of the Broadway

During the spring, the hotels are used to house the bees and their eggs, and during the winter, the hotels fill with thousands of cocoons. We clean and maintain the hotels annually to prevent the spread of disease.

Without bees, our food system would be severely impacted.

THE CHALLENGES

Bees are sensitive to their environment, and the spread of disease and the lack of food and water sources are all challenges that are affecting bee populations. In many ways, climate change is increasing the frequency and intensity of these challenges making it more difficult for our local bees to survive.

For example, in 2021 Vancouver experienced an unprecedented heat dome which led to a significant decline in bee populations. In addition to the immediate losses, the heatwave also caused all the nearby flowers to die, decreasing food sources and creating additional challenges.

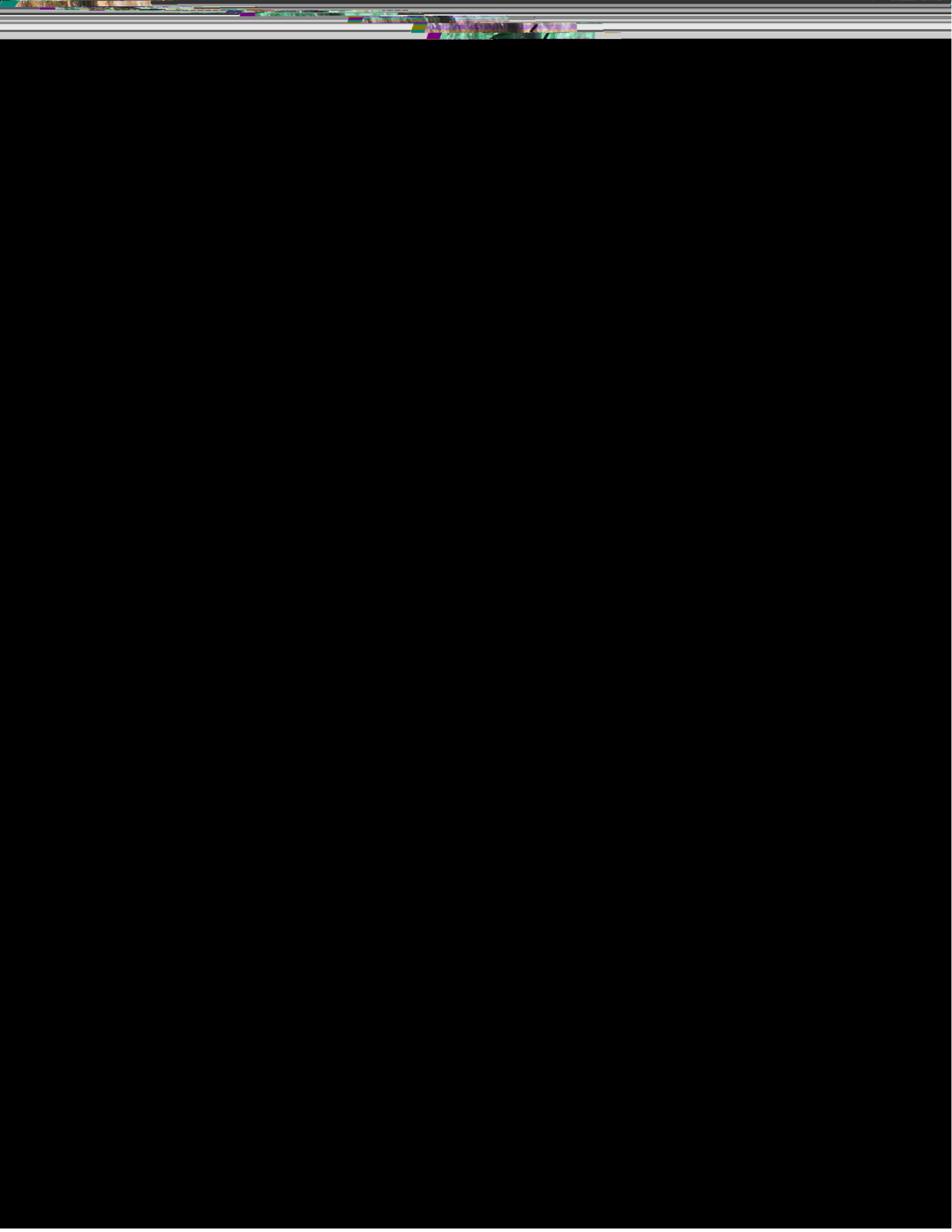
The following year VCC took action to reduce the impact of heat by providing an abundance of flowers readily available, water, and shade to improve survival chances, and as we improved our irrigation systems, only this year the challenge was a firm heat, but rather a lack of heat. Cold & rain in summer delayed the arrival of flowers to the hotels and created additional stress during the hatching process.

