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Item	
Meeting 2016 March 7	r

COUNCIL REPORT

TO: CITY MANAGER

DATE:	2016	February 24	
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FROM: DIRECTOR PLANNING AND BUILDING

76500 20 ESS

FILE:

Ref:

### SUBJECT: ENVIRONMENTAL SUSTAINABILITY STRATEGY DRAFT REPORT AND PHASE 3 PUBLIC CONSULTATION

**PURPOSE:** To initiate public consultation on the *Draft Burnaby Environmental Sustainability* Strategy (ESS) Report and initiate public consultation on the *Draft Burnaby* Community Energy and Emissions Plan (CEEP).

### **RECOMMENDATIONS:**

- 1. THAT Council authorize staff to undertake the third and final phase of the public consultation program to seek response to the *Draft Burnaby Environmental Sustainability Strategy (ESS) Report,* as outlined in Section 5 of this report.
- 2. THAT Council authorize staff to undertake public consultation on the *Draft Burnaby Community Energy and Emissions Plan (CEEP)*, as outlined in Section 6 of this report, as a supporting component of the third and final phase of ESS public consultation.
- 3. THAT Council send a copy of this report to the Environment Committee, the Planning and Development Committee, the Social Planning Committee, the Transportation Committee, and the Parks, Recreation and Culture Commission for their information.

### REPORT

### **1.0 INTRODUCTION**

The *Burnaby Environmental Sustainability Strategy* (ESS) is being advanced on the initiative of the Mayor and Council to ensure that Burnaby will continue to show regional, national and international leadership in the development of exemplary sustainability programs and initiatives, guided by its integrated social, environmental and economic strategies.

The purpose of this report is to summarize the highlights of the first two phases of ESS public consultation ("*Issues and Priorities*"; and "*Exploring Further*"), to present an overview of the *Draft ESS Report*, and to seek Council approval to undertake the third and final phase of public consultation ("*Draft ESS*"), which is proposed to include consultation on Burnaby's *Draft Community Energy and Emissions Plan* (CEEP) as a supporting element.

### 2.0 THE ESS

The ESS is intended to set directions for environmental protection, stewardship, enhancement, and resilience in the city. The ESS, together with the award winning *Social Sustainability Strategy* (SSS) completed and adopted in 2011, and the award-winning *Economic Development Strategy* (EDS) completed and adopted in 2007, will help to define how the city can evolve and build on its strengths, to become an even more vibrant, resilient and sustainable community, integrated with healthy ecosystems.

7.1.

The ESS process, previously approved by Council at its meeting of 2011 November 7, is updated as shown in Attachment 1. Step 14, the *Draft ESS Report* has now been created and the process is nearing completion.

Sharing the *Draft ESS Report* and the supporting *Draft Burnaby Community Energy and Emissions Plan* (CEEP) with the broader community as part of the Phase 3 public consultation, Step 15, is the subject of this report.

### 2.1 ESS Process Overview

On 2013 May 13, Council approved the three phase public consultation framework for the ESS.

Led by the Mayor's ESS Steering Committee, the ESS process is one of the largest and most creative public consultation programs the City has ever undertaken. The ESS timeline and a summary of the three phases of the ESS **process** can be found in **Attachment 2**. The three phases of ESS **public consultation** are summarized below.

• Phase 1 – Issues and Priorities (May to July 2013)

The first phase of engagement focused on raising awareness, identifying key issues and opportunities, developing the vision and building interest and support from the very beginning.

• Phase 2 – Exploring Further (March to July 2014)

The second phase of engagement emphasized deeper and more focused feedback to inform the draft theme-based goals, strategies and suggested actions.

Phase 3 – Draft ESS (proposed for March to May 2016)

The final and third phase of engagement, the subject of this report, will involve checking in with the community regarding the proposed ESS framework contained within the *Draft ESS Report* to see if the recommendations match the priorities and perspectives identified in earlier phases.

 To:
 City Manager

 From:
 Director Planning and Building

 Re:
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Over 2,100 people have been engaged and over 7,000 ideas have been collected in the first two phases of ESS public consultation, as shown in **Figure 1** (below). The response from the public and stakeholders has been overwhelmingly positive. This input has helped to shape the *Draft ESS Report*.



Figure 1: ESS Public Consultation Results (Phases 1 and 2)

Extensive and creative community engagement methods were used including a website, information displays and brochures, mobile online questionnaires on iPads, community engagement volunteers, environmental Super-Heroes (Phase 1), a Vision Tree (Phase 1), a public workshop (Phase 2), Sustain-A-Bucks group activity (Phase 2) and a youth video contest (Phase 2). The process has brought together motivated individuals, groups, businesses and institutions to envision and create a plan for Burnaby's green future.

The ESS process and the creation of the *Draft ESS Report* was guided by the 20 member ESS Steering Committee of recognized community leaders from diverse backgrounds and interests, chaired by Mayor Corrigan and served by Councillors Dan Johnston (vice chair), Sav Dhaliwal, Colleen Jordan, and Richard Chang. Citizen members of the ESS Steering Committee included Mark Angelo, Frank Bassett, Paul Cipywnyk, Chris Dikeakos, Diane Gillis, Jack Gin, Linda Huang, Paul Holden, Isabel Kolic, Dick Kouwenhoven, Jennie Moore, Dirk Odenwald, Harman Pandher, Bill Schwartz, and Dave Switzer.

Biographies for the Steering Committee members can be found at: <a href="http://www.burnaby.ca/ess-sc">www.burnaby.ca/ess-sc</a>

### 2.1.1 Phase 1 Consultation – "Issues and Priorities"

Phase 1 public consultation was held from May to July 2013, focusing on "*Issues and Priorities*" and this initial round of consultation, focused on broad and highlevel engagement, was designed to raise awareness about the process and to attract input from diverse audiences and voices.

> Seven public events were attended by staff and volunteers and about 500 people were engaged through a variety of methods including an online questionnaire hosted on iPads. Phase 1 public consultation revealed broad interest and support for environmental protection, restoration, and related sustainability initiatives.

> Respondents also stated a strong desire for more information, education and involvement, demonstrating a willingness to take an active part in Burnaby's sustainability initiatives.

This feedback was used to refine the draft vision and goals for the ESS.

To view the complete summary of ESS Phase 1 public consultation, please visit www.burnaby.ca/ess-report-B.

