



nsc
Facilities Management

Sustainability
Annual Report

2018-19



NSCC President Don Bureaux

Message from the President

The House of Commons recently declared a national climate emergency. With so many of Nova Scotia's communities, significant infrastructure and fresh water supplies situated in vulnerable areas along our coastline, our province is particularly at risk. We are facing imminent threats such as coastal erosion, flooding, and increased demand for fresh water. Combating climate change and developing adaption strategies are top priorities.

With 13 campuses across the province, the College can and will make a difference. The 17 Global Sustainable Development Goals set by the United Nations are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face – not only climate change, but also poverty, inequality, environmental degradation, prosperity, peace and justice. NSCC is committed to working towards these goals and will continue to report annually on our sustainability activities and progress.

As we phase out fossil fuels in the years to come, low carbon economies will emerge that will reshape industries and markets around the globe. Through our actions we hope the College will serve as a leader through this change and ensure that our students are not only sustainability ambassadors, but are also prepared to take advantage of the positive opportunities that emerge to support and promote a more sustainable future.

Don Bureaux,
NSCC President



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VP, College Services and CFO Monica Foster

By annually tracking and publishing our achievements, we hold ourselves publicly accountable for our work to reduce our environmental footprint. In doing so, we hope to serve as a model for sustainable practices for our internal and external communities.



Welcome to NSCC's 2018/19 Sustainability Report

It has never been more important to act on our sustainability objectives.

For the past decade, NSCC's Annual Sustainability Report, prepared by our Facilities and Engineering Department, has demonstrated our commitment to advancing sustainable development within our organization. By annually tracking and publishing our achievements, we hold ourselves publicly accountable for our work to reduce our environment footprint. In doing so, we hope to serve as a model for sustainable practices for our internal and external communities.

As our College community continues to grow, it is vital we remain focused on creating a better and more sustainable organization and continue to

inspire our employees and students to make sustainable choices for the future. This will be instrumental, not only for the success of the College, but for the Province as a whole.

It is my hope that this progress report will motivate our NSCC community to further improve our sustainability efforts in the years ahead.



Monica Foster,
VP, College Services and CFO



Major renovations or construction of new buildings require large amounts of energy and material resources. Our buildings also consume resources and produce emissions and waste throughout their entire lifecycle. Sustainable construction ensures that structures are designed to have a minimal environmental impact during their whole lifespan, while delivering the degree of comfort and functionality desired by building users.

Sustainable Construction

The lifecycle environmental impacts of building materials should be considered when planning projects, and the use of renewable energy resources should be preferred over conventional fuel sources to help reduce global greenhouse gas emissions.

NSCC has developed Sustainable Building Standards that will apply to all future capital projects. Going forward, these standards will be included in all Requests for Proposals issued for new projects and referenced in contracts for architects, design consultants, and construction managers. These standards are intended to establish NSCC as a leader in sustainable building practices and have been developed to align with the College's Sustainability Goals. They build upon industry best practices from the position of an owner, as well as by adapting portions of Harvard University's Green Building Standards (Harvard, 2016), and Alberta Infrastructure's Green Building Standards (Technical Services Branch, 2018). The Standards identify a minimum level of design and process requirements for all new construction and renovation projects, while providing enough flexibility for individual project teams to meet project goals.

NSCC requires projects to achieve prescriptive levels of environmental performance according to project size and scope. New construction and major renovation projects (Tier 1) are required to register and achieve a minimum Silver certification using the latest version of the U S Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED®) green building rating system (currently LEED® v4). Below are some examples of sustainable construction projects currently underway with the goal to pursue LEED® GOLD certification.



IT Campus Information Technology Innovation Centre

Planning for a new three-story, 21,000 ft² addition to the IT Campus has begun. The new centre will focus on job creation and industry-driven problem solving through expanded program offerings and work-integrated learning opportunities in a multi-functional new space. This addition will not only address space issues at the campus but will also carry on the College's tradition of construction and operational sustainability. It will be a sustainable building showcase for the many visitors who tour, work, learn and industry problem-solve in this facility, built and certified to LEED® standards.



Strait Area Campus Residence

The construction of a 51-bed, 20,000 ft² residence will help the campus serve a broader range of students and clients through both its existing range of programs and potential program additions. The residence follows contemporary models for post-secondary student housing, configured

along the lines of apartment living, and is designed to accommodate the campus's short-term program offerings. The building will be LEED® Certified for design and construction. It is expected construction of the new residence will be completed by December 2020.



Centre of Geographic Sciences (COGS) – Annapolis Valley Campus Residence and Business Research Centre

To supplement the area's residential rental options, the construction of a 40-bed residence at COGS is a priority. The new 27,000 ft² space will be ready by January 2021 and will include a Business Research Centre. It will bring industry, students, and researchers together, serving as a hub for tackling geospatial challenges and issues that cut across key Nova Scotia sectors like agriculture, energy, health wellness and aquaculture. This building will be constructed sustainably to LEED® standards. The construction of a LEED® Certified building would not only result in a building that is both efficient and durable, but it will also (and most importantly) provide a demonstration building to promote sustainable practices for tomorrow's workforce. In addition to complying with LEED® standards, the building will also significantly reduce greenhouse gas emissions through reduced student travel. Currently, the majority of COGS students are driving to the campus on a daily basis.



BOMA BEST

BOMA BEST is a nationally recognized platform for assessing and measuring sustainable building operations. It includes many of the performance indicators included in this report, such as water usage and greenhouse gas emissions, as well as several other areas to ensure that the efficiency of the buildings and the health of its users and occupants are optimized. Not only does this optimization reduce the environmental impact of the building, it significantly reduces operating and maintenance costs.

NSCC has been enrolled in BOMA BEST since 2008/09, when our buildings achieved an average rating of 75% (BOMA BEST Silver). This year, we recertified all our campuses under BOMA BEST Version 3.0, an expansion of the program that covers 10 different aspects of sustainable building operation. New requirements in BOMA BEST 3.0 include thermal imaging scans of building envelopes, development of campus-specific energy management plans, and long-term climate change risk assessments. Despite the increased scope and higher performance standards, NSCC was able to obtain an average score of 84% (BOMA BEST Gold) and have upgraded Ivany Campus and the Institute of Technology Campus to BOMA BEST Platinum.

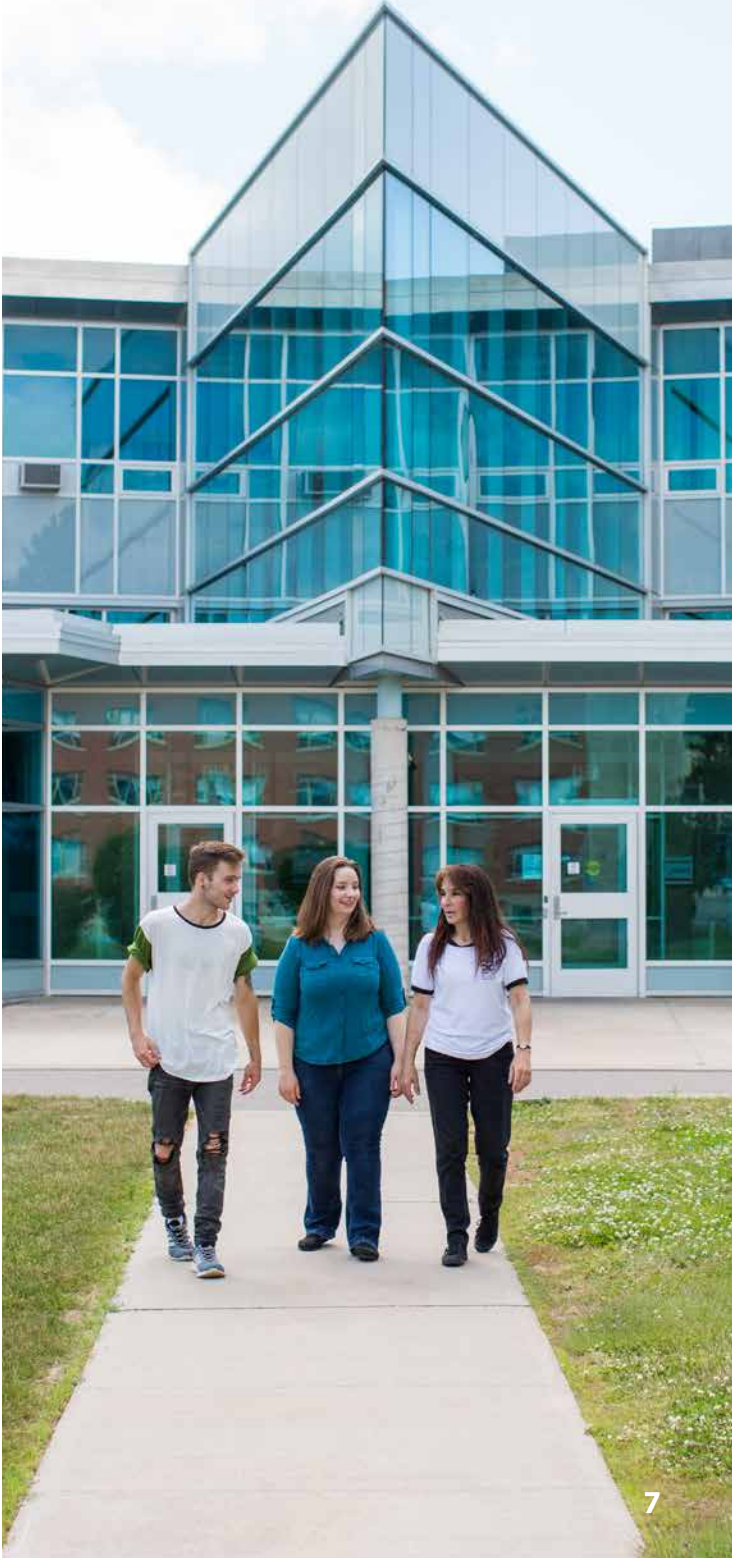




Local students planting a bioswale at Lunenburg Campus to help manage stormwater runoff.