THE SOLUTIONS

Local bee populations include:

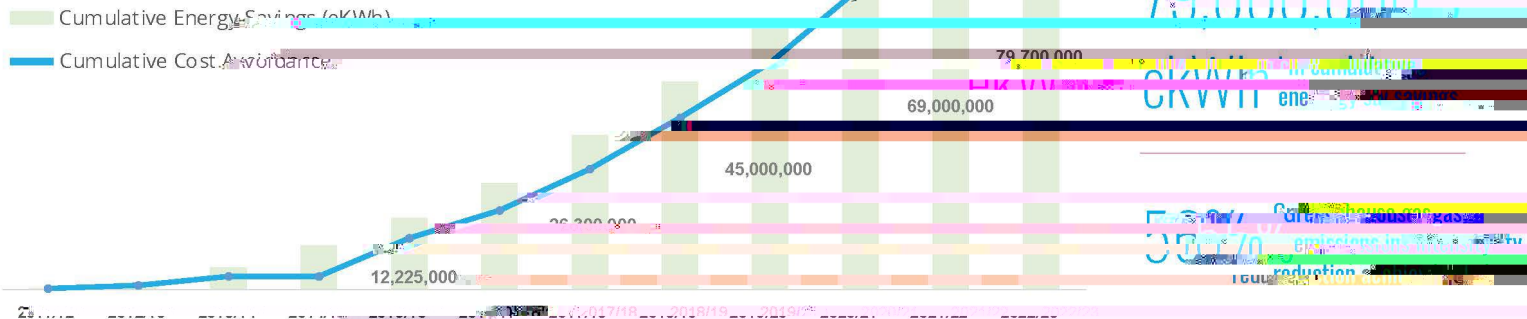
- Relocating our current bee hotels to a more sheltered area against the elements.
- Maintaining outdoor temperatures and environments during the spring and moving bee hotels into a temperature controlled dark conditions until optimal conditions for hatching.
- Consulting a Climate Risk Assessment and identifying adaptations that can be applied if needed (see pg. 2)





VCC ENERGY SAVINGS

VCC's campuses are now well below median in terms of energy intensity when compared with similar post-secondary institutions in BC.



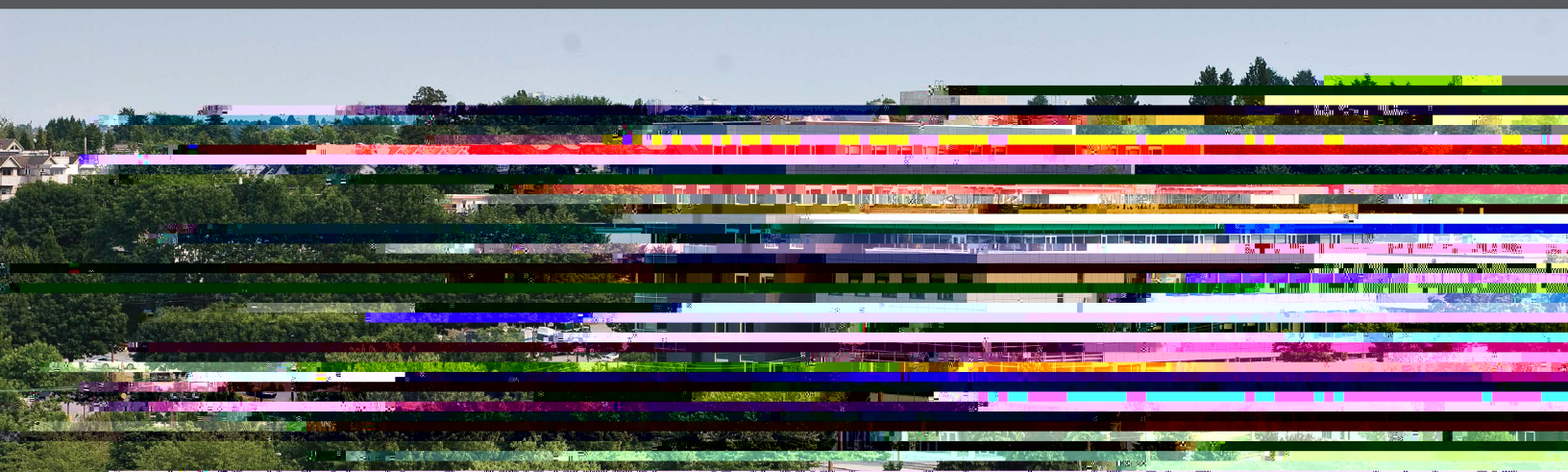
Creating a culture of energy conservation