### 2.1.2 Phase 2 Consultation – "Exploring Further"

In advance of engaging the public in Phase 2, four **Sub-Committees** were convened in the Fall of 2013. In total, 11 meetings were held with over 100 people in total, and networking was undertaken by sub-committee members among 550 people in their broader peer groups.

Phase 2 ESS public consultation ("*Exploring Further*") took place between March and July 2014 and engaged the public in deeper and more focused ways by presenting a draft vision statement, 10 draft ESS goals and 51 draft ESS strategies to the community for feedback.

The public engagement consisted of 10 public events and three presentations attended by staff and volunteers and a variety of methods were used to engage over 1,600 people during Phase 2.

There was generally a high level of support for the proposed ESS vision, goals and strategies.

- Draft vision statement was well received (84% support).
- Draft goals and strategies were well received and strongly supported (80%-97% support).
- No major 'missing pieces' or missing areas of focus at the goal level were identified.
- No "red flags" were identified.

Almost 3,900 suggestions and comments were received. These ideas were analyzed in detail using a key word approach to group similar ideas. This detailed analysis was then used as key input to help develop the proposed ESS framework, "*Big Moves*" and "*Quick Actions*", as described in Section 3 of this report.

To view the complete summary of ESS Phase 2 public consultation, please visit <u>www.burnaby.ca/ess-report-C</u>.

### 3.0 THE DRAFT ESS

The Draft ESS Report, distributed to Council under separate cover, is available for viewing at the Planning department, and following Council approval of this report, it will be posted at <u>www.burnaby.ca/css-input</u>.

### 3.1 ESS Framework

The draft framework contained within the *Draft ESS* represents the heart of the document. It was created based on the input received during phases 1 and 2. The draft framework is intended to provide clear direction on the areas that are priorities for City action. As shown in **Figure 2** (below), the draft ESS framework has four layers, with each level being supported by more detail in the level below. Moving from the highest level to the most detailed level: there is one vision, 10 goals, 49 strategies and 151 suggested actions.

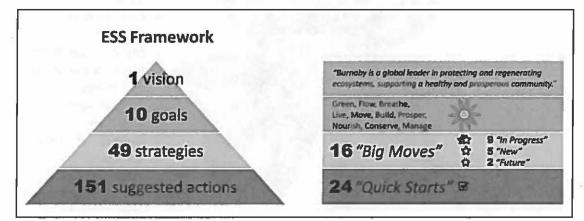


Figure 2: ESS Framework

### 3.1.1 Vision

The purpose of the vision is to express a common direction for the City's environmental future to help align decisions and actions so that the community can collectively move toward this shared vision. The draft vision for the ESS was developed with significant input from the public and the Steering Committee.

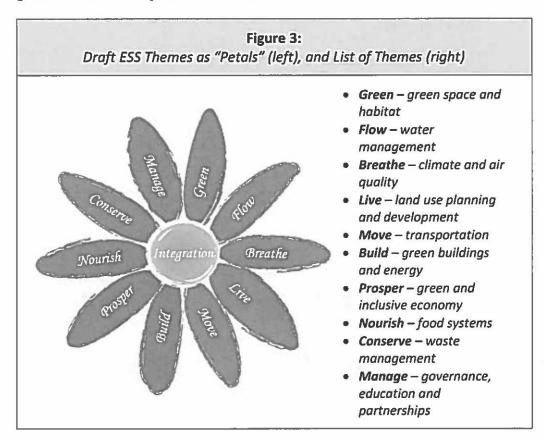
A vision for Burnaby's Future: "Burnaby is a global leader in protecting and regenerating ecosystems, supporting a healthy and prosperous community." 7.1.

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The Draft ESS Report also contains a longer 'narrative' of the vision that is intended to evoke the imagination.

### 3.1.2 ESS Theme-Based Goals

Burnaby's *Draft ESS* is structured around 10 themes, represented as petals of a flower, as shown in Figure 3 (below), to support the draft vision for the ESS. A goal statement accompanies each theme.



The Draft ESS Report includes 10 'ESS at-a-glance' summary pages – one for each goal. Figure 4 (next page), shows the page layout, including: "Now" (Burnaby today), "Future" (details on the ESS framework – goal, strategies, and suggested actions), and "What Can You Do?" (suggestions on what the public can do to help – based on ideas collected during the Phase 2 public consultation).

### 3.1.3 Strategies and "Big Moves"

Each of the goals is supported by a number of strategies, 49 in all. 16 of the Strategies have been identified as "*Big Moves.*" "*Big Moves*" represent a significant opportunity, a key strategy necessary to achieve a goal, and/or received strong sub-committee/public support. "*Big Moves*" may also require

further policy approval by Council and/or additional resources due to the scope of the proposed strategy.

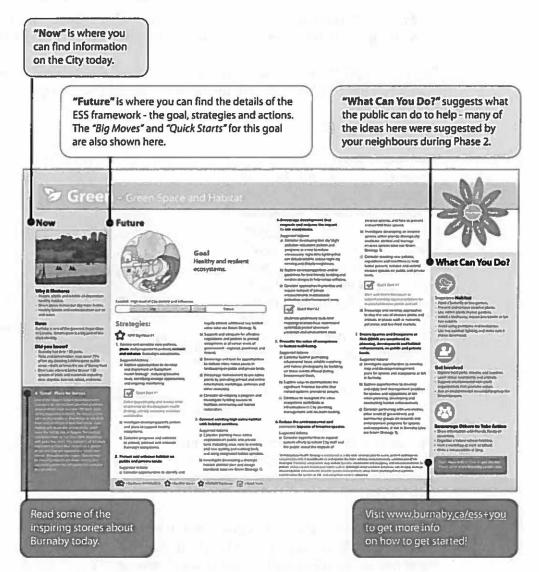


Figure 4: How to read the 'ESS at-a-glance' summary pages.

Three types of "Big Moves" have been identified:

- In Progress (9 strategies) "Big Moves" that acknowledge and build on what we are already doing; lend strength and focus to our existing efforts; link to work in progress; and help guide, shape and improve what we are doing now.
- New (5 strategies) "Big Moves" that introduce new areas of work (policies, programs, other actions) and highlight these as priorities for Council's

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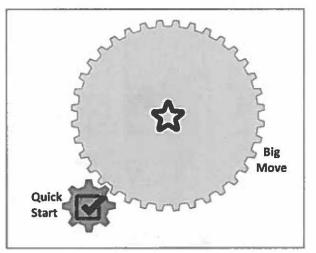
consideration. These would be approved-in-principle by Council with the adoption of the ESS.