Campus specific BOMA BEST scores

Campus	2008/2009	2011/2012	2015/2016	2018/2019
Akerley	72%	76%	84%	88%
AVC COGS	65%	81%	82%	84%
AVC Middleton	68%	86%	85%	83%
Burridge	77%	82%	81%	79%
Cumberland	80%	82%	82%	78%
ITC	75%	86%	90%	90%
Ivany	93%	93%	92%	92%
Kingstec	74%	80%	82%	84%
Lunenburg	79%	82%	81%	80%
Marconi	85%	85%	83%	81%
Pictou	80%	80%	79%	80%
Shelburne	68%	83%	85%	77%
Strait Area	78%	82%	83%	80%
Truro	73%	75%	78%	84%



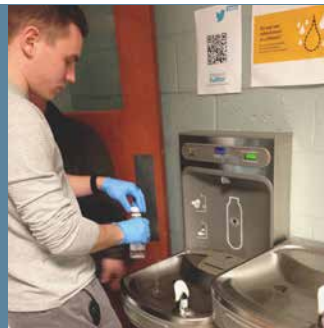


Healthy Buildings

Canadians spend 70% of their time indoors, mostly due to our long winters. Many Canadians state that they feel healthy and happier when in nature. As a part of the College's sustainability agenda, it is important that we are providing our students and employees with a healthy indoor environment. Our buildings are filled with natural light to ensure that occupants feel a connection to the outdoors. Some campuses bring the outdoors in with living walls and indoor plants.

In support of our BOMA Best certification, we conduct regular air testing to make sure we are meeting ASHRAE standards. Indoor air quality (IAQ) directly impacts occupant comfort, work performance, and health. By ensuring our buildings are following ASHRAE standards we give our occupants a positive and healthy environment.

NSCC regularly tests drinking water to ensure that water quality meets Health Canada's guidelines.



Radon gas monitoring is carried out at each campus in accordance with Health Canada to ensure optimum air quality.

Green wall at Pictou Campus, built by our students.



SUSTAINABLE DEVELOPMENT

GOALS

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

SUSTAINABLE DEVELOPMENT GOALS

The Sustainability Tracking, Assessment & Rating System (STARS) and Global Sustainable Development Goals

In January 2016, the United Nations 17 Global Sustainable Development Goals came into force. They support the UN 2030 Agenda for Sustainable Development and apply to all countries. Being an industry leader in sustainability and promoting sustainability literacy in Nova Scotia, NSCC has an important role to play in supporting global sustainable development. NSCC is committed to working towards these goals with the Facilities and Engineering Department monitoring our annual sustainability performance.

The Association for the Advancement of Sustainability in Higher Education (AASHE)'s Sustainability Tracking, Assessment & Rating System™ (STARS) offers a transparent, self-reporting framework for colleges and universities to measure their sustainability performance with credits linked to the Global Sustainable Development Goals. Participation in STARS involves collecting information about sustainability initiatives and performance, documenting that information in the online reporting tool, and submitting a report to earn public recognition. NSCC has been tracking sustainability performance using STARS since 2013 and earned STARS gold rating in 2017, the highest scoring College in Canada, and number 5 of 31 postsecondary institutions in the country. The goal for this year is to recertify and improve the NSCC STARS rating. To achieve this, the NSCC STARS Steering Committee is working through an extensive STARS action plan, identifying areas where the College can improve and earn more credits.



The STARS Action Plan can be found in Appendix A on page 22.



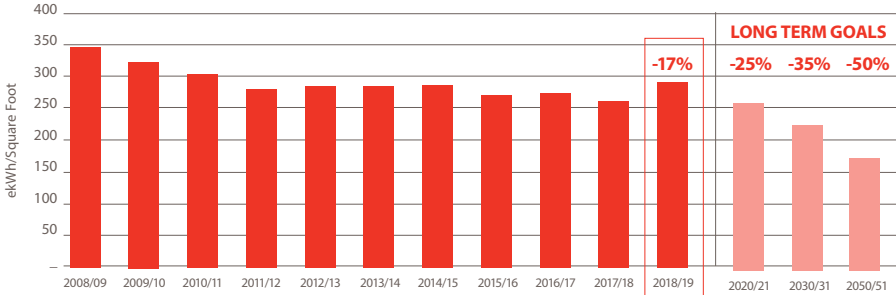
Energy

NSCC’s buildings are as diverse as our student population. Every campus has its own unique operational requirements, dependent on the size and age of the campus, as well as what programs are offered on site. As a result, NSCC has customized our approach to reducing energy consumption at each campus across the province. Custom solutions of switching to less carbon-intensive fuel sources, increasing the efficiency of our systems, upgrading the insulation of our walls and roofs, and switching our lighting to LED bulbs.

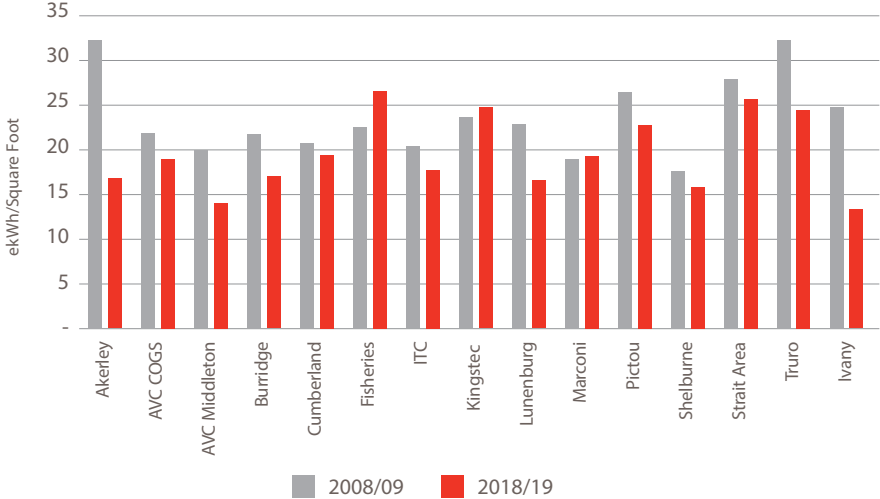
We track our usage of electricity, steam, and heating fuels (natural gas, propane, and fuel oil) and convert the energy we consume into one metric: equivalent kilowatt hours (ekWh). We then consider campus energy consumption per square meter of floor area, which allows us to compare the energy performance at all our campuses, regardless of their size or sources of energy. NSCC uses energy intensity per square foot as a key performance indicator when annually reviewing our performance and when setting goals for the future.



College-Wide Average Energy Intensity



Campus Specific Energy Intensity





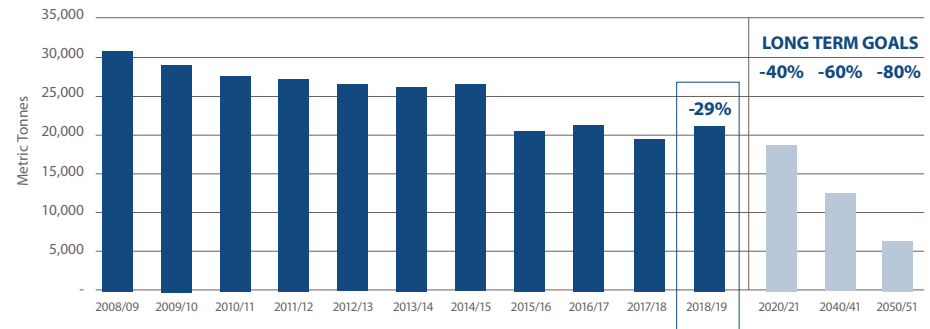
Climate Change

Nova Scotia and the rest of the world are experiencing the impacts of climate change. From fluctuating weather patterns that impact food production, to rising sea levels that intensify the risk of flooding, the impacts of climate change are unparalleled in scale. Climate change is caused by an increased proportion of human-produced greenhouse gases (GHGs) being released into our atmosphere, such as carbon dioxide (CO₂) and methane (CH₄). Without immediate reductions of greenhouse gas emissions, adapting to these changes in the future will be more difficult and come at a high cost.

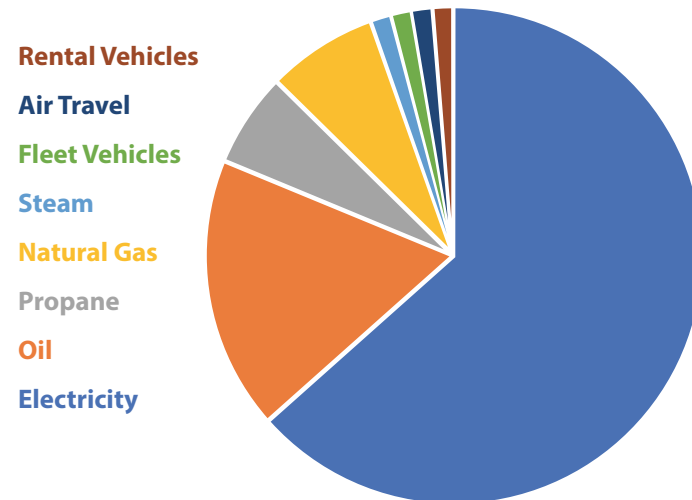
As we look forward, education is arguably the most important aspect of combating climate change. Ensuring people in the workforce are informed on prominent issues and equipped with the proper tools to make a difference is critical. NSCC is in a unique position in this regard compared to other post-secondary institutions in Nova Scotia. With 13 campuses across the province teaching a variety of programs, from agriculture to information technology, we cover a much broader geographic and educational range than other institutions. This range presents us with the opportunity to communicate the message of sustainability to a wide and diverse audience. We have embraced this opportunity and are committed to being leaders in reducing greenhouse gas emissions and adapting to climate change in our communities.