VCC has also worked to integrate energy conservation and sustainability into the culture on campus. VCC is part of BC Hydro and FortisBC's Energy Minder Network program, which consists of both public and private sector organizations committed to saving energy through behaviour change and engagement.

Over the years, VCC's energy team has collaborated with IT staff to update computer settings to switch to energy saving modes while the user is away. VCC's "Take the Stairs" campaign encourages energy saving by taking the stairs and staying active. In early 2018, VCC launched the Saving Ideas Competition inviting staff to submit their ideas for saving energy on their campuses. Since 2016, VCC has encouraged staff to turn off electrical equipment during the December break.

A greener future

To help reach our energy reduction targets, VCC is proud to be making progress towards a greener future.



Bundle Up

Did you know heating comprises
42% of VCC's total energy consumption?

If everyone turned their heat down by just 1°C,
we could reduce our GHG emissions by 10%.

VCC's 'Bundle Up' campaign encourages staff to "heat your body before heating the room", to help avoid increasing indoor temperatures above 21°C during the colder months. Unfortunately, this doesn't always work, as some workspaces are not able to adjust to the building's heating systems. Shared workspaces also present a challenge as individuals often have different comfort levels which can make an ideal temperature for everyone a bit tricky.

While energy-efficient space heaters can provide a more comfortable work environment, but traditional space heaters consume a huge amount of electricity and work against the college's energy and emissions goals.

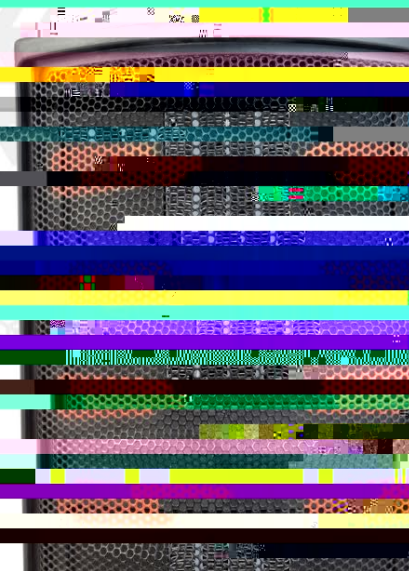
For the past 8 years, the Facilities Team at VCC has been providing staff with energy-efficient space heaters that consume 60% less electricity. To date, they've provided nearly 180 units, which has reduced electricity consumption from 1440kWh to 1920kWh.*

These energy savings inspired the creation of the first Facilities Management Operational Standard FM-01 Space Heaters, which aim to maximize energy efficiency, minimize costs, reduce emissions, and increase the safety of building inhabitants.

**BY SAVING 1440KWH OF ELECTRICITY EVERY YEAR,
THE AMOUNT OF ENERGY CONSUMED FROM THIS INITIATIVE IS EQUIVALENT TO
EMISIONS PRODUCED FROM DRIVING OVER
4000KM!****

*Assuming space heaters are used for 8 hours per day, 120 days per year.
**USEPA Greenhouse Gas Equivalencies Calculator

Traditional space heaters are one of the highest consuming appliances around and are often left running through the entire day...and sometimes overnight if they forget to get switched off!



The Great Annual Holiday Shut Down



In 2023, VCC continue to lead the way in energy conservation. Our annual energy conservation campaign helps save energy and raise awareness about energy saving opportunities such as turning off monitors, unplugging small appliances and closing the blinds.

At the same time, the Facilities Team reduced heating and ventilation to all the buildings. These systems consume a large portion of energy and turning them off for the holiday season has a significant impact on reducing VCC's carbon footprint.

THIS YEAR, WE HAD OVER 32 STAFF MEMBERS PARTICIPATE ACROSS 11 DIFFERENT DEPARTMENTS.