• Future (2 strategies) – "Big Moves" that acknowledge anticipated future work (likely policy work); and lend strength and focus to future work.

The Draft ESS Report includes a summary list of the proposed "Big Moves" (Table 1 of the Draft ESS Report, provided under separate cover).

### 3.1.4 Actions and "Quick Starts"

Each of the strategies is supported by a number of suggested actions, 151 in all. In addition to the 151 suggested actions, there are 24 "Quick Starts". For every "Big Move" there is a supporting "Quick Start" to get things moving, as shown in Figure 5 (right). "Quick Starts" are proposed City actions that take advantage of short term opportunities, build momentum and demonstrate commitment to the ESS.



7.1.

Figure 5: "Quick Starts" and "Big Moves"

The Draft ESS Report includes a summary list of the proposed "Quick Starts" (Table 2 of the Draft ESS Report, provided under separate cover).

### 3.1.5 Gap Analysis

The draft ESS framework was compared to other leading city scale sustainability frameworks. The results of this Gap Analysis indicate that the *Draft ESS Report*, supported by the *Community Energy and Emissions Plan* (CEEP) and *Economic* and *Social* strategies, provides a comprehensive framework covering all key areas.

Additional background information about the ESS can be found at www.burnaby.ca/ess-input.

### 4.0 THE COMMUNITY ENERGY AND EMISSIONS PLAN (CEEP)

Burnaby has already made great progress in wise energy use and emissions management, like using compact land uses around SkyTrain stations. Burnaby currently has one of the lowest emission rates per person in the province (4.3 tonnes per person), well below the BC average

(5.0 tonnes per person). However, the City also faces several challenges in reducing total community emissions over time, which require careful consideration:

- Significant population growth (120,000 more people by 2041).
- Limited control of several key levers for energy and emissions reductions, such as improving transit service and vehicle efficiency standards.
- Limited local government powers and resources, including legislative, human and financial.

Under the leadership of Burnaby Council, the City took advantage of a unique opportunity to develop a *Community Energy and Emissions Plan* (CEEP) in support of the ESS process. The CEEP process, previously approved by Council at its meeting of 2011 November 7, was designed to create a more detailed plan focused on reducing community greenhouse gas (GHG) emissions and energy use.

Burnaby's Draft CEEP is a plan to reduce the community's overall energy use and greenhouse gas (GHG) emissions, in order to address climate change, improve local air quality, save money, and improve livability and health. The *Draft CEEP* supports many of the goals of the ESS, as well as the *Economic* and *Social* sustainability strategies.

The Draft CEEP:

- includes targets for GHG reduction along with goals, strategies and actions;
- focuses on four key sectors: buildings, transportation, district energy and solid waste; and
- also supports many of the ESS goals.

The key points of the *Draft CEEP* are presented in **Attachment 3**, and were circulated to Council under separate cover and are available for viewing in the Planning Department. Following approval of this Council report, the information contained within **Attachment 3** will be posted at <u>www.burnaby.ca/cecp</u>.

### 4.1 CEEP Process Overview

The CEEP was developed through a combination of public input, technical work, and dialogue.

**Public input** on a number of CEEP related ESS goals, including Breathe, Live, Build and Move, was collected during ESS Phase 2 (*"Exploring Further"*) public consultation.

The **technical work** was based on a rigorous science-based model, calibrated for Burnaby, that estimated today's emissions and the potential impact of different strategies to reduce emissions over time.

> **Dialogue** included meetings with the CEEP Steering Committee (consisting of City staff and representatives from key partner agencies), and workshops with the ESS Steering Committee and community stakeholders.

> This approach allowed participants to understand the impacts of various strategies, to provide input into choosing desirable and feasible strategies, and to have confidence that the target chosen will be achievable.

Although the CEEP is being developed through a parallel process to the ESS, its draft recommendations were integrated into the ESS to address climate change and to complement other goals for community health and livability, such as:

- *Health* as more people walk and cycle instead of driving their health improves, they are happier, the air is cleaner.
- *Reduced costs* buildings that are better insulated cost less to heat/cool and walking/cycling cost less to travel.
- *Economic growth* 'green' jobs in building trades, green building materials and renewable energy.
- *Livable communities* walkable, 'complete' communities that are attractive, lively and enrich our lives.

### 4.2 Unique Approach to Targets

Reducing energy use and emissions is a shared responsibility and requires effort from the federal and provincial governments, regional organizations like TransLink, the business community, the City of Burnaby and citizens. The CEEP is a plan for the community (City, residents, businesses, and other agencies) to all take action.

Burnaby's approach of setting two targets is unique. A "City Only" target and a further "City Plus Others" target makes it clear how the City can take action and how others can take action.

The "*City Only*" objectives were determined by assessing jurisdiction: who can do what. The City also considered Burnaby's ability to implement and deliver, resulting in an achievable target with feasible objectives and actions.

The primary "City Only" target, in areas the City has control over, is a 5% reduction in 2010 baseline emissions by 2041. This may sound like a 'small' target but it means that, by 2041, projected emissions will be reduced by over 20% when compared to the future trend if no action was taken at all. This is a big reduction and is shown on the right side of the top band of the 'wedge' in **Figure 6** (next page).

A second target, "City Plus Others," shows how much emissions could be reduced if other agencies also took action alongside the City. The "City Plus Others" target shows

that with this cooperation we could reduce community emissions by over 40% in total by 2041 compared to if no action were taken. This second part of the reduction is shown on the right side of the second band of the 'wedge' in **Figure 6** (below).

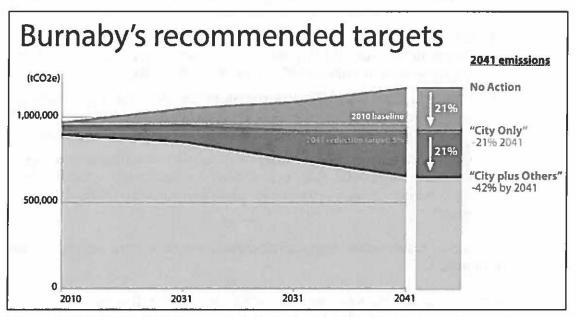


Figure 6: Burnaby's draft recommended targets

Each of these targets would contribute about equally to a projected GHG reduction by the year 2041.