College-wide GHG (metric tonnes) between 2008/09 to 2018/19 with goals for 2020, 2040 and 2050



Greenhouse Gas Emissions Sources 2018/19





NSCC keeps an inventory of our GHG emissions following an internally recognized accounting and reporting standard, which breaks emissions down into three categories:

Scope 1 Emissions:

Direct GHG emissions from NSCC owned sources including: Fuel combustion from heating of our buildings (ie. fuel oil, natural gas, propane); and from NSCC owned vehicles. These emissions are calculated and quantified in CO₂ equivalent using specific emission factors for oil, propane, and natural gas.

Scope 2 Emissions:

Indirect emissions from sources owned or controlled by another entity within the NSCC institutional boundaries including purchased electricity and purchased steam.

Scope 3 Emissions:

All indirect emissions (not included in scope 2). Coming years' inventories will include more Scope 3 emissions (such as student and employee commuting and solid waste disposal). Many of NSCC's campuses are located in rural locations and student and staff commuting to these locations has the potential to significantly contribute to NSCC's indirect emissions. This year's report included emissions from air travel and rental vehicles.

Action Items for Scope 1 Emissions

NSCC has recently made positive steps in reducing our Scope 1 emissions by replacing aging fuel oil burners at several campuses with high-efficiency propane boilers, and by replacing aging building envelope systems to provide more insulation from outside temperatures.

Action Items for Scope 2 Emissions

NSCC is greening the grid by installing solar arrays at several campuses that will feed directly into Nova Scotia’s electric grid through the Nova Scotia Solar for Community Buildings Pilot Program. Our first project was the installation of a 35kW solar array at Ivany Campus, with 75kW arrays at Shelburne, Strait Area Campus, and the Centre of Geographic Sciences currently under development.

Action Items for Scope 3 Emissions

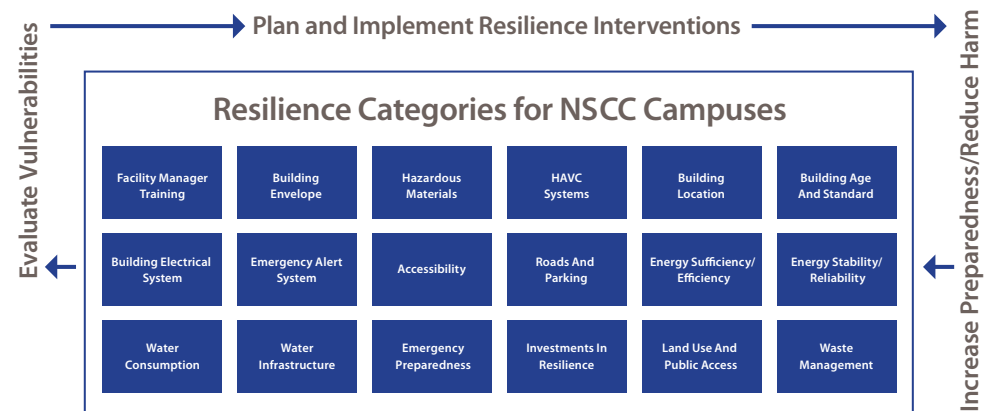
NSCC will continue to provide infrastructure to encourage carpooling, public transport, and cycling.

Resiliency Planning

NSCC is in the process of developing resilience plans for our campuses. Resilience includes emergency preparedness, climate change adaptation and other support systems to withstand potential impacts of natural disasters or disturbances. Recent increases in the frequency and severity of extreme weather events worldwide, in combination with aging infrastructure, can render campuses vulnerable. There is potential for disruption of our day-to-day lives, business operations, and possible risk to human safety and building functions. Fortunately, resilience measures can be developed that have the potential to enhance security and add value. Resilience planning is a comprehensive investment strategy that greatly reduces damage and losses and lessen disruption to building operations. Together with sustainable energy and water strategies, resilience measures can reduce operational and maintenance costs in addition to reducing (or avoiding entirely) the costs of responding to a catastrophic event. Designing buildings for resilience involves anticipating interruptions and changes and recognizing that simple, flexible, diverse and redundant systems are more robust.

Some recent resilience upgrades underway at NSCC include backup emergency generator installations at the Institute of Technology (IT), AVC-Middleton, and Burrige Campuses.

Continual Improvement - NSCC Campus Resilience

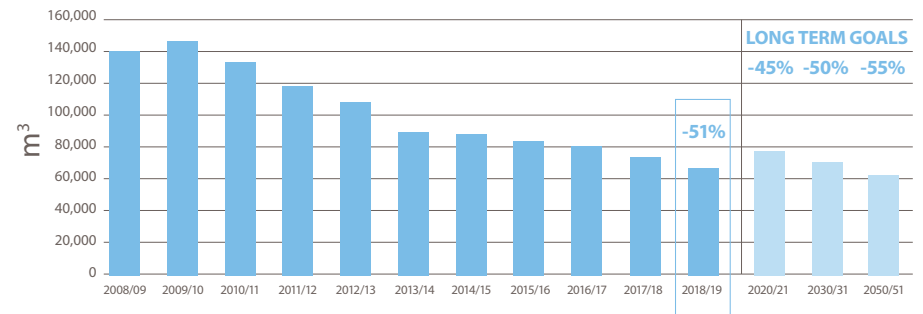




Water

Water is one of our most important – and increasingly scarce – natural resources. Close to 9% of all fresh water in the world exists in Canada, while less than 1% of the people in the world live here. This perceived wealth of water has led to one of the highest rates of water use per capita in the world. To do our part, NSCC has set aggressive targets for water use reduction. By implementing major operational changes and upgrading our infrastructure, NSCC has been able to reduce our on-campus water usage by 51 percent since 2008! Due to our current progress, we have already met our previous 2030 target of 50% reduction compared with usage in 2008/09.

**NSCC College-Wide Water Consumption (2008-2019)
with goals for 2030 and 2050**



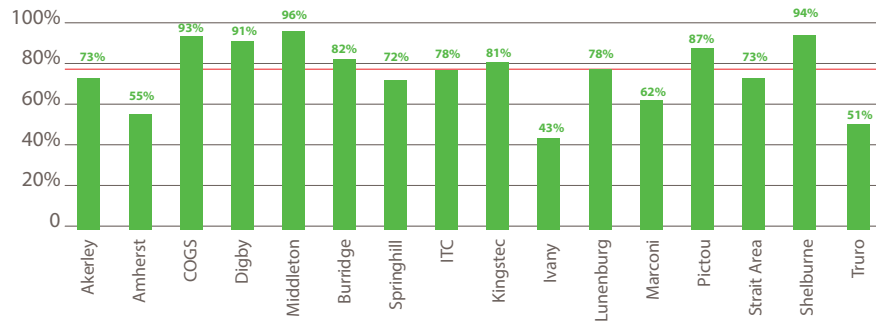


Students completing waste audit at Ivany Campus.

Waste

Through the Environment Act and the Environmental Goals and Sustainable Prosperity Act (EGSPA), the Nova Scotia Government is committed to effective waste diversion and minimizing waste disposal. Waste management at NSCC is an integral part of our sustainability policy. NSCC actively seeks to minimize solid waste generation and maximize the amount of waste recycled and diverted from landfill. Recycling also contributes to the reduction of NSCC's carbon footprint.

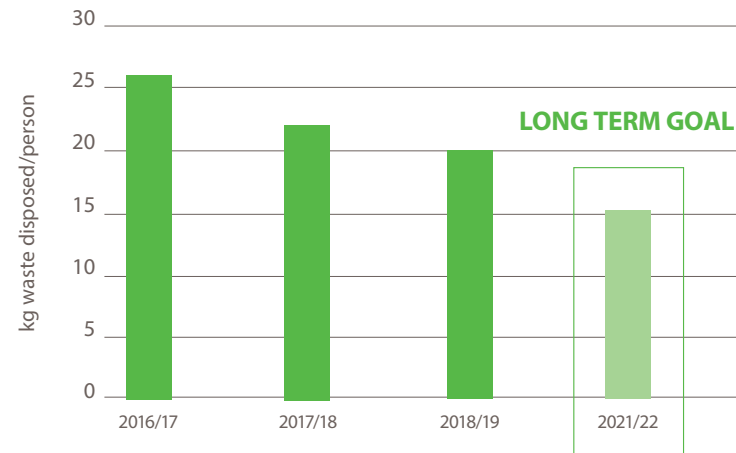
Waste Diversion Rate (%) for 2018/2019 Academic Year



The "Waste Diversion Rate" is the percentage of each campus's total waste generated that is diverted from landfill through recycling and composting. It is NSCC's goal to maintain an overall waste diversion rate of 75% with a minimal diversion rate of 65% for each campus.

Since 2016, NSCC has been measuring and monitoring overall annual waste disposal as the mass of waste disposed by each building occupant. Waste disposal was 20 kg/person per year in 2018/19. The goal is to reach 15 kg of waste per person per year by 2021.

