



The Corporation of the District of Saanich

Report

To: Mayor and Council

From: Sheila Allen, Director of Corporate Services

Date: October 22, 2024

Subject: Energy and Carbon Emissions Reporting Requirement for Large Buildings

File: 2560-50 • 100% Renewable Energy

RECOMMENDATIONS

1. That Council endorse the proposed Energy and Carbon Emissions Reporting Requirement, and associated program supports for large buildings; and,
2. That Council direct Staff to bring forward a bylaw for consideration to establish the requirement and prepare for the program launch.

PURPOSE

The purpose of this Report is to:

- Provide background on the development of the proposed Energy and Carbon Emissions Reporting Requirement, including engagement activities;
- Outline the proposed Energy and Carbon Emissions Reporting Requirements that would apply to buildings over a certain size threshold in the community; and
- Discuss considerations and next steps for the program finalization and launch.

BACKGROUND

Energy benchmarking is the process of measuring, reporting, and comparing a building's energy and emissions performance over time. Buildings in Saanich generate nearly 160,000 tCO₂e per year, which accounts for approximately 32% of the community's total territorial emissions (2022 inventory). While we know that nearly 75% of these emissions are from burning fossil fuels such as natural gas, oil and propane, the District has relied on modelling to estimate how these emissions are spread across various building typologies. Collecting actual energy use data from large buildings will greatly support the delivery of tailored programs, policies and incentives to enhance climate action, in addition to helping building owners and managers themselves gain awareness of, and improve, energy management practices.

Since its inception in 2020, Saanich has participated in and supported the voluntary Building Benchmark BC (BBBC) Program (www.buildingbenchmarkbc.ca), operated by Open Green Building Society. Private and public sector buildings from across the province participate by sharing their energy and carbon emissions data with the Program, and performance is tracked over time, as well as compared against other similar buildings. Participating building owners and property managers receive annual Building Scorecards, which help them to interpret the data for their buildings and begin to explore energy and carbon emission reduction measures.

Participants are encouraged to include their building on the public disclosure map (available on the website) in an effort to increase public and industry awareness of building performance and trends, support transparency, and foster collaboration through the sharing of case studies and best practices. Across BC, the benchmarking process has been completed for over 1200 buildings, with over 90% of these voluntarily listed on the public disclosure map.

While BBBC has grown to become the largest voluntary benchmarking program in North America, the impact of a voluntary program is inherently limited, with participants tending to be leaders in the field or public sector organizations with a climate mandate. A mandatory benchmarking program is considered a foundational climate policy, with the rationale that you can't effectively manage what you don't measure. Both the Climate Plan and the Building Retrofit Strategy identify actions regarding mandatory benchmarking, or as referred to herein, Energy and Carbon Emissions (ECE) Reporting:

- Climate Plan Action B2.17: Support mandatory energy and greenhouse gas benchmarking for existing Part 3 buildings; and
- Building Retrofit Strategy – High Impact Action PR2: Implement mandatory building energy benchmarking and disclosure for large Part 3 buildings.

At the January 29, 2024 Committee of the Whole meeting, information on ECE Reporting was presented, which included the benefits for building owners, property managers and governments; examples of other mandatory and voluntary reporting programs across North America and BC; and an overview of the typical process a building owner would go through to comply. Council endorsed the proposed process for engagement and the development of a mandatory ECE Reporting Program in Saanich.

DISCUSSION

Methodology to Develop an ECE Reporting Requirement

The District of Saanich has been collaborating with the City of Victoria and the Capital Regional District (CRD) on the development of a proposed ECE Reporting requirement, including all phases of engagement. Harmonization is known to be an important objective for the building industry, and the CRD has supported the process with an intent to encourage regional alignment, similar to engagement and adoption of the BC Energy and Zero Carbon Step Codes. There is an intent for the CRD to take on program administration on behalf of local governments, as discussed on page 6, below.

Figure 1 outlines the process undertaken to develop the recommended ECE Reporting Requirements and program design, and the associated timelines. A more detailed account of activities is included in the ECE Reporting Requirements Engagement Summary Report (Attachment 1). Project milestones are as follows:

- December 2023: Initial meetings were held with key stakeholder associations in the region.
- December 2023 – February 2024: A draft program design was developed, informed by background research and early conversations with stakeholders.
- February – March 2024: Broad industry engagement was conducted to solicit feedback on the draft ECE Reporting Requirement. Further details on the sessions and outcomes are summarized below.
- March – November 2024: Feedback from the engagement activities were considered and incorporated into the final proposed requirement and program design. The CRD initiated the development of a “covered buildings list” to provide a definitive inventory of buildings that would be covered under the requirement.

- Fall 2024: The finalized recommendations are being brought forward for Council endorsement, following which, a harmonized bylaw would be brought forward in conjunction with the City of Victoria in 2025.