### 4.3 A Strategic Approach – Six Broad City Themes

The "*City Only*" target calls for a 5% reduction in GHGs by 2041 (compared to 2010), which amounts to reducing total community emissions by over 20% in 2041. The City has control over these actions. The City's proposed reduction target is based on a strategic approach that includes six broad city themes - two city-wide and four sectors (Buildings, District Energy, Transportation and Solid Waste).

### City-Wide

- 1. Continue to **Demonstrate Leadership** on energy and emissions through city initiatives and civic facilities like the energy efficiency features included in the Tommy Douglas Library.
- 2. Continue the City's commitment to planning **Complete Communities** and transit-oriented development.

### Four Sectors

3. Achieve high energy performance in new **Buildings** and encourage energy upgrades in existing buildings. Buildings represent Burnaby's biggest opportunity to reduce greenhouse gas emissions (51% of the "*City Only*" target).

7.1.

- 4. Continue to pursue **District Energy** in large redevelopments. Using District Energy to heat our buildings could further reduce our building-related greenhouse gas emissions (an additional 3% of the "*City Only*" target).
- 5. Support a multi-modal **Transportation** system that encourages walking, cycling and public transit. Over a third of our proposed emission reductions (33% of the *"City Only"* target) could come from improving our transportation options.
- 6. Continue to increase **Solid Waste** diversion like recycling, food scraps and yard waste. Although solid waste is something we need to tackle together as a region, there are steps Burnaby can take to reduce our emissions (13% of the "*City Only*" target).

More specific details on the proposed strategies for each of these sectors are provided in **Attachment 3**.

It is estimated that the total net cost to the community (all of us in total - residents, businesses, the City and others) of the proposed "*City Only*" target would be a savings of \$1 for every tonne of GHGs we reduce. Cost savings in some areas like more energy efficient buildings and reduced travel would offset costs in other areas like district energy, vehicle electrification, and waste.

### 5.0 DRAFT ESS PUBLIC CONSULTATION PLAN (PHASE 3)

As described in Section 2.1, over 2,100 people have been engaged and over 7,000 ideas have been collected in the first two phases of ESS public consultation (*"Issues and Priorities"* and *"Exploring Further"*). The response from the public and stakeholders has been overwhelmingly positive.

The proposed public consultation plan for Phase 3 ("*Draft ESS*"), the third and final phase of public consultation, is listed in the left column of **Attachment 4** and described below.

As we are now completing the cycle of ESS public consultation, the engagement approach for Phase 3 ("*Draft ESS*") will be similar in scope to Phase 1 ("*Issued and Opportunities*") – broad high level awareness combined with opportunities for meaningful input.

### 5.1 Objectives

Objectives for Phase 3 ("Draft ESS") are to:

• Celebrate the process to date (extensive consultation, collaborative effort, culmination of 'good work').

 To:
 City Manager

 From:
 Director Planning and Building

 Re:
 Environmental Sustainability Strategy

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- Share the Draft ESS Report framework (vision, goals, strategies and suggested actions) and priorities ("Big Moves" and "Quick Starts").
- Confirm that the Draft ESS Report is on the right track, or correction, if needed.

### 5.2 Two Streams – Awareness and Engagement

The public consultation plan for Phase 3 ("Draft ESS") has two streams – awareness and engagement.

To increase **awareness**, methods like newspaper ads, news releases, social networking, website material, in person conversation at public events, and networking are being proposed.

To engage people, methods similar to those used successfully in the previous two phases of ESS consultation are proposed, including a combination of:

- "going to the community" engagement activities like staff attending community events with information displays and mobile questionnaires; and
- inviting the community to "come to us" engagement activities like hosting a dropin public workshop.

Events	Location	Date(s)	Time
Burnaby Youth Sustainability Network		Thursday, April 7	6-8pm
British Columbia Institute of Technology (BCIT) Open House	3700 Willingdon Avenue	Friday, April 8 Saturday, April 9	10am-3pm
ESS Public Workshop	Alan Emmott Centre 6650 Southoaks Crescent	Wednesday, April 20	7- 10pm
BBOT State of the City Address	Delta Hotel & Conference Centre 4331 Dominion Street	Tuesday, April 26	
Easter Seals BC Woman2Warrior	Swangard Stadium	Sunday, May 15	10am-2pm
Burnaby Board of Trade (BBOT) Green Talks	- R	May	
Simon Fraser University (SFU)	SFU, Burnaby campus	To be confirmed.	
Great Salmon Send-Off	Stoney Creek Community School 2740 Beaverbrook Crescent Burnaby	Saturday, May 14	10am-2pm
City of Burnaby Environment Festival	City Hall 4949 Canada Way	Saturday, May 28	10am-2pm
The European Festival	Swangard Stadium	Sunday, May 29	

# Table 1Potential Phase 3 Public Events

To: City Manager

From: Director Planning and Building

Re: Environmental Sustainability Strategy

Draft Report and Phase 3 Public Consultation

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The Phase 3 ("*Draft ESS*") public consultation will target attending about nine public events and two stakeholder workshops over about three months. Table 1 (previous page) lists potential Phase 3 public events, although some locations, dates and times are still to be determined.

### 5.3 Outcomes

The anticipated outcomes of Phase 3 (*Draft ESS*) include feedback to gauge the general level of support for the high-level directions (goals and strategies), and suggested improvements to be included in the *Final ESS Report*.

### 5.4 Next Steps – Beyond Phase 3 Public Consultation

The *Final ESS Report* will be refined based on Phase 3 public consultation input (Step 16 of **Attachment 1**) and advanced for Council adoption. Council adoption of the *Final ESS Report* will allow the City to take action on "*Quick Starts*" and "*Big Moves*" while developing a more detailed implementation plan (Step 18 of **Attachment 1**). The detailed implementation plan would then be advanced to Council for approval.