NSCC Waste Disposal



Goals for waste management:

- A minimum 65% diversion rate for each campus.
- Reduce waste disposal to 15 kg/person and year by 2021.

Waste management action items:

- Shift education efforts to focus on waste reduction.
- Reduce or eliminate the amount of disposable, single-use items being used in the cafeterias.
- Focus on disposable items in next round of waste audits, and continue to monitor total waste disposal.

APPENDIX A – STARS ACTION PLAN

Category	Subcategory	Credit Number and Title		Points Available	Minimum Requirement	NSCC Action
Report Preface	Introduction	PRE 1	Executive Letter	Required	Obtain a cover letter from a high-ranking executive to accompany the institution's STARS Report.	
		PRE 2	Points of Distinction	Optional	Highlight programs, initiatives, or accomplishments that reflect the institution's leadership for sustainability.	
	Institutional Characteristics	PRE 3	Institutional Boundary	Required	Define the boundary to be used for its STARS report.	
		PRE 4	Operational Characteristics	Required	Have current operational data (e.g. campus area, floor area of building space, endowment size).	
		PRE 5	Academics and Demographics	Required	Have current demographic data (e.g. FTE enrollment, FTE employees, number of people living on-campus).	
Academics (AC)	Curriculum	AC 1	Academic Courses	14	Conduct an inventory to identify sustainability course offerings.	Developing a database of all NSCC courses.
		AC 2	Learning Outcomes	8	Have adopted one or more institution-level sustainability learning outcomes and/or have students graduate from degree programs that require an understanding of the concept of sustainability.	Developing a database of all NSCC courses.
		AC 3	Undergraduate Program	3	Offer at least one sustainability-focused, undergraduate-level major, degree program, minor or concentration.	Not Applicable for NSCC.
		AC 4	Graduate Program	3	Offer at least one sustainability-focused, graduate-level major, degree program, minor, concentration or certificate.	Not Applicable for NSCC.
		AC 5	Immersive Experience	2	Offer at least one immersive, sustainability-focused educational study program.	Reporting on ENTG's geology field school and international studies.

Category	Subcategory	Credit Number and Title	Points Available	Minimum Requirement	NSCC Action	
Academics (AC)	Curriculum	AC 6	Sustainability Literacy Assessment	4	Conduct an assessment of the sustainability literacy of the institution's students.	Issuing an assessment survey to all NSCC students this September during orientation.
		AC 7	Incentives for Developing Courses	2	Have an ongoing program that offers incentives for academic staff to develop new sustainability courses and/or incorporate sustainability into existing courses or departments.	Not Applicable for NSCC.
		AC 8	Campus as a Living Laboratory	4	Utilize the institution's infrastructure and operations as a living laboratory for applied student learning for sustainability.	Reporting on numerous programs across the college that cover different categories of this credit.
	Research	AC 9	Research and Scholarship	12	Conduct an inventory to identify the institution's sustainability research.	Not Applicable for NSCC.
		AC 10	Support for Sustainability Research	4	Have programs to encourage and/or support sustainability research.	Not Applicable for NSCC.
		AC 11	Open Access to Research	2	Facilitate open access publishing.	Not Applicable for NSCC.
Engagement (EN)	Campus Engagement	EN 1	Student Educators Program	4	Coordinate an ongoing peer-to-peer sustainability outreach and education program for students.	Reporting on students teaching waste education to fellow students.
		EN 2	Student Orientation	2	Include sustainability prominently in student orientation activities and programming.	Developing sustainability education boards for orientation at each campus, volunteers will chat with students and issue literacy assessment survey.
		EN 3	Student Life	2	Have co-curricular sustainability programs and initiatives.	Each NSCC campus is required to maintain an active Sustainability Committee and include students on the committee.
		EN 4	Outreach Materials and Publications	2	Produce outreach materials and/or publications that foster sustainability learning and knowledge.	NSCC is working on improving our website to use as a platform for sharing information regarding sustainability.

Category	Subcategory	Credit Number and Title	Points Available	Minimum Requirement	NSCC Action	
Engagement (EN)	Campus Engagement	EN 5	Outreach Campaign	4	Hold at least one sustainability-related outreach campaign directed at students and/or employees.	NSCC implemented the Pack It In/Pack It Out Program to educate students on waste sorting. Also, each campus participates in the yearly energy challenge to see who can reduce their energy consumption the most during the summer months.
		EN 6	Assessing Sustainability Culture	1	Conduct an assessment of campus sustainability culture that focuses on sustainability values, behaviors and beliefs.	NSCC will administer a sustainability assessment survey during student orientation and re-administer the survey to the same students at the conclusion of their programs to determine if sustainability knowledge or values were learned at NSCC.
		EN 7	Employee Educators Program	3	Administer or oversee an ongoing peer-to-peer sustainability outreach and education program for employees.	NSCC staff have been trained to administer diversity and inclusion to training to all fellow employees.
		EN 8	Employee Orientation	1	Cover sustainability topics in employee orientation and/or in outreach and guidance materials distributed to new employees.	All new employees receive diversity and inclusion training and participate in learning conferences annually.
		EN 9	Staff Professional Development and Training	2	Make available professional development and training opportunities in sustainability to non-academic staff.	All NSCC staff are encouraged to enter continuing education and there are many opportunities available.
	Public Engagement	EN 10	Community Partnerships	3	Have at least one formal community partnership to work together to advance sustainability.	NSCC Applied Research has partnered with the South End Environmental Injustice Society in the town of Shelburne to improve the water in the community using Ultrafiltration Technology.
		EN 11	Inter-Campus Collaboration	3	Collaborate with other colleges and universities to support and help build the campus sustainability community.	NSCC is a member of the Atlantic University College Sustainability Network where institutions discuss and support sustainability initiatives.
		EN 12	Continuing Education	5	Offer continuing education courses that address sustainability and/or have at least one sustainability-themed certificate program through a continuing education or extension department.	NSCC offers 18 continuing education courses that relate to sustainability.

Category	Subcategory	Credit Number and Title	Points Available	Minimum Requirement	NSCC Action	
Engagement (EN)	Public Engagement	EN 13	Community Service	5	Have data on student engagement in community service and/or a formal program to support employee volunteering.	NSCC provides employees with opportunities to give back to their communities through service learning days. Employees are afforded a paid leave for a day to participate in a community service activity of their choice.
		EN 14	Participate in Public Policy	-	Advocate for public policies that support campus sustainability or that otherwise advance sustainability.	Employees have participated in panel on climate change at municipal level, NSCC's VP of Organizational Development sits on Nova Scotia Accessibility Advisory Board, and NSCC's President sits on the board of directors of Colleges and Institutes Canada (CICan).
		EN 15	Trademark Licensing	2	Have adopted a labor rights code of conduct in its licensing agreements with the licensees who produce its logo apparel.	NSCC is a member of the Workers Rights Consortium.
Operations (OP)	Air & Climate	OP 1	Emissions Inventory and Disclosure	3	Have completed an inventory to quantify the institution's greenhouse gas (GHG) and/or air pollutant emissions.	NSCC reports on our greenhouse gas emissions in the Sustainability Annual Report. Part of that report includes breakdowns of our Scope 1 and Scope 2 emissions.
		OP 2	Greenhouse Gas Emissions	8	Have completed an inventory to quantify the institution's Scope 1 and Scope 2 greenhouse gas (GHG) emissions.	NSCC reports on our greenhouse gas emissions in the Sustainability Annual Report, and we are striving to reduce our GHG footprint wherever we can, particularly in our building operations.
	Buildings	OP 3	Building Design and Construction	3	Own new or renovated buildings that were designed and built in accordance with a published green building code, policy/guideline, or rating system.	Construction of the Pictou Campus Trades Wing was recently completed with LEED Gold certification.
		OP 4	Building Operations and Maintenance	5	Own buildings that are operated and maintained in accordance with a sustainable management policy/program or a green building rating system focused on the operations and maintenance of existing buildings.	NSCC maintains BOMA BEST certifications on all of our buildings, with an average rating of Gold.

Category	Subcategory	Credit Number and Title	Points Available	Minimum Requirement	NSCC Action	
Operations (OP)	Energy	OP 5	Building Energy Efficiency	6	Have data on grid-purchased electricity, electricity from on-site renewables, utility-provided steam and hot water, and stationary fuels and other energy products.	NSCC reports on energy usage at all campuses in the Sustainability Annual Report and strives to reduce overall building energy intensity wherever possible.
		OP 6	Clean and Renewable Energy	4	Support the development and use of clean and renewable energy sources.	NSCC participates in the Solar Electricity for Community Buildings Program, which involves generating solar electricity at some of our campuses and selling that electricity to the grid. Unfortunately, this does not garner fulfillment of this credit, but the greenhouse gas emissions offset is still notable, and the educational value of having a solar array on campus is enormous.
	Food & Dining	OP 7	Food and Beverage Purchasing	6	Purchase food and beverage products that are sustainably or ethically produced and/or plant-based.	Developing an inventory of NSCC's food purchases for the last fiscal year.
		OP 8	Sustainable Dining	2	Have programs and initiatives to support sustainable food systems and minimize food waste.	NSCC has multiple sustainable food systems that support a sustainable dining experience. (ex. reusable dishware & cutlery and bulk dispensing of condiments).
	Grounds	OP 9	Landscape Management	2	Manage grounds organically or in accordance with an Integrated Pest Management (IPM) program.	NSCC maintains the grounds of its campuses with consideration for a variety of sustainability criteria.
		OP 10	Biodiversity	1-2	Have conducted an assessment to identify endangered and vulnerable species and/or areas of biodiversity importance on land owned or managed by the institution.	A general assessment of habitat at various NSCC campuses has been conducted.
	Purchasing	OP 11	Sustainable Procurement	3	Apply sustainability criteria when making procurement decisions.	NSCC procurement policy has recently been updated to include sustainability criteria for all purchasing.
		OP 12	Electronics Purchasing	1	Purchase environmentally and socially preferable electronic products.	Developing an inventory of NSCC's electronic purchases.