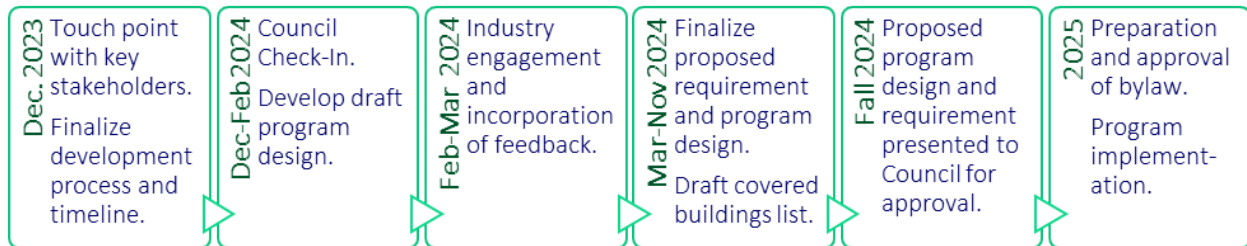


Figure 1: Energy and Carbon Emissions Reporting Requirement Process and Timelines

Engagement Summary and Outcomes

Initial industry engagement took place in the form of meetings with stakeholder associations in the region to gauge their level of support, identify initial concerns or considerations, and secure commitments to support engagement activities with building owners and managers through the organizations' respective memberships.

Following these initial meetings and drawing on research from best practices and other energy and carbon emissions reporting programs across North America, staff from the City of Victoria, the CRD and the District of Saanich developed a proposed ECE Reporting Requirement. This formed the basis of broad industry engagement between February and March 2024. The engagement objectives were to:

- Inform industry about the proposed ECE Reporting Requirement;
- Obtain feedback on the draft requirement, as proposed; and
- Identify supports that would help address any challenges to compliance.

Documents were posted on HelloSaanich, and opportunities for feedback were shared via a direct mailout and through stakeholder associations, including: Building Owners and Managers Association (BOMA); Urban Development Institute (UDI); BC Non-Profit Housing Association (BCNPHA), Landlord BC (LLBC), Vancouver Island Strata Owners Association (VISOA) and the Condominium Home Owners Association (CHOA). Engagement activities included:

- Four focus groups, each centred on a different building typology (i.e. commercial, strata, rental, and one "general" theme). Each focus group was 2 hours in length, and a total of 37 participants were engaged.
- Two information sessions, which presented the proposed ECE Requirement, including amendments that had been made based on the focus group findings. Each info session was 1 hour in length and a total of 25 participants attended.
- General written comments which were received via email or through HelloSaanich or the City of Victoria's online platform Have Your Say. Nine email correspondences and three comment threads were received regarding the proposed requirement.

A summary of the engagement process and findings are included in Attachment 1. Key themes included:

- A general familiarity with benchmarking programs and acknowledgement of the benefits, with some participants already involved in voluntary programs;

- A desire for harmonization with other reporting requirements and energy management practices (e.g. Strata electrical planning reports; corporate ESG reports; use of Energy Star Portfolio Manager as a commonly used energy management platform);
- Some concern regarding capacity constraints and a desire for support services to help building owners meet the requirement;
- Some concern around access to data, including how to find a building's gross floor area, how data would be aggregated in buildings with multiple units; how tenants would provide utility data; and data quality or maintenance issues; and
- Prevalent concern with mandatory disclosure and the original proposal to have each building's performance publicly available and attributable to a specific address.

In response to the engagement discussions, suggestions and concerns, some areas of the proposed ECE Reporting Requirement were strengthened or amended. The proposed ECE Reporting Requirement as outlined below is designed to address concerns and opportunities raised by participants, such as by:

- Allowing all building owners to opt out of public disclosure, and developing an anonymized database of building performance that can be used for research purposes;
- Developing a covered buildings list that provides the gross floor area for each building under the requirement;
- Using the industry standard software, Energy Star Portfolio Manager, as the underpinning platform for data entry;
- Supporting buildings with multiple utility meters in setting up automatic data aggregation services;
- Ensuring that support services, such as a Help Desk function is available to troubleshoot issues and proactively flag data quality issues for users;
- Providing greater clarity on which buildings are exempt from the requirement to report, as well as additional conditions that would be considered under a request for an annual exemption in extenuating circumstances; and
- Including language to highlight the importance of the policy in supporting climate adaptation; for e.g. the ability to use data to analyze access to cooling across the building stock.

The final proposed ECE Reporting Requirement is outlined in the following section, and amendments to the original proposal, as well as the full overview of the engagement process and findings can be found in Attachment 1.