### 6.0 DRAFT CEEP PUBLIC CONSULTATION PLAN

Public input on a number of CEEP related ESS goals, including Breathe, Live, Build and Move, was collected during ESS Phase 2 ("*Exploring Further*") public consultation. Now that draft CEEP targets, goals and strategies for GHG reduction have been developed, it is proposed that they be shared with the broader community in concert with the ESS Phase 3 ("*Draft ESS*") public consultation. Taking the *Draft CEEP* out to the community at the same time as the *Draft ESS Report* offers an opportunity for the *Draft CEEP* to reach a wider audience.

The proposed public consultation plan for the *Draft CEEP* is listed in the right column of **Attachment 4** and described below.

### 6.1 **Objectives**

The objectives for CEEP public consultation are:

- Introduce the CEEP.
- Seek public feedback on the draft objectives (buildings, district energy, transportation and solid waste).
- Confirm that draft approach, targets, and strategies (6) are on the right track, or correction if needed.

### 6.2 Two Streams – Awareness and Engagement

The public consultation plan for the Draft CEEP also has two proposed streams – awareness and engagement.

To increase **awareness**, methods like social networking, website material, in person conversation at public events, and networking are being proposed.

To engage people, it is proposed that the *Draft CEEP* material would accompany the ESS material in "going to the community" engagement activities with staff attending community events with information displays and in the CEEP specific mobile questionnaires. It is also proposed that a separate "come to us" engagement event for community stakeholders would be hosted for the CEEP.

Five display panels have been created to help share the City's proposed approach to community GHG reduction, as shown in Attachment 3. These boards would serve as display panels at ESS public events listed in Table 1 (two pages before). This information would also be hosted on-line and would be used as part of the online "My CEEP questionnaire."

### 6.3 Outcomes and Next Steps

The feedback will help to inform the *Final CEEP Report* which will be advanced in future for Council approval. Following approval by Council, a CEEP implementation plan would be developed and advanced for Council approval.

### 7.0 CONCLUSION

The Draft ESS Report was created based on the input received from the Steering Committee, sub-committees, stakeholders, the public and staff during the ESS Phase 2 ("Exploring Further") public consultation. The Draft ESS Report is intended to provide clear direction to staff and the public about areas that have emerged, through the ESS process, that are priorities for City action.

In this third and final phase of ESS public consultation ("*Draft ESS*"), the extensive consultation with the public and stakeholders, collaborative effort in drafting the ESS, and the culmination of 'good work' will be celebrated and serve as a basis for a final 'check in' with the community. The proposed Phase 3 consultation plan aims to use many of the successful approaches and techniques of Phases 1 ("*Issues and Priorities*") and 2 ("*Exploring Further*") and would take place in spring of 2016.

Public input on a number of CEEP related goals, including Breathe, Live, Build and Move, was collected during ESS Phase 2 ("*Exploring Further*") public consultation. Now that draft CEEP targets, goals and strategies for GHG reduction have been developed, it is proposed that they be shared with the broader community in concert with the ESS Phase 3 ("*Draft ESS*") public consultation. Taking the *Draft CEEP* out to the community at the same time as the *Draft ESS Report* offers an opportunity for the CEEP material to reach a wider audience.

This report recommends that: Council authorize staff to undertake the third and final phase of the public consultation program to seek response to the *Draft Burnaby Environmental Sustainability* 

 To:
 City Manager

 From:
 Director Planning and Building

 Re:
 Environmental Sustainability Strategy

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Strategy (ESS) Report, as outlined in Section 5 of this report; Council authorize staff to undertake public consultation on the Burnaby Community Energy and Emissions Plan (CEEP), as a supporting component of the third and final phase of ESS public consultation, as outlined in Section 6 of this report; and Council send a copy of this report to the Environment Committee, the Planning and Development Committee, the Social Planning Committee, the Transportation Committee, and the Parks, Recreation and Culture Commission for their information.

øu Pelletier, Director

PLANNING AND BUILDING

DAC/LT:sla Attachments (4)

cc: Deputy City Managers Director Finance Director Engineering Director Parks, Recreation and Cultural Services City Solicitor OIC RCMP Fire Chief Chief Librarian City Clerk

P:Environmental Sustainability Strategy/Council reports/No. 8 - 2016 Mar 7/ESS Council Report No 8 - public consultation phase 3 V6.docx.

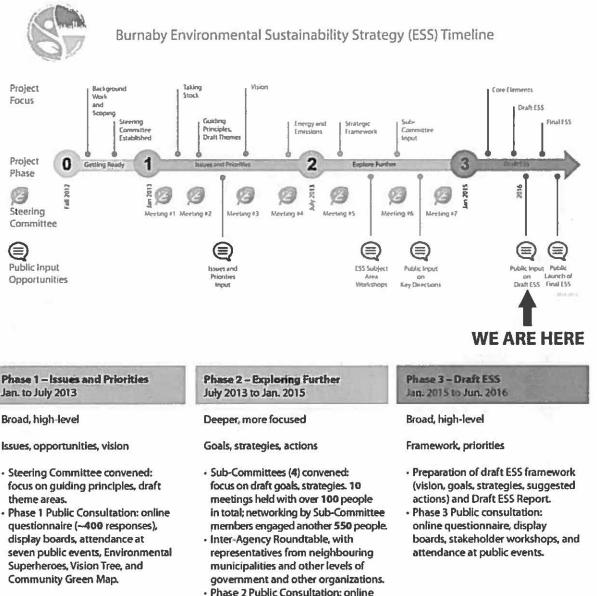
# Attachment 1: Steps of the ESS Process