Category	Subcategory	Credit Number and Title		Points Available	Minimum Requirement	NSCC Action
Operations (OP)	Purchasing	OP 13	Cleaning and Janitorial Purchasing	1	Purchase cleaning and janitorial paper products that meet multi-criteria sustainability standards.	Developing an inventory of NSCC's cleaning products.
		OP 14	Office Paper Purchasing	1	Purchase office paper with post-consumer recycled, agricultural residue, and/or Forest Stewardship Council (FSC) certified content.	NSCC purchases 100% post-consumer recycled office paper.
	Transportation	OP 15	Campus Fleet	1	Include vehicles that are hybrid, electric and/or alternatively fueled in the institution's motorized fleet.	The Sustainability Office is advocating for a shift to electric or hybrid fleet vehicles. However, no change has been enacted yet.
		OP 16	Commute Modal Split	5	Conduct a survey to gather data about student and/or employee commuting behavior.	NSCC Institutional Research conducts a yearly survey of student and employee commute methods.
		OP 17	Support for Sustainable Transportation	1	Have implemented strategies to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting.	NSCC supports sustainable transportation in variety of ways, including providing free or reduced-cost public transit passes to its students where public transit exists, and providing carpool programs and parking spaces.
	Waste	OP 18	Waste Minimization and Diversion	8	Have data on the weight of materials recycled, composted, donated/re-sold, and disposed in a landfill or incinerator.	NSCC conducts annual waste audits at all campuses.
		OP 19	Construction and Demolition Waste Diversion	1	Divert non-hazardous construction and demolition waste from the landfill and/or incinerator.	NSCC makes every effort to divert construction and demolition waste from landfill. For example, 99% of the waste from the recent construction of the Pictou Trades Wing was repurposed on-site.
		OP 20	Hazardous Waste Management	1	Have strategies in place to 1) safely dispose of all hazardous, special, universal, and non-regulated chemical waste and minimize the presence of these materials on campus; and/or 2) recycle, reuse, and/or refurbish electronic waste.	Each NSCC campus has a specific Hazardous Waste Management program in place to ensure hazardous waste is disposed of properly.

Category	Subcategory	Credit Number and Title	Points Available	Minimum Requirement	NSCC Action	
Operations (OP)	Water	OP 21	Water Use	4-6	Have data on potable and non-potable water use.	NSCC reports on water usage data in the Sustainability Annual Report.
		OP 22	Rainwater Management	2	Use green infrastructure and low impact development (LID) practices to help mitigate stormwater run-off impacts and treat rainwater as a resource rather than as a waste product.	Various rainwater use and stormwater retention strategies exist at multiple NSCC campuses, including bioswales and other green engineering techniques.
Planning & Administration (PA)	Coordination & Planning	PA 1	Sustainability Coordination	1	Have at least one sustainability committee, office, and/or officer tasked by the administration or governing body to advise on and implement policies and programs related to sustainability on campus.	NSCC operates a Sustainability and Infrastructure office led by Michael Chapman.
		PA 2	Sustainability Planning	4	Have a published plan that includes measurable sustainability objectives and/or include the integrated concept of sustainability in the institution's highest guiding document.	NSCC has implemented Sustainability Action Plans for numerous areas at the College, from applied research to groundskeeping.
		PA 3	Inclusive and Participatory Governance	3	Have formal participatory or shared governance bodies, include diverse stakeholders on the institution's highest governing body, and/or host or support a formal body through which external stakeholders have a regular voice in institutional decisions that affect them.	NSCC's board of Governors includes staff, students and stakeholders and meet regularly.
		PA 4	Reporting Assurance	1	Complete an assurance process that provides independent affirmation that the information in its current STARS report is reported in accordance with credit criteria.	NSCC is looking into the opportunity of having an outside source review our STARS submission.
	Diversity & Affordability	PA 5	Diversity and Equity Coordination	2	Have a diversity and equity committee, office and/or officer and/or make diversity trainings and activities available.	The Office of Diversity and Inclusion at NSCC works to strategically infuse diversity and inclusion at every level of the College.
		PA 6	Assessing Diversity and Equity	1	Have engaged in a structured assessment process to improve diversity, equity, and inclusion on campus.	NSCC actively supports diversity at its campuses and offices through a variety of initiatives and programs.

Category	Subcategory	Credit Number and Title	Points Available	Minimum Requirement	NSCC Action	
Planning & Administration (PA)	Diversity & Affordability	PA 7	Support for Underrepresented Groups	3	Have policies, programs or initiatives to support underrepresented groups and foster a more diverse and inclusive campus community.	NSCC offers many programs and services, and participates in various initiatives to support underrepresented groups.
		PA 8	Affordability and Access	4	Have data related to the institution's accessibility and affordability to low-income students.	NSCC School of Access offers programs that minimize the cost of attendance to low-income students.
	Investment & Finance	PA 9	Committee on Investor Responsibility	2	Have a formally established and active committee on investor responsibility (CIR) or similar body.	Not applicable for NSCC.
		PA 10	Sustainable Investment	3-5	Make positive sustainability investments and/or have investor engagement policies and practices.	Not applicable for NSCC.
		PA 11	Investment Disclosure	1	Make a snapshot of investment holdings available to the public on at least an annual basis.	Not applicable for NSCC.
	Wellbeing & Work	PA 12	Employee Compensation	3	Have data on the hourly wages and total compensation provided to employees.	Currently researching this data within NSCC.
		PA 13	Assessing Employee Satisfaction	1	Conduct a survey or other evaluation that allows for anonymous feedback to measure employee satisfaction and engagement.	NSCC assesses employee satisfaction through a yearly survey administered to all staff.
		PA 14	Wellness Programs	1	Have a wellness and/or employee assistance program and/or prohibit smoking within all occupied buildings.	NSCC offers employees and students access to EFAP program, and prohibits smoking in buildings as per Nova Scotia law.
		PA 15	Wellness Programs	2	Have an occupational health and safety management system (OHSMS) and/or data on work-related injury or ill health.	NSCC reports on workplace injuries and occupational disease cases.
	Innovation & Leadership (IN)	Innovation & Leadership	IN - Catalog of optional credits available	0.5 each (up to 4 bonus points)	Varies by credit.	The NSCC Sustainability Office has recently developed a Sustainable Events Guide for use during all college events.

APPENDIX B – CAMPUS SPECIFIC DATA

All Campuses

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year		Change since 2008/09			
Demand (kW)	77,805	73,600	71,851	73,293	71,404	70,978	71,355	71,477	68,540	66,009	67,129	1,120	2%	Increase	6,677	9%	Decrease
Electricity (kWh)	25,713,392	24,624,301	23,843,918	24,176,972	23,080,668	22,229,584	22,329,330	21,796,511	21,428,036	20,903,241	21,315,032	411,791	2%	Increase	4,398,360	17%	Decrease
Fuel Oil (ekWh)	30,275,656	27,881,559	21,748,171	18,592,979	18,976,611	20,255,774	21,236,726	18,888,192	18,940,393	14,039,420	14,197,107	377,040	3%	Increase	16,078,549	53%	Decrease
Propane (ekWh)	1,727,582	1,349,789	1,287,257	1,586,992	1,011,245	856,169	831,594	792,290	964,437	3,906,310	6,576,270	2,669,960	41%	Increase	4,848,688	74%	Increase
Natural Gas (ekWh)	0	0	3,705,384	5,953,969	7,916,266	7,389,251	7,274,428	5,891,930	7,948,038	7,564,075	8,811,248	875,367	10%	Increase	8,327,959	95%	Increase
Steam (ekWh)	2,423,411	2,051,961	2,423,360	2,297,833	2,386,512	2,678,206	2,431,908	1,416,258	1,582,196	1,466,364	1,326,962	139,402	10%	Decrease	1,096,449	45%	Decrease
TOTAL Energy (ekWh)	60,140,041	55,907,609	53,008,090	52,608,745	53,371,302	53,408,983	54,103,987	48,785,181	50,863,100	46,784,728	52,226,618	4,194,757	8%	Increase	8,396,711	14%	Decrease
Energy Intensity ekWh/SF	351	322	306	282	286	288	294	268	280	267	293	30	10%	Increase	59	17%	Decrease
CO ₂ (Metric Tonnes)	31,139	28,634	27,433	27,477	26,898	26,168	26,240	21,312	21,628	20,482	20,964	1,728	8%	Increase	9,467	31%	Decrease
Water Use (m ³)	137,031	143,701	131,397	117,528	105,448	87,518	86,009	82,260	78,701	73,463	67,022	7,276	10%	Decrease	70,511	51%	Decrease
Waste Diversion Rate (%)	-	-	-	68%	-	65%	74%	75%	76%	73%	74%	-	1%	Improvement	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	48%	49%	48%	-	-		-	-	N/A