Proposed ECE Reporting Requirement

The overarching goals of the proposed ECE Reporting Requirement are to:

1. Develop a better understanding of greenhouse gas emissions from buildings;
2. Support adaptation of buildings to the changing climate;
3. Use data to support development of programs, policies and incentives to enhance climate action;
4. Provide building owners and managers with the data needed to support improvements to their building's energy and carbon performance; and
5. Enhance industry and public awareness of building energy and emissions performance.

Buildings Subject to Reporting Requirement and Implementation Schedule

The proposed ECE Reporting requirement would be applied to all buildings with a gross floor area (GFA) of 10,000 square feet (929 square metres) or greater. The District of Saanich is currently working with the CRD to develop a definitive "covered buildings list" which would

provide clarity on whether a building is subject to the requirement and provide the GFA for each building to ensure consistent reporting and comparisons. While this list is still being finalized, preliminary estimates indicate that there are 500-700 buildings that would report in Saanich, approximately 55% of which are commercial or institutional buildings, and 45% of which are residential or mixed use.

To provide sufficient lead time and support as buildings begin sharing data, it is proposed that the first year of the program be voluntary (in 2025, reporting 2024 data). The mandatory requirement would be phased in over two years based on building size, as defined by the following cohorts and outlined in Table 1:

Cohort 1

All buildings, 30,000 square feet or larger.

First Reporting Deadline: June 1, 2026, reporting 2025 performance.

First Public Disclosure year: 2027

Cohort 2

All buildings, 10,000 square feet or larger.

First Reporting Deadline: June 1, 2027, reporting 2026 performance.

First Public Disclosure year: 2028

Table 1: Schedule for First Year of Energy and Carbon Emissions Reporting Requirements

Year	2025	2026	2027	2028
Implementation	Voluntary	Cohort 1	Cohort 2	
Disclosure	Voluntary	Voluntary	Cohort 1 – Disclose by default – opt out available	Cohort 2 – Disclose by default – opt out available

For clarity, the following are exempt from the requirement to report:

- Buildings smaller than 10,000 square feet;
- Single family detached or single family attached buildings including rowhouses, townhouses, houseplexes, triplexes and duplexes;
- Buildings with a single residential occupancy and four or fewer residential units; and
- Mixed use buildings where the primary occupancy (i.e. 50 per cent or more of gross floor area) is residential and containing four or fewer residential units.

The annual reporting deadline will be June 1 of the following calendar year. For instance, Cohort 1 is required to report their January 1 – December 31, 2025 energy data by June 1, 2026.

Data Reporting Requirements

The software used for data inputs and reporting will be Energy Star Portfolio Manager (ESPM), which is a free online tool licensed and maintained by the Government of Canada. In reference to feedback from industry stakeholders, this is a platform commonly used by building owners and managers for their existing energy management and reporting purposes, and its use was broadly supported in the engagements. In order to report, owners would set up a profile for each building with basic information such as address, occupancy, year of construction, gross floor area, etc., (see full list of fields in Appendix B of Attachment 1), and connect their energy utility (i.e. BC Hydro and FortisBC) accounts to their ESPM account to enable automatic data uploads for their monthly energy use.

BC Hydro aggregates building data for residential buildings that contain five or more units, and for commercial buildings that contain three or more electricity service accounts, with additional processes in place to support aggregation for buildings that do not meet these thresholds. For natural gas connections, most buildings have a single natural gas account that service common loads, like hot water, making data aggregation less commonly required. Aggregation may be requested from FortisBC as needed. In most cases, the initial set up of a building in ESPM typically takes no more than an hour or two.

Building performance information that is required by ESPM under the requirement includes:

- Annual site energy use;
- Monthly utility data in aggregated units; and
- Energy use through electric vehicle chargers (where applicable).

These three metrics will be used by the program administrator and/or ESPM to calculate:

- Annual and monthly weather normalized site energy use;
- Annual and monthly weather normalized energy use intensity; and
- Annual and monthly GHG emissions and intensity.

Data will be reported through ESPM by setting the District of Saanich and a designated third-party administrator (contracted by the District or CRD) as “read-only” on the building’s ESPM account. This will enable the District to extract the information and metrics required for reporting while minimizing the effort for property owners and managers. On an annual basis, reporting will require that all information in the ESPM account is up to date and accurate. Data quality issues (e.g. missed bills) are flagged through the account for the user to address.

Public Disclosure

A public dashboard in the form of an online, interactive map will include property and building performance information such as energy use intensity, GHG emissions and benchmarked rank. Studies have shown that benchmarking along with disclosure can drive action amongst building owners and managers, and even with no other policy interventions, yield cumulative average energy savings of 7% over 3 years¹. Public disclosure will be strongly encouraged, as it supports objectives discussed above, such as public and industry awareness of building performance, transparency, and increased collaboration. However, given the sensitivities that were voiced by participants in the industry engagement sessions, owners may choose to opt-out of the public dashboard at any time. In addition, building-level data will be anonymized and made available for public use in .csv format for research and development purposes.