<u>Timeline</u>	inputs		Sim	Quitoute	Council Reports
1	Community Dialogue' approach     Council input	1	Set Approach	funding approved     'Community Dialogue' approach approved	← Council Report 1
$\checkmark$	work plan detaés     resources required     Steering Committee terms of reference (TOR)	2	Confirm Process	project learn assembled     process updated     Stearing Committee TOR approved	← Council Report 2
$\checkmark$	consultant terms of reference     consultant proposats	3	Hire Consultant	consultant retained     work plan confirmed	
$\checkmark$	polential Steering Committee members     invitations from Mayor	4	Assemble Steering Committee	Draft Enveronmental Context Report (shat we are stored)     Steering Committee assembled and approved	← Council Report 3
1	Discussion Paper No. 1a. Burneby's Environmental Achievements     Discussion Paper No. 15: What in Sustainebility     o. Burnaby's environmental policies     o. best practices by others     o. kay challenges / opportunities	5	Tain Stock	<u>poportunities and challenges</u> Sisering Committee meeting No. 1 (crientation)	
$\checkmark$	Draft Environmental Context Report (what we are doing)     Cases Studies     (what others are doing)     Desusteion Paser No. 2. Guiding Principles	6	Set Guiding Principles & Draft Subject Areas	Sizering Committee meeting No. 2 <u>draft dations principles</u> <u>draft ablect arrans</u> public consultation strategies     suppressons for sub-committee members	Ę
~	research loois and looistes     draft consultation plan (phase 1)	7	Draft Community Consultation Plan	approved consultation plan (phase 1)	Council Report 4
1	<ul> <li>public process kick-off event</li> <li>into on existing policies, programs and initiatives</li> <li>draft quiding procipies</li> <li>draft subject areas</li> </ul>	8	Outreach Phase 1	Summary Report     successes acknowledged     comments on guiding principles     areas for more work     emerging issues     draft subject areas	
1	public input (Phase 1) <u>Besuasion Paten No. 3. Vision</u> Keynole parker at ESS SC Mg No. 3 <u>Discussion Paper No. 4: Phase 1. Public     Consultation</u>	9	Confirm the Subject Areas	Steering Committee meeting No. 3 (draft vision)     draft vision statement     Steering Committee meeting No. 4 (CEEP)     confirmed subject areas     Integration with CEEP     comments on draft vision statement	
$\checkmark$	Sub-committee terms of reference     subject area workshops     engage experts     ongoing public engagement & ewareness     ESS draft consultation plan (phase 2)     CEEP vision/goats/pmmolplex workshop	10	Sub-Committee Workshops	Steering Committee Meeting No. 5 (key directors)     workshop feedback (interim update)     CEEP update     draft Strategic Directoria	
$\checkmark$	Comments from sub-committees and Interagency round-table     draft ESS matrix     draft Strategic Directions	11	Draft Community Consultation Plan (Phase 2)	Staering Committae Meeting No. 6 (depley penels)     sub-committee summaries     draft consultation plan (Phase 2)     draft vision statement for public outreach	Council Report 5
$\checkmark$	Public Outreach (suestionnaire)     o Viscon     Theme-based comments (directions,     Issues, opportunities)     promotion al events     Staff consultation (workshops)	12	Outreach Phase 2	<ul> <li>public feedback</li> <li>staff feedback</li> </ul>	
$\checkmark$	public input     stafi input     sub-committee input		Develop Framework	Public Consultation Summary Report     ESS report outling     gap analysis	Council Report 6
$\checkmark$	Care studies     Gao analysis     Consultation Summary	14	Draft the Environmental Sustainability Strategy (ESS)	Steering Committee meeting No. 7 (transvork)     accrosed consultation plan (phase 3)     Draft ESS Report	Council Report 7
Mar – May 2016	public open house event     orsine 'open house'	15	Dutreach Phase 3	Summary Report     public response to ESS     additional recommendations and suggestions	
Summar 2016	public input (Phase 3) <u>final ESS</u>	16	Finalize Environmental Sustainability Strategy	Council approval of <u>final ESS</u>	Council Report 8
Fall 2016	report publication and distribution	17	Project Completion	public ennouncement(s)     Steering Committee meeting No. 8 (celebration)	
2016 criviard	take action	18	Implement and Monitor	monitor outcomes	15

Legenst When boxes note steps led by City staff. Dave boxes note steps led by the consultant, and <u>underland</u> terms are key project deliverables.

7.1.

## Attachment 2: Three Phases of the ESS Process



#### Outcomes:

- Draft vision statement; confirmed scope (theme areas) and draft goals.
- Phase 2 Public Consultation: online questionnaire (~800 responses), display boards, attendance at 15 public events, three invited presentations, public workshop, Community Green Map, youth video contest, and 150 others engaged via workshops and invited presentations using "Sustain-A-Bucks".

### **Outcomes:**

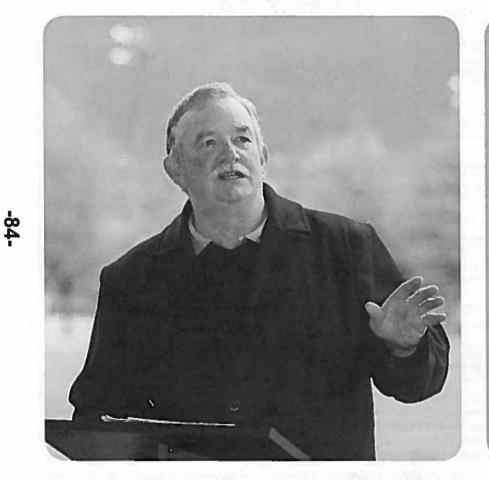
 Feedback on draft vision, goals, strategies; suggestions for actions - by the City and by individuals; analysis of responses.

### Anticipated outcomes:

 Confirmation of level of support for Draft ESS; suggestions on how to improve the Final ESS.

# Mayor's Message





# Why is the CEEP important?

"In the context of a changing climate - not just the atmosphere but also the social and economic climate - we need to take pragmatic steps to improve the resilience of our City (and) to regenerate the health of our environment and community.

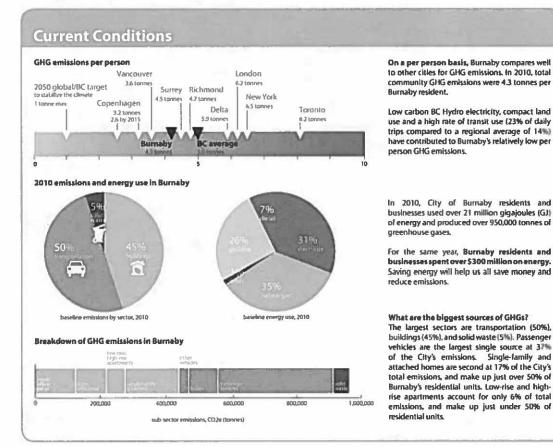
In the CEEP, we will look closely at specific opportunities to improve air quality, make our buildings more efficient, shift to more sustainable transportation, and look for clean and affordable sources of energy - while also reducing emissions. In this way, our emissions target will be built on a sound foundation - not just a number that sounds good. By placing the CEEP within the Environmental Sustainability Strategy, we'll also make sure the broader environmental, social and economic considerations are taken into account."