Akerley

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	9,101	9,153	8,995	8,989	9,149	8,712	8,350	7,792	8,167	8,021	7,283	738	9%	Decrease	1,818	20%	Decrease
Electricity (kWh)	2,744,716	2,758,862	2,671,322	2,604,505	2,576,706	2,470,083	2,549,313	2,250,523	2,212,074	2,025,462	2,007,213	18,249	1%	Decrease	737,503	27%	Decrease
Fuel Oil (ekWh)	4,598,272	4,762,610	171,647	-	-	-	-	-	-	-	-	0	0%	No Change	4,598,272	100%	Decrease
Propane (ekWh)	1,005,296	702,987	744,249	932,408	438,171	125,469	29,905	-	-	-	-	0	0%	No Change	1,005,296	100%	Decrease
Natural Gas (ekWh)	-	-	3,705,384	4,433,146	5,567,687	5,044,926	4,951,376	3,876,279	3,914,299	3,587,753	3,520,742	67,011	2%	Decrease	3,037,454	86%	Increase
TOTAL Energy (ekWh)	8,348,285	8,224,459	7,292,602	7,970,059	8,582,563	7,640,477	7,530,594	6,126,802	6,126,373	5,613,215	5,527,955	85,260	2%	Decrease	3,303,618	37%	Decrease
Energy Intensity ekWh/SF	30	30	27	29	31	28	23	19	19	17	17	0	2%	Decrease	15	48%	Decrease
CO ₂ (Metric Tonnes)	3,756	3,753	3,128	3,197	3,275	3,027	3,044	2,156	2,137	1,958	1,934	24	1%	Decrease	1,822	49%	Decrease
Water Use (m ³)	35,022	26,845	27,877	21,419	13,551	9,268	8,843	8,055	5,906	6,598	6,225	373	6%	Decrease	28,797	82%	Decrease
Waste Diversion Rate (%)	-	-	-	41%	-	65%	78%	83%	80%	77%	84%	-	7%	Improvement	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	47%	49%	56%	-	-		-	-	N/A
BOMA BEST	72%	-	-	78%	-	-	-	84%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	8%	2%	4%	3%	4%	-	-	N/A	-	-	N/A

AVC COGS

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	1,496	1,475	1,534	1,271	1,302	1,353	1,324	1,315	1,344	1,297	1,249	48	4%	Decrease	247	17%	Decrease
Electricity (kWh)	554,650	524,285	510,687	407,566	386,264	386,238	422,935	417,258	459,499	431,535	460,186	28,651	6%	Increase	94,464	17%	Decrease
Fuel Oil (ekWh)	762,887	754,863	604,453	589,741	606,250	500,208	619,871	618,462	712,413	525,834	692,881	167,047	24%	Increase	70,005	9%	Decrease
TOTAL Energy (ekWh)	1,317,537	1,279,148	1,115,140	997,307	992,514	886,446	1,042,806	1,035,720	1,171,912	957,369	1,153,067	195,698	17%	Increase	164,469	12%	Decrease
Energy Intensity ekWh/SF	22	21	18	16	16	15	17	17	19	16	19	3	17%	Increase	3	12%	Decrease
CO ₂ (Metric Tonnes)	663	635	586	495	481	454	515	427	478	413	473	61	13%	Increase	190	29%	Decrease
Water Use (m ³)	2,948	3,922	1,443	1,623	1,298	962	902	1,026	1,189	927	950	23	2%	Increase	1,998	68%	Decrease
Waste Diversion Rate (%)	-	-	-	76%	-	65%	91%	90%	96%	88%	88%	-	0%	No Change	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	35%	36%	34%	-	-		-	-	N/A
BOMA BEST	65%	-	-	81%	-	-	-	82%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	21%	16%	21%	20%	21%	-	-	N/A	-	-	N/A

AVC Middleton

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	2,346	2,323	2,203	2,003	1,817	1,950	1,905	1,824	1,632	1,668	1,781	113	6%	Increase	565	24%	Decrease
Electricity (kWh)	910,800	829,440	700,116	633,385	576,923	606,006	601,435	583,450	520,932	517,972	549,786	31,814	6%	Increase	361,014	40%	Decrease
Fuel Oil (ekWh)	1,320,717	1,182,024	921,742	718,658	844,126	1,062,761	1,117,634	758,467	885,171	723,588	998,288	274,700	28%	Increase	322,429	24%	Decrease
Propane (ekWh)	80,151	81,693	86,190	75,422	131,983	74,734	57,593	45,504	22,276	9,694	82,332	72,637	88%	Increase	2,181	3%	Increase
TOTAL Energy (ekWh)	2,311,668	2,093,157	1,708,048	1,427,465	1,553,032	1,743,501	1,776,661	1,389,245	1,430,011	1,251,254	1,630,406	379,151	23%	Increase	681,262	29%	Decrease
Energy Intensity ekWh/SF	20	18	15	12	13	15	15	12	13	11	14	3	23%	Increase	6	29%	Decrease
CO ₂ (Metric Tonnes)	1,123	1,019	844	735	730	798	804	579	576	521	625	105	17%	Increase	497	44%	Decrease
Water Use (m ³)	810	660	1,671	1,374	1,442	1,551	1,505	1,155	1,382	1,008	1,007	1	0%	Decrease	197	20%	Increase
Waste Diversion Rate (%)	-	-	-	68%	-	64%	90%	91%	96%	96%	97%	-f	1%	Improvement	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	35%	36%	34%	-	-		-	-	N/A
BOMA BEST	68%	-	-	86%	-	-	-	85%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	21%	16%	21%	20%	21%	-	5%	N/A	-	-	N/A

*An issue with the Campus' water meter was identified and addressed in 2010/11

Burridge

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09			
Demand (kW)	3,149	2,913	2,884	1,777	911	926	2,646	2,925	2,881	2,846	2,706	140	5%	Decrease	443	14%	Decrease	
Electricity (kWh)	1,660,200	1,033,200	955,075	892,045	846,634	897,035	874,960	878,945	824,723	744,042	721,582	22,460	3%	Decrease	938,618	57%	Decrease	
Fuel Oil (ekWh)	1,397,473	1,399,567	1,056,174	1,156,655	1,279,237	1,645,376	1,743,661	1,705,982	1,568,220	263,380	-	263,380	100%	Decrease	1,397,473	100%	Decrease	
Propane (ekWh)	19,151	23,337	31,607	5,750	41,034	18,767	59,858	33,032	22,276	1,382,627	1,704,895	322,269	19%	Increase	1,685,744	99%	Increase	
TOTAL Energy (ekWh)	3,076,824	2,456,104	2,042,855	2,054,450	2,166,906	2,561,178	2,678,479	2,617,958	2,415,220	2,390,049	2,426,477	36,429	2%	Increase	650,347	21%	Decrease	
Energy Intensity ekWh/SF	22	17	14	14	15	18	19	18	17	17	17	0	0%	No Change	5	21%	Decrease	
CO ₂ (Metric Tonnes)	1,766	1,235	1,084	1,050	1,050	1,180	1,194	1,007	935	833	818	-231	-39%	Decrease	948	54%	Decrease	
Water Use (m ³)	4,404	4,853	3,623	2,116	2,683	3,355	2,733	1,818	1,326	2,574	2,511	64	2%	Decrease	1,893	43%	Decrease	
Waste Diversion Rate (%)	-	-	-	85%	-	79%	93%	78%	83%	86%	71%	-	15%	Decrease	-	-	N/A	
Space Utilization	-	-	-	-	-	-	-	-	46%	43%	41%	-	-		-	-	N/A	
BOMA BEST	77%	-	-	82%	-	-	-	81%	-	-	-	-	-		N/A	-	-	N/A
FCI	-	-	-	-	-	-	17%	17%	20%	20%	21%	-	3%		N/A	-	-	N/A

Cumberland

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	1,291	1,351	1,374	1,433	1,517	1,421	1,488	1,755	1,652	1,533	1,745	212	12%	Increase	454	26%	Increase
Electricity (kWh)	379,440	362,640	360,543	379,443	412,118	414,885	412,939	421,528	419,199	374,487	405,960	31,473	8%	Increase	26,520	7%	Increase
Fuel Oil (ekWh)	743,029	660,484	830,943	574,680	683,065	561,258	707,208	540,377	538,405	531,752	654,268	122,516	19%	Increase	88,762	12%	Decrease
TOTAL Energy (ekWh)	1,122,469	1,023,124	1,191,486	954,123	1,095,183	976,143	1,120,147	961,905	957,604	906,239	1,060,228	153,989	15%	Increase	62,242	6%	Decrease
Energy Intensity ekWh/SF	21	19	22	18	20	18	21	18	18	17	20	3	15%	Increase	1	6%	Decrease
CO ₂ (Metric Tonnes)	509	474	515	467	522	494	529	410	408	377	428	51	12%	Increase	81	16%	Decrease
Water Use (m ³)	2,129	1,434	2,114	1,300	4,460	1,597	1,483	3,207	1,003	1,014	1,062	48	4%	Increase	1,067	50%	Decrease
Waste Diversion Rate (%)	-	-	-	78%	-	58%	65%	61%	61%	59%	48%	-	11%	Decrease	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	43%	43%	38%	-	-		-	-	N/A
BOMA BEST	80%	-	-	82%	-	-	-	82%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	10%	9%	10%	11%	11%	-	1%	N/A	-	-	N/A