Program Administration

Through its existing Climate Service, the CRD intends to administer and operate an ECE Reporting Program on behalf of member municipalities that adopt such a requirement, or those that would like to offer a voluntary service for buildings in their community. This approach will support consistency across the region, as well as realize efficiencies in program administration. The budget and approvals process are underway and will be confirmed in early 2025.

In relation to concerns about capacity for building owners, the program has been designed to minimize the time and effort required, while maximizing the benefits and supports. Once a building is set up in ESPM, the owner must check annually to ensure all information continues to be correct and all data from the connected utility accounts are complete and up to date. Ensuring the District or its administrator is added as “read only” to the account will enable the

¹ https://www.imt.org/wp-content/uploads/2018/02/PCC_Benefits_of_Benchmarking.pdf

energy and carbon emissions data to be pulled each year, which will constitute the annual report (no further report or form will be necessary to submit). Any data issues, such as dropped accounts or missing utility data will be flagged by ESPM or the program administrator for the user to resolve, and support will be provided for troubleshooting and addressing any issues. In addition, the District is working with the CRD to develop a covered buildings list, which will help owners identify if their building is required to report and provide each building's floor area, which was a data input that some focus group participants noted may be difficult for them to find. Lastly, to maximize the benefits of the program, the data will be used to generate useful tools such as Building Scorecards that can help building owners interpret their building's data and identify opportunities for improving building performance.

Overall, support services within the program will include the following:

- Help Centre: where building owners, property managers or tenants can call to ask questions, get support with setting up an account, troubleshooting data issues, etc.;
- Resource Library: will provide a collection of written materials such as fact sheets, guides, checklists, and FAQs to help users understand the processes and rules;
- Webinars and Training: to help orient users to the processes and rules in an environment where they can ask questions and learn in an interactive manner; and
- Data Interpretation Tools: will add value to participants by helping them understand benchmarking information and make smart decisions about improving their building's performance.

COUNCIL OPTIONS

1. That Council approve the recommendation as outlined in this staff report.
2. That Council reject the recommendation as outlined in this staff report.
3. That Council provide alternate direction to staff.

FINANCIAL IMPLICATIONS

Through its existing Climate Service, the CRD intends to administer and operate an ECE Reporting Program on behalf of member municipalities that adopt such a requirement. The program would be contracted to a third-party administrator. The budget and approvals process are underway and will be confirmed in early 2025.

The development of the program and bylaw would be completed with existing staff resources in collaboration with the CRD and City of Victoria. The development of a covered buildings list is being undertaken with grant funding from BC Hydro and financial support from CRD. Program implementation will involve some staff time to provide advisory services to the CRD-administered program, complete an annual update on the covered buildings list, and provide some compliance support, as needed. These tasks will be undertaken with existing staff resources, and as such, there are no direct financial implications for the District of Saanich.

STRATEGIC PLAN IMPLICATIONS

Development of an ECE Reporting Requirement is helping to achieve Council's 2023-2027 Strategic Plan: Climate Action and Environmental Leadership goal, namely:

- Take steps to ensure building stocks address our environmental and climate impact; and

- Implement innovative solutions and practices to reduce emissions, mitigate and adapt to the effects of climate change, and protect the environment.

It contributes to Strategy B2 of the Climate Plan: Accelerate efficiency and renewable energy upgrades in existing buildings; and Action PR2 of the Building Retrofit Strategy: Implement mandatory building energy benchmarking and disclosure for large Part 3 buildings.

CONCLUSION

This Report provides an overview of the process to develop an Energy and Carbon Emissions Reporting Requirement and program, including the industry engagement that took place to inform and refine the proposal. It outlines the final recommendations of the ECE Reporting Requirement, which would entail buildings over 10,000 square feet sharing utility data through their Energy Star Portfolio Manager account. The first reporting year for buildings over 30,000 sq. ft. would be in 2026. Implementation of the program will be instrumental for deepening our understanding of emissions and resilience in the building stock, delivering effective climate programs, and will help maintain the District's status as a leader on progressive climate action in the Province.

With Council endorsement and direction on next steps, an ECE Reporting Bylaw will be developed in collaboration with City of Victoria and brought forward for consideration. Staff will work with the City of Victoria and the CRD to establish the program, contingent on CRD budget approvals in early 2025. It is intended that a program be established to support a voluntary reporting year by fall 2025.

Prepared by: Maggie Baynham, Sustainability Project Manager

Reviewed by: Rebecca Newlove, Manager of Sustainability

Approved by: Sheila Allen, Director of Corporate Services

Attachments:

Attachment 1: ECE Reporting Requirements Engagement Summary Report

ADMINISTRATOR'S COMMENTS:

I endorse the recommendation from the Director of Corporate Services.

Brent Reems, Chief Administrative Officer