- Mayor Corrigan on the purpose of the Community Energy and Emissions Plan

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# Burnaby Today

Climate change is one of the most pressing challenges currently faced by society. Burning fossil fuels, including for heating our homes and businesses and powering our cars and trucks, is one of the main sources of greenhouse gas (GHG) emissions, a key driver of climate change. Burnaby's Community Energy and Emissions Plan (CEEP) will help to reduce our community's GHG emissions and meet other goals like improving local air quality, saving money, and improving heath and community livability.



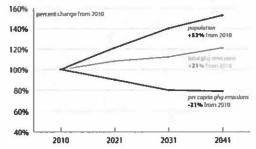
### The Challenge Ahead

Burnaby has made great progress in wise energy use and emissions management, particularly with compact land use planning around SkyTrain stations. However, the City also faces several challenges in reducing total community emissions over time, which require careful consideration:

Community Energy and Emissions Plan

- Significant population growth (120,000 more people by 2041).
- Limited control of several key levers for energy and emissions reductions, such as improving transit service and vehicle efficiency standards.
- · Limited local government resources, both human and financial.

#### Reducing total community emissions, even as Burnaby's population grows.



Burnaby's challenge is to reduce community emissions, even as our population grows (over 50% by 2041 as shown by the red line at the top). Even with each person forecast to produce fewer emissions in the future (a reduction of more than 20% by 2041 as shown by the blue line at the bottom), the City's total emissions are estimated to increase (by over 20% by 2041 as shown by the green line in the middle).

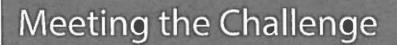
### Why does it matter?

- Climate change is one of the most pressing global issues of our time.
- We are already experiencing the effects of climate change, from more wildfires to intense storms to summer droughts.
- · We can do many things locally to help.

### Additional benefits

- · Reducing air pollution can improve air quality and also help to make us healthler.
- Improving transportation choices can help everyone get around Burnaby safely.
- Reducing energy use helps Burnaby businesses and residents save money.

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Strategic Approach - Six Broad City Themes

The six themes shown here will enable Burnaby to meet its 5% reduction

1. Continue to demonstrate leadership on energy and emissions through

city initiatives and civic facilities like the energy efficiency features included

The City of Burnaby has developed the CEEP to reduce energy use and greenhouse gas (GHG) emissions in the community. Reducing energy use and emissions is a shared responsibility and requires effort from the federal and provincial governments, regional organizations like TransLink, the business community, the City of Burnaby and citizens. The City of Burnaby has proposed a 5% reduction target based on six broad City strategies.



### What do the CEEP Targets mean?

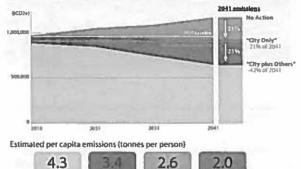
The primary "City Only" target that Burnaby is committing to, in areas the City has control over, is a 5% reduction in emissions by 2041 compared to 2010. This may sound fike a 'small' target but it means that, by 2041, projected emissions will be reduced by over 20%. This is a big reduction, as shown in the green band on the right hand side of the 'wedge' graph below.

A second target, "City Plus Others", shows how much emissions could be reduced if other agencies also took action alongside the City. The City Plus Others target shows that with this cooperation we could reduce community emissions by over 40% in total.

Each of these targets would contribute about equally to a projected GHG reduction by the year 2041, as shown in the 'wedge' graph below.

### Burnaby's recommended targets

2016



Emissions can also be calculated per-person (per year). Today's per-person emissions of 4.3 tonnes could be reduced to 2.6 tonnes with "City Only" actions, or to 2.0 tonnes with "City Plus Others" actions. The BC target is 1.0 tonne per person by 2050.

### How was the recommended target set?



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### Four Sectors

in the Tommy Douglas Library.

**Two City Wide Themes** 

development.

target. The high level strategic approach is to:

- Achieve high energy performance in new buildings and encourage energy upgrades in existing buildings.
- Continue to pursue district energy in large redevelopments.

Continue planning complete communities and transit-oriented

- Support a multi-modal transportation system that encourages walking, cycling and public transit.
- Continue to increase solid waste diversion like recycling, food scraps and yard waste.

**Demonstrating Leadership in Burnaby** 

Burnaby will continue to use energy responsibly in City operations; provide resources to support CEEP strategies; develop partnerships with others to advance action on community energy; and advocate for other levels of government to take action to reduce energy use and emissions. The City's current achievements include:

- Supporting development of high-performance buildings like Harmony House and communities fike UniverCity; development of walking and cycling
  routes in the City, like completion of the Central Valley Greenway.
- Alternative energy in private and public buildings, including geothermal in Tommy Douglas Library, Burnaby Mountain and Burnaby Central Secondary Schools, UniverCity Cornerstone building, and Solo development (under construction), and solar thermal water heating for Bonsor pool.



Percent of total emission reductions from buildings, district energy, transportation and solid waste to meet the City's 5% target.

Leadership and compact land use support these reductions. The proportion of reductions from transportation would increase if other levels of government did their part.

# Buildings & District Energy

Order of priority (highest to lowest)



Burnaby's CEEP Building Strategies

1. Use policies to encourage:

- energy efficient building types and locations; and
- density and mixed use in town centres and areas well served by transit.
- 2. Meet updated building code requirements for new building energy performance.
- Encourage new building design and construction to be more energy efficient than required in the BC Building Code, including using passive design, improved building envelope design and efficient heating and cooling systems.
- Develop programs and incentives to encourage residents, businesses and building owners to improve energy efficiency when renovating buildings.
- Develop policies and programs to measure and communicate how much energy a building uses (for example using energy audits and EnerGuide labels or building benchmarking).
  - 6. Encourage more re-use and recycling of building materials when a building is being torn down.
  - Encourage using renewable energy in buildings, like solar power/heat, geothermal heat (ground heat), and re-using waste heat from nearby sources.

## Burnaby's CEEP District Energy Strategies



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- Continue to investigate District Energy opportunities in large new developments.
- 2. Encourage using waste heat from sources like industrial sites and sewers.
- 3. Encourage low-carbon fuel sources for existing or new District Energy systems.
- Consider requiring or encouraging heating/cooling systems in new developments that allow for future connection to a District Energy system.