Institute of Technology

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	8,087	7,942	7,605	8,267	8,615	8,808	8,792	8,578	8,336	8,103	8,032	71	1%	Decrease	55	1%	Decrease
Electricity (kWh)	2,468,090	2,562,195	2,605,952	2,732,273	2,839,532	2,953,053	2,941,954	2,845,444	2,677,438	2,710,922	2,585,582	125,340	5%	Decrease	117,492	5%	Increase
Fuel Oil (ekWh)	3,164,321	3,388,674	2,268,981	109,529	-	-	-	-	-	-	-	0	0%	No Change	3,164,321	100%	Decrease
Propane (ekWh)	61,908	39,841	42,791	42,225	-	25,024	26,922	20,269	24,994	6,429	14,529	8,100	56%	Increase	47,380	77%	Decrease
Natural Gas (ekWh)	-	-	-	1,520,822	2,348,580	2,344,325	2,323,052	2,015,651	2,032,670	1,979,487	2,358,153	378,666	16%	Increase	2,358,153	100%	Increase
TOTAL Energy (ekWh)	5,694,319	5,990,710	4,917,724	4,404,849	5,188,112	5,322,402	5,291,928	4,881,364	4,735,102	4,696,838	4,958,263	261,426	5%	Increase	736,055	13%	Decrease
Energy Intensity ekWh/SF	20	21	18	16	19	19	19	17	17	17	18	1	5%	Increase	3	13%	Decrease
CO ₂ (Metric Tonnes)	2,906	3,038	2,794	2,630	2,833	2,934	2,921	2,214	2,109	2,120	2,105	15	1%	Decrease	801	28%	Decrease
Water Use (m ³)	11,054	11,709	9,298	7,695	9,025	8,545	9,336	7,620	7,952	7,155	8,068	913	11%	Increase	2,986	27%	Decrease
Waste Diversion Rate (%)	-	-	-	58%	-	67%	68%	85%	58%	81%	71%	-	10%	Decrease	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	56%	63%	61%	-	-		-	-	N/A
BOMA BEST	75	-	-	86%	-	-	-	90%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	12%	7%	4%	7%	7%	-	3%	N/A	-	-	N/A

Ivany

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	10,845	10,666	11,339	14,807	12,883	13,517	13,150	13,919	11,576	11,200	11,538	338	3%	Increase	693	6%	Increase
Electricity (kWh)	4,357,800	4,368,645	4,402,269	5,298,849	4,786,740	4,686,525	4,904,640	4,749,012	4,621,680	4,341,078	4,509,654	168,576	4%	Increase	151,854	3%	Increase
Steam (ekWh)	2,423,411	2,051,961	2,423,360	2,297,833	2,386,512	2,678,206	2,431,908	1,416,258	1,582,196	1,466,364	1,326,962	139,402	10%	Decrease	1,096,449	45%	Decrease
TOTAL Energy (ekWh)	6,781,211	6,420,606	6,825,629	7,596,682	7,173,252	7,364,731	7,336,548	6,165,270	6,203,876	5,807,442	5,836,616	29,174	0%	No Change	944,595	14%	Decrease
Energy Intensity ekWh/SF	25	23	25	17	16	17	17	14	14	13	13	0	0%	Increase	11	46%	Decrease
CO ₂ (Metric Tonnes)	4,253	4,178	4,290	5,024	4,609	4,590	4,719	3,407	3,362	3,154	3,232	78	2%	Increase	1,021	24%	Decrease
Water Use (m ³)	24,000	23,779	24,364	25,296	23,154	26,035	25,831	26,018	24,533	19,724	11,528	8,197	42%	Decrease	12,472	52%	Decrease
Waste Diversion Rate (%)	-	-	-	76%	-	52%	52%	53%	43%	38%	54%	-	16%	Improvement	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	69%	72%	70%	-	-		-	-	N/A
BOMA BEST	93%	-	-	93%	-	-	-	92%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	1%	2%	1%	2%	2%	-	1%	N/A	-	-	N/A

*The Campus was expanded through construction of the Centre for the Built Environment in 2011/12

**An issue with the Campus' steam condensate meter was identified and addressed in 2015/16

***An issue with the Campus' water meter was identified and addressed in 2018/19

Kingstec

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	5,058	4,822	4,846	4,841	4,642	4,945	4,865	4,847	4,625	4,595	4,787	193	4%	Increase	271	5%	Decrease
Electricity (kWh)	1,685,400	1,461,600	1,373,418	1,321,740	1,240,728	1,272,180	1,302,150	1,397,946	1,313,178	1,331,142	1,323,528	7,614	1%	Decrease	361,872	21%	Decrease
Fuel Oil (ekWh)	2,742,010	1,808,737	1,890,914	1,877,633	2,231,325	2,512,816	2,760,574	2,496,354	3,140,598	3,053,644	3,240,114	186,470	6%	Increase	498,104	15%	Increase
Propane (ekWh)	466,895	392,899	255,969	409,053	356,741	448,010	444,971	573,697	641,027	621,283	571,049	50,233	8%	Decrease	104,154	18%	Increase
TOTAL Energy (ekWh)	4,894,305	3,663,235	3,520,301	3,608,425	3,828,793	4,233,006	4,507,695	4,467,997	5,094,802	5,006,069	5,134,691	128,622	3%	Increase	240,386	5%	Increase
Energy Intensity ekWh/SF	24	18	17	17	18	20	22	21	25	24	25	1	3%	Increase	1	5%	Increase
CO ₂ (Metric Tonnes)	2,218	1,778	1,695	1,679	1,689	1,805	1,892	1,654	1,774	1,760	1,792	154	9%	Increase	426	19%	Decrease
Water Use (m ³)	10,706	12,384	7,848	5,515	6,106	5,403	4,756	4,524	4,960	4,817	4,513	304	6%	Decrease	6,193	58%	Decrease
Waste Diversion Rate (%)	-	-	-	85%	-	61%	91%	76%	79%	62%	68%	-	6%	Improvement	-	-	N/A
Space Utilization (# of Pages)	-	-	-	-	-	-	-	-	56%	52%	53%	-	-		-	-	N/A
BOMA BEST	74%	-	-	80%	-	-	-	82%	-	-	-	-	2%	N/A	-	-	N/A
FCI	-	-	-	-	-	-	5%	5%	4%	4%	17%	-	1%	N/A	-	-	N/A

Lunenburg

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	4,260	4,181	4,358	3,899	3,999	4,063	3,692	3,908	3,584	3,642	4,100	458	11%	Increase	160	4%	Decrease
Electricity (kWh)	1,316,400	1,170,000	1,184,754	1,088,340	1,091,628	1,049,802	973,242	969,078	888,426	877,320	1,031,310	153,990	15%	Increase	285,090	22%	Decrease
Fuel Oil (ekWh)	2,023,240	1,710,437	1,606,247	1,439,646	1,284,325	1,652,617	1,875,300	1,922,566	1,739,921	118,180	0	118,180	100%	Decrease	2,023,240	100%	Decrease
Propane (ekWh)	-	-	-	-	-	-	-	-	3,539	1,094,682	1,401,232	306,549	22%	Increase	1,401,232	100%	Increase
TOTAL Energy (ekWh)	3,339,640	2,880,437	2,791,001	2,527,986	2,375,953	2,702,419	2,848,542	2,891,644	2,628,347	2,090,182	2,432,542	342,360	14%	Increase	907,098	27%	Decrease
Energy Intensity ekWh/SF	23	20	19	17	16	18	19	20	18	14	17	2	14%	Increase	6	27%	Decrease
CO ₂ (Metric Tonnes)	1,628	1,425	1,411	1,287	1,251	1,308	1,299	1,113	1,106	824	957	133	14%	Increase	670	41%	Decrease
Water Use (m ³)	7,874	10,998	8,711	5,848	5,342	5,012	4,125	4,205	4,305	4,955	6,367	1,412	22%	Increase	1,507	19%	Decrease
Waste Diversion Rate (%)	-	-	-	74%	-	86%	82%	90%	90%	78%	78%	-	0%	Increase	-	-	N/A
Paper Consumption (# of Pages)	-	-	-	-	-	-	-	-	35%	37%	38%	-	-		-	-	N/A
BOMABEST	79%	-	-	82%	-	-	-	81%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	26%	21%	22%	12%	12%	-	1%	N/A	-	-	N/A

Marconi

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	8,073	9,441	7,602	7,602	8,724	8,714	8,486	8,101	8,413	8,453	8,491	38	0%	Increase	418	5%	Increase
Electricity (kWh)	2,584,620	2,533,020	2,497,780	2,414,280	2,538,418	2,583,018	2,549,752	2,455,018	2,608,906	2,806,400	2,800,031	6,369	0%	No Change	215,411	8%	Increase
Fuel Oil (ekWh)	1,292,190	1,068,256	1,251,720	1,451,921	1,372,391	1,273,743	1,602,580	1,744,073	1,819,496	1,600,243	2,040,431	440,188	22%	Increase	748,241	37%	Increase
TOTAL Energy (ekWh)	3,876,810	3,601,276	3,749,500	3,866,201	3,910,809	3,856,761	4,152,332	4,199,091	4,428,402	4,406,643	4,840,462	433,819	9%	Increase	963,652	20%	Increase
Energy Intensity ekWh/SF	19	17	18	19	16	15	17	17	18	18	19	2	9%	No Change	1	3%	Increase
CO ₂ (Metric Tonnes)	2,522	2,422	2,438	2,417	2,503	2,516	2,570	2,034	2,153	2,226	2,333	107	5%	Increase	189	7%	Decrease
Water Use (m ³)	12,384	14,536	13,640	13,640	14,268	2,366	2,193	5,808	5,088	5,331	5,046	-	-	Increase	7,338	59%	Decrease
Waste Diversion Rate (%)	-	-	-	-	-	42%	57%	63%	71%	67%	68%	-	1%	Improvement	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	56%	55%	51%	-	-		-	-	N/A
BOMA BEST Marconi	85%	-	-	85%	-	-	-	83%	-	-	-	-	2%	N/A	-	2%	N/A
BOMA BEST CBE	-	-	-	90%	-	-	-	89%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	14%	14%	12%	19%	19%	-	2%	N/A	-	-	N/A