### **Actions by Others**

Federal and provincial governments; TransLink; BC Hydro and Fortis; financial institutions

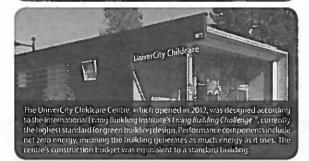
Energy and Emissions

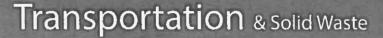
- Improve energy performance in the National Energy Code and BC
   Building Code
- Develop an energy efficiency "Reach Code"
- Provide rebates for home energy upgrades
- Require home energy EnerGuide labels when houses are sold
- Provide incentives for EnergyStar new homes
- Improve heating, hot water and appliance efficiency standards/ regulations
- Provide utility programs to help commercial customers reduce energy use
- Enable national benchmarking programs (e.g. Portfolio Manager)
- · Provide financing for energy efficient construction and upgrades

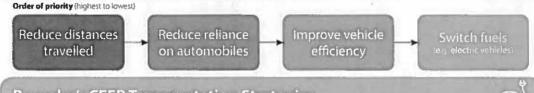
### **Ideas in Action**



Metrolower III, a 29-storey, 400,000 sf office tower completed in 2014, features energy efficiency, reuse of stormwater, and exceptional indoor air quality. The project is pre-certified LELD® Flatinum, allowing tenants to achieve LELD® Commercial Interior certification, in support of greening their businesses.







## Burnaby's CEEP Transportation Strategies

- Develop a Transportation Plan that emphasizes citizens' ability to move comfortably around Burnaby at any age as a pedestrian, cyclist, transit user or mobility scooter user.
  - Continue to develop and improve Burnaby's comprehensive pedestrian connections and cycling network.
  - Partner with school board, community groups, businesses, business associations and the police to foster and support a culture of walking and cycling throughout all parts of the city.
- 4. Improve the transit experience in Burnaby, like more bus stops and more shelters and bus priority measures,
- 5. Encourage electric vehicles by:
  - Developing policies and programs that encourage electric vehicle use.
  - Requiring or encouraging electric vehicle charging stations in new developments.
- Exploring partnerships to install publicly accessible electric vehicle charging stations.
- 6. Encourage and develop partnerships to expand car-sharing opportunities.
- 7. Encourage local businesses to provide programs and incentives for sustainable transportation like discounted transit fares and showers and lockers for cyclists.
- Develop a comprehensive, city-wide plan for parking that explores the use of a range of options like adding parking meters, reducing parking, and introducing parking permits.

## **Burnaby's CEEP Solid Waste Strategies**



Continue to demonstrate leadership at City Hall with expanded recycling, and through partnerships in the community, like extending food scraps programs with community partners.

Continue taking municipal actions in Metro Vancouver's Integrated Solid Waste Management Plan to reach a regional diversion rate of 80% by 2020. For example, expand the food scraps and yard waste collection program to apartment buildings and look for opportunities to divert waste from construction sites.

### Actions by Others

Federal, provincial and regional governments; TransLink; BC Hydro

Energy and Emissions

#### Transportation demand management

- Develop a regional parking strategy
- Adopt a regional road pricing strategy
- · Bring in distance-based insurance

### Transit Improvements

- Ensure stable and increasing public transportation funding
   Upgrade to a Frequent Bus Network or Bus Rapid Transit
- Improve the regional cycling network and infrastructure
- Vehicle efficiency and fuel switching
- Improve vehicle fuel efficiency standards
- Continue the electric vehicle incentive programs
- Install fast-charge electric vehicle charging infrastructure
- Improve low-carbon fuel standards

### **Ideas in Action**



Land allocater to rotats makes up zero in the City of surfacty, in January 2015, Burnaby City Council approved "public realine design standards" for streets in the four Town Centres. He goal is to design attractive and functional streets for all modes (e.g. walking, cycling, transit, and driving), ages, and ablitities. Streets should become "places for people" and enhance community feeling. Some street sequents have already been built, as part new developments.

Shri Guru Ravidass Sabha Community Centre has 500 to 1000 people in attendance weekly. Food plays a vital role, bringing people together. Through sharing food, the community realised they wanted to look for a more sustainable solution to garbage and food waste. They approached the City to ask about joining the City's Food Scraps Program; after an assessment by the City, a food scraps project was launched at the Centre. With up to 500 lbs diverted to organics collection every week, the Centre has now moved to bi-weekly garbage collection.

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# Attachment 4: Phase 3 Public Consultation Plan

	Draft ESS Phase 3	Draft CEEP	
	The third phase of engagement will be the final check-in with the community to make sure there is broad support for the Draft ESS Report – the framework and priorities.	The first time the approach for the CEEP will be shared with the public - draft targets, strategies (6), and objectives (buildings, DE, transportation and solid waste).	
Engagement Focus	Broad, high-level awareness Framework, priorities	Deeper, focused Approach, targets, strategies and objectives	
Objectives	<ul> <li>Celebrate the process to date (extensive consultation, collaborative effort, culmination of 'good work').</li> <li>Share the Draft ESS Report - framework (vision, goals, strategies and suggested actions) and priorities (<i>"Big Moves"</i> and <i>"Quick Starts"</i>).</li> <li>Confirm that the Draft report is on the right track, or correction, if needed.</li> </ul>	<ul> <li>Introduce the CEEP.</li> <li>Seek public feedback on the draft objectives (buildings, district energy, transportation and solid waste).</li> <li>Confirm that draft approach, targets, and strategies (6) are on the right track, or correction if needed</li> </ul>	
Potential Techniques AWARENESS	Newspaper ads News releases (earned media) Website Social Media In person (~9 public events*) Networking	Website Social Media In person (~9 public events*) Networking	
Potential Techniques ENGAGEMENT		Online questionnaires Display boards (CEEP ~5) Stakeholder workshops (tbd) • community stakeholders • secondary school(s) • SFU/BCIT • BBOT Public events (*ESS events)	
Anticipated Outcomes	A summary of the level of public support for the Draft ESS and additional recommendations and suggestions to incorporate into the final ESS.	A summary of the level of public support for the draft approach for the CEEP and additional recommendations and suggestions to incorporate into the Draft CEEP Community Report.	

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