*The Campus was expanded through construction of the Centre for the Built Environment Trades Wing in 2010/11

Pictou

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	5,827	5,554	5,050	5,305	5,415	5,454	5,571	5,677	5,421	4,795	5,367	572	11%	Increase	460	8%	Decrease
Electricity (kWh)	1,647,600	1,769,982	1,545,217	1,554,568	1,437,595	1,383,823	1,327,158	1,362,307	1,416,947	1,480,488	1,671,168	190,680	11%	Increase	23,568	1%	Increase
Fuel Oil (ekWh)	2,933,343	2,690,975	2,231,263	2,611,122	2,460,931	2,488,998	2,609,993	2,154,010	148,293	0	0	-	0%	No Change	2,933,343	100%	Decrease
Natural Gas (ekWh)	-	-	-	-	-	-	-	-	2,001,069	2,368,640	2,932,353	563,712	19%	Increase	2,932,353	100%	Increase
TOTAL Energy (ekWh)	4,580,943	4,460,957	3,776,480	4,165,690	3,898,526	3,872,821	3,937,151	3,516,317	3,566,309	3,849,128	4,603,521	754,392	16%	Increase	22,577	0%	No Change
Energy Intensity ekWh/SF	26	25	22	24	22	22	22	20	20	22	23	1	3%	Increase	(3)	-15%	No Change
CO ₂ (Metric Tonnes)	2,138	2,181	1,874	1,978	1,841	1,802	1,784	1,427	1,316	1,386	1,610	225	14%	Increase	528	25%	Decrease
Water Use (m ³)	6,380	14,516	13,600	9,044	6,179	5,009	6,568	3,131	3,968	3,758	3,955	197	5%	Increase	2,425	38%	Decrease
Waste Diversion Rate (%)	-	-	-	63%	-	46%	77%	71%	85%	92%	93%	-	1%	Improvement	-	-	N/A
Paper Consumption (# of Pages)	-	-	-	-	-	-	-	-	59%	53%	53%	-	-		-	-	N/A
BOMA BEST	80%	-	-	80%	-	-	-	79%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	6%	5%	6%	6%	6%	-	1%	N/A	-	-	N/A

*The Campus was expanded through construction of the Dr. John F. Hamm Trades & Innovation Centre in 2017/18

School of Fisheries, Pictou

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	456	326	436	380	392	331	378	371	358	377	364	13	3%	Decrease	92	20%	Decrease
Electricity (kWh)	332,500	337,620	204,699	202,211	227,986	199,979	217,515	212,068	212,061	218,474	206,706	11,768	5%	Decrease	125,794	38%	Decrease
Fuel Oil (ekWh)	643,049	544,738	732,591	509,679	554,454	588,343	621,791	689,467	479,068	680,181	953,963	273,782	29%	Increase	310,914	33%	Increase
TOTAL Energy (ekWh)	975,549	882,358	937,290	711,890	782,440	788,322	839,306	901,535	691,129	898,655	1,160,669	262,014	23%	Increase	185,120	16%	Increase
Energy Intensity ekWh/SF	22	20	21	16	18	18	19	21	16	21	27	6	23%	Decrease	4	16%	Increase
CO ₂ (Metric Tonnes)	444	424	358	300	333	318	341	264	300	304	693	389	56%	Increase	248	36%	Increase
Water Use (m ³)	502	243	137	89	45	129	106	165	68	835	243	-	-	Increase	(259)	-107%	Increase
FCL	-	-	-	-	-	-	14%	13%	16%	-	-	-	3%	N/A	-	-	N/A

Shelburne

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	874	822	883	880	781	896	952	839	898	930	1,107	178	16%	Increase	234	21%	Increase
Electricity (kWh)	301,422	270,265	260,542	245,927	198,610	253,665	275,225	269,645	228,140	222,431	233,888	11,457	5%	Increase	67,534	22%	Decrease
Fuel Oil (ekWh)	560,518	461,157	324,112	332,285	390,232	407,463	537,640	488,561	468,073	426,567	543,803	117,236	22%	Increase	16,715	3%	Decrease
TOTAL Energy (ekWh)	861,940	731,422	584,654	578,212	588,842	661,128	812,865	758,206	696,213	648,998	777,691	128,693	17%	Increase	84,249	10%	Decrease
Energy Intensity ekWh/SF	18	15	12	12	12	13	17	15	14	13	16	3	17%	Increase	2	10%	Decrease
CO ₂ (Metric Tonnes)	397	346	303	293	267	318	369	298	266	252	289	37	13%	Increase	108	27%	Decrease
Water Use (m ³)	523	672	760	787	660	690	617	665	835	735	2,155	1,420	66%	Increase	1,632	76%	Increase
Waste Diversion Rate (%)	-	-	-	76%	-	80%	89%	89%	93%	65%	92%	0	29%	Improvement	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	30%	31%	32%	-	-		-	-	N/A
BOMA BEST	68%	-	-	83%	-	-	-	85%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	39%	23%	23%	20%	21%	-	0%	N/A	-	-	N/A

Strait Area

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year		Change since 2008/09			
Demand (kW)	6,844	6,665	6,805	6,410	5,939	5,437	5,286	5,281	5,388	4,875	4,903	27	1%	Increase	1,941	28%	Decrease
Electricity (kWh)	2,287,959	2,291,228	2,283,506	2,193,734	1,840,963	1,482,868	1,424,937	1,462,615	1,548,005	1,440,121	1,398,197	41,924	3%	Decrease	889,762	39%	Decrease
Fuel Oil (ekWh)	2,731,428	2,629,084	2,712,658	2,373,462	2,596,637	2,997,397	2,841,828	2,284,834	3,187,681	2,191,020	561,689	1,629,331	74%	Decrease	2,169,739	79%	Decrease
Propane (ekWh)	-	-	-	47,257	43,316	75,016	118,844	46,785	86,308	659,957	2,668,372	2,008,415	75%	Increase	2,668,372	100%	Increase
TOTAL Energy (ekWh)	5,019,387	4,920,312	4,996,164	4,614,453	4,480,916	4,555,280	4,385,609	3,794,234	4,821,995	4,291,098	4,628,258	337,160	7%	Decrease	391,129	8%	Decrease
Energy Intensity ekWh/SF	28	27	28	26	25	25	24	21	27	24	26	2	7%	Decrease	2	8%	Decrease
CO ₂ (Metric Tonnes)	2,631	2,609	2,623	2,471	2,227	2,029	1,950	1,535	1,825	1,622	1,597	26	2%	Decrease	1,035	39%	Decrease
Water Use (m ³)	3,475	2,330	1,642	2,990	4,567	2,324	2,547	2,229	4,145	4,476	2,092	2,384	53%	Increase	1,383	40%	Decrease
Waste Diversion Rate (%)	-	-	-	74%	-	54%	26%	73%	71%	94%	78%	-	16%	Decrease	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	48%	49%	47%	-	-		-	-	N/A
BOMA BEST	78%	-	-	82%	-	-	-	83%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	15%	13%	14%	12%	13%	-	1%	N/A	-	-	N/A

Truro

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Change from last year			Change since 2008/09		
Demand (kW)	6,099	5,965	5,936	5,428	5,318	4,450	4,472	4,347	4,265	3,675	3,676	1	0%	No Change	2,423	40%	Decrease
Electricity (kWh)	2,481,795	2,351,319	2,288,038	2,208,106	2,079,823	1,590,424	1,551,175	1,521,674	1,476,828	1,381,367	1,410,241	28,874	2%	Increase	1,071,554	43%	Decrease
Fuel Oil (ekWh)	5,363,179	4,819,952	5,144,727	4,847,969	4,673,639	4,564,795	4,198,647	3,670,736	4,087,205	3,705,678	4,511,671	805,993	18%	Increase	851,508	16%	Decrease
Propane (ekWh)	94,181	109,032	126,451	74,878	0	89,150	93,501	73,004	115,640	131,638	133,861	2,222	2%	Increase	39,679	30%	Increase
TOTAL Energy (ekWh)	7,939,155	7,280,303	7,559,216	7,130,954	6,753,462	6,244,369	5,843,323	5,265,414	5,679,672	5,218,683	6,055,772	837,089	14%	Increase	1,883,383	24%	Decrease
Energy Intensity ekWh/SF	32	30	31	29	27	25	24	21	23	21	25	3	14%	Increase	8	24%	Decrease
CO ₂ (Metric Tonnes)	3,477	3,233	3,264	3,111	2,943	2,518	2,393	1,927	2,011	1,856	2,078	222	11%	Increase	1,399	40%	Decrease
Water Use (m ³)	15,322	2,380	2,020	2,010	14,290	15,400	14,570	12,800	12,110	10,390	11,300	910	8%	Increase	4,022	26%	Decrease
Waste Diversion Rate (%)	-	-	-	69%	-	75%	60%	43%	51%	45%	41%	-	4%	Decrease	-	-	N/A
Space Utilization	-	-	-	-	-	-	-	-	47%	52%	53%	-	-		-	-	N/A
BOMA BEST	73%	-	-	75%	-	-	-	78%	-	-	-	-	-	N/A	-	-	N/A
FCI	-	-	-	-	-	-	11%	11%	11%	12%	19%	-	0%	N/A	-	-	N/A